PUBLIC DEBT AND ECONOMIC GROWTH IN NEPAL

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By

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October, 2021

DECLARATION

I, DIPENDRA BABU SHARMA, declare that this is my own original work except where otherwise indicate or acknowledged in the thesis. The thesis doesn't contain materials which has been accepted or submitted for any other degree at the University or other institution.

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LETTER OF RECOMMENDATION

This thesis entitled **PUBLIC DEBT AND ECONOMIC GROWTH IN NEPAL** has been prepared by Mr. Dipendra Babu Sharma under my supervision. I hereby recommend this thesis for the examination by the Thesis Committee as a partial fulfillment of the requirements for the Degree of Master of Arts in Economics.

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APPROVAL SHEET

We certify that this thesis entitled **"PUBLIC DEBT AND ECONOMIC GROWTH IN NEPAL"** submitted by Mr. Dipendra Babu Sharma to the Central Department of Economics, Faculty of Humanities and Social Sciences, Tribhuvan University, in partial fulfillment of the requirements for the Degree of MASTER OF ARTS in ECONOMICS has been found satisfactory in scope and quality. Therefore, we accept this thesis as a part of the said degree.

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ABSTRACTS

Public debt is an instrument of financing budget deficit. One important macroeconomic problem of Nepalese economy is prevailing research gap. Due to the such situation, with the increase in size of government budget, the size of public debt is also increasing. This study is based on descriptive analysis. For this purpose, the period of 1997/98-2019/20 data is considered. This paper examines the relationship between public debt and economic growth in Nepal. The trend of government expenditure has increased rapidly than government revenue because of limited resource of the revenue. So, the government borrowed from external and internal sources. The condition of the external debt is increased, due to the poor mobilization of internal resources, export- import gap, revenue -expenditure gap, large amount of fiscal deficit. So there has been excessive flow of foreign loans to bridge up these gaps. In this study found that government borrowing has increased mostly on the unproductive sectors. The paper suggests that government should invest taking loan in productive sector. The empirical results confirms that internal, external and total debt has not caused negative impacts on GDP growth of Nepal. However, country must focus on the improving the balance of payment.

Keywords: Public debt, Real GDP, Resource gap

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ABBREVIATIONS

ADB	:	Asian Development Bank
BOP	:	Balance of Payment
CBS	:	Central Bureau Statistics
CEDECON	:	Central Department of Economics
CEID	:	Center for Empowerment Innovation and Development
ED	:	External Debt
FY	:	Fiscal Year
GDP	:	Gross Domestic Product
GNP	:	Gross National Product
GON	:	Government of Nepal
ID	:	Internal Debt
IMF	:	Internal Monetary Fund
LDCs	:	Least- Developed Countries
MIGA	:	Multilateral Insurance Guarantee Agency
MOF	:	Ministry of Finance
NPC	:	National Planning Commission
NRB	:	Nepal Rastra Bank
OLS	:	Ordinary Least Squares
SDR	:	Special Drawing Rights
TD	:	Total Debt
TDS	:	Total Debt Servicing
TED	:	Total External Debt
TFP	:	Total Factor Productivity
UK	:	United Kingdom
UNDP	:	United Nation of Development Program
USSR	:	Union of Soviet Socialist Republic
WB	:	World Bank
WHO	:	World Health Organization

CHAPTER – I

INTRODUCTION

1.1 Background of the Study

Public debt is important source of government financing. The Keynesian economics first highlighted the importance of deficit financing during the hard times such as depression or down swing of the economy as it helps to boost the economy through increasing aggregate demands (Dornbusch, 1990). The public borrowing accordingly became widely accepted tool of deficit financing. The great depression of 1930s and subsequent Second World War underscored the importance of deficit financing and public borrowing became a standard practice (Hoeflich, 1982).

Though the notion of public debt has been widespread on academia since emergence of Keynesian economics, it has been in use and practice since last three centuries. It was originated in Great Britain in the 17th century (Hoeflich, 1982). After the first and second world war, public debt becomes very popular for reconstruction and maintenance. Most of the countries in the world started tomorrow systematically and still borrowing to develop their economic at a faster rate. But in the modern times the growth of public debt is the result of changing economic and political situation of all countries. With similar analogy, public debt has been central issue and characteristics of modern and developing economies on the world (Panizza, 2008). In most developing countries, public debt is the primary source of funding for development programs.

Technically, the government's public debt/borrowing is a responsibility to repay the principal sum borrowed plus a specified rate of interest to individuals, institutions, and other governments at the end of the maturity term (Rosen, 2004). The issue of public debt is extremely important since it directly affects present taxpayers, future generations, and can have a significant impact on future expectations (Musgrave, 1983). The more integrated the globe grows, the greater the risk of crisis contagion, such as the global financial crisis and the European debt crisis. These big developments have posed a substantial threat to future growth prospects (Guzman & Heymann, 2015).

Government debt is made up of both internal and foreign sources (Backhaus & Wagner, 2006). Borrowing from individuals and the financial industry are two internal sources. Foreign loans, grants, and bilateral and multilateral agencies are examples of external sources. Because internal income sources such as tax revenue and surpluses from public enterprises fall short of resource requirements, the government borrows money both internally and abroad. Therefore, the need of public debt as a source of resource mobilization for development financing and to strengthen the economy is a democratic form of government (Poudel, 2005).

With limited domestic savings and borrowing to support the restoration and development of war-torn economies and the emergence of international financial institutions, the government began to accept foreign aid in the form of grants and loans (Rosen, 2004). Foreign aid is largely intended to assist in overcoming investment limits imposed by domestic savings constraints, foreign exchange constraints in funding development inputs, and technology transfer from rich and advanced countries (Meier & Stiglitz, 2001).

The function of public debt has long been a source of controversy among economists. Classical economists were generally opposed to government debt and borrowing. They expected that, in the long term, real GDP would adjust to potential GDP automatically. Classical economists were opposed to counter-cyclical fiscal policy for this reason (Tsoulfidis, 2007). But Keynes was against the view of classical economists. The Keynes and his clan argued that resources in the private sector may remain unemployed for long period, if corrective or compensatory action is not employed by the government (Aspromourgos, 2014).

Over the years, there has been considerable interest on examining the relationship between public borrowing, for that matter, public debt and economic growth. The affect of public debt on economic development of numerous countries remains a controversial issue in both scholastic and arrangement making (Cashell, 2007). Agreeing to the "conventional see of open debt" (Elmendorf and Mankiw, 1999), within the short-run yield is demand-determined and fiscal deficits (or higher open obligations) have a positive impact on expendable income, aggregate request and by and large yield. This positive short-run impact of budget deficits (and higher obligation) is likely to be expansive when the yield is distant from capacity. Concurring to Elmendorf and Mankiw (1999), things are distinctive in the long-run. On the off chance that Ricardian Comparability does not hold the diminish in open savings brought almost by the next budget shortage will not be completely compensated by an increment in private investment funds. As a result, national investment funds will decrease, resulting in lower add up to venture, either at domestic or overseas. Lower investment at home will have a negative impact on GDP, because it will lead to a littler capital stock, higher intrigued rates, lower labor efficiency and compensation. Since the relationship is debatable from different theoretical and empirical perspective, this study aims to examine the relationship between public debt and economic growth taking Nepalese case.

1.2 Statement of the Problem

Nepal is one of the least developed countries (LDCs) in the world. A major problem for all LDCs is the acute lack of resources to finance public spending. To build a modern and affluent society, the government will require a large amount of money for reconstruction, rehabilitation, and relief. Due to the low level of tax paying capability of the population in developing nations like Nepal, public debt can be a key source of revenue. For economic development of Nepal, government must invest on various sectors such as education, health, transport, communication etc. To build up such overhead capital there is need of heavy fund which is possible only through government borrowing due to low tax payable capacity of the people.

Similarly, there is a higher need for public debt to break the vicious cycle of poverty and improve people's socioeconomic conditions. The deficit budget has remained the fundamental feature of Nepalese fiscal policy because the revenue surplus has not been sufficient to satisfy development spending. As a result, the overall loan value has been increasing, and the debt servicing load has been increasing year after year. As a result of this predicament, the government is becoming more indebted, both externally and internally.

The burden of public debt is very controversial issue because government has taken loan for peace and securities which are unproductive sectors. The outstanding debt around 55 percent of GDP and more than 50 percent of development budget is shared by foreign loan in each periodic plan (Bhattarai, 2013). So Nepal is heavily dependent on foreign aid. To break the vicious circle of poverty and to improve social condition of people, there is greater demand of government expenditure. Properly managed government debt is essential for the found functioning of an economy. But improperly managed government debt brings many problems such as the instability in the domestic financial market, imbalance in money supply, influence on inflation, and impact on country's balance of payment and so on.

Nepalese government has not a very long history of budgeting. Budgeting started in 1951. Nepal's experience in public debt in an ongoing and documented basic is fairly recent. In the process of obtaining public debt (1962) by a year, the first foreign creditors being USSR and the UK public debt transaction in Nepal fall under the domain Public Debt Act 1960, and Public Debt by law 1963. After the enforcement of Public Debt Act 1960, Public Debt for the first time was issued in Nepal in 1962 through Treasury Bills amounting to Rs. 7 millions. The next instrument of public debt, Development Bond, was first issued in fiscal year 1963/64, amounting to Rs. 250 million. Beginning from January 1992, NRB bond was issued with the sole objectives of mapping of excess liquidity. It however has been suspended since April 1996 (Banjade,2008).

Thus, our history of public debt is not so long. Government started to take domestic loan in 1962 whereas it started to take external loan in 1963. The first foreign creditors of Nepal were former USSR and UK. After that public debt has important role in the government budget (Acharya, 1968).

Hence, it is worthwhile to make an analysis of the government debt. In recent years, Nepal has been raising public debt from external and internal sources and the public debt has rapidly increased, particularly after 1990 when multiparty democratic system has reinstated in Nepal. It is important to have a close look at the magnitude of the public of the public debt of Nepal because debt stock needs to be accompanied by debt servicing capacity to avoid/prevent any undue financial problems in the economy (Nijanand, 2010).

The research questions of thesis are as follows:

i) What is the trend and pattern of resource gap and public debt in Nepal?

ii) What is the relationship between the public debt and economic growth in Nepal?

