

TREND AND PATTERN OF PUBLIC DEBT AND ITS IMPACT ON GROWTH IN NEPAL

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fulfilment of the requirements for the Master's Degree

by

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled “**Trend and Pattern of Public Debt and its Impact on Growth in Nepal**”. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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TABLE OF CONTENTS

	<i>Page No.</i>
<i>Title</i>	<i>i</i>
<i>Certification of authorship</i>	<i>ii</i>
<i>Report of research committee</i>	<i>iii</i>
<i>Approval sheet</i>	<i>iv</i>
<i>Acknowledgements</i>	<i>v</i>
<i>List of contents</i>	<i>vi</i>
<i>List of tables</i>	<i>viii</i>
<i>Abbreviations</i>	<i>ix</i>
<i>Abstracts</i>	<i>x</i>
CHAPTER I : INTRODUCTION	1-6
1.1 Background of the study	1
1.2 Problem statement	3
1.3 Objectives of the study	6
1.4 Rationale of the study	6
1.5 Limitations of the study	6
CHAPTER II : REVIEW OF LITERATURE	7-33
2.1 Theoretical review	7
2.1.1 Recent thinking on government borrowing	13
2.1.2 History of public borrowing in Nepal	17
2.2 Empirical review	19
2.2.1 Review of journals and articles	19
2.2.2 Review of theses	27
2.3 Research gap	33
CHAPTER III: Research METHODOLOGY	34-38
3.1 Research design	34
3.2 Size of sample and sampling design	34
3.3 Nature and sources of data, and instruments of data collection	34
3.4 Method of analysis	34
3.5 Research framework and definition of variables	37

CHAPTER IV : RESULTS AND DISCUSSION	39-66
4.1 Composition and trend of public debt in Nepal	39
4.2 Growth trend of public debt	41
4.3 Sources of internal debt	42
4.4 Pattern of internal net outstanding debt	43
4.5 Sources of external borrowing	45
4.6 Burden of public debt in Nepal	47
4.7 National outstanding debt and its share in GDP	48
4.8 Debt servicing issues in Nepal .	50
4.9 Ownership pattern of internal debt servicing situation .	52
4.10 Issues of foreign loans	55
4.11 Foreign outstanding debt and GDP	57
4.12 Correlation analysis	58
4.13 Relationship between Internal Debt, External Debt, total debt and GDP	59
4.14 Major findings	61
4.15 Discussions	64
CHAPTER V : Summary AND ConclusionS	67-70
5.1 Summary	67
5.2 Conclusions	68
5.3 Implications	69

REFERENCES

APPENDICES

LIST OF TABLES

Table 1	Internal and external debt as percentage of fiscal deficit	40
Table 2	Trend of public debt	41
Table 3	Sources of internal debt	43
Table 4	Structure of internal net outstanding debt	44
Table 5	Structure of internal net outstanding debt in percentage	44
Table 6	Structure of external loan in terms of disbursement by major sources	46
Table 7	Outstanding debts and its share in GDP	49
Table 8	Share of external and internal debt servicing in total debt servicing	50
Table 9	Share of interest and principal payments in total dept servicing	51
Table 10	Share of internal debt servicing in total revenue, regular expenditure and GDP	52
Table 11	Outstanding public debt, development expenditure and debt servicing	53
Table 12	Annual internal debt servicing as percentage of annual internal debt	54
Table 13	Annual external debt servicing as percentage of annual external debt	55
Table 14	Annual growth of external outstanding debt and GDP	57
Table 15	Pearson's correlation matrix for the dependent and independent variables	58

ABBREVIATIONS

ADB	:	Asian Development Bank
CBS	:	Central Bureau of Statistics
ED	:	External Debt
FY	:	Fiscal Year
GDP	:	Gross Domestic Product
ID	:	Internal Debt
IMF	:	International Monetary Fund
LDCs	:	Least Developed Countries
MOF	:	Ministry of Finance
NG	:	Nepal Government
NPC	:	National Planning Commission
NRB	:	Nepal Rastra Bank
SAARC	:	South Asian Association for Regional Co-operation
TD	:	Total Debt
TED	:	Total External Debt
TU	:	Tribhuvan University
UK	:	United Kingdom
UN	:	United Nations
UNDP	:	United Nations Development Programme
UNICEF	:	United National Children's Fund
WB	:	World Bank
WDR	:	World Development Report
WHO	:	World Health Organization

ABSTRACT

Government is taking loan from two sources, internal and external. In internal sources, development bonds, treasury bills, national saving certificate and saving certificates are used. Similarly, in external sources Nepal is receiving debt by two sources, bilateral and multilateral. The main objective of the study is to investigate and analyze the trend and pattern of public debt in Nepal and specific objectives are; to assess the trend and pattern of public debt in Nepal, to analyze the burden of public debt and debt servicing capacity and to examine the effect of external debt on output growth in Nepal. This study is based on historical, analytical as well as descriptive research design. In order to show the trend and structure of external borrowing and its effect on gross domestic product, data from 2013/14 to 2022/23 has been taken into account through purposive sampling method. This study is based on secondary data and was collected from various sources such as government's budget and economic surveys.

The study found that the total debt was Rs. 443700 million in FY 2013/14 and has increased to Rs. 1139796 million in the FY 2022/23. Internal debt was only Rs. 184199 million in the FY 2013/14 and has gone up to Rs. 440047 million in 2022/23. Where as external debt was Rs. 259501 million in 2013/14 and increased tremendously up to Rs. 699749 million in 2022/23.

The study found that the amount of total debt servicing was Rs. 29957.3 million in 2013/14 and has increased to Rs. 47309 million in 2022/23. This shows as an increasing trend of total debt servicing. The volume of external debt servicing was Rs. 13542.1 million in 2013/14 and has increased to Rs. 14420 million in 2022/23 and the internal debt service was Rs. 16415.2 million in 2013/14 and has gone up to Rs. 32889 million in 2022/23. The analysis of this study found that there exist significant positive relationship between External Debt, Internal Debt and Total Debt with Gross Domestic Product (GDP). Higher external debt is associated with higher domestic output and vice versa.

Keywords: *Gross domestic product (GDP), public debt, internal and external debt, development bonds, treasury bills, national saving certificate.*

CHAPTER I

INTRODUCTION

1.1 Background of the study

In the Nepalese economy, the private sector is not well developed. Because of the low per capita income, the private saving rate is low; consequently the private sector investment is also low. Moreover, due to scattered saving and the shortage of enough effective institutional mechanism for mobilizing the scattered saving, it has become very difficult to induce the private sector to invest its saving in the productive sector. Due to these reasons the government of Nepal is involved not only in the provision of certain socio-economic services like roads, bridges, school, drinking water and health facilities, but also in other direct productive economic activities like estate blushing factories and running them so that development process could be accelerated. The government expenditure started to increase, which were not possible to meet only through revenue, collection. When the government expenditure exceeds revenue, a deficit arises in the budget of government. The most appropriate method is the method of debt finance which is preferred by all the states for mobilizing financial resources to bridge fiscal deficits in the government budgetary (CBS, 2023).

Hence, Nepal is facing a nervous and growing financial resource gap in one hand and increasing inflation and population growth on the other and for this the government cannot rely entirely upon the tax revenue, and deficit financing, as an internal financial resource. These sources of finance have to be supplemented by borrowing as a large scale from the banking sector and other financial institutions internally and externally. Therefore the need of public debt for mobilizing additional financial resource is a comparatively modern phenomenon and has come into existence with the development of a democratic form of government (MoF, 2023).

Public debt is a legal obligation of the part of a government to make interest and/or amortization payments to holders of designated claims in accordance with a defined temporal schedule (Palgrave Dictionary). Public debt is defined as a kind of tax through which public enjoy the advantage of public expenditure After the second World war, public debt seemed a vital source of development expenditure, most of the countries in the world started to borrow systematically and still borrowing to develop

their economies at a faster pace. After the first and second World war, large amount of loans were borrowed for the reconstruction, rehabilitation and maintenance (Harris, 1974).

The government gets its income mainly from two sources, namely, public revenue and public debt (borrowing). Public revenue consists of all income or receipts (tax and non-tax) and public debt carries with it the obligation to pay money back to persons, institutions or countries from whom it has been obtained. "The accumulated amount of what the government has borrowed to finance past deficit is called public debt". An internal debt is owed by a nation to its own citizens and it poses no burden. An external debt is owned by a nation from foreigners and it is burdensome (Hanson, 1941)

The phenomenon of public debt was originated in Great Britain in the 17th century, where a group of merchants provided grants and loans to the government. In return, they received the privilege of royal charter to fund the Bank of England, which become the country's Central Bank. Public debt is a very common and popular method of solving the problem of deficit financing of any government of developing countries. Generally, governments of developing countries borrow to meet their deficit budget. Sometimes it is also taken to meet the expenditure of war, natural calamities etc (Joshi, 2019).

Economic Development is widely accepted as a major goal of national policy in developing countries where as economic growth as a major goal of the developed countries. Economic development is viewed as a process, which implies the series of changes in social, technological and economic forces, which are useful in accelerating the pace of development. But the underdeveloped countries are facing a problem of low-income level of equilibrium trap, vicious circle of poverty and huge resource gap. Those problems can be solved not only by the investment from the private sector but also by the deliberate actions of public sector. In the underdeveloped countries, private sector alone is not capable to generate required fund for investment so, actions of government plays a vital role in this respect (Lekhi, 2002).

Studying the situation of public debt in Nepal, it is heavily dependent upon external debt. The trend of the public debt is increasing more rapidly than internal debt. So, in

the Nepalese context, there is no doubt that if the trend of external debt goes on like this, Nepal will fall in the 'debt trap'. The importance of the public debt may be appreciated in terms of the strategic role which the government has to play in the initial stage of development. It has always been the task of government to create some minimum pre conditions of development such as building up of social and economic overheads which don't generally attract private investment, usually require huge amount of resources but don't promise immediate returns. Thus the government has to play a positive and dynamic role in stimulating the rate of capital formation and promoting the rapid development of a country (Joshi, 2019).

The persistent features of Nepal's public debt both internal and external have been increasing rapidly each year. The trend of external debt is increasing more rapidly in absolute terms than internal debt. Since developing countries like Nepal always need foreign currencies to import many capital goods required for development, these countries have to depend more on external borrowing than internal for favorable balance of payment, maintaining the availability of foreign exchange and controlling of inflation (Sharma, 2004).

In the context of underdeveloped country like Nepal is passing through the critical phase of low-income level equilibrium trap, vicious circle of poverty and huge resource gap. This problem can be solved not only by the investment from private sector but also by the deliberate actions of the government in the field of transportation, communication, power, road, other basic infrastructure and directly productive activities. For this the regular sources of government revenue are insufficient to meet the required expenditure. So, government has to make deficit budget, which depend upon borrowing from internal and external sources. External sources include foreign loan and grants from bilateral and multilateral agencies whereas internal sources include individuals, financial institution, non banking financial institution, commercial banks, central bank etc. Therefore, this study examines trend and pattern of public debt and its impact on growth in Nepal.

1.2 Problem statement

In Nepal, effective management of public finance is a challenging proposition. The miss-match between government revenue and expenditure creates deficit, which is sticky, and ever occurring in the Nepalese budgetary system. It has become persistent

creating a great tension since the first budget in Nepal. The major proportion of the deficit in the budget has been balanced by borrowing-internally and externally (Joshi, 2019).

If the borrowed fund to balance the budgetary deficit is utilized properly, it may play vital role for socio-economic transformation, especially if it is used for income earning assets or project(s) of the government or on these heads, which add to productivity of the economy. It results the nation towards the prosperity. Raising the debt for debt servicing and redemption would be a grim and wicked act to the nation. Moreover, it is harmful to borrow the external debt hugely because it adversely impacts on the balance of payment (BOP) of those countries that can export the goods and services in a very small quantity, like Nepal (NRB, 2023).

External borrowing is used for meeting the saving-investment gap. The Tenth Plan has visualized the need for Rs. 81 billion so it is quite evident that if such borrowing is not forthcoming, the targeted growth rate has to be scaled down. Even if required level of external borrowing is mobilized, there is still a risk of excessive aggregate demand having a potential of inflationary pressure. There is also a potential of distorted foreign exchange rate and increasing current deficits. The other likely impact is to raise the debt burden tremendously due to currency depreciation. Thus, there is need to match the growth rate of external borrowing to that of national income (MoF, 2023).

In Nepal, Government expenditure is increasing rapidly each year but government revenue is not growing in the same pace. It is very common to know that a rise in the magnitude of public debt must be accompanied by an increase in the debt servicing capacity. Though public borrowing as a means of rising fund is applied in a wide prospective, it is necessary to have a careful look on the increasing magnitude of public debt and proper care must be taken to increase the debt servicing capacity of the country. Nepal is facing a growing financial resource gap on one hand and problem of increasing inflation and population growth on the other. To mitigate and avoid the resource gap and to mobilize the financial resources there is need of public debt and its appropriate management. The sources of finance have to be supplemented by borrowing as a large scale from the banking sources and other financial institutions internally and externally. Therefore the need of public debt for mobilizing additional

financial resource is a comparatively modern phenomenon and has come into existence with the development of a democratic form of government (Wagle, 2021).

Now-a-days, burden of public debt has been one of the controversial issues in economics of public finance. Academic views regarding it have been changing according to changes in the general economic thinking. The existence of a large debt is neither an evil nor a blessing in itself. It has both adverse as well as favorable effects on the economy. Public debt is an instrument of fiscal policy, but it is one, which should be used with care. The problem with which the controversy is concerned are: a) the measurement of the burden b) the cost and the benefits of the public debt, and c) the inter-generation distribution of the burden of public debt. The academic views about these specific aspects have been changing from time to time. In Nepal, both internal and external debt has been increasing rapidly in each fiscal year. The external debt is increasing more rapidly than internal debt. Increasing trend of net public debt is likely to increase further. As a result, debt-servicing obligations are also increasing rapidly. But the pace of capacity of the country to repay debt is not increasing to meet the debt obligation.

The increasing dependency of the country upon the external borrowing is due to poor and inadequate internal resource mobilization. Both, the scarcity of internal resources as well as necessity of external resources have caused for such massive increasing in external borrowing. Ever increasing debt and debt servicing obligations will create a serious problem in the economy like 'debt trap', colonization, internal public instability etc. In short, there may appear macro-economic imbalances which create excessive dependency upon foreign assistance. For this purpose, the study has made an attempt to identify the following problems:

- i What is the trend and pattern of public debt in Nepal?
- ii What is the burden of public debt and debt servicing capacity?
- iii What is the effect of external debt on output growth in Nepal?

1.3 Objectives of the study

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

- i To assess the trend and pattern of public debt in Nepal.
- ii To analyze the burden of public debt and debt servicing capacity
- iii To examine the effect of external debt on output growth in Nepal

1.4 Rationale of the study

This research provides updated information in regards with public debt. This study explores and analyzes causes of resource gap in the Nepalese context and the trend and structure of public debt which may be helpful for the future economic plans and policies. Hence its significance is obvious. External debt is increasing, so it is more relevant to study. Scholars and academicians are concentrated in this issue. So it is equally important to study issue. This study will focus on the existing scenario of public debt, requirements of borrowing, trend and structure of public debt. So, this study will be beneficial for the readers like students and researchers. At present economic planning is taken as the main tool of economic development. In economic planning various objectives are made. Due to low level of taxable capacity of the people, public debt is essential to meet the objectives of development plans in Nepal. Hence public debt has become a reliable and common instrument for resource mobilization and hence to break the vicious cycle of poverty in underdevelopment countries like Nepal.

1.5 Limitations of the study

This study has the following limitations:

- i. This study covers only the time period between 2013/14 to 2022/23.
- ii. This research is completely based on secondary data and information.
- iii. This study has not attempted to examine the effect of public debt on other macro economic variables, except GDP.
- iv. This study gives emphasis only on the trend and pattern of public debt in Nepal.

CHAPTER II

REVIEW OF LITERATURE

This chapter is basically concerned with literature review relevant to public debt and its trend and pattern. There are two sources of public borrowing: i) Internal borrowing and ii) External borrowing. The government can borrow from individuals, commercial banks, financial institutions, charitable trusts and the central banks in country. Externally, the government may borrow from individuals, banks, and international financial institutions and foreign governments. External public borrowing is the acceptance by a government or government agency of real or financial resources from an external source with the obligation or relinquishing such resources in specified future dates (Ghuge, 1997).

