STRUCTURE AND TREND OF PUBLIC DEBT IN NEPAL

A Thesis

Submitted to Department of Economics,

Faculty of Humanities and Social Sciences of Tribhuvan University,

in Partial Fulfillment of the Requirements for the Degree of

MASTER OF ARTS

in

ECONOMICS

Submitted by

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December, 2018

LETTER OF RECOMMENDATION

This thesis entitled *"Structure and Trend of Public Debt in Nepal"* has been prepared by Dhurba Prasad Sigdel under my supervision. I hereby recommend this thesis for approval by the thesis committee.

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APPROVAL SHEET

We certify that the thesis "*Structure and Trend of Public Debt in Nepal*" submitted by Dhurba Prasad Sigdel to Department of Economics. Prithvi Narayan Campus, Pokhara, Faculty of Humanities and Social Science: Tribhuvan University in partial fulfillment of the requirement for the degree of *MASTER OF ARTS* in *ECONOMICS* has been found satisfactory in scope and quality. Therefore, we accept this thesis as a part of the said Degree.

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ACKNOWLEDGEMENTS

This thesis has been prepared for the partial fulfillment of the requirement for the degree of Master of Arts in Economics under the Faculty of Humanities and Social Sciences, Tribhuvan University, Nepal.

First and foremost, it is my great pleasure to acknowledge deep gratitude to my thesis supervisor Rajendra Subedi, Department of Economics, Prithvi Narayan Campus, without whose valuable suggestions, guidance and continuous co-operation, I could not be completed this thesis.

I would like to extend my gratefulness to Prof. Deo Narayan Sutihar, Head of Department of Economics, Prithvi Narayan Campus, Pokhara. Similarly, I would like to thank the respected teachers of the Department of Economics for providing valuable suggestions and co-operations.

My special thanks go to my friends Kiran Dahal and Madan Regmi without their support and motivation, I could not have completed this thesis. I would also like to thank my brother Ramu Sigdel, and my all friends and family who provided me the necessary help and suggestions to accomplish this thesis.

Finally, I would like to express my thanks to Aadarsha Computer Sewa, Pokhara-1 for computer assistance.

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T.U. Reg No.6-2-48-15-97-2009

Date: 27th December, 2018

ABSTRACT

The main purpose of this thesis is to analyze the structure and trend of public debt in Nepal along with to examine the impact of public debt on GDP. For this analysis three independents variables i.e internal debt, external debt and total debt and dependent variable GDP have been considered. The data for the time frame ranges from FY 1990/91 to 2014/15 are considered. This relationship has been analyzed by the help of SPSS tools. In this analysis of explanatory variables, there exists direct and positive relationship between total public debt and GDP. Moreover, the study found that the internal debt is stronger than external debt for economic development.

Economic development is the main goal of underdeveloped countries but the lack of financial resources it cannot be achieved easily. To minimize the deficiency of financial resources public debt can play an important role. So, developing countries like Nepal need internal as well as external borrowing to support the budgetary deficits.

Underdeveloped country has low rate of saving investment, income and low living standard due to the low per capita income and poverty, dualistic economy, unutilized natural resources, lack of capital etc. Resource gap is a burning problem of the underdeveloped economy due to the lack of capital. Public debt is only one solution to fill the lack of capital.

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

From the study period F.Y. 1990/91 to 2014/15, it is concluded that the average annual growth rate of GDP and revenues are extremely low as compared with that of debt and its servicing obligation. Because of investment in unproductive borrowed funds, other things remaining the same, there are the symptoms of progressively going towards the debt trap soon. Hence fiscal deficit is increasing in any way and the public debt has played a vital role in socio-economic development of the country.

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LIST OF ACRONYMS/ABBREVIATIONS

ADB	=	Asian Development Bank
BOP	=	Balance of Payment
CBS	=	Central Bureau of Statistics
EDO	=	External Outstanding Debt
EDS	=	External Debt Servicing
FDI	=	Foreign Direct Investment
FCGO	=	Financial Comptroller General Office
FY	=	Fiscal Year
GDP	=	Gross National Product
HRD	=	Human Resource Development
IDS	=	Internal Debt Servicing
IDA	=	International Development Association
IFAD	=	International Fund for Agricultural Development
IMF	=	International Monetary Fund
IP	=	Imports Payment
LDCs	=	Least Developed Countries
MPC	=	Marginal Propensity to Consume
MoF/GoN	=	Ministry of Finance/Government of Nepal
NPC	=	National Planning Commission
NRB	=	Nepal Rastra Bank
OMOC	=	Open Market Operation Committee
PCI	=	Per Capita Income
RE	=	Regular Expenditure
TD	=	Total Debt
TDS	=	Total Debt Servicing
TFD	=	Total Foreign Debt
TR	=	Total Revenue
UDCs	=	Under Developed Countries
UNDP	=	United Nations Development Program
WB	=	World Bank
WHO	=	World Health Organization

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Public debt is an important source of government financing. It is widely used as a means of financing development activities in underdeveloped country. public debt/ borrowing taken by government is an obligation of repayment of principal sum borrowed plus a stipulated rate of interest after its maturity period to person's institutions and foreign countries. Public debt comprises of both internal and external sources of government. Internal sources include borrowing from individuals and from banking sector. External sources include foreign loans and grants from bilateral and multilateral agencies.

Public debt is the major source of fund for development activities basically in developing countries. Nepal is one of the least developed countries (LDCs) of the world. One major problem of all LDCs is the acute shortage of resources to finance the public expenditure. In such situation, they require to borrow money. However, in the modern world, not only for the LDCs but for developed countries also, public borrowing is becoming an important technique of government finance along with other sources of revenue, e.g., tax and non-tax revenue. When an individual's income cannot meet his/her expenditure, he/she should borrow money from somewhere. In the similar manner, government should also borrow, when its revenue cannot meet the expenditure.

Nepalese government has not a very long history of budgeting. Budgeting started in 1951. After that, we have frequent experience of deficit budgeting. There are three sources of deficit financing available to the government of Nepal, viz. foreign loan, internal loan and change in cash reserves. So, public debt has been an important tool of the Nepalese fiscal policy. However, public debt in Nepal was taken after 11 years of initiation of budgetary practice. Thus, our history of public debt is not so long. Government started to take domestic loan in 1962 whereas it started to take external loan in 1963. The first foreign creditors of Nepal were former USSR and UK (Acharya, 1968).

After that public debt has important role in the government budget. Nepal is facing a serious and growing resources gap problem on the one hand and increasing inflation and population growth on the other. As internal revenue generation such as tax revenue, surplus of public undertaking are inadequate in comparison to resource requirements. Therefore, the need of public debt as a source of resource mobilization for development financing and to strengthen the economy is a comparatively modern phenomenon and has come into existence with the development of a democratic form of government.

Economic theory suggests that reasonable levels of borrowing by a developing country are likely to enhance its economic growth. Countries at early stages of development have small stocks of capital and are likely to have investment opportunities with rates of return higher than those in advanced economies. As long as they use the borrowed funds for productive investment and do not suffer from macroeconomic instability, policies that distort economic incentives, or sizeable adverse shocks, growth should increase and allow for timely debt repayments. The best known explanation comes from "debt overhang" theories, which show that if there is some likelihood that, in the future, debt will be larger than the country's repayment ability, expected debt service costs will discourage further domestic and foreign investment and thus harm growth. Some considerations suggest that, at reasonable levels of debt, further borrowing would be expected to have a positive effect on growth. Others stress that large accumulated debt stocks may be a hindrance to growth. Both these elements together imply that debt is likely to have non-linear effects on growth (Poirson, Hélène & Luca Ricci, 2002).

Taxation is the most important source of government financing to build up socio economic infrastructure such as health education, transportation, communication etc. for economic development. But it is quite impossible to raise adequate fund through taxation in underdeveloped countries because of poor tax payable capacity of the people. The only way to collect the needed fund is public debt. Debt can be taken from citizens as well as foreigners. Hence, public debt is taken as balancing items of increasing trends of fiscal deficit.

1.2 Statement of the Problem

Developing countries like Nepal are always facing the problem of fund needed for developmental projects. Government collects such fund from internal and external borrowing. The external borrowing is increasing more rapidly than internal debt due to wide gap between saving and investment, revenue and expenditure and exports and imports.

In Nepal, every year budgetary deficit is growing in which effective management of available resources are needed. The proposition of government borrowing and debt servicing obligation are increasing rapidly. To maintain the resource gap, debt is only one solution, which helps to increase the amount of debt. In the context of Nepal the increasing size of public debt to maintain fiscal deficit is challenging proposition. So, public debt in Nepal is a matter of concern.

In the underdeveloped countries like Nepal, domestic resources are inadequate to meet the financial requirement for the economic development due to low income, low saving and low capital formation. So it creates the low internal debt in Nepal. Thus, Nepal is more dependent on external debt than internal one. This ever increasing trend of debt servicing of the country creates a great problem for debt management and becoming a major challenging issue for the country. Foreign assistance has become major source of financing development expenditure.

The burden of public debt is very controversial issue because government has taken loan for peace and securities which are unproductive sectors. Nepal is heavily dependent on internal as well as external public debt for development. Nepal recorded a Government Debt to GDP of 26.80 percent of the country's Gross Domestic Product in 2017. Government Debt to GDP in Nepal averaged 55.66 percent from 1990 until 2014, reaching an all time high of 72.3 percent in 2001 and a record low of 25.7 percent in 2015. Since developing countries like Nepal always needs foreign currencies to import many capital goods required for development. The trend of borrowing through external source is very high in Nepal as compared to internal source. Every increasing debt will create a serious problem in the economy like debt trap, colonization, internal instability etc. In fact, if public debt increases and not utilized properly there will be macro-economic imbalance which creates excessive dependency upon foreign assistance. On this ground, this research question is design to address the following research question related to the structure and trend of public debt in Nepal.

i. What are the structure and trend of public debt in Nepal?

ii. What is the structure and trend of debt servicing in Nepal?

iii. What is the impact of public debt on GDP?

1.3 Objective of the Study

The main objective of the study is to analyze the structure and trend of Nepalese public debt. The specific objectives are as follows:

i. To examine the structure and trend of internal, external and overall public debt,

ii. To analyze the structure and trend of debt servicing in Nepal,

iii. To examine the impact of public debt on GDP.

1.4 Significance of the Study

Public debt and growth rate of GDP are the burning issues of Nepalese economy. The relationship between public debt and growth rate of GDP in Nepal has considerable implications on economic policy formulation. The government needs a huge amount of resources for reconstruction, rehabilitation and relief to make modern and prosperous society. In this regard, public debt can be a major source of revenue due to low level of tax payable capacity of the people.

For economic development of Nepal government must invest on various sectors such as education, health, transport, communication etc. To build up such overhead capital there is need of heavy fund. Similarly, to break the vicious circle of poverty and to improve social condition of the people, there is greater need of public debt. As the revenue surplus has not been adequate to meet the development expenditure, the deficit budget has remained the prime feature of Nepalese fiscal policy been mobilized. Due to this reason, the value of total loan has been rising and the burden of debt servicing has been increasing year by year. This situation leads the government to become more indebted from external as well as internal borrowing.

The comparative study of growth of public debt with growth rate of GDP is concerned to maintain, what kind of public debt either, external or internal is more empirical for economic growth of least developing countries like Nepal. This study also shows the scenario of resource gap in Nepal. Moreover this study will also be concentrated on the mobilization of financial resource through appropriate utilization of public debt. It is also applicable for the people and institution to purchase government securities. It is also written hoping that it will be a little reference for the budgetary system.

1.5 Limitations of the Study

The study has following limitations:

i. This study is based on secondary data. No attempt is made to check the reliability of the secondary data.

ii. This study has covered the period of 25 years from FY 1990/91 to 2014/15only.

iii. This study does not cover the effects of public debt on some macroeconomic variable, such as money supply, price level, inflation, employment and poverty.

iv. This study does not address the impact of public debt on socio-cultural life of the public.

1.6 Organization of the Study

This thesis is divided into five different chapters. The first chapter is concerned on the introductory part of the study with background, problems, objectives, significance and limitations of the study. The second chapter reviews some literatures, books, articles with introduction, theoretical review, recent thinking about public debt as well as National context and International context review of literature. The chapter three describes about the research methodology: Research Design, Nature and sources of data, method of Data Analysis, simple Regression Equation Model and Definition of Terminologies are included. The chapter four is related with the presentation and analysis of data and the chapter five shows summary of findings, conclusion and recommendations. Finally, references are presented at the end of the thesis.

CHAPTER II

REVIEW OF THE LITERATURE

2.1 Introduction

Public debt as an important source of deficit financing refers to the obligation of government to pay back to the person, institution or countries from whom it has been obtained. Generally, public debt refers to loan raised by a government within the country or outside the country. Every government like individuals has to borrow when its expenditure exceeds its revenue. Encyclopedia Britannica (1959) defines that public debt is “obligation of government, particularly those evidenced by securities, to pay certain sums to the holders at some future date.”

Most of the developing countries consist of the limited opportunities for raising the resources internally in terms of domestic debt. It is because of the low marginal propensity to save. The widespread poverty, low level of productivity, low purchasing power and minimum participation of the people in the development activities are the common characteristics of the developing countries. To alleviate the poverty and to uplift the nation with self-sustainable manner huge initial investment is the pre-condition.

On the other hand the government of developing countries like Nepal depends mostly on the external assistances. The external loan contains some criteria while receiving. Through the external debt has no current real burden on the community, it possess the burden to the future generation. The external debt has the question of the benefit and cost, which is determined by the capacity of servicing and utilization of the borrowed amount.

The public debt is not the new and keen matter of the students of economic. From the very beginning of classical economists, of 19th century, like J.B. Say, Malthus and Pigou has raised the argument of debt on for and against. In fact, they were against all types of debt but they appreciated the productive use of public debt. Then the argument of public debt become in favor after the rise of Keynesians. In the literature of public debt different economists have different views regarding the public debt. Generally, Classical, Keynesian and Post Keynesian economists have different aspect towards public debt.

This chapter presents the review of literature of public debt. Moreover, it has presented various reviews of theoretical views and the review of the texts and dissertations of the public debt. The theoretical reviews refer to the various views of the debt from the classical economists to that of the modern economists.

2.2 Theoretical Review

Review of Classical Thinking

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

i. The classicists were not against any form of government expenditure, what they favored was minimum public expenditure. In between taxation and borrowing, classicist taxation for the following reasons:

ii. Deficit financing means increases in public debt since it is an easy method to obtain income; government is likely to be extravagant and irresponsible. Consequently, public debt will be definitely become a burden to economy.

iii. Payment of interest on public debt and refunding of the principle will require additional taxation. It might prove to be difficult since government's power to tax is unlimited.

iv. Deficit financing might produce currency deterioration and price inflation.

However, the classical economists were not against all type of public debt. In the words of R.A Musgrave, " self liquidating project may be define narrowly investment in public enterprises that provide the fee or sales income sufficient to service that debt incurred in their financing, or they may be defined broadly as expenditure projects that increase future income and the tax base. Such projects permit servicing (interest and amortization) of the debt incurred in their financing without requiring an increase in the future level of tax rates." (Musgave, 1959)

Review of Keynesian Thinking

Unlike the classical economists, Keynes did not accept the notion of free enterprises economy, which is self –equilibrium at full employment level. He advanced the concept of underemployment equilibrium. He argued that resources in the private sector might remain unemployed for relatively longer time period if the government becomes unconscious. In such situation when resources are unemployed on large scale, government employment of these resources does not necessarily deprive the private sector of anything. On the contrary, increasing government spending by using idle men and materials is likely to raise the level of aggregate demand and thereby aggregate output and income. Hence public borrowing /debt need not necessarily be unproductive, and burdensome. Due to this, Keynesian strongly prescribed to increase the public expenditure by undertaking deficit financing or borrowing.

