ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF BUSINESS

THE ROLE OF CUSTOMS DUTY, REAL GDP GROWTH AND

GOVERNMENT SPENDING ON GOVERNMENT BUDGET IN

THE CASE OF ETHIOPIA

BY AKALU ATLAW

MAY, 2015

ADDIS ABABA, ETHIOPIA

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DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Ato Tiruneh Legesse. All sources of material used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institutions for the purpose of earning any degree.

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             Name   Signature

St. Mary's University, Addis Ababa   May, 2015

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate studies for examination with my approval as a university advisor.

Tiruneh Legesse (Ass.Prof)   _____

   Advisor   Signature

St. Mary's University, Addis Ababa   **May, 2015**

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ACRONYMS

ERCA	Ethiopian Revenue and Customs Authority
GDP	Gross Domestic Product
IMF	International Monitory Fund
LDCs	Least Developed Countries
MoFED	Ministry of Finance and Economic Development
NBE	National Bank of Ethiopia
R&D	Research and Development
VAT	Value Added Tax

ABSTRACT

This study explores the role of Customs duty, real GDP growth and Government spending on Government budget in the case of Ethiopia. In order to achieve its objective, the study employed quantitative research design. Secondary data collected from Ministry of Finance and Economic Development (MOFED) and Ethiopian Revenue and Customs Authority (ERCA). The data was analyzed by using inferential statistics (regression analysis) and descriptive statistics (tables and charts). The regression analysis considers the Government Budget as a dependent variable and Customs duty, Real GDP growth and Government Spending as an independent variable. The study finding suggests that there is a positive relationship between customs duty and government budget. That means the share of customs duty in the Ethiopian government revenue is significant. However, the performance of customs duty contribution to the total government budget is declined over time. Moreover, the government spending is significant variable which affect the government budget but the Real GDP growth is not significant variable. The main rationale for the insignificant result is that the government budget increment is not highly dependent on the growth in the economy. The study recommended that the performance of customs duty in Ethiopia in terms of its contribution towards the government budget has been declining overtime so government need to take actions to revise the trend .Furthermore, the government budget should follow the growth in GDP trend rather than the normal trend. Since Government spending is a significant variable, government should take in to account before making change in government spending policy. In addition customs duty is a variable which affects government's budget significantly so the government needs to collect the tax in a very efficient and effective manner. Finally, the study has the limitation to see only the budget data that was originally approved at the beginning of each year from the year 1991 to 2013GC.

Key words*: Time series model, Custom duty, Government budget, Ethiopia*

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Customs duty is used by many developing countries all over the world to practice the protectionist view of the Modern economists. Along with its role of protecting domestic infant industries, customs duty also have the advantage of generating tax revenue from international trade, controlling the problems of trade deficit and balance of payments, as well as attracting investors into the protected sectors. Even from the developed and large countries point of view, the theory of optimum tariffs is another argument against free trade.

To some scholars, customs duty is perceived as a major barrier to trade (Lemma, 2014). Customs duty plays important economic roles such as protective, revenue, income distribution, employment, balance of payments, import substitution and economic growth. Beyond these economic roles, some people argue that sometimes customs duty is also associated with high levels of "nationalism" and "patriotism" income redistribution and national defense (Lindert, 1986).

In underdeveloped countries like Ethiopia, the direct and indirect domestic tax revenues are low because of the low per capita income (Lemma, 2014). In such countries the proportion of people subject to income tax is very low and therefore, income tax does not yield as much revenue as it does in developed countries.

The major source of tax revenue, particularly in the less developed countries such as Ethiopia, is the tax revenue from international trade. In fact, "in the early stages of development, internal flows of goods and income cannot be assessed and taxed because of the small and the decentralized nature of economic activity. Imports and exports, on the other hand, transit through few trade points and are readily identifiable targets of the tax administration. Hence, it is not surprising to find that the "openness" of a country greatly influences the tax burden of less developed countries, an influence that worked through increasing the relative importance of import and export taxes" (De Wulf, 1980)

The revenue collection role of Customs Administrations is also emphasized by De Wulf and Sokol (2005), when they remark that "in spite of declining customs tariff rates brought about by

successive rounds of trade liberalization, the revenue mobilization and control functions of customs are likely to remain substantial, for several reasons: (a) the fiscal dependency on customs revenues is likely to linger for some time, in light of the difficulty many developing countries encounter in broadening their tax bases; (b) imports will probably constitute a major tax base for levying VAT, and customs is well positioned to control the goods at the time of importation; (c) customs will remain the responsible agency to ensure that goods that were imported for other than home consumption are not diverted to such consumption; and (d) assessing VAT refunds on exported goods will continue to require a high level of control over exported goods.

Keen (2003) also explains that, "in Africa, more than one-third of total revenue still comes from trade taxes, whose relative importance actually increased over the 1990s. Elsewhere in the world there is a clear downward trend, but reliance still remains high: one-fifth of all revenues in Asia and the Pacific, and one-quarter in the Middle East, are from trade taxes." As explained by these statistics, customs duty made a significant contribution for government budget.

Krugman and Obstfeld (2006) disclose that, before the introduction of income tax in the United States of America, customs duty had been the major source of government of the country. Up until 1913, customs receipts constituted a considerable percentage of the total Federal revenue of the United States and fiscal needs played a significant part in customs duty discussions. Since 1913, governmental revenue requirements have increased and new methods of taxation have reduced the relative importance of customs receipts. In 1922, revenue from customs duty amounted to only 8.7% of total Federal revenues; in 1932 the proportion rose to 15.5%, largely because of the decline in income tax payments in that year. By 1934 customs duty provided less than 10% of total Federal revenue (Fox,1936).

Many countries use customs duty to improve their balance of payments positions as well.

They increase their customs duty rates to cut down imports generally in order to offset the decrease in exports. The four major components of customs tariff as indicated by Todaro and Smith (2006) are duties on trade are the major source of government revenue in most LDCs because they are a relatively easy form of taxation to impose and even easier to collect; import restrictions represent an obvious response to chronic balance of payments and debt problems;

protection against imports is one of the most appropriate means of fostering economies of scale, positive externalities, and industrial self-reliance as well as overcoming the pervasive state of economic dependence in which most developing countries find themselves as well as pursuing policies of import restriction, developing countries can gain greater control over their economic destinies while encouraging foreign business interests to invest in local import-substituting industries, generating high profits and thus the potential for greater savings and future growth.

Even if customs tariff is perceived as a major barrier to trade on the one hand, it has also its own advantages. In other words, there are economic benefits that determine the demand for customs tariff.

