

**TREND OF PUBLIC EXPENDITURE AND ITS
RELATON WITH GROSS DOMESTIC PRODUCT,
IMPORT AND MONEY SUPPLY
(1990-2010)**

A THESIS

Submitted to the Central Department of Economics,
Tribhuvan University, Kirtipur, Kathmandu, Nepal
in Partial Fulfillment of the Requirements

For the Degree of
MASTER OF ARTS
in
ECONOMICS

BY

SUSHILA SUBEDI

Regd. No. 9-2-375-12-2005
Central Department of Economics
Tribhuvan University, Kirtipur
Kathmandu, Nepal

July, 2013

LETTER OF RECOMMENDATION

Ms. Sushila Subedi has prepared this thesis entitled "**TREND OF PUBLIC EXPENDITURE AND ITS RELATION WITH GROSS DOMESTIC PRODUCT, IMPORT AND MONEY SUPPLY (1990-2010)**" under my supervision. I hereby recommend this thesis for examination by the thesis committee as a partial fulfillment of the requirements for the Degree of MASTER of ARTS in ECONOMICS.

.....

Resham Bahadur Thapa

Lecture

Thesis Supervisor

Central Department of Economics

Tribhuvan University

Date:

APPROVAL LETTER

We certify that this thesis entitled "**TREND OF PUBLIC EXPENDITURE AND ITS RELATION WITH GROSS DOMESTIC PRODUCT, IMPORT AND MONEY SUPPLY (1990-2010)**" submitted by **Ms. Sushila Subedi** 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.

Thesis committee

.....
Dr. Ram Prasad Gyawali
Acting Head of the Department

.....
Dr. Uma Shankar Prasad
External Examiner

.....
Resham Bahadur Thapa
Thesis Supervisor

Date:

ACKNOWLEDGEMENTS

Let me take this opportunity to confer my sincere gratitude and appropriation to my supervisor Resham Bhadur Thapa. He read every pages of manuscript and made a many suggestions, which I adopted. If this thesis has merit, he deserves much of the credit and its drawbacks are mine alone. This thesis would not have existed without his genuine suggestions and help.

I am thankful to Dr. Ram Prasad Gyawali and Uma Shankar Prasad for suggesting me time and again. I would like to thank to the members of our department and central library we happily assisted me. I am especially grateful to Naveen Adhikari who timely helped in the subject matter and guide to complete this thesis.

I owe to my well-wishers Bishnu Dhungana , Gita Prajapati, Ganesh Acharya and Prakash Paudel for kind help, inspiration and encouragement. And thankful to my Brother Kshitij Dhungana and Sister Laxmi Dhungana who helped me while typing the Thesis.

Sushila Subedi

TABLE OF CONTENTS

	Page No.
RECOMMENDATION LETTER	ii
APPROVAL LETTER	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
LIST OF TABLES	vii
LIST OF FIGURE	viii
LIST OF ABBREVIATIONS	ix
CHAPTER–I: INTRODUCTION	1-5
1.1 General Background	1
1.2 Statement of the Problem	3
1.3 Objective of the Study	4
1.4 Significance of the Study	4
1.5 Limitation of the Study	4
1.6 Organization of the Study	5
CHAPTER–II: REVIEW OF LITERATURE	6-21
2.1 Introduction	6
2.1.1 International Context	6
2.1.2 National Context	8
2.2 Theoretical Concept	13
2.2.1 Public Expenditure in Developing and Developed Countries	14
2.2.2 Pure Theories of Public Expenditure	14
2.2.2. A) Ability to Pay Theory	14
2.2.2 B) The Benefit Principle	15
2.3 Classical Views on Public Expenditure	17
2.4 Keynesian Views on Public Expenditure	17
2.5 Wagner's Law of Expanding State Activity	19
2.6 Peacock Wiseman Hypothesis	19
2.7 Critical Limit Hypothesis	20
2.8 Stanley Please Hypothesis	20
Conclusion	21
CHAPTER–III: RESEARCH METHODOLOGY	22-29

3.1	Research Design	22
3.2	Period of Study	22
3.3	Sources of Study	22
3.4	Specification of Some Variable	23
3.5	Statistical Tools	24
3.5.1	Regression Analysis	24
3.5.2	Coefficient of Multiple Determinations	26
3.5.3	Adjusted Coefficient of Multiple Determinations	27
3.5.4	Test of Significance of Parameter	27
3.5.5	Hypothesis of the Study	29

**CHAPTER –IV: TREND OF PUBLIC EXPENDITURE AND
IT'S RELATION WITH GROSS DOMESTIC PRODUCT,
IMPORT AND MONEY SUPPLY 30-48**

4.1	Introduction	30
4.2	Reforms in Public Expenditure	30
4.2.1	Medium Term Expenditure Framework	31
4.3	Trends of Public Expenditure	34
4.3.1	Growth Rate of Total, Regular and Development Expenditure	37
4.3.2	Total, Regular and Development Expenditure as Percentage of GDP	38
4.3.3	Regular Expenditure	40
4.3.4	Development Expenditure	42
4.4	Relation of Public Expenditure with GPD, Import and Money Supply	46
4.4.1	Relationship between Public Expenditure and GDP	47
4.4.2	Relation of Public Expenditure and Import	47
4.4.3	Relation of Public expenditure and Money supply	48
4.5	Concluding Remarks	48

**CHAPTER–V: SUMMARY, CONCLUSION AND
RECOMMENDATIONS 49-52**

5.1	Summary and Conclusion	49
5.2	Recommendation	51

APPENDIX

BIBLIOGRAPHY

LIST OF TABLES

Table No.	Title	Page No.
4.1	Trends of Regular and Development Expenditure and Percentage Distributions	34
4.2	Growth Rates of Total, Regular, and Development Expenditure.	37
4.3	Total, Regular and Development Expenditure as Percentage of GDP.	39
4.4	Regular Expenditure Under Different Heads.	41
4.5	Development Expenditure Under Different Heads as Percentage of Development Expenditure.	43
4.6	Development Expenditure Under Social and Economic Services as Percentage of Total Expenditure.	44

LIST OF FIGURE

Figure No.	Title	Page No.
4.1	Trend of Regular, Development and Total Expenditure.	36

LIST OF ABBREVIATIONS

ADB	-	Asian Development Bank
AEA	-	American Economic Association
DE	-	Development Expenditure
DW	-	Durbin Watson
FY	-	Fiscal Year
GDP	-	Gross Domestic Product
GE	-	Government Expenditure
GON	-	Government of Nepal
IDS	-	Integrated Development System
IMF	-	International Monetary System
LDC _s	-	Least Development System
LTD	-	Limited
OLS	-	Ordinary Least Square
SAP	-	Structural Adjustment Program
M	-	Real Imports
MOS	-	Ministry of Finance
MS	-	Money Supply
MTEF	-	Medium Term Expenditure Framework
NFA	-	Net Foreign Assets
NPC	-	Nepal Planning Commission
NDF	-	Nepal Development Forum
PE	-	Public Expenditure
RE	-	Regular Expenditure
UN	-	United Nation
WB	-	World Bank
WDR	-	World Development Report

CHAPTER-I

INTRODUCTION

1.1 General Background

Public expenditure is the main instrument of fiscal policy. It has to play significant role to achieve higher rate of growth, higher rate of employment, higher rate of per capita income and equitable distribution of income and wealth in the society. Public expenditure refers to the expenses made by government for socio-economic welfare for equitable development of society and economy as whole.

Goode defines public expenditure as a means to carry out essential functions administrating justice and providing national defense and to supply certain additional goods and services that are advantageous to a great society but that would not be supplied by private enterprises because doing so would not be profitable (Goode 1984). So the expenditure incurred by public authorities satisfies to collective social wants of people is known as public expenditure. In the 19th century, most of the governments followed laissez faire economic policies and functions were restricted to defending aggression and maintaining law and order all size of budget because classicists believe that the economy runs in full employment. But in the period of 1930s appeared worldwide depression in the economy, J.M. Keynes pointed out that the fundamental causes of the depression was lack of spending.

Nowadays public expense is expanding, every country adopts such economic policies which can promote maximum social welfare. Increase in public spending witnessed in modern society has increased a dilemma particularly in democratic countries. In the words of widensky "people are happy to consume Government services but increasingly restive about paying for them." Today government spending is classified mainly in two types current expenditure and capital expenditure . Public expenditure may have direct and indirect effect on economy, directly on industry, production, commerce, aggregate economic development. Indirectly in economic development by appropriate policies and co-operating private participants by providing transportations, communication, health, education and other social welfare program in the economy.

Nepal remains one of the least industrialized countries in South Asian Region. The economic problems have been exacerbated by its landlocked position and complete open border with India. During the Rana's period not much development took place in the country. After the inception of democratic system in 1951, it was necessary to expand public sector activities through viable strategies of planned development and budgetary management. With the beginning of the plan (1965-1970), attempt was made to make the plan relatively comprehensive. That is in each successive plan attention was given to maintain intersectoral and intrasectoral balance with different sub sectors of the economy besides trying to maintain the balance between physical plan and availability of resources. From then the phenomenal increase in the size of public sector due to intensive development efforts made by government through comprehensive planning process in the country.

The study points out the importance of the public expenditure as an instrument of state policy. Improvement in the well being of citizens, development of infrastructure and promotion of structural change and development in the economy as the objectives of the government expenditure policies are the recent origin. A debate is joined to the extent, which the state should directly participate in production of goods and services. This has been achieved through the instrument of public loans, subsidies where appropriate direct investment in enterprises deemed important for promoting private enterprises. Public expenditure has provided transport, communications, utilities, education and health services as part of infrastructure to sustain development (Sharma 1999).

Rising public expenditure especially in administrative and development activities has chiefly contributed to increase in resource gap. The gap needs to be fulfilled by the way of deficit financing but the policy has to be designed that the money created from such financing doesn't prove to be counterproductive and frustrating. Therefore, the government of developing countries like Nepal, increasing their expenditure on economic development, capital formation and infrastructure also benefited on new agricultural techniques and seeds varieties which have often been product of government expenditure programmed.

1.2. Statement of the Problem

Nepal has agro-based economy where majority of population is directly engaged in agriculture. The agriculture sector occupies about 35% share of GDP in 2009/10. However, the government has given more emphasis to the agricultural sector but the output obtained is not satisfactory.

Regular expenditure has increased than development expenditure. The reasons are behind of the situation raising public services due to increasing level of money income and population growth for providing basic minimum needs services, educational, health sector etc. so, government of Nepal increasing their expenses such as defense, administrative, law and order, other services. Another fact is where private sector has to play double role and motivate for participating national development with the help of more spending.

The trend of public expenditure programs try to analyze the period of 1990/91 to 2010/11. Development expenditure has increased faster than its regular expenditure until 1998/99 then after regular expenditure exceeds continuously. In the fiscal year 1998/99 the development expenditure RS 5951.8 million has again been decreased registering the negative changes over previous years. This is so in fiscal year 2001/02 and 2002/03 where development expenditure has been decreased by RS 3776.9 million and RS 3113.3 million from previous year respectively. Regular expenditure has been increasing at higher pace mainly due to responsibility of maintaining law and order salary debt servicing obligation. In the same way in fiscal year 2010/11 regular expenditure and development expenditure are RS 170295.4 million and 107847.5 million respectively. Therefore the factor of demand side and supply side has made influence in increasing public expending in the Nepalese Economy.

A sound revenue policy tries to mobilize resources according to expansion in economy if this coordination is not maintained the problem of resource gap becomes more acute in the course of expanding public expenditure programmed. There are two types of resource gap: Domestic resource gap and overall resource gap. In the context of Nepal domestic resource gap has been growing continuously. In the fiscal year 1992/93 the gap was RS 15749.3 million and domestic resource gap as % of GDP

9.52 which was highest in the fiscal year 2000/01 RS 30941.5 million. In the fiscal year 2007/08 domestic resource gap is RS 53727.4 million and overall resource gap as % of GDP was 4.61. So the gap between domestic and overall resource gap is of increasing tendency. The increasing trend of resource gap resembles that ceteris paribus, either the resources have been diverted toward the non-productive type of recurrent expenditure and spillover effect in the economy.

Budget is just an implementation of plan of country that has specified social objectives both short run & long run. Problems of Nepal regarding public spending are due to the lack of coordination between policy formation and implementation. So, the budgetary process is being to fail in overall resources allocation practices.

1.3 Objectives of the Study

The objectives of the study are given below:

- (a) To analyze the trend of public expenditure in Nepal during 1990/91 to 2010/11.
- (b) To examine the relation of public expenditure with Gross domestic product, Import and Money supply.

1.4 Significance of the Study

There is no doubt that Nepalese fiscal systems are no more stable even though the study has particular significant. Mainly the research study tries to analyze the trend of public spending and relation of public expenditure with gross domestic product, import and money supply how become effective to generate the output. So this study would helpful to researchers, planners, universities students, policy makers, other interested and related personals.

1.5 Limitation of the Study

The limitation of the study is given below:

- I) This study is based on the secondary sources of data. No test is done to check the reliability of those data.
- II) The study covers only period of fiscal year 1990/91 to 2010/11.

- III) This study mainly deals with public expenditure and economic development in Nepal, but it doesn't study the organizational aspect and other aspect of government of Nepal.
- IV) There are many economic factors to see the relationship with public expenditure; if time and resource are constraint we consider that the relation of public expenditure with GDP, Import and Money supply are more relevant factors in this thesis.

1.6. Organization of the Study

There are five chapters in this study and each chapter is further divided into various sub-sections. The first chapter which is the introductory portion gives a general overview of the whole study.

The second chapter attempts to literature review. Review of literature deals with the theoretical context along with both the international and national context the relevant articles of the study. The third chapter provides the methodology of the study, sources of data, methods of analysis and variables used in the study, various statistical tests are used to establish the relationship between variables are the core of this chapter.