For Keynesian, if debts are internally held, there is nothing to worry about their size. It is because such debt involves merely a series of transfer payments and they cancel out for the economy as a whole. Hence the only concern was on high level of income and that deficit budget even by undertaking public debt, would be a powerful tool during the time period of stagnation/ depression.

Review of Post Keynesian Thinking

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

The post Keynesian economist like Learner also shares the view that, “internal debt inflicts no burden simply because it is a transfer of fund from one pocket in other from the left hand to the right hand”. He further maintains, “An inter-personal of international loan yields the borrower a real benefit, it enables him to consume or invest more than he is earning or producing. And when he pays interest or repays the loan he must tighten his belt, reducing his consumption or his investment. In this case of national debt were have neither the benefit nor the burden, the belt cannot be let out when borrowing need not be tightened when repaying. (Poudel, 2005)

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

i. According to them, public borrowing does not always deprive the private sector from the use of resources. As for example during the time period of widespread unemployment, it may be productive.

ii. Besides, it is not accepted now that borrowing in the period of full employment must be inflationary. If the borrowing taps the funds otherwise used of consumption, it is not more inflationary.

iii. A large public debt if internally held poses many problems for the economy. It complicates the monetary policy and difficulties of management and so on.

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

Recent Thinking

Recent thinkers opined that heavy growth of borrowing is dangerous for the economy for two reasons:

Firstly, growth of debt ratio may lead crowding out of private investment;

Secondly, government spending out of borrowed funds might be unproductive.

(Ponser; 1992)

They observed that, that part of public debt is burdensome whose servicing falls entirely or mostly on tax revenue. If its servicing does not fall entirely on tax revenue, it is not burdensome rather it is productive. Because it itself generates resources for its debt service besides income, employment and output. Therefore all debts are not burdensome.

Modern economist Raja J. Chelliah observes that, "If revenue will meet subsides, other transfers, interest payments and the greater the part of current expenditure; debt finance will be used for meeting the government's non-remunerative capital formation; and the total domestic borrowing will be determined in such a way that, given the rate of domestic saving , the non -government sector will be able to obtain a due share of saving and that there will be no need to borrow from the central bank more than the correct amount of saving and the there will be no need to borrow from the central bank more than correct amount of seignior age, it is the ideal situation for borrowing."

It can be presented in another ways also:

The level of government borrowing is the function of ability and willingness of person and business to lend and the government's power and intention to tax. Minimum level of debt can be expressed in term of the following equation (Singh, 2004).

$$D= \frac{Yt-E}{r}$$

Where,

D = maximum sustainable national debt

t = maximum ratio of tax receipts to national income (Y) and

r = contractual interest rate of government debt.

However, the burden of debt depends upon the nature of investment, productive or unproductive. If it is productive, there will not be burden because of creation of real asset in the economy which further generates income of the people thereby increasing national income. If it is unproductive, the situation will naturally be burdensome on the government.

2.3 Review of Related Studies

National Context

Joshi (1982) has covered the structure of the public debt and the importance of public debt in the financial development. He has presented the poor performance of the nation’s topography and the poor performance of the human capital. He concludes the debt is only one source of fulfill the resource gap of the budgetary expenditure of the nations and internal debt is the essential phenomena for the development of the capital as well as the entire money market.

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

Koirala (2002) has dealt with the debt as a useful resource for economic development, several inverse consequences were found by its over use. There is only two options: either mobilizes more foreign debt for economic development or put the hand off hand doing nothing. In a nutshell, there should be debt management plan for its better use and regular servicing. The government debt has a simple relationship with the government deficit over a given year is equal to the budget deficit or a higher economic growth requires a higher level of investment that is not possible simply from taxation so that government seeks public borrowing.

Bhatta (2003) has prepared “An assessment of the impact of external debt on economics growth of Nepal” Countries at early stages of development have small stocks of capital and require foreign borrowing for their investment needs and meet their external resource gap. Nepal's dependence on foreign assistance, nearly for the last five decades, can be viewed from the same perspective. The present article is a preliminary work in the direction of analyzing the relationship of external debt and economic growth of Nepal. The examination of the debt burden, increase in the size and magnitude of such during 1990s. The empirical observation shows the external debt should not be viewed only as a burden but also as a major source of financing for developing economy like Nepal. however, the analysis of external debt borrowing be made to supplement but no replace domestic saving in the long run.

Pyakurel (2004) has claimed the inadequacy of Nepal's revenue surplus to finance the development expenditure. Government expenditure and revenue pattern have shown that the economy has lost its productive capacity to respond to the sustained growth. The ratio of regular government expenditure to GDP in F/Y 1996/97 was 8.6 percent but increased to 11.5 percent in F/Y 2001/02. The revenue during the same period decreased from 7.3 percent in F/Y 1996/97 to 7 percent in F/Y 2001/02. Development expenditure also declined from 9.5 to 7.5 during the same period. Nepal's debt service position, though within sustainable limit, has consuming quite of significant chunk of fresh resources, which could otherwise use for productive purposes. Its debt service ratio during 1990s remained around one third of annual regular expenditure. With the dominance of the loan portions in the foreign assistance and the maturity of the debt incumbent upon the nation, to have advocated the necessity of a caution approach to proper management of the variable external resources.

Tiwari (2010) in his thesis "public debt; structure public debt and burden in Nepal" analyzed that the existing scenario of public debt trend ,necessary of borrowing ,structure and condition of debt burden in Nepal .The objective of his study was to analyze the structure of public debt in Nepalese economy ,to analyze the structure of public debt in Nepal ,to analyze the burden consequences of public debt in Nepal and to recommend appropriate policy on public debt .this study based on the secondary data which have been issued and published in books ,booklets etc most of the data were taken from publication of government budget ,economy survey ,ministry of finance (MOF), journal of Nepal Rastra bank (NRB) during the time period of 1990/91 to FY 2005/06. He used tabulated, simple statistical tools for analyzing the data.

Bista (2011) has analyzed that public external debt has a negative and significant relationship with per capita GDP an investment both in the short run and in the long run in Pakistan for period 1972-2009. It develops a hybrid model that explicitly incorporates the role of public debt in growth equations. Auto regression Distributed Lag (ADRL) technique has been applied to estimate the model.

Bhattarai (2013) has written an article "public debt in Nepal." According to him public debt is the instrument of financing budget deficit. The objective of his study was to analyzed trend and composition of Nepalese public debt whereas the specific objectives were to analyze the growth pattern of internal external and overall public debt, and to make the comparative study of growth of public debt with growth rate of real GDP and rate of inflation. This study based on the descriptive analysis. For this purpose, the period of 1975/76-2010/11 is considered and the study was based on secondary data these data were taken from the economic survey published by ministry of finance (MOF), government of Nepal (GON).

Sharma (2014) has written a article “trend and impact of public debt In Nepalese Economy”. According to him “the public debt or public borrowing in Nepal is considered to be an important source of income of the government. Public debt helps to achieve targeted economic growth and narrow down the gap between expenditure and revenue. However, the country is falling into debt trap in the form of interest and principal payment. In this article an attempt has been made to find out the situation, trend and impact of public debt on Nepalese economy. This article based on the secondary data.

Acharya (2015) has concluded that the average annual growth rate of GDP, revenue and export earnings are considerably low as compared with that of debt and its servicing obligation and the most of the borrowed funds are using in unproductive sectors. Because of the misuse of borrowed funds, other things remaining the same there are symptoms of steadily falling into the debt trap. The agile amount of debt and poor servicing capacity of the government compel to think the sinking condition of the economy. It arises several questions about the capacity of debt receiving and existence of the nation. Excessive dependency on foreign assistance makes the balance of payment on the favor of creditors which is horrible situation to get rid of. Any way it can play the useful role for the economic development of every nation and it is widely accepted measure also for financing government expenditure.

International Context

Domar (1944) has defined the burden of public debt as the ratio of the total debt to the national income. He lays down the condition under which the burden would increase or decrease over time. The tax rate necessary to pay interest on debt depends on the ratio of debt multiplied by the rate of interest to income. This tax is related to growth of income and the budget deficit. The burden of debt would increase or decrease. When either ratio of deficit to income rate of interest paid on debt increases then the burden of the debt will also be increased or, the burden of the debt (t) and ratio of deficit to income (b) and the rate of interest paid on debt have positive relationship.

Taylor (1961) has analyzed the nature and the burden of public debt upon the economy upon which fiscal policy must stand without it the financing of public emergencies would be impossible. Public debt is desirable, no matter what its burden when incurred for the purpose of securing benefits which outweigh the burden. In this sense debt is a necessary evil like cost of production: if the benefits could be secured with fewer burdens the alternative would be preferable. The burden of public debt is represented by the economic hardship which it imposes. This hardship may take the form of waste of productive efficiency for the economy as whole or undesirable economic burdens imposed upon particular class. The possibility of inflation resulting from the form of borrowing constitutes another element of burden

Nevin (1962) has considered public debt as an important tool for the development of capital market as well. According to Nevin In the early stages of requirement stock exchange the Public debt and the government operation in it will play a fundamental role in the pre suppose and adequate flows of capital to the productive enterprises of the country. In this instance, this likely to be done to a large degree through the medium of the Public debt, with the development of trading facilities in securities, the possibility of the issues of private securities directly to local institutional investors becomes a responsible one and the follow of capital will be stimulated and expanded.

In the modern context the least developed countries borrow in order to fulfill the resource gap. There is wider gap of the import-export, Revenue-Expenditure, and the gap of saving-investment. The internal resources are not sufficient to meet the government expenditure. Generally, government makes a larger investment for the infrastructure development which is the back bone of the nation.

Harris (1974) has concluded that the classical writers were generally against the public borrowing. The classical writers assumed that individual, consumer, and the business firm employs the resources more efficiently. They were against the role of the state and they had the philosophy that the government is the best which governs the least. According to them state has to perform its limited activities; maintenance of law and order, justice and social security. Classical economists like J.B. Say, TR Malthus and CG Base table have the strong faith that “Debt creates burden in the economy because of its unproductive nature”.

Goode (1984) has viewed that borrowed money when used to finance public investment causes no such reduction, all that will happen is the change in the consumption of capital formation. The inference is that failure to restrict borrowing to the finance of investment will retard economic growth. A weakness of the argument is that not all outlays classified as investment actually contribute to growth, while some expenditure usually classified as government consumption promotes growth.

World Bank (2011) has stated that baseline external public debt sustainability indicators are more favorable compared to the previous Debt Sustainability Analysis (DSA), and external debt dynamics are resilient to standard stress tests; however total public debt ratios increase gradually over the projection period. External debt indicators breach the thresholds under an alternative scenario developed to analyze risks arising from heightened financial sector stress, highlighting the urgent need to address financial sector vulnerabilities. A prudent fiscal stance remains appropriate, and net domestic financing of deficits should be contained to around 2½ percent of GDP or less. Stronger efforts to improve the absorption capacity for foreign financing would release pressure on the domestic debt market, while structural reforms to boost long-run growth and revenue generation would improve overall public debt sustainability. The DSA results would change if large-scale external borrowing on commercial terms were to arise, for example to fund hydro development.

Barik (2012) has observed that government debt has made a significant contribution to the economic growth not only directly but also indirectly. The finding of the paper shows that public debt all being equal would appear to induce investment over time and in turn indirectly enhance growth in real output. Regression results showed public debt positively affects the economic growth controlling for other determinants of growth. On average, one percent increase in debt is associated with an increase in real GDP of around 0.08 percent per year. It appears that resources generated through public debt are basically used in a productive manner.

Chongo (2013) has studied that the relationship between public debt and the economic growth over the period 1980-2008. The aim of the study was to analyze the growth of public debt stock as well as its empirical impact on empirical economic growth. In order to understand the extent of the burden, the study has also analyzed the impact of a rising public debt stock on debt service. Results of the analysis confirm a long- run relationship between public debt and economic growth.

Canbek (2014) has conducted a research study “Public debt and growth :An empirical investigation” on their thesis they investigate the relationship between public debt and growth for a panel sample of 128 countries including 26 advanced 40 emerging and 62 developing economics for a period of 1960-2011 . to this end, they consider not only the conventional fixed effects procedure but also the recently developed cross section ally augmented distributed lag(CS-DL) mean group(MG) procedure . They also investigate whether the relationship is robust to different country groupings such as advance, emerging and developing economics and to different debt levels such as suggested. In the study vicariate equation for debt and growth and conventional growth equation augmented with debt threshold variables are estimated. The result suggests that the negative impact of the public debt on growth appears to be more severe in emerging market countries than both advanced and developing countries. The result also lends a support to the view that the growth is invariant to different public debt levels in advance countries.

August, Lopes, Ferriira and Neves (2014) on their thesis “Public debt, economic growth and inflation in African economics”, they analyzed the implications of public debt on economic growth and inflation in a group of 52 African economics between 1950 and 2012. The results indicate that the limits of public debt affect economic growth and exhibit negatively, from a given level of debt, an inverted U behavior regarding the relationship between economic growth and public debt. The highest average rates of real and per capita growth are achieved when public debt reaches 60 percent of the real GDP. And an average inflation rate of 8.2 percent when this ratio fall between 60-90 percent, the average rate of economic growth drop by up to 1.32pp and continues dropping by up to 1.64 pp when the ratio exceeds 90 percent. Briefly, the high levels of public debt were reflected in reduced rate of economic growth and rising levels of inflation.

Naugen (2015) has conducted a research study “ The effects of public debt , inflation and their interaction economic growth in developing countries :Empirical evidence based on difference panel GMM”, the paper empirically investigates the effects of public debt , inflation and their interaction on growth rate for a whole sample of 60 developing countries and for three sub- sample of developing countries (22 Asia , 11 in Latin America and 27 in Africa) over the period 1990-2014 through the estimation method of difference panel GMM. The estimated result showed that for the whole sample and the sub-sample of Latin America, the effects of public debt and inflation on growth are negative while their interaction is positive. For the sub sample of Asia, public debt and inflation have positive effects on growth whereas their interaction has a negative impact; and for the sub-sample of Africa, the effects of public debt and interaction on growth are negative, whereas the influence of inflation is positive. These results suggest some important implication for governments in these developing countries.

Jernej and Aleksander (2015), University of Ljubljana, Faculty of Administration, Slovenia, The paper attempts to empirically explore the transmission mechanism regarding the short-term impact of public debt and growth. We examine and evaluate the direct effect of higher indebtedness on economic growth for countries in the EU which are in the epicenter of the current sovereign debt crisis. The empirical analysis primarily includes a panel dataset of 25 sovereign member states of the EU. Our sample of EU countries is divided into subgroups distinguishing between so-called 'old' member states, covering the period 1980–2010, and 'new' member states, covering the period 1995–2010. In order to account for the impact of the level of the debt-to-GDP ratio on the real growth rate of GDP, we employ panel estimation on a generalized economic growth model augmented with a debt variable, while also considering some methodological issues like the problems of heterogeneity and endogeneity. The results across all models indicate a statistically significant non-linear impact of public debt ratios on annual GDP per capita growth rates. Further, the calculated debt-to-GDP turning point, where the positive effect of accumulated public debt inverts into a negative effect, is roughly between 80% and 90% for the 'old' member states. Yet for the 'new' member states the debt-to-GDP turning point is lower, namely between 53% and 54%. Therefore, we may conclude that the threshold value for the 'new' member states is lower than for the 'old' member states. In general, the research may contribute to a better understanding of the problem of high public debt and its effect on economic activity in the EU.