The Ethiopian Ministry of Finance and Economic Development (2007) also states the objectives of the Ethiopian Customs duty are providing proper protection for the domestic industries and investors; providing "Price Signal" for the producers and the investors; encouraging the substitution of imported goods with local products; controlling the balance of payments deficit and prohibiting the importation of hazardous and polluting goods from abroad; and Serving as a source of government revenue.

1.2. Statement of the Problem

In the 1950's, economists such as Prebisch, Singer and Myrdal appeared and influenced the world with the so-called Prebisch-Singer Hypothesis which is generally skeptical about the benefits of trade, favor import substitution strategies Harvey et.al (2008). The P-S Hypothesis argues that there was, and will continue to be, a secular decline in the terms-of-trade of primary-commodity exporters due to low income and price elasticity's of demand for primary products. These groups of economists contend that import substitution is the strategy that such countries have to follow in order to grow.

As Alekaw (2011) mentioned Ethiopia seem to have been planned based on the conclusion that Ethiopia's terms of trade has been deteriorated as it has been engaged in exporting primary products. The trends in the policy frame work contend that import substitution is the strategy that Ethiopia has to follow to grow. However, this strategy had been tested in the 1960s and 1970s over many Latin American countries as well as other countries of the world and proved to be inefficient Rodriguez et.al. (2008). There have been shifts from import substitution to export oriented growth strategy in the 1980s and onwards.

In line of this, to secure the benefits of international trade, counties like Ethiopia are usually advised to make further liberalization efforts. However, the fact that customs duty has retained a significant share in the Ethiopian economic structure has made the attempt of trade liberalization difficult as it has contributed to more than 34 percent of the tax revenue over the last ten years (2002/03 to 2012/13).

Consequently, reduction of foreign trade tax will cause a substantial decline in revenue of the government. The reduction in revenue will worsen the budgetary deficit. Thus, customs tariff reduction needs to be coordinated with fiscal reforms. The general advice of international institutions such as the International Monetary Fund and World Bank given the developing countries over the past few decades has been to replace foreign trade tax (customs duty) with domestic consumption tax, particularly with value-added tax (VAT) and to maintain relatively high corporate income tax rates. In this case the portion that government is getting from customs duty may decrease and the government can find other sources of revenue to compensate for the decrease in custom duty following the customs tariff reductions.

In the past, researches has been done and articles have been written regarding the role of customs duty, effect Real GDP growth and Government spending towards the government's budget, in Ethiopia. However, most of these works were conducted using descriptive research design rather than inferential design, where relationships between variables were not adequately researched and discussed. Therefore, the researcher is interested in conducting research on this topic, but by applying regression models fills the knowledge gaps in identifying relationships among different variables such as Customs duty, real GDP growth, Government spending and Government budget.

In this paper an inferential type of research employed to examine the role of customs duty, Real GDP and Government spending for government budget in the Ethiopian context.

1.3.   Research Questions

The research questions of the studies are;

1 What is the impact of customs duty, real GDP, and Government spending on Government budget?

2 To what extent does real GDP growth affects Government budget?

3 What is the contribution of customs duty on the country's budget?

1.4.   Objectives of the study

1.4.1.   General Objective

The general objective of the study was to examine the role of customs duty, Real GDP and Government spending on Government Budget in the case of Ethiopia.

1.4.2 Specific Objectives

The specific objectives of the studies were:

- To examine the impact of Customs duty, Real GDP and Government Spending on Government Budget
- To investigate the effect of real GDP growth on government budget.
- To access the implications of custom duties on the country's budget.

1.5. Hypotheses

According to Kothari (2014), a "hypothesis is tentative assumption made in order to draw out and test its logical or empirical consequences." As such, the manner in which research hypotheses are developed is particularly important since they provide the focal point for research.

The following hypotheses were formulated:

Hypotheses 1: Customs duty has significant effect on the government budget.

Hypotheses 2: Real GDP has significant effect on the government budget.

Hypotheses 3: Government spending has a significant effect on the government budget.

1.6. Significance of the Study

The findings of this study are expected to be significant for the following:

- From a practice standpoint, this study will be used as an input for policy makers like governments and other stakeholders for development and/or revision of policies, regulations directives and guidelines on the effective implementation of tax system expenditure management and resource allocation for the country. Moreover, the finding would be a stepping-stone for further studies by other researchers.

- The findings may also be considered an important addition to the existing stock of knowledge and literature in this area of research.

1.7. Scope of the Study

The study deals with the role of Customs duty, the effect of real GDP and the impact of government spending on the countries budget in Ethiopia. The study used a 22 years of various data such as customs duty, government budget, government expenditure and real GDP growth.

1.8. Organization of the Study

This research is organized into five chapters. Chapter one contains the background of the study, statement of the problem research objectives, hypothesis, significance of the study, scope of the study. Chapter two have theoretical and empirical literature review that informing the reader what is already known in the areas of the study. Chapter three has the methodology employed in

this study, including research design, data source and collection method, procedure of data collection and method of data analysis. Chapter four is about data analysis and discussion the results. Finally, chapter five contains conclusions, limitation and recommendation.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

This chapter presents the related theoretical and empirical review about the role of customs duty, real GDP growth and Government spending on Government budget. In the theoretical review part, different theoretical aspects about customs duty, real GDP growth, Government spending and Government budget are presented. In the empirical literature review part, the summary of similar and related studies is presented.

2.1. Theoretical Literature

2.1.1 Definition of Customs Duty

Customs duty is a tax imposed on imported goods and services. Customs duty is used to restrict trade, as they increase the price of imported goods and services, making them more expensive to consumers. A specific tariff is levied as a fixed fee based on the type of item (e.g., $1,000 on any car). An ad-valorem tariff is levied based on the item's value (e.g., 10% of the car's value). Customs duty provided additional revenue for governments and domestic producers at the expense of consumers and foreign producers. They are one of several tools available to shape trade policy.

According to Alekaw(2011) Governments may impose tariffs to raise revenue or to protect domestic industries from foreign competition, since consumers will generally purchase foreign-produced goods when they are cheaper. While consumers are not legally prohibited from purchasing foreign-produced goods, tariffs make those goods more expensive, which give consumers an incentive to buy domestically produced goods that seem competitively priced or less expensive in comparison. Tariffs can make domestic industries less efficient, since they aren't subject to global competition. Tariffs can also lead to trade wars as exporting countries reciprocate with their own tariffs on imported goods. Groups such as the World Trade Organization exist to combat the use of egregious tariffs.