The fourth chapter relates our subject of the study with the scenario of Nepal. The trend, pattern and growth rates of public expenditure with in table. And analysis to examine the relation of public expenditure with Gross Domestic Product (GDP) Import and Money supply also. This means empirical findings that will show what would be the relation of public expenditure with GDP, Import and Money supply separately.

Finally, the last chapter carries conclusion of the study and recommendation that may be helpful in formulating policies. Appendixes and bibliography are presented after the last chapter.

CHAPTER–II

REVIEW OF LITERATURE

2.1. Introduction

There are many research papers, books, surveys, articles, economists have argued about public expenditure in different time period. Some research papers and dissertations are concerned with developing economy and with industrial economy. Classical economists suggested that government should reduce their expenditure, they believed in the existence of the full employment in the economy and there is no need of government intervention. After the great depression of 1930s J.M. Keynes brought thought of economics, he justified the role of public expenditure is achieving full employment and pausing up the rate of economic growth. Government should make deficit budget huge amount of spending according it Keynesian school.

Different researchers of the trend, relation and achievement of public expenditure come off with their own findings. In this regard it is worthwhile to review some of the relevant literature both by international and by the national researchers.

2.1.1. International Context

Phillip Taylor (1961) in his study." The Economic of Public Finance " discussed the significance of public expenditure stressed the expansion of government had often been characterized a movement in the direction of socialism that government obviously tended to socialize through public expenditure. It helped to correct the disorder that had created by cyclical fluctuation, which mostly appeared during the depression. Public works projects and landing functions during the depression were instituted to cushion the effects of the worst features of capitalism. Its recurrent tendency to break down 'pump-priming' the injection of public expenditure to fill avoid left by deficient private expenditure in recession has as its goal the prevention of serious break down.

According to Hagen (2005) made a study on Budgeting institutions and public spending concerned with the political economy of the budgeting process and

discussed the implications of incomplete contracts voters with political. In the view of these incomplete contracts, politicians can use targeted public policies to ensure their confirmation an office. Because there was a disconnect between those who bear the burden of financing and those who benefit from such policies, such as environment has generated potential for excessive levels of spending taxation and borrowing as commonly observed in developing countries.

Larry Schroeder (2007) in his study ' Forecasting Local Revenues and Expenditures' reviewed the rationales for and techniques available to local government financial managers for forecasting revenues and expenditures in developing and transition economics. It illustrated how the techniques can be used and buttresses that discussion with illustrations of how they are actually used.

The World Bank studied on the role of public finance in development in 1988. One aspect of sound public finance is the prudent control of fiscal deficit. The report has underlined some general conclusion on public spending in developing and industrial countries (World Bank). In most developing countries the share of central government spending in gross national product (GNP) remains below that of the industrial countries central government spending as a percentage of GNP is higher in low and middle income countries than in the industrial countries. Next, in developing countries the public sector trends to play a greater role as an investor than in industrial countries. Another is in most developing countries state owned enterprises account for important shares both of total public spending and gross domestic product (GDP). The state and local government appear in general to have smaller role in developing countries than in industrial countries.

Recently, in the year 1996 United Nations has analyzed the role of public expenditure in the provision if social services focusing mainly on education, health, water supply and sanitation and the housing sector. The United Nations reported that allocation to the education sector continued to constitute the largest share of the government budget devoted to social services in the developing countries of the economic and social commission for Asia and Pacific (ESCAP) region. In Pakistan expenditure on education as a proportion of the total public sector expenditure increased from 5.9% in 1975to 7.4% in 1993, while in china this proportion increased from 13.8% in 1985

to 14.9% in 1992. In Nepal, the share of education sector in total development expenditure increased from 14.2% in 1986 to 18.7% in 1994,(UN 1996).

Alan a Tait and Heller (1982) made study on "International comparison of Government Expenditure ". This study provided a comparable framework for comparison of both functional and economic expenditure pattern of countries having similar economic and demographic position. It further provided in an implicit technological norm for predicting the economic characteristics of a country's expenditure pattern, based on its choice of priorities for functional expenditure. They concluded that first, many international cross section studies of government revenue and expenditure used per capita income as a proxy for most of the underlying demographic, social and economic differences. Second, it is encouraging to note how plausible the modeled relationships are; it is also reassuring to see how most of the expenditure indicates for individual countries performances and attitudes. Third the technical coefficient functional categories that determine economic categories of public expenditure are powerful and suggestive.

Finally, without a doubt, this study provided departure points for discussions and assessment of government expenditure policies in individual countries. countries in the developing world spend more on economic services ranging from a fifth to a third of total expenditures while industrialized countries spend much less. Premchand, speaking about the year in 1978,states" Defense expenditures don't lend themselves to any clear conclusion ,owing to the cost sharing arrangements of alliances and to the geopolitical forces at work. Public expenditure has had a positive impact in terms of bringing about substantial improvements in indicators of achievement in different social sector. These include the unacceptably high degree of dispersion in achievements among countries, persistent in equalities with in countries, poor quality of services particularly in rural areas and inefficiency in the use of resources.

2.1.2 National Context

S.K. Singh (1977) in his book" The Fiscal System of Nepal" analyzed the consistency between fiscal policy of Nepal and targeted growth rate from the time series data over the period of 1954/55 to 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 public expenditure to GDP was just 2.44% in the fiscal year 1954/55 which increased to as high as of 10.57% in the fiscal year 1974/75. He also found that development expenditure ratio to GDP increasing from 4.07% in fiscal year 1965/66 to 6.75% in 1974/75. The growth rate of regular expenditure was quite slower registering 2.13% in 1965/66 to 3.82% in fiscal year 1974/75.

P.P.Upadhaya (1987) in his thesis of M.A. entitled 'Public Expenditure and Regional Development in Nepal'. A Macro case study found that the volume of development expenditure is increasing rapidly through it has not affected for the overall economic growth of the country. He concluded that the resource allocation practice were only growth promoting rather than balanced regional development.

Singh studied in pattern of HMG expenditure during the period of 1956/57 to 1976/77. He has found that HMG budgets show that between 1956/57 and 1962/63 (except 1961/62) revenue was not sufficient to meet even regular expenditure. Since 1963/64, there had been enough to meet development expenditure. Both regular and development expenditure had been rising fast. According to him, investment in the public sector establishment of regional growth centers and decentralizing of administration in a number of areas, maintenance expenditure, social service expenditure, increase in salary and debt servicing explain for rapid growth HMG expenditure (1977).

IDS have reported that the government expenditure has grown rapidly relative to the country's gross domestic product (GDP). In 1974/75, the share of government expenditure in GDP was only 9.13%. In 1984/85, this share had increased to 20.11%. The expenditure on economy services to GDP ratio was the highest for every year. Nevertheless, the most rapid growth as reflected by the data was with respect to the payment of interest. Its share in GDP had increased to 1.21% in 1984/85 from 0.20% in 1974/75. IDS moreover, found that a major feature of government expenditure in Nepal was the dominance of current expenditure over capital expenditure. In the absence of effective countervailing forces, the former was expanding at the expenses of the latter. The current expenditure, which was only 51.41% of the total expenditure in 1979/80, reached 59.24% in 1984/85. Except in the year 1981/82 and 1983/84,

current expenditure had tended generally to take an upward trend. In 1984/85, current expenditure rose from 56.04% of total expenditure in previous year to 59.24% possibly due to a large increase in the salary of government employees (IDS, 1987).

Rana has analyzed the fiscal system of Nepal during the period of 1964/65 to 1986/87. With his study, he has concluded that there has been a constant increasing trend in revenue expenditure. The trend of regular and development expenditure has created a continuous deficit that has compelled the government to rely excessively upon foreign aids. The amount of deficit has increased rapidly because of a rapid increase in the volume of regular and development expenditure. During the period under review, regular expenditure has increased from RS 117.94 millions to RS 4307.1 millions in 1986/87. Similarly, development expenditure has also increased from RS 239.91 millions to RS 8745.5 millions in 1986/87. Total expenditure taken together has increased from RS 349.85 millions in 1964/65 to RS 13052.6 millions in 1986/87. Consequently, a rapid increase in the volume of deficit has been recorded amounting to RS 157.51 millions in 1964/65 to RS 7177.5 millions in 1986/87 (Rana, 1988).

Lohani has analyzed the trend of public expenditure, government revenue and problem of resource mobilization. He has concluded that the public sector is draining a private saving towards unproductive regular expenses instead of channelizing it towards productive investment in the study period of 1974/75 to 1990/91. In spite of a tremendous increase in the size of public sector, it has failed to generate surpluses required to finance, generate and sustain the process of development. Nepal's external dependence has risen alarmingly, he has argued that the continuous extension of budget without evolving medium and long-term investment planning and expenditure programming has delinked planning with annual budgeting for more resources have been allocated to capital items. Both macro and sectoral planning have been found to be weak due to the absence of rigorous cost-benefit analysis and programmed budgeting, three decades of planning have failed to substantiate a long-term perspective plan with the view to maintain consistency among macro and sectoral physical targets on the one hand and insure necessary resources to the sectoral programmes on the other hand (Lohani, 1993).

Basyal has carried out a research about the growth of development expenditure of Nepal in different plan periods and sources of financing it. He has underscored the

dominance of foreign capital in Nepal's plan financing. During the fifth (1976 to 1980), the sixth (1981 to 1985) and the seventh (1986 to 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 downward share of the revenue surplus in meeting the development expenditure (Basyal, 1994).

Upreti, has studied government expenditure pattern in Nepal covering the period of 17 years (1975 to 1992) using the simple regression analysis method and graphical analysis. He has drawn conclusion that the growth public expenditure in Nepal taken place rapidly than the growth of GDP of the country. He has pointed out that the major chunk of regular expenditure has been gone to loan repayment and interest services indicating the dominance of foreign aid in the Nepalese economy. The trend of allocation of development expenditure has presented the situation that the larger % of development has gone to economic services followed by social services, communication, transportation and electricity (Upreti, 1996).

Similarly, Sharma has also found the steady growth in the public expenditure in the 1980s and in the first half of 1990s. With an average annual growth of 17.7%, it has been rising faster than GDP. Nevertheless, the relatively growth in the public sector has seen as related to the growth of real per capita income. Instead, it seemed to be affected by the foreign aid given the domestic resource constraint (Sharma, 1999).

Tenth plan has reviewed the ninth plan. During the ninth plan period, the government expenditure of RS 27846.8 corers over the targeted expenditures of RS 33729 corers at the constant price of 1996/97, created the expenditure gap of 17.4%. During the ninth plan period there has been annual average increase of 9.3% in the regular expenditure. During the plan period the development expenditure had been decelerating by 1.1% annually. The share of development expenditure force to limit it to 46.9% during the plan period. The targeted expenditure on economic services, infrastructure, and social services and miscellaneous was 29.4, 36.3, 33.4 and 0.9% of the development expenditure respectively. The actual figure turned out to be 22.7, 35.7, 39.9 and 1.7% respectively. The expenditure in productive sector especially on miscellaneous heading has exceeded the target, which the expenditure on productive

sector like economic services and infrastructures has remained below the target (NPC, 2002).

Pyakural 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 FY 1996/97 was 8.6 but increased to 11.5 in 2001/02. The revenue during the same period decreased from 7.3 in 1996/97 to 7.0 in 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 valuable external resources (Pyakural, 2004).

These arguments do not hold well in the present era. It is not universally true that the private person can use money in a better way. The state spends money in a much better way than the private persons in the performance of certain types of functions. So, public expenditure has emerged greater importance modern times for two reasons. Firstly, the economic activities of the state have increased manifold. Secondly, the nature and volume of public expenditure have important effect on production, distribution and the general level of economic activities. Therefore, it is the need of the hour that state should participate in almost every field and the government is responsible even for small matter. Prof. Musgrave advocated that 'Public expenditure should be forced to deal with many day-to day activities like re-allocation of resources, redistribution activities, stabilizing activities and commercial activities'. (Lekhi, 2005).

Public expenditure shows the decision of the parliament and other independent executive bodies for the scope of public expenses. It is measured with respect to public expenses made by government in the previous year or last functional interval. Technically, most government classifies it into two parts as current expenditure and capital expenditure.

Mahendra B.C 2009 his Thesis of MA entitled an analysis of Public Expenditure in Nepal. This study is primarily confined to the analysis of trend and pattern of Public Expenditure and impact on GDP during the period 1991 to 2005. He found that the regular expenditure has surpassed the development expenditure as against the accepted fiscal norms; development expenditure exceeds the regular expenditure until fiscal year 1997, then after it is lesser than regular expenditure. He has also explained that public revenue is growing slow or than expenditure leading to the widening resource gap. This gap is further extended by the weakness of government toward strong commitment, clear vision and sufficient assessment necessary to chose programs to allocate budget for them In Nepal.

Finally, analyzing at year- to –year growth, found that regular expenditure has fluctuate less than development expenditure. This has happen largely because rigidity were being steadily built into regular expenditure, as a result adjustment varying through public spending entailed a high social cost to the economy, by curtailing development expenditure. Thus, with the growth of regular expenditure, the flexibility of spending policy as a tool for economic management has been drastically limited.

2.2 Theoretical Concept

The role of public expenditure is the functioning of the economy is an important at almost all stages of development .Musgrave has analyzed this changing role under what he calls "a theory of public expenditure development "The present time every individual contribute s to financing the government expenditure with the help of taxation . Determinants of expenditure development are economic as well as conditioning & social factors. So the size of governmental outlay depends on the income elasticity of demand for private against public consumer goods.

Public finance is a field of economics concerned with how government raises money, how that money is spent & the effect of these activities on the economy and on society. Public finance studies how governments at national, state and local all level provides the public with desire services & how they secure the financial resources to pay for these services.