Evora and Portugal(2016) " Impact of Public Debt on Economic Growth in Advanced Economies" This paper examines the impact of public debt on the economic growth in advanced economies over a period of 1946 to 2009, using an econometric approach. The findings suggested an inverse relationship between public debt and economic growth in advanced economies. These relationships were found to be significant as well. Model results also show that the real GDP growth rate does not decline sharply whether the public debt-to-GDP ratio is lower than 220%. The public debt-to-GDP ratio elasticity of the real growth rate shows that an increase of 1% in public debt/GDP category above 120% decreases the real GDP growth rate in 1.13%. The negative effect of public debt is only stronger on the real GDP growth rate in advanced economies when the public debt-to-GDP ratio is above 220%. Finally, these findings lead us to reassess the austerity agenda, and the governments should devise new strategies for public debt management in advanced economies, taking into account their economic and financial performance**.**

2.4 Research Gap

Studies done in the past have opened the way to future research stating that the application of relevant methodology would provide time outcomes. Further, the objectives and methodologies of the present study are different from those of aforementioned reviewed studies and articles. So, this study intends to link and fill gaps in the literature of the past at academic level covering large span of time series annual data. Further, in the changed socio- economic structure of the economy, the past studies may not provide sound guidelines for present policy prescription. Therefore, an in- depth study on relationship between government debt and GDP is utmost important and it is expected that it will contribute extra knowledge in the existing field. In early all research were only focused on structure and trend of public debt in Nepal. But this research shows the structure and trend of public debt along with debt servicing. Also in this research, the impact of public debt on GDP is determined by using statistical SPSS program.

CHAPTER III

METHODOLOGY

3.1 Research Design

To meet the earlier mentioned objectives, the study has used both qualitative and quantitative analyses. The nature of the study is descriptive and the study is based on secondary data. This research has attempted to show the structure and trend, role and burden of public debt. Historical data from of last structure and trend 25 years from FY 1990/91 to 2014/15 have been taken into account.

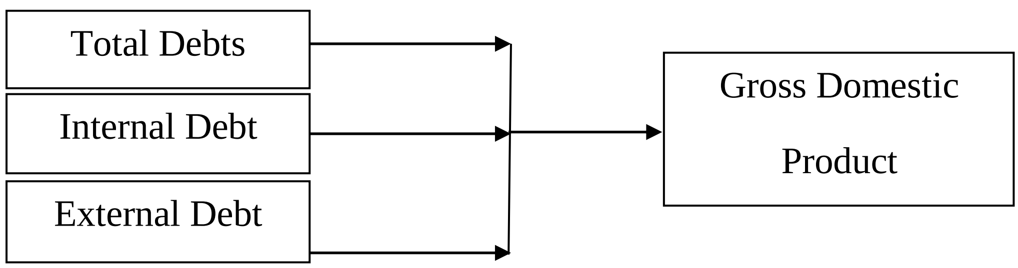
3.2 Conceptual Framework

Government borrows internal and external debt from various sectors. These debts are intended to enhance development in the recipient country. Therefore, public debt effectiveness is meant to be having a positively significant on gross domestic product (GDP). The conceptual framework can be given as:

Figure 3.2

Conceptual Framework

Explanatory Variable Affects Dependent Variable



3. 3 Nature and Sources of Data

This study is based on secondary sources of data and information collected from the published sources like: publications of Nepal Rastra Bank, publications of Ministry of Finance, publications of Central Bureau of Statistics, newspaper, published articles on different journals and magazines, Dissertation available at the central library of T.U., publications of World Development Report and publications of World Bank and Internet, e-mail.

3.4 Data Collection and Processing

In this study data is collected from secondary sources such as Nepal Rastra Bank, publications of Ministry of Finance, publications of Central Bureau of Statistics, newspaper, published articles on different journals and magazines, Dissertation available at the central library of T.U., publications of World Development Report and publications of World Bank and Internet, e-mail.

3.5 Methods of Data Analysis

The collected data from various relevant sources is processed according to the need of the chapter. The available data from various documents are collected, classified and tabulated to meet the needs of the study. Some statistical tools such as, percentage distribution, average annual growth rate and trend analysis are used for analyzing the data when they are necessary. This study is designed to examine the structure and trend of public debt through quantitative analysis, based on the secondary data and information.

3.6 Simple and Multiple Regression Equation

It establishes the relationship between dependent and independent variable. It used to show the degree and direction of the relationship between variable and it also provide a mechanism for prediction or forecasting. Here, to explain the role of public debt on growth rate of GDP, a simple ordinary least square linear regression model has been used. The theoretical statement of this model is that GDP depends upon the internal debt and external debt. This shows the relationship between GDP and public debt.

Relationship between GDP and Public Debt

1. $GDP=a_0+a_1TD$
2. $GDP=a_0+a_1ED$
3. $GDP=a_0+a_1ID$
4. $GDP=a_0+a_1ED+a_2ID$

Where,

GDP= Gross Domestic Product

ID= Internal Debt

ED=External Debt

TD= Total Debt

a_0, a_1 and a_2 are the parameters

3.7 Definition of Terminologies

i. Public Debt: total public debt includes an external obligation of a public debtor and national government.

ii. Internal Debt: Internal debt is the government's borrowing from domestic banking sector and individual

iii. External Debt: External debt is the government's borrowing from external source through bilateral and multilateral source.

iv. Gross Domestics Product (GDP): GDP is the measure of the total domestic output at factor price.

v. Debt Servicing: Debt Servicing refers to the principle payment and interest payment on loan after maturity.

vi. 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 the annual interests on the government loans.

vii. Debt Trap: Debt Trap is the situation when new fresh loans are taken to redeem the previously taken loan.

viii. Gross National Product (GNP): GNP is the measure of the total domestic and foreign output claimed by resident of the economy, less the domestic output.

ix. Budget deficit (BD): It is the gap between government income and expenditure including with foreign grants.

x. Fiscal Deficit (FD): It is the gap between government revenue and expenditure except foreign grants.

CHAPTER IV

DATA ANALYSIS

4.1 Introduction

This chapter includes presentation and analysis of data. In the process of data analysis the relevant data from various sources are collected, classified and tabulated to fulfill the requirement of the study. Data are presented in the percentage when required. Tables, bar graphs, trend line. The regression, correlation, hypothesis testing are done according to the given sets of data using SPSS software.

4.2 Structure and Trends of Public Debt

Nepal being a least developed country has been facing the problems of funds where the level of government revenue is very low because of low tax payable capacity of people. But the level of government expenditure is increasing rapidly. The government needs heavy investment for infrastructure development and socio-economic development. Since government revenue is not sufficient for such development. Public borrowing plays a prominent role to bridge the fiscal deficit of a country to meet such investment.

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 totaled Rs. 201656.8 million in 2014/15 and external debt liability has reached Rs. 343261.8 million in the same period. Total Public Debt Liability as of 2014/15 stands at Rs. 544918.6 million.

The structure of the government finance in Nepal clearly indicates the important role of public debt, both internal and external, in meeting the resource gap. Public debt has been used in Nepal as a regular mechanism of deficit financing. Public Debt Act, 2059 delegate domestic debt management to Nepal Rastra Bank (NRB). On behalf of Government of Nepal, Nepal Rastra Bank acts as the manager and regulator of domestic debt. Accordingly, Ministry of Finance has been focusing on policy guidelines and external debt and while, Nepal Rastra Bank 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. In Nepal first experience of foreign aid was of US government in 23rd January, 1951 with agreement of "Point four Program." In the first five planes (1956/57-1960/61) of Nepal, the development expenditure was fulfilled by foreign loan/grants. But from second three year plan (1962/63-1964/65), Nepal started to obtain the external debt from 1963/64 and internal debt from FY 1962/63. For first time FY1962/63, the government floated securities for mobilizing saving to finance the country's economic development. Specially, "After the enforcement of public debt Act 1960, Public debt for first time was issued in Nepal in 1962 through treasury bills amounting to Rs 7 millions.

4.3 Resource Gap in Nepalese Economy

The limited mobilization of internal resources is the main obstacle of the development program in Nepal. So that resource gap in Nepalese economy has always been a common phenomenon. Nepal is facing serious and growing problem of resource gap. This is because of the growth trend of the total expenditure and its revenue generation capacity. The annual absolute volume of government expenditure has resulted financial resource gap in budget of the government. On the other hand, a foreign aid can not be received as expected; export trade tendency is not so encouraging which also leads budgetary deficits.

In Nepal, marginal propensity to save is low and tax evasion is widespread. The annual growth rate of the total expenditure and that of its revenue are not keeping in the same face. The annual absolute volume of government expenditure has outfaced its revenue collection resulting financial resources gap in budget of the government. Similarly, foreign aid can't be received and our export trade is not so encouraging, with ultimately leads to the budgetary deficit. The overall scenario of resource gap in Nepal has been shown by Table 4.3

Table 4.3

Different Scenarios of Resource Gap (Rs. in millions)

Fiscal year	Government revenue (A)	Annual growth rate of GI(%)	Government expenditure (B)	Annual growth rate of GE(%)	Scenario (I)fiscal deficit(B-A)	Annual growth of FD(%)	Foreign grant (C)	Annual growth rate of FG(%)	Scenario(II) budget deficit(I-C)	Annual growth of BD(%)
1990/91	10729	-	23549.8	-	12820.0	-	2146.8	-	10673.2	-
1991/92	13512.7	26.0	26418.2	12.2	12905.5	0.6	1643.8	-23.43	11261.7	5.51
1992/93	15148.8	12.10	30897.7	16.96	15749.3	22.04	3793.3	130.76	11956.0	6.17
1993/94	19580.8	29.26	33597.4	8.74	14016.5	-11.00	2393.6	-36.90	11622.9	-2.79
1994/95	24605.1	25.66	39060.0	16.26	14454.9	3.13	3937.1	64.48	10577.8	-9.51
1995/96	27893.1	13.36	46542.4	19.16	18649.3	29.02	4825.1	22.55	1324.2	31.44
1996/97	30373.5	8.89	50723.7	8.98	20350.2	9.12	5988.3	24.11	14361.9	3.89
1997/98	32937.9	8.44	56118.3	11	23180.4	14	5402.6	-9.78	17777.8	23.78
1998/99	37251.3	13.10	59579.0	6	22327.7	1	4336.6	-19.7	17991.1	1.12
1999/00	42893.8	15.15	66272.5	11	23378.7	-2	5711.7	31.7	17667	-1.80
2000/01	48893.6	13.99	79835.1	20	30941.5	37	6753.4	18.2	24188.1	36.91
2001/02	50445.5	3.17	80072.1	0	29626.6	-5	6686.2	-1.0	22940.4	-5.16
2002/03	56229.8	11.47	84006.1	5	27776.3	-28	11339.1	69.6	16437.2	-28.34
2003/04	62331.0	10.85	89442.6	6	27111.6	-3	11283.4	-0.5	15828.2	-3.70
2004/05	70122.7	12.5	102560.4	15	32437.7	13	14391.2	27.5	18046.5	14.014
2005/06	72282.1	3.08	110889.2	8	38607.1	37	13827.5	-3.9	24779.6	37.30
2006/07	86686.0	19.92	133604.6	20	46918.6	21	15800.8	14.3	31117.8	25.5
2007/08	104939.3	21.05	161350.0	21	56410.7	10	20320.7	28.6	36090	15.97
2008/09	138372.0	31.85	219660.0	36	81288	51	26382.9	29.8	54905.1	52.13
2009/10	179940.3	30.04	259680.9	18	79740.6	-13	38546.0	46.1	41194.6	-24.97
2010/11	199819.0	11.04	295363.0	14	95544	-8	45922.0	19.1	49622	20.45
2011/12	247172	23.69	339168.3	15	91996.3	29	40812.0	-11.1	51184.3	3.15
2012/13	298398	20.72	358638.0	6	60240	-52	35529.0	-12.9	24711	-51.72
2013/14	362349.9	21.43	435050.0	21	72700.1	57	33960.1	-4.4	38740	56.78
2014/15	411955.8	13.69	531550.0	22	119594.2	115	36374.2	7.1	83220	114.81
Average Annual growth rate		**16.01**		**13.49**		**13.07**		**16.41**		**12.84**

Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15.

In Table 4.3 first scenario shows the trends in income and expenditure in Nepal. The revenue and expenditure both are continuously increasing each and every year. The total expenditure is higher than total income which shows increasing tendency of fiscal deficit. But the annual growth rate of government income is greater than the government expenditure. The amount of total expenditure was Rs. 23549.8 million in FY 1990/1991 has gone up to Rs. 531550 million in FY 2014/2015 whereas total revenue has increased from Rs. 10729 million in FY 1990/1991 to Rs. 4119558 million in FY 2014/2015. This shows the public expenditure dominated to government income. The revenue gap was Rs.12820.0 million in the FY 1990/91. The government expenditure continuously increased than government revenue. In FY 2014/2015 the revenue gap increased to Rs.119594.2 million. This indicates that the problem of resource gap is serious.

In the review period, the average annual growth rate of total expenditure has 13.49 percent whereas the average annual growth rate of income has stood at 16.01 percent. The foreign grant is not increasing in the desirable pace as it predicts where it was Rs.2146.8 million in 1990/91 and increased to Rs.36374.2 million in 2014/15. Budget deficit was Rs. 12820 million in 1990/91 and Rs. 83220 million in 2014/15 with the average annual growth rate 13.07 percent. It is happened due to the fluctuation of foreign grants.