According to Lemma (2014) Governments typically use one of the following justifications for implementing tariffs:

To protect domestic jobs, if consumers buy less-expensive foreign goods, workers who produce that good domestically might lose their jobs. To protect infant industries, if a country wants to

develop its own industry producing a particular product well, it will use tariffs to make it more expensive for consumers to purchase the foreign version of that product. The hope is that they will buy the domestic version instead and help that industry grow**.** If one country doesn't play by the trade rules both countries previously agreed on, the country that feels jilted might impose tariffs on its partner's goods as a punishment. The higher price caused by the tariff should cause purchases to fall. To protect consumers, if a government thinks a foreign good might be harmful, it might implement a tariff to discourage consumers from buying.

2.1.2 The Major Roles of Customs duty

I. The Protective Role of Customs duty

One major objective of imposing customs tariff is that it plays an import substitution role. Import substitution is a strategy used by many and still being used by some of the developing countries to replace goods that are being imported with similar domestic products. "The economic rationale put forward for the establishment of import substituting manufacturing operations", according to Todaro and Smith (2006), "is either that the industry will eventually be able to reap the benefits of large-scale production and lower costs (the so-called infant industry argument for tariff protection) or that the balance of payments will be improved as fewer consumer goods are imported." Krugman and Obstfeld (2006) also explain that even if tariffs are traditionally used to raise revenue for the government, the true purpose of tariffs is protecting domestic products from foreign competition. They also have the view that in the early 19th century in the United Kingdom, and in the late 19th century in both Germany and the U.S. tariffs were mainly used for protection purposes. It is widely understood as "infant industry argument". The theory of tariff for protecting infant industries is taken as a temporary interference with the freedom of trade.

The distinction between nominal tariff rate of protection and effective rate of protection also helps to appreciate more the principle behind protective tariff. The nominal tariff rate of protection, according to Todaro and Smith (2006), "shows the extent, in percentages, to which the domestic price of imported goods exceeds what their price would be in the absence of protection". The "effective rate of protection" for Todaro and Smith (2006), "shows the percentage by which the value added at a particular stage of processing in a domestic industry can exceed what it would be without protection".

The effective rate of protection is usually used to measure the protection given to each activity and also to measure how a country's tariff schedule affects the allocation of domestic resources. In fact, the protective role of tariff has declined through time, as countries devised different non-tariff mechanisms such as import quotas; import licensing, foreign exchange control, export subsidies, and export restraining Krugman and Obstfeld, (2006).

II.   The Revenue Role of Customs Duty

Revenue role is another objective of levying customs tariff is to collect revenue in the form of taxes from the foreign trade. Krugman and Obstfeld (2006) disclosed that, before the introduction of income tax in the United States of America, tariffs had been the major source of revenue of the government of the country.

In the developing countries, customs revenue is a major contributor to the public budget. A statistical report of the IMF (2003) indicates that the tax revenue from international trade and transit as a percentage of total central government revenue is 1.10% for the United States (1997), 2.32% for Canada (1994), 2.44% for Australia (1997) 1.24% for Japan (1993), 2.73% for New Zealand (1997) and 1.20% for Iceland. In contrast, the Customs receipts of the 24 developing members of the World Customs Organization amounted to more than 20% (and in 12 cases more than 30%) of total government revenue. This demonstrates that developing countries heavily rely on customs revenue unlike the developed ones.

III.   The Role of Customs Duty in Capital Formation

Another contribution of customs tariff to capital formation in the developing countries such as Ethiopia can be analyzed both from the demand and the supply sides of capital. Some economists believe that it has the demand side contribution. (Nurkse, 1955), when he tries to analyze the connection between customs tariff and capital formation, explains that there are people who believe that tariff "could at least make a contribution on the demand side by increasing the incentive to invest in domestic industry". The reason behind this argument is that if domestic industries are protected through imposing customs tariff, new investors, both domestic and foreign could be attracted to invest in the areas where the tariff rate is high enough to protect them from external competition.

There is also another demand side argument that tariff could attract the surplus labor in the agricultural sector to the protected manufacturing sector, whereby the productivity of the labor increases the national income. If the productivity of the transferred labor increases as it is used in the new industry, then it is convincing that this increases the national product.

In the supply side of capital, it is argued that by imposing customs tariff on consumption goods, it is possible to reduce the expenditure on the importation of consumption goods and allocate it for importation of investment goods. In such a case, a country's stock of capital goods such as machinery and equipment can be made to increase.

Another possible effect of the restriction of imports", says (Nurkse, 1955) "is that foreign capital will respond to the increased inducement and will come in to set up 'tariff factories' producing for the domestic market." Countries which have large market size, for example Canada, according to (Nurkse,1955), attract significant capital from abroad. This way, protecting the domestic industries can attract capital not only from domestic, but also from external sources. But it depends on the purchasing power of the tariff imposing country's citizens.

IV.   Customs Duty and Balance of Payments Problems

When it comes to balance of payment, Customs duty is sometimes used to reduce the balance of payments deficit. The higher the customs duty rate is expected to result in the higher price for imported goods, and thus the lower the demand for foreign products.

The lower the demand for foreign products, in turn, ends up with lower customs tariff collected from imports. In most of the cases, underdeveloped countries overvalue their exchange rates. This happens because they are engaged in widespread industrialization and import substitution programs, to reduce poverty. The overvalued currencies have the role of reducing the domestic currency price of imports, especially capital and intermediary goods, which are highly needed for industrialization. This will end up in excess demand over supply for foreign currency. In situation of excess demand, say Todaro and Smith (2006), LDCs have three basic policy options: running down their reserves of foreign exchange or borrowing additional foreign exchange abroad and thereby incurring further debts; pursuing commercial policies and tax measures designed to lessen the demand for imports; or rationing the limited supply of available foreign exchange to "preferred" customers. Therefore, commercial policy that deals with the tariff aspect can have an effect on the balance of payments of a country.

Theoretically, therefore, it should be after considering all these roles of customs tariff, and analyzing the zero marginal rate of substitution among all these objectives that a country should fix its customs tariff rate.

Customs duty can create allocative inefficiencies that reduce national income. There is thus a legitimate presumption that high average levels of tariffs are a poor policy choice. However, Customs duty can also be used to raise national income provided the appropriate industry that is chosen for protection. In these models, customs tariffs raise per capita gross domestic product (GDP) when they target the industry subject to externalities. Thus, while the average tariff matters, so too does the finer structure of tariffs across industries. Yet tariff structure has been entirely absent from the empirical tariffs-and-growth literature Nathan Nunn and Daniel (2010).