1.3 Objectives of the Study

The general objective of this study is to focus on the role of public debt in economic growth of Nepal. The specific objectives of this study are as follows.

i. To analyze the trend and pattern of resource gap and public debt in Nepal.
ii. To examine the relationship between the public debt and economic growth in Nepal.

1.4 Significance of the Study

The study of public debt is concerned to maintain high level of employment, a reasonable degree of price level stability, balance in foreign accounts and an acceptable rate of economic growth. This study is also concentrated on the mobilization of financial resource through appropriate utilization of public debt. It is also applicable for the people and institution to purchase government securities. It is also written hoping that it will be a little reference for the budgetary system. Nepal is not only landlocked, small and beautiful country too, but also it is a poor and undeveloped country in the world. Such types of countries economic planning is taken as the main instrument for economic development. During the planning for development, various objectives are made. To meet the objectives of public debt is necessary due to low level of tax paying capacity of the people, mostly in developing countries. In order to remove vicious circle of poverty and improve socio-economic condition of the people, there is increasing need of heavy investment, which is totally impossible in current situation. In such situation public debt is common and reliable source for resource mobilization. So government borrowing (public debt) has been necessary for developing countries like Nepal.

The process of modern economic development in Nepal started with the implementation of the first five years plan in 1956. Since then the magnitude of development outlays has been increasing because of the growing demand for fund. Fiscal deficit of Nepal is continuously increasing due to lack of income management to meet the increasing pattern of government expenditure and public debt is shrinking the gap between revenues of government and expenditure. Public debt is playing a crucial role to physical capital formation and human capital formation, which gives favorable impact on economy.

The study has the exiting scenario of public debt of the economy. It will provide several information of in Nepalese public debts to them who are interested to know it. This study will also be useful for researcher, policy makers and general students. This study provides some information related to our budgetary system and contribution of debt on it. This study will be beneficial for those who are interested in various aspect of public debt. They can get a clear concept and idea about various aspects of public debt.

1.5 Limitations of the Study

Some limitations of the study are as follows:

- This study is fully based on the secondary data and information.
- Some statistical tools are used to analyze the data.
- This research study covers only data from FY1997/98 to2019/2020.
- This study only focus relation between the public debt and economic growth.

1.6 Organization of the Study

This study has been organized in to five chapters. The first chapter is introducing part which consists of the background of the study, statement of the problem, objectives of the study, significance of the study, limitations of the study. The second chapter reviews some literatures with theoretical, internal and external. The chapter three describes about the research methodology with research design, nature and sources of data, tools and data collection, data organization. The chapter four is related with the data analysis, presentation and interpretation of the study analyzing the role of public debt in Nepal. The chapter five shows the summary of finding, conclusion and recommendation.

CHAPTER II

REVIEW OF LITERATURE

This chapter discusses the relevant literature pertaining to public debt and its relationship with economic growth and development of the nation. This chapter begins with theoretical review where different concepts regarding public debt and economic theories are explained. The theoretical review is followed by the empirical review where the empirical literature of international and national context are reviewed and summarized. The last part identify the research gap.

2.1 Theoretical Review

2.1.1 Conceptual Definition

- **Public Debt**

Public debt refers to loan raised by a government within a country or outside the country. A government resorts to public debt when its expenditures exceed its revenue. Public loans are collected by the government from banks, institutions and individuals on the conditions given in writing that these would be repaid and interest would be paid regularly as per the terms of the loan. Governments borrow to finance their operations and to regulate the volume of aggregate activity in the economy. Public debt involves the issues of short terms and long terms securities.

- **Internal Debt (ID)**

Internal debt refers to public loan raised within the country from domestic or internal sources. The government borrows money domestically from individuals and financial institutions.

- **External Debt (ED)**

External debt occurs when a borrowing unit acquires money from international resources. It refers to international transfer made at confessional terms rather than at market rates for promoting economic development of the nation. Alternatively, external debt refers to the obligation of a country to foreign agency or government through bilateral and multilateral sources.

- **Debt Servicing**

Debt servicing refers to interest payment against loan and repayment of principal after maturity.

- **Debt Trap**

A debt trap is a situation in which a country (debtor) will have to borrow more and more to pay even the interest obligation.

- **Bilateral Debt**

Bilateral debt is the debt based on a direct arrangement between two countries. Bilateral debt occurs when a debt unit acquires money or a quantity or goods and services from the government of other country.

- **Multilateral Debt**

Multilateral debt results when a debt unit acquires money or goods and services from the union of nations or governments institutions; business person and consumers or international organizations (such as WB, IMF, EU etc.)

- **Gross Domestic Product (GDP)**

GDP is the measure of the total domestic output at factor price. GDP is the final value of goods and services produced in a country in any specific period of time normally a year.

.• **Gross National Product (GNP)**

GNP is the total money value of all final goods and services produced annually in a country including net factor income from abroad.

- **Export of Goods and Services**

It is the amount of goods and services sold to another country

- **Imports of Goods and Services**

It is the purchase of goods and services from another country.

- **Burden of Debt**

Burden of debt is the sacrifice of the community through a rise in taxation the time of payment and for paying the annual interest on the government loan.

2.1.2 Review of Classical Thinking

The classical economists were generally against the public borrowing and favored the minimum role of government. They assumed that individual, consumer and business firm employ resources more efficiently. According to them, economics activities are best in private sector because they have the greed of profit, through which allocation of resources would be more efficient. On the other hand, government does not have such greed. Due to this ,they are in favor of limit/slim size of public sector and reduce the function of government to the minimum possible extent .They further believe that any government intervention into the economics activities results into rigidity and disrupt the smooth functioning .This would help to bring about the optimum allocation of resources and the achievement of full employment and maximum output .Under a fully employed economy, therefore government can acquire resources by borrowing only at the cost of private sector where they are more fruitful engaged. Classical economists like J.B. Say, TR Malthus, and Bastable have the strong faith that "Debt creates burden in the economy because of its unproductive nature" (Harris, 1974). The classical Economist Adam Smith opposed any use of Public Debt. He took Public Debt as leads to extravagance encouraged resort to war and induced generally disadvantageous economic conditions for the nation, which employed it. Similarly, Bastable (1964) observed a nation can't any more than an individual keep adding continually to its liabilities without at least coming to the end of its resources. They also taken Public Debt is no longer a cake eating feast but rather a careful and efficient brain to handle the management of the Public Debt. In this context Shiras opines, as government must remember that borrowing is not a short cut to prosperity except for what can reasonably be regarded as productive expenditure (Lekhi, 1995).

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

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

b. payment of interest on public debt and refunding of the principle will require additional taxation. It might prove to be difficult since governments power to tax is not unlimited.

2.1.3 Review of Keynesian Thinking

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

2.1.4 Post-Keynesian Review

Post-Keynesian economists think about the developing countries have a very low income, saving and investment. They further say that without increasing the rate of these crucial factors, no country could achieve steady growth. So, the overall aim of borrowing is not to equalize income in different countries but to provide opportunity to every country to achieve steady growth. On the other side, people of the developed countries are enjoying high prosperity, high standard of living and high education facilities etc. population growth problem so serious in those countries. Harris (1974) maintained that Public debt assures elasticity in money supply and agreed that government expenditure could be productive and need not necessary be wistful and so case for public borrowing is strengthened. Those who follow can take in to account the income generating aspect in the public debt and reject any possibility of internal debt being burden upon the community. Moulton (1943) considered public debt as a national assert rather than liability and says that it is essential for the prosperity of the country. Goode (1984) viewed that borrowed money when used to finance public investment causes no such reduction, all that happen is the change in the consumption of capital formation. The inference is that failure to restrict borrowing to the finance of investment will retard economic growth. A weakness of the argument is that not all outlays classifieds investment actually contributes to growth, while some expenditure usually classified as government consumption promotes growth. Public debt plays significant role in the developing countries. The developing country have the natural resources but lack the technology for management in developing countries there is the gap between imports-exports, saving-investment and the gap of income and expenditure. To fulfill this gap, debt is an essential fact. Domestic borrowing sources of these countries are not sufficient to fill up the gap. Borrowing can be under taken in order to mobilize the technology for the economic development. It has produced a transfer of resources from the richer to the poorer countries. In this context then term “foreign debt” has been a means of reducing this gap. The post-Keynesian position accepted a large part of the modifications of the classical debt theory has brought about by Keynesian economists. It emphasizes, however, on the transfer and management aspects as well as the interrelationships between public debt and money supply. Many economists have argued that borrowing today constitutes burden for future. Public borrowing does not always deprive the private economy of resources and instance in a period of widespread unemployment. It is also not accepted now that borrowing in a period of full employment must be inflationary. It depends on the circumstances. If borrowing taps funds otherwise spent on consumption, it is not more inflation any than taxation. A long public debt, if internally hold, poses many problems for the economy (Singh, 2004). In a developing country for economic growth, development of industries, infrastructures and for social welfare, government may choose external borrowing. The marginal productivity of borrowed funds may be as high in relation to the rate of interest on loans available in more matured nations as to compensate for future to transfer difficulties and income drainage. The under developed country may thus supplement its own saving with command over foreign resources and the increase in the real income that this makes possible to justify the admitted complications (present and future) of foreign borrowing (http://amazon.com/books).

2.1.5 Recent Thinking

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

Firstly, growth of debt ratio may lead crowding out of private investment, secondly government spending out of borrowed fund might be unproductive. (Ponser; 1992)

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

Especially in underdeveloped countries, as a fiscal instrument, to raise the effective demand which is ultimately leads to accelerate pace of economic development. It also acts as an effective instrument of inflation generated in the process of growth and ensures growth with stability. It also acts as a balancing wheel that controls the tempo of the business cycle. In the period of depression when aggregate demand is not enough to accelerate the level of production and employment, compensatory fiscal policy suggests to increase in public expenditure and public works by mobilizing idle saving in the hands of people through public borrowing to create effective demand and promote an economic recovery (Barman,1986, p.12). Growth in the debt ratio causes alarm for two reasons. First, growth is 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 (Michael &Posher, 1992, p.204).

IMF (2006) presented that a new database on government debt in 19 emerging market countries including Brazil, China, India, Malaysia, Korea and Thailand since 1980. The data set focuses on the structure of debt in terms of jurisdiction of insurance, maturity, currency, composition, and indexation. It also presents stylized facts on debt structure and preliminary evidences on their determinants.