2.1 Theoretical review

Public debt is a modern invention. It was not heard prior to the eighteenth century. In those days the living was very simple and there were limited economic activities. The government budgets were very small and there was the policy of Laissez faire in economic system. But after the great depression of 1929-33, the public authorities started to take interest in the economic stability and development of their countries. So, public borrowing has become a tool for the proper development of the country. In modern time, the government activities have grown rapidly. The government has to spend a big amount on day to day activities and development functions. In such a situation any other sources of revenue or taxes are not sufficient to utilize and mobilize the resources and to obtain the macro economic objectives. Hence it has become an effective instrument of fiscal to stabilize and enhance the economic development of underdeveloped economics (Risal, 2009).

Public debt is a very common and popular method of solving the problem of deficit financing of any government of developing countries. Generally, governments of developing countries borrow to meet their deficit budget. Sometimes it is also taken to meet the expenditure of war, natural calamities etc. it is a temporary source of government revenue since, it must be paid back with interest and principal after maturity. There are various objectives of public debt which are a) Revenue objectives, b) To fight depression, c) To curb inflation, d) To finance development plans, e) To

finance public enterprises and f) To finance war expenditure. Objectives of public debt in Nepal i) To fight depression, ii) To curb inflation, iii) To finance the deficit budget, iv) To finance for immediate problem, v) To tackle the emergency period of crisis, vi) To reduce poverty, vii) To finance development plans and viii) To sustain the economic and monetary stability (Goode, 1984).

A report jointly published by the World Bank, the International Monetary Fund and Organization for Economic Co-operation and Development has recommended the following core definition of debt: Gross external debt is the amount at any given time of disbursed outstanding contractual liabilities of residents of a country to non – residents to repay principal with or without interest or to pay interest with or without principal (Adhikari, 2016).

This definition states that the external debt of a country also includes the external obligations of the private sector.

The borrowing fund can be used to finance war expenditure or to buy defense equipment or to pay for the development project or to pay off adverse balance of payments. Generally, there are two important external source of government borrowing are prominent Firstly, International financial institutions like IMF, IBRD, IDA, FC etc, which are called multilateral sources. These institutions give loans to member countries for a short –term period in order to improve the temporary difficulties of balance of payments and for long –term to development projects and secondly, government borrows from bilateral sources which is mainly used for development projects. In modern times, external source of borrowing has become significant so developing countries like Nepal has been received massive assistance from the Nepal aid group (Gurley & Shaw, 1955).

The governments of underdeveloped countries have to borrow due to low saving. This in turn is resulted from the low level of investment. Hence the poverty sequences more like inadequate capital, low productivity, low real income and low purchasing power, inadequate capital gain. This justify that capital deficiency in the developing countries are facing the deficiency of capital in relation to their population and natural resources. Most of the developing countries are characterized by deficiency of capital. To break the vicious circle and uplift a country with a self sustain growth, a large

amount of initial investment is necessary. Thus underdeveloped countries showed emphasize to stimulate and accelerate capital formation (Hanson, 1941).

Generally, the classical economists were generally against public borrowing and favored the minimum expenditure from the government side. They assumed that individual consumer and business firm employ resources more efficiently. Under a fully employed economy, government can acquire resources by borrowing only at the cost of private sector where they are more fruitfully engaged. In this way, classical economists had negative attitude towards public borrowing and they did not plead for increasing economic role of government. In stead they said, Let money fruiting on the pockets of the people. 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, J.S Mill, and T.R Malthus have given their argument that Debt creates burden in the economy because of its unproductive nature (Singh, 2007).

Classical economist considered public debt as dead weight in the sense of wasted opportunity, but modern economists consider public borrowing as an important technique of public finance. Public loans in modern times are necessary to met financially unfavourable situations like deficit in budget, flood and famine; warfare has become so costly that the normal income through taxation falls short of the actual war expenditure. Many economists like J.M. Keynes have advocated increased public expenditure financed through borrowings and not through taxation as means to remove depression and unemployment. Public borrowings are considered very useful for the development of natural resources of developing countries (Tyagi, 2008).

In the opinion of Findlay Shirras, government must remember that borrowing is not a short cut to prosperity and a policy of borrowing must be retreated except for what cash reasonably be regarded as productive expenditure (Lekhi, 2002).

It is not that the classical writers were against any form of debt. They favored minimum public expenditure and between taxation and borrowing, they favored taxation for the following reasons (Higgins, 1959).

- a) Deficit financing means an increase in public debt. Since it is an easy method of obtaining income, gives likely to be extravagant and irresponsible. Consequently, public debt will become a definite burden on the economy.
- b) Payment of interest on public debt and refund of the principal will require additional taxation. It might prove to be difficult since government's power to tax is not unlimited.
- c) Deficit financing might produce currency deterioration and price inflation.

From the above statements, it can be said that classical economists were not against all types of public debt. They agreed that public debt should be used for productive purposes, that is, for capitals projects since the fruits of such projects could be sold to buyers so debt servicing and refund of principal did not necessitate additional taxation. These are called self – liquidating projects. In the words of R.A Musgrave (1959), “self –liquidation projects may be defined narrowly as investment in public enterprises that provide a fee or sales income sufficient to service the debt incurred in their financing, or they may be defined broadly as expenditure projects that increase future income and tax base permit servicing (interest and amortization) of the debt incurred in their financing without requiring an increase in the future level of tax rates (Singh, 2007).

The classical economists Edgeworth viewed the government should not raise the public debt for consumption on activities. Economists R.A Musgrave and P.B Musgrave (1989) holds,” “Tax raised to finance this payment imposes a burden on economy.” They further said that this burden does not arise because resources are withdrawn from the economy. In this context they also stated that debt accumulation during war may be so drastic as to lead to fiscal and debt repudiation in the post war period (Musgrave & Musgrave, 1989).

In the classical system, all private income is spent on either consumption or investment. Full employment is secured automatically. Price level stability is maintained if the money supply is held stable or is increased at the same rate at which real income grows. After the great depression of the 1930's new wave of thinking took place in the writing of J. M Keynes who advocated for increasing government role in the economic activities by adopting deficit financing so that effective demand is created in the economy ensuring employment opportunities (Hicks, 1954).

Keynes stood against the concept of classical economists and propounded different view in his book “General Theory” in 1936. He did not accept the classical notion of a free enterprise economy, which is self-equilibrating at a full employment level. He advanced the concept of underemployment equilibrium and who effected a truly significant revision in theory of public debt. Keynes argued that if debts are internally held, there is nothing to worry about their size. Such debt involves merely a series of transfer payments and they cancel out for the economy as a whole. Hence the only concern should be about economic stability at high level of income. Keynes also stressed and challenged the version of classical economists and hold opposite opinion on the subject of burden of public debt. He submits that there is no shift of the basic burden to the future generation because the same posterity that pays the additional taxes will be benefited from the repayment of the debt (Hicks, 1954).

Groves, a Profounder of the functional finance approach to public debt, maintains that government should borrow only when it wants to make people hold more bonds in place of money. This action will raise the rate of interest by lowering the value of bonds and will prove to be anti- inflationary. In the event of falling aggregate demand and shortage of funds for productive investments, government should lend to the private sector or increase its own expenditure to arrest the fall in real income and employment. Debt servicing poses no problem since it is always open to the government to borrow from the central bank. Since the function finance maintains a correct level of aggregate demand corresponding to available output, there is no danger of inflation (Groves, 1950).

Lastly, it can be said that many Keynesians carried out views with the support of public debt that if they are normally held, there is nothing to worry about their size.

During World War II and the post-war years, the size of public debt increased enormously. The increase in the size of public debt has caused some revision in economists thinking on the subject. The post-Keynesian economists accept a large part of the modifications of the classical debt theory as brought about by Keynesian economics. It emphasizes, however, the transfer and management aspects as well as the interrelationship between public debt and money supply (Harris, 1974).

Post-Keynesian economists advanced their idea that government borrowing does not always deprive the private economy of resources as, for instance, in a period of widespread unemployment. It is also not accepted how that borrowing in a period of full employment must be inflationary. It depends on these circumstances if borrowing taps funds otherwise spent in consumption; it is not more inflationary than taxation. A large public debt, if internally held, poses many problems for the economy. It complicates monetary policy and creates difficulties of management. They think that the developing countries have very low income, saving and investment. They further says that without increasing the rate of these three crucial factor, no country could achieve steady growth so the over-all aim of borrowing is not to equalize income in different countries but to provide every country with an opportunity to achieve steady growth, on the other side, people of the developed countries are enjoying high prosperity, high standard of living, high educational facilities etc. Population problem is also not so serious in such economics. Post-Keynesian economists Goode views that borrowed money when used to finance public investment causes no such reductions, all that will happen is the change in the consumption of capital will happen is the change in the consumption of capital formation. According to him “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 (Harris, 1974).

In this way, different economists in different periods have expressed their own views on public debt and they are conscious of the burden as well. The situation of foreign debt and internal debt is different because for foreign debt needs foreign exchange for its debt servicing for which foreign exchange earning sector must be created effectively. The true burden of debt servicing on the debtor country thus depends to a substantial degree on how for the loans can be transferred into productive investment

The case of shifting the burden to the future generation is one of the burning issues of debate between the economists. Classical economists state that through debt financing, it is the present generation, which suffers a loss of resources. They further say that if the present generation reduces it's saving in order to meet the debt finance and leave a smaller amount of capital resources for the future. This will reduce the

productive capacity of the coming generations and they will accordingly lose. In this way, burden of public debt may pass on to the future generation but on other hand modern economists including J. M Keynes, Harris, Hansen, Buchanan, Bowen Davis, Musgrave have challenged the version of classical economists and hold opposite opinion on the subject of burden of public debt. They submit that there is no shift of the basic burden to the future generation because the same posterity that pays the additional taxes will be benefited from the productive use of the debt. Thus, the question of shifting the burden of public debt to the future generations has remained an unsettled problem. However, the burden controversy depends upon the nature of investment, productive or unproductive. If it is productive, there will be no 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 be burdensome on the government (Singh, 2007).

Even though public debt imposes burden into the economy, Samuelson has suggested for the use of foreign capital in the process of economic development of developing countries. He has said that if there are many difficulties in the way of domestic financed capital formation, why not rely more heavily on foreign sources.

2.1.1 Recent thinking on government borrowing

Now a days government borrowing is connected with development purpose of the underdeveloped countries in wider prospective. It is used for recovering the deficiency of the effective demand. Government borrowing can be used as an instrument of fiscal policy for mobilizing saving for the development purposes and can also be used as tools of monetary policy for combating inflation. Besides, it also acts as a balancing wheel that controls the tempo of the business cycle. In a period of depression, when aggregate demand is not enough to accelerate the level of production and employment, compensatory theories of fiscal policy suggest to increase public expenditure on public works by mobilizing idle saving at the hands of the people through public borrowing to create effective demands and to promote an economic recovery (Barman, 2016).

According to post Keynesians and Second World War economists, public borrowing plays a prominent role in underdeveloped countries. It helps the mobilization of resources for the economic development. In such countries, sources of revenue are

inadequate and insufficient for the heavy expenditures that have to be incurred on the development schemes.

Michael Posner points out that growth in the debt ratio causes alarm for two reasons. First, growth in debt ratio might lead to crowding out of private investment, second and more important, is the assumption that government spending out of the borrowed funds might be unproductive (Posner, 2017).

Chelliah points out that the ideal situation is one in which first, revenues will meet subsidies, other transfer, interest payments and the greater part of current expenditure, debt finance will be used for meeting the governments non remunerative capital formation, a propositions of current expenditure designed to increase social capital and productive requirements of financial investments and second, the total of domestic borrowing will be determined in such a way that it gives the rate of domestic saving, the non – government sector will be to obtain borrow from the central bank that current account seignior age (Chelliah, 1992).

In recent years, the objective of the government borrowing in developing countries is that it should be used as an instrument to mobilize saving of people which would otherwise have gone to idle or wastefully consumption. Public debt should be advocated for creating additional capacity and producing capital equipment. Generally, government borrows for the creation of infrastructures in the economy since it requires huge investment initially which cannot be meet only through revenue collection. The aim of the government borrowing policy should be helped in strengthening the money and capital market, which in turn accelerate development and price stability. The government of a developing country tries to mobilize the saving of the community partly through the device of public borrowing in order to meet the financial need of its development program.

A discussion paper was prepared by United Nation conference on trade and development' Multilateral debt of least developed countries'– It has reviewed development in multilateral debt of least developed countries since the debts crises o f the early 1980s. This paper has discussed on problem of multilateral debt as sustainability, liquidity and accumulations of large-scale arrears. The discussion paper has also evaluated recent schemes to provide debt relief and suggested possible

measures to strengthen and improve existing schemes as well as present other innovative obtains. The analysis focused mainly on the least developed countries. The World Bank and IMF classify 37 of these countries registered multilateral debt arrears in 1993, 29 of them as heavily indebted poor countries. These are 48 countries classified in 1995 by the United Nation as least developed countries (Sablater, 2009).

The government has been increasingly relying on domestic and external debts to meet the resource gap amid shrinking revenue amid the corona virus pandemic. As a result, the country debt has nearly tripled in the last five and half years. According to the Finance Ministry, outstanding debt of the country increased to Rs1.50 trillion as of the first half of the current fiscal year from Rs. 544.91 billion in fiscal year 2014/15.

As of the last fiscal year 2019/20, the country's outstanding debt was worth Rs1.41 trillion, 40.16 percent of the country's gross domestic product (GDP), according to the Financial Comptroller General Office, a government agency responsible for keeping record of the income and expenditure of the government. Even though the country's debt liability was rising in a slow pace until fiscal year 2015/16, it surged with the country requiring to generate massive resources for post-earthquake reconstruction (MOF, 2023).

The deadly earthquake in 2015 not only caused loss of over 8,000 lives but also the damaged properties worth over Rs700 billion, according to the Post Disaster Risk Assessment report. The country also required more resources for institutionalising the federal set up after the 2017 elections and the Covid-19 pandemic affected the country's economy badly leading to reduced revenue generation for the government as result of which the government has been increasingly relying on the domestic and external loans for bridging the resources gap. The government collected just 75.6 percent of targeted revenue in the last fiscal year 2019-20, according to the Financial Comptroller General Office. The government collected revenue of Rs. 841 billion against the target of Rs1.11 trillion, the office said.

The revenue target of current fiscal year 2020/21 will also not be met with the finance ministry through the mid-term review of the budget trimmed revenue target to Rs. 931.85 billion against the initially targeted Rs.1.01 trillion.

Even though the debt level increased substantially in the last five years, experts said that the country should not be worried about current level debt. In the past, we feared taking loans which deprived us from potential infrastructure development, said Min Bahadur Shrestha, former vice-chairperson of the National Planning Commission, the main planning body of the government. For a country like Nepal which can collect limited resources from the revenue, we have to rely on domestic and external debt to finance big infrastructure projects (MOF, 2023).

Experts say that the country still has the ‘fiscal space’ or room for taking more loans. “We should not be worried about debt sustainability till our debt level remains 50-60 percent of the GDP,” said Nara Bahadur Thapa, former executive director of Nepal Rastra Bank, who had also worked as a policy advisor on macro-economic management at the International Monetary Fund in the late 2000s. “We should not fear taking out loans to boost the economy as long as there is fiscal space,” said Thapa. “With the productive use of debt, we can boost our economy and the economic expansion is a must to enhance the country’s ability to pay the debt.” However, the government has not been able to spend the available resources, both domestic and external, delaying the completion of the important development projects. Most of the national pride projects have faced time and cost overruns (NRB, 2023).

A discussion paper was prepared by United Nation Conference on Trade and Development (2020) 'stated that relatively small economic size, sluggish progress of structural transformation and heightened dependence on external finance leave LDCs with limited alternatives to aid dependence, vindicating their condition of heightened vulnerability which justifies dedicated support measures. While aid dependence has been on a downward trend, as the magnitude of aid flows has been declining relative to GDP and other macroeconomic variables (such as imports and gross fixed capital formation), it remains remarkably high by international standards, reflecting in the twin gaps in terms of financing for much-needed investment and foreign exchange. This poses a potential challenge in the current context of stagnant if not declining aid budgets, particularly in light of the “missing middle of development finance” (i.e. the challenge of middle-income country in their transition from aid to other sources of development finance).