Government expenditure consists of spending on real goods and services purchase from administration, defense & education, spending on transfer payments to pensioners the unemployed & disabled, spending on subsidies and grants to industries and payment of debt interest (Black 2002). Thus in analyzing the determinants of the share in gross domestic product (GDP) of public spending in a sector the level of development seems to place a fundamental limit on possible spending in many sectors. It may also influence the likely balance in spending between the economic sector, social & administrative sectors.

2.2.1 Public Expenditure in Developing and Developed Countries

In the case of developing countries government spending account for higher show of national income than it aid when the industrial economies of today at comparable levels of per capita income. It can be also noted that the share public spending in GDP is rising. The fiscal policy closely related with the expenditure programs of the government stabilization. Stabilization is the measure role of fiscal policy to be played in developed countries. But in underdeveloped countries fiscal policy besides stabilization, should aim to promote economic growth, employment level and redistribution of income.

2.2.2 Pure Theories of Public Expenditure

Many economists are developed theory of public expenditure but, the pure theory of public expenditure relates to those principles which govern the optimal provision of public goods Mainly, "ability to pay" principle and "benefit "principle are consider in this context.

2.2.2.A) Ability to Pay Theory

Pigou Approach

The ability to pay theory to be used to determination of optimum level of public expenditure has received must comprehensive treatment in hand of Pigou. Singh explains Pigou's view as that goods and services which are provided by government departments and can be sold for fees so arranged as to cover cost of production pose no problem. The amount of resources that should be devoted to this purpose is

determined automatically by public demand. Nevertheless, fees can cover neither bulk of non transfer expenditure of government such defense, civil administration and so forth nor transfer expenditure. Hence, there is no automatic machinery to determine how far expenditure shall be carried and some other method has to be employed (Singh1991).

The optimum amount of government expenditure is determined at the point at which the satisfaction obtain from last rupee spent is equal to the satisfaction lost in respect of the last rupee called upon by government service. Pigou states the condition when government expenditure would be larger. First, the greater is the aggregate income of community, the larger will be the optimum amount of government expenditure. Second, under the circumstance where new opportunities for expenditure through government are opened up with no corresponding opportunities for private expenditure, balanced between marginal benefit of expenditure & marginal disutility of revenue will be struck at higher point. Third, given aggregate income and population, greater the concentration of income in hands of a few rich persons higher the optimum level of public expenditure. It is because tax scheme can be framed as to rise given revenue with lower marginal sacrifice.

2.2.2.B) The benefit Principle

Samuelson Approach

Samuelson developed a pure theory of public expenditure, which aimed for the optimal resource allocation in an economy in which there are two types of goods, private and public. The theory takes into account both allocation & distribution facets of the problem and thus presents a unified system of general equilibrium (Samuelson1955).

Samuelson considers the optimal choice between private consumption good like tea (X), and public consumption good like national defense (G), in a two-man economy (A&B). Since X is a normal private good, which is divisible in consumption; that is amount of X consumed by A cannot be consumed by B, & conversely. This can formally be stated by the condition that $X_a + X_b = X$ where X_a & X_b represent the amount of private good X respectively consumed by A & B.

Since G is pure public good, it is not divisible in consumption. The amount of g is equally available for consumption by each person; the total amount of G is in a sense consumed equally by each. This can be stated formally by the condition that: $G_a = G_b = G$, where G_a & G_b represent the amount of Consumed by A & B respectively.

Samuelson further assumes that the tastes of A & B are constant and society's production possibility frontier as given. The condition needed for efficiency in a world of private and public good can be stated as follows:

- For efficiency between private goods,

$$MRS^A = MRS^B = MRT$$
- For efficiency between private good and public good,

$$MRS^A + MRS^B = MRT$$

Where, MRT is marginal rate of transformation between X & G and MRS^A & MRS^B are the marginal rate of substitution between X & G for individuals A & B respectively.

In general case for an economy characterized by the existence of public goods, private goods and many individuals, the condition for the optimal supply of public goods. Therefore, that the sum of the marginal rate of substitution must equal the marginal rate of transformation.

$$\sum_{i=1} MRS_{ijk} = MRT_{jk} \quad \begin{array}{l} i=1 \dots n \text{ (the number of individual consumers)} \\ \text{and } j, k=1 \dots m \text{ (the number of commodities)} \end{array}$$

So, the Samuelson's model for the optimum supply of pure public good is a general equilibrium model which determines the existence, uniqueness and stability of a set equilibrium prices of public & private goods.

Lindahl-Johansen (L-J) Approach

At first Lindahl developed the theory and recently viewed by Johansen assumes a fixed distribution of income between individuals who consume a private good X & a public good G. L-J start off with the some assumptions that each individual has fixed

budget constraint and the distribution of income as between individuals and group is given.

This theory concerned with the allocation of resources between the public and private sector against the background of 'state of income distribution already accepted by the community as just proper'. In the theory of welfare economics, under certain conditions when consumer & producers maximizes respectively, their utility & profit on the basis of prices which none of them can alter, conditions necessary for Pareto optimality are satisfied. Such conditions do not prevail in the 'bilateral monopoly' discussed in the Lindhal version (Methew.1972).

2.3 Classical Views on Public Expenditure

Classical economists developed esoteric argument to justify the role of government and thus defined the areas of public wants. They were against the heavy role of government because they believed on full employment. The classical economists were the followers of the doctrine of *lassiez faire*. According to them; economics function best under private initiative & competitive conditions rather than under state control. Their arguments were designed to restrain government interference in private sector because government has viewed with apprehension & fear hence, was suspected of corruption. The position of classical economists can be epitomized "The less government the better"(Khanal, 1998).

Musgrave (1959) has given to raise the large & growing literature on the theory of public goods. According to Froyen, classical economists mistrusted government and stressed the harmony of individual & national interest when the market was left unfettered by government regulations, except those necessary to see that the market remained competitive (Froyen 2003).

2.4 Keynesian views on Public Expenditure

The foundation of Keynesian theory is the failure of classical theory. When the former asserted that the competitive process of free enterprise economy does not necessarily ensure an effective demand such as to absorb all productive resources at full employment. Supply does not operate its own demand economy may attain equilibrium at underemployment level.

According to Keynes lack of spending is basic causes of depression. The decision to save in the household sector did not necessarily lead to a decision to invest and the government had to step up its expenditure in order to "prime to pump" of the economy. At the level of income corresponding to full employment, the gap between total income and total consumption is so high in a mature economy that private investment is inadequate to fill it. If unemployment is to be avoided, the gap must be filled either by government expenditure or by increasing the propensity to consume.

To show the positive effect of public spending. Keynes uses the concept of government. The model is:

$$Y=C+I+G\text{..... (1)}$$

Where Y= Aggregate national income in three sector economy

C= Consumption expenditure

I= Investment expenditure

G= Government expenditure

$$C= C_a+bY\text{.....(2)}$$

Where C_a = autonomous consumption

b= marginal propensity to consume and $0 \leq b \leq 1$

$$I = I\text{..... (3)}$$

$$G = G\text{..... (4)}$$

From equation 1, 2, 3 & 4:

$$Y= C_a+bY+I+G$$

$$(1-b) Y= C_a+I+G$$

$$Y = \frac{1}{1-b} (C_a+I+G)$$

$$dY= \frac{1}{1-b}$$

And $\frac{dY}{dG} = \frac{1}{1-b}$ which is government expenditure multiplier.

$$\frac{dY}{dG} = \frac{1}{1-b}$$

In Keynesian view budget deficit is positive instrument to shore up aggregate income to stimulate all vectors to spend more. At the time of depression, Keynes favors higher public expenditure through deficit financing which can increase effective demand. And the period of inflation, better to reduce public expenditure & also impose heavy tax through surplus budget.

2.5 Wagner's Law of Expanding State Activity

Adolph Wagner analyzed the data on government expenditure for several developed countries. Then found the conclusion that the share of public spending in GDP had been increasing over time and that this trend would continue if future. Wagner's analysis provided a theory rather than just description & an economic justification for the prediction is known as "Law of increasing expansion of public particularly state activities " The basic causes of relative growth of government expenditure according to Wagner is social progress. This is in addition to provision of law and order, government participation in the production of economic goods, inclusion the provision of certain "social product". When real per capita income grows, investment in these social products tends to increase it helps to push up the magnitude of government expenditure.

Among the factors making for changes in the sector of economy, which influence public expenditure decision, particular mention was made by Mathew, may be of the four factors (Mathew, 1972). In his law income increases, the effective demand for goods & services also increases is known as income effect. Another is population effect, with the growth of population increases, in the flow of real income accruing to individuals; the pace of urbanization has also increased at a rapid rate. Even a part from providing the required public services to the urban areas, the sheer increase in population places on the public sector institutions obligation of a kind. The third effect is urbanization effect, there is also possibility of an expenditure becoming more and more widely diffused because of the increase in the size of urban community. The fourth is technological effect, when rises public spending also increases new technology and innovations.

2.6 Peacock Wiseman Hypothesis

From the empirical analysis of the data on public expenditure for the British economy during the period 1890 to 1955, they were able to establish that fiscal activities had risen step by step to successive new heights all along the period they had investigated. Some social disturbances, war & depression take place which shows the need of increased expenditure as the existing public revenue could not meet the situation. Peacock and Wiseman analyzed the process of growth of public expenditure in terms of three separate but related concepts of the displacement, inspection and concentration effects. Social disturbances create a "displacement effect" by which the previous lower tax and expenditure are replaced by new & budgetary levels. The increased expenditures are partly direct result of disturbance while other frequently involves the expansion of government into new areas of economic activity. For instance war and other social disturbances frequently force the people and their government to find out of the problems, which previously had been neglected. This is known as "Inspection effect". And concentration effect refers to the evaluation of expenditures under taken at different level of governments & tendency to be concentrated in the central government.

2.7 Critical Limit Hypothesis

Colin Clark developed the theory of 'critical limit' hypothesis regarding tax tolerance. He used on the interwar data of several western countries and argued that inflation inevitably occurs when government expenditure financed out of taxes & other receipts 25% of aggregate national income. This has been alleged to be true even under circumstances when the budget remains in balance. Public expenditure beyond a stipulated level will cause inflation only if there does not exist initially sufficiently unused capacity to cater to the increased demand and if the additional public spending to release resources necessary to meet the requirements of increased public expenditure.

This theory holds that by increasing taxes & restricting credit, it is possible to cut down expenditure in private sector & there by accommodate increased public expenditure by releasing sources from private use. Therefore, when it is asserted that public expenditure beyond a specified limit will generate inflation, it seems to imply that reduction of private expenditure on account of personal consumption & private

investment is either possible or undesirable. If any of these contentions is conceded, it will be true that additional public expenditure will cause inflation in the economy.

2.8 Stanley Please Hypothesis

Stanley Please Hypothesis deals with the cause and sources of increasing government expenditure in Least Developed Countries (LDCs) with its effectiveness and overall impact on economy. According to Stanley Please public expenditure especially for consumption is driven by available resources rather than the other way around. His question is, is increasing government saving by taxation is reality or mirage? His conclusion is if government increase the tax, theoretically increases in national saving. But increasing in tax rate that implies to spend more: such expenditure is not only increased in investment but also increased in government consumption. So, that increase in national saving is mirage by the taxation. So, Please effect is relevant in developing countries. He suggested some policies in expenditure management.

- A) Government should be more rational and more self disciplined in determining public expenditure policy.
- B) Expenditure on current activities and alternative uses of revenue should be calculated. Spending on education and health is taken as both current expenditure and capital expenditure as it provided benefit to the country after a lag of many years.
- C) In case of foreign loan, the productivity that it yields and the liability that the country has to pay later should be calculated and has to be used in beneficial project.

Conclusion

In conclusion the findings of various researchers largely differ. This is because different researchers examine and analyzed their studies through different aspects. Some are concentrated mainly in social sectors, some are in the impact of public spending in various sector and some are concentrated in pattern and growth of public expenditure. After reviewing relevant literature in the context of Nepal, increasing trend of public expenditure from 1990/91 to 2010/11 than upward trend in reliance in foreign resources and downward shares of the revenue surplus to meet development

expenditure underlines increasing trend of resource gap and high dependence of development expenditure in external resources.

CHAPTER–III

RESEARCH METHODOLOGY

3.1 Research Design

This study is divided into two parts; the first part presents the descriptive analysis of trend, pattern and growth of public expenditure with its sources of financing in Nepal. Trend and pattern are presented using simple statistical tools like average, percentage by tabular analysis the second part presents to the empirical analysis which analyze the relation of public expenditure with gross domestic product (GDP), Import and Money supply separately. Different statistical methods of different tests like t-test, R^2 test, F-test, Adjusted R^2 & t-test are used and find out the significance of result.

3.2 Period of Study

This study shows the trend of public expenditure during the period of 1990 to 2011. The budgetary system of Nepal shows classical deficit budget character. During early 1990s, democracy was restored in the country and implemented the eight plan 1992-1997. At the plan period government introduced open, liberal & market oriented policy which, increased the role of government. The budgetary contents are not same today they were initial period 1952. like, the heading & subheadings of public expenditure are changed in different time period which had made complicated to analysis. Gross domestic saving, gross national saving, & total investment of data are not available in starting period of the study. On the other hand, FY 2010/11 is the last year of this study the availability of actual data on gross domestic saving, gross domestic product, expenditure, revenue and so on which supposed to analyze the trend & sources of government expenditure in Nepal.

3.3 Sources of Data

The research study is based on secondary sources of data. They are Economic Surveys, MOF, GON, Quarterly Economic Bulletin, NRB, Financial Statistical Year Book etc. The other bulletin and publication like budget speech of various years, monthly reports & economic reviews of NRB & CBS are also used for information

has been used as a deflator. Although separate price deflator for public expenditure is needed in the absence of suitable deflators.