2.2 Empirical Review

2.2.1 International Context

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

Conscious people, a reasonable of natural resources, a spirit of enterprises, a technically trained labor force and dedicated civil servants are the essential requirements for achieving rapid economic development, but capital formation or mobilization of financial resources is fundamental to the whole problem of economic development. It is true that a large supply of capital is not a sufficient condition for economic development, but increase capital is obviously a necessary concomitant of it. To insure and adequate supply of capital without which economic progress cannot be achieved, appropriate methods of mobilizing financial resources have to be adopted. Using the wrong method can wreck even the best plan (Hicks, 1954, p.37).

Buchanan (1958) has suggested that the incurrence of domestic debt results in the postponement of tax liability from current to future generations. This shift from current to future taxation could imply a shifting of tax burden from current to future generations.

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

Nevin (1962) has considered public debt as important tool for the development of capital market as well. According to Nevin in the early stages of requirement stock exchange of public debt and the government operation in it will play a fundamental role in the pre suppose and adequate flows of capital to the productive enterprises of the country. In this instance this likely to be done to a large degree through the medium of public debt, with the development of trading facilities in securities, the possibility of the issues of private securities directly to the local institutional investors becomes a responsible one and the follow of capital will be stimulated and explained. In the modern context the least developed countries borrow in order to fulfil the resource gap. There is wider gap of the import-export, Revenue-Expenditure and the gap of saving- Investment. The internal resources are not sufficient to meet the government expenditure. Generally, government makes a larger investment for the infrastructure development which is the backbone of the nation.

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

Krugman (1989) showed the debt relief Laffer curve (with the shape of an inverted U), where the nominal value of debt of a country and its actual expected payment is related. On the upward segment of the curve, debt and expected payments increase because the risk of default is low; in the descending segment, the level of debt increases but expected payments begin to descend because the risk of default is very high. He concludes that when a country is on the descending segment of the curve, the country suffers from debt overhang.1 In this situation of debt overhang, external debt obligations act as a tax obligation acts as a tax on investment.

Singh (1991) has stated that the debt involves merely a series of economic transfer payment. Hence the main concern subject is about level of income, employment and the economic stability. It is propounded the concept of the double budget, current budget and the capital budget. But Keynesian view is that the budget deficit should be undertaken during the period of depression. Post Keynesian economists think about the developing countries have very low income saving and investment. They further say that without increasing the rate of these crucial factors, no country could achieve steady growth. So, the overall aim of borrowing is not equalize income in different countries but to provide every country with an opportunity to achieve steady growth. Saint-Paul (1992) has shown an endogenous growth model with overlapping generations, where an increase in public debt reduces the growth rate of the economy.

Jalan (1996) has opined that heavy growth of the borrowing is dangerous for the economy for two reasons: Firstly, growth of debt ratio may lead crowding of public investment; Secondly, government spending out of borrowed funds might be unproductive. They observed that the part of public debt which is burdensome and that servicing falls entirely or mostly on tax revenue. If its servicing does not fall entirely on tax revenue, it is not burdensome rather it is productive. Because it itself generate resources for its debt service besides income, employment and output. Therefore, all debt is not burdensome.

Lekhi (2001) has explained that the classical economist Adam smith opposed any use of public debt. He took public debt as leads to extravagance, encourage resort to war and induced generally disadvantages economic conditions for the nation, which employed it. Similarly, Bastable (1964) observed, a nation can't any more than an individual keep adding continually to its liabilities without at least coming to the end of its resources. They also taken public debt is no longer a cake eating feast but rather a careful and efficient brain to handle to management of public debt.

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

Ozurumba and Kanu (2014) have studied about domestic debt and economic growth in Nigeria. The study applied time series from 1980-2011 with multiple regression technique. This research revealed that not all components of our domestic debt profile are contributing positively to the economic growth of Nigeria, both in the short and long run. This calls for caution and rethink on the burgeoning level of our domestic debt profile. Government should not be seen as borrowing money for the sake of it. Domestic loans should only be called for, when it is absolutely necessary.

Issac and Rosa Garcia-Almada(2016) have concluded that the econometric results confirmed that public debt is positively correlated with public investments and that this is turn generates economic growth .This does not mean that a good economic policy strategy has been followed since the marginal positive impact of public investment ,and therefore the public debt on the production per person ,is reduced(1% increase in the interaction between the public investment and public debt variable causes a 0.0005% increase in economic growth).This suggests deviation from the debt contracted for purpose other than production ,which could lead to a situation of unsustainability of state public finance in the medium term.

Almada and Juarez (2016) investigated the effect of public debt and public investment on economic growth in Mexico, where the simple regression model and the OLS method were used. The study concluded that public debt is positively correlated with public investment, which has positive effect on economic growth in Mexico. The study recommended that the legal framework on public debt should be reformed to improve the economic growth.

Aziri (2017) testing the effect of public investment on economic growth in Macedonia for the period 2003-2014.The study used the simple linear regression model and the method of OLS to test the hypothesis of the study. The study concluded that public investment has a positive and statistically significant impact on economic growth. The study recommended that the public investments in the long term, such as productive investment in infrastructure, power stations, education, health, technology should increase growth.

Al Kharusi (2018) concluded in his study of external debt and economic growth in the case of emerging economy like Oman, there exists a negative and significant influence of external debt on economic growth. Further, gross fixed capital was found to be positively significant in determining growth performance in Oman. The study, recommends a more productive use of the external debt fund in order to affect positive growth.

2.2.2 National Context

Singh (1977) has analyzed the consistency between fiscal policy of Nepal and targeted growth rate from the time series data over the period of F/Y 1954/55 to F/Y 1974/75. He also analyzed the trend of revenue and expenditure during the same period, found a substantial change in the ratio of total public expenditure to GDP. He found that the ratio of total expenditure to GDP was just 2.44 percent in the F/Y

1954/55 which increased to high as of 10.57 percent in the F/Y 1974/75. He also found that development expenditure ratio to GDP increasing from 4.07 percent in F/Y 1965/66 to 6.75 percent in F/Y 1974/75. The growth rate of regular expenditure was quite slower registering 2.13 percent in 1965/66 to 3.82 percent in F/Y 1974/75.
Joshi (1982) has covered importance of public debt in the financial development. He has presented the poor performance of the human capital. He concluded the debt is only one source of fulfil the resources gap of budgetary expenditure of the nations and internal debt is essential phenomena for the development of the capital as well as the entire money market.

Singh (1983) has analyzed the structure of the internal debt and its impact on the economy. He found most inflationary nature of internal borrowing to increase the infection in the economy.

Rana (1988) has analyzed the fiscal system of Nepal during the period of F/Y 1964/65 to F/Y 1986/67. With his study he has concluded that there has been the constant increasing trend in revenue expenditure. The trend of regular and development expenditure has created a continuous deficit has compelled the government to rely excessively upon the foreign aids. The amount of deficit has increased rapidly because of rapid increase in the volume of regular and development expenditure. During the period under review, regular expenditure has increased to NRs. 117.94 million to NRs. 4,307.1 million in F/Y 1986/87. Similarly, development expenditure has also increased from NRs. 239.91 million to NRs. 8,745.5 million in 1986/87. Total expenditure taken altogether has increased from NRs. 349.85 million in 1964/65 to NRs. 13,052.6 million in F/Y 1986/87. Consequently, a rapid increase in the volume of deficit has been recorded amount into NRs. 157.51 million in F/Y 1964/65 to NRs. 7,177.5 million in F/Y 1986/87.

Basyal (1994) has carried out a research about growth of development expenditure of Nepal in different time periods and source of financing fit. He has underscored the dominance of foreign capital in Nepal’s plan financing. During the fifth (1796-1980), the sixth (1981-1985) and the seventh (1986-1990) plan periods, foreign grants and loan financed the total development expenditure of the extent of 47.3 percent, 48.1 percent and 59.5 percent respectively. This has clarified an upward trend in the reliance on foreign resources and consequently, the down share of the revenue surplus in meeting the development expenditure.

Adhikari (1996) has analyzed the foreign debt servicing problem in Nepal. She found out substantial increase in foreign debt servicing. She prescribed effective implementation of liberalization policy in all areas of investment. This can bring a great relief to the country by creating capacity for foreign exchange earning which can reduce the burden of debt servicing substantially in the years to come.

Gurughararana (1996) presented the share of outstanding public debt in GDP at factor cost and of foreign debt servicing in regular expenditure. He pointed out that although foreign loan is relatively much softer terms for Nepal compared to India and China, the very low rate of return and increasing share of loan in foreign aid imply that aid slowly pushing Nepal toward in the debt crisis in the coming years.

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

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

Regmi (2008) has found that Nepal is in critical phase of managing public finance because of inadequacy of internal resources. Fiscal deficit is widening every year. In order to finance the deficit, the government is borrowing internal and domestic debt. In the F/Y 1986/87, the domestic debt accounted for 37.2 percent of the total debt while its share was 28.6 percent in F/Y 2005/06. Likewise, the share of external loans increased to 71.4 percent in F/Y 2005/06 up from 62.8 percent in F/Y 1986/87, reflecting growing dependency of Nepal on foreign loan.

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

CEID Nepal (2012) analyzed the study of overall situation of public debt in Nepal. It examined that the high stock of debt, slow growth rate of economy and outflow of considerable amount of resources in the form of debt servicing have raised questions of debt sustainability and also whether foreign or domestic borrowing on current terms is beneficial for our economy or not. This study purposed to analyze current debt situation, analyzed the trend of public debt, analyzed impact of debt on macroeconomic performance & so on. The methodological approach used in this study is based on: inductive inquiry, reviewing of secondary sources of information, which includes published status reports, audit reports and financial records, and consultation and interactions with the officials of key stakeholders this study was carried out for a quick assessment of the situation, as per the call made from Financial Comptroller General Office. The study has examined and identified the key issues in the overall debt situation of Nepal and has made recommendation for its improvement.