Some empirical literature examines the impact of a country's average tariff level on its subsequent long-term growth and contribution of countries budget. For the post-war period, the impact of average customs duty/ tariffs on growth is found to be negative in Sebastian Edwards (1998) and positive in Athanasios Vamvakidis (2002), Halit Yanikkaya (2003), and David N. DeJong and Marla Ripoll (2006). For the late-nineteenth century, the results are even more conflicting.

As a conceptual framework, we use the Grossman and Helpman (1991), chapter variety-expansion model of endogenous growth. There is one homogenous good and a continuum of horizontally differentiated varieties. A new blueprint is required for each new variety, and the cost of this innovation is decreasing in the number of varieties already being produced in the country. There are thus national as opposed to international returns to scale. A tariff on the homogeneous good draws resources away from variety goods and R&D (e.g.blue print production), thus reducing per capita GDP. In contrast, there are parameter values for which a tariff on variety goods, by increasing the number of domestic varieties, can push the economy off a transition path in which the variety sector is in permanent decline and onto a transition path in which the country comes to dominate world production of variety goods.

According to Alekaw (2011), in 1993, Ethiopia embarked on a comprehensive trade reform program aimed at dismantling quantitative restrictions and gradually reducing the level and dispersion of tariff rates. As a result of this reform, tariff rates narrowed down from pre-reform of the

0-240 per cent to 0 - 80 per cent in 1995 and then to 0- 35 per cent in 2003(MOTI, 2003). Despite the adoption of trade related and fiscal reforms, Ethiopia has not fully realized the full benefits from its trade reform that began in the early 1990s. It is equally true, however, that the country is certainly better off under the liberalized trade regime compared to the highly restricted trade regime of the pre reform period.

Apart from the attempts for trade liberalization made by Ethiopia so as to gain from International trade, the contribution of trade for the registered economic growth has been insignificant and consequently trade played little to the poverty reduction process. The merchandise export composition of Ethiopia in particular and the economy as a whole has shown no significant transformation following the trade reform.

The export composition has been entirely concentrated into certain primary agricultural and mining (mainly gold) products while its imports have been diversified and increased in quantity following the economic growth mainly industrial. This trade imbalance widened from time to time and consequently forced the government to revise its monetary policy especially the exchange rate policy.

2.1.3   The Nature of Government Expenditures

Government expenditures refer to the expenses that the government incurs for its own maintenance, for the society and the economy as a whole. Government spending reflects the policy choices of government. Once governments have decided upon the type and quantity of goods and services to provide, government spending represents the cost of carrying out these policies.

The basic rationale behind the need for government expenditure is associated with the Existence of an externality or market failure. Without externalities or market failures there is no reason to assume that additional public sector investments would be more productive than the private sector investments.

Government spending on public services has a profound effect on peoples' standard of living and life chances or opportunities. Spending on public services has the objectives of giving citizens the chance to realize their full potential (through education, training and work), building an inclusive and fair society and strengthening a competitive economy.

Thus, the government's objectives for public expenditure encompasses both equity and

efficiency elements. It is sometimes argued that efficiency improvements must not be achieved at the expense of equity. However, inefficiency in the provision of public services has the result that opportunities for improved equity are lost because of wasteful use of resources. This result may be exacerbated to the extent that both the provision and financing of public services crowds out the private sector and leads to reduced economic growth. Lower economic growth results in fewer resources being available to pursue social programs. Moreover, it has to be recognized that the provision and financing of public services is not simply concerned with the redistribution of income in favor of disadvantaged socioeconomic groups in society. Social justice is not only concerned with distributional issues, but also with equality of opportunity, individual responsibility for self-improvement and reward for merit and effort. In sharp contrast with the idea that the state promotes social justice, the leviathan state mode of government suggests that rather than being socially enlightened, governments are rent-seeking, self-serving distributional coalitions benefiting those with the greatest effective political power. In this scenario, improvements in efficiency and in equity are not necessarily mutually exclusive (Bailey, 2002).

Indeed, exactly what constitute public spending is open to question and the definition of public expenditure has changed on many occasions. Such changes are normally justified on technical grounds and, generally, have attempted to separate that part of public expenditure over which central government has little or no control from that part over which it does have (or could reasonably be expected to have) control. However, such changes may also be politically expedient in allowing central government to claim success in controlling (reducing) public expenditure. For example, when central government was committed to cutting public expenditure during the 1980s in Britain, privatization revenues were treated as negative public expenditure rather than as a source of public revenue (Bailey, 2002).

Government expenditures can be represented by two broad categories of government activity: exhaustive expenditures and transfer expenditure. Exhaustive public expenditures correspond to the government's purchases of current goods and services (i.e. labor, consumables etc.) and capital goods and services (i.e. public sector investment in roads, schools, hospitals etc.). These expenditures are, therefore, purchases of inputs by the public sector and are calculated by multiplying the volume of inputs by the input prices.

Exhaustive government expenditures are viewed as claims on the resources of the economy. Use

of these resources by the public sector precludes use by other sectors. The absorption of resources by the public sector means that the opportunity cost of these government expenditures is the forgone output of the other sectors. It is the opportunity cost arguments of these kind that underlie the arguments of those who frown upon larger size of public sector and that also from the basis of many of the techniques used to measure public sector efficiency. These arguments underlie the crowding-out debate. Thus, an increase in government expenditure does not necessarily imply an increase in public output; neither does it always imply a reduction in efficiency, which makes efficiency calculations using national income data tricky (Brown & Jackson, 1996). Transfer expenditures (i.e. public expenditures on pension, subsidies, debt interest etc.) do not represent a claim on the society's resources by the public sector as in the case of exhaustive public expenditures. Indeed, transfers are a redistribution of resources between individuals in society, with the resources flowing through the public sector as intermediary.

However, the economic categories of exhaustive and transfer expenditure do not figure explicitly in public expenditure statistical series since, whilst used for analytical purposes, they have little value for accounting or planning purposes. The published public expenditure figures are the summation of many accounting components. This calls for understanding accounting constituents of government spending for empirical analysis. Accounting components of government expenditure encompass current and capital (Developmental) expenditures. Current expenditure includes spending on wages and salaries, supplies and services, rent and so on. These are broadly considered to be consumable items, the benefits of which are consumed or exhausted with in each financial year. Capital expenditures, on the other hand, include spending on fixed assets such as land, buildings and plant and machinery, the benefits of which are more durable, lasting several years of decades. Both components involve exhaustive and transfer expenditures. For example, social security payments are categorized as current expenditures, as are the interest payment on debt used to finance capital expenditures (Bailey, 2002).