3.4 Specification of Some Variable

The purpose of this chapter is to examine the substance questions: Is statistical evidence of government expenditure has significance relation with GDP growth? Some other related variables are defined below:

3.4.1 Regular Expenditure (RE)

Regular expenditure is used to pay salary to the government employees, payment of interest on loan, expenditure of maintaining law & order etc. It is current outlays on public consumption and revenue expenditure.

3.4.2 Development Expenditure (DE)

Development expenditure is used particularly for development activities of the countries including structural changes and annexation such as construction of roads expansion of electricity, drinking water, telecommunication facilities etc, are needed to forward economic activities for higher economic growth and development

3.4.3 Total Expenditure (TE)

The total expenditure is the sum of regular expenditure and development expenditure.

3.4.4 Gross Domestic Product (GDP)

Real gross domestic product at 1994/95 prices has been used in this study .To make nominal GDP to real GDP, GDP deflators calculated by Central Bureau of Statistics has been used.

3.4.5 Imports

The term import denotes total import from India and other countries. Due to the lack of import deflator, Indian wholesale price index has used as a deflator to change real nominal imports.

3.4.6 Money Supply

There are two commonly used monetary aggregates in Nepal i.e. narrow money supply and broad money supply. Here narrow money supply has been used in the analysis and also includes the impact of net foreign assets in public expenditure.

3.4.7 Net Foreign Assets

Net foreign assets are external factors which has stronger effects on supply of money.

3.5 Statistical Tools

Macro models being simultaneous in nature can be estimated through various methods none the less, the methods of ordinary least square (OLS) has own the debate to a great extend. It is an established fact that if any method other than OLS is used for estimation and other test are like t-test & F-test. In general following models are used for analysis.

3.5.1 Regression Analysis

Simple regression equation has been used while carrying out relation of public expenditure with some economic factors. Whereas log linear regression equation is employed while examine the relation of regular expenditure and development expenditure on GDP, import and money supply respectively. Regression equations are defined as:

3.5.1 a) Relationship of Public Expenditure and GDP

The growth derived for the total public expenditure, development expenditure, regular expenditure GDP of the product of the country clearly verifies the proposition of expanding state activities. In this research try to analyze the phenomenal increasing tendency of both regular and development in comparison with the GDP of the country. It can be notice that the process of public sector expansion, administrative, defense, protective and other recurrent type of expenditure tended to increase as rapidly on social and economic overheads. And other hands social wants ranging from

consumption, capital foundation and transfer payments tended to increase rapidly overtime due to the expansion in the level of economic activity.

Thus, from the evidence share of different public expenditure categories in the GDP further reveals that during the process of intensive development. The expansion in the public expenditure takes place more rapidly than the expansion of GDP.

The regression equation of public expenditure on GDP is Log Linear Model expressed as:

$$\text{LnGDP} = a + b_1\text{LnRE} + b_2\text{LnDE}$$

Where,

GDP = Real gross domestic product

RE = Regular expenditure

DE = Development expenditure

3.5.1 b) Relationship of Public Expenditure and Import

Import and export are the main components in foreign trade. Import is generally regarded as endogenous variable in the macroeconomic models. Therefore, we have attempted to estimate import function only. From the point of view precise policy implication, imports may be disaggregated viz, consumption goods, raw materials and capital goods. The main objectives of estimating aggregate import demand function has been to find out that to what extent increase in public investment expenditure vis-à-vis aggregate private spending leads to increase the size of import. Besides, it has also been attempted to examine the effect of regular expenditure and development expenditure variables.

So the log linear import function can be specified as:

$$\text{LnM} = a + b_1\text{LnRE} + b_2\text{LnDE}$$

Where,

M = Import

RE = Regular expenditure

DE = Development expenditure

3.5.1 c) Relationship of Public Expenditure and Money Supply

There is a fact that monetary and public sectors are highly interrelated in development country like Nepal. Due to the budgetary constraints, the budgetary deficit is improved either through foreign help or through internal loan and cash balances, which haven't only important bearing on price level but also on real expenditure and revenue, foreign trade, foreign assets and so on. The results obtained for the reserve money function clearly reveal that total nominal public expenditure variable has strong influence on the supply of money through its effect on reserve money.

The log linear money supply function is derived as:

$$\text{LnMS} = a + b_1\text{LnPE} + b_2\text{LnNFA}$$

Where,

MS = Money supply

PE = Public expenditure

NFA = Net foreign assets

In the assumption of that money multiplier relatively constant in developing countries, like Nepal. So the increase in nominal public expenditure will have direct impact on money supply and on price. The change in reserve money occurs mainly through the changes in international reserve, changes in central bank's claims on government and simply the reflection of the fiscal deficit due to the budgetary constraint.

3.5.2 Coefficient of Multiple Determinations (R^2)

Coefficient of multiple determinations explains how good is the fit of the estimated regression line to the sample observations of Y and X. therefore, it is the measurement of the dispersion of observation around the regression line.

R^2 is taken as a measure of goodness of fit as it shows the percentage of total variation of the dependent variable that can be explained by the independent variables of the multiple determinations. The higher the dispersion of the observations from the

regression plane, higher the total variation. In other words, closer the observation to the line, the better the goodness of fit, i.e. the better explanation of the variations of Y by the change in the explanatory variables (Aryal, 2010)

The value of R^2 ranges from 0 to 1. If the value of R^2 approaches to 1, the regression plane thus estimated is a good fit and if it approaches to 0, it implies the bad fit. It is because increasing R^2 means explaining more of the total variation by regression plane.

3.5.3 Adjusted Coefficient of Multiple Determinations (Adj. R^2)

The value of numerator in R^2 increase with the addition of new explanatory variable that finally affect the presentation of the result and decision made based on R^2 (Aryal, 2010). So, the adjusted R^2 is calculated to overcome this problem.

$$\begin{aligned} \text{Adj. } R^2 &= 1 - \frac{\text{Unexpected variation / d.f. for unexpected variation}}{\text{Total Variation / d.f. for total variation}} \\ &= 1 - \frac{\sum e^2 / n - k}{\sum Y^2 / n - 1} \end{aligned}$$

Where,

n = number of observations,

k = number of parameter,

d.f. = degree of freedom.

3.5.4 Test of significance of parameters

It is applied for judging the statistical reliability of the estimates of the regression coefficients. Gujarati defines test of significance is a procedure by which sample result are used to verify the truth or falsify of a null hypothesis (Gujarati, 2004). In order to test the hypotheses, following tests are performed:

i. t-test

Hypothesis testing or test of significance is different for large and small sample cases. In practice, most of the statistician conclude that a large samples is that which exceed 30 samples units (i.e. $n > 30$). For small sample (i.e. $n < 30$), t-test is applied.

The computed t-test is compared with the tabulated value of a certain level of significance for a given degree of freedom. If calculated value is greater than tabulated value, the null hypothesis is rejected inferring that estimated coefficient is significantly different from zero. It is defined by:

$$t = \frac{\hat{\beta}_i}{S.E.(\hat{\beta}_i)}$$

Where, $S.E.(\hat{\beta}_i)$ = Standard error of $\hat{\beta}_i$

$$= \sqrt{\text{Var}(\hat{\beta}_i)}$$

The t statistics has N-k degree of freedom.

N= No. of observation,

K =No. of parameters in the regression.

ii. F-test

This is used to examine the overall significance of the model. It is also a test of significance of R^2 . It is also known as the variance ratio test and is mostly used in context of analysis of variance. The value of F must lie between 0 to ∞ .

It is calculated by the following formula.

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

Where, R^2 = coefficient of determination

K = numbers of parameters and N = numbers of observation in the sample.

There is direct relationship between F and R^2 . The larger the R^2 , greater the F value. In the limit, where $R^2 = 1$, then F is infinite. The calculated F-variance ratio is compared with the tabulated value at specific level of significance with $V_1 = (k-1)$ and

$V_2 = (N-k)$ degree of freedom. The same rule rejecting and accepting the hypothesis are applicable as in the case of t-test.

3.5.5 Hypothesis of the Study

Depending upon the model developed in conceptual framework part, the following hypotheses have been tested here were H0 stands for null and H1 stands for alternative hypothesis.

1. H0: Public investment makes positive impact on GDP growth. (i.e. $b_1 > 0$)
2. H0: There is positive association between government expenditure and imports (i.e. $b_2 > 0$)
3. H0: There is positive association between government expenditure and money supply (i.e. $b_1 > 0$)

CHAPTER-IV

TRENDS OF PUBLIC EXPENDITURE

4.1 Introduction

Government expenditure is a synonymous of public expenditure, is the expenditure allocated for the functional and development cost of the government not only at the national level but also at local level for public services for the welfare of the people. In order to provide economic and social welfare the political agents influence in the estimation of public expenditure and distribution in accordance with their own socio-economic objectives. In Nepal, objective of government expenditure are for stability, growth & welfare. The main component of budget is government expenditure & government revenue. The expenditure is classified into a) object classification, b) functional classification and c) economic classification.

The establishment of democracy realized the necessity of national budget in Nepal and first annual budget was announced in 1952. Budget is presented by minister of finance of first elected government in 1958/59 is considered as the first scientific budget of Nepal (1999). Mainly, there were to cause increases the public expenditure, was needed to increase for development activities and growth of public expenditure was accelerated to make institutions for development activities due to increasing pressure for the development. In 2010, it is 288 billion rupees with is double of 2007 (143 billion rupees) and nearly triple of 2001 (100 billion rupees). In conclusion it enlarges the size of budget in the country.

4.2 Reforms in public expenditure

Nepal incurred large fiscal deficit following the 1980 referendum the verdict of which went into favor of party less panchayat system against multi party system and from mid 1980, the reforms in fiscal system were started (Acharya: 1999). Successive government formed after the referendum followed an expansionary fiscal policy. The widened deficits were financed largely from domestic resources. From this fiscal deficits give pressure on the balance of payments leading it to deficit for three consecutive years fiscal year 1982/83 to 1984/85 (ibid: 1999). These crisis leads on

the contents of economic reforms were largely the result of negotiation conducted with the IMF and World Bank for financial assistance (ibid: 1990).

The reforms in public expenditure front as such were launched during late 1990s when the government was preparing a comprehensive poverty reduction strategy paper (PRSP) the tenth plan. Critical action in this area include prioritizing all development expenditure on the basis of all development PRSP priorities, and providing adequate funding for high priority activities for this purpose a realistic medium terms expenditure framework was adopted, projects were ranked into these categories(P1, P2 and P3) (NPC 2000). National planning Commission and fiancé are optimistic that these initiatives will completely transform the traditional planning and budgeting fund allocation and release process. Unlike in the past when hundreds of questionable projects found their way into the development budget, producers for inclusion projects in the budget and for funding them now more transparent and explicit (MOF: 2004).

4.2.1 Medium Term Expenditure Framework

Medium Term Expenditure Framework is a transparent planning and budget formulation process in which finance ministry allocates public resources to their strategic priorities of development, while maintaining overall fiscal discipline. Due to recommendation of the public expenditure reform commission (PERC), MTEF is included in the tenth plan. The need for on MTEF has also been reinforced by a number of other considerations; the most important consideration is the poverty reduction strategy paper in the tenth plan. MTEF has different objectives to address different public expenditure issue. From that several reforms measures in the fiscal sector were introduce an initiated on both the revenue and expenditure side. The first budget (1997/98) 9th plan envisaged to pursue the objectives of poverty alleviation in a more co-coordinated, integrated and effective manner.

After coming to an end of tenth five year plan, NPC formulated and implemented the three interim plans, echoing the sentiments and expectations of the people's revolution. The interim plan was prepare to address issues specific to the transition period, in a post conflict situation. This plan put special emphasis on increasing public expenditure to assist relief and generate employment as well as on peace building,

reconstructions, rehabilitation, reintegration, inclusion and revitalization of the economy.

National planning commission more active in project selection, monitoring and evaluation MOF will require preparing budget on the basis of three years rolling expenditure plan. The midterm evaluation of the budget will be conducted on time and budget will be managed accordingly. In 2000 budget gave especial emphasis on reform in public expenditure management, revenue administration and improvement in the effectiveness of foreign aid.

In June 2002, Nepal government adopted the immediate action plan was design to expenditure reforms in three critical areas prioritizing public expenditures improving service delivery and strengthening anti-corruption and accountability measures. The main IAP points for public expenditure included setting a realistic budget ceiling and eliminating a number of low priority projects. Implementing public procurement and financial accountability reforms, public posting of budget information and tracking of expenditure.

On the recommendation of the 2000, public expenditure review and the work of public expenditure review commission in 2001 and promoted by the worsening fiscal situation, Nepal government decided to introduce. MTEF starting in FY in 2002/03, overcoming the entrenched tendency to seek increased foreign aid to cope with fiscal stress, the reform minded NPC and MOF used the fiscal pressure to motivate serious adjustment in budget allocation. The MTEF was a good beginning but was no sustained later. Budget in Nepal is driven by political objectives of the government. The Public Expenditure Report (PER) 2000, pointed out that the development budget is heavily over programmed, because of the political pressure.

In the tenth plan (2002-2007) had focused on reduction poverty supplemented by rolling Medium Term Expenditure Framework (MTEF). Which will be updated every year and provides for the first time in Nepal an effective mechanism to link the annual budget with the five year plan and adjustment in programs as needed. Private and non agriculture was given more priority with 76 percent resource allocation then social sector was given 38.6 percent. For such resources allocation, investment share of

private sector in the plan was 72 percent and the remaining resource was finance by government.

The Interim Approach paper is successor of the Interim plan (2007-10) had main objectives to reducing poverty and existing unemployment establishing sustainable peace by allocating proper expenses and effective service delivery. Interim Approach Paper (2011-14) approaches goals to Millennium Development Goal (MDG) by 2015, generating, employment, reduction of economic inequality, maintaining regional stability. In order to achieve development goals to improve socio-economic level of people, through poverty reduction and permanent peace through inclusive and equity based employment and economic growth by allocating proper expenses. This has been stated recent budget speeches and Millennium Development Goals etc.