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

Neupane (2018) has expressed the effect of increasing trend of government barrowing on economic development. After the established of the republication system government need huge amount of the money to finish the peace process, transition era and to do election. On the other hand, by promulgating new constitution, Nepal has adopted federal governance system with seven provinces as well as completed the three level elections. The government expenditure has increased more rapidly than government revenue, increasing pattern of barrowing crates a great problem for the debt management and becoming major challenging issue for the country. The debt money is unlikely financed on the non-monetized and unproductive sectors of the economy which in turn burden for the nation.

2.3 Research Gap

This research helps to reviewers to find the updated and changed situation in the economy. Above research mainly concerned with the role of public debt in economic growth of Nepal. Issues of public debt are not new phenomenon. Earlier thesis also has studied the different aspect of public debt like trend, pattern, financial resource gap and relation between the public debt and GDP. Earlier research study may not be understanding the current issues of public debt because the studies have use old data and information. As a result, these earlier researches may not be relevant for the understanding of the different issues of public debt.

In context of Nepal, there are a few studies which focus on debt growth nexus. Past studies have also suffered from conflicting results. The past studies have opened the way to future research stating that the application of relevant methodology would provide time outcomes. Further, the objectives and methodologies of the present study are different from those previous reviewed studies and articles. So, this study intends to link and fill gaps in the literature of the past at academic level covering large span of time series annual data.

Further, in the changed socio- economic structure of the economy, the past studies may not provide sound guidelines for present policy prescription. Therefore, an in-depth study on relationship between government debt and economic growth is most important and it is expected that it will contribute extra knowledge in the existing field. This research study is tried to find out impact of public debt, Import-Export gap and other variables on the economic growth of Nepal.

CHAPTER III

DATA AND METHODOLOGY

3.1 Research Design

The study uses a descriptive as well as analytical research design. The descriptive part examines the trends and patterns of public debt through a presentation in trend line, bar diagrams and tabular form. The analytical part uses simple regression technique to examine the relationship between public debt and economic growth in Nepal.

3.2 Nature and Sources of Data

This study is based on secondary sources of data and information. The required data were collected from mainly three sources namely Economic Bulletin, Publications of Nepal Rastra Bank (NRB), Economic Survey, Ministry of Finance (MoF) and National Income Estimates of Central Bureau of Statistics, Government of Nepal. Other sources have also taken for some of the in-text and contextual citations.

The data is primarily quantitative in Nepal. The required data were collected form above sources and processed as per the need of the study. This includes examining the consistency on definition and recording of the information, making uniformity on base and extracting important variables required for the study. EViews and Excel software are used for data processing and analysis.

3.3 Method of Data Analysis

In the process of data analysis, data are present with the help of tables and bar diagrams. In order to determine the relationship between public debt and economic growth in Nepal, the researcher conducted a simple regression analysis. A simple linear regression model which presents the relationship between the public debt and economic development is employed. The sub-sequent post estimation such as tests like t-test, f-test, chi-square test are also performed. As standard in literature, the analysis is at 0.005 level of significance.

The main idea behind the study is to see the impact of public debt on GDP. The variables that were added to the model next to debt and annual GDP Growth were: inflation, import and export, tax revenue and government expenditure. In the section ‘related literature’ is explained why and how these variables could have an important role by the impact from public debt on GDP based on literature, policy advice, research and theory. The regression can be shown as the following:

This study uses data for time period is 1997-2018. The econometric used in the study is as follow:

$$Y_{it} = \beta_1 + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \beta_7 X_{7it} + \varepsilon_{it}$$

Where,

$Y_{it}$is GDP growth rate ,

β_1 is the constant

$X_{2it}$is Log(Debt) with coefficient β_2

$X_{3it}$is inflation with coefficient β_3

X_{4it} is the log(import) with coefficient β_4

$X_{5it}$is Log(export) with coefficient β_5

X_{6it} is Log(revenue) with coefficient β_6

X_{7it} is log(expenditure) with coefficient β_7

$\varepsilon_{it}$is the error term

The log of relevant variables are used in regression. In this way, the results are easier to interpret. The coefficient predicts how much the annual GDP growth will change when the respective variable increases/decreases with 1%. Additionally, the logarithm solves the problem of large differences in the real numbers of the Revenue, Debt and Expenditure.

The variables used in the regressions are of economic nature. The variable X_{2it} measures the total debt of the country. Similarly, variable X_{3it} measures the inflation rate of Nepal for a given time period. The variablesX_{4it},X_{5it}, X_{6it} and X_{7it} measures the import, export, revenue and expenditure of the Nepal for the time period as stated as above. The independent variables except inflation appear in logarthims. The economic variables used in the regression have both positive and negative relation with the growth rate. Annual GDP growth rather than GPD was chosen as the independent variable. Similarly, annual outstanding public debt was used as independent variable.

In order to test the significance of the model in measuring the relationship between public debt and economic performance, this study will conduct test in EViews. On extracting the result the researcher will look at the significance value. The study will be tested at 95 percent confidence level and 5 percent significant level. If the significance number found is less than the critical value () then the conclusion will be that the model is significant in explaining the relationship.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

This chapter presents data analysis in line with the objectives of the study and draw major conclusions. This begins with identifying the resource gap, trends and patterns of public debt and finally discusses the relationship between public debt and economic growth using regression technique.

4.1 Resource Gap in Nepalese Economy

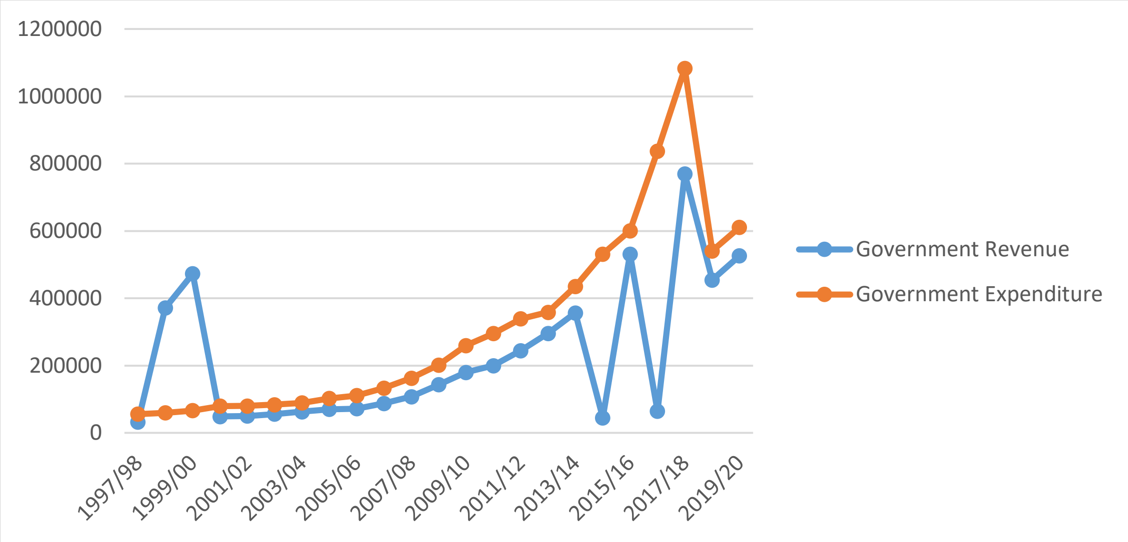
Resource gap is different between total expenditure and total revenue of the government of a country. Nepal is LDC country which does not have sufficient private investment due to various social, economic and institutional factors. Therefore, the government is forced to take the responsibility of taking public debt that might augment the rate of net investment in the country. When a country is spending more than its internal resources, there will be a resource gap in the economy. To find out the resource gap in the economy the annual budget documents of the government analyzed. The total outlay of the government is classified in to current expenditure, capital expenditure and principal repayment expenditure. The revenue side of the government shows the internal revenue, foreign aid and deficit – financing component. In order to finance the resource gap, government is forced to take the public debt. Generally, the deficits are on revenue side. The government may cover the deficit by taking public debt.

Table: 4.1 Different Scenarios of Resource Gap in Nepal

F/Y	Government Revenue	Annual Growth rate of Govt. Revenue	Total Expenditure	Annual Growth rate of Government Expenditure	Revenue Expenditure Gap	GDP	Revenue as percent of GDP	Expenditure as percent of GDP	Revenue Expenditure Gap as percent of GDP
1997/98	32937.9	-	56118.3	-	23180.4	289798	11.37	19.36	8.0
1998/99	371251	13.09	59579.0	6.17	223328.0	330018	11.29	18.05	6.77
1999/00	472893.8	15.15	66272.5	11.29	22378.7	366251	11.71	18.09	6.38
2000/01	48893.6	14	79835.1	20.5	30941.5	394052	12.4	20.3	7.9
2001/02	50445.5	3.2	80072.2	0.3	29626.5	425454	11.9	18.8	7
2002/03	56229.8	11.5	84006.1	4.9	27776.3	444052	12.7	18.9	6.3
2003/04	63331	10.9	89442.6	6.5	27111.6	473545	13.2	18.9	507
2004/05	70122.7	12.5	102560	14.7	32437.7	517993	13.5	19.8	6.3
2005/06	72282.7	3.1	110889	8.1	38607.1	630300	11.5	17.6	6.1
2006/07	87712.1	21.3	133605	20.5	45892.5	696989	12.6	19.2	6.6
2007/08	107623	22.7	163000	22	55377.3	781262	13.7	20.8	7
2008/09	143475	33.3	201966	34.7	76187.5	938671	15.3	23.4	8.1
2009/10	179946	25.4	259689	18.2	79743.3	1096038	16.4	23.7	7.3
2010/11	199819	11.1	295363	13.7	95544.4	1369431	14.5	21.5	6.9
2011/12	244374	22.3	339168	14.83	94794	1527344	15.91	22.2	6.2
2012/13	296021	21.1	358638	5.74	62617	1692643	17.48	21.18	3.69
2013/14	356620	20.5	435050	21.3	78430	1941624	18.36	22.4	4.03
2014/15	45043	21.99	531558.0	22.18	81145.0	2130150	21.14	24.95	3.81
2015/16	531411.0	17.98	601016	13.07	696050	2253163	23.59	26.67	3.09
2016/17	64747.0	21.84	837248.0	39.31	189778.0	2642595	24.50	31.68	7.18
2017/18	770000.0	21.70	1083000	29.4	313000	3060307	25.16	35.38	10.22
2018/19	454606.1	0.54	540897.3	31.64	86291.2	3464300	23.85	32.11	2.4
2019/20	526224.7	15.75	610680.7	44.54	84456	3767040	38.09	45.01	2.2

Source: Economic Survey, Various Issues from FY1997/1998 to 2019/20, MOF, Government of Nepal.