4.4 Growth Trends of Government Borrowing

The expenditure of the government is increasing very rapidly as compare to increase the income resource it is due to the rapid increase in the service of the government. Reliance on Taxation is not sufficient in view of the large amount of financial resources required for growing government expenditure and therefore, there is increasing need for supplementing it by borrowing internally and externally, Nepal is facing large financial resources gap in the government budget. Thus, government has to borrow loans to meet it. This trend is shown in the Table 4.4

Table 4.4

Public Debt as Percentage of GDP (Rs. in millions)

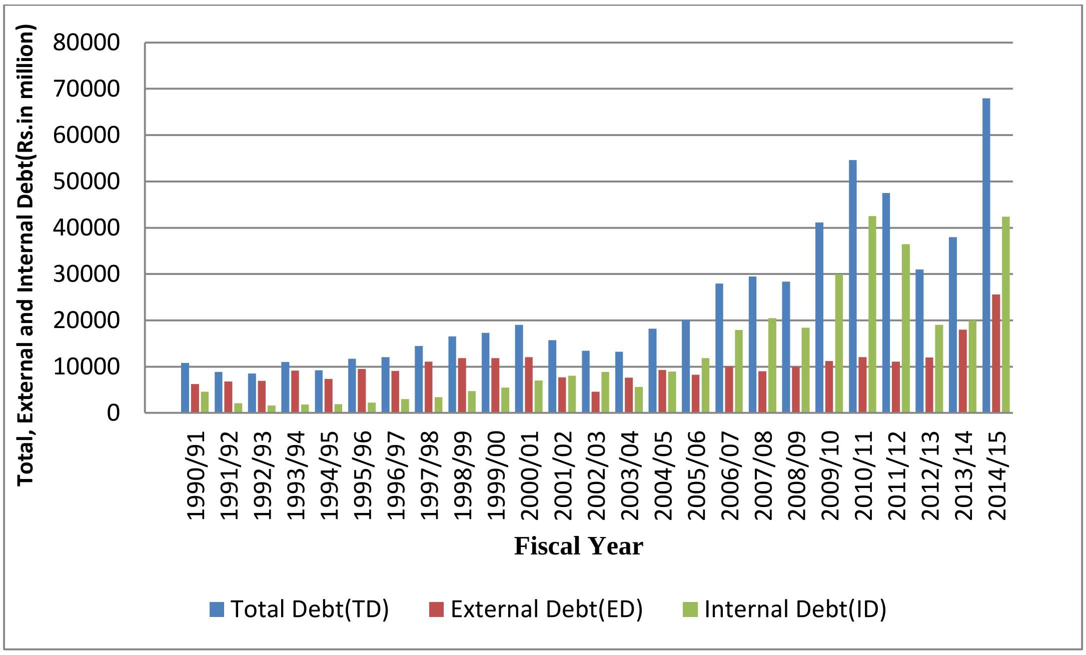
Fiscal year	Nominal GDP at current price	Total debt(TD)	External debt(ED)	Internal debt(ID)	TD as% of GDP	ED as % of GDP	ID as % of GDP
1990/91	116127	10809.4	6256.7	4552.7	9.3	5.4	3.9
1991/92	144933	8895.7	6816.9	2078.8	6.14	4.7	1.43
1992/93	165350	8540.9	6920.9	1620.0	5.17	4.19	0.98
1993/94	191596	10983.6	9163.6	1820.0	5.73	4.78	0.95
1994/95	209976	9212.3	7312.3	1900.0	4.39	3.48	0.90
1995/96	239388	11663.9	9463.9	2200.0	4.87	3.95	0.92
1996/97	269570	12043.6	9043.6	3000.0	4.47	3.35	1.11
1997/98	289798	14454.6	11054.4	3400	5.0	3.8	1.2
1998/99	330018	16562.4	11852.4	4710	5.0	3.6	1.4
1999/00	366251	17312.2	11812.2	5500	4.7	3.2	1.5
2000/01	394052	19044	12044	7000	4.8	3.1	1.8
2001/02	406138	15698.7	7698.7	8000	3.9	1.9	2.0
2002/03	437546	13426.8	4546.4	8880	3.1	1.0	2.0
2003/04	474919	13236.8	7629	5607	2.8	1.6	1.2
2004/05	508651	18204.2	9266.1	8939.1	3.6	1.8	1.8
2005/06	557869	20048.5	8214.4	11834.2	3.6	1.5	2.1
2006/07	696989	27945.8	10053.5	17892.3	4.0	1.4	2.6
2007/08	792131	29476.3	8979.9	20496.4	3.7	1.1	2.6
2008/09	988272	28385.9	9968.8	18417.1	2.9	1.0	1.9
2009/10	1192774	41137	11223.4	29914	3.4	0.9	2.5
2010/11	1374953	54591.4	12075.6	42515.8	4.0	0.9	3.1
2011/12	1527344	47501.8	11083.1	36418.7	3.1	0.7	2.4
2012/13	1695011	31012.4	11969.4	19043.0	1.8	0.7	1.1
2013/14	1964540	37981.6	17998.8	19982.8	1.9	0.9	1.0
2014/15	2120470	67983.1	25615.6	42367.5	3.2	1.2	2.0
Average Annual Growth Rate			3.5%	10.5%	4.19	2.34	1.69

Source: Various Issues of Economic Survey from FY1990/91 to 2014/15

Table 4.4 shows that the government borrowing and annual growth rate between the periods 1990/91 to 2014/15. As the table shows that the under the review period total government borrowing has increased from Rs.10809.4 million to Rs.67983.1 million. Similarly external borrowing also increased from Rs.6256.7 million to Rs. 25615.6 million under the period of study. Likewise internal borrowing is increased from Rs. 4552.7 million to Rs. 42367.5 million. Since the share of total debt to GDP was 9.3 percent in FY 1990/91and it is decreased to 3.2 percent in FY 2014/15, the government borrowing is increasing in absolute value. The table also shows that the share of internal borrowing is increasing as compare to external borrowing. The average annual growth rate of internal debt is 10.5percent whereas the average annual growth rate of external debt is 3.5percent. Thus the trends indicate clearly shows that the government borrowing is increasing in both absolute and relative terms.

Figure 4.4

Total, External and Internal Debt in Nepal (Rs. in Millions)



Source: Various Issue of Economic Survey from FY 1990/91 to 2014/15

4.5 Outstanding Public Debt in Nepal

The trend of ever growing fiscal deficit, the government has to borrow large amount of public debt to meet ever increasing financial resource gap. Usually public debt is used as means of meeting the government budgetary expenditure, but in case in Nepal it is the main and reliable resources of meeting the government expenditure over from the years. So the volume of outstanding public debt has been increasing. The trend of increasing volume in public debt is shown in Table 4.5

Table 4.5

Outstanding Debt as Percentage of GDP (Rs. in Millions)

Fiscal year	Nominal GDP at current price	Total outstanding debt(TD)	External outstanding debt(EOD)	Internal outstanding debt(IOD)	TOD as % of GDP	EOD as % of GDP	IOD as % of GDP
1990/91	116127	80360.2	59505.3	20854.9	66.8	49.4	17.3
1991/92	144933	94158.8	70923.9	23234.9	63.0	47.4	15.5
1992/93	165350	112876.9	87420.8	25456.1	65.8	51.0	14.8
1993/94	191596	123598.0	101966.8	30631.2	66.5	51.2	15.4
1994/95	209976	14058.7	113000.9	32057.8	66.2	51.6	14.6
1995/96	239388	162286.3	128044.4	34241.9	65.2	51.4	13.8
1996/97	269570	167977.7	132086.8	35890.9	59.9	47.1	12.8
1997/98	289798	199614.7	161208	38406.7	68.9	55.6	13.3
1998/99	330018	219135.6	169465.9	49669.7	66.4	51.4	15.1
1999/00	366251	244948.2	190691.2	54257	66.9	52.1	14.8
2000/01	394052	260448.4	200404.6	60043.8	66.1	50.9	15.2
2001/02	406138	293746.3	220125.6	73620.7	72.3	54.2	18.1
2002/03	437546	308078.5	223433.2	84645.3	70.4	51.1	19.3
2003/04	474919	318913	232779.3	86133.7	67.2	49.0	18.1
2004/05	508651	307206.1	219641.9	87564.2	60.4	43.2	17.2
2005/06	557869	328679.2	233968.6	94710.6	58.9	41.9	17.0
2006/07	696989	320404.9	216628.9	103776	46.0	31.1	14.9
2007/08	792131	353299.7	242060.6	111239.1	44.6	30.6	14.0
2008/09	988272	402700	277000	125700	40.7	28.8	12.7
2009/10	1192774	404303	256243.3	142859.7	33.9	21.5	12.0
2010/11	1374953	443700.0	259501.1	184199.0	32.3	18.9	13.4
2011/12	1527344	523207.6	309287.0	213920.6	34.3	20.2	14.0
2012/13	1695011	545314.8	333442.0	211872.8	32.2	19.7	12.5
2013/14	1964540	553507.7	346819.1	206688.6	28.2	17.7	10.5
2014/15	2120470	544918.6	343261.8	201656.8	25.7	16.2	9.5
Average Annual Growth Rate		7.97%	7.3%	9.45%	55.66	40.89	14.78

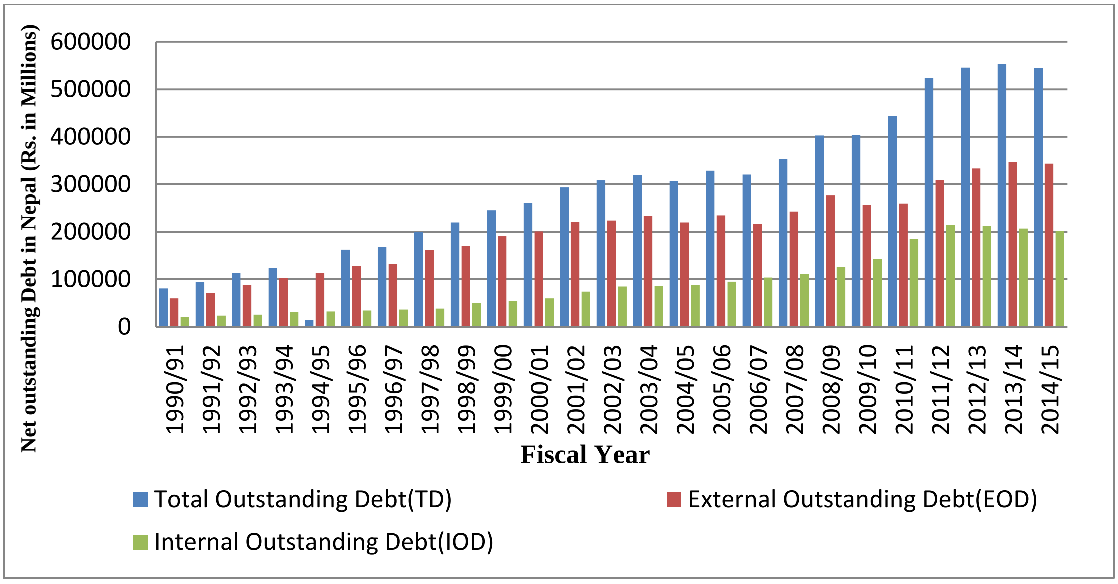
Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15

Table 4.5 seems as an elaboration of debt burden of Nepal in which the total outstanding public debt of government has increased from Rs. 80360.2 million in 1990/91 to Rs. 544918.6 million in FY 2014/15 with average annual growth rate of 7.97 percent. The table shows that outstanding external debt has increased from Rs.59505.3million in fiscal year 1990/91 to Rs. 343261.8 million in fiscal year 2014/15 with average annual growth rate of 7.3 percent and the outstanding internal debt has increased from 20854.9 million to 201656.8 million in the review period with average annual growth rate of 9.45 percent. The average annual shares of total outstanding, external outstanding and internal outstanding debt to GDP are found 55.6, 40.89 and 14.78 percent respectively. The share of external outstanding debt to GDP is relatively high to share of internal outstanding debt to GDP.

This clearly indicates that the increasing reliance on the external borrowing. One of the factors is responsible for rapid increase in the external debt is depreciation of Nepalese currencies each year. Other attributing factor is the growing needs of foreign currencies to bridge the current account capital deficit and capital deficiency in the economy. Observing table, the burden of external outstanding debt is greater than internal which may be danger in the future generation. In the table GDP is also increasing but the growth rate of GDP is less than that of outstanding debt.

Figure 4.5

Net outstanding Debt in Nepal (Rs. in Millions)



Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15.

Figure 4.5 shows that the pattern of net outstanding Debt which shows both internal and external outstanding debt is increasing in every fiscal year but the trend of increasing rate of external debt is higher than internal outstanding debt.

4.6 Structure of Internal Outstanding Debt in Nepal

Nepal has carried out internal borrowing program since four decades. It is used for to meet the resources gap on the budgetary system and mobilizing financial resources for development. The Government mobilizes the internal borrowing by issuing mainly treasury bills, development bonds, national special certificate and special bonds. Table 4.6 shows the structure of internal net outstanding debt in Nepal.

Table 4.6

Structure of Internal Outstanding Debt in Nepal (Rs. in Millions)

Fiscal year	Total Internal outstanding debt	Treasury bills	Development bonds	National saving certificate	Special bonds
1990/91	20854.9	2350.0	5482.3	3646.5	9376.1
1991/92	23234.9	3483.2	5132.2	4546.3	10073.2
1992/93	25456.1	4403.2	5132.2	4901.5	11019.2
1993/94	30631.2	5216.3	4732.2	5691.5	14991.2
1994/95	32057.8	6392.5	4122.2	6076.4	15466.7
1995/96	34241.9	7142.5	3672.2	7376.5	16050.7
1996/97	35890.9	8092.5	3042.2	8736.5	16019.7
1997/98	38406.7	9182.5	3302.2	9886.4	16035.6
1998/99	49669.7	17586.9	3872	10426.4	17784.1
1999/00	54257	21027	4262.2	11526.5	15741.3
2000/01	60043.8	27610.8	5962.2	12476.4	13994.3
2001/02	73620.7	41106.5	11090.7	11536.1	9259.3
2002/03	84645.3	48860.7	16059.2	9629.8	9164.5
2003/04	86133.7	49429.6	17549.2	9029.8	8946.2
2004/05	87564.2	51383.1	19999.2	6576.7	8176.33
2005/06	94710.6	62970.3	17959.2	3876.8	8225.6
2006/07	103776	74445.3	19177.1	1516.9	7225.7
2007/08	111239.1	85033	21735.4	1116.9	7568.2
2008/09	125700	86515.1	29478.5	2169.5	8327.9
2009/10	142859.7	102043.7	35519.4	1015.6	5126.9
2010/11	184199.0	120340.7	43519.4	10680	5287.0
2011/12	213920.6	131624.1	57519.5	15680.0	9097.0
2012/13	211872.8	131624.1	51610.9	15680.0	12957.8
2013/14	206688.6	136468.1	47110.9	16586.5	6523.1
2014/15	201656.8	119858.1	57070.0	16586.5	8142.2

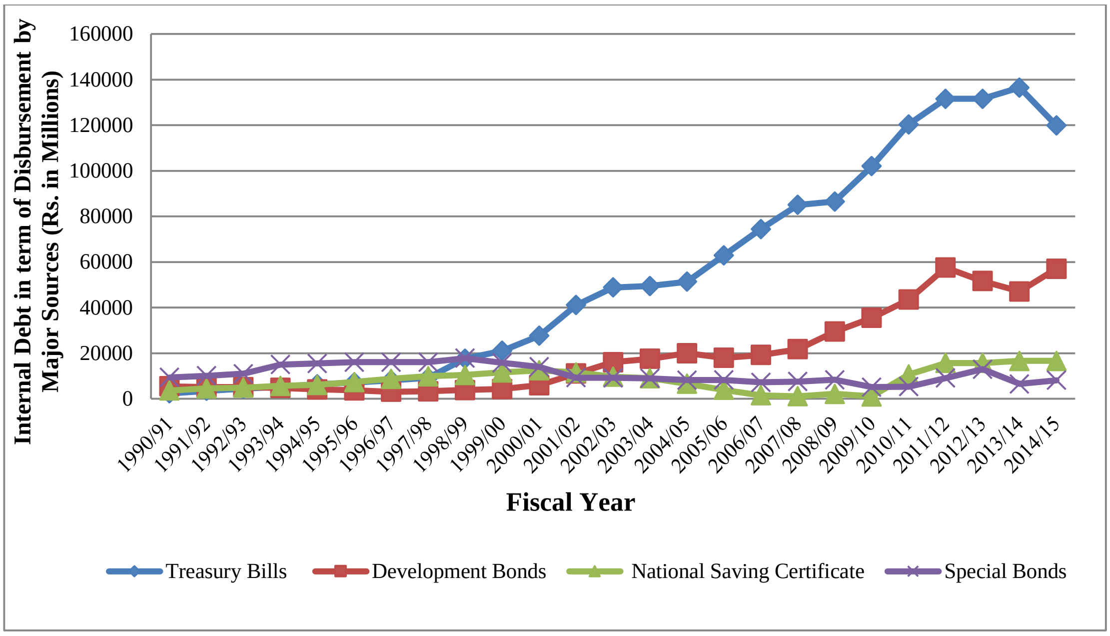
Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15.