Resource committee (RC) is chaired by vice chair person of National Planning Commission, comprising of member of NPC, Macro sector, governor of NRB. Financial controller general and secretary of ministry of finance. The RC determines the size of budget by analyzing overall economic situation of the country with the help of macroeconomic indicators. The NPC sets out the priority and policy goals with respect to plans and programs for forthcoming FY and provide necessary guidelines to the concerned ministry and the MOF, prior to sending of circular for preparation of budget. In the case of capital budget the first round of discussion takes place at the NPC.

An IMF report, on basic system of public financial management (PFM) 2010, observed that despite a well conceived PFM system with detailed legislation and regulation, there is increasing evidence that this is not working well in Nepal. It is threatened by lack of monitoring of fiscal risk, poor capital budget preparation and implementation and weak reconciliation of revenue accounts. Despite advance set of laws, regulation and process, there are gaps in the framework and implementation, the large fiscal activities remain outside and the scope of government budget. The report highlighted the following key deficiencies and supplemented by 2011(FAD) mission report in Nepal PFM system.

Government of Nepal has initiated several reforms majors to strengthen monitoring and evaluation system. Result base monitoring and evaluation guidelines 2010 has

been approved by NPC in July 2010. The guideline was prepared with wide consultation of sectoral ministries and other stakeholders including donor partners. So, the guideline will be implemented for donor funded programs and other priorities.

4.3 Trends of Public Expenditure

In Nepalese, budget is formulated under the tradition budgetary approach when total expenditure is divided by under the two headings viz; regular expenditure which is also termed as recurrent expenditure and development expenditure is termed as capital expenditure. In this studies try to analyze the trend of public expenditure during the period of 1990/91 to 2010/11.

Table 4.1

Trends of Regular and Development Expenditure and Percentage Distribution

Rs. in million

Fiscal Year	Nominal Distribution			Percentage Distribution (RE and DE as % of TE)		
	Total Exp.(TE)	Reg.Exp. (RE)	Dev.Exp. (DE)	RE	DE	Total
1990/91	23549.8	7570.3	15979.5	32.15	67.85	100
1991/92	26418.2	9905.4	16512.8	37.49	62.51	100
1992/93	30897.7	11484.1	19413.6	37.17	62.83	100
1993/94	33597.4	12409.2	21188.2	36.94	63.06	100
1994/95	39060.0	19265.1	19794.9	49.32	50.68	100
1995/96	46542.4	21561.9	24980.5	46.33	53.67	100
1996/97	50723.7	24181.1	26542.6	47.67	52.83	100
1997/98	56118.3	27174.4	28943.9	48.42	51.58	100
1998/99	59579.0	31047.7	28531.3	52.11	47.89	100
1999/00	66272.5	34523.3	31749.2	52.09	47.91	100
2000/01	79835.1	42769.2	37065.9	53.57	46.43	100
2001/02	80072.2	48863.9	31208.3	60.68	39.32	100
2002/03	84006.1	52090.5	31915.6	65.44	34.56	100
2003/04	89442.6	55552.1	33890.5	62.11	37.89	100
2004/05	120560.4	61686.4	40884.0	60.15	39.81	100
2005/06	110889.2	67017.8	43871.4	60.44	39.56	100
2006/07	133604.6	77122.4	56482.2	57.72	42.28	100
2007/08	161349.9	91446.9	69903.0	56.68	43.32	100
2008/09	219662.0	127738.9	91923.1	58.15	41.85	100
2009/10	259689.1	151019.1	108670.0	58.15	41.85	100
2010/11	295363.4	170295.4	125068.0	57.66	42.34	100

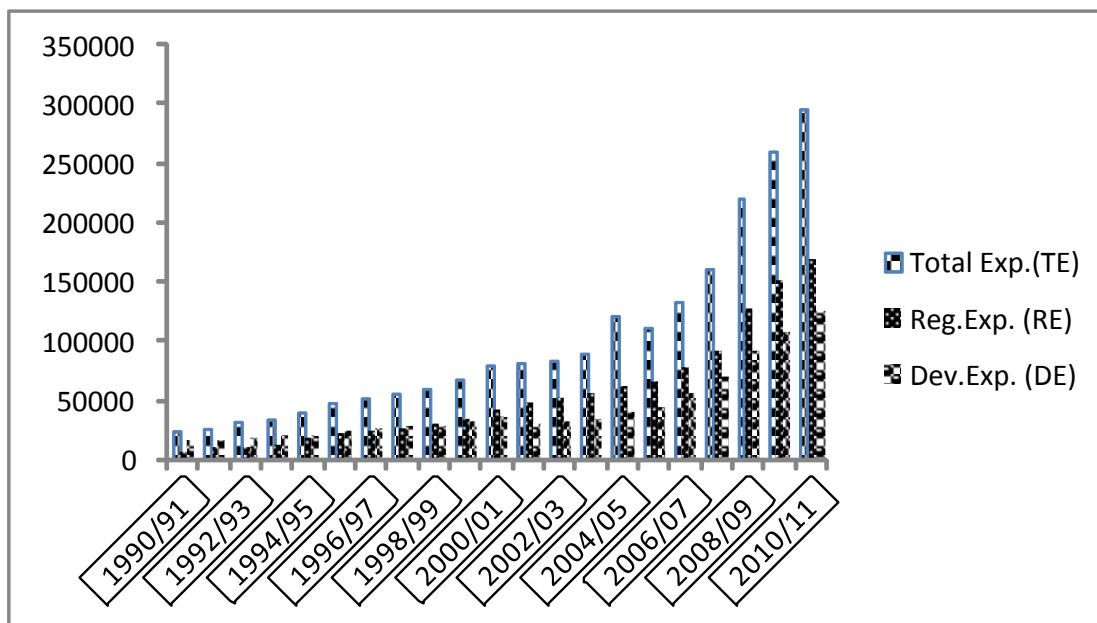
Source: Economic Survey, MOF, 2000/01 & 2011/12.

The table 4.1 gives the idea about regular and development expenditure under two heads table 4.1 shows that both kinds of expenditure are increases in each year. Moreover the regular expenditure has suppressed the development expenditure which is against the fiscal norms. In FY 1990/91, total expenditure was 23549.8 million which reached to 295363.4million in the FY 2010/11. Regular expenditure was also increased from Rs 7570.3 million in the FY 1990/91 to 170295.4 million in the FY 2010/11. The development expenditure does not consistently increase in the study period. It's volume decreased by Rs 1393.3 million in the FY 1994/95.Rs 411.6 million in FY 1998/99 than the previous years. But the overall development of expenditure is increased from Rs 15979.5 million to Rs 278142.9 million in the study period. In the FY 2011/12 the percentage share of Regular expenditure is 71.7 & Development expenditure is 28.22, which is largely increased than previous years (Economic Survey 2013).

Table 4.1 also tells about the percentages share of regular and development expenditure in the total expenditure, which gives clear ideas about the structure of public expenditure in this table the overall trends of regular expenditure is increasing trend and this is clear indication that more r resources have been allocated to words recurrent expenditure than development expenditure. In the FY 2011/12 the percentage of regular expenditure is 71.78 and development expenditure us 15.15 percent which is largely increased than previous years.(Economic Survey 2013)

In the figure, in FY 1990/91, the share of regular expenditure to total expenditure 23percent, which reached to 58 percent in the FY 2010/11 which the development expenditure has decreased from the share of 68 percent to 42 percent during the same period .In fiscal year 2002/03, development expenditure decreased by 8 percent against that the FY 2001/02, Rs 29 billion. In the ratio of regular and development expenditure tendency of regular expenditure to rise continued through 2010/11 in terms of ratios, regular expenditure and development expenditure are 54 and 46 percent in the FY 2000/01.In the FY 2010/11 regular expenditure increased to 58% while development expenditure decreased to 42% MOF 2011.Regular expenditure has overlapped development expenditure in FY 1998/99.

Figure no:1



On the basis of table 4.1 figure 1 is drawn which shows steady, constant and increasing trend of Public expenditure. Development expenditure was greater than regular expenditure in total expenditure before 1998 /1999. After that regular expenditure exceeds development expenditure. Table 4.1 and figure 1 lead to several aspects of Nepalese public expenditure structure. Both regular and development expenditure have encroached the economy in the steady and constant manner.

Figure 1 clearly shows the trend of public expenditure during the period 1990/1991 to 2010/2011. Development expenses have increased faster than regular expenditure from 1990 to 1997. Nevertheless, from 1998 to 2010 regular expenditure has increased more than its development components. That means bulk of expenditure, have gone towards non productive activities. Government tries to fulfill the major social objective specified by periodic plan and parallel the government commitment to maintain fiscal discipline is questionable against the background of current public

expenditure pattern. These trends have some important consequences of institutional weakness and the political commitment.

On the basis of Table 4.1 shows to several important aspect of Nepalese public expenditure structure. Poverty alleviation is the main social objective of government which increases the share of regular expenditure. The bulky resources have been devoted to unproductive recurrent expenditure with very little scope of contribution for acceleration of economic growth. Government's willingness to fulfill the major social objectives specific by periodic plan and parallelly the government's commitment to maintain fiscal discipline is questionable against the background of the current public expenditure pattern. These trends have some importance consequences of institutional weakness and political commitment. So for the improving public expenditure management is to optimum resource allocation.

4.3.1 Growth rate of Total, Regular and Development Expenditure The growth rates of Total, Regular and Development Expenditure during the study period are presented in the following table 4.2.

Table 4.2
Growth Rate of Total, Regular and Development Expenditure

Fiscal Year	Total Government expenditure(%)	Regular expenditure(%)	Development expenditure(%)
1990/91	19.73	13.47	22.94
1991/92	12.18	30.85	3.34
1992/93	16.96	15.04	17.57
1993/94	8.74	8.06	9.14
1994/95	16.26	55.25	-6.58
1995/96	19.15	11.92	26.20
1996/97	8.99	12.15	6.25
1997/98	10.64	12.38	9.05
1998/99	6.17	14.25	-1.43
1999/00	11.21	11.19	11.28
2000/01	20.46	23.89	16.75
2001/02	0.30	13.61	-15.80
2002/03	4.91	13.13	2.27
2003/04	6.47	1.05	6.19
2004/05	14.67	11.04	20.63
2005/06	8.12	8.64	7.31
2006/07	20.5	15.1	25.8
2007/08	20.8	18.6	16.2
2008/09	36.1	39.7	25.7

2009/10	18.2	18.2	10.7
2010/11	13.7	12.8	6.5
Average	14.01	17.16	10.48

Source: Economic Survey, MOF, 2000/01 & 2011/12

A simple approach of examine public expenditure growth is the comparison of its growth rates of national income registered during the period under examination. Public expenditure in Nepal has grown faster than the national income. The growth rate of total public expenditure on the fiscal year 1990/91 as 19.73 percentages. There were maximum growth rate in 2007/08, which becomes 20.8 percentage where as there is just 0.3 percentage growth in 2001/02. Similarly, regular expenditure in the beginning in the study period was 13.47 percent; it increased to ever highest growth rate FY 1994/95 of 55.3 percent which was substantially higher than the period's average of 16.58 percent. Distinguishing feature of both total and regular expenditure from that the development expenditure is negative growth rate during the study period (i.e. FY 1994/95, 1998/99 and 2001/02). In an average total expenditure increased by 14.01 percent prevent against 16.58 percent increase in regular expenditure. Similarly, there was development growth rate of 7.31percent in FY 2005/06, which drastically has increased by 25.8 percent in 2006/07 and the average growth rate is 10.47 percent in the study period.

It can be seen that there are random fluctuations in the all categories discussed so far. The trend as we saw falls beyond the established norms of public expenditure management. The increase in regular expenditure in the period on the review had led to important consequences that it has preempted much of the limited growth rate in government revenue living only a surplus for financial development activity. In recent year it seems to collapse FY 2010/11 13.7 percent of total public expenditure.

4.3.2 Total, Regular and Development Expenditure as percentage of GDP

In order to attain a meaningful picture regarding the trends and patterns of total, regular and development expenditure and attempt is made to compare these, with respect to GDP in the following table 4.3

Table 4.3**Total, Regular and Development Expenditure as percentage of GDP (at current price)**

Fiscal Year	GDP million	Total expenditure	Regular expenditure	Development Expenditure
1990/91	116127	20.28	6.52	13.76
1991/92	144933	18.23	6.83	11.39
1992/93	165350	18.69	6.95	11.74
1993/94	191596	17.54	6.48	11.06
1994/95	209974	18.60	9.17	9.43
1995/96	239388	19.44	9.01	10.44
1996/97	269570	18.82	8.97	9.85
1997/98	289798	19.36	9.38	9.99
1998/99	330018	18.05	9.41	8.65
1999/00	366251	18.09	9.43	8.67
2000/01	425454	20.29	10.87	9.42
2001/02	444052	19.80	12.05	7.69
2002/03	473546	19.29	11.96	7.33
2003/04	517993	18.93	11.76	7.17
2004/05	566579	19.34	11.63	7.71
2005/06	630301	18.97	11.47	7.51
2006/07	696989	18.36	10.59	7.76
2007/08	755257	19.78	11.21	8.57
2008/09	909309	22.23	12.92	9.30
2009/10	1060881	21.76	12.65	9.10
2010/11	1161949	21.57	12.43	9.13

Source: Economic survey, MOF, 2000/01 & 2011/12.