This highlights that LDCs have a considerably stake in discussions related to so-called systemic issues, notably reserve currency and debt sustainability. While their economic weight might be marginal when assessed on a global scale, the terms of their integration in the global market are profoundly affected by the measures agreed by the international community in this respect. It is thus all the more important that developing countries, and LDCs in particular, have a saying in critical reforms of the international financial architecture, and their interests are adequately considered and reflected in global forums debating systemic issues, such as access to international liquidity, orderly debt workout systems and tackling illicit financial flows. It has reviewed development in multilateral debt of least developed countries since the debts crises of the early 1980s. This paper has discussed on problem of multilateral debt as sustainability, liquidity and accumulations of large-scale arrears. The discussion paper has also evaluated recent schemes to provide debt relief and suggested possible measures to strengthen and improve existing schemes as well as present other innovative obtains. The analysis focused mainly on the least developed countries. The World Bank and IMF classify 37 of these countries registered multilateral debt arrears in 1993, 29 of them as heavily indebted poor countries. Forty-seven countries are currently designated by the United Nations as least developed countries (UNCTAD, 2020).

2.1.2 History of public borrowing in Nepal

In the Nepalese economic history, public debt is not that old. Evolution of budgetary development in Nepal is a factor for to increase in government expenditure, which pushed government borrowing. Until 1975, public expenditure amounted 11 percent of GDP. In 1980's there was heavy increase in public expenditure from 1990's onwards expenditure had exceeded one fifth of GDP. Revenue remained around 9% of GDP till 1993. Another interesting feature of Nepalese budgetary development has increasing magnitude of regular expenditure to compare with that part of development expenditure, particularly in the 1990's (Sharma; Uprety; & Dahal, 1998).

In the context of Nepal, regular expenditure is growing with the planned development. Recent trend of government expenditure shows that regular expenditure is surpassing the development expenditure. This situation has limited the availability of revenue surplus for development expenditure. As the revenue surplus is not sufficient to meet

the development expenditure, foreign grants as well as foreign and internal loans have been mobilized from the previous years to meet such expenditure. Therefore, the amount of foreign loans is rising for the past several years. Similarly, due to the depreciation of Nepalese currency vis-a-vis the convertible foreign currency, the burden of debt services has been increasing year by year. Compared to FY 2000/01 the net outstanding foreign loan increased by 9.8% in FY 2001/02 and reached Rs. 220125.6 million (Upadhyaya, 2008).

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

Foreign aid has been entirely in grants from upto 1960/61. Then after this the share of grants has been declining but still it continued to account for a large proportion of total aid (more than 50% upto 1982/83). The share of loan in total aid started to increase since 1983/84. Now a days government is receiving foreign aid to meet the regular government expenditure too (Sharma, 2004).

In 1999/00 the share of loan in total aid was eighty percent. In fiscal year 2001/02 Nepal received Rs. 14384.8 million total foreign aid by bilateral and multilateral sources. In which Rs. 6686.2 million and Rs. 7698.6 million were grants and loans respectively. Till now, the amount of grants is higher but the increasing trend of grants is lower as compare to loans. All these information shows that the burden of public debt of Nepal is increasing due to growing share of foreign loans. So public debt is increasing is faster rate (Khatiwada, 2010).

Public debt is the instrument of financing budget deficit. One important macroeconomic problem of Nepalese economy is prevailing resource gap. Due to such situation, with the increase in size of government budget, the size of public debt is also increasing. With the increase in public debt, it is worthwhile to study how

macroeconomic indicators are changing over the time. This study was based on the descriptive analysis. For this purpose, the period of 1975/76-2010/11 is considered. In this period, public debt has increased, on average, by 18.86%. The share of external loan, on average, seems to be relatively higher, i.e. 58.85% whereas such share of internal loan is 41.15%. However, in the latter period, the share of internal loan has significantly higher than the share of external loan. For example, during the period of 2005/06-2010/11, the average share of internal loan is 68.01% whereas such share of external loan is 31.99%. In spite of increased budget and increased public debt, the growth rate of economy is relatively low. On average, it is 4.28%. But, the rate of inflation is, on average, 8.31%. Thus, Nepalese economy is facing the problem of low rate of economic growth and high rate of inflation. Experts, however, say the country still has room for borrowing needed for development but insist that there should be productive use of the borrowed fund (Bhattarai, 2016).

2.2 Empirical review

2.2.1 Review of Journals and articles

Madhuhansi and Shantha (2022) analyzed the Effects of Public Debt on Economic Growth in Sri Lanka. The main objective of the study was to investigate the effects of public debt on economic growth in Sri Lanka, to examine the relationship between public domestic debt and economic growth in Sri Lanka, the relationship between public external debt and economic growth in Sri Lanka, and to analyze the relationship between public debt service payment and economic growth in Sri Lanka as specific objectives. This study used annual time series data from 1980 to 2019 which translates to 40 observations. This paper uses econometric tools that normally uses in time series analysis using GDP growth rate as the dependent variable and public domestic debt, public external debt, and public debt servicing as explanatory variables. This study also proposes a non-linear regression model to estimate the relationship between public debt and economic growth. Descriptive statistics and normality test is used. While analyzing time series data. Method: Least Squares & Regression analysis were used. The study concluded that overall public debt has a negative effect on economic growth in Sri Lanka. When the results compare with similar studies, the majority had concluded that public debt has a negative effect on economic growth. Debt is very important to the development and growth of Sri

Lanka. In such a situation, there is not support of public debt on economic growth in Sri Lanka according to this analysis. And also that public debt cost is heavily for low-income people as tax. This paper implies that if Sri Lanka arranges more public debt, it will be led to huge failure in the country. This study ensured Keynesian theoretical model that expresses the negative relationship between public debt and economic growth after the threshold level. The study suggested a few policy implications such as effective usage of public debt on development activities, divisibility of export would be supported to reduce the budget deficit, avoiding corruptions, handling savings in an effective way for development activities instead of depending high debt, avoiding high imports of non-essential products, reducing wasting or unnecessary expenses of government, encouraging private sector for huge investment inside the country and ensuring effectiveness among government institutions.

Dimitrios, Keith & Cecilia (2021) examined on public debt and economic growth: panel data evidence for Asian countries. The main objective of the article is to examine the relationship between public debt on both short and long-run economic growth, to find out the impact of direct of government debt on economic growth and to examine a set of countries that has not previously been explored, using both a linear and non-linear function. The study used several econometrics methods to examine the relationship between public debt and economic growth particularly in Asian countries and consider both the long-run and short-run relationships, along with the presence of nonlinearity. Two panel cointegration tests are employed here, based on the results of preliminary tests of non-stationarity. Panel Autoregressive Distributed Lag (ARDL) is conducted if no-cointegration found from the previous methods. This study attempts to look at the asymmetric response of long-run and short-run response of public debt accumulation in economic growth. The study concluded that there is a negative effect of the public debt ratio on economic growth, both in the short-run and long-run. The negative relationship is more significant when study used common correlated factors to address the issue of cross sectional dependence. An asymmetric response of a change in public debt is found to be significantly negative in the short-run. Rises in short-run public debt negatively affect economic growth in the short-run but falls public debt do not have a correspondingly positive effect on economic growth.

Marta and Simón (2018) analyzed Public Debt and Economic Growth Further Evidence For the Euro Area. The main objective of the study was to examine the relationship between public debt accumulation and economic performance in the EA countries, to examine the use of the panel estimation techniques to combine the power of cross section on average with all the subtleties of temporal dependence and to assess both the short and the long-run effects of public debt on output performance. The study used Autoregressive Distributed Lag (ARDL) bounds testing approach to the co integration proposed. The ARDL bounds testing approach allows the analysis of long-term relationships between variables. It gives the values of the F- and t-statistics for the case of unrestricted intercepts and no trends. The study concluded that high public debt tends to hamper growth by increasing uncertainty over future taxation, crowding out private investment, and weakening a country's resilience to shock. However, they detect the possibility that an increase in public debt may have a positive effect in the short run by raising the economy's productive capacity and improving efficiency depending on the characteristics of the country and the final allocation of public debt.

Victor and Christopher (2016) studied on Public Debt and Economic Growth in Ghana. The main objective of the study was to examine the long-term and causal relationship between public debt and economic growth in Ghana. The study used secondary data. Descriptive and analytical research designs were used. The empirical analysis is carried out using annual time series data for Ghana that spans 1970 to 2012. A total of seven macroeconomic variables were employed in the analysis. Time series data was analyzed to test for its stationarity using the Augmented Dickey–Fuller (1979) and Phillips–Perron (1988) unit root tests. The findings from the study revealed a positive and statistically significant long-run relationship between public debt and economic growth. Also, in the short run a bidirectional Granger causality link exists. This study uses Johansen cointegration and the vector error correction model to examine the long-term and causal relationship between public debt and economic growth in Ghana. Annual time series data were gathered from the World Bank Development Indicators and IMF Economic outlook data from 1970 to 2012.

Siew-Peng, and Yan-Ling (2015) analyzed on Public debt and economic growth in Malaysia. The main objective of the study was to analyze the public debt contribution

to the economic growth in Malaysia; and to examine the indicators of debt burden. The study used secondary data. Descriptive and analytical research designs were used. The study had conducted model experiments using statistical information on indicators of debt burden. The study found that public debt in the Malaysia increased because of fiscal expansions. This study examines whether public debt contributed to the economic growth in Malaysia over the period 1991 to 2013. It also examined whether other indicators of debt burden, such as budget deficit, budget expenditure, and external debt service and government consumption, have an impact on economic growth. The results of this study are consistent with the existing literature that found a negative association between debt and growth.

Ogutu, Gisele and Mamello (2015) studied on financial guarantees and public Deb in South Africa. The main objective of the study were to study the moderating Expenditure Growth to expand Public Services at a sustainable pace., to stabilizing debt as a share of national income by narrowing the budget deficit and to examine the improvement impact of public spending by prioritizing capital investment and reducing waste and inefficiency. The study used secondary data from December 1997 to December 2011. The researcher used time series data analysis estimation technique to study the relationship between the ratio of national net loan debt to GDP and the ratio of financial guarantees to GDP. Researcher used descriptive statistics and analytical research design. The research used the quantitative method of data analysis. The study used regression analysis and correlation analysis. The study found that although there is no long-run relationship between the two variables, the pass value of financial guarantees significantly affects it present value. The past value of financial guarantees has a predictive ability in determining the present value of debt sustainability. These findings may be contrary to what would be expected in the case of South Africa considering that the country is managing the issuance of financial guarantees prudently and that at present levels, there is no need for a radical policy shift. The challenge for South Africa is to continually devise ways of increasing social as well as infrastructure expenditure at a sustainable rate and to enhance the quality of service delivery, to avoid undermining the impressive fiscal stability gains at the macroeconomic level and ensure continued inclusive prosperity.

Naeem (2014) analyzed on is public debt hindering economic growth of the Philippines. The main objective of the study were to examine the consequences of public debt for economic growth and investment for the Philippines, to examine the relationship between domestic debt with investment and economic growth, to examining the relationship between debt servicing with investment and economic growth and to find out the relationship between Philippines public external debt & economic growth with investment. The present study examines the consequences of public debt for economic growth and investment for the Philippines during the period 1975-2010, by using autoregressive distributed lag technique. Most appropriate method for estimation is autoregressive distributed lags (ARDL) model. The study found that in the Philippines, public external debt has negative and significant relationship with economic growth and investment confirming the existence of “Debt Overhang effect”. Due to insignificant relationships of debt servicing with investment and economic growth, the existence of the crowding out hypothesis could not be confirmed. The domestic debt has a negative relationship with investment and positive relationship with economic grow. The results are also suggestive of the fact that real GDP has been negatively affected by population growth and positively by openness.

Cleomar, et al;. (2014) studied on the effects of public debt management on macroeconomic equilibrium: Analysis of Brazilian economy. The main objective of the study were to study the effects of public debt management on yield curve spreads in brazil, in order to see possible impacts on the country’s economic activities, to examine the responsive behavior of bondholders to changes in the composition of the public debt and to investigate the impact of the issuance of fixed rate and floating rate linked bonds on yield spread premiums required by investors, while purchasing bonds with different maturities. This article used econometric methodology, data and descriptive static .This article is related to state space structural Models and Kalman filtering, which is a recursive linear filter capable of predicting the unobservable variable in the next period, based on the current observation. The study found that the increase in the issuance of fixed rate linked bonds lead to increases on yield spreads and longer the maturity, the longer the effects. External public borrowing is the acceptance by a government or government agency of real or financial resources. The opposite results comes when there is increase issuance of floating rate linked bonds.

The study can help to understand how the stance of monetary policy can influence the debt management process.

Munla (2014) analyzed on external debt policy and macroeconomics adjustment had analyzed the origin of debt problems and explained about it. The debt crisis had its origin in the substantial rise in the external liabilities of the developing countries during the second half of the 1990s and early 2000s, in an environment of large - scale recycling of the oil exporter's surpluses, rising world inflation, and negative real interest rate. At the time many viewed that this recycling of funds as a positive development: creditors were able to identify new investment and deters could acquire funds needs for development purposes. The study again explained that an external debt crisis was due to: A drastic deterioration in external economic environment in the form of higher interest rates, lower commodity price and severe recession in industrialized economies; Economic mismanagement and policy errors in debtor countries; and Excessive lending by commercial banks to some countries, with little regard to country risk limits. In this article Munla contributed towards principle of debt strategy and pointed out three fundamental principles which are: Debtor countries need to pursue strong adjustment programs, supported by determined structural reforms, aimed at increasing domestic resource mobilization. Attracting non – debt creating flows, and reducing impediments to growth; Creditors and donors need to ensure to provision of adequate external financing in support of such programs on a case – by – case basis; and The international economic environment must be conducive to the success of these efforts.

Ugo and Andrea (2013) analyzed public debt and Economic Growth in Advanced Economies: A Survey. The main objective of the study were to determine several practical and conceptual issues related to the definition and measurement of public debt and to know the overview of various theoretical models that link debt to economic growth. The study used secondary data. Descriptive research design was used. The study used statistical and financial tools. The study used effectiveness of fiscal policy and the consequences of rising government debt in developed countries. The study found several practical and conceptual issues related to the definition and measurement of public debt. The study started with an overview of various theoretical models that link debt to economic growth. The study found that debt has a negative

impact on growth through a standard crowding out effect, but back-of-the envelope calculations indicate that this effect is quantitatively small. While uncertainty and policy credibility may amplify the negative effect of crowding out, hysteresis can lead to a situation in which expansionary fiscal policies have positive effect on long-run growth. It is also hard to find full-fledged theoretical models that predict non-monotonicity or threshold effects in the relationship between public debt and economic growth. There is no simple relationship between debt and growth. There are many factors that matter for a country's growth and debt performance. Moreover, there is no single threshold for debt ratios that can delineate the "bad" from the "good".

Cândida (2012) studied on public debt and economic growth: a granger causality panel data approach. The main objective of the study was to analyze the growth of the real GDP per capita and the public debt. The study used secondary data. Descriptive research design was used. The study used statistical tools. The study adapts the methodology recently applied by Erdil and Yetkiner. The study analyses the Granger-causality relationship between the growth of the real GDP per capita and the public debt, here represented by the ratio of the current primary surplus/GDP and the ratio of the gross Government debt/GDP. Using OECD annual data for 20 countries between 1988 and 200. There is positive relationship between growth of the real GDP per capita and the public debt. The study concluded that high public debt tends to hamper growth by increasing uncertainty over future taxation, crowding out private investment, and weakening a country's resilience to shock.

Ghimire (2012) studied on burden of public debt in Nepal. The study analyzed the debt situation in Nepal. He has also pointed out the various factors that cause excessive internal and external debt burden. In which internal factors are: Inappropriate or expansive fiscal policy, Very low tax effort, Poor maturity mix of the debt burden, Over-regulated prices that dampen incentives to export oriented production resulting in falling exports and revenue, and increased import. External factors to lead excessive debt burden are: Adverse external conditions such as deterioration in the terms of trade (e.g. Oil shocks). Inadequacies in external debt management such as poor maturity mix and exchange rate misalignment over leading by creditors commercial banks. Ghimire also analyzed the situation of widening

saving-investment gap, persistently growing share of regular expenditure, GDP and government revenue, per capita debt burden increasing trade gap. These factors clearly indicate the ever-increasing debt burden.

Khatriwada (2010) analyzed on public debt management and macro economic stability" basically dealt with monetary implication of public debt. He found that public debt has: Exerted excess monetary expansion, which has indirectly resulted in high rate of inflation and deterioration of current account situation. Crowd out resources available for private sector investment. Exerted upward pressure on the market rate of interest. Pressurized on debt servicing to the government resulting in higher budgetary deficit which further contributes to monetary expansion having subsequent repercussion on the internal as well as external sector stability. The study has further analyzed the situation more alarming, as foreign loan of the long-term nature is maturing out at faster rate and exchange rate of Nepalese Rupee has been depreciated very fast.