Table 4.6 presents the annual net outstanding internal debt and primary sources of internal debt. The total outstanding debt was Rs.20854.9 million during FY 1990/991 and it reaches to Rs.201656.8 million in the FY 2014/15. This reflects the highly indebted economy with low economic standard of citizens.

In the review period, Treasury bills are increased from Rs.2350 million in 1990/91 to Rs.119858.1 million. Development bonds are increased from Rs. 5482.3 million to Rs.57070.0 million and National Saving Certificate increased from Rs. 3646.5 million to Rs. 16586.5 million.

Figure 4.6

Trend of Internal Debt in term of Disbursement by Major Sources (Rs. in Millions)



Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15.

4.7 Structure of External Debt in Terms of Disbursement by Major Sources.

Nepal's first experience of foreign economic assistance was heralded by the point-four-program agreement signed on 23rd Jan, 1951. In which the U.S. Governments assistance of twenty two thousands rupees was provided. But Nepal had started to borrow foreign loan since 1964/65. The foreign assistance grants and loans are the major source of foreign currency for Nepal.

Nepal has borrowed the external loan through bilateral and multilateral sources. Bilateral loans are loans form government and their agencies, loans from autonomous bodies and direct loans from official expert credit agencies. Multilateral loans are loans and credits form multilateral agencies as World Bank, IMF, Regional Development Banks and other multinational and inter-governmental agencies. It is necessary to compare an Analyze the follow of foreign loan and it debt servicing through the earnings of foreign trade. Review period between 1990/91 to 2014/15, the foreign loan disbursement has been shown by Table 4.7

Table 4.7

External Debt in terms of Disbursement by Major Sources (Rs. in Millions)

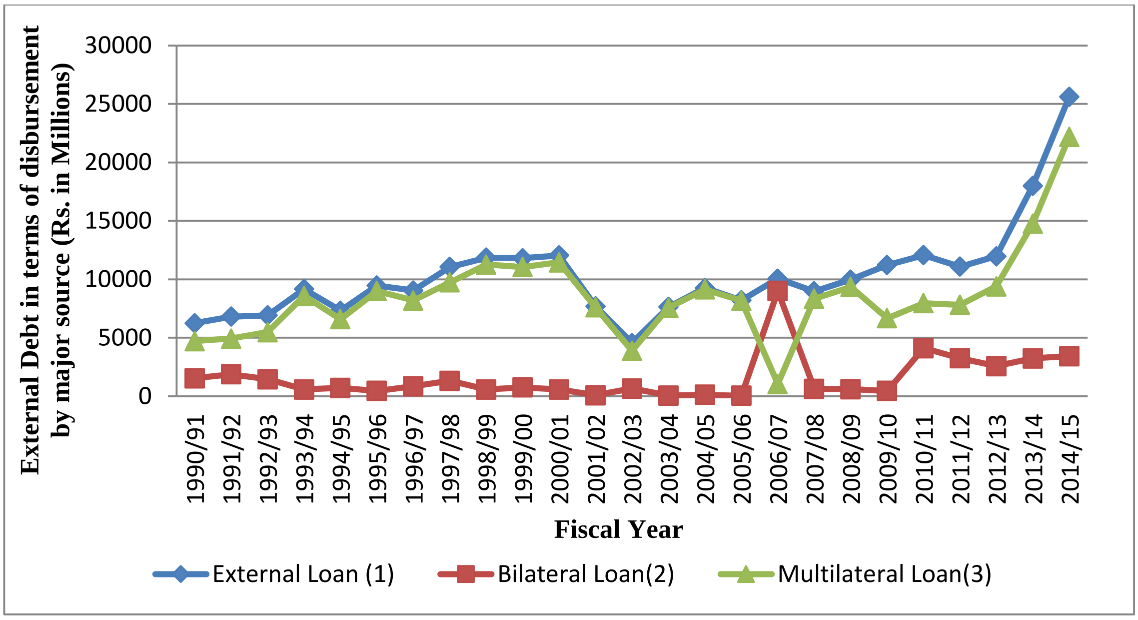
Fiscal year	External loan (1)	Bilateral loan(2)	Multilateral loan(3)	(2) as % of (1)	(3) as % of (1)
1990/91	6256.7	1543.9	4712.8	24.7	75.3
1991/92	6816.9	1884.8	4932.1	27.7	72.3
1992/93	6920.9	1453.4	5487.5	21.0	79.0
1993/94	9163.6	582.9	8580.7	6.4	93.6
1994/95	7312.3	717.3	6595.0	9.8	90.2
1995/96	9463.9	460.0	9003.9	4.9	95.1
1996/97	9043.6	850.7	8192.9	9.4	90.6
1997/98	11054.4	1314.5	9740	11.9	88.1
1998/99	11852.4	584	11268.4	4.9	95.1
1999/00	11812.2	757.9	11054.3	6.4	93.6
2000/01	12044	586.7	11457.3	4.9	95.1
2001/02	7698.7	87	7611.6	1.1	98.9
2002/03	4546.4	657.2	3889.2	14.5	85.5
2003/04	7629	66	7563	0.9	99.1
2004/05	9266.1	126.5	9139.6	1.4	98.6
2005/06	8214.4	40.6	8173.7	0.5	99.5
2006/07	10053.5	9004.5	1048.9	89.6	10.4
2007/08	8979.9	632.1	8347.7	7.0	93.0
2008/09	9968.8	612.9	9356.9	6.1	93.9
2009/10	11223.4	455.5	6672.8	40.6	59.5
2010/11	12075.6	4112.4	7963.2	34.1	65.9
2011/12	11083.1	3254.4	7828.7	29.4	70.6
2012/13	11969.4	2574.45	9394.9	21.5	78.5
2013/14	17998.8	3240.5	14758.3	18.0	82.0
2014/15	25615.6	3427.6	22188.0	13.4	86.6
Average Annual Growth Rate				16.39	83.60

Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15.

Table 4.7 shows that the pattern of bilateral and multilateral loan. In the review period bilateral loan increased from 1543.9 million to 3427.6 million whereas multilateral loan is increased from 4712.8 million to 22188.0 million. Likewise the average share of multilateral loan to total external loan on review period stick on 83.6 percent whereas the average shares of bilateral loan to total external loan is 16.39 percent.

Figure 4.7

Trend of External Debt in terms of disbursement by major source (Rs. in Millions)



Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15.

4.8 Structure of Deficit Financing

Public debt has been the main sources for financing fiscal deficit in Nepalese fiscal system. A deficit in fiscal position occurs when the government spends more than its current revenue. The government must borrow from somewhere to meet its fiscal deficit; broadly there are two sources of deficit financing-internal and external. Table 4.8 shows the structure of deficit financing.

Table 4.8

Internal and External Debt as Percentage of Budget Deficit (Rs. in Millions)

Fiscal year	Budget deficit	Total debt(TD)	Internal debt(ID)	External debt(ID)	ID as %of BD	ED as % of BD
1990/91	10673.2	10809.4	4552.7	6256.7	42.7	58.6
1991/92	11261.7	8895.7	2078.8	6816.9	18.5	60.5
1992/93	11956.0	8540.9	1620.0	6920.9	13.5	57.9
1993/94	11622.9	10983.6	1820.0	9163.6	15.7	78.8
1994/95	10577.8	9212.3	1900.0	7312.3	18.5	71.3
1995/96	13824.2	11663.9	2200.0	9463.9	15.9	68.5
1996/97	14361.9	12043.6	3000.0	9043.6	22.7	73.9
1997/98	17777.8	14454.6	3400	11054.4	19.1	62.2
1998/99	17991.1	16562.4	4710	11852.4	26.2	65.9
1999/00	17667	17312.2	5500	11812.2	31.1	66.9
2000/01	24188.1	19044	7000	12044	28.9	49.8
2001/02	22940.4	15698.7	8000	7698.7	34.9	33.6
2002/03	16437.2	13426.8	8880	4546.4	54.0	27.7
2003/04	15928.2	13236.8	5607	7629	35.2	47.9
2004/05	18046.5	18204.2	8939.1	9266.1	49.5	51.3
2005/06	24779.6	20048.5	11834.2	8214.4	47.8	33.1
2006/07	30091.6	27945.8	17892.3	10053.5	59.5	33.4
2007/08	33076.7	29476.3	20496.4	8979.9	62.0	27.1
2008/09	49802.7	28385.9	18417.1	9968.8	37.0	20.0
2009/10	43144.8	41137	29914	11223.4	69.3	26.0
2010/11	39622	54591.4	42515.8	12075.6	107.3	30.5
2011/12	51184.3	47501.8	36418.7	11083.1	71.2	21.7
2012/13	24711	31012.4	19043.0	11969.4	71.1	48.4
2013/14	38740	37981.6	19982.8	17998.8	51.6	46.5
2014/15	83220	67983.1	42367.5	25615.6	50.9	30.8
Average					42.16	47.69

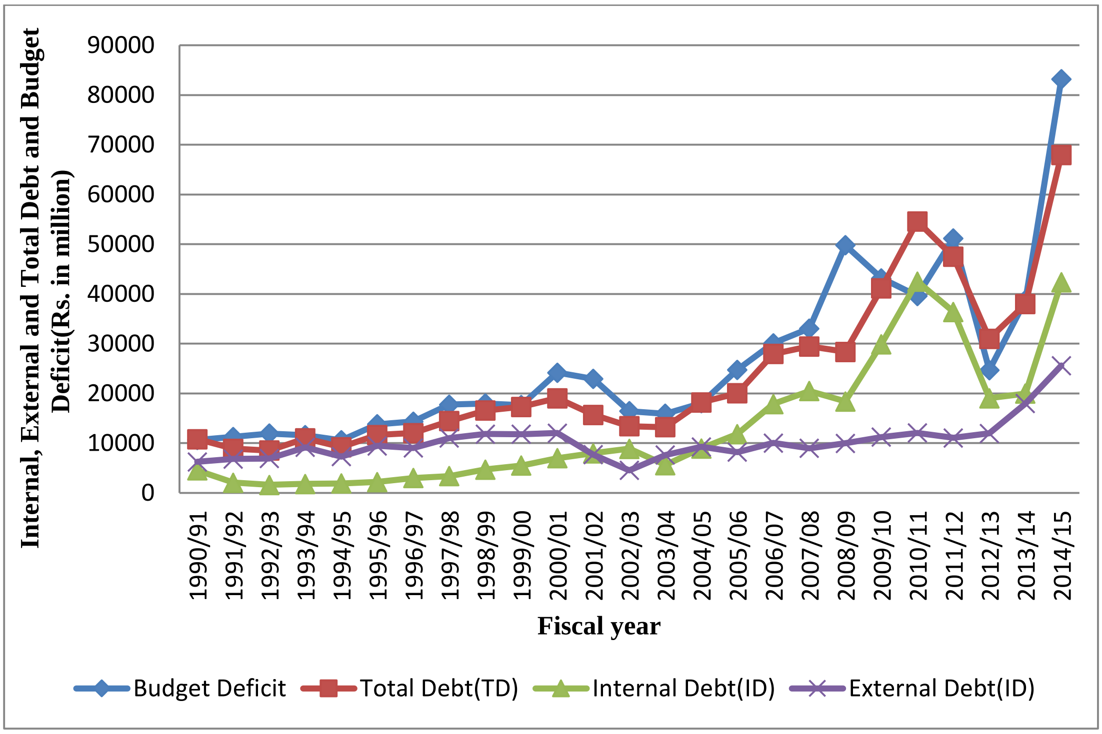
Source: Various Issue of Economy survey from FY 1990/91 to 2014/15.

Table 4.8 shows the increasing trend of public debt from both internal and external sources. Public Debt which was Rs. 10809.4 million in 1990/91 has increased to Rs. 67983.1 million in 2014/15. Internal debt was Rs. 4552.7 million in fiscal year 1990/91 and gone up to Rs. 42367.5 million in fiscal year 2014/15, whereas external debt was Rs. 6256.7 million in 1990/91 which has increased to Rs.25615.6 million in 2014/15. This shows the tremendous increasing trend. The table also shows that the percentage share of internal and external debt to budget deficit. Contribution of internal and external debt was 42.7 and 58.6 percent in fiscal year 1990/91 respectively, whereas share of internal and external debt is 50.9 and 30.8 percent in fiscal year 2014/15.

The table shows government growing reliance on external loan for meeting the ever- increasing budget deficit. It is in decreasing trend and that of internal debt is in increasing trends.

Figure 4.8

Trends of Internal, External and Total Debt and Budget Deficit (Rs. in Millions)



Source: Various Issues of Economic survey from FY 1990/91 to 2014/15.

4.9 Debt Servicing Issues in Nepal

Nepal is taking huge amount of external and internal loan with the obligation of future repayment. In Nepalese context, foreign loan share is rapidly increasing which increase financial and real burden for the future generation. So the debt servicing is one of the problems of Nepalese economy because most of the portion of revenue has been used to pay the interest of internal debt as well as external debt. The ratio of internal and external debt servicing to total debt servicing during the period 1997/98 to 2014/15 has shown in Table 4.9

Table 4.9.1

Share of External and Internal Debt Servicing in Total Debt Servicing(Rs.in Millions)

Fiscal year	Total Debt servicing(TDS)	Internal Debt servicing(IDS)	External Debt servicing(EDS)	IDS as %of TDS	EDS as % of TDS
1990/91	2407.4	1320.9	1086.5	54.9	45.1
1991/92	3797.1	2132.2	1664.9	56.2	43.8
1992/93	4560.5	2428.6	2131.9	53.3	46.7
1993/94	4855.1	2366.4	2488.9	48.7	51.3
1994/95	6083.3	3098.6	2984.7	50.9	49.1
1995/96	6715.4	3421.1	3294.3	50.9	49.1
1996/97	7527.2	4177.8	3349.4	55.5	44.5
1997/98	7682.8	3481.6	4201.2	45.3	54.7
1998/99	8723	3977.5	4745.5	45.6	54.4
1999/00	10032.8	4711.4	5321.4	47.0	53.0
2000/01	10388.4	4187	6201.4	40.3	59.7
2001/02	12205.2	5637.7	6567.5	46.2	53.8
2002/03	16181.3	8662.1	7519.2	53.5	46.5
2003/04	17338.8	9429.9	7908.9	54.4	45.6
2004/05	19751.3	11651.4	8099.9	59.0	41.0
2005/06	20423.5	11272.7	9150.8	55.2	44.8
2006/07	22916.3	13321.8	9594.5	58.1	41.9
2007/08	22760.6	14742.1	10014.7	64.8	44.0
2008/09	26988.3	14494.3	12494	53.7	46.3
2009/10	28413.6	15212.5	13201.1	53.5	46.5
2010/11	29957.6	16417.6	13540.0	54.8	45.2
2011/12	35319.9	18956.7	16363.2	53.7	46.3
2012/13	48866.7	31673.5	17013.4	64.8	34.8
2013/14	53914.8	33825	20089.8	62.7	37.3
2014/15	73722.8	53658.9	20077.9	72.8	27.2
Average				54.2	46.08