Table 4.3 is try to compare total expenditure regular expenditure and development expenditure with respect to country's (GDP) gross domestic product and all information of table 5.2 has been expressed as percentage of GDP (at current price). Total expenditure has not change in relation to GDP form the early 1990s to early millennium. In FY 1990/91 the share of total expenditure was 20.28 percent while it went down to 21.57 percent in FY 2010/11. In FY 2008/09 as an exception the share of total is reached to 22.83 percent breaking the trend of past years. However, remarkable changes are in case of regular expenditure and development expenditure. In FY 1990/91, regular expenditure as percent of GDP was just 6.52 percent, which reached to 12.43 percent double in the FY 2010/11. But the case of development

expenditure is just opposite. Development expenditure as percent of GDP was as higher as of 13.76 percent ever highest share in the FY 1990/91 which is decline to 9.13 percent. In FY 2002/03 the share of development expenditure is lowest 7.17 percent in the figure.

So the Table 4.3 also explains that fact of increasing regular expenditure and decreasing development expenditure. Decline in the total expenditure as the ratio of GDP may be justifiable under the context of liberalization and privatization. Due to the liberalization police the expansion private sector and limiting the public activities. The production of commercial goods will certainly reduce the share of public expenditure in GDP. Simply because contribution public enterprises who are supposed to add to GDP decline. However, the increase share of regular expenditure and decreasing share of development expenditure is really alarming sign for developing economies like Nepal. Against the back ground of low growth rate of revenue than government expenditure, this is leading to widening resource gape. At the present context the increasing shares of foreign aid, especially foreign loan. It is largely allocated in developmental sector like development expenditure. The outcomes attain only in long- run difficult to achieve its goal due to policy, political instability in the country. Thus, government needs to revise its policy regarding government expenditure and restructure its expenditure pattern because of huge amount of income used only repayment of principle and interest payment. Government should follow that policy in periodic plan which raised development expenditure.

4.3.3 Regular Expenditure

Regular expenditure includes the recurrent type of expenditure. Regular expenses consists various component, the main functional component are constitutional organs (CO), general administration (GA), revenue administration (RA), economic administration and planning (EAP), judicial administration (JA), foreign service (FS), defense (D), social service (SS), economic service(ES), Loan and investment (LI), loan repayment and interest (LRI), and miscellaneous (M). Miscellaneous includes traveling expenditure of dignitaries and government delegation, pension, allowances and gratuity, hospitality emergency help, donation and prizes, compensation, miscellaneous and contingency.

Table 4.4 shows the composition of regular expenditure under different heads as percentage of GDP. These categories have been divided into different sub categories, which are not expenditure is of loan payment and interest followed by social service, defense, and general administration and miscellaneous service respectively. In the table loan repayment and interest payment have higher share among than other categories.

Table 4.4
Regular Expenditure under Different Heads

Rs.in billion

FY	Const. organ	General Adm.	Rev. Adm	Eco. Adm. & Planning	Judicial Adm.	Foreign Service	Defense	Social service	Eco. Service	Loan & invest.	Loan Rep & Int.	Misc.
1990/91	0.19	1.18	0.12	0.048	0.08	0.18	1.15	0.74	0.37	0.01	2.41	1.08
1991/92	0.28	1.53	0.17	0.06	0.11	0.23	1.49	1.00	0.55	0.00	3.80	0.68
1992/93	0.17	1.82	0.19	0.07	0.15	0.31	1.72	1.27	0.59	0.02	4.56	0.62
1993/94	0.20	1.90	0.19	0.08	0.15	0.33	1.88	1.35	0.61	0.02	4.86	0.85
1994/95	0.21	2.12	0.22	0.09	0.16	0.38	2.00	4.44	1.35	0.01	6.08	2.20
1995/96	0.23	2.51	0.25	0.10	0.19	0.39	2.13	5.38	1.53	0.02	6.72	2.12
1996/97	0.47	2.84	0.26	0.10	0.22	0.44	2.36	5.91	1.74	0.03	7.53	2.28
1997/98	0.35	3.16	0.29	0.11	0.25	0.48	2.58	6.99	1.89	0.02	7.68	3.36
1998/99	0.38	3.62	0.31	0.12	0.28	0.61	2.99	7.38	2.17	0.02	8.72	4.45
1999/00	0.43	4.07	0.34	0.13	0.28	0.67	3.48	8.33	2.22	0.04	10.03	4.50
2000/01	0.44	6.26	0.38	0.19	0.32	0.60	3.81	10.88	1.63	0.01	10.39	7.86
2001/02	0.57	7.73	0.48	0.20	0.44	0.67	5.86	13.35	1.91	0.01	12.21	5.17
2002/03	0.82	7.82	0.47	0.21	0.44	0.72	7.38	13.75	2.05	0.002	16.8	5.13
2003/04	0.74	7.33	0.50	0.27	0.45	0.71	6.63	20.81	5.51	0.06	16.86	6.87
2004/05	0.82	8.23	0.54	0.33	0.50	0.79	8.58	23.4	7.17	0.00	18.84	5.30
2005/06	1.02	9.27	0.61	0.33	0.56	0.83	9.81	25.38	7.53	1.5	19.90	5.64
2006/07	0.88	11.16	1.00	0.66	0.58	0.85	10.13	29.49	8.38	6.16	-	7.90
2007/08	1.64	13.94	0.92	0.36	0.67	1.02	10.56	35.07	9.20	6.37	-	11.68
2008/09	1.42	16.86	1.21	0.38	0.81	1.15	13.75	47.44	12.05	8.15	-	24.51
2009/10	1.56	19.57	1.47	0.50	1.05	1.38	16.57	62.39	14.93	9.98	-	21.60
2010/11	2.41	22.21	1.87	1.38	1.13	1.81	17.41	70.54	17.79	12.74	-	21.01

Source: Economic Survey, MOF, 2000/01 & 2011/12

From the table we can analyze that expenditure for administration (constitutional organ, general, judicial, revenue etc.) all assert nearly one fourth of the total expenditure of which expenditure Foreign Service is substantial except then general administration. The expenditure revenue administration and economic planning contains very nominal share of total expenditure. In FY 1990/91 the expenditure on Foreign Service was Rs.0.18 billion, while the expenditure on the same FY revenue administration and economic planning was just Rs 0.12 and Rs.0.048 billion. Though

the expenditure on revenue administration and economic planning and administration increased in absolute terms of the subsequent years but still has little share over total regular expenditure. For example the share of this total regular expenditure in FY 2010/11 is 1.87 billion and 1.38 billion respectively while the share of constitutional organs, Foreign Service and defense on the same year is 2.41, 1.81 and 17.4 billion respectively all being higher than those two. The amount of general administration, defense, social service, economic service is highest then other due to socio-economic and political nature of the country. Allocation on economic service is quite low in the initial FY then other categories.

The share of loan repayment and interest payment have highest amount that shows bulks of resources is devoted for the maintenance of public enterprises. Public enterprises have been suffering heavy loses every year adding extra burden to government. So the categories' also consists of the loan and interest payment of foreign aid. Another important expect is that a substantial amount is allocated for the salaries, wages, categories (general administration, Foreign Service, constitutional organ, judicial organ) etc. Which have left a little amount for other categories like social service expenditure, economic service expenditure and mainly for the organization and management?

4.3.4 Development Expenditure

The main role of public sectors is attaining sustaining growth rate of development. There is necessity of expanding productive investment in an economy by the state in order to accelerate the process of capital formation as well as to increase and improve the quality of human capital. It may be argued that as the process of development starts this may lead to increase the demand for such publicly provided goods. In additional to increase in the demand's needs of people in a changing society a further increase in the demand is caused by urbanization, demonstration and inspection effects development expenditure, like regular expenditure is made of different components the main components are constitutional organs. General, administration, economic service, social service, miscellaneous etc.

Table 4.5
Development Expenditure under Different Heads as Percentage of Development Expenditure

Fiscal year	Consti.	General	Eco. & Adm.	Social	Eco.	Misc.	Dev.Exp
	Organ.	Adm.		Service.	Service.		
1990/91	-	0.07	0.52	22.33	74.43	2.64	15979
1991/92	-	0.08	0.23	30.52	66.99	2.15	16513
1992/93	-	0.14	0.09	37.32	62.38	0.04	19414
1993/94	-	0.14	0.09	33.53	65.32	0.90	21188
1994/95	-	0.16	0.16	31.44	64.92	3.29	19795
1995/96	-	0.16	0.13	30.47	67.98	1.24	24981
1996/97	-	0.13	0.06	34.96	64.25	0.58	26543
1997/98	0.01	0.16	0.06	35.66	61.84	2.24	28944
1998/99	0.10	0.27	0.07	35.98	60.72	2.851	28531
1999/00	0.12	0.49	0.13	57.04	85.74	2.44	21749
2000/01	0.03	0.34	0.52	34.72	56.96	7.40	37066
2001/02	0.04	0.79	0.29	36.62	55.43	6.80	31482
2002/03	0.06	2.21	0.12	46.42	47.83	3.33	26258
2003/04	0.17	2.73	0.42	33.75	62.10	0.81	21141
2004/05	0.15	3.54	0.97	31.84	61.74	1.74	24934.6
2005/06	0.36	4.46	0.76	38.39	55.95	0.05	26443.3
2006/07	0.11	11.76	0.68	40.32	46.58	0.57	38510.5
2007/08	0.20	3.85	1.73	44.09	48.13	1.97	46000.1
2008/09	0.11	2.49	0.66	47.70	44.81	4.20	71398
2009/10	0.08	2.33	1.01	42.45	49.97	4.14	85973.1
2010/11	0.10	1.80	1.72	46.39	46.41	3.55	98275.5

Source: Economic Survey 2000/01 & 2011/12 MOF.

The table 4.5 shows the development expenditure pattern under different major components as percentage of development expenditure. Among economic, social, and miscellaneous services, the highest percent share of economic services followed by social and miscellaneous service respectively. In FY 1990/91 economic service was 74.43, which decreased in FY 2010/11 is 46.42. It was declined in FY 2002/03 41.84 percent which was 55.45 as percentage of development expenditure in FY 2001/02. The share of social service, which claim second highest share of development expenditure and shows some FY is fluctuating trend. In FY 1990/91 the expenditure of social service was 22.34 and 46.39 percent in FY 2010/11. In the FY 2004/05 the share of social service was low then it started to rising. Third highest share of expenditure in this table is miscellaneous expenditure which was 2.64 percent in FY 1990/91 and 3.55 percent in FY 2010/11 of total development expenditure this

head is significantly higher than other categories like constitutional organ General administration and economic administration and planning. Government spend little amount of total expenditure on constitutional organ.

Table 4.5 highlights some special characteristic. It is seen that social and economic service expenditure holds a large share on total development expenditure. The expenditure on administration reforms side such as spending on constitutional organs, general administration and economic administrative and planning also command some amount on development expenditure signifying the reforms process on the administrative side. These will contribute in realizing the efficient as well as good government with in the country. But at the same time the spending under the miscellaneous head leave an open debate about the productivity of such spending the expenditure must be clearly stated under specific head rather than miscellaneous.

Table 4.6
Development Expenditure under Social and Economic services as Percentage of Total Expenditure

Fiscal Year	Education	Health	Drinking Water	Agricul.*	Forestry	Industry	Communication.	Transportation	Electricity	Dev.Exp. (DE)
1990/91	10.73	2.29	3.37	16.85	2.87	10.961	0.355	12.388	8.530	15979.5
1991/92	14.50	3.07	8.08	21.31	5.35	14.69	0.70	14.41	8.56	16512.8
1992/93	17.84	3.09	9.38	21.12	4.78	5.59	2.44	14.65	11.48	19413.6
1993/94	18.03	2.64	5.06	26.13	4.56	3.05	2.06	15.87	10.91	21188.2
1994/95	7.34	4.33	5.56	26.22	2.06	0.13	7.66	15.20	8.91	19794.9
1995/96	7.17	3.66	4.82	20.57	1.51	1.22	4.61	23.89	12.85	24980.5
1996/97	8.87	6.10	5.00	17.48	1.74	0.99	4.12	19.98	16.75	26542.6
1997/98	7.03	7.17	5.77	16.00	1.41	1.64	4.10	19.41	16.25	28943.9
1998/99	5.75	5.87	6.54	17.27	1.68	1.01	1.63	17.91	16.86	28531.3
1999/00	8.10	6.69	7.63	16.37	1.63	2.62	0.89	14.78	17.44	31749.2
2000/01	8.92	6.32	7.71	20.42	1.53	1.17	0.78	17.15	21.83	31208.3
2001/02	8.82	6.01	5.59	18.60	2.02	1.86	0.86	14.47	14.08	31208.3
2002/03	2.94	0.49	5.23	6.39	1.17	1.33	5.26	11.48	12.16	31915.6
2003/04	2.96	0.42	6.09	6.63	1.35	0.12	1.05	11.67	14.00	33890.5
2004/05	3.08	10.02	3.52	5.39	1.00	0.05	1.31	10.15	17.65	40884
2005/06	3.66	2.16	4.44	6.38	0.33	0.07	0.66	9.52	14.26	43871.4
2006/07	2.84	2.09	5.63	7.81	0.27	0.16	0.44	11.29	9.64	56482.2
2007/08	4.24	3.48	5.28	9.79	0.35	0.13	0.44	10.27	8.36	69903
2008/09	3.83	2.91	6.15	6.86	0.30	0.37	0.35	10.76	6.60	91923.1
2009/10	3.59	2.91	4.90	8.02	0.52	0.32	0.37	15.65	11.50	108670
2010/11	5.00	3.65	3.86	6.84	0.68	0.37	0.30	16.13	9.02	125068

Source: Economic Survey 2000/01 & 2011/12 MOF.

*Agriculture includes irrigation and land reform

Table 4.6 shows percentage share of social service and economic service with respect to Total expenditure which hold only nominal expenditure are not taking for the analysis. The table exhibits that education; health and drinking water are the

important component of social services expenditure. Education under social service expenditure claims a largest share on the expenditure.