Sharma (2004) studied on the growing fiscal imbalance in Nepal, "Are we falling into the Debt Trap?" The study analyzed that the even increasing debt in Nepal and its servicing has really created a situation which is driving the country towards debt – trap because of the following reasons: Large amount of loan is allocated for meeting current expenses within the development expenditure, A good amount of borrowed money is used for debt servicing and Size of borrowed amount exceeds the maximum legal limit of borrowing. In the context of the Nepalese situation, Nepal is facing a paradoxical situation in that it can neither promote her economy without aid, nor has she been able to avoid the risk of becoming the victim of aid intoxication. Meanwhile, aid for long periods has created a separate social group, namely, the rental class.

Gurugharana (2003) studied on the role of foreign aid in economic development and poverty alleviation. The study analyzed the burden of public debt, as debt servicing cost in Nepal and has come to the view that the long term upward trend of increasing debt burden inflict greater burden. He finally said that through the loan component of foreign aid, Nepal is suffered more than other countries like India and China though

rate of return is very low and rapidly increase volume of debt slowly brings the Nepalese economy towards crisis of debt trap.

2.2.2 Review of theses

Ghimire (2023) analyzed the entitled, “A study of public debt and its effect on output in Nepal”. The major objectives of the study were as follows: to study the trend and pattern of public debt in Nepalese economy, to examine the burden of public debt and resource gap in Nepal and to analyze the effect of public debt on output growth in Nepal. The study found that Nepalese economy is characterized as three kinds of macroeconomic imbalances viz.-saving-investment gap, export import gap and revenue-expenditure gap. These fundamental gaps represent the foreign dominance in Nepalese economy, while saving-investment and revenue expenditure gap is mainly the consequence of excess government activities in economic matters. To fill up these gaps public debt in the form of either internal or external is inevitable. The volume of external debt is excessively rising in the recent years under liberalization policy. As globalization concept is wide spreading all over the world, aid is gradually decreasing and emphasis goes on loans, technology transfers and trade which have created high degree of indebtedness and, consequently, debt servicing obligations are increasing. In the meanwhile, the loan is not self-liquidating i.e., the debt repayment capacity is not increasing in the same pace. During the study period, average annual growth rate of GDP, revenue and merchandise export earnings are out stepped by annual growth rate of debt and debt servicing obligations. He concluded that external debt in Nepal over the period 2009/10 to 2018/19 is to some extent productive. Therefore it is necessary to have a careful look on the increasing magnitude of external debt and proper care must be taken to increase the debt servicing capacity of the country.

Wagle (2022) examined entitled, “An analysis of public debt situation in Nepal,”. The major objectives of his study are as follows: to analyze the situation and structure of public debt in Nepal, to examine the debt obligations and financial resource gap in Nepal, to study the debt servicing capacity of Nepal and to study the impact of public debt on gross domestic product in Nepal. The study found that the share of interest payments to total debt servicing was greater than principal payments till 2015/16. But

then, the share of principal amount to total debt servicing is greater than interest payments till 2009. The servicing amount of interest and principal payments indicates that large proportion of regular expenditure has gone to creditor countries, which has hampered regular expenditure as well as development expenditure. In 2010/11, 15 percent of regular expenditure has gone to service of principle payments and interest payments; this indicates the seriousness situation about debt servicing and burden of public debt of Nepal. The study concluded that macro economic imbalance such as widening trade deficit that the debt servicing capacity of Nepal is very poor which is also responsible for increasing debt obligations and financial resource gap.

Sharma (2020) studied entitled "Public Debt in Nepal". The major objectives of his study are as follows: to analyze the structure of public debt in Nepal, to study the burden of public debt and debt servicing capacity and to recommend for optimal utilization of debt. The study dealt with the positive role of government borrowing for the sound economic growth and prosperity on the one hand and on the other hand he has alarmed the state not to disburse the debt unproductively. He has focused on increasing public debt because only richer section of the society gets double benefits from the public debt. According to him one benefit is in form of the interest in the debt and other benefit from the development it self. But if there is any increase in small saving, ownership of debt is defused and the problem of inequality in the distribution of wealth and income is minimized." He further found that expansionary impact of the ownership pattern of government securities has contributed to the inflationary spiral in the country. And hence it has caused several real burden of public debt.

Upadhya (2019) analyzed the entitled "External debt and debt servicing in Nepal". The major objectives of his study are: to analyze the trend of public debt in Nepal, to analyze the burden of public debt, to identify the effect of public debt on output growth in Nepal. The study analyzed indebtedness of the country with increasing external borrowing and the determinants of external borrowing in Nepal. He has pictured the poor economic performance of the nation, which is due to nation's natural topography and human behavioral limitations. The study concluded that

internal borrowing is most essential to develop the money and capital market in the nation and external borrowing is mainly for the rapid economic development. The study describes the external debt as supplementary tool for the resource gap in the countries' budgetary expenditure.

Summary of Review of Literature

S. No.	Writers and Date of publication	Title	Objectives	Methodology	Findings
1.	Madhuhansi, G.C & Shantha, (2022)	The Effects of Public Debt on Economic Growth in Sri Lanka	The main objective of the study was to investigate the effects of public debt on economic growth in Sri Lanka, to examine the relationship between public domestic debt and economic growth in Sri Lanka, the relationship between public external debt and economic growth in Sri Lanka, and to analyze the relationship between public debt service payment and economic growth in Sri Lanka as specific objectives.	This study used annual time series data from 1980 to 2019 which translates to 40 observations. This paper uses econometric tools that normally uses in time series analysis using GDP growth rate as the dependent variable and public domestic debt, public external debt, and public debt servicing as ex-placatory variables. Descriptive statistics and normality test is used. While analyzing time series data. Method: Least Squares &Regression analysis were used.	The study concluded that overall public debt has a negative effect on economic growth in Sri Lanka. When the results compare with similar studies, the majority had concluded that public debt has a negative effect on economic growth. Debt is very important to the development and growth of Sri Lanka. In such a situation, there is not support of public debt on economic growth in Sri Lanka according to this analysis. And also that public debt cost is heavily for low-income people as tax. This paper implies that if Sri Lanka arranges more public debt, it will be led to huge failure in the country. This study ensured Keynesian theoretical model that ex-presses the negative relationship between public debt and economic growth after the threshold level. The study suggested a few policy implications such as effective usage of public debt on development activities, divisibility of export would be supported to reduce the budget deficit, avoiding corruptions, handling savings in an effective way for development activities instead of depending high debt, avoiding high imports of non-essential products, reducing wasting or unnecessary expenses of government, encouraging private sector for huge investment inside the country and ensuring effectiveness among government institutions.
2.	Dimitrios, Keith, & Cecilia, (2021)	Public debt and economic growth: panel data evidence	The main objective of the article is to examine the relationship between public debt on both short and long-	The study used several econometrics methods to examine the relationship between public debt and economic	The study concluded that there is a negative effect of the public debt ratio on economic growth, both in the short-run and long-run. The negative relationship is more significant when study used common correlated factors to address the issue of crosssectional dependence. An asymmetric response

		for Asian countries	run economic growth, to find out the impact of direct of government debt on economic growth and to examine a set of countries that has not previously been explored, using both a linear and non-linear function.	growth particularly in Asian countries and consider both the long-run and short-run relationships, along with the presence of nonlinearity.	of a change in public debt is found to be significantly negative in the short-run. Rises in short-run public debt negatively affect economic growth in the short-run but falls public debt do not have a correspondingly positive effect on economic growth.
3.	Marta, G.P. and – Simón S. R. (2018)	Public Debt and Economic Growth Further Evidence For the Euro Area	The main objective of the study was to examine the relationship between public debt accumulation and economic performance in the EA countries, to examine the use of the panel estimation techniques to combine the power of cross section on average with all the subtleties of temporal dependence and to assess both the short and the long-run effects of public debt on output performance.	The study used Autoregressive Distributed Lag (ARDL) bounds testing approach to the co integration proposed. The ARDL bounds testing approach allows the analysis of long-term relationships between variables. It gives the values of the F- and t-statistics for the case of unrestricted intercepts and no trends.	The study concluded that high public debt tends to hamper growth by increasing uncertainty over future taxation, crowding out private investment, and weakening a country's resilience to shock. However, they detect the possibility that an increase in public debt may have a positive effect in the short run by raising the economy's productive capacity and improving efficiency depending on the characteristics of the country and the final allocation of public debt.
4.	Victor, & Christopher, (2016)	Public Debt and Economic Growth in Ghana	The main objective of the study was to examine the long-term and causal relationship between public debt and economic growth in Ghana	The study used secondary data. Descriptive and analytical research designs were used. A total of seven macroeconomic variables were employed in the analysis. Time series data was analyzed to test for its stationarity using the Augmented Dickey–Fuller (1979) and	The findings from the study revealed a positive and statistically significant long-run relationship between public debt and economic growth. Also, in the short run a bidirectional Granger causality link exists. This study uses Johansen cointegration and the vector error correction model to examine the long-term and causal relationship between public debt and economic growth in Ghana. Annual time series data were gathered from the World Bank Development Indicators and IMF Economic outlook data from 1970 to 2012.

				Phillips–Perron (1988) unit root tests.	
5.	Siew-Peng, & Yan-Ling, (2015)	Public debt and economic growth in Malaysia	The main objective of the study was to analyze the public debt contribution to the economic growth in Malaysia; and to examine the indicators of debt burden.	The study used secondary data. Descriptive and analytical research designs were used. The study had conducted model experiments using statistical information on indicators of debt burden.	The study found that public debt in the Malaysia increased because of fiscal expansions. This study examines whether public debt contributed to the economic growth in Malaysia over the period 1991 to 2013. It also examines whether other indicators of debt burden, such as budget deficit, budget expenditure, and external debt service and government consumption, have an impact on economic growth. The results of this study are consistent with the existing literature that found a negative association between diet and growth.
6.	Ogutu Miruka, Gisele Mah,Mamell o Nchake (2015)	Financial Guarantees and public Debt in South Africa	The main objective of the study were to the moderating Expenditure Growth to expand Public Services at a sustainable pace., to stabilizing debt as a share of national income by narrowing the budget deficit and to examine the improvement impact of public spending by prioritizing capital investment and reducing waste and inefficiency.	The study used secondary data from December 1997to December 2011. The researcher used time series data analysis estimation technique to study the relationship between the ratio of national net loan debt to GDP and the ratio of financial guarantees to GDP. Researcher used descriptive statistics and analytical research design. The research used the quantitative method of data analysis. The study used regression analysis and correlation analysis.	The study found that although there is no long-run relationship between the two variables, the pass value of financial guarantees significantly affects it present value. The past value of financial guarantees has a predictive ability in determining the present value of debt sustainability. These findings may be contrary to what would be expected in the case of South Africa considering that the country is managing the issuance of financial guarantees prudently and that at present levels, there is no need for a radical policy shift. the challenge for South Africa is to continually devise ways of increasing social as well as infrastructure expenditure at a sustainable rate and to enhance the quality of service delivery, to avoid undermining the impressive fiscal stability gains at the macroeconomic level and ensure continued inclusive prosperity.
7.	Naeem Akram (2014)	Is public debt hindering economic growth of the Philippines	The main objective of the study were to examine the consequences of public debt for economic growth and investment for the Philippines, to examine the relationship between domestic debt with investment and economic growth,	The present study examines the consequences of public debt for economic growth and investment for the Philippines during the period 1975-2010, by using autoregressive distributed lag technique. Most	The study found that in the Philippines, public external debt has negative and significant relationship with economic growth and investment confirming the existence of “Debt Overhang effect”. Due to insignificant relationships of debt servicing with investment and economic growth, the existence of the crowding out hypothesis could not be confirmed. The domestic debt has a negative relationship with investment and

			to examining the relationship between debt servicing with investment and economic growth and to find out the relationship between Philippines public external debt & economic growth with investment.	appropriate method for estimation is autoregressive distributed lags (ARDL) model.	positive relationship with economic grow. The results are also suggestive of the fact that real GDP has been negatively affected by population growth and positively by openness.
8.	Cleomar Gomes, Manoel Carlos de Castro Pires, Fabio Henrique Bittes Terra. (2014)	The effects of public debt management on macroeconomic equilibrium: Analysis of Brazilian economy	The main objective of the study were to study the effects of public debt management on yield curve spreads in brazil, in order to see possible impacts on the country's economic activities, and to investigate the impact of the issuance of fixed rate and floating rate linked bonds on yield spread premiums required by investors, while purchasing bonds with different maturities.	This article used econometric methodology, data and descriptive static. This article is related to state space structural Models and Kalman filtering, which is a recursive linear filter capable of predicting the unobservable variable ,in the next period ,based on the current observation.	The study found that the increase in the issuance of fixed rate linked bonds lead to increases on yield spreads and longer the maturity, the longer he effects. The opposite results comes when there is increase issuance of floating rate linked bonds. The study can help to understand how the stance of monetary policy can influence the debt management process.
9.	Ugo, Andrea (2013)	& Public debt and Economic Growth in Advanced Economies: A Survey.	The main objective of the study were to determine several practical and conceptual issues related to the definition and measurement of public debt and to know the overview of various theoretical models that link debt to economic growth.	The study used secondary data. Descriptive research design was used. The study used statistical and financial tools. The study used effectiveness of fiscal policy and the consequences of rising government debt in developed countries.	The study found several practical and conceptual issues related to the definition and measurement of public debt. The study started with an overview of various theoretical models that link debt to economic growth. The study found that debt has a negative impact on growth through a standard crowding out effect, but back-of-the envelope calculations indicate that this effect is quantitatively small. While uncertainty and policy credibility may amplify the negative effect of crowding out, hysteric can lead to a situation in which expansionary fiscal policies have positive effect on long-run growth. It is also hard to find full-fledged theoretical models that predict non-monotonicity or threshold effects in the relationship between public debt and economic growth.
10.	Cândida F.	Public	The main	The study used	The study analyses the Granger-

(2012)	Debt and Economic Growth: a Granger Causality Panel Data Approach	objective of the study was to analyze the growth of the real GDP per capita and the public debt.	the secondary data. Descriptive research design was used. The study used statistical tools. The study adapts the methodology recently applied by Erdil and Yetkiner.	causality relationship between the growth of the real GDP per capita and the public debt, here represented by the ratio of the current primary surplus/GDP and the ratio of the gross Government debt/GDP. Using OECD annual data for 20 countries between 1988 and 200. There is positive relationship between growth of the real GDP per capita and the public debt. The study concluded that high public debt tends to hamper growth by increasing uncertainty over future taxation, crowding out private investment, and weakening a country's resilience to shock.
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2.3 Research gap

It can be concluded that governments of underdeveloped countries have to borrow due to low saving. This in turn is resulted from the low level of investment. Hence the poverty sequences more like inadequate capital, low productivity, low real income and low purchasing power, inadequate capital gain. This justify that capital deficiency in the underdeveloped countries are facing the deficiency of capital in relation to their population and natural resources. From the above literature, it can be concluded that economists were not against all types of public debt. They agreed that public debt should be used for productive purposes, that is, for capitals projects since the fruits of such projects could be sold to buyers so debt servicing and refund of principal did not necessitate additional taxation. Previous researchers analyzed the trend of debt by using secondary source of information in terms of internal and external borrowing. But actually speaking, debt can be determined by various factors. Among them, country's environment and fiscal policy in terms debt servicing and refund of principal may be the strong determinant for debt management in the country. In present context, these are the heart issue in Nepalese economy. The previous scholars could not submit the present facts. Present study tries to define trend and structure of public debt in Nepal by applying those various facts in the context of Nepalese economy. It can be very useful or important in debt management. Thus, present study will be fruitful to those interested person, parties, scholars, professor, students, businessman and government for academically as well as policy perspective. Hope this study will help to others in future in the related field.

CHAPTER III

RESEARCH METHODOLOGY

This chapter is basically concerned with research methodology, which includes research design, size of sample and sampling design and method of analysis.

3.1 Research design

This study is based on historical, causal comparative as well as descriptive research design. In fact, the research design is the conceptual structure within which the research is conducted. This study analyzes the trend and pattern of public debt of Nepal. Variables used in the models have been explained analytically. The statistical models have been estimated by using Ordinary Least Square method.

3.2 Size of sample and sampling design

In order to show the trend and structure of external borrowing and its effect on gross domestic product, data from 2013/14 to 2022/23 has been taken into account through purposive sampling method. This is because researcher is interested to examine the relationship between external debt and GDP, agricultural GDP and non-agricultural GDP. In order to show the trend and structure of public borrowing, 10 years data has been taken into account. This is because researcher is interested in examining the relationship between public debt and GDP of Nepal.