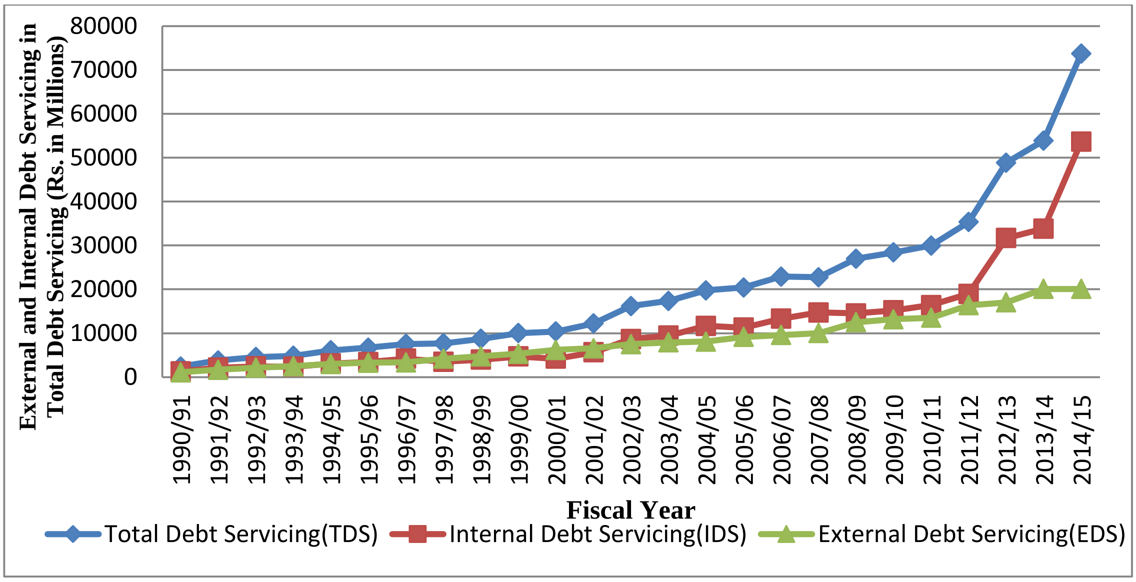
Source: Various Issues of Economic Survey from 1997/98 to 2014/15

Table 4.9 reflects that total debt servicing amount has increased from Rs 2407.4 million in FY 1990/91 to Rs73722.8 million in FY 2014/15. This indicates an increasing trend of total debt servicing. Similarly, the internal debt servicing amount has increased from Rs.1320.9million in fiscal year 1990/91 to Rs 53658.9 million in fiscal year 2014/15. And the external debt servicing has increased from Rs 1086.5 million in fiscal year1990/91 to Rs 20077.9 million in the fiscal year 2014/15. The average of internal debt servicing to total debt servicing is 54.2 and average of external debt servicing as percentage of total debt servicing is 46.08 percent in the review period. This means the burden of internal debt is growing rapidly than burden of external debt.

This means the burden of internal debt is growing rapidly than burden of external debt. Thus we find that the share of internal debt servicing in total debt servicing has been greater than that of external debt servicing throughout of the study period.

Figure 4.9

External and Internal Debt Servicing in Total Debt Servicing (Rs. in Millions)



Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15.

4.10 Analysis of Internal Debt Servicing Situation

The burden of Public Debt is measured by the ratio between the debt servicing and total revenue and the ratio between servicing cost and national income (GDP).This is shown in the Table 4.10

Table 4.10

Share of Internal Debt Servicing in TR, Regular Expenditure and GDP (Rs .in millions)

Fiscal year	Total revenue (TR)	Regular expenditu re(RE)	GDP	Internal Debt servicing(IDS)	IDS as% of TR	IDS as% of RE	IDS as % of GDP
1990/91	10729.8	23549.8	116127	1320.9	12.3	5.6	1.1
1991/92	13512.7	9905.4	144933	2132.2	15.8	21.5	1.5
1992/93	15148.8	11484.1	165350	2428.6	16.0	21.1	1.5
1993/94	19580.8	12409.2	191596	2366.4	12.1	19.1	1.2
1994/95	24575.2	19267.1	209976	3098.6	12.6	16.1	1.5
1995/96	27893.1	21561.8	239388	3421.1	12.3	15.9	1.4
1996/97	30373.5	24181.1	269570	4177.8	13.8	17.3	1.5
1997/98	32937.9	27174.4	289798	3481.6	10.6	12.8	1.2
1998/99	37251.3	31944.2	330018	3977.5	10.7	12.5	1.2
1999/00	42893.8	35579.3	366251	4711.4	11.0	13.2	1.3
2000/01	48893.6	45837.3	394052	4187	8.6	9.1	1.1
2001/02	50445.5	48863.9	406138	5637.7	11.2	11.5	1.4
2002/03	56229.8	52090.5	437546	8662.1	15.4	16.6	2.0
2003/04	62231.0	55552.1	474919	9429.9	15.2	17.0	2.0
2004/05	70122.7	61686.4	508651	11651.4	16.6	18.9	2.3
2005/06	72282.1	67017.8	557869	11272.7	15.6	16.8	2.0
2006/07	87712.2	77122.4	696989	13321.8	15.2	17.3	1.9
2007/08	107620.5	91446.9	792131	14742.1	13.7	16.1	1.9
2008/09	143474.4	124425.3	988272	14494.3	10.1	11.6	1.5
2009/10	177990.1	186597.6	1192774	15212.5	8.5	8.2	1.3
2010/11	198376.3	210167.7	1374953	16417.6	8.3	7.8	1.2
2011/12	244374.9	243460.0	1527344	18956.7	7.8	7.8	1.2
2012/13	296021.1	247455.0	1695011	31673.5	10.7	12.8	1.9
2013/14	356620.7	303530.0	1964540	33825	9.5	11.1	1.7
2014/15	405866.4	339407.0	2120470	53658.9	13.2	15.8	2.5
Average Annual Growth Rate					11.84	14.16	1.54

Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15.

Table 4.10 shows the volume of total revenue, regular expenditure, GDP and internal debt servicing. It also shows the share of TR, RE and GDP as percentage of internal debt servicing. Under the study period (Fiscal Year 1990/91 to 2014/15), the magnitude of total revenue, regular expenditure, GDP and internal debt servicing was Rs 10729.8, Rs.23549.8, Rs.116127 and Rs.1320.9 million at the starting period of review and which has increased to Rs. 405866.4, Rs.339407.0, Rs.2120470 and Rs.53658.9 million at the last period of review respectively.

Observing Table 4.10 the nature of internal debt servicing as percentage of total revenue, regular expenditure, GDP and internal debt servicing has been increasing. The internal debt servicing as percentage of total revenue was 12.3 percent in fiscal year 1990/91 and it has decreased to 7.8 percent in fiscal year 2011/12 and in FY 2014/15 it moves to 13.2 percent. Internal debt servicing as percentage of regular expenditure was 5.6 percent in fiscal year 1990/91 and has increased to 15.8 percent in fiscal year 2014/15. Similarly, the internal debt servicing as percentage of GDP was 1.1 percent in fiscal year 1990/91 and has increased to 2.5 percent in fiscal year 2014/15 which indicates that the trend of internal debt servicing as percentage of GDP is increasing.

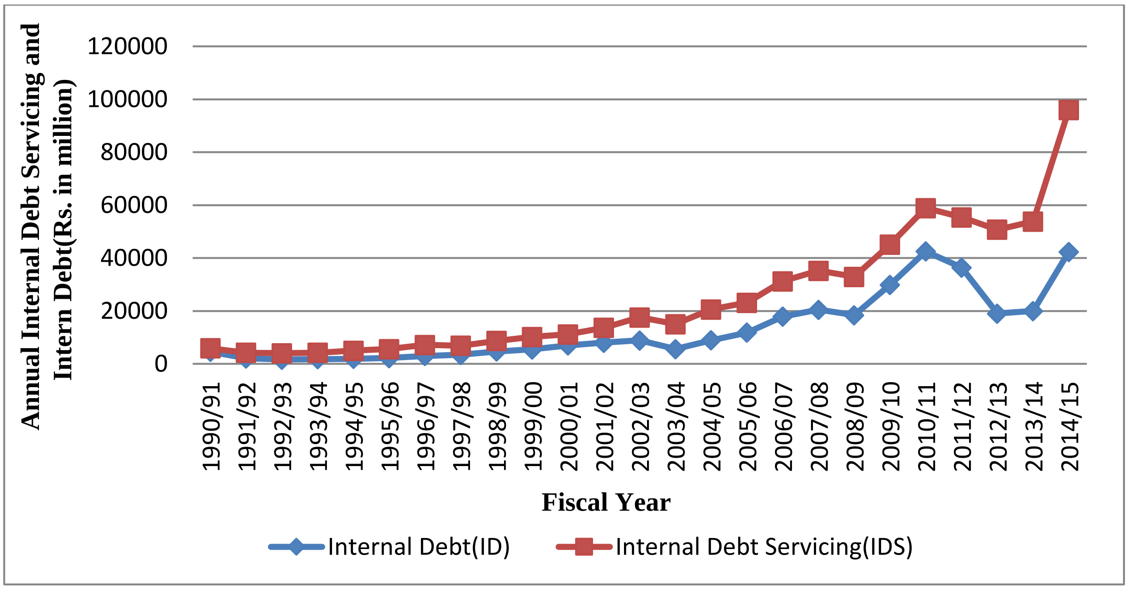
It shows that the growth rate of internal debt servicing is greater than growth rate of total revenue and GDP. This indicates that the servicing capacity of government has not increasing.

4.11 Annual Internal Borrowing and Internal Debt Servicing

The proportional relationship between annual internal borrowings an internal debt servicing can be taken as important aspects of internal debt analysis. Figure 4.11 shows the Trend of annual internal debt servicing and internal debt Table 4.11 shows that the aspects of internal debt servicing and proportion of annual borrowing which has spent on debt servicing.

Figure 4.11

Trend of Annual Internal Debt Servicing and Internal Debt (Rs. in Millions)



Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15.

Table 4.11

Internal Debt Servicing as Percentage of Internal Borrowing (Rs. in millions)

Fiscal year	Internal debt(ID)	Internal debt servicing(IDS)	IDS as % of ID
1990/91	4552.7	1320.9	29.0
1991/92	2078.8	2132.2	102.6
1992/93	1620.0	2428.6	149.9
1993/94	1820.0	2366.4	130.0
1994/95	1900.0	3098.6	163.1
1995/96	2200.0	3421.1	155.5
1996/97	3000.0	4177.8	139.3
1997/98	3400	3481.6	102.4
1998/99	4710	3977.5	84.4
1999/00	5500	4711.4	85.7
2000/01	7000	4187	59.8
2001/02	8000	5637.7	70.5
2002/03	8880	8662.1	97.5
2003/04	5607	9429.9	168.2
2004/05	8939.1	11651.4	130.3
2005/06	11834.2	11272.7	95.3
2006/07	17892.3	13321.8	74.5
2007/08	20496.4	14742.1	71.9
2008/09	18417.1	14494.3	59.2
2009/10	29914	15212.5	50.9
2010/11	42515.8	16417.6	38.6
2011/12	36418.7	18956.7	52.1
2012/13	19043.0	31673.5	166.3
2013/14	19982.8	33825	169.3
2014/15	42367.5	53658.9	126.7
Average			102.89

Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15

Table 4.11 shows the internal debt servicing and its percentage with internal debt. As far as measuring the internal debt burden, it shows internal debt servicing is growing faster than that of internal debt receiving. Observing the data we can find out the volume of internal debt was Rs.4552.7 million in fiscal year 1990/91 and it increased to 42367.5 million in FY 2014/15. Likewise internal debt servicing is also gone up from Rs.1320.9 million to Rs. 53658.9 million in fiscal year 2014/15. Internal debt servicing as percent of internal debt was 29.0 percent in FY 1990/91 and it is increased to 126.7 percent in FY 2014/15. All these trend shows Nepal's fourth coming days will be change into free of debt burden of these situation is running up continuously.

4.12 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. Here, the ratio of external outstanding debt to GDP has grown up and creating adverse situation in the economy, which requires serious thinking for its solution. Here, the compare of annual flow of external debt with annual debt servicing obligation is shown by Table 4.12

Table 4.12

External Debt Flow and its Servicing (Rs. in Millions)

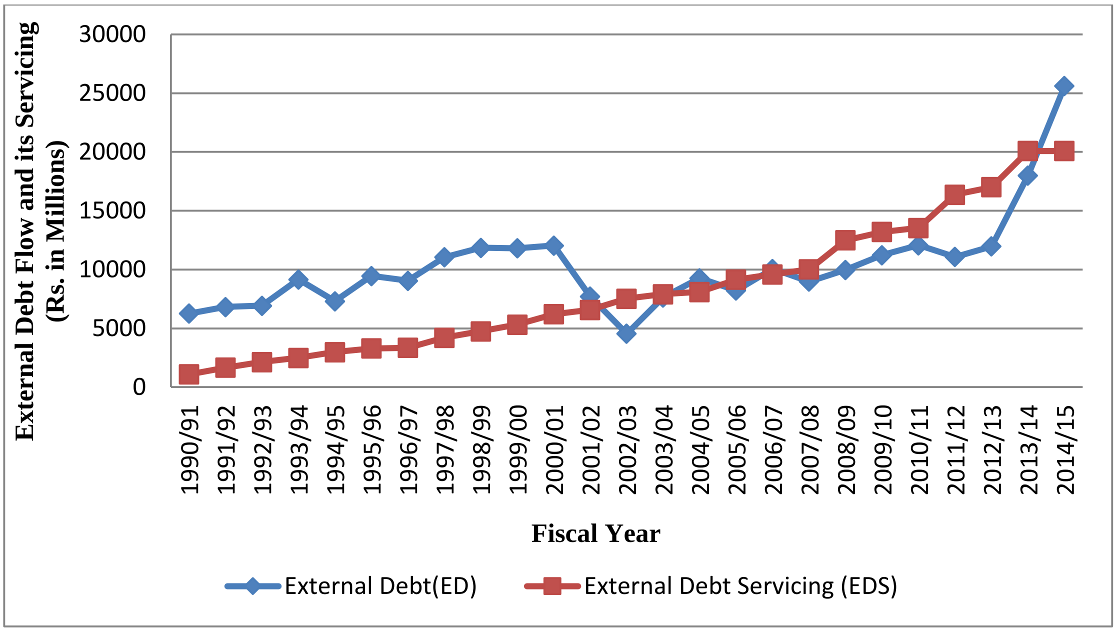
Fiscal year	External debt(ED)	External debt servicing (EDS)	EDS as % of ED
1990/91	6256.7	1086.5	17.36
1991/92	6816.9	1664.9	24.4
1992/93	6920.9	2131.9	30.8
1993/94	9163.6	2488.9	27.2
1994/95	7312.3	2984.7	40.8
1995/96	9463.9	3294.3	34.8
1996/97	9043.6	3349.4	37.0
1997/98	11054.4	4201.2	38.0
1998/99	11852.4	4745.5	40.0
1999/00	11812.2	5321.4	45.1
2000/01	12044	6201.4	51.5
2001/02	7698.7	6567.5	85.3
2002/03	4546.4	7519.2	165.4
2003/04	7629	7908.9	103.7
2004/05	9266.1	8099.9	87.4
2005/06	8214.4	9150.8	111.4
2006/07	10053.5	9594.5	95.4
2007/08	8979.9	10014.7	111.5
2008/09	9968.8	12494	125.3
2009/10	11223.4	13201.1	117.6
2010/11	12075.6	13540.0	112.1
2011/12	11083.1	16363.2	147.6
2012/13	11969.4	17013.4	142.1
2013/14	17998.8	20089.8	111.6
2014/15	25615.6	20077.9	78.4
Average Growth Rate			79.27

Source: Various Issues of Economic Survey from FY 1997/98 to 2014/115.