Table 4.6 also reveals that expenditure on these categories have increased from the early 1990s to early millennium. In fiscal year 1990/91, the percentage share of education was 7.28, which decreased to 3.44 percent in fiscal year 2000/01. In FY 2004/05 government spend little amount of total expenditure is 1.04 percent after then start to rising but not in previous years. Similarly the expenditure on health and drinking water was 1.56 and 2.28 in FY 1990/91 respectively, both increased by substantial amount of total expenditure but the share of drinking water is larger than health sector.

Expenditure under different component of economic services reveals different pattern. The share of agriculture expenditure is higher than other development expenditure. This expenditure has rose by more than two times from FY 1990/91 to 2001/02 but decreased in the end of study period. In FY1993/94, the even highest amount is observed in the study period Rs 5536.6 million was spent under this category. However the highest share of agriculture expenditure is 16.47 in the FY 1993/94. Similarly it is decreasing and 2.90 percent of total expenditure in the last year of study period. In the context of Nepal, agriculture is the major foundation of economy but not develop in this sector as properly. Thus, government should make appropriate agriculture perspective plan and implement it.

The expenses on transportation are another component which takes also large share of total economic service. The amount is Rs.1979.5 million in FY 1990/91 covers 8.40 percent of total expenditure. This is increasing rate still FY 1997/98 then it starting to decline in coming years. Government takes policy to enlarge the transportation facility to all districts. So that the expenses are growing up and it reached 6.83 percent in FY 2010/11. We can see the percentage of Industrial and Communication expenses have taken little share of Total expenditure in the table, which refers to government try to focused other sector of social and economic sectors.

While, analyzing the average percentage share in 21 years study period of the selected components of social services to that of development expenditure. It is observed that the highest average percent share is on education expenditure. The percentage of

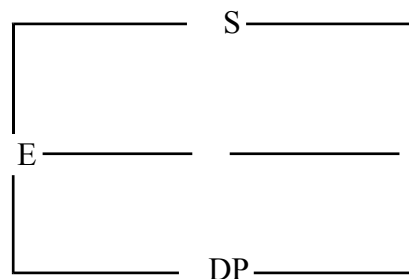
share of education in an average 8.38 percent of total development expenditure, health and drinking water respectively. Under the assumption of infant private sector and democratic governmental set up justifies the need of large resources to be allocated under the social service and economic service? The real debate however should be productive of such spending under the different component of social and economic service. Accordingly, there is needing have inter sect oral comparison to guarantee the high yield. So that the major objective of society is poverty alleviation which can be achieved with in the desired period.

4.4 Relationship of Public Expenditure with Gross Domestic Product, Import and Money Supply

Conceptual Framework

Such a macro model has been employed in estimating the relation of public expenditure with certain crucial variables like GDP, import, money supply, foreign trade, prices etc. This technique can also be used in the estimation of both direct and indirect relation. But due to certain constant it has not been possible to obtained relationship in this chapter an attempt is made to analyze the direct relation only. The true public expenditure programs are equally influenced by the non economic factors like demographic, social, historical and political factors but simple trends reveal the closer relationship between national income and public expenditure.

The relationship of public expenditure with other variables GDP, money supply, price and import are shown in the following simple chart:



Where,

GE= Government expenditure

MS = Money supply

P = Price level

GDP = Gross domestic product

4.4.1 Relationship between public expenditure and GDP

Hence, GDP growth is taken as the function of regular and development expenditure. The ordinary least square estimation of the relevant equation gives the following results:

$$\text{LnGDP} = 4.849 + 0.701\text{RE} + 0.59\text{DE}$$

$$R^2 = 0.997, \quad \text{adj.}R^2 = 0.994 \quad \text{F-test} = 1577.943$$

$$\text{t-value} = 16.463, \quad 0.919$$

In this log linear regression equation, the results states that the positive relationship between GDP and public expenditure. The sign of regression co-efficient is positive (0.701) telling that one percent change in regular expenditure will induce 0.70 percent change in GDP. As the value of R^2 and adjusted R^2 are very high. It represents 99.4 percent change in GDP is explain by the change in regular expenditure and development expenditure. The value of t-test represents the significance of result. The high F- value supports overall fitness of the one percent level of significance in the regression model which is about 1577.948.

4.4.2 Relationship between public expenditure and Import

The main objective of government is estimating aggregate import demand function has been to find out that what extend government spending leads to increase the size of import. To examine the relationship between regular and development expenditure with import linear regression models are estimated following equation verify the relation of change in public expenditure on change in import:

$$\text{LnM} = 1.946 + 0.695\text{RE} + 0.220\text{DE}$$

$$R^2 = 0.980 \quad \text{adj.}R^2 = 0.978$$

$$\text{t-value} = 7.625, \quad 1.606$$

$$\text{F-test} = 440.892$$

The equation shows that positive association between public expenditure and import. The sign of regression of co-efficient is positive (0.695 and 0.220) telling that one percentage change in regular expenditure will induce to have 69 percent change in import, the sign of development expenditure co-efficient is 0.220 telling that one percentage change in development expenditure will induce to have 22 percent change in import which is lower than regular expenditure. As the value of R^2 and $adj.R^2$ are very high, this represents the high goodness of fit on regression line. That is value of R^2 is high enough to justified the 98 percent change in import is changed by regular expenditure. The value of t-test represents the significance of the result. The F- value is high supports to the same result i.e. variable in the equation shows a better association.

4.4.3 Relationship of public expenditure and money supply

To see the effect of public expenditure on money supply, net foreign asset, the money supply function has been used. The ordinary least square estimation of the relevant equation gives following results:

$$\text{LnMS} = -0.568 + 0.419\text{PE} + 0.613\text{NFA}$$

$$R^2 = 0.993 \quad \text{adj.}R^2 = 0.993$$

$$t\text{-value} = 5.998, \quad 7.481$$

$$F\text{-test} = 1351.722$$

Equation shows that positive relationship between money supply and public expenditure and net foreign assets also. The sign of regression co-efficient are positive (0.419 and 0.613) it implies that one percentage increases in public expenditure will increase money supply by 41percent and NFA will increase will 61 percent the change in money supply. The value of R^2 and $adj. R^2$ reveals that fact 99 percent change in money supply is explained by the change in public expenditure. The F-value supports for the overall fitness of model which is very high.

4.5 Concluding Remarks

From the above analysis, it is found that there is positive association between the aggregate level of GDP and public expenditure (regular expenditure, development expenditure). Among total expenditure, regular expenditure and development expenditure GDP is found to be highly responsive to development expenditure and

least responsive to regular expenditure. The parametric value of NFA is smallest which implies that internal factors have stronger effect on the supply of money in the public expenditure than the external factors.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary and Conclusion

This study is primarily confined to the analysis of trend and impact of public expenditure on Nepalese economy (GDP, import and money supply), during the period 1990/91 to 2010/11. The trend and pattern of public expenditure threat on the fiscal deficit and management. There are many factors giving to rights the increasing trend of regular expenditure rather than development expenditure. The relation of public expenditure on some macro economic variables are analyzed by establishing some models. The regular expenditure has surpassed the development expenditure as against the accepted fiscal norms. Development expenditure exceeds the regular expenditure until fiscal year 1997/98, than after it is lesser than regular expenditure.

Nepal although, initiated development activities only after the inception of democratic system in 1951, the advent of planning has led to tremendous increase in the size of public expenditure. The Massive investment in each successive plan for rapid expansion of the economic and social infrastructure has been mainly responsible for it. In spite of, phenomenal increase in its size, the actual performance of the Nepalese economy has been below expectation. Expressed differently, constant or even declining trend in real per capita income. The economy problems have further aggravated due to growing inefficiencies in the allocation of resources and inflationary pressures. In such a situation, present study has been addressed essentially to examine the growth and pattern of public expenditure, and to examine the relation of public expenditure with GDP, import and money supply.

The pattern of public expenditure clearly justifies the fact that social service and economic service categories hold substantial amount of total public expenditure under development expenditure whereas, general administration, interest payment, loan repayment and defiance claims a large share over regular expenditure. However, the threat to the social objective of poverty alleviation has been caused from high burden of defense expenditure, loan repayment and general administration expenditure. The rapid growth of regular expenditure on later years of study period can be attributed to

the increasing expenses on defense. From the analysis the trend of public expenditure, economic and social service expenses hold a large share of total expenditure. Finally, the defense components of social service, which hold large amount of total expenditure lead to conclude that greater concentration, have been provided to education followed by local development health and drinking water respectively.

In overall, the emerging picture revealed by functional components concludes that the government is likely to grow even at a faster rate not because of government of in providing more social and economic services to the community because of growing dept servicing of the government.

The analysis of real growth rates conclude that the public expenditure in Nepal has grown faster than national income. The real growth rate analysis also boosted that the highest growth rate of regular expenditure followed by development expenditure. The percent of regular expenditure is 12.43 in FY 2010/11 and the percent of development expenditure is 9.13 of total expenditure the average growth rate of total expenditure is 14.01 percent in study period, 16.58 percent and 10.47 percent of regular and development expenditure respectively. Among the regular expenditure is the higher growth has been obtained of social services followed by miscellaneous loan repayment and interest respectively. And the development expenditure categories the higher growth rate has been obtained for miscellaneous services and constitutional organ.

While relating public sector to the real sector, it has been postulated that investment programs would have considerable impact on private investment. Even if they have been able to complimentary to the private investment through reducing external diseconomies, market imperfection, capital constraints etc. similarly, it has been assumed that the expansion in the imports of capital and intermediates goods through public expenditure programs would have positive impact on countries development. Despite of, several departures from the studies on the area of public expenditure the broad conclusions derived are still subject to certain limitations mainly due to number of assumptions made which estimating relevant variables. The present study has primarily attempted to examine the important of public expenditure in the economy in general and its impact on certain crucial macroeconomic variables in particular. Usual

econometricists such as: R^2 , adj. R^2 , t-test, f-test carried out to test the validity of models and their predictive power indicate the results satisfactory.

To conclude about the empirical findings in the thesis tells that among total regular and development expenditure, regular expenditure is highly responsive to GDP followed by total by expenditure. Due to the tendency of declining foreign grants and increasing foreign loans, the debt burden of Nepal has been increasing. With almost one third of regular expenditure to be allocated for debt service. Development expenditure is least responsive to GDP implying that it doesn't growth at the pace as much as the increase in GDP. R^2 value has been found high value with GDP, money supply and import to public expenditure.

5.2 Recommendations

Based upon the above conclusions, the following recommendations can be presented:

- The excessive increase in the regular expenditure should be reduced and development expenditure should be increased to increase its revenue.
- The government should focus its resources on the core priority areas where resources can be optimally utilized.
- The rapid growth of regular expenditure especially over few years can be attributed to the increase in defense expenditure. Therefore, peace is necessary condition for economic growth and development, there must be cut in defense expenditure and should be allocated to social economic sectors.
- Budgetary deficit need to be reduced by mobilizing additional resources the government should take a number of majors such as strengthening increase tax base to promote revenue generation and control corruption similarly, unnecessary regular expenditure should be discourage.
- Government should choose major priority sector that generate income and should spend on those sectors on planned basis.
- Social sector development is needed to upgrade the quality of life pattern and rapid economic growth sub- section of social sectors such as basic education; health and safe drinking water should be accorded high priority because of their significant role in human resource development and their determining position in human development which directly affect poverty alleviation.

- Public expenditure should be allocated for the development of transportation, communication and social service in order to reduce geographical fragmentation and increase in profitability of private investment as well as by extending the size of market, skill and efficiencies of labor.
- The share of agricultural sector in developing expenditure is to be low, adequate attention must be given to this sector because majority of population is directly or indirectly dependent on it.
- The share of debt servicing is substantial in regular expenditure so, loan from external sources should be received only when needed. Foreign aid should be channelized in such investment programs which help improving the productive activity of the economy.
- A complete and vigorous cost benefit analysis must be done before receiving loan for any project from external sources as well as from domestic borrowings.
- Political stability, clear policies should be made to facilitate domestic loan.

BIBLIOGRAPHY

- Achrya, K.P.(1999).*Development Challenges for Nepal*. Kathmandu: Nepal Foundation for Advanced Studies (NEFAS).
- Adhikari, D. (2004). *Nepal and Budgetary Exercise during the Nineties: An Assessment Economic Review*, Occasional Paper, Nepal Rastra Bank. No.16.
- Adhikari, N. (2004). *Public Expenditure in Nepal*, "Trend and Determinants. Unpublished, M.A. Thesis, Central Department of Economics, Tribhuvan University.
- Aryal, J.P. and Gautam, A. (2010). *Quantitative Techniques: Third Revised Edition*. Kathmandu: New Hira Books Enterprises.
- Baral, S.C. (2009). *Trends and Impact of Public Expenditure in Nepal*, Unpublished M. A. Thesis, Central Department of Economic, Tribhuvan University.
- Basnet,D.B. (1983). *Analysis of Public Expenditure and Economic Development in Nepal*. Kathmandu. Unpublished M.A. Dissertation, Tribhuvan University.
- Basyal,T.R.(1994). *Development in Domestic Saving Mobilization in Nepal*. An overview, Economic Review Occasional Paper,14-41.
- Baumol, W.J. (1967, June). *Macroeconomics of Unbalanced Growth: The Anatomy of Urban Crisis*. American Economic Review, LXII (3).
- Bishokarma, M. (2009). *An Analysis of Public Expenditure in Nepal*, Unpublished M.A. Thesis, Central Department of Economics, Tribhuvan University.
- Black, J.(2002).*Oxford Dictionary of Economics. Second Edition*. New York: Oxford University Press.
- Bista, R.B.(2011).*Economics of Nepal: Second Revised Edition*. Kathmandu: New Hira Books Enterprises.
- Froyen, R.T. (2003). *Macro Economics: Theory and Policies*. New Delhi: Pearson Education.