3.3 Nature and sources of data, and instruments of data collection

This study is based on secondary data and information are collected from government's budget speeches (2013/14 to 2022/23), various Economic surveys, and publications of Ministry of Finance (MOF), Nepal Rastra Bank. Data has been collected from the various issues of Economic surveys, and publications of Ministry of Finance and Nepal Rastra Bank.

3.4 Method of analysis

In order to support the study, different statistical and mathematical tools such as percentage, ratio, arithmetic mean, and hypothesis testing have been used. It is, therefore, evident that the subjective patterns of analysis guided by theoretical tools and statistical as well as mathematical tools have collectively been exercised to explain the different component of the study raised basically through the major issues related to external debt in Nepal.

It attempts to establish the nature of relationship between dependent and independent variables. It also provides a mechanism for prediction or forecasting. The regression of Y (=GDP) on X(= Public Debt) is used to estimate the value of the dependent variable Y for any given value of independent variable and vice versa.

The regression equation of GDP on Total public debt has been estimated. The estimated form of the equation given by:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

$$Y = \text{GDP}$$

$$X_1 = \text{External debt}$$

$$X_2 = \text{Internal debt}$$

$$X_3 = \text{Total Public debt}$$

a = Autonomous element which does not vary with public debt

b_x = Induced element which varies directly with public debt

Regression equation of Y_{GDP} on EXT_{debt} , INT_{debt} and Total Public debt

$$Y_{\text{GDP}} = a + b_1 \text{EXT}_{\text{debt}} + b_2 \text{INT}_{\text{debt}} + b_3 \text{TPD}_{\text{debt}}$$

Where Y_{GDP} = Gross Domestic product, EXT_{debt} = External debt

INT_{debt} = Internal debt, TPD_{debt} = Total Public debt

3.4.1 Statistical test of significance

Standard errors of estimates SEE, like standard deviation, measure the reliability of the estimating equation and estimating coefficients. The larger the SEE, the greater happens to be the dispersion of scattering of given observations around the regression line (or coefficients) and no better the estimate.

3.4.2 Test of the goodness of fit (R^2)

R^2 shows the percentage of the total variation of the dependent variable that can be explained by the independent variables of the multiple determinations and is the square of the correlation co-efficient.

3.4.3 Test of significance of the parameter estimates

It is applied for judging the statistical reliability of the estimates of the regression co-efficient. The following tests have been performed to test the hypothesis of the study.

t-Test

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

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

where, \hat{a}_i = estimated value of a_i

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

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

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

F = Test

F test is used to examine the overall significance of the model

$$\text{The formula for calculation is } F = \frac{R^2 / K - 1}{(1 - R^2) / N - K}$$

R^2 = Co-efficient of determination

K = Number of explanatory variable

N = Number of observation in the sample

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

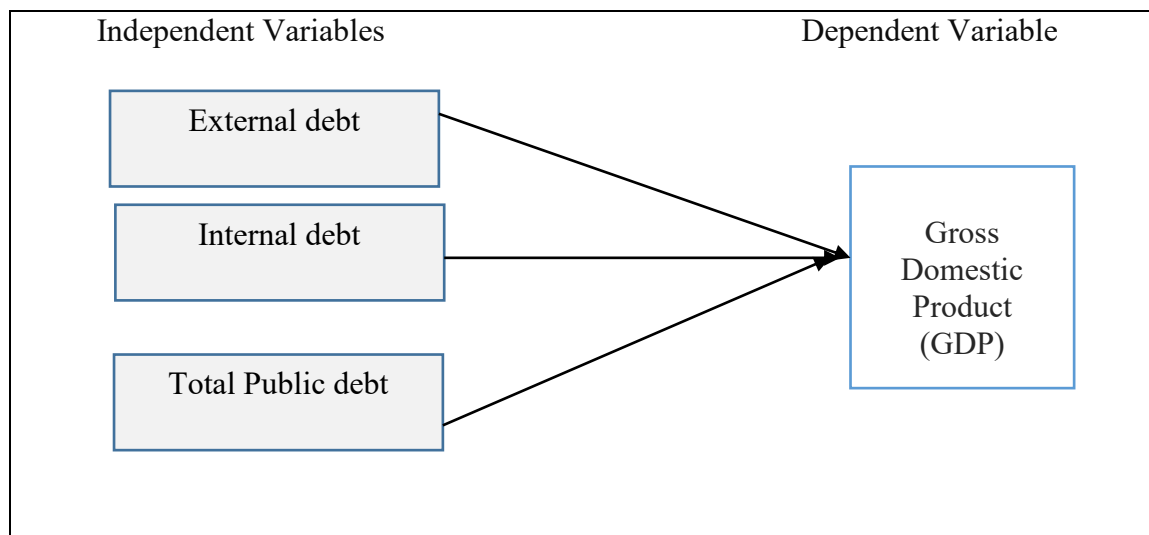
If $F_{cal} < F_{Tab}$, we accept null hypothesis

If $F_{cal} > F_{Tab}$, we reject null hypothesis.

3.5 Research framework and definition of variables

3.5.1 Conceptual framework

In view of theory and major empirical evidences, it is expected that the GDP may affect by internal, external and total debt. The conceptual framework is developed to test the impact of internal, external and total debt indicators on the GDP of Nepal. In this study conceptual framework is portrayed in figure 1.



Sources: Siew-Peng & Yan-Ling, 2015

Figure 1

Conceptual Framework (Relationship between Dependent and Independent variable)

Independents variables as the one which influence the dependent variable

In view of theory and major empirical evidences, it is expected that the GDP is positively affected by external, internal and total debt.

Dependent Variable

Gross Domestic Product (GDP)

Gross domestic product is a monetary measure of the market value of all the final goods and services produced in a specific time period by a country or countries. GDP

is most often used by the government of a single country to measure its economic health (Siew-Peng & Yan-Ling, 2015).

Independent Variables

External debt

External debt is the portion of a country's debt that is borrowed from foreign lenders, including commercial banks, governments, or international financial institutions. If a country cannot repay its external debt, it is said to be in sovereign debt and faces a debt crisis (Siew-Peng & Yan-Ling, 2015).

Internal debt

In public finance, internal debt or domestic debt is the component of the total government debt in a country that is owed to lenders within the country (Siew-Peng & Yan-Ling, 2015).

Total Public debt

Public debt, sometimes also referred to as government debt, represents the total outstanding debt (bonds and other securities) of a country's government. It is often expressed as a ratio of Gross Domestic Product (Siew-Peng & Yan-Ling, 2015).

CHAPTER IV

RESULTS AND DISCUSSION

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

The government of Nepal has been borrowing new fresh loan mainly to balance its deficit budget however, other causes may exists with it. It is applied for the maintenance of the balance between the expenditure and revenue. It is also applied for financing economic development since under developed countries always face the problems of adequate funds, which is reflected in a large extent as ever increasing financial resource gap in the government budgetary operations. There are mainly four reasons for raising the government borrowing; a) to recover the deficit budget, b) to tackle the emergency period of crisis, c) to maintain the economic and monetary stability and d) to accelerate the pace of economic development.

Government borrowing in Nepal is rapidly increasing since the FY 1984/85 the government started to raise borrowing with new long term security named 'national saving certificate'. Therefore the amount of public debt has been fluctuated in its size but in aggregate, it has been increased tremendously under the review period 2013/14 to 2022/23.

4.1 Composition and trend of public debt in Nepal

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

Table 1
Internal and external debt as percentage of fiscal deficit

Fiscal year	Fiscal Deficit (1)	Total Debt	Total Debt as % of fiscal Deficit	Internal Debt (2)	% of Total Debt	External Debt (3)	% of Total Debt	(Rs. million)	
								Loan as a % of fiscal deficit	
								Internal loan	External loan
2013/14	459316.8	443700	96.6	184199	41.51	259501	58.49	40.10	56.50
2014/15	568703.3	523207	92.0	213920.6	40.89	309287	59.11	37.62	54.38
2015/16	556442.9	545314	98.0	211872.8	38.85	333442	61.15	38.08	59.92
2016/17	703312.6	553507	78.7	206688.6	37.34	346819.1	62.66	29.39	49.31
2017/18	796663.7	544918	68.4	201656.8	37.01	343261.8	62.99	25.31	43.09
2018/19	768410.0	627791	81.7	239029	38.07	388762.8	61.93	31.11	50.59
2019/20	840382.8	702560	83.6	288581.8	41.08	413978.8	58.92	34.34	49.26
2020/21	909238.1	916512	100.8	391161.5	42.68	525351.2	57.32	43.02	57.78
2021/22	1209452	978446.6	80.9	383588.5	39.20	594858.1	60.80	31.72	49.18
2022/23	1228228	1139796	92.8	440047	38.61	699749	61.39	35.83	56.97

Note. Ministry Finance, Economic Survey, FY 2022/23

Table 1 indicates the increasing trend of public debt from both internal and external sources. The total debt was Rs. 443700 million in FY 2013/14 and has increased to Rs. 1139796 million in the FY 2022/23. Once it became so high in FY 2022/23. Its average annual rate of growth over the review period is 7.2 percent. The table shows the increasing trend of public debt in which the increasing trend of external debt is so rapidly then internal debt.

Internal debt was only Rs. 184199 million in the FY 2013/14 and has gone up to Rs. 213920.6 million in 2014/15, but in 2013/14 it has decreased up to 2016/17 again it has gone up to Rs. 239029 million in 2017/18 and 440047 million in 2022/23. Where as external debt was Rs. 259501 million in 2013/14 and increased tremendously up to Rs. 346819.1 million in 2016/17 and it has decreased to 343261.8 million in 2017/18 and again it has increased up to 699749 million in 2022/23.

Table 1 shows the percentage share of internal and external debt to fiscal deficit, in which the contribution of both internal and external debt to their fiscal deficit has been fluctuating. The contribution of internal debt to fiscal deficit was 40.10 percent in the FY 2013/14 whereas external debt was 56.50 percent. But the share of internal debt is 35.83 percent in the FY 2022/23 which shows the decreasing contribution and

external is 56.97 percent in the same fiscal year, which shows the increasing contribution to the fiscal deficit.

The absolute terms of the above table show the growing reliance on external loan for meeting the ever-increasing fiscal deficit. This absolute term also shows that (during the last 10 years) economic performance has not been conducive enough to reduce growing reliance on external loan. This situation has led us to think seriously about this alarming situation.

4.2 Growth trend of public debt

After the restoration of multiparty system, the financial operations of the government of Nepal have been increased and accordingly the volume of government expenditure is increasing. The reliance on taxation is not possible in view of the large amount of financial resources required for the government expenditure. Therefore, Nepal is facing large and growing financial resource gap in the government budgetary system. In this context, the government borrows from both external and internal sources to bridge the resource gap. The government has borrowed large amount of loans to bridge meet the fiscal deficit. The growth trend of public debt is shown in table 2 below.

Table 2
Trend of public debt

Fiscal Year	Total Debt (I)	External Debt (II)	Internal Debt (III)	Annual Growth Rate of (I) %	Annual Growth Rate of (II) %	Annual Growth Rate of (III) %	(Rs. million)	
							% Share of (II) in 'I'	% Share of (III) in 'I'
2013/14	443700	259501	184199	20.0	22.2	13.3	58.49	41.51
2014/15	523207	309287	213920.6	17.92	19.19	16.14	59.11	40.89
2015/16	545314	333442	211872.8	4.23	7.81	-0.96	61.15	38.85
2016/17	553507	346819.1	206688.6	1.50	4.01	-2.45	62.66	37.34
2017/18	544918	343261.8	201656.8	-1.55	-1.03	-2.43	62.99	37.01
2018/19	627791	388762.8	239029	15.21	13.26	18.53	61.93	38.07
2019/20	702560	413978.8	288581.8	11.91	6.49	20.73	58.92	41.08
2020/21	916512	525351.2	391161.5	30.45	26.90	35.55	57.32	42.68
2021/22	978446.6	594858.1	383588.5	6.76	13.23	-1.94	60.80	39.20
2022/23	1139796	699749	440047	16.49	17.63	14.72	61.39	38.61

Note. Ministry Finance, Economic Survey, FY 2022/23

Table 2 shows the government borrowing (internal and external) and their annual growth rate between the period 2013/14 and 2022/23. The table shows that over the review period total government borrowing has increased from Rs. 443700 million to Rs.1139796 million, which is about 2.8 folds. Similarly external borrowing also increases from Rs. 259501 million to Rs. 699749 million during the period of study. It was at the peak in FY 2020/21, (i.e.391161.5 million) which was, about 1.5 fold. But in FY 2022/23, it became Rs. 699749 million, which is about 2.4 times from the beginning. And the average annual growth rate of internal debt is 10.5 percent and increasing in trend from Rs. 184199 million to Rs. 440047 million.

Table 2 also indicates that the external debt increased more than the internal debt in absolute term during the period of review. Although the trend clearly shows that the government borrowing is increasing in both absolute and relative terms. The percentage share of external and internal debt in total debt is 61.39 and 38.61 percent respectively in 2022/23. It indicates that external loan is in increasing rate and internal loan is in decreasing rate.

4.3 Sources of internal debt

The government can borrow internal debt from banking and non-banking sources. Borrowing from banking sources is the borrowing from the central bank and other banks. This type of borrowing may be inflationary because it assists to increase the demand of goods. Borrowing from non-banking source is the borrowing from general public of the country like citizen saving bond, national saving bond etc. This type of borrowing assists to reduce the disposable income of the general people and hence it may not be inflationary. Hence the efforts should be made toward internal debt mobilization through non-banking system. The volume of internal debt from banking and non-banking source has been shown in the Table 3.

Table 3
Sources of internal debt

Fiscal year	Banking Sources (I)	Non-banking Sources (II)	Total Internal Debt (III)	(Rs. In million)	
				(I) as a percentage of (III)	(II) as a percentage of (III)
2013/14	142482.2	41716.8	184199	77.35	22.65
2014/15	162081	51839.6	213920.6	75.77	24.23
2015/16	176292	35580.8	211872.8	83.21	16.79
2016/17	164571	42117.6	206688.6	79.62	20.38
2017/18	159732	41924.8	201656.8	79.21	20.79
2018/19	195204	43825.2	239029	81.67	18.33
2019/20	241637	46945.3	288581.8	83.73	16.27
2020/21	342406	48755.1	391161.5	87.54	12.46
2021/22	335628	47960.2	383588.5	87.50	12.50
2022/23	393870	46177.1	440047	89.51	10.49

Note. Ministry Finance, Economic Survey, FY 2022/23

Share of non-banking sources to total internal borrowing has increased from Rs. 142482.2 million in 2013/14 to Rs. 342406 million in 2020/21 and decreased in 2021/22 to Rs. 335628 million and increased to 393870 million in 2022/23. On the other hand percentage share of non-banking source has decreased from 22.65 to 10.49 percent over the study period. This indicates that the contributions of non-banking financial sources have been slightly decreasing.

4.4 Pattern of internal net outstanding debt

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

Now the government receives the internal borrowing by issuing mainly treasury bills, development bonds, National Saving Certificate, Public Saving Card and special bonds, where public saving card is new concept and has issued since 2001/02. The pattern of internal debt is shown in Table 4.

Table 4
Structure of internal net outstanding debt

Fiscal Year	Treasury Bills	Development Bonds	National Saving Certificate	Public Saving Card	(Rs. In million)	
					Special Bonds	Total Internal Outs. Debt
2013/14	120340.7	435194	10680	4636.5	5029.1	184199
2014/15	131624.1	414980	15680.1	4139	5028.7	213920.6
2015/16	136468.1	516109	15680	3242.7	13345.5	211872.8
2016/17	136468.1	471109	16586.5	1652	4871.1	206688.6
2017/18	119858.1	570700	16586.5	3271.2	4871.1	201656.8
2018/19	116059.1	108900	906.5	8292.3	4871.1	239029
2019/20	110409.2	163900	906.5	8494.9	4871.1	288581.8
2020/21	144847.9	235900	906.5	9244.3	262.8	391161.5
2021/22	146792.9	297347	0	8830.6	0	383588.5
2022/23	136267.9	294947.1	0	8832	0	440047

Note. Ministry Finance, Economic Survey, FY 2022/23
Internal Outstanding = TB + DB + NSC + PSC + Special Bonds.