Figure 4.1 Different Scenarios of Resource Gap



In the Table 4.1 and Figure 4.1, the second column and the fourth column show the trend in revenue and expenditure in Nepal. The sixth column shows the revenue expenditure gap in which we can see the increasing tendency mainly because of increasing volume of total expenditure than revenue. The amount of total expenditure was NRs. 56118.3 million in F/Y 1997/98 has gone up to NRs. 610680.7 million in F/Y 2019/20; whereas total revenue has increased from NRs. 32937.9 million in F/Y 1997/98 to NRs. 526224.7 million in F/Y 2019/20 This shows the public expenditure has dominated to government revenue. Thus, the revenue- expenditure gap is NRs. 84456 million in F/Y 2019/20. This gap is increasing continuously increasing in each FY. This indicates that the resource gap is serious problem in Nepal.

The annual growth rate of government revenue and total expenditure is 13 percent and 6.17 percent in F/Y 1998/99 respectively but the annual growth rate of government revenue and total expenditure is 15.75 percent and 44.54 percent respectively in F/Y 2019/20. This shows that the government expenditure is very high due to impact of COVID-19.

The tenth column shows the resource gap as percentage of GDP. GDP has been increasing continuously from F/Y 1997/98 to F/Y 2019/20. GDP is the main indicator of the economic development that is why analysis of resource gap as percentage of GDP is more important. The revenue expenditure gap has been decreased from 8 percent in F/Y 1997/98 to 2.2 percent in F/Y 2019/20. Average annual growth rate of revenue expenditure gap as percentage of GDP is 2.2 percent. Similarly the data can be shown in the line graph as a figure 4.1.

4.2 Growth Trend in Government Debt

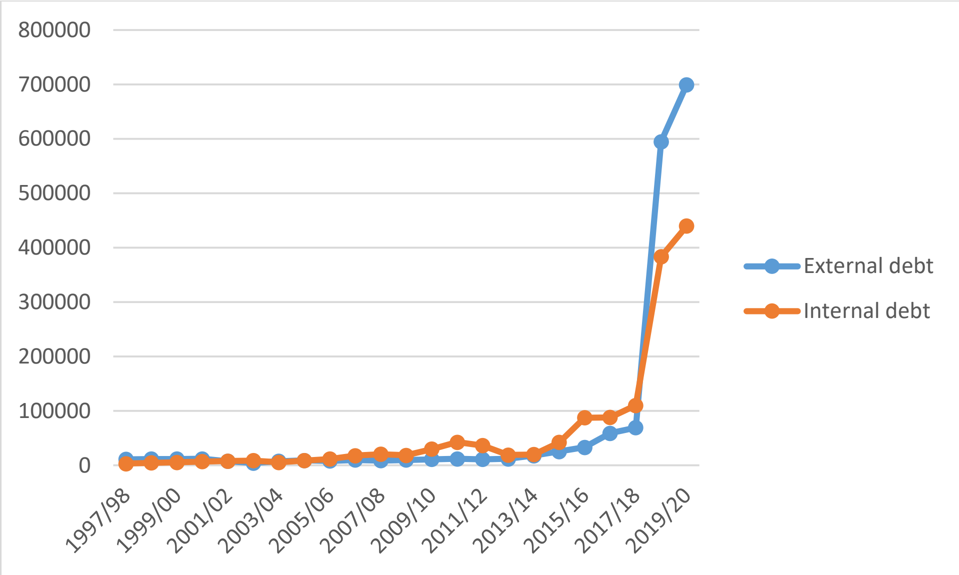
Nepal being one of the poor countries in the world, the rate of domestic savings and investment are low. It lacks woefully in economic and social overhead capital and basic and key industries. The scope of government has been increasing and investing more, so the government expenditure is increasing. The reliance on taxation is not possible in view of the large amount of financial resources required for government expenditure. So, Nepal is facing large and growing financial resource gap in the budgetary resource. In this context, the government borrowing both external and internal is needed for supplementing the resource gap. The government has to borrow large amount of loans to meet the fiscal deficit, which is shown in the following table:

Table 4.2 Percentage of Debt in GDP

F/Y	Internal Debt (ID)	External Debt (ED)	Total Debt (TD)	% share of ID in TD	% share of ED in TD	GDP	ID as % of GDP	ED as % of GDP	TD as % of GDP
1997/98	3400	11054.4	14454.4	23.5	76.5	289798	1.17	3.81	4.98
1998/99	4710	11852.4	16562.4	28.43	71.56	330018	1.42	3.59	5.01
1999/00	5500	11812.2	17312.2	31.76	68.24	366251	1.50	3.22	4.72
2000/01	7000	12044	19044	36.8	63.2	441519	1.58	2.72	4.3
2001/02	8000	7698.7	15698.7	51	49	459443	1.74	1.67	3.41
2002/03	8880	4546.4	13426.4	66.1	33.9	492231	1.80	0.92	2.72
2003/04	5607.8	7629	13236.8	42.4	57.6	536790	1.04	1.42	2.46
2004/05	8938.1	9266	18204.1	49.1	50.9	589412	1.51	1.57	3.08
2005/06	11834.2	8214.4	20048.6	59	41	654084	1.80	1.25	3.05
2006/07	17892.3	10053.5	27945.8	64	36	727995	2.45	1.38	3.83
2007/08	20496.4	8979.9	29476.3	69.5	30.5	815658	2.51	1.10	3.61
2008/09	18417.1	9968.9	28386	64.9	35.1	988272	1.86	1.00	2.86
2009/10	29914	11223.5	41137.4	72.7	27.3	1192774	2.50	1.02	3.52
2010/11	42515.8	12075.6	54591.6	77.8	22.1	1366954	3.1	0.94	4.04
2011/12	36418.7	11083	47502	76.66	23.33	1527344	2.38	0.73	3.11
2012/13	19043	11969.1	31012	61.4	38.6	1695011	1.12	0.71	1.83
2013/14	19983	17998.8	41110	48.6	51.4	1964540	1.02	0.91	2.11
2014/15	42423	25615.8	68038.8	62.4	37.6	2130150	1.96	1.20	3.35
2015/16	87775	33228.3	121003.3	72.53	27.4	2253163	3.89	1.47	5.36
2016/17	88338	59022	147360.2	59.94	40.06	2642595	3.34	2.23	5.57
2017/18	110171	69499.025	179670.025	61.31	38.69	3060307	3.6	2.29	5.89
2018/19	383588.5	594858.1	978446.6	39.2	60.8	3464300	11.07	17.17	28.24
2019/20	440047	699749	1139796	38.6	61.6	3767040	11.68	18.57	30.25

Source: Economic Survey, Various Issues from FY 1997/1998 to 2019/20, MOF, Government of Nepal.

Figure 4.2 Percentage of Debt in GDP



According to the Table 4.2 and Figure 4.2, there is the fluctuating trend of total public debt of Nepal during the review period. The total debt was Rs. 14454.50 million in FY 1997/98 and Rs1139796 million in FY 2019/20. After the Covid of 2019 there is sharp increase in both internal and external debt.

4.3 Public Debt as Percentage of Fiscal Deficit

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

Table 4.3 Percentage of Debt in Fiscal Deficit (NRs. In Million)

F/Y	Internal Debt (ID)	External Debt (ED)	Total Debt (TD)	Fiscal Deficit	ID as percent of Deficit	ED as percent of Deficit
1997/98	3400	11054.4	14454.4	23180.4	14.66	47.6
1998/99	4710	11852.4	16562.4	22328	21.09	53.08
1999/00	5500	11812.2	17312.2	22378.7	24.57	52.78
2000/01	7000	12044	19044	30941.45	22.64	38.92
2001/02	8000	7698.7	15698.7	29626.7	27	25.98
2002/03	8880	4546.4	13426.4	27776.3	31.96	38.9
2003/04	5607.8	7629	13236.8	27111.6	20.68	26
2004/05	8938.1	9266	18204.1	32437.7	32	16.4
2005/06	11834.2	8214.4	20048.6	38607.1	20.7	28.1
2006/07	17892.3	10053.5	27945.8	45892.4	27.6	28.6
2007/08	20496.4	8979.9	29476.3	53727	30.7	21.3
2008/09	18417.1	9968.9	28386	76187.5	39	21.9
2009/10	29914	11223.5	41137.4	79743.3	62.8	34.7
2010/11	42515.8	12075.6	54591.6	95544.4	36.9	20
2011/12	36418.7	11083	47502	94516.1	72.6	27.2
2012/13	19043	11969.1	31012	59706.9	87.3	24.8
2013/14	19983	17998.8	41110	65824.3	71.2	21.7
2014/15	42423	25615.8	68038.8	81145	77.1	48.4
2015/16	87775	33228.3	121003.3	69605	52.4	55.4
2016/17	88338	59022	147360.2	1889778	46.74	31.23
2017/18	110171	69499.025	182776.9	2518662.5	43.74	27.59
2018/19	383588.5	594858.1	978446.6	3009693.9	12.74	19.764
2019/20	440047	699749	1139796	3240815.3	13.57	21.59

Source: Economic Survey, Various Issues from FY 1997/1998 to 2017/18, MOF, Government of Nepal.