This distinction of government spending is considered useful by many economists and policy makers who believe that a large share of developmental expenditure in total public expenditure is a sign of an economic policy that contributes to growth. However, there is no standardized way of classifying expenditure as current or capital so that what is classified as current in one country

may be classified as developmental in another.

Furthermore, since it is easier to obtain foreign grants and concessional credit for developmental expenditure than for current expenditure, there is an incentive for countries to make developmental expenditure look larger than it might be in reality by reclassifying some current expenditure as developmental.

Besides accounting components, it is important to look at Government expenditure in terms of tiers of government. Generally speaking, expenditure by the central government include: expenditure on social security, defense, health, trade and industry, overseas development, transport and agriculture. On the other hand the major expenditures by local government include expenditure on education, personal social services, housing and the police, local environmental health, and leisure and recreation.

Government expenditure can also be categorized as economic and functional (sectorial). Economic categories of expenditure include wages and salaries, materials and supplies, interest, subsidies, capital outlays, etc. Economic categories of expenditure can further decomposed into current and capital expenditure. On the other hand, functional or sectorial expenditure include general public service, defense, public order and safety, education, health, social security and welfare, agriculture, manufacturing and construction, electricity and water supply, transportation and communication, environmental protection etc. Diamond(1990). Moreover, government expenditures can be broadly broken down between civilian and defense.

Barro (1990) categorized government expenditure as productive and nonproductive. Productive government spending would include the resources devoted to property rights reinforcements, as well as activities that enter directly into production function. On the other hand, those expenditures that could not enter into production function (e.g. government consumption services) are considered unproductive. Bleaney et al (2001) classified general public service expenditure, defense expenditure, educational expenditure, health expenditure, housing expenditure, and transport and communication expenditure as productive expenditures. Health and Education spending is treated as investment because of the additions to human capital they

might entail. They classified social security and welfare expenditure, expenditure on recreation, and expenditure on economic services as unproductive expenditure.

2.1.4   Real GDP Growth

Real Gross Domestic Product (GDP) Definition: The total value of goods and services produced within the borders of the country, regardless of who owns the assets or the nationality of the labor used in producing that output. (In contrast, Gross National Product (GNP) measures the output of the citizens of the country and the income from assets owned by the country entities, regardless of where located.) The growth of output is measured in real terms, meaning increases in output due to inflation have been removed.

GDP or gross domestic product, is the market value of all final goods and services produced in a country in a given time period. Market value GDP is a market value—goods and services are valued at their market prices. To add apples and oranges, computers and popcorn, we add the market values so we have a total value of output in dollars. Final goods and services GDP is the value of the final goods and services produced. A final good (or service), is an item bought by its final user during a specified time period. A final good contrasts with an intermediate good, which is an item that is produced by one firm, bought by another firm, and used as a component of a final good or service. Excluding intermediate goods and services avoids double counting. Produced within a country GDP measures production within a country domestic production. In a given time period GDP measures production during a specific time period, normally a year or a quarter of a year.

The circular flow shows two ways of measuring GDP. GDP Equals Expenditure Equals Income Total expenditure on final goods and services equals GDP. $GDP = C + I + G + X - M$. Aggregate income equals the total amount paid for the use of factors of production: wages, interest, rent, and profit. Firms pay out all their receipts from the sale of final goods, so income equals expenditure, $Y = C + I + G + (X - M)$. GDP and the Circular Flow of Expenditure and Income GDP measures the value of production, which also equals total expenditure on final goods and total income. The equality of income and output shows the link between productivity and living standards.

2.1.5 Government Budget

Government allocates scares resources to programs and services intended to be implemented within a given period of time through budgeting. Budgeting is quantification of plan of action and planning can be defined as, the function of selecting objectives and establishing the policies, procedures, and programs necessary for achieving them (Kerzner, 2009). Budgeting is among the most crucial activity of government. Budgeting can be defined as a detailed statement of anticipated revenue and expenditures during an accounting period.

Budgeting process which is integrated with good planning and management function will provide better financial and program decision and lead to improved government operation. While preparing budget governments give priorities to community programs and service goals and also ways of improving quality of services delivered to the community through stewardship and development of proper financial recording system. The budgeting principle which is estimation of the future inflows and out flows is directly related with the reporting capabilities of the government, whether it is capable of reporting in accordance with Generally Accepted Accounting Principles or not and also other legal compliances.

Budget process is not simply an exercise in balancing revenue and expenditures of one year at a time but is strategic in nature, by encompassing a multiyear financial and operating plan that allocates resources on the bases of identified goals. A good budget process moves beyond the traditional concept of line item expenditure control, providing incentives and flexibility to managers that can lead to improved program efficiency and effectiveness. This days Budgeting is characterized by several futures; incorporating long term perspectives, establishing linkage to broader goals and objectives, focusing the decision on results and outcomes, involving and promoting effective communication with stakeholders and provision of incentives to government management and employees.

There are two kinds of budget classification; first for analytical purposes which is based on single criteria like functional (according to purposes e.g. defense, justice and social protection) and the second type is for authorization purpose, which is definition of line item in which each country have only a single classification of line item based on a mixture of institutional, economic and functional criteria. Line item has legal status and hence ministries cannot or only shift resources from one line item to another under strict conditions described in the budgetary

legislations (Jan Kraan, 2007). The quality of decision made on budgeting highly depends on the budget process used and information provided for the budget process. For effective and efficient utilization of resource and for fair and equitable distribution of resources governments use different budgeting approach. The major budgeting types are; traditional budgeting (line item budgeting), Zero based budgeting, program budgeting and performance budgeting.

Line item budgeting is a budgeting approach which uses previous year's performance as a base and add some incremental amount without explaining why the money will be spent or describing the expected outcomes. Line items are resources consumed in implementing programs, while planning the main emphasis is on input control. Line item budgeting focuses on government operation in terms of dollars spent in prior year rather than what is accomplished by the spending agencies Wilson et.al (2010).

Line item budgeting have different advantage that it is simple for analysis, the budget is stable or budget changes are gradual and it allows higher controlling opportunity since the budget is allotted per line item and no deviation is allowed from the approved one. The line item budgeting is criticized for its inadequate justification for continuation or elimination of spending, lack of accountability for results, no incentive to reduce costs, no linkage with government policies and lack of flexibility. John M. Kim (2006) in his assessment on the move from line item budgeting to program budgeting stated four major drawbacks in line item budgeting; (1) insufficient and in appropriate information for resource allocation decision-making, (2) insufficient autonomy granted to line ministries, (3) weak accountability mechanism for designating responsibility and (4) lack of transparency and accessibility of relevant information (M. Kim, 2006). The line item budgeting (objective of expenditure) system plays essential role in all budgeting system.