Table 5
Structure of internal net outstanding debt in percentage

Fiscal Year	Total Internal Outs. Debt (1)	% share of Treasury Bills to (1)	% share of Development Bonds to (1)	% share of National Saving Certificate to (1)	(Rs. In million)	
					% share of Public Saving Card to (1)	% share of Special Bonds to (1)
2013/14	184199	65.33	23.63	5.80	2.52	2.73
2014/15	213920.6	61.53	19.40	7.33	1.93	2.35
2015/16	211872.8	64.41	24.36	7.40	1.53	6.30
2016/17	206688.6	66.03	22.79	8.02	0.80	2.36
2017/18	201656.8	59.44	28.30	8.23	1.62	2.42
2018/19	239029	48.55	4.56	0.38	3.47	2.04
2019/20	288581.8	38.26	5.68	0.31	2.94	1.69
2020/21	391161.5	37.03	6.03	0.23	2.36	0.07
2021/22	383588.5	38.27	7.75	0.00	2.30	0.00
2022/23	440047	30.97	6.70	0.00	2.01	0.00

Note. Ministry Finance, Economic Survey, FY 2022/23
Internal Outstanding = TB + DB + NSC + PSC + special Bonds.

Table 5 shows the structure of internal net outstanding debt in which the government mainly receives the internal resources by five sources. Among them Public Saving Card was started from 2001/02. Before this, there are only four sources, which contributed much more in the field of internal net outstanding debt. Where the contribution of Treasury Bills is larger because its percentage share to total internal outstanding debt is increasing trend over the study period.

Table 5 shows the share of Treasury Bills, Development Bonds, National saving Certificate and Special Bonds to total net internal outstanding debt which are 65.33%, 23.63%, 5.8%, 2.52% and 2.73% respectively in 2013/14. Which is fluctuating trend in case of treasury bills, Saving Certificate, Public Saving Card and Special Bonds over the review period.

The percentage share of Treasury Bills is 30.97 and of Development Bonds, National Saving Certificate, Public Saving Card and Special Bonds are 6.7 percent, 0 percent, 2.01 percent and 0 percent respectively in FY 2022/23. This shows that more than half of internal net outstanding debt has mobilize through Treasury Bills and development bonds.

We can reach the conclusion by above table that the volume of internal borrowing is increasing without increasing in tax revenue collection proportion to the growth in the government expenditure. This action also will create the inflationary situation, which may leads us into debt crisis in future.

4.5 Sources of external borrowing

Nepal has borrowed the external loan through bilateral and multilateral sources. Bilateral loans are the, loans from foreign individual governments and their agencies, loans from autonomous bodies and direct loans from official expert credit agencies. Multilateral loans are the loans from multilateral agencies such as World Banks, IMF, Regional Development Banks and other multilateral and intergovernmental agencies.

Table 6, clearly shows the decreasing trend of bilateral loans and increasing trend of multilateral loans over the review period.

In the beginning of the review period the share of bilateral loans to total external loan is Rs. 7000 million (2.70%) and multilateral is Rs. 258186.5 million (97.3%) and at the end of the year of this study the bilateral loan decreased to Rs. 3330 million (0.48 %) and multilateral loan increased to Rs. 690744.4 million (99.52%). But it was high in the FY 2021/22 with Rs. 594817.5 million (100%). The average annual growth rate of bilateral and multilateral loan is 7.1 percent and 7.7 percent respectively over the study period.

Table 6*Structure of external loan in terms of disbursement by major sources*

Fiscal Year	Total External Loan (1)	Bilateral Loan (2)	Multilateral Loan (3)	(Rs. In million)	
				(2) as a percent of (1)	(3) as a percent of (1)
2013/14	259501	7000	258186.5	2.70	97.3
2014/15	309287	21453	308703	6.94	93.06
2015/16	333442	15210	332684.1	4.56	95.44
2016/17	346819.1	6587	346232.4	1.90	98.1
2017/18	343261.8	98029	343174.8	28.56	71.44
2018/19	388762.8	44757	388105.6	11.51	88.49
2019/20	413978.8	51287	413912.8	12.39	87.61
2020/21	525351.2	0	525224.7	0.00	100
2021/22	594858.1	0	594817.5	0.00	100
2022/23	699749	3330	690744.4	0.48	99.52

Note. Ministry Finance, Economic Survey, FY 2022/23

Table 6 shows the multilateral external debt has dominated the bilateral debt in the structure of external debt of Nepal. Where annual growth rate of multilateral loan average is 7.7 percent and bilateral loan is 7.1 percent. The annual growth rate of bilateral loan increased by 28.56 percent in 2017/18 thereafter decreased.

Over the period of review, the amount of grants did not sufficiently increase; where it has gone up in 2017/18 to 2019/20, which has not enough to cover the budgetary deficit. During this period, the amount of bilateral and multilateral loan has increased tremendously which has created some sort of constraint in the performance of economy as a whole.

Due to the delay in timely implementation of the projects, donors are reluctant to disburse the committed amount of foreign aid. The main cause of the delay in the disbursement is the time lag because aid for the many project are committed in one year, and the committed aid is being disbursed in the subsequent years. When the returns from the investment in the economy were not obtained on time, the foreign assistance could not be fully utilized government of Nepal ever since it began to receive aid. It becomes clear that if one goes to the gap between the commitment and disbursement of aid during the study period. Another main feature of foreign aid in Nepal is the constant shortfall of disbursement against commitment.

4.6 Burden of public debt in Nepal

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

The total burden of public debt can be divided into two parts: (1) burden of internal public debt, (2) burden of external public debt. The internal means the total part of the debt which is hold internally. In case of external debt burden it is however, completely different. External debt imposes real burden on the economy because it reduces national welfare. External debt is paid not in monetary terms but in real terms, in terms of goods and services. Which are exported to the creditor country for the settlement of debt? The process will have to continue during the whole period of loan because the borrower country has to pay interest charges, but if external loans are used for increasing the productive capacity of the economy, the debt repayment may not be a serious burden. The debtor country may pay off the debt and interest without any difficulty because of increased capacity of export oriented industries. If debtor country does not sufficiently increase the production and export, it will have to face the balance of payment problem.

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

Regarding the shift of the debt burden to the future generation, there is debate among the economists. A group of economists argues that if the present generation reduces current saving in order to repay the debt and leaves a smaller amount of capital resources for future, it will not create sufficient capacity for the coming generation. In this way, burden of public debt may pass on to the future generation. But on the other

hand, another group of economists has challenged the above version and expressed opposite opinion on the subject of burden of public debt. They argue that there is no shift of the basic burden to the future generation because the state posterity, which pays the additional taxes, will be benefited from the repayment of the debt with interest. In conclusion if additional taxes are imposed on present generation to repay the debt, it is paid partly by reducing current consumption and partly by reducing current saving. The former lowers the standard of living of the present generation. This is the real burden of debt on present generation. Reduction in current saving means reduction in future consumption which will become small burden on future generation. Thus the part of current saving used in paying tax reduces saving and future consumption and to that extent the debt burden is shifted to future generation.

On the basis of the above discussion, we can say that it is difficult to conclude a specific opinion in the issue. Thus, the question of shifting the burden of public debt to the future generation has remained an unsettled riddle so far.

In case of Nepal, public debt is increasing rapidly each year, which was 62.61 percent of GDP in 2021/22. Large scale public debts have been incurred in the past for financing development programs, but debt servicing capacity is not increasing in the same pace, that may cause undue strain in the balance of payment owing to outflow of funds through debt services. Nepal has been borrowing fresh loan to repay old loans. This also has alarmed the situation of 'debt trap' in the future.

4.7 National outstanding debt and its share in GDP

The ratio of public debt to GDP is an important indicator of the manageability of public debt in an economy. The relative shares of the public debt in the GDP should be taken into consideration for assessing the burden of growing public indebtedness. Nepal has to borrow huge amount of external as well as internal loans for meeting the budget deficit. And on the other hand, the tax revenue and non-tax revenue are not increasing as it is predicted and improper utilization of public debt and corruption, debt servicing capacity is not increasing as a result burden of outstanding debt is increasing. Table 7 shows the burden of debt through the method of measure of burden of debt as the ratio of public debt to GDP.

Table 7
Outstanding debts and its share in GDP

Fiscal Year	External Outs. Debt	Internal Outs. Debt	Total Public Debt	GDP at Producer's price	(Rs. In million)		
					Percentage Share debt in GDP	External Debt	Internal Debt
2013/14	259501	184199	443700	639694	40.57	28.79	69.36
2014/15	309287	213920.6	523207	670279	46.14	31.92	78.06
2015/16	333442	211872.8	545314	697954	47.77	30.36	78.13
2016/17	346819.1	206688.6	553507	739754	46.88	27.94	74.82
2017/18	343261.8	201656.8	544918	764336	44.91	26.38	71.29
2018/19	388762.8	239029	627791	768835	50.57	31.09	81.65
2019/20	413978.8	288581.8	702560	832060	49.75	34.68	84.44
2020/21	525351.2	391161.5	916512	887455	59.20	44.08	103.27
2021/22	594858.1	383588.5	978446.6	950033	62.61	40.38	102.99
2022/23	699749	440047	1139796	2248690	31.12	19.57	50.69

Note. Ministry Finance, Economic Survey, FY 2022/23

Observing Table 7, it shows the magnitude of outstanding debt, GDP and their ratio, which also assesses the burden of public debt. This Table shows the ratio of internal and external debt to GDP in the Year between 2013/14 to 2022/23. The share of external debt in GDP was 40.57 percent in 2013/14, which has decreased to 31.12 percent in the year 2022/23, showing fluctuating trend.

Similarly, Table 7 also shows the share of internal debt in GDP. It has increased from 28.79 percent in 2013/14 to 44.08 percent in 2020/21. It means burden of public debt is decreasing, where total outstanding public debt has increased from Rs. 443700 million in 2013/14 to Rs. 1139796 million in 2022/23 and share of it in GDP has decreased from 69.36 percent in 2013/14 to 50.69 percent in 2022/23. This indicated an alarming situation of burden of debt in Nepal. Table also shows that the burden of external outstanding debt is greater than that of internal debt which may be danger for the future generation. This magnitude of the burden of public debt may increase to alarming situation of productive capacity is not created in the economy for increasing production. Here, comparing the Table 8 we can see that growth rate of GDP is less than the growth rate of outstanding debt and the part of GDP used in repaying debt is continuously increasing. It may lead to a situation of bankruptcy.

4.8 Debt servicing issues in Nepal

The payment of interest and principle of public debt is known as debt servicing. In Nepal, the share of foreign loan is in increasing trend that ultimately increases financial and real burden on future generation. Table 8 shows the ratio of internal and external debt servicing to total debt servicing and their percentage share of external and internal debt servicing to total debt servicing.

Table 8

Share of external and internal debt servicing in total debt servicing

Fiscal Year	Total Debt Servicing (I)	External Debt Servicing (II)	Internal Debt Servicing (III)	(Rs. In million)	
				'II' as a percentage of (I)	'III' as a percent of (I)
2013/14	29957.3	13542.1	16415.2	45.20	54.80
2014/15	35319.9	16363.2	18956.7	46.33	53.67
2015/16	48866.7	17193.2	31673.5	35.18	64.82
2016/17	53914.8	20089.8	33825.0	37.26	62.74
2017/18	73735.0	20076.1	53658.9	27.23	72.77
2018/19	76803.1	21105	55698.1	27.48	72.52
2019/20	71288.1	25976.5	45311.6	36.44	63.56
2020/21	71928.1	22456.6	49471.5	31.22	68.78
2021/22	75067.0	57387.1	17679.9	76.45	23.55
2022/23	47309	14420	32889	30.48	69.52

Note. Ministry Finance, Economic Survey, FY 2022/23

External Debt Servicing = Repayment + Interest Payment

Internal Debt Servicing = Total Debt Servicing - External D.S.

Total Debt Servicing = Interest Payment + Principle Repayment

On observing Table 8, the amount of total debt servicing was Rs. 29957.3 million in 2013/14 and has increased to Rs. 47309 million in 2022/23 with average annual growth rate of 10.2 percent. This shows as an increasing trend of total debt servicing. The volume of external debt servicing was Rs. 13542.1 million in 2013/14 and has increased to Rs. 14420 million in 2022/23 and the internal debt service was Rs. 16415.2 million in 2013/14 and has gone up to Rs. 32889 million in 2022/23. The average annual growth rate of total and internal debt servicing is higher than external debt servicing and that of internal debt servicing are 10.2% and 60.67% respectively. Whereas the average annual growth rate of external debt servicing is 39.32%. Till FY 2022/23, the annual growth rate of external debt servicing is lower than that of internal, since then, internal debt servicing is increasing at higher rate than external debt servicing. In 2022/23 the percentage share of external and internal debt servicing to total debt servicing was 30.48 percent and 69.52 percent respectively. At the end of

the year, government is doing well because it has increased its internal source to the debt servicing. It shows a happy signal of improvement in Nepal's debt servicing situation.

Table 9

Share of interest and principal payments in total dept servicing

(Rs. In million)					
Fiscal year	Total Debt Servicing (I)	Principle Payments (II)	Interest Payments (III)	'II' as a Percentage of (I)	'III' as a percentage of (I)
2013/14	29957.3	17220.4	12736.9	57.48	42.52
2014/15	35319.9	20159.2	15160.7	57.08	42.92
2015/16	48866.7	35130	13736.7	71.89	28.11
2016/17	53914.8	41877.0	12037.8	77.67	22.33
2017/18	73735.0	64457.7	9265.1	87.42	12.57
2018/19	76803.1	68130	8673.1	88.71	11.29
2019/20	71288.1	61264.4	10023.7	85.94	14.06
2020/21	71928.1	55673.8	16247.3	77.40	22.59
2021/22	75067.0	16795.5	12229.4	22.37	16.29
2022/23	47309	32453	14856	68.60	31.40

Note. Ministry Finance, Economic Survey, FY 2021/22

Similarly Table 9 shows the servicing amount of interest payments and principal payments in total debt servicing amount. While observing Table 10, it shows the 10.2 percent of average annual growth rate of total debt servicing over the study period, where share of interest amount was Rs. 12736.9 million in FY 2013/14 and has gone up to Rs. 14856 million in FY 2022/23. Similarly share of principal amount was Rs. 17220.4 million in FY 2013/14 and has gone up to Rs. 32453 million in FY 2022/23 over the review period. The table shows that increasing trend of principal payments is higher than interest payments. The servicing amount of interest and principal payments indicated that large proportion of regular expenditure has gone to creditor countries, which has hampered regular expenditure as well as development expenditure. In 2016/17, 15 percent of regular expenditure has gone to service of principle payments and interest payments; this indicates the serious situation of debt servicing and burden of public debt of Nepal i.e. the burden of debt servicing is increasing that may adversely affect the growth process.

4.9 Ownership pattern of internal debt servicing situation

The burden of public debt is measured by the ratio between the debt servicing and aggregate tax revenue and non-tax revenue or total revenue and the ratio between servicing cost and national income (GDP). This has been shown in Table 10.

Table 10

Share of internal debt servicing in total revenue, regular expenditure and GDP

Fiscal Year	Regular Expenditure	Total Revenue	GDP	Internal Debt Servicing	(Rs. In million)		
					D.S as % of Regular Expenditure	D.S. as % of Total Revenue	D.S. as % of GDP
2013/14	243460	244374	639694	16415.2	6.74	6.72	2.57
2014/15	247455	296021	670279	18956.7	7.66	6.40	2.83
2015/16	303531	356620	697954	31673.5	10.44	8.88	4.54
2016/17	339407	405866	739754	33825.0	9.97	8.33	4.57
2017/18	371297	481961	764336	53658.9	14.45	11.13	7.02
2018/19	518616	609179	768835	55698.1	10.74	9.14	7.24
2019/20	696919	726717	832060	45311.6	6.50	6.24	5.45
2020/21	403113	432357	887455	49471.5	12.27	11.44	5.57
2021/22	408392	516988	950033	17679.9	4.33	3.42	1.86
2022/23	450781	593310	2248690	32889	7.30	5.54	1.46

Note. Ministry Finance, Economic Survey, FY 2022/23

Table 10 shows the average annual growth rate and volume of regular expenditure, Total Revenue, GDP and internal debt servicing. It also shows the share of TR, RE and GDP as percentage of internal debt servicing. Under the period of the study, the magnitude of regular expenditure, total revenue, GDP and Internal debt servicing was Rs. 243460 million, Rs. 244374 million, Rs. 639694 million and Rs. 16415.2 million in 2013/14 and has increased up to Rs. 450781 million, Rs. 593310 million, Rs. 2248690 million and 32889 million in 2022/23 respectively.

The trend of debt servicing as percentage of regular expenditure, total revenue and GDP has been decreasing and fluctuating. Debt servicing as a percentage of regular expenditure was 6.74 percent in 2013/14 and increased to 7.30 percent (till FY 2022/23), and total revenue was 6.72 and decreased to 5.54 percent over the period of the study. Likewise, share of debt servicing to GDP is 2.57 and decreased to 1.46 percent in FY 2022/23.