Table 4.12 shows, the external debt was Rs.6256.7 million in 1990/91 and has increased to Rs.25615.6 million in 2014/15 million. The amount of external debt servicing has increased from Rs.1086.5 million in 1990/91 to Rs 20077.9 million in 2014/15. And external debt servicing as percentage of external debt was 17.36 percent in 1990/91 whereas it is increased to 78.4 in FY 2014/15 and the average of review period stood at 79.27 percent. This shows that the external debt is more than the debt servicing which causes the rise in outstanding external debt.

Figure 4.12

Trend of External Debt Flow and its Servicing (Rs. in Millions)



Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15.

4.13 External Debt Servicing, Export Earning and GDP Ratio

Here, the attempt has been made to compute the ratio of external debt servicing to export earnings and debt servicing to GDP. In Nepal, the large proportion of GDP and export earning go back to foreign countries while servicing. The Table 4.13 shows the external debt burden in terms of export earning, debt servicing and ratio to GDP.

Table 4.13

External Debt Servicing, Export Earning and GDP Ratio (Rs. in Millions)

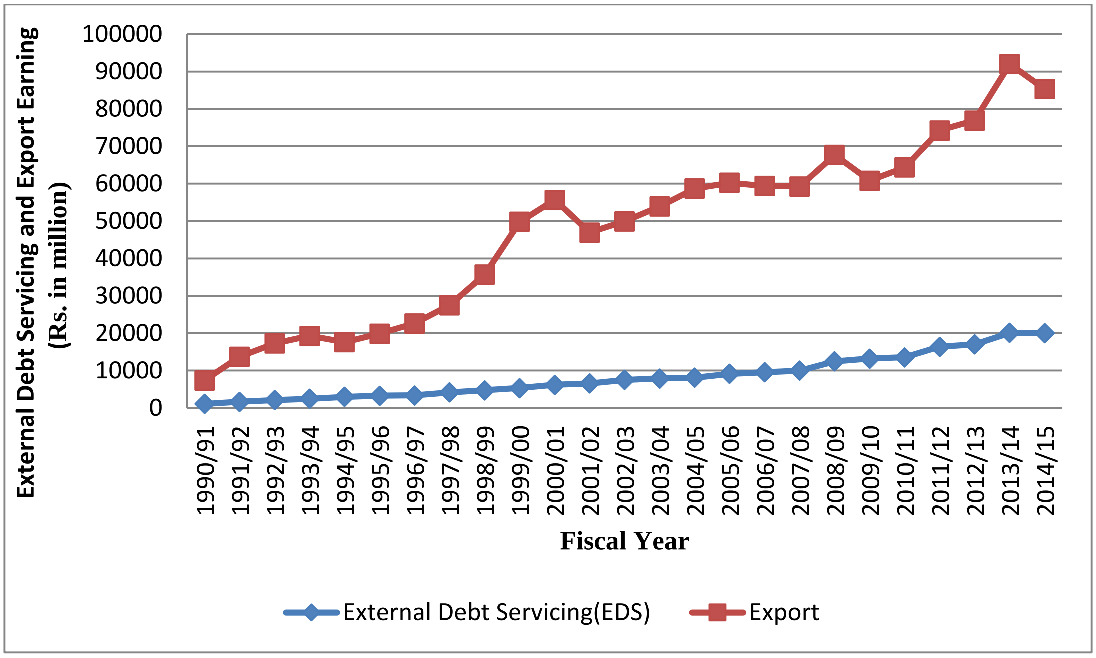
Fiscal year	GDP	External debt servicing(EDS)	Export	EDS as% of GDP	EDS as % of Export
1990/91	116127	1086.5	7387.5	0.9	14.7
1991/92	144933	1664.9	13706.5	1.1	12.1
1992/93	165350	2131.9	17266.5	1.3	16.1
1993/94	191596	2488.9	19293.5	1.3	12.9
1994/95	209976	2984.7	17639.2	1.4	16.9
1995/96	239388	3294.3	19881.1	1.4	16.6
1996/97	269570	3349.4	22636.5	1.2	14.8
1997/98	289798	4201.2	27514.5	1.4	15.3
1998/99	330018	4745.5	35676.3	1.4	13.3
1999/00	366251	5321.4	49822.7	1.5	10.7
2000/01	394052	6201.4	55654.1	1.6	11.1
2001/02	406138	6567.5	46944.8	1.6	14.0
2002/03	437546	7519.2	49930.6	1.7	15.1
2003/04	474919	7908.9	53910.7	1.7	14.7
2004/05	508651	8099.9	58705.7	1.6	13.8
2005/06	557869	9150.8	60234.1	1.6	15.2
2006/07	696989	9594.5	59383.2	1.4	16.2
2007/08	792131	10014.7	59266.7	1.3	16.9
2008/09	988272	12494.0	67697.5	1.3	18.5
2009/10	1192774	13201.1	60824.0	1.1	21.7
2010/11	1374953	13540.0	64338.5	1.0	21.0
2011/12	1527344	16363.2	74261.0	1.1	22.0
2012/13	1695011	17013.4	76917.2	1.0	22.1
2013/14	1964540	20089.8	91991.3	1.0	21.8
2014/15	2120470	20077.9	85319.1	0.9	23.5
Average Annual Growth Rate		12.15%	10.19%	1.28	16.40

Source: Various Issue of Economic Survey from FY 1990/91 to 2014/15.

Table 4.13 shows the magnitude of export earning was Rs.7387.5 million in 1990/91 which has increased to Rs.85319.1 million in 2014/15. whereas external debt servicing amount was Rs.1086.5 million in 1990/91 and increased to Rs.20077.9 million in 2014/15. The average annual growth rate of export stood at 10.19% and the average annual growth rate of external debt servicing stood at 12.15% which shows that the annual increase in export is less than the annual increase in external debt servicing.

Figure 4.13

Trend of External Debt Servicing and Export Earning (Rs. in Millions)



Source: Various Issues of Economic Survey from FY 1990/91 to 2014/15

4.14 Outstanding External Debt and Import

The relationship between external debt burden and import payments on their average annual growth rate and the ratio of imports payments to external debt are shown in Table 4.14

Table 4.14

Ratio of External Outstanding Debt and Import Payment (Rs. in Millions)

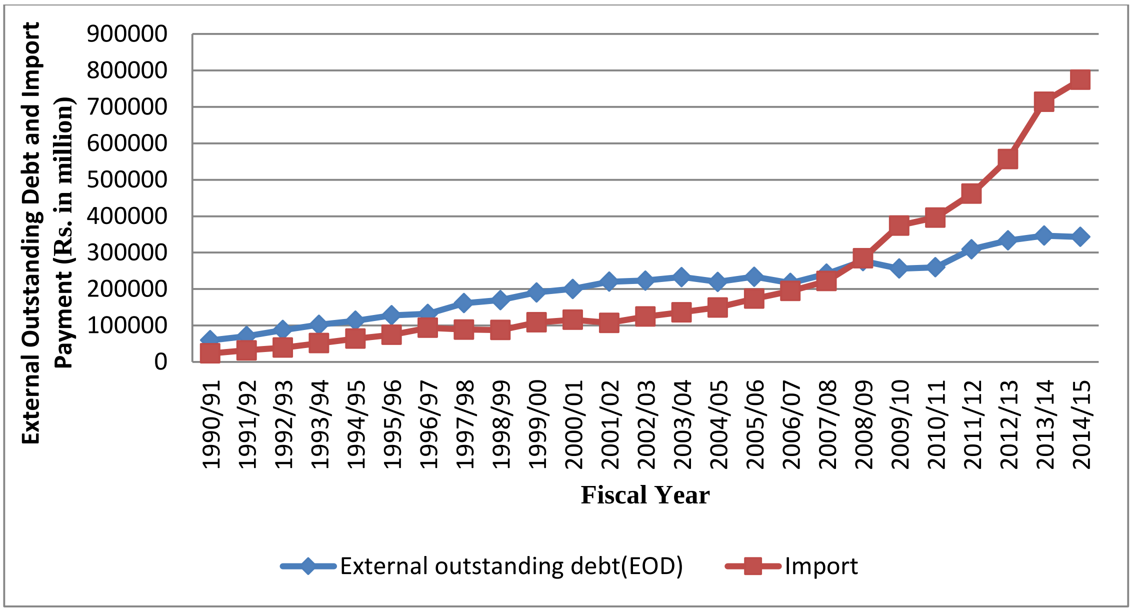
Fiscal year	External outstanding debt(EOD)	Import	Import as % of (EOD)
1990/91	59505.3	23226.5	39.0
1991/92	70923.9	31940.0	45.0
1992/93	87420.8	39205.6	44.8
1993/94	101966.8	51570.8	50.6
1994/95	113000.9	63679.5	56.4
1995/96	128044.4	74454.5	58.1
1996/97	132086.8	93553.4	70.8
1997/98	161208	89002.0	55.2
1998/99	169465.9	87525.3	51.6
1999/00	190691.2	108494.9	56.9
2000/01	200404.6	115687.2	57.7
2001/02	220125.6	107389.0	48.8
2002/03	223433.2	124352.1	55.7
2003/04	232779.3	136277.1	58.5
2004/05	219641.9	149473.6	68.1
2005/06	233968.6	173780.3	74.3
2006/07	216628.9	194694.6	89.9
2007/08	242060.6	221937.8	91.7
2008/09	277000	284469.6	102.7
2009/10	256243.3	374335.2	146.1
2010/11	259501.1	396175.5	152.7
2011/12	309287.0	461667.7	149.3
2012/13	333442.0	556740.1	167.0
2013/14	346819.1	714365.9	206.0
2014/15	343261.8	774684.2	225.7
Average Annual Growth Rate	7.3%	14.6%	84.75

Source: Various Issues of Economic Survey from FY 1990/91 to 2014/115

Table 4.14 shows that the external outstanding debt. IN FY 1990/91 was Rs.59505.3 million whereas in 2014/15 it increased to 343261.8 million with average annual growth rate of 7.3 percent which indicates the serious problem in external debt burden of Nepal. On the other hand, the magnitude of import payment was Rs 23226.5 million in 1997/98 and has gone up to Rs 774684.2 million in 2014/15 with the 14.6 percent of average annual growth rate. This shows the large proportion of foreign exchange transferred to foreign countries for import of goods and services. The table also shows the imports payment as percentage of External outstanding debt was 39.0 percent in FY 1990/91 which increased to 225.7 percent in FY 2014/15 with average of 84.75 percent in review period. The purpose of external debt is not going on right direction and balance of payments is hampered.

Figure 4.14

Trend of External Outstanding Debt and Import Payment (Rs. in Millions)



Sources: Various Issues of Economic Survey from FY 1990/91 to 2014/15

4.15 Regression Analysis

To study the impact of external debt and internal debt on the economic development of Nepal, some regression equations are made. These equations are used to analyze the cause and effect relationship between GDP with internal debt (ID) and external debt (ED).here an attempt has to be made analyze the relationship between public debt and GDP. For this purpose, regression equations are computed by using SPSS program.

4.15.1 GDP and Internal Debt

This analysis shows the relationship between GDP and Internal debt. For this, regression equation is

$Y=a_0+a_1X_1$

Where,

Y= GDP (Dependent variable)

X_1= ID (Independent variable)

a_0, a_1=Regression parameters

The result of this regression model is:

$Y= -436413.253+109.915X_1$

(-2.012)* (5.625)*

R^2= 0.579 Adjusted R^2=0.561 F=31.639 D-W =0.404

*denotes t-value

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. This result shows the slope of regression line is 109.91 which tell that one million increase in internal debt result 109.91million increase in GDP. The coefficient of determination R^2 is 0.579 that means 57.9 percent variation in GDP is effected by the explanatory variable i.e internal debt. The value of R^2 shows the variation. Since calculated F-value is 31.639 which is greater than tabulated value F is at 5 percent level of significant with degree freedom (1,23) i.e. $F_{0.05}(1,23)=4.28$. So that regression equation is significant. To test the significance of regression coefficient, the t-test is with at a certain level of significance at N-1 degree of freedom. Since the calculate t value of a_0 (-2.012) is less than tabulated value 1.711 so it is statistically not significant. However, the calculate t value of a_1 (5.625) is greater than tabulated value at the same level of significance and degree of freedom so it is statically significance. The D-W test (d) is 0.404 at 5 percent level of significance we can find the tabulated value of d_l= 1.288 and d_u=1.454.Thus, 0.404<1.288 or $d < d_l < d_u$ so there exist positive autocorrelation.

4.15.2 GDP and External Debt

The relation between GDP and External debt is represented by the equation given below:

$Y=a_0+a_1X_2$

Where,

Y= GDP (Dependent variable)

X_2= ED (Independent variable)

a_0, a_1=Regression parameters

The result of this regression model is:

$Y= 160469.473+40.973X_2$

(1.827)* (8.46)*

R^2= 0.757 Adjusted R^2 =0.746 F=71.57 D-W =0.904

* denotes t-value

The fitted equation above shows that there is positive relationship between GDP(Y) and External Debt (X_2) which means when Internal Debt increases then GDP increases. This result shows the slope of regression line is 40.973 which tell that one million increase in external debt result 40.973 million increase in GDP. The coefficient of determination R^2 is 0.757 that means 75.7 percent variation in GDP is effected by the explanatory variable i.e external debt. And the calculated F-value is 71.570 greater than tabulated value F is at 5 percent level of significant with degree freedom (1,23) i.e. $F_{0.05}(1,23)=4.28$. So that regression equation is significant. To test the significance of regression coefficient, the t-test is with at a certain level of significance at N-1 degree of freedom. Since the calculate t value of a_0 (1.827) is greater than tabulated value 1.711 so it is statistically significant. Similarly, the calculate t value of a_1 (8.46) are greater than tabulated value at the same level of significance and degree of freedom so it is statically significance. The D-W test (d) is 0.904at 5 percent level of significance we can find the tabulated value of d_l=1.288 and d_u=1.454 Thus, 0.904<1.288 or $d<d_l<d_u$. So there exist positive autocorrelation.

4.15.3 Effects of Internal and External Debt on GDP

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

$Y=a_0+a_1X_1+a_2X_2$

Where,

Y= GDP (Dependent variable)

X_1= ID (Independent variable)

X_2=ED (Independent variable)

a_0, a_1, a_2 = Regression parameters

The result of this regression model is:

$Y= -242289.933+52.396X_1 +30.45X_2$

(-1.761) * (3.335) * (5.944)*

$R^2 = 0.838$ Adjusted $R^2=0.824$ F=57.095 D-W Test=1.252

* denotes t-value

The fitted equation above shows GDP is dependent variable and X_1 and X_2 are independent variable. This result shows that $a_1$or MPC of internal debt is 52.396 when one million increases in internal debt (X_1) causes GDP(Y) would increases by 52.396 million. Similarly a_2 or MPC of external debt is 30.45 when one million increases in external debt (X_2) causes GDP(Y) would increases by 30.45 million. The coefficient of determination R^2 is 0.838 that means 83.8 percent variation in GDP is effected by the explanatory variable i.e internal debt and external debt. And the calculated F-value is 57.095 greater than tabulated value F is at 5 percent level of significant with degree freedom (2, 22) i.e. $F_{0.05}(2,22)=3.44$. So that regression equation is significant. To test the significance of regression coefficient, the t-test is with at a certain level of significance at N-1 degree of freedom. Since the calculate t value of a_0 (-1.761) is less than tabulated value 1.711 so it is statistically not significant. However, the calculate t value of a_1 (3.335) and a_2 (5.944) are greater than tabulated value at the same level of significance and degree of freedom so they are statically significance. The D-W test(d) 1.252 at 5 percent level of significance we can find the tabulated value of d_l=

1.206 and d_u= 1.550 Thus, 1.252> 1.206 or $d_l<d<d_u$. it shows that there is existence of autocorrelation among error terms.