Zero based budgeting approach is budgeting approach which uses zero as a base for budgeting. The budgeting process is made based on the anticipation that we are going to start new business from scratch. Despite the concept of adding one or more to a budget each year on line item budgeting, Zero Based Budgeting justifies all expenses every year if the budget is really needed to spend as much as we spent last year, instead of deciding how much more you need to spend this year than last year. Zero based budgeting is developed based on; the expectation to reduce or eliminate funding for low priority programs, increase funding of high priority programs by shifting resources and increase effectiveness of the programs implemented. Zero based budgeting have its own advantages and disadvantages. The major advantages of zero based budgeting is; it

increases staff involvement at all level, in efficient and obsolete operations can be identified and discontinued, it drive managers to find out cost effective ways to improve to operations and to detect inflated budgets. The major disadvantages are difficulty of defining decision units and decision packages, ranking can be difficult for qualitative activities, the management may be de-motivated because of its time consuming and requirement of detail budget justification and it emphasizes on short term benefits to the detriment of long term goals (Kenya program budgeting manual, 2011).

Program Based Budgeting is a budgeting approach which directly links the planned expenditures to clearly determined results and improved service delivery within the mandate of an organization. It is shifting emphasis from input to activities, outputs, outcomes, service delivery and results (Republic of Ghana Program based budgeting guide line, 2013). Under program budgeting, the budget preparation process should be program based. That is, agencies should present and justify their budgets in terms of programs with supporting cost and performance information Robinson and Last (2009). In addition to efficient and effective allocation of resources, program budgeting allows to accompany accountability issue. The budget information and decision packages are structured according to the objectives of the government. Program based budgeting exists when a group of activities and services are merged to attain a single strategic objective called program. While discussing program or operational budget classification Sarraf (2006) defined program as any suitable and meaningful group of recurrent activities and investment projects under a program manager, which consumes resources (inputs) to contribute toward a common result (Sarraf, 2006). As the definition implies, program is collection and closely inter dependent activity performed to attain a specific result/output. Bourdeaux (2008) defined program as, systematic sets of activities undertaken to carry out an agency's core businesses. In addition he urged that program should be customer and outcome focused and should result in positive change for the programs customers. For the purpose of monitoring, programs can be divided in to sub-programs and activities and their performance is evaluated with outcomes, outputs and cost.

As Kraan noted, a programmatic budget classification is considered to be major supportive of the priority setting function of the budget than a classification which is largely based on inputs (Jan Kraan, 2007). Indicators and narrative statements should also be presented with the programs. Indicators serve to illustrate the major policy issues and provide feedback to policy decision

makers, rather than to monitor operational performances. A presentation of budget by program should focus first on strategic areas (main programs/functions) and on the strategic policy objectives of the government (Allen and Tommasi, 2001).

M. Mcnab (2011) states that a well-designed program budgeting system will smoothly integrate four multiple objectives so that they can complement each other. These four distinct objectives are (1) facilitating a cost effectiveness comparison between alternative systems, (2) improving technical efficiency by providing discretionary authority to lower level managers, (3) clarifying the life cycle cost of decisions and (4) structuring a planning, programming and budgeting decisions in multiyear frame work.

Program budgeting has advantages on increasing efficient and effective use of scares resources there are some draw backs attached to it like; definition of some objective is difficult, difficulty in quantifying some measurements and difficulty in defining programs of administrative organizations. Understanding of the very nature of program budgeting system between different levels of government officials (i.e. Budget officials, economists, accounting sections and different scholars) is also another problem.

Time budgeting system has developed from traditional input based budgeting system to zero base budgeting in which the allocation is started from scratch each year to allotting budget for specified program and now to linking allocation of resource to expected performance to be delivered. Performance-based budgeting aims to improve the efficiency and effectiveness of public expenditure by linking the funding of public sector organizations to the results they deliver and making systematic use of performance information (Robinson and Last, 2009). Performance budgeting is the process of developing performance information and using this information in budgeting process and resource allocation. Increasing the use of performance information in budgeting process is an important initiative that moves the focus of decision making in budgeting away from inputs towards measurable results (Curristine, Lonti and Joumard, 2007).

Bourdeaux (2008) while describing the move from program to performance budgeting describes that; budgeting is being influenced by ideas surrounding performance based budgeting, a reform that focus both on performance measures or outcomes and on managerial entrepreneurialism. The theory behind performance budgeting is that, managers should be held accountable for results, but should be allowed to shift input as needed in order to achieve these results

(Bourdeaux, 2008). With slight modification from the previous one Rivenbark (2004) defined performance budgeting as "Performance budgeting" is a process for budget preparation and adoption that emphasizes performance management, allowing decisions about allocation of resources to be made in part on the efficiency and the effectiveness of service delivery (Rivenbark, 2004).

Performance based budgeting starts with definition of programs hereby followed by financial accountability and performance measurement system. Bourdeaux (2008) describes the basic difference between programs of program budgeting and performance based budgeting as programs under program budgeting are associated with more discrete strategies, service or products used to achieve an objective rather than being associated with the objective as in the performance budgeting system.

2.2. Empirical Literature

Empirical literature overwhelmingly suggests that increased trade or reduced protectionism is associated with greater growth. Edwards (1998), for example, found that after taking into account the roles of all other factor (including capital accumulation, growth in labor force and the differences in level of technology), countries with lower degrees of protection, on average; tend to grow at a much faster pace than countries with high trade restrictions.

Pawlos (2002) after taking the data of the 1961-2000 periods, he found that in the long run imported intermediate goods positively and significantly affected the real GDP, whereas the change in imported intermediate goods before one year has a positive and significant effect on the change in current real GDP in Ethiopia. His findings also revealed that the majority of Ethiopia's imports are essentially capital and intermediate goods for which there are sufficient domestic substitutes.

Lemma (2014) presented the contribution of customs duty towards the revenue budget for Ethiopian Government. In this case there is a positive relationship between customs tariff and government budget. The identified facts and findings were the share of revenue tariff in Ethiopian government's total revenue is significant. Therefore, any change in tariff policy can have significant impact on government's revenue budget; Although Ethiopia is categorized under

the developing countries where the average customs tariff rate is high, the effective rate is much lower than average tariff rate. This indicates that the effectiveness of the tax base in this case the custom duty/value of import is very low; The performance of customs duty, measured in terms of its contribution to total government budget, foreign trade taxes and its GDP ratio have declined overtime; Customs duty in Ethiopia has influential power of affecting the contribution of the foreign trade taxes and total indirect taxes to the total government budget and the low performance of customs duty could be one of the major factors that are lowering the countries Tax/GDP ratio even when compared with the other sub-Saharan African countries.