Table 11*Outstanding public debt, development expenditure and debt servicing*

(Rs. In million)

Fiscal Year	Total Outs. Debt (I)	Development Expenditure (II)	Total Debt Servicing (III)	'I' as a percent of (II)	'III' as a percentage of (II)
2013/14	443700	51390	29957.3	11.58	58.29
2014/15	523207	54598	35319.9	10.44	64.69
2015/16	545314	66694	48866.7	12.23	73.27
2016/17	553507	88843	53914.8	16.05	60.69
2017/18	544918	123251	73735.0	22.62	59.83
2018/19	627791	208748	76803.1	33.25	36.79
2019/20	702560	270713	71288.1	38.53	26.33
2020/21	916512	94239	71928.1	10.28	76.33
2021/22	978446.6	90310	75067.0	9.23	83.12
2022/23	1139796	96478	47309	8.46	49.04

Note. Ministry Finance, Economic Survey, FY 2022/23

The status of total outstanding debt, total debt servicing and development expenditure is being made between 2013/14 to 2022/23 in the table 11.

Observing Table 11, we can see the volume of outstanding debt which was Rs. 443700 million in 2013/14 and has increased to Rs. 1139796 million in 2022/23. These show the real burden of debt of Nepal, where total outstanding public debt as percentage of development expenditure was 11.58 percent in 2013/14 gone up to 38.53 percent in FY 2019/20. This shows Nepal is going year by year into the depth of the debt burden.

Development expenditure has also gone up to Rs. 96478 million in FY 2022/23, which in the beginning of the study period was Rs. 51390 million. Table also shows that development expenditure is in decreasing trend at the end of the study period 2021/22. It may be due to the political instability. Till FY 2013/14, its annual average growth rate was 10.0 percent, but it has decreased down to 5.0 percent in FY 2018/19. It clearly shows us that our development process is not increasing at growing path. This shows the increasing trend of development expenditure is less than outstanding public debt.

Likewise, total debt servicing was Rs. 29957.3 million in 2013/14 and has gone up to Rs. 47309 million in 2022/23. Total debt servicing as percentage of development

expenditure has increased from 58.29 percent to 83.12 percent during the period of 2013/14 to 2021/23.

While discussing about the burden of internal debt, the analysis of internal debt and annual internal borrowing are important aspect. The Table 12 has shown the proportional relationship between annual internal debt servicing and internal annual borrowing.

Table 12

Annual internal debt servicing as percentage of annual internal debt

Fiscal Year	Internal Debt	Internal Debt Servicing	(Rs. In Million)
			IDS of ID
2013/14	184199	16415.2	8.91
2014/15	213920.6	18956.7	8.86
2015/16	211872.8	31673.5	14.95
2016/17	206688.6	33825.0	16.37
2017/18	201656.8	53658.9	26.61
2018/19	239029	55698.1	23.30
2019/20	288581.8	45311.6	15.70
2020/21	391161.5	49471.5	12.65
2021/22	383588.5	17679.9	4.61
2022/23	440047	32889	7.47

Note. Ministry Finance, Economic Survey, FY 2022/23

Observing the table 12, we can find out the volume of internal debt which was Rs. 184199 million in 2013/14 and has gone up to Rs. 440047 million in 2022/23 over the period of study. Likewise, internal debt servicing has also gone up from Rs. 16415.2 million to Rs. 32889 million.

The volume of internal debt is larger than that of internal debt servicing in 2013/14, but after 2013/14 the rise up internal debt servicing exceeds the amount of internal debt. But at the end of the study period, increase in internal debt service is greater than the internal debt. Till FY 2017/18, this situation indicates that the internal borrowing is being spent on debt servicing and also shows that the government's ability to borrow from internal sources is not conducive to raise enough funds for development requirement and this also shows that the increasing proportion of internal debt servicing is the manifestation of unproductive use of borrowed fund. But at the end of the study period, it became hopeful to develop capital formation by borrowing funds. Even, the proportion of internal debt servicing to the internal debt is

fluctuating from the year 2013/14 to 2022/23. Which increased from 8.91 percent to 26.61 percent in 2017/18, it became 23.30 percent in 2018/19. This indicates that the internal loan is going up.

Table 13

Annual external debt servicing as percentage of annual external debt

Fiscal Year	External Debt	External Debt Servicing	(Rs in million)
			EDS as Percentage of ED
2013/14	259501	13542.1	5.22
2014/15	309287	16363.2	5.29
2015/16	333442	17193.2	5.16
2016/17	346819.1	20089.8	5.79
2017/18	343261.8	20076.1	5.85
2018/19	388762.8	21105	5.43
2019/20	413978.8	25976.5	6.27
2020/21	525351.2	22456.6	4.27
2021/22	594858.1	57387.1	9.65
2022/23	699749	14420	2.06

Note. Ministry Finance, Economic Survey, FY 2021/22

However, this is good at the end of the year but in the past year, it was not good. Thus, the high reliance on internal borrowing for financing budgetary deficit may have some causes. Huge amount of development fund was diverted to meet debt-servicing charges, which comes under regular expenditure. NRB in the form of overdraft will have effect on expansionary money supply and that may create inflationary pressure. Likewise borrowing from commercial Banks may crowd out the private investment.

Table 13 shows the ratio of external debt servicing was 5.22 percent in 2013/14, it increases to 6.27 percent in 2019/20 and decreases to 4.27 percent in 2018/19. But due to high increasing rate, external debt was high in 2021/22 and 2022/23 with Rs. 699749 million and was greater than external debt servicing but at the end of the year growth of external debt became less than external debt servicing and the percentage share of external debt has increased from 5.22 percent to 2.06 percent.

4.10 Issues of foreign loans

Underdeveloped countries like Nepal are facing a serious problem of scarcity of domestic capital formation, which is more essential for development process. And these countries are also facing the shortage of foreign exchanges. So, these countries

have to borrow public debts from within the country as well as from the external sources like foreign countries and foreign agencies to breakout the vicious circle of insufficient capital formation and development bottlenecks. The scope of domestic borrowing in these countries is very limited, because internal resources are scarce. So, only external borrowing remains the alternative to be undertaken by these countries.

Nepal is facing various problems like poverty, unemployment and Nepal's macro economic indicators show declining economic performance. In FY 2021, Nepal's Human Development Indicator and Human empowerment Indicator were below 0.5, it proved the poverty of Nepal. During the study period, Nepal has to invest a huge amount of expenditure for security, which is not productive. Every year's Budget is more than preceding year's budget but revenue is not increasing in the same pace. Due to this reason, Nepal has to depend upon foreign assistance and external loans. Owing to heavy reliance on external assistance in the form of borrowing in public accounts, Nepal's external public indebtedness has increased in geometric progression. A rise in external indebtedness should be accompanied by an increasing debts servicing capacity. An ever increasing debt servicing with out similar increase in debt servicing creates undue strain in the BOP, because an increasing external debt servicing implies outflow of capital which may lead the country to the heavy burden of debt and debt crisis in the future.

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

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

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

4.11 Foreign outstanding debt and GDP

While discussing on the burden of external debt, it is important to pay attention on the trends of external debt and GDP to make a comparison between the two. This comparison gives the position of external debt in the country's GDP. This comparison is being made in the following table 14.

Table 14

Annual growth of external outstanding debt and GDP

Fiscal Year	Total External Debt	Annual Growth Rate %	Gross Domestic Product	(Rs. In million)	
				Annual Growth Rate %	External Debt as Percentage of GDP
2013/14	259501	22.0	639694	7.2	40.57
2014/15	309287	19.19	670279	4.78	46.14
2015/16	333442	7.81	697954	4.13	47.77
2016/17	346819.1	4.01	739754	5.99	46.88
2017/18	343261.8	-1.03	764336	3.32	44.91
2018/19	388762.8	13.26	768835	0.59	50.57
2019/20	413978.8	6.49	832060	8.22	49.75
2020/21	525351.2	26.90	887455	6.66	59.20
2021/22	594858.1	13.23	950033	7.05	62.61
2022/23	699749	17.63	1248690	31.44	56.04

Source: Ministry Finance, Economic Survey, FY 2021/22

Observing table 14, there is increasing trend of growth rate of outstanding external debt and GDP. The amount of outstanding debt was Rs. 309287 million in 2014/15 with 19.19 percent of average annual growth rate. Its annual growth rate was 26.90 percent in 2020/21 but thereafter it is declining to 13.23 percent in FY 2021/22 and slowly increasing to 17.63 percent in 2022/23 and was negative by -1.3 percent in 2017/18. But the rate of increase in GDP is diminishing though GDP is increasing. Increasing trend of average annual growth rate of GDP shows diminishing and it also

shows unsatisfactory economic performance because GDP is a pillar of National economy. Where, GDP has increased from Rs. 639694 million in FY 2013/14 to Rs. 670279 million with 4.78 percent of average annual growth rate over the review period, which is smaller than growth rate of external outstanding debt. After the restoration of multiparty system, the annual growth rate of GDP is not satisfactory and became 8.22 percent in 2019/20 and again it rose to 31.44 percent in 2022/23 in the market price.

While comparing the increasing trend of external indebtedness with increase in GDP or external debt to GDP was 46.14 percent in 2014/15 and has gone up to 50.57 percent in 2018/19 with 50.44 percent of average annual rate. This shows clearly about the burden of external debt was quite heavy. Table 15 also shows the average annual percentage share of external outstanding debt is 50.44 percent of GDP, which may lead to country to external debt crisis in future. So, external loans have to use for productive sector or think about proper utilization.

4.12 Correlation Analysis

Correlation Analysis between variables was studied to find relations among them. Pearson's Correlation analysis is used to determine the relationship between various independent and dependent variables associated with the research. It measures the linear correlation between two variables.

Table 15

Pearson's correlation matrix for the dependent and independent variables

Variables	GDP	Internal Debt	External Debt	Total Debt
GDP	1	0.907**	0.963**	0.947**
Sig(2-tailed)		.000	.000	.000
N	10	10	10	10

** . Correlation is significant at the 0.01 level (2-tailed).

This table 15 shows the relationship between dependent and independent variables.

Relationship between Internal Debt and GDP in Nepalese Economy

The correlation analysis results presented in table 4.15 shows that Pearson correlation coefficient between Internal Debt and GDP in Nepalese Economy is $r = 0.907$, which implies that the two variables are positively correlated. Further this value indicates

that there is positive and high degree of correlation between Internal debt and GDP in Nepalese Economy. The correlation is significant at 1% level of significance as p-value is less than alpha i.e. (0.000 < 0.001).

Relationship between External Debt and GDP in Nepalese Economy

The correlation analysis results presented in table 15 shows that Pearson correlation coefficient between External Debt and GDP in Nepalese Economy is $r = 0.963$, which implies that the two variables are positively correlated. Further this value indicates that there is positive and high degree of correlation between External debt and GDP in Nepalese Economy. The correlation is significant at 1% level of significance as p-value is less than alpha i.e. (0.000 < 0.001).

Relationship between Total Debt and GDP in Nepalese Economy

The correlation analysis results presented in table 15 shows that Pearson correlation coefficient between Total Debt and GDP in Nepalese Economy is $r = 0.947$, which implies that the two variables are positively correlated. Further this value indicates that there is positive and high degree of correlation between Total debt and GDP in Nepalese Economy. The correlation is significant at 1% level of significance as p-value is less than alpha i.e. (0.000 < 0.001).

4.13 Relationship between Internal Debt, External Debt, total debt and GDP

The Internal Debt, External Debt, total debt are growing over the time whether this growing of debt is contributing for output growth or not? This situation explores the answer of this question. Let us consider the following estimated relationship between change in Internal Debt, External Debt, total debt and change in GDP. This equation is estimated by Ordinary Least Square method. To answer this empirical question, following empirical equation is estimated.

The fitted equation of the regression model is

$$Y = 313849.820 + 1.719INTDebt + 1.224 EXT_{debt} + 0.725 TD_t \dots\dots\dots(7)$$

(4.915)
(6.087)
(10.058)
(8.314)

$$R^2 = 0.985 \qquad F = 69.72$$

The regression of dependent variable of GDP shows that beta coefficient for internal debt, External debt and total debt are positive as indicated in equation. The result shows that internal debt would have higher GDP keeping external debt and total debt constant. Similarly, increase in internal debt by Re.1 leads to increase in GDP by Re. 1.719 holding the external debt and total debt variable constant and increase in external debt by Re.1 leads to increase in GDP by Re. 1.224 holding the internal debt and total debt constant and increase in total debt by Re. 1 lead to increase in GDP by Rs. 0.725 keeping internal debt and external debt constant. The beta coefficient is significant for internal debt, external debt and total debt. The constant $a=313849.820$ indicated that if all variables used in this model is zero, GDP is Re. 313849.820.

The value of multiple coefficient of determination (R^2) is 0.985 indicated that 98.5% of total variation in GDP of Nepal is explained by independent variables and only 1.5% is explained by other variables. The t-value of coefficient of internal debt, external debt and total debt are statistically significant given model at 5% level of significance; therefore the regression equation could provide statistically significant explanation of variation in the GDP due to internal debt, external debt and total debt. The results presented in equation indicated that there is greater influence of internal debt rather than external debt and total debt to GDP in Nepal. The F- statistic for regression is 69.72, which is higher than their corresponding critical value at 5% level of significance indicating that the regression equation provides statistically significant explanation of variation in the GDP of Nepal.

Slope coefficients of equation are statistically significant and have positive sign as expected. The equation itself is a good fit, with 98.5 percent of the variations in dependent variable being explained by the independent variables This estimated equation indicated that there exist the significant positive relationship between Internal Debt, External Debt, total debt and output.

4.14 Major findings

Based on the study following are the major findings of the study:

- The study found that the total debt was Rs. 443700 million in FY 2013/14 and has increased to Rs. 1139796 million in the FY 2022/23.

- Internal debt was only Rs. 184199 million in the FY 2013/14 and has gone up to Rs. 213920.6 million in 2014/15 and 440047 million in 2022/23. Whereas external debt was Rs. 259501 million in 2012/13 and increased 699749 million in 2022/23.
- The contribution of internal debt to fiscal deficit was 40.10 percent in the FY 2013/14 whereas external debt was 56.50 percent. But the share of internal debt is 35.83 percent in the FY 2022/23 which shows the decreasing contribution and external is 56.97 percent in the same fiscal year, which shows the increasing contribution to the fiscal deficit.
- The study found that the government borrowing is increasing in both absolute and relative terms. The percentage share of external and internal debt in total debt is 61.39 and 38.61 percent respectively in 2022/23. It indicates that external loan is in increasing rate and internal loan is in decreasing rate.
- Share of non-banking sources to total internal borrowing has increased from Rs. 142482.2 million in 2013/14 to Rs. 342406 million in 2020/21 and decreased in 2021/22 to Rs. 335628 million and increased to 393870 million in 2022/23. On the other hand percentage share of non-banking source has decreased from 22.65 to 10.49 percent over the study period.
- The study found that the share of Treasury Bills, Development Bonds, National saving Certificate and Special Bonds to total net internal outstanding debt which are 65.33%, 23.63%, 5.8%, 2.52% and 2.73% respectively in 2013/14. Which is fluctuating trend in case of treasury bills, Saving Certificate, Public Saving Card and Special Bonds over the review period.
- The study found that in the beginning of the review period the share of bilateral loans to total external loan is Rs. 7000 million (2.70%) and multilateral is Rs. 258186.5 million (97.3%) and at the end of the year of this study the bilateral loan decreased to Rs. 3330 million (0.48 %) and multilateral loan increased to Rs. 690744.4 million (99.52%). But it was high in the FY 2021/22 with Rs. 594817.5 million (100%).
- The study found that the share of external debt in GDP was 40.57 percent in 2013/14, which has decreased to 31.12 percent in the year 2022/23, showing fluctuating trend. Similarly, the study also shows the share of internal debt in GDP had increased from 28.79 percent in 2013/14 to 44.08 percent in

2020/21. It means burden of public debt is decreasing, where total outstanding public debt has increased from Rs. 443700 million in 2013/14 to Rs. 1139796 million in 2022/23 and share of it in GDP has decreased from 69.36 percent in 2013/14 to 50.69 percent in 2022/23.