4.15.4 Effects of total Debt on GDP

This analysis shows the relationship between GDP and Total debt. For this, regression equation is

$Y=a_0+a_1X$

Where,

Y= GDP (Dependent variable)

X= TD (Independent variable)

a_0, a_1=Regression parameters

The result of this regression model is:

Y= -120561.743+34.92X

(-1.300)* (10.558)*

R^2= 0.829 Adjusted R^2=0.822 F=111.472 D-W =1.215

* denotes t-value

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. This result shows the slope of regression line is 34.92 which tell that one million increase in total debt result 34.92 million increase in GDP. The coefficient of determination R^2 is 0.829 that means 82.9 percent variation in GDP is effected by the explanatory variable i.e total debt. And the calculated F-value 111.472 greater than tabulated value F is at 5 percent level of significant with degree freedom (1,23) i.e. $F_{0.05}(1,23)$=4.28. So that regression equation is significant. To test the significance of regression coefficient, the t-test is with at a certain level of significance at N-1 degree of freedom. Since the calculate t value of a_0 (-1.300) is less than tabulated value 1.711 so it is statistically not significant. However, the calculate t value of a_1 (10.558) is greater than tabulated value at the same level of significance and degree of freedom so it is statically significance. The D-W test (d) is 1.215 at 5 percent level of significance we can find the tabulated value of d_l= 1.288 and d_u= 1.454 Thus, 1.215<1.288 or $d<d_l<d_u$. So there exist positive autocorrelation.

In conclusion, the relationship between GDP and total debt, External debt and internal debt is positive. Both debts help to increase the GDP. At last this empirical finding shows that the impact of internal debt on GDP is stronger than external debt at current time period so, Nepal should take consideration in taking internal debt in comparison to external debt.

4.16 Major Findings

i. Basically, the study shows that there is lack of adequate fund for development financing. We have limited resources, small size GDP, lower per capita income, lack of infrastructure, saving investment gap, export import gap, revenue expenditure gap etc. so, the domestic resources are not sufficient to promote the rapid development of the economy. All these factors are major causes to increase external dependency Borrowing is taking from two sources internal and external. In the internal sources treasury bills, special bonds, development bonds and national saving certificates are included. Large proportion of internal debt is taken by banking sectors from very beginning of the debt program. Similarly, in external sources Nepal is receiving borrowing in the form of bilateral and multilateral sources such as ADB, UNDP, WB, WHO, IMF etc.

ii. In the FY 1990/91, government expenditure was Rs. 23549.8 million and it is increased to Rs 531550.0 million in the FY 2014/15. The average annual growth rate of government revenue in the study period is 16.01 percent whereas the average annual growth rate of government expenditure is 13.49 percent. The average annual growth rate of income is higher than the average annual growth rate of expenditure but the absolute amount of government expenditure is higher than the income. This shows the financial resource gap, in which budget deficit has been increased from Rs. 10673.2 million to Rs. 83220 million with an average annual growth rate of 12.84 percent under the review period.

iii. The total debt has been increased from Rs. 10809.4 million to Rs. 67983.6 million. The share of external loan to budget deficit has been decreased from 58.6 percent to 30.8 percent and share of internal loan has been increased from 42.7 percent to 50.9 percent under the review period. The average annual growth rate of internal debt as percentage of budget deficit stood at 42.16

percent and the average annual growth rate of external debt as percentage of budget deficit stood at 47.69 percent under the review period

iv. Main sources of financing deficit are loan and grant. In FY 1990/91 share of external borrowing was Rs.6256 million whereas the share of internal borrowing was Rs.4552.7 million but in FY 2014/15, the amount of external borrowing rose to Rs. 25615.6 million and internal borrowing stood at Rs.42367.5 million. It shows that both sources of borrowing are increasing.

v. A foreign grant is not increasing in the desirable pace as it predicts. Foreign grants has been increasing from Rs. 2146.8 million in fiscal year 1990/91 to Rs. 36374.2 million in 2014/15 with 16.41 percent average annual growth rate under the study period.

vi. In the study period FY 1990/91 to fiscal year 2014/15 the percentage share of total debt to GDP has been decreasing from 9.3 percent to 3.2 percent with average of 4.19 percent. Similarly, internal debt as percent of GDP was 3.9 percent in FY 1990/91 and decreased to 2 percent in FY 2014/15 and 1.69 percent of average on study period. The external debt as percentage of GDP was 5.4 percent in FY 1990/91 and it decreased to 1.2 in FY 2014/15 with 2.34 percent average on the review period.

vii. In the study period, the average annual growth rate of outstanding total debt, internal debt and external debt are 7.97, 9.45 and 7.3 percent respectively. The share of external debt to GDP is in decreasing trends which reaches to 16.2 percent from 49.4 percent. Similarly, the share of internal debt to GDP is decreased with fluctuating nature from 17.3 percent in 1990/91 to 9.5 in 2014/15. And the share of total outstanding debt to GDP decreased to 25.7 percent from 66.8 percent in FY 1990/91.

viii. Government received internal debt from Treasury Bills, Development Bonds, National saving Certificates and Special Bonds. Treasury bill provides short term financial requirement for government having 3 month to one year. National saving Certificates, Development bonds and Special Bonds etc are the long term financial requirement having the maturity period of 5-7 years. Government received Rs 2350 million internal debt from Treasury Bills, Rs.5482.3 million from Development Bonds, Rs. 3646.5 million from

National Saving Certificate and Rs. 9376.1 million from Special Bonds in FY 1990/91. Similarly Government received Rs.119858.1 Rs, 16586.5 million from National Saving Certificate and Rs.8142.2 from Special Bonds in FY 2014/15.

ix. It is found out that total loan, share of multilateral sources is higher than bilateral sources, because in F.Y. 2014/15 out of external loan 25615.6 million and Rs. 22188.0 million was multilateral and Rs. 3427.6 million was bilateral loan and percentage of bilateral and multilateral loan to total external loan were 24.7 percent in FY 1990/91 to 16.39 percent in 2014/15 and similarly, 75.3 percent in 1990/91 to 83.60 percent in FY 2014/15 respectively. Here share of multilateral loan to external loan is high than bilateral loan.

x. External outstanding debt as percentage of GDP was 49.4 percent in FY 1990/91, which was 16.2 percent in FY2014/15. Similarly internal outstanding debt as percentage of GDP was 17.3 percent in FY 1990/91 to 9.5 percent in FY 2014/15. This clearly shows that the burden of external debt which is quite heavy.

xi. The trend of debt servicing of Nepal is increasing, total debt servicing has increased from Rs.2407.4 million in FY 1990/91 to Rs.73722.8 million in FY 2014/15. Average annual growth of external debt servicing to total debt servicing is 46.08 percent where as average annual growth rate of internal debt servicing to total debt servicing 54.2 percent, which shows the large amount of total debt, is spending for internal debt servicing.

xii. The percentage share of internal debt servicing to internal debt was 29.0 percent in FY 1990/91 and its 126.7 percent in the last year of review period. This shows that government's ability to borrow from internal sources is not conducive to raise enough funds for development requirement.

xiii. The external debt servicing as percentage of external debt was 17.36 percent in FY 1990/91 and it is 78.4 percent in FY 2014/15 with79.27 percent average annual growth rate.

xiv. While considering the empirical result of regression equation of GDP on ED and ID, the regression constant (a_0) is -242289.933, regression coefficient of ID (a_1) is 52.396 and coefficient of ED(a_2) is 30.45, Similarly, R^2=0.838, Adjusted R^2=0.824, F-Test=57.095 and D-W Test=1.252, which indicate that there is strong and positive relationship between public debt and GDP. It implies that the increment and decrement in GDP depend upon the public debt. And the impact of internal debt on GDP is stronger than external debt at current time period.

CHAPTER V

SUMMERY AND CONCLUSIONS

5.1 Summary

This study is divided into five different chapters. The first chapter is concerned on the introductory part of the study with background, problems, objectives, significance and limitations of the study. The second chapter reviews some literatures, books, articles with introduction, theoretical review, recent thinking about public debt as well as National context and International context review of literature. The chapter three describes about the research methodology: Research Design, Nature and sources of data, method of Data Analysis, simple Regression Equation Model and Definition of Terminologies are included. The chapter four is related with the presentation and analysis of data and the chapter five shows summary of findings, conclusion and recommendations. Finally, references are presented at the end of the study. To examine the structure and trend of internal, external and overall public debt, to analyze the structure and trend of debt servicing in Nepal and examine the impact of public debt on GDP are the main objectives of this study.

The study attempted to get various empirical results using only secondary data. The required data were obtained from various sources like Economic survey, Ministry of Finance (MOF), National Planning Commission (NPC), Central Bureau of Statistics(CBS), World Bank, International monetary fund etc. the time coverage of the study is from FY 1990/91 to 2014/15 after the restoration of democracy in Nepal. The regression analysis is used to examine the impact of Public Debt on GDP. The study main focus was to show the trend and structure of public debt in Nepal. The trend of public debt took increasing and decreasing pattern in the study period but the overall the internal and external public debts are rapidly increasing in the study period. The outstanding domestic debt liability has totaled Rs.201656.8 million in FY 2014 and external debt liability has reached Rs. 343261.8 million in the same period. Total public debt liability as of 2014/15 stands at Rs. 544918.6 million which is 55.6% of GDP. The studied showed that composition of internal debt in terms of Treasury Bills, Development Bonds, National Saving Certificate and Special Bonds which indicates that government borrowing comparatively more amount from

Treasury bills than other. Similarly it is found out that total external debt, share of multilateral sources is higher than bilateral sources. The study shows the impact of public debt in GDP of Nepal. From, the regression analysis we found that the impact of internal debt on GDP is stronger than external debt at current time period. Being a least developed country, Nepal is incurring public debt. Although, the trend of continuous increase public debts are not good economic indicator for Nepal. Public debt is important source to mobilize resource as well as socioeconomic development of the country.

Nepal is one of the least developed countries with low level of saving investment. Nepal suffers from serious problem of resource gap. Nepal is facing an acute resource gap problem, which is also being expected to grow coming years. Nepal is demanding more and more financial resources through public debt to bridge the growing resources gap in budget. Since, revenue expenditure gap, export import gap as well as saving investment gap is important factor for increasing borrowing trend, government is fulfilling such gap from two sources, internal & external debt is taken from treasury bills, special bonds, national saving certificates and development bonds through banking sector. External debt received from bilateral and multilateral sources and the proportion of loan from such institutions is large in Nepal only through internal resources, it is not sufficient to promote the rapid development of the Nepalese economy.

5.2 Conclusions

Public debt refers to the obligation to pay money back to the persons, institutions, or country from whom it has obtained. It plays a valuable role in socio-economic development of a nation. Nepal started obtaining internal debt since FY 1961/62 and external debt since FY 1963/64 with the objectives of national development. Nepal's most development activities ate depending upon the Public Debt especially external debt.

During the study period, it was found that government borrowing has been increased financed mostly on the unproductive sector including imports of goods and services hence government always lacks the revenue then borrows the new loan to pay the previous one. That's why, the Public Debt and its interest is growing rapidly. But addressing capacity for redemption the debt is not increasing in the same pace.

It is concluded that the average annual growth rate of GDP, revenue and export earnings are considerably low as compared with that of debt and its servicing obligation. Because of the misuse of borrowed funds, other things remaining the same there are symptoms of steadily falling into the debt trap. Nevertheless the study concludes that the share of outstanding debt to GDP in the recent years seemed to have declined. It had remained at 66.8 percent in FY 1990/91 and continued to fall in its succeeding years and arrived at 25.7 percent in FY 2014/15. The share of outstanding public debt to GDP remained away from worrying state as per international standard. Foreign loan and domestic debts that are accepted every year to finance fiscal deficit have further increased country's liability. In this context, it is necessary to think for assessing risks inherent in public debts and manage them accordingly. It also concludes that the impact of internal debt on GDP is stronger than external debt and there is positive relationship between GDP and public debt.

5.3 Recommendations

In the Nepalese budgetary system Public Debt has meaningful place. To fulfill the gap between revenue and expenditure debt is using every year heavily. So, to rescue from the debt trap the effective utilization of Public Debt is necessary. After the study of Public Debt in Nepal during the period 1990/91 to 2014/15, the following recommendations are proposed to be a tool for the Public Debt management in Nepal:

i. To minimize the resource gap, the government expenditure has to be controlled and allocated on the basis of national priority so that productivity may increase within stipulated time period.

ii. Government should use the external and internal debt on highly productive sectors which can contribute to pay back of the principle and interest and to help to generate the capital formation.

iii. Government should move towards fiscal imbalance and strong fiscal discipline through control of unproductive expenditure and maximizing revenue mobilization.

iv. The government should be active enough to maintain the strong policy of monitoring, evaluation and supervision which help to reduce corruption and to increase accountability, responsibility and implementation.

v. Government should adopt the policy of trade but not aid for the economic development. Proper attention should be given to maintain macroeconomic stability of the country while taking both external and internal borrowing

vi. The government should try to maintain balance between expenditure and revenue. For this government should remove unnecessary expenditure.

vii. Government should increase the debt servicing capacity of the country. For this government should invest debt amount in productive sector ie development sector.

viii. Government should borrow debt from development bond rather than treasury bills because its maturity period less than development bonds.

ix. The share of debt servicing is substantial in regular expenditure so, loan from external sources should be received only when needed. Foreign aid should be channelized in such investment programs which help improving the productive activity of the economy.

x. A complete and vigorous cost benefit analysis must be done before receiving loan for any project from external sources as well as from domestic borrowings.

xi. To increase the Debt servicing capacity, Government should increase GDP growth, revenue growth and export earnings growth in sustainable path so that country will not trapped on the debt servicing problem.

xii. Government should be conscious about debt trap. To prevent from debt trap, government should create new debt servicing capacity. The inflowing loan should be utilized as possible as in productive areas.

APPENDIX

LINEAR REGRESSION MODEL

S.N	Variable			Result Regression coefficient			R2	Adj.R 2	T-test			F-test	D-W test
	Dept.	Indept.		a_0	a_1	a_2			a_0	a_1	a_2		
1.	GDP	ID	-	-436413.253	109.915	-	0.579	0.561	-2.012	5.625	-	31.639	0.404
2.	GDP	ED	-	160469.473	40.973	-	0.757	0.746	1.827	8.46	-	71.570	0.904
3.	GDP	TD	-	-120561.743	34.92	-	0.829	0.822	-1.300	10.558	-	111.472	1.215
4.	GDP	ID	ED	-242289.933	52.396	30.45	0.838	0.824	-1.761	3.335	5.944	57.095	1.252

Where,

Dept=Dependent variable

Indept=Independent variable

R^2 refers to the coefficient of determinations

Adjusted R^2 refers to the coefficient of multiple determinations.

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