Lemma concluded that although customs duty share in the government budget is significant, by all measurements including tax base effectiveness, share of customs duty to the total government revenue and total indirect and its GDP ratio, the performance customs duty in Ethiopia has been declining over time.

Yanikaaya (2003) examined the relationship between tariff and growth for 80 developed developing countries over the period of 1970-1997 and concluded that trade barriers in the form of tariffs can actually be beneficial for economic growth especially for developing countries. This is due to tariff has significant contribution for countries budget.

Meanwhile, there are studies that express pessimism of trade liberalization and little evidence to support a link between trade liberalization and economic growth Grossman and Helpman (1991).However, there is agreement within a majority of economists and policy makers that liberalizing the economy is advantageous over restriction. However, tariff reform continues to be a pressing policy issue in many developing countries. Reducing trade barriers is frequently a core and problematic element while the prospective scales of liberalization for some countries remain substantial. One of the major concerns of trade liberalization, especially for developing countries, is that it reduces government revenue. In many low income countries, a customs duty continues to account for a significant share of public revenues and GDP.

De Jong and Ripoll (2006) examined the relationship between tariff and growth for 60 countries over a period of 1975-2000 and showed that the marginal effect of tariff on growth is declining in the level of per capita incomes. That is to say, the relationship between tariff and growth is negative and significant among the world's rich countries but positive among the world poor countries.

Recent estimates suggest that, on average, customs duty account for around 4 percent in low and

middle income countries' GDP in 1995-2000 while the equivalent estimates in high income countries are below 1 percent (Keen,2003).

Loss of revenue can particularly be a potential source of fiscal instability in African countries as the countries mainly rely on trade taxes for government revenue. Equally true, if the Compensatory increases in other taxes are imposed mainly on poor, poverty would be exacerbated. Obviously, the key obstacle to fundamental tariff reduction in many developing countries is the revenue loss that it ultimately implies. To implement a dramatic trade reform in a domestic economic environment with increasing personal income disparities, the government has to choose tax policies that will avoid further increases in income inequalities and balance the government budget with minimal social costs.

Bisrat (2009) used a dynamic CGE micro simulation model for Ethiopia to investigate the impact of trade liberalization on growth and poverty reduction. The main findings of the study were that a complete removal of tariff in the Ethiopian economy would lead to a worsening of poverty in the short run and contraction of the initially protected sectors, particularly industry and service sectors. In the long run, however, trade liberalization combined with capital accumulation reduces poverty and swells sectors that were contracted in the short run. The growth effect captured by the model contributed to the expansion of all sectors, particularly agriculture and reduces poverty.

2.3. Conceptual Framework

Figure 1 Conceptual Framework

Independent Variable   **Dependent Variables**
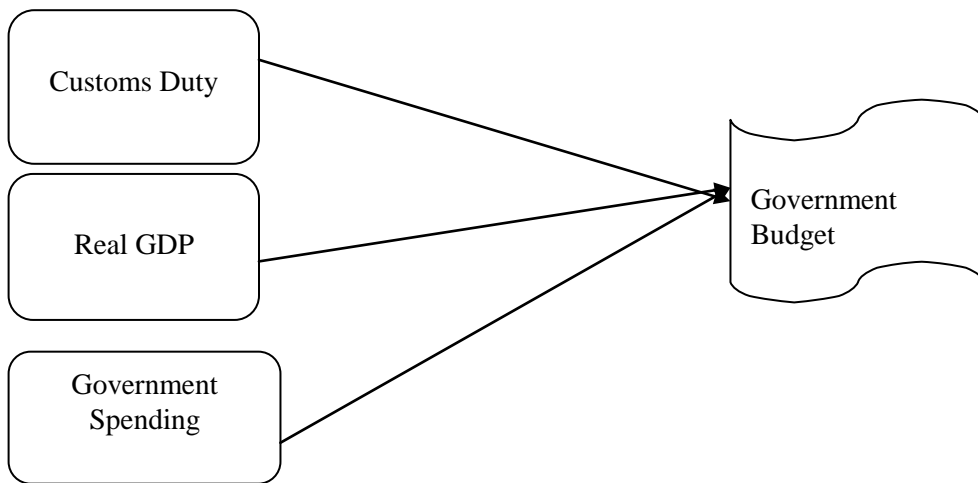
CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

3.1. Research Design

A research design is a master plan that specifies the methods and procedures for collecting and analyzing needed information Zikmund et al. (2009).The research design of this study is inferential type as it tries to explain the role of customs duty, real GDP, and Government spending on Government Budget in the case Ethiopia. According to Kothari (2004) Inferential analysis is concerned with the various tests of significance for testing hypotheses in order to determine with what validity data can be said to indicate some conclusion or conclusions. It is also concerned with the estimation of population values. It is mainly on the basis of inferential analysis that the task of interpretation (i.e., the task of drawing inferences and conclusions) is performed.

The study employed quantitative research approach because it is explanatory and the research problem requires identifying variables (dependent and independent).

Research method is an activity that involves three elements; possible ways of data collection, methods of analyzing and the interpretation that the researcher proposes for his study. There are also three types of research approach (i.e. the qualitative, quantitative and mixed) which support a variety of methods for gathering, analyzing and interpreting data. In order to achieve the research objective quantitative research approach is used.

As Kothari (2004) stated "quantitative research" is the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion. Whereas, qualitative research is less structured than quantitative research and the researcher interpret and give his judgment based on qualitative data collected through open ended question, interview and observation.

Variables of the study

Government Budget is a dependent variable and Customs duty, Real GDP and Government spending are independent variables.

3.2. Types of Data and Tools of Data Collection

The data for the study were collected from secondary sources. Data obtained from Secondary data were collected from both Ministry of Finance and Economic Development and Ethiopian Revenue and Customs Authority. The researcher also tried to use different books and articles associated to the subject matter from libraries and web sites. Secondary data, which is quantitative in nature, were used for the study.

Time series data were used to analyze the relationship between customs duties on Government budget, Real GDP on Government budget and Government spending on Government budget.

The data set is composed of data obtained from different institutions such as Ministry of Finance and Economic Development (MoFED), and the Ethiopian Revenue and Custom Authority (ERCA) and National Bank of Ethiopia (NBE). The researcher also used different printed materials such as books, journals, thesis, and online resources. The data covers the time period from 1991-2013 G.C.