Figure 4.3Percentage of Debt in Fiscal Deficit (NRs. In Million)

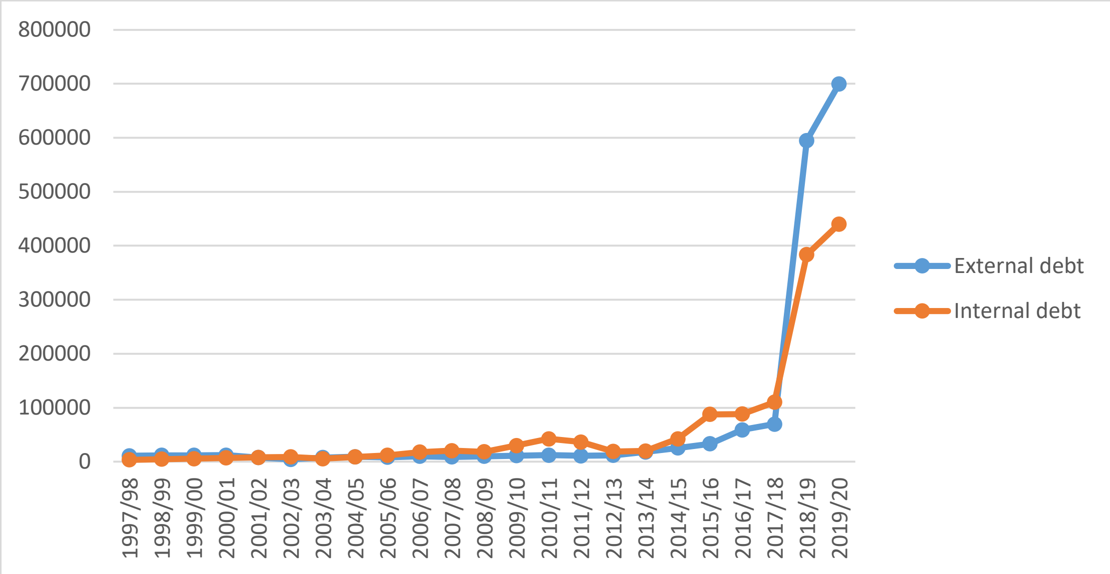


Table 4.4 and Figure 4.4, depicts the raising of total public debt. Total public debt in F/Y 1997/08 is NRs.144, 5.44 million which has been increased to NRs. 1139796 million in F/Y 2019/20. In F/Y 2019/20 both internal and external debt are increased to NRs. 440047 million and NRs. 699749 million respectively. The fiscal deficit has been increased to NRs. 23180.4 million from NRs. 3240815.3 million.

The internal debt has occupied 14.66 percent of deficit whereas the external debt has occupied 47.6 percent of fiscal deficit in F/Y 1997/08. But in F/Y 2019/20 the internal debt has occupied 13.57 percent of fiscal deficit whereas the external debt has occupied 21.59 percent of fiscal deficit.

The scenario indicates that the government's growing reliance on external loan for meeting ever increasing fiscal deficit.

4.4 Export and Import Gap

In Nepalese economy, Export-import gap is one of the major economic problems. Being developing country Nepal exports limited goods such as garments, carpets etc. Main exportable goods are raw materials and food grains but it imports final goods as well as capital goods. Importation of capital goods, improved technology, raw material etc. will help industrialize the economy. Import of goods will also help the shortage of supply in the domestic market. This will keep price stable.

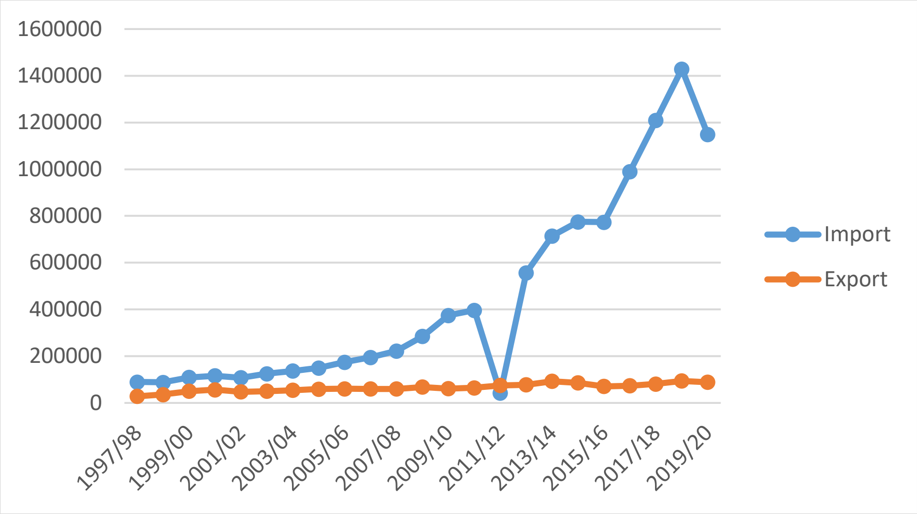
However, if external resources are miss-used of unproductively used, it will impose a burden on the economy. Payment of interest and refunding of the principal would cause a drain of hard-earned foreign exchange. Since the amount of import is greater than export, which makes negative balance in current account. The major factor of increase in external debt is the gap between export and import.

Table 4.4 Pattern of Export – Import Gap

F/Y	Export(E)	Growth rate of Export (%)	Import (I)	Growth rate of Import (%)	Export-Import gap	Growth rate of E-I gap (%)
1997/98	27513.5	-	89002	-	-61489	-
1998/99	35676.3	29.67	87525.3	-1.66	-51849	-15.68
1999/00	49822.7	39.65	108504.9	23.97	-58682	13.18
2000/01	55654.1	11.7	115687.2	6.62	-60033	2.3
2001/02	46944.8	-15.65	107389	-7.17	-60444	0.68
2002/03	49930.6	6.36	124352.1	15.8	-74422	23.12
2003/04	53910.7	7.97	136277.1	9.59	-82366	10.68
2004/05	58705.7	8.89	149473.6	9.68	-90768	10.2
2005/06	60234.1	2.6	173780.3	16.26	-113546	25.1
2006/07	59383.1	-1.41	194694.6	12.03	-135312	19.17
2007/08	59266.5	-0.2	221937.8	13.99	-162671	20.22
2008/09	67697.5	14.23	284469.6	28.18	-216772	33.26
2009/10	60824	-10.15	374335.2	31.59	-313511	44.63
2010/11	64338.5	5.78	396175.5	5.83	-331837	5.85
2011/12	74261	15.42	41667.7	16.53	-387407	16.75
2012/13	76917.1	3.58	556740.2	20.59	-479823	23.86
2013/14	91991.4	19.60	714365.9	28.31	-622375	29.71
2014/15	85319.1	-7.25	774684.1	8.44	-689365	10.76
2015/16	70117	-17.82	773599	-0.14	-703482	2.05
2016/17	73049	4.18	990113	27.99	-917064	30.36
2017/18	80938.292	10.8	1208927.973	22.1	-1127989.381	23.00
2018/19	93500	15.5	1429000	18.20	-1335500	18.39
2019/20	88000	-5.88	1148400	-19.6	-1060400	20.5

Source: Economic Survey, Various Issues from FY 1997/1998 to 2019/20, MOF, Government of Nepal.

Figure 4.5 Pattern of Import-Export Gap



The trend of export-import in the given period shows that, in FY 1997/98 the export was Rs.27513.5 million and import was Rs.89002.0 million whereas the export gap (X-M) in the same year was Rs. 61489 million. The pattern of export has been increasing and became Rs.88000 million in FY 2019/20 and the import also has been increasing and drastically became Rs. 1148400million in FY 2019/20, whereas the export-import gap (X-M) has been increasing each and every year and became Rs. 1060400 million in FY 2019/20. Due to the massive earthquake and Indian unofficial blocked, import has decreased in FY 2015/16. The growth rate of export-import gap has been fluctuating in the beginning of review periods, it was -15.68 percent and became 0.68 percent in FY 2002/03 and reached 20.5 percent in FY 2019/20.

4.5 Situation of Debt Trap in Nepal

The condition of debt trap is the great challenge for developing countries like Nepal. When the country loses principal payment capacity and interest payment capacity, there arise a situation that whole- borrowed money will be used for debt obligation payment. Nepal faces the problem of fiscal deficit. Nepal is facing over increasing problem of resource gap. It has such situation due to following conditions:

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

4.6 The Role of Public Debt in Economic Growth of Nepal

The first objective of the study tried to examine the pattern of public debt along with trade gap, resources gap, deficit financing and other important elements in the study. Public debt is important for LDC country like Nepal. A successful public borrowing can be a useful tool of economic development by diverting resources from unproductive channels to productive channels. Public borrowing is resorted to for specific development projects like power generation, irrigation words, roads, etc. Thus, it is a useful method of financing development projects.

The role of public debt in the economic growth has been examined by looking at various aspects. The study has looked upon various data obtained from various sources. The first important factor, the study has looked upon is the resource gap. Resource gap is the difference between total expenditure and total revenue of the government of a country. If any public expenditure that is in excess of current public revenue, it will create resource gap. Nepal is LDC country which does not have sufficient private investment due to various social, economic and institutional factors. Therefore, the responsibility to augmenting the rate of net investment in the economy lies on the government. On the account of the lack of sufficient resources to finance public investment, government has to resort to the method of deficit financing. Public debt is one of the most important instruments of deficit financing.

Similarly the pattern of public debt has been analyzed. Nepal being a poor country, its rates of domestic savings and investment are low. To accelerate the rate of economic development, it borrow to import capital goods, raw materials technology etc. Besides, it also borrows to finance consumer goods to meet the requirements of the growing population. For a country like Nepal public debt is better than the taxation. Taxation implies forced savings; borrowing is voluntary. The tax payer is never happy in paying tax. Moreover, in Nepal the revenue generated from taxation is less. Also borrowing does not adversely affect incentives to save and invest.

However in Nepal the scope of public saving is limited due to low levels of income, low savings and high propensity to consume of the masses. The few rich are not likely to be attracted by government loans which are not so lucrative as investment in other sectors. The government is not in the position to borrow much due to the absence of organized money and capital markets. The banking and financial institution are few and bonds or securities are not so much popular. Lastly, popular confidence may be lacking in the financial and political stability of the government. Domestic borrowing can, however, increase as development gains momentum whereby income and savings tend to rise.

In addition, the exports of Nepal are limited to a few primary products, it also borrows to supplement and increase the domestic resources. These lead to huge current account balance of payments (BOP) deficit. This can lead to inflationary pressures leading to high costs and prices, and a large external deficit which acts as a drag on its export. To finance its BOP deficit, Nepal borrows by selling bonds, commercial banks, from international financial institutions like IMF, World Bank, ADB, IFC etc., and from private foreign firms. In all such cases, the country accumulates external debt which it has to repay abroad in the future in the form of interest and principal.
Similarly, the study has also presented the trend of outstanding public debt in Nepal. Both net outstanding internal and external public debt are increasing in each FY. The study also shows that since the government expenditure is rapidly increasing which is unable to raise revenue accordingly. Thus, accumulation of debt is mainly for financing the deficit.