- The study found that the amount of total debt servicing was Rs. 29957.3 million in 2013/14 and has increased to Rs. 47309 million in 2022/23. This shows as an increasing trend of total debt servicing. The volume of external debt servicing was Rs. 13542.1 million in 2013/14 and has increased to Rs. 14420 million in 2022/23 and the internal debt service was Rs. 16415.2 million in 2013/14 and has gone up to Rs. 32889 million in 2022/23.
- The study found that the magnitude of regular expenditure, total revenue, GDP and Internal debt servicing was Rs. 243460 million, Rs. 244374 million, Rs. 639694 million and Rs. 16415.2 million in 2013/14 and has increased up to Rs. 450781 million, Rs. 593310 million, Rs. 2248690 million and 32889 million in 2022/23 respectively.
- The trend of debt servicing as percentage of regular expenditure, total revenue and GDP has been decreasing and fluctuating. Debt servicing as a percentage of regular expenditure was 6.74 percent in 2013/14 and increased to 7.30 percent (till FY 2022/23), and total revenue was 6.72 and decreased to 5.54 percent over the period of the study. Likewise, share of debt servicing to GDP is 2.57 and decreased to 1.46 percent in FY 2022/23.
- Likewise, total debt servicing was Rs. 29957.3 million in 2013/14 and has gone up to Rs. 47309 million in 2022/23. Total debt servicing as percentage of development expenditure has increased from 58.29 percent to 83.12 percent during the period of 2013/14 to 2021/22.
- The study found that the volume of internal debt which was Rs. 184199 million in 2013/14 and has gone up to Rs. 440047 million in 2022/23 over the period of study. Likewise, internal debt servicing has also gone up from Rs. 16415.2 million to Rs. 32889 million.
- The study found that the amount of outstanding debt was Rs. 309287 million in 2014/15 with 19.19 percent of average annual growth rate. Its annual growth rate was 26.90 percent in 2020/21 but thereafter it is declining to 13.23 percent in FY 2021/22 and slowly increasing to 17.63 percent in 2022/23 and

was negative by -1.3 percent in 2017/18. But the rate of increase in GDP is diminishing though GDP is increasing. Increasing trend of average annual growth rate of GDP shows diminishing and it also shows unsatisfactory economic performance because GDP is a pillar of National economy.

- The correlation analysis results found that Pearson correlation coefficient between Total Debt and GDP in Nepalese Economy is $r = 0.947$, which implies that the two variables are positively correlated. Further this value indicates that there is positive and high degree of correlation between Total debt and GDP in Nepalese Economy. The correlation is significant at 1% level of significance as p-value is less than alpha i.e. ($0.000 < 0.001$).
- Pearson correlation coefficient between Internal Debt and GDP in Nepalese Economy is $r = 0.907$, which implies that the two variables are positively correlated. Further this value indicates that there is positive and high degree of correlation between Internal debt and GDP in Nepalese Economy. The correlation is significant at 1% level of significance as p-value is less than alpha i.e. ($0.000 < 0.001$).
- Pearson correlation coefficient between External Debt and GDP in Nepalese Economy is $r = 0.963$, which implies that the two variables are positively correlated. Further this value indicates that there is positive and high degree of correlation between External debt and GDP in Nepalese Economy. The correlation is significant at 1% level of significance as p-value is less than alpha i.e. ($0.000 < 0.001$).
- The regression of dependent variable of GDP shows that beta coefficient for internal debt, External debt and total debt are positive as indicated in equation. The result shows that internal debt would have higher GDP keeping external debt and total debt constant. Similarly, increase in internal debt by Re.1 leads to increase in GDP by Re. 1.719 holding the external debt and total debt variable constant and increase in external debt by Re.1 leads to increase in GDP by Re. 1.224 holding the internal debt and total debt constant and increase in total debt by Re. 1 lead to increase in GDP by Rs. 0.725 keeping internal debt and external debt constant. The beta coefficient is significant for internal debt, external debt and total debt. The constant $a=313849.820$

indicated that if all variables used in this model is zero, GDP is Re. 313849.820.

- The value of multiple coefficient of determination (R^2) is 0.985 indicated that 98.5% of total variation in GDP of Nepal is explained by independent variables and only 1.5% is explained by other variables. The t-value of coefficient of internal debt, external debt and total debt are statistically significant given model at 5% level of significance; therefore the regression equation could provide statistically significant explanation of variation in the GDP due to internal debt, external debt and total debt. The results presented in equation indicated that there is greater influence of internal debt rather than external debt and total debt to GDP in Nepal. The F- statistic for regression is 69.72, which is higher than their corresponding critical value at 5% level of significance indicating that the regression equation provides statistically significant explanation of variation in the GDP of Nepal.
- Slope coefficients of equation are statistically significant and have positive sign as expected. The equation itself is a good fit, with 98.5 percent of the variations in dependent variable being explained by the independent variables This estimated equation indicated that there exist the significant positive relationship between Internal Debt, External Debt, total debt and output.

4.15 Discussions

The analysis of this study revealed that there exist significant positive relationship between External Debt, Internal Debt and Total Debt with Gross Domestic Product (GDP). Higher external debt is associated with higher Domestic output and vice versa. The analysis of the effect of external debt on output reveals that there exist significant positive relationship between external debt and GDP. It is concluded that external debt in Nepal over the period 2013/14 to 2022/23 is some extent productive, which is similar to study by Ghimire (2012) and Khatiwada (2010).

Studying the situation of public debt in Nepal, it is heavily dependent upon external debt. The trend of the public debt is increasing more rapidly than internal debt. So, in the Nepalese context, there is no doubt that if the trend of external debt goes on like this, Nepal will fall in the 'debt trap'. The importance of the public debt may be appreciated in terms of the strategic role which the government has to play in the

initial stage of development. It has always been the task of government to create some minimum pre conditions of development such as building up of social and economic overheads which don't generally attract private investment, usually require huge amount of resources but don't promise immediate returns. Thus the government has to play a positive and dynamic role in stimulating the rate of capital formation and promoting the rapid development of a country, which is similar to study by Dimitrios, Keith & Cecilia (2021).

The trend of debt servicing as percentage of regular expenditure, total revenue and GDP has been decreasing and fluctuating. Debt servicing as a percentage of regular expenditure was 6.74 percent in 2013/14 and increased to 7.30 percent (till FY 2022/23), and total revenue was 6.72 and decreased to 5.54 percent over the period of the study. Likewise, share of debt servicing to GDP is 2.57 and decreased to 1.46 percent in FY 2022/23. Thus, this results support the previous reports Ghimire (2012) and Khatiwada (2010). Likewise, total debt servicing was Rs. 29957.3 million in 2013/14 and has gone up to Rs. 47309 million in 2022/23. Total debt servicing as percentage of development expenditure has increased from 58.29 percent to 83.12 percent during the period of 2013/14 to 2021/22 which is similar to previous study by Sharma (2004).

The study found that the volume of internal debt which was Rs. 184199 million in 2013/14 and has gone up to Rs. 440047 million in 2022/23 over the period of study. Likewise, internal debt servicing has also gone up from Rs. 16415.2 million to Rs. 32889 million. Thus, this results support the previous reports Ghimire (2012) and Khatiwada (2010).

The regression of dependent variable of GDP shows that beta coefficient for internal debt, External debt and total debt are positive. The result showed that internal debt would have higher GDP keeping external debt and total debt constant. Similarly, increase in internal debt by Re.1 leads to increase in GDP by Re. 1.719 holding the external debt and total debt variable constant and increase in external debt by Re.1 leads to increase in GDP by Re. 1.224 holding the internal debt and total debt constant and increase in total debt by Re. 1 lead to increase in GDP by Rs. 0.725 keeping internal debt and external debt constant. The beta coefficient is significant for internal debt, external debt and total debt. The constant $a=313849.820$ indicated that if all

variables used in this model is zero, GDP is Re. 313849.820, which similar to the study by Madhuhansi and Shantha (2022).

The value of multiple coefficient of determination (R^2) is 0.985 indicated that 98.5% of total variation in GDP of Nepal is explained by independent variables and only 1.5% is explained by other variables. The t-value of coefficient of internal debt, external debt and total debt are statistically significant given model at 5% level of significance; therefore the regression equation could provide statistically significant explanation of variation in the GDP due to internal debt, external debt and total debt. The results presented in equation indicated that there is greater influence of internal debt rather than external debt and total debt to GDP in Nepal. The F- statistic for regression is 69.72, which is higher than their corresponding critical value at 5% level of significance indicating that the regression equation provides statistically significant explanation of variation in the GDP of Nepal which similar to study by Dimitrios, Keith & Cecilia (2021).

This estimated equation indicated that there exist the significant positive relationship between Internal Debt, External Debt, total debt and output which contradict the study by Marta and Simón (2018).

CHAPTER V

SUMMARY AND CONCLUSIONS

5.1 Summary

Government is taking loan from two sources, internal and external. In internal sources, development bonds, treasury bills, national saving certificate and saving certificates. In it financial/banking sector dominates non-banking sectors. Similarly, in external sources Nepal is receiving debt by two sources, bilateral and multilateral. In the initial study period the share of bilateral is higher as compared to multilateral but in recent year multilateral sources like World Bank, UNDP, Asian Development Bank, International Monetary Fund, etc are dominating the multilateral sources.

The main objective of the study is to investigate and analyze the trend and pattern of public debt in Nepal and specific objectives are: a) to analyze the trend and pattern of public debt in Nepal, b) to analyze the burden of public debt and debt servicing capacity and c) to examine the effect of external debt on output growth in Nepal.

The study is based on historical, analytical as well as descriptive research design. In fact, the research design is the conceptual structure within which the research is conducted. This study analyzes the trend and pattern of public debt of Nepal. For this purpose, the study has estimated some models. Variables used in the models have been explained analytically.

The statistical models have been estimated by using Ordinary Least Square method. In order to show the trend and structure of external borrowing and its effect on gross domestic product, data from 2013/14 to 2022/23 has been taken into account through purposive sampling method. This is because researcher is interested to examine the relationship between external debt and GDP, agricultural GDP and non-agricultural GDP. In order to show the trend and structure of public borrowing, 10 years data has been taken into account. This is because researcher is interested in examining the relationship between public debt and GDP of Nepal.

This study is based on secondary data and information are collected from various sources such as government's budget speeches (2013/14 to 2022/23), various Economic surveys, and publications of Ministry of Finance (MOF), Nepal Rastra

Bank, Central Bureau of Statistics, National Planning Commission etc. Data has been collected from the various issues of Economic surveys, and publications of Ministry of Finance and Nepal Rastra Bank. SPSS software has been used to find correlation and regression.

5.2 Conclusions

The analysis of this study revealed that there exist significant positive relationship between External Debt, Internal Debt and Total Debt with Gross Domestic Product (GDP). Higher external debt is associated with higher Domestic output and vice versa. The analysis of the effect of external debt on output reveals that there exist significant positive relationship between external debt and GDP. It is concluded that external debt in Nepal over the period 2013/14 to 2022/23 is some extent productive. Therefore it is necessary to have a careful look on the increasing magnitude of external debt and proper care must be taken to increase the debt servicing capacity of the country. The regression of dependent variable of GDP shows that beta coefficient for internal debt, External debt and total debt are positive as indicated in equation. The result shows that internal debt would have higher GDP keeping external debt and total debt constant.

Studying the situation of public debt in Nepal, it is heavily dependent upon external debt. The trend of the public debt is increasing more rapidly than internal debt. So, in the Nepalese context, there is no doubt that if the trend of external debt goes on like this, Nepal will fall in the 'debt trap'. The importance of the public debt may be appreciated in terms of the strategic role which the government has to play in the initial stage of development. It has always been the task of government to create some minimum pre conditions of development such as building up of social and economic overheads which don't generally attract private investment, usually require huge amount of resources but don't promise immediate returns. Thus the government has to play a positive and dynamic role in stimulating the rate of capital formation and promoting the rapid development of a country.

The ultimate effect of lower capacity to debt servicing falls on capital formation and development process. Mismanagement of fund resulted on lack of self-liquidating projects. These conditions are compelling the researchers to ask a question that "Is Nepal really fall in the debt trap"? After the study, it can be concluded that Nepal has

not really fallen into the debt trap but if the process continues for years, there will be no other result. Loan component through internal and external sources both are under the ceiling but debt servicing amount is increasing annually and its growth rate is higher than GDP growth rate and revenue growth rate.

5.3 Implications

The following are the recommendations on the basis of the study:

- Large proportion of internal borrowing comes from banking sector particularly from the central bank, which is expansionary in nature and enhance non banking sectors which stimulate domestic saving and investment. Internal borrowing from central bank has been kept within limitation of 5% of previous year revenue collection. But limitation rule is not being followed by government. Therefore, in order to reduce the inflationary pressures in the economy, this aspect of internal borrowing rule is should be followed.
- Government should try to collect foreign assistance through the grants as far as possible by applying effective foreign aid policy. The government should try to get the grants amount more and more as far as possible; there is more domination of bilateral grants. The government also should maintain such external policy so that more of grants should be received rather than the loans.
- Government must be used external and internal borrowing on such projects which are highly productive nature and can produce exportable items and these projects are to be kept under constant supervision and monitoring process. Government should move towards fiscal balance and strong fiscal discipline through control of unproductive expenditure and maximizing revenue mobilization. Governments efforts should be directed towards mobilization of internal resource and thus to reduce dependency on loans for financing development expenditure.
- The size of overall budgetary deficit excluding grants has remained high mainly due to low revenue and very high expenditure. This has lead to heavy borrowing from internal and external sources. So, for reducing the volume of borrowing revenue collection is to be increased substantially in order to attain self-sufficiency in the long run. Improving effective tax policy and tax

administration can do this. This also includes simplification of tax rates, rationalization of tax structure and expansion of tax base.

- Loan assistance should be utilized selectively, after careful scrutiny of the purpose, content and benefits of such projects and programmes in order to reduce the burden of external debt while contributing to accelerate growth and to meet the socio-economic objectives. Therefore, borrowed fund from both internal and external sources is to be spent on those projects, which are capable of producing exportable commodities within shortest gestation period. Otherwise, the large volume of loan obtained from external sources has remained unutilized creating additional burden of debt servicing.
- It is concluded that external debt in Nepal over the period 2013/14 to 2022/23 is some extent productive. Therefore it is necessary to have a careful look on the increasing magnitude of external debt and proper care must be taken to increase the debt servicing capacity of the country.
- Viewing increasing indebtedness of public debt, mainly external outstanding debt, government should increase its debt servicing capacity by increasing GDP growth, revenue growth and export earning. Here growth rate of national outstanding debt, debt servicing obligations, gross domestic product, revenue and export earnings must go together in a sustainable path so that country will not be trapped by debt servicing problem.
- To reduce the foreign dependency various measures must be applied such as export promotion, tourist attraction and import substitution policy.

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ABSTRACT The government borrows money from both internal and external sources. Treasury bills, national savings certificates, development bonds, and saving certificates are employed as internal sources. Similar to this, Nepal receives loans from both bilateral and multilateral sources on the outside. Examining and analyzing the trend and pattern of public debt in Nepal is the primary goal of the study. Other specific goals include analyzing the burden of public debt and debt servicing capacity and examining the impact of external debt on output growth in Nepal. The present investigation is grounded in a historical, analytical, and descriptive research design. Purposive sampling has been used to include data from 2013–14 to 2022–23

in order to illustrate the trend and structure of external borrowing and its impact on

the gross domestic product. The secondary data used in this study came from a variety of sources, including economic surveys and government budgets. Per the analysis, the overall debt in FY 2013–14 was Rs. 443700 million, and in FY 2022–2023 it was Rs. 1139796 million. The amount of internal debt increased from just Rs. 184199 million in FY 2013–14 to Rs. 440047 million in FY 2022–2023. In contrast, external debt climbed dramatically from Rs. 259501 million in 2013–14 to Rs. 699749 million in 2022–23. According to the study, the entire amount of debt serviced in 2013–14 was Rs. 29957.3 million, and in 2022–2023 it amounted to Rs. 47309 million. This manifests as an increase in the overall trend of debt servicing. The amount of money servicing foreign debt went from Rs. 13542.1 million in 2013–14 to Rs. 14420 million in 2022–23, while the amount servicing internal debt

increased from Rs. 16415.2 million in 2013–14 to Rs. 32889 million in 2022–23. The results of

this study's analysis indicate

that there is a substantial positive correlation between total debt, internal debt, and external debt and GDP

larger domestic output is correlated with larger external debt, and vice versa. **Keywords:** Gross domestic product (GDP), public debt, internal and external debt, development bonds, treasury bills, national saving certificate. **CHAPTER I INTRODUCTION 1.1** Background of the study The private sector of the Nepalese economy is underdeveloped. The low private saving rate is a result of the low per capita income, which also lowers private sector investment. Furthermore, it is now extremely difficult to persuade the private sector to spend its savings in the productive sector because of dispersed saving and a lack of sufficient effective