3.3. Methods of Data Analysis

The collected data were analyzed by a means of tabular, charts, and regression analysis. STATA version 12 was used for data analysis technique because it can take data from word and excel file, and use them to generate tabulated report, charts, and complex statistical analysis like regression analysis. Regression analysis was used in order to estimate or predict the role of customs duty, Real GDP growth and Government spending towards government budget.

3.4. Procedures of Data Collection

Secondary data were used for the study and all data were collected from Ministry of Finance and Economic Development and Ethiopian Revenue and customs Authority.

The secondary data which the researcher collected from ministry of finance and economic development are government budget from year 1991 to 2013, expenditure report from the year 1991 to 2013, real GDP data from year 1991 to 2013 total government revenue (i.e. taxes and nontax revenue data's from the year 1991 to 2013). The researcher also collected various data

from Ethiopia Revenue and Customs Authority such as Customs duty, Excise tax VAT etc. since some data was missing from Ministry of Finance and Economic Development. Annual progress reports for different years prepared by Ministry of Finance and Economic Development were also used as a secondary data.

3.5. Regression Function

To empirically analyze the Customs duty, Real GDP and Government Spending towards government budget, the following model is formulated in light of the above reviewed literatures. However, one should notice that the purpose of an econometric analysis is not to capture the total reality but its salient features. The study will use government budget as a dependent variable and custom duties, Real GDP growth and Government spending as an independent variable and other factors affecting Custom duty, real GDP and Government spending as explanatory variables. The model is mathematically be specified as follows:

$$GBt = \beta_0 + \beta_1\, Cd_t + \beta_2\, GS_t + \beta_3\, Growth_t + \varepsilon_t$$

Where:

GB= Government Budget

CD= Customs duty

GS= Government Spending

GR=Growth in GDP and

ε_t **is an error term that captures other unobservable factors.**

CHAPTER FOUR

4. RESULTS AND DICUSSION

This chapter deals with analysis and presentation of findings from the collected data through secondary techniques. The secondary data is collected from Ministry of Finance and Economic Development and Ethiopian Revenue and Customs Authority. The type of data collected is quantitative in nature such as annual progress report, budget data and different types of books which are quantitative in nature.

4.1. Findings of the study

Multivariate time series models enable one to estimate the dynamic effects of the explanatory variables on the dependent variables. However, to undertake estimation or testing procedures it is important to make sure that the variables are stationary. This is because regression on a non-stationary dependent variable on non-stationary independent variables results in spurious regression from which estimates and test statistics obtained would be misleading.

However, there is an exception to this problem where if non stationary series happen to have a linear relationship that is stationary they are destined to have a long run relationship to which there is an error correction mechanism that leads the variables to their long run equilibrium (Verbeek,2004).

In this section, the regression results of long run relationship and short run error correction adjustments will be discussed. The first thing to do before running any of the regression is to check for the stationery of the variables under study. After checking whether the variables are stationary or not, we proceed to the regression of the variables and test for the existence of the co-integration among the variables which indicates for the long run relationship between the variables. If there is found to be a long run relationship an error correction model will be regressed to check how much of the fluctuations is adjusted to the equilibrium per period.

Co-integration in more technical terms, if we have two non-stationary time series X and Y that become stationary when differenced (these are called integrated of order one series, or I(1)

series; random walks are one example) such that some linear combination of X and Y is stationary (aka, I(0)), then we say that X and Y are co integrated. In other words, while neither X nor Y alone hovers around a constant value, some combination of them does, so we can think of co-integration as describing a particular kind of long-run equilibrium relationship. (The definition of co-integration can be extended to multiple time series, with higher orders of integration.) Examples for integrated Pairs; Income and consumption: as income increases/decreases, so too does consumption; size of police force and amount of criminal activity etc…

The reason why we are checking the co-integration of the variables is that standard regression analysis fails when dealing with no stationary variables, leading to spurious regression that suggest relationships even when there are none.

4.1.1. Test for Stationary

A series is said to be stationary if the time origin doesn't affect its properties, i.e the joint probability distribution not affected by a shift along the time axis. The distribution of Yt is the same as any other value of the series Yt-k for any k that doesn't depend on time. This condition is what is called strict stationary. However, what one will be concerned with is the means, variances and covariance's of the series which is found sufficient to impose that these moments are independent of time rather than entire distribution. This is what is called weak stationary (Verbeek, 2004).

An autoregressive process such as Yt = α + β Yt-1 + εt is said to be stationary if -1 < β < 1.

If, however, β = 1 there is said to be a unit root which causes the process to be non stationarity. Therefore, to test for stationarity one conducts a Dicky - Fuller test where the null hypothesis is:

Ho: β = 1 (a unit root)

Against the alternative hypothesis:

H1: β < 1 (stationary) the test statistic to be compared with the tabulated DF critical values is

DF = (- 1) / Se ( )

However, the critical values from the standard t-ration shouldn't be used to check for significance levels as it doesn't have a t-distribution not even asymptotically. This is because the

non stationarity of the series invalidations the standard results. Instead, critical values are taken from the appropriate distribution which is under the null hypothesis on non-stationary is non-standard. A time series is said to be stationary if and only if its mean, variance and auto covariance remain the same regardless at what time we measure them that is they are time invariant, they only depends on the gap or lag between the two time periods not the actual time. The stationary of the variables can be determined by performing the Augmented Dickey-Fuller Test (ADF) test. The significant part of the test is that testing for non-stationary is equivalent to testing for the of a unit root. As the error term is unlikely to be white noise, Dickey and Fuller extended their test procedure suggesting augmented version of the test which includes extra logged terms of the dependent variable in order to eliminate auto correlation. Accordingly a stationary test was conducted on the variables that are under study. The result obtained is described in table 1 below.

Table 1 Augmented Dickeys Fuller Test for Stationary

Variables	ADF test Statistics	1%	5%	10%
	I(0)			
Government Budget	8.283	3.702	2.980	2.622
Custom duties	7.800	3.702	2.980	2.622
RGDP	8.402	3.702	2.980	2.622
Government spending	18.873	3.702	2.980	2.622

Source: STATA result

All the dependent and independent variable are stationary at 1%, significant level. This indicates the variables are time invariant which means the variables does not have time dependence.

A time-invariant variable is a term used by statisticians analyzing economic data. A time invariance means that time scaling will not change the variable so e.g. x(t)=x(t+a) i.e. time is shifted by and also called time symmetry. It can also mean constant, i.e. dx/ dt=0

Figure 2 Budget vs GDP Growth (1996-2005 EC)