- Goode, R. (1984). *Government Finance in Developing Countries*. New Delhi: Tata McGraw-Hill Publishing House Ltd.
- Gujarati, D. (2004). *Basic Econometric: Forth Edition*. New Delhi: Tata McGraw-Hill Publication.
- Hagen, V. J. (2005). *Budgeting Institutions and Public Spending In Fiscal Management ed.* By Anwar Shah. Washington DC: World Bank.
- Hicks, U.K. (1955). *Public Finance*. London: James Tisbet and Co. Ltd.
- Integrated Development Systems. (1987). *Financing Public Sector Expenditure in Nepal*. Kathmandu: IDS.
- Khanal, D.R. (1988). *Public expenditure in Nepal: Growth, Pattern, and Impact*. New Delhi: Sterling Publisher.
- Lekhi, R.K. (2005). *Public Finance: Twelfth Edition*. New Delhi: Kalyani Publishers.
- Lohani, K.P. (1993). *Public expenditure Management in Nepal*, Unpublished M.A. Thesis, Central Department of Economics, Tribhuvan University.
- Methew, T. (1972). *The Economics of Public Expenditure*. New Delhi: Vora and Co. Publisher Private Limited.
- Ministry Of Finance (Various Issues). *Economic Survey*. Kathmandu: MOF, HMG/N.
- Ministry Of Finance.(2000). *Economic Survey (1999/00)*. Kathmandu: MOF, HMG/N.
- Ministry Of Finance.(2012). *Economic Survey (2011/12)*. Kathmandu: MOF, HMG/N.
- Ministry Of Finance.(2013). *Economic Survey (2012/13)*. Kathmandu: MOF, HMG/N
- Musgrave, R.A., and Musgrave, P.B. (1979). *Public Finance Theory and Practice*. New Delhi: McGraw Hill Publication.
- National Planning Commission Five Year Plan (Various Plan Periods). Kathmandu: NPC.

- National Planning Commission. (2002). *Medium Term Expenditure Frame work*. Kathmandu: NPC.
- National Planning Commission. (2002). *The Tenth Plan (2002-07)*. Kathmandu: NPC.
- Nepal Development Forum. (2002). *From the Paper Presented by National Planning Commission*. Kathmandu: NDF Secretariat.
- Nepal Rastra Bank. Annual Reports. (Various Issues).
- Peacock, A.T. and Wiseman, J. (1961). *The Growth of Public Expenditure in the United Kingdom*. USA: Princeton University.
- Pigou, A.C. (1947). *A Study in Public Finance: Third Edition*. New York: MacMillan Co. Ltd.
- Poudel, S.R. (1988). *Foreign Trade, Aid and Development in Nepal: First Edition*. New Delhi: Commonwealth Publishers.
- Pyakural, B. (2004). *Nepalese Conflict Economy: Cost, Consequences and Alternative*. Kathmandu: Nepal.
- Rana, D.S. (1989). *Public Finance in Nepal*. Unpublished M.A. Dissertation, Kathmandu: Tribhuvan University.
- Raut, N.K. (2005). *An Analysis of Budget Deficit, Money Supply and Inflation (1990/91 to 2002/03)*, Unpublished M.A. Thesis, Central Department of Economics, Tribhuvan University.
- Samuelson, P.A. (1955). *Diagrammatic Exposition of a Theory of a Public Expenditure*. Review of Economics and Statistics, 37: 350-356.
- Schoreder, L. (2007). *Forecasting Local Revenue and Expenditure in Local Budgeting* ed. By Anwar Shah, Washington DC: World Bank.
- Sharma, V.P. (1999). *The Problem and Prospects of Regular and Development Budget of HMG/Nepal, Kathmandu*. The Economic Journal of Nepal, Vol.22, No.1.

- Shapiro, E. (2000). *Macroeconomic Analysis: Fifth Edition*. New Delhi: Galgotia Publication Ltd.
- Singh, S.K. (1977). *The Fiscal System of Nepal*. Kathmandu: Ratna Pustak Bhandar.
- Sharma, G.N. (2000). *Nepal: Missing Elements in the Development Thinking*. New Delhi: Birla Publication.
- Sing, S.K. (2010). *Public Finance in Theory and Practice: Eight Revised Edition*. New Delhi: S.Chand and Company Ltd.
- Singh, S.K. (1964). *Public Finance in Developed and Underdeveloped Countries*. New Delhi: S. Chanda and Co.
- Tait, A.A., and Peter, S.H. (1982). *International Comparison of Government Expenditure*. Washington DC: IMF.
- Taylor P.E. (1961). *The Economic of Public Finance*. New York: The Macmillan Publishing Co.
- United Nation. (1993). *The Control and management of Government Expenditure in Asian Countries*, Discussion Paper U.N. 13. Review of Economics and Statistics, 37: 350-356.
- Upadhaya. P.P. (1981). *Public Expenditure and Regional Development in Nepal*. A Macro Case Study Unpublished M. A. Thesis, Central Department of Economics, Tribhuvan University.
- Upreti, B. (2002). *A Study on Performance of Public Expenditure in Nepal*. The Economic Journal of Nepal, Vol. 25, No.2.
- Wagner, R.E. and Weber, W.E. (1977). *Wagner's Law: Fiscal Institution and the Growth of Government*. National Tax Journal, XXX (1).
- World Bank, (1997). *World Development Report*. Washington DC: WB.
- World Bank. (2000). *Nepal: Public Expenditure Review*. Washington DC: WB.

Appendix-I

FY	RE	DE	TE	GDP	MS	M	NFA
1990/91	7570.3	15979.5	23549.8	116127	14223	23226.5	9338.9
1991/92	9905.4	16512.8	26418.2	144933	16283	31940.4	16151.7
1992/93	11474.4	19413.6	30897.7	165350	19457.7	39205.6	2792.7
1993/94	12409.2	21188.2	33597.4	191596	23833	51570.8	29125
1994/95	19265.1	19794.9	39060	209974	28510.4	63679.5	36218.1
1995/96	21561.9	24980.5	46542.4	239388	32985.4	74454.5	37085.5
1996/97	24181.1	26542.6	50723.7	269570	36498	93553.4	37707.6
1997/98	27174.4	28943.9	56118.3	289798	38460.3	89002	40191.1
1998/99	31047.7	28531.3	59579	330018	45163.8	87525.3	55572.8
1999/00	34523.3	31749.2	66272.5	366251	51062.4	108504.9	65027.6
2000/01	42769.2	37065.9	79835.1	425454	60979.8	115678.2	80467.5
2001/02	48863.9	32108.3	80072.2	444052	70576.9	107389	87798
2002/03	52090.5	31915.6	84006.1	473545	77156.2	124352.1	88419.1
2003/04	55552.1	33890.5	89442.6	517993	83753.9	136277.1	91407
2004/05	61686.4	40884	102560.4	566579	93969.6	149473.6	108805
2005/06	67017.8	43871.4	110889.2	630301	100206	173780.3	107742
2006/07	77122.4	56482.2	133604.6	696989	113061	194694.6	139439
2007/08	91446.9	69903	161349.9	755257	126888	221937.7	131909
2008/09	12738.9	91923.1	219662	909309	154344	284469.6	171456
2009/10	151019.1	108670	259689.1	1060881	196459	374335.2	224562
2010/11	170295.4	125068	295363.4	1161949	218159	396175.5	213036

Source: Economic Survey 2000/01 & 2011/12

Appendix-II

FY	LnRE	LnDE	LnTE	LnGDP	LnMS	LnM	LnNFA
1990/91	8.93	9.68	10.07	11.66	9.56	10.05	9.14
1991/92	9.2	9.71	10.18	11.88	9.7	10.37	9.69
1992/93	9.35	9.87	10.34	12.01	9.88	10.58	9.94
1993/94	9.43	9.96	10.42	12.16	10.08	10.85	10.28
1994/95	9.87	9.89	10.57	12.25	10.26	11.06	10.5
1995/96	9.98	10.12	10.75	12.38	10.4	11.22	10.52
1996/97	10.09	10.19	10.83	12.5	10.5	11.45	10.54
1997/98	10.21	10.27	10.93	12.58	10.56	11.4	10.6
1998/99	10.31	10.26	10.99	12.71	10.72	11.38	10.92
1999/00	10.45	10.36	11.1	13.81	10.84	11.59	11.1
2000/01	10.66	10.52	11.29	12.96	11.03	11.66	11.3
2001/02	10.8	10.35	11.29	13	11.16	11.58	11.38
2002/03	10.86	10.37	11.34	13.06	11.25	11.73	11.39
2003/04	10.92	10.43	11.4	13.16	11.34	11.82	11.42
2004/05	11.03	10.62	11.54	13.25	11.45	11.91	11.6
2005/06	11.11	10.69	11.62	13.35	11.51	12.06	11.59
2006/07	11.25	10.94	11.8	13.45	11.64	12.18	11.84
2007/08	11.42	11.15	11.99	13.53	11.75	12.31	11.79
2008/09	11.76	11.43	12.3	13.72	11.95	12.56	12.05
2009/10	11.92	11.6	12.48	13.87	12.19	12.83	12.32
2010/11	12.04	11.74	12.6	13.96	12.29	12.89	12.27

Source: Based on Appendix I

Appendix-III
Development Expenditure under Different Heads

Rs in million

Fiscal year	Constitutional organ	General Adm.	Economic Adm. & Planning	Social service	Economic Service	Misc.	Total Exp.
1990/91	-	11.3	83.3	3569.3	11893.3	422.2	15979
1991/92	-	13.8	39.3	5040.3	11063.3	356.1	16513
1992/93	-	29.0	18.7	7245.5	12111.5	8.9	19414
1993/94	-	31.3	19.5	7104.4	13841.4	191.9	21188
1994/95	-	33.5	31.6	6224.8	12852.7	652.3	19795
1995/96	-	41.6	33.2	7612.7	16982.7	310.3	24981
1996/97	-	34.5	17.3	9281.3	17054.7	154.8	26543
1997/98	3.6	46.4	19.3	10323.4	17900.2	650.9	28944
1998/99	28.5	79.2	20.5	10265.4	17324.4	813.3	28531
1999/00	26.6	108.1	28.6	12406.2	18648.6	531.1	21749
2000/01	12.7	127.2	196.2	12872.7	21114.3	2742.8	37066
2001/02	13.4	250.1	94.1	11530.3	17452.0	2142.3	31482
2002/03	16.8	581.3	33.3	12190.0	12561.0	875.6	26258
2003/04	36.9	578.1	89.4	7135.2	13129.0	172.0	21141
2004/05	38.0	883.6	242.1	7940.7	15394.9	435.3	24934.6
2005/06	96.1	1181.7	203.0	10151.8	14797.1	13.6	26443.3
2006/07	45.3	4512.0	262.2	15529.3	17938.6	223.1	38510.5
2007/08	96.0	1773.5	798.1	20283.6	22142.7	906.2	46000.1
2008/09	84.7	1781.7	472.0	34056.8	31999.9	3002.9	71398.0
2009/10	71.6	2006.6	868.0	36495.2	42968.0	3563.7	85973.1
2010/11	105.3	1776.2	1692.0	45591.1	45615.3	3495.6	98275.5

Source: Economic survey, MOF, 2000/01 & 2011/12

Appendix-IV

Development Expenditure under Social and Economic services

Rs in million

FY	Social Services			Economics Services					
	Edu.	Health	Drink	Agri*	Forestry	Indus.	Commu.	Trans.	Electri.
1990/91	1716.0	366.8	538.5	2693.9	460.1	1751.5	56.7	1979.5	1363.1
1991/92	2395.2	507.2	1334.4	3519.5	884.3	2427.2	116.0	2381.0	1414.4
1992/93	3465.0	600.2	1821.4	4100.4	928.8	1085.6	474.7	2844.0	2229.1
1993/94	3822.1	560.5	1073.6	5536.6	966.5	648.0	437.6	3363.2	2312.2
1994/95	1453.6	858.5	1102.2	5191.6	408.4	27.2	1517.8	3010.6	1764.9
1995/96	1791.0	915.5	1206.4	5138.4	378.7	306.0	1151.7	5968.5	3210.2
1996/97	2356.2	1621.2	1327.1	4641.3	463.5	263.5	1095.9	5305.2	4447.3
1997/98	2037.1	2076.1	1670.0	4633.4	410.4	477.1	1188.4	5619.9	4704.7
1998/99	1641.3	1677.2	1866.8	4928.3	480.5	289.4	466.0	5111.3	4811.3
1999/00	2573.7	2126.7	2423.0	5197.7	519.0	833.9	282.5	4695.4	5537.9
2000/01	2783.9	1972.4	2407.2	6372.6	478.9	366.8	244.0	5354.9	6813.7
2001/02	2755.1	1876.7	1747.3	5807.5	630.9	582.5	271.3	4518.0	4395.3
2002/03	940.7	159.3	1669.9	2041.9	373.7	425.1	1680.1	3664.9	3881.6
2003/04	1003.4	142.2	2065.8	2249.0	459.8	40.5	356.5	3958.0	4746.2
2004/05	1260.4	4098.3	1440.0	2204.2	410.7	23.5	536.8	4149.6	7219.1
2005/06	1609.6	948.2	1949.8	2800.1	148.0	31.0	283.6	4178.1	6256.4
2006/07	1604.9	1185.5	3182.7	4414.1	152.5	91.2	251.0	6382.1	5450.0
2007/08	2963.6	2434.1	3693.5	6844.6	250.6	96.0	314.0	7178.9	5847.6
2008/09	3520.2	2677.4	5657.7	6314.3	281.8	348.3	330.3	9893.7	6073.3
2009/10	3903.9	3170.7	5335.0	8723.6	574.1	356.6	406.0	17016.6	12503.4
2010/11	6258.4	4566.0	4838.6	8566.4	856.9	471.1	376.1	20184.4	11291.2

Source: Economic Survey 2000/01 & 2011/12 MOF