4.7 Public Borrowing and Economic Development

Under-developed countries are suffering from poverty, unemployment, low level of income, low tax payable capacity, economic instability etc. To get rid of this above mentioned problem, economic development is necessary to accelerate economy. Economic development helps to transform the traditional society into modern society. So economic development is the main goal of developing countries but there are resource constraints to achieve such goal. Since other sources of revenue are limited public borrowing becomes useful resource for development. Most of the under-developed countries are conformed to rapid population growth low human capital development inadequate infrastructural problems and repressive regions. More importantly the inappropriate domestic policies fiscal policy, monetary policy, liberalization, investment policy and taxation policy pursued by the country have contributes to this weak and disappointing overall growth performance. In such situation, public debt can vital role for economic development. Nepal being a least developed country has the potential for development. There is low rate of saving, investment, income and low living standard due to the low per capita income and poverty, dualistic economy, mass poverty, unutilized natural resources, lower health and education condition of the people, deficiency for capital in under developed countries.

Resources gap is a burning problem of such under developed country due to deficiency of capital. So that public debt is only one solution to cross the resource constraint. Nepal is facing the deficiency of capital in relation to their production and natural resources due to low tax payable capacity of the people causes low income which creates low saving. Nepal is also suffering from vicious circle of poverty. To break vicious circle and uplift country with a self-sustaining growth, a large amount of initial investment is necessary. Thus, the government of such under-developed country should emphasize to stimulate and accelerates capital formation. There is need of heavy investment to fulfill the objectives of economic development. Since it is not possible through the persons, there is need of government finance, such finance is not possible through government also because of poor tax payable capacity of the people in under-developed countries like Nepal. At this critical juncture, public debt becomes important source to collect information small potentiality of saving and low level of tax payable capacity finally hampers economic development which can be removed by using borrowing and a nation becomes prosperous. In conclusion public borrowing is regarded as a basic tool for development in developing countries. Without public debt the adequate mobilization of internal resources could not have been made in order to accelerate the rate of economic development. Public borrowing proceeds regular channel for investment and also helps in the strengthening the money and capital markets which in turn accelerate development and price stability. As a fiscal measure it is a source of revenue to the government as it channels saving from the public to expansion of the productive capacity .So borrowing as a method of financing for development is quite suitable as it has less expansionary effect on the money supply than deficit financing.

4.8 The Relationship between Public Debt and Economic Growth of Nepal

The study of public debt is significant in the case of country like Nepal. Nepal is a poor country which depends heavily on inflows of capital from abroad to finance its development needs. It lacks in economic and social overhead capital and basic and key industries. Thus, it needs to take debt as an important role in the acceleration of the rate of economic development. Similarly trade related policies of Nepal also led to the growth of external debt of Nepal. With the continuous fall in the prices of its primary commodities, the terms of trade has deteriorated. The trade deficit is widening every year. Similarly it has been the victim of discriminatory policies pursued by WTO which falls heavily on LDC like Nepal. Thus, the adoption of trade reforms to boost exports and the inflow of private capital through international banks further increases its external debt.

The second objective of the study is to make a quantitative study concerning the role of public debt in the economic growth of Nepal. The influence of debt on annual GDP growth is examined. Tax revenues, government expenditure, inflation, trade gap are taken into account. This is done for a panel data from the time period from 1997/98 to 2017/18. The simple OLS regression is carried out in order to determine the impact of public debt on the economic growth of the country. The rate of economic growth is considered as the dependent variable. The variables such as revenue, expenditure, import, export and debt are considered as the major independent variables. The hypothesis is set to determine the impact of public debt on the economic growth rate. The general conclusion is that based on this study states that debt has a significant impact on the annual GDP growth. All other added variables have a regression coefficient which is expected based on economic theory.

Nepal is characterized by extreme inequalities of income and wealth. Expenditure on education, public health and medical facilities help in the human capital formation. As a result, the earning power of the working population is enhanced. As economic development proceeds rapidly the barriers to upward mobility are removed. Moreover, industrialization tends to increase the share of wages and decrease the share of profits in national income in the share of national income in the long run, and the gap between higher and lower income is narrowed.

In the case of Nepal, public debt can be made effective by discouraging savings being spent in the unproductive channels. The masses should be encouraged to save more, which can be done by education, propaganda and persuasion. Similarly, there must be network of intermediate agencies to attract savings from the people. The establishment of saving banks, commercial banks, insurance companies, unit trusts, social security institutions, etc., can induce people to save more. In addition to that a well-organized bill market should be established to facilitate marketability. Finally, the success of public borrowing programmer will depend on the extent of the confidence of the people have in the political and financial stability of the government. A rising level of real income with no threat of inflation will go a long way in making government borrowing success.

The reason why this subject/study was chosen for this thesis was the worldwide commotion. Many political leaders have a strong opinion about the appropriate level of the government debt as do a lot of economist while there seems to be lack of consensus. Thus, this study provides evidence in the part of LDC country like Nepal, where public debt plays a significant role in the economic growth.

4.9 Problems of Borrowing in Under Developed Countries

Nepal is facing several problems or constraints in reflecting its borrowing programs. The main characteristic of Nepal are low saving, low investment, low level of income, dualistic economy, under-developed industrial sector, illiteracy, technological constraints, unorganized money and capital markets etc. Poverty is the growing phenomenon. Due to all these reasons, financial sectors are also under developed. The rural sectors of such developing country appear the largest sector and a substantial volume of saving may originate in this sector. But it is not reality, since most of the financial and banking institutions are city oriented. So these are problem of rural saving. There is also existence of barer economy in rural areas so that people have no capacity and willingness to save due to poverty and illiteracy. Financial sectors are not well organized for rural saving and investment activities. Mobilization of rural income has not any contributive impact on the economy. Due to lack of appropriate financial and banking sector in rural areas, large part of money expenses in unproductive purpose. Values and institutions have also negative impact for the development of physical and financial sectors.

Domestic resources are inadequate to meet the financial requirement for economic development. In such condition government is bound to take external loan. But Nepal has less economic and political relation with developed countries for the external borrowing and has less capacity to pay the dues on the other. This is because the most part of the expenses used for productive purpose which decreased the trust and further providing of borrowing is less possible. Then factors like political stability, low level of debt servicing capacity, unproductive expense, corruption etc. decrease the intention of donors for providing loan and grants. To conclude, development of finance sectors is essential to strengthen the economy. Money and capital markets are the main indicators of development which can play major role for government borrowing as a short term or long term.

The scope of public debt is limited in the case of Nepal, due to low levels of income, low savings and high propensity to consume of the masses. The rich are not generally attracted by government loans which are not so lucrative as investment in other sectors. The government is not in position to borrow much due to the absence of organized money and capital markets. Lastly, popular confidence may be lacking in the financial and political stability of the government. Therefore, government should discourage savings being spent in the unproductive channel. There should be network of intermediate agencies to attract savings by establishing banks, insurance companies. A well-organized bill must be established that provides variety of government bonds which provide better marketability and competitive rates. Finally, the success of public borrowing programme will depend on the extent of confidence people have in the political and financial stability of the government.

4.9.1 Econometric Analysis and Result

This study uses data for time period is 1997-2018. The econometric used in the study is as follow:

$$Y_{it} = \beta_1 + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \beta_7 X_{7it} + \varepsilon_{it}$$

Where,

$Y_{it}$is GDP growth rate ,

β_1 is the constant

$X_{2it}$is Log(Debt) with coefficient β_2

$X_{3it}$is inflation with coefficient β_3

X_{4it} is the log(import) with coefficient β_4

$X_{5it}$is Log(export) with coefficient β_5

X_{6it} is Log(revenue) with coefficient β_6

X_{7it} is log(expenditure) with coefficient β_7

$\varepsilon_{it}$is the error term

The variables used in the regressions are of economic nature. The variable X_{2it} measures the total debt of the country. Similarly, variable X_{3it} measures the inflation rate of Nepal for a given time period. The variables X_{4it}, X_{5it}, X_{6it} and X_{7it} measures the import, export, revenue and expenditure of the Nepal for the time period as stated as above. The independent variables except inflation appear in logarthims. The economic variables used in the regression have both positive and negative relation with the growth rate.

The estimation of the given model is obtained by using software package Eviews. The study has used simple OLS regression model. There are 20 observations made from 1997-2018. The results of the estimations are as follows:

Model Summary

R Square	Adjusted R Square	Sumofsquareresidual
0.786	0.775	430.3445

Table 4.6: The Results

Variable	Coefficient	Std Error	t statistic
Constant	47.82	35.02	6.983
Debt	0.1164**	0.548	2.12
Inflation	-0.298	0.225	-1.2
Import	0.288***	0.115	6.32
Export	0.727**	0.118	2.3
Revenue	2.622***	0.44	-5.873
Expenditure	-1.58***	0.35	-4.41

Note: Three asterisk (***) denote significant at 1% level

Two asterisk (**) denote significant at 5% level

The test are based on one tailed test

4.9.2 Interpretation of the Regression Equation

Results of the estimated model appear in the above table. The coefficients on the explanatory have both positive and negative signs which are as expected. The major concern is the magnitude and of level significance of the coefficients of the variables involved.

Debt

The estimated coefficients of the debt are positive and highly significant. The coefficients on the debt variable suggest that 1% increase in debt of the country results in the 0.1164% increase in the GDP. The fact that growth increases with the level of debt is verified in the case of Nepal. External public debt can have nonlinear impacts on economic growth. Thus, at low levels of indebtedness, an increase in the proportion of external public debt to GDP could promote economic growth; however, at high levels of indebtedness, an increase in this proportion could hurt economic growth. As far as the relationship between external debt and economic growth is concerned, a reasonable level of borrowing is likely to enhance economic growth, through capital accumulation and productivity growth. Because at early stages of development, countries have small stocks of capital and they have limited investment opportunities. External borrowing for productive investment creates macroeconomic stability. It is also been seen as capital inflow having positive effect on domestic savings, investment and economic growth; it implies that foreign savings complement domestic savings to cater for investment. However, high level of accumulated debt has an adverse effect on rate of investment and economic growth.

Inflation

The estimated coefficients of the inflation are negative and highly significant. The coefficients on the inflation variable suggest that1% increase in inflation rate of the country results in the 0.29 decrease in the growth rate. The fact that growth decreases with the level of inflation is verified in the case of Nepal.

An increase in inflation means that prices have risen. With an increase in inflation, there is a decline in the purchasing power of money, which reduces consumption and therefore GDP decreases. High inflation can make investments less desirable, since it creates uncertainty for the future and it can also affect the balance of payments because exports become more expensive. As a result, GDP is decreases further. So it appears that GDP is negatively related to inflation. However, there are studies indicating that there may also be a positive relationship. The Phillips curve, for example, shows that high inflation is consistent with low rates of unemployment, implying that there is a positive impact on economic growth. So there exist both positive and negative relations between these two. There is a huge literature behind the relationship between growth rate and inflation rate which is beyond the research of this study.

Import

The estimation shows that with the increase in import, growth rate is likely to increase by. Mathematically, this means country Nepal is likely to have increase in growth rate 28% more with the increase of 1% import. This is a unlikely result, however this may be due to the fact of comparative advantage theory of trade.

Imports of goods and services represent the value of all goods and other market services received from the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees and other services such as communication, construction, financial, information, business, personal and government serviced. They exclude compensation of the employees and investment income and transfer payments. However, the higher increase in import as compared to export is not a good sign to economy.

Export

The estimated coefficients of the inflation are positive and highly significant. The coefficients on the export variable suggest that 1% increase in export of the country results in the 72% increase in the growth rate. The fact that growth increases with the level of export is verified in the case of Nepal. Any country that has high degree of export mainly results in the high economic growth of the country.

When a country exports goods, it sells them to a foreign market, that is, to consumers, businesses, or governments in another country. Those exports bring money into the country, which increases the exporting nation's GDP. When a country imports goods, it buys them from foreign producers. The money spent on imports leaves the economy, and that decreases the importing nation's GDP.Net exports can be either positive or negative. When exports are greater than imports, net exports are positive. When exports are lower than imports, net exports are negative. If net exports are positive, the nation has a positive balance of trade. If they are negative, the nation has a negative trade balance. If exports are greater than imports, it means country is earning profit from its industrial sector, it is a also a source of income generation. if industrial sector is public. If industrial sector is privatized than country will earn by custom duties and tariffs. Higher level of exports generates revenue for country which helps in providing public goods and services as well as investments. Thus, by exports country grows its GDP.

Revenue

The estimated coefficients of the revenue are positive. The coefficient of revenue is 2.622. That would mean that a 1% increase in revenue leads to a 2.622% increase in annual GDP growth. It is obvious that more income is correlated with high economic growth. Thus government must be concerned with the increase in the revenue of the country. This can be done with the increase in the industrial sector, modernization of agriculture, promotion of service sector, mobilization of remittance. Thus, it is required in the part of government to make plans and policies that promote the revenue of the government.

Expenditure

The final dependent variable used in the study is expenditure. The estimated coefficient of the expenditure is negative and highly significant. The coefficient of expenditure is -1.58. This suggests that with the increase in the expenditure, growth rate of country is like to go down. Mathematically, in case of Nepal, its growth rate is likely to go down by 1.58% with the increase in 1% of expenditure which is accepted. This relation is also straight forward. The growth rate diminishes with the increase in the expenditure of the government. This does not mean that government must reduce its expenditure. In the developing countries like Nepal, government has especial role in the economy. So, government has responsibilities of carrying out public expenditure. Thus, instead of reducing expenditures, the government should focus on increasing the revenue by enhancing production and trade.

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CHAPTER-V

SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Major Findings

There are many views among various economists regarding the question whether the public debt is necessary to bring the growth in the country. The debate goes from classical to neoclassical economists who were against the government intervention in the economy. Similarly, Keynesian economists are in the favor of government intervention in the economy. This study has tried to look at the trend of public debt in Nepalese context. Similarly, it has also tried to look at the relationship between public debt and economic growth rate.

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

Borrowing is taking from two sources internal and external. In the internal source treasury bills, development bonds, special bonds and national saving certificate are included. Similarly, in external sources Nepal is receiving borrowing in the form of bilateral and multilateral sources as ADB, UNDP, WB, WHO, IMF etc. For Nepal, both internal and external debt plays a significant role as a means of financing economic development. Public borrowing has to be undertaken within the country as well as abroad. Only through internal sources, it is not sufficient to promote the rapid development of the Nepalese economy. Thus, external debt financing contributes significantly to the external development of Nepal.

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

The study has used the quantitative technique to analyze the trend and relationship of public debt with economic growth rate. The regression model used is OLS with growth rate as dependent variable and public debt, inflation rate, revenue, expenditure, import and expenditure considered as dependent variables.

Major findings are as follows:

- In the study period from F/Y 2001/02 to F/Y 2019/20, the government revenue has increased from NRs.48893.6 million to NRs. 526224.7million In the same period, the expenditure has increased from NRs. 79835.1million to NRs. 6160680million. But the growth rate of revenue is not sufficient for financing the increased government expenditure.
- In the study period from F/Y 2001/2002 to F/Y 2019/20, the gap between revenue and expenditure has increased from NRs. 48893.6 million to NRs. 84456 million. The resource gap has been increasing in each year that shows there is excessive increase in government expenditure than government revenue which leads the resource gap.
- The total public debt has increased from NRs 14454.5 million in F/Y 1997/98 to 1139796 million in F/Y 2019/20. The internal and external debt as percentage of fiscal deficit was 14.67 percent and 47.69 percent respectively in F/Y 1997/98. The percentage share of internal debt to fiscal deficit has gone up to 13.57 percent in F/Y 2019/20.
- Total external debt was NRs.12,044 million in F/Y 1997/98 in which NRs. 586.7 million was taken from bilateral and NRs. 11,457.3 million from

multilateral sources. It has gone up to NRs. 699749 million from multilateral sources.

- Average annual growth rate of total external debt as a percentage of GDP is 1.4 percent whereas the percentage hare of bilateral and multilateral debt is 1.37 and 0.6 percent respectively. This shows that the external debt is heavily dependent upon multilateral sources.
- The fiscal deficit is increasing in each fiscal year. The average annual growth rate of fiscal deficit is 10.01 percent.
- In the study period export-import gap has increased. Import is higher than export. In in F/Y 1997/98 export-import gap was Rs. 61489 million whereas Rs 1060400 million in 2019/20. This shows that there exists negative trade balance.
- The empirical result of regression equation of growth rate on public debt, inflation, import, export, revenue and expenditure shows that there exists positive and strong relationship between public debt and growth rate. This study also shows that there exists strong relationship between growth rate and inflation, import, export, revenue and expenditure.

5.2 Conclusion

This study has analyzed the role, structure and trend of public debt on the economic development of Nepal. Similarly, it has also looked at the relationship between growth rate and various variables such as public debt, inflation, import, export, revenue, expenditure. The trend of government expenditure has increased more rapidly than government revenue because of the limited resources of revenue. So the government has borrowed from internal and external sources. The growing trend of borrowing creates a great problem for debt management and becoming a major challenge issue for the country.

The condition of indebtedness of the external debt has increased, due to the poor-mobilization of internal resources, widening investment saving gap, export import gap, revenue expenditure gap and large amount of fiscal deficit. So there has been excessive flow of foreign loans to bridge up these gaps. Consequently, burden of debt and debt servicing obligation are increasing rapidly in each year but debt servicing capacity of the economy is not increasing the same pace.

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

The study also finds the relationship between economic growth and public debt. In the OLS regression, rate of economic growth was taken as the dependent variable and public debt was considered as independent variable with other variables such as import, export, revenue and expenditure. The regression shows that there exists a positive relationship between growth rate and public debt. Therefore, in case of Nepal, it is likely the case that increase in public debt leads to increase in the economic growth. However, it should be kept in mind that the burden of public debt is not good for economy in the long run for the country.

The empirical results confirm that stock of internal, external and total debt has not caused negative impacts on GDP growth of Nepal. However, country must focus on the improving balance of payment. Similarly the inflation rate of the country must be checked. It may be good to keep fiscal deficit less than 3% as advocated by WB and other IFS. Therefore, it is better to take the loan for the economic development but it should be properly utilized on productive sectors otherwise debt-trap will drag us to the path of difficult situation from where we cannot escape from it.

5.3 Recommendations

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

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

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

- Government should try to receive more grants rather loans.

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

- Government should increase the debt servicing capacity of the country.

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

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

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

- The internal borrowing for short term should be minimized and long term internal borrowing should be given priority.
- The inflation rate of the country must be checked by applying appropriate monetary policy.

- The government of Nepal must take initiative to promote export of the country. The gap between import and export is rising which shows gloomy picture for the future.
- Government of Nepal should try to maintain low fiscal deficit which pressurizes government to curtail its spending in the future.
- Government should discourage the spending of savings into the unproductive channels. The masses should be encouraged to save more through education, propaganda and persuasion
- There should be a network of intermediate agencies to attract savings from the people. The establishment of savings banks, commercial banks, commercial banks and insurance companies can induce people to save more
- •There should be a variety of government bonds which would provide marketability and competitive rates with private issues and through such features as ready convertibility to each, acceptance of government securities at par with gold for tax payment by masses.
- Finally, the success of public borrowing will depend on the extent of the confidence people have in the political and financial stability of the government. A rising level of real income with no threat of inflation will go a long way in making government borrowing a success.

Nepal has so many under-developed areas, where the role of government is dominating. Government should maintain the balance between urban and rural areas, agricultural and industrial sectors, trades and non- traded sector. The maintenance of such various unbalanced sectors of the economy should be done through control of unproductive expenditure, big push through capital and proper utilization of resources of the under-developed areas. And Government should reduce foreign dependency, various measures must be applied such as export promotion, tourist attraction and import substitution policy should be emphasized and import of capital goods should be increased for the productive purpose. It is not advisable for an underdeveloped country like Nepal to rely completely on the method of public debt for specific development projects and for a short period of time. The government should aim in stimulating the private enterprise through the establishment of state-owned financial and banking institutions. Thus the policy of public expenditure and public borrowing should go parallel to promote the economy of the country.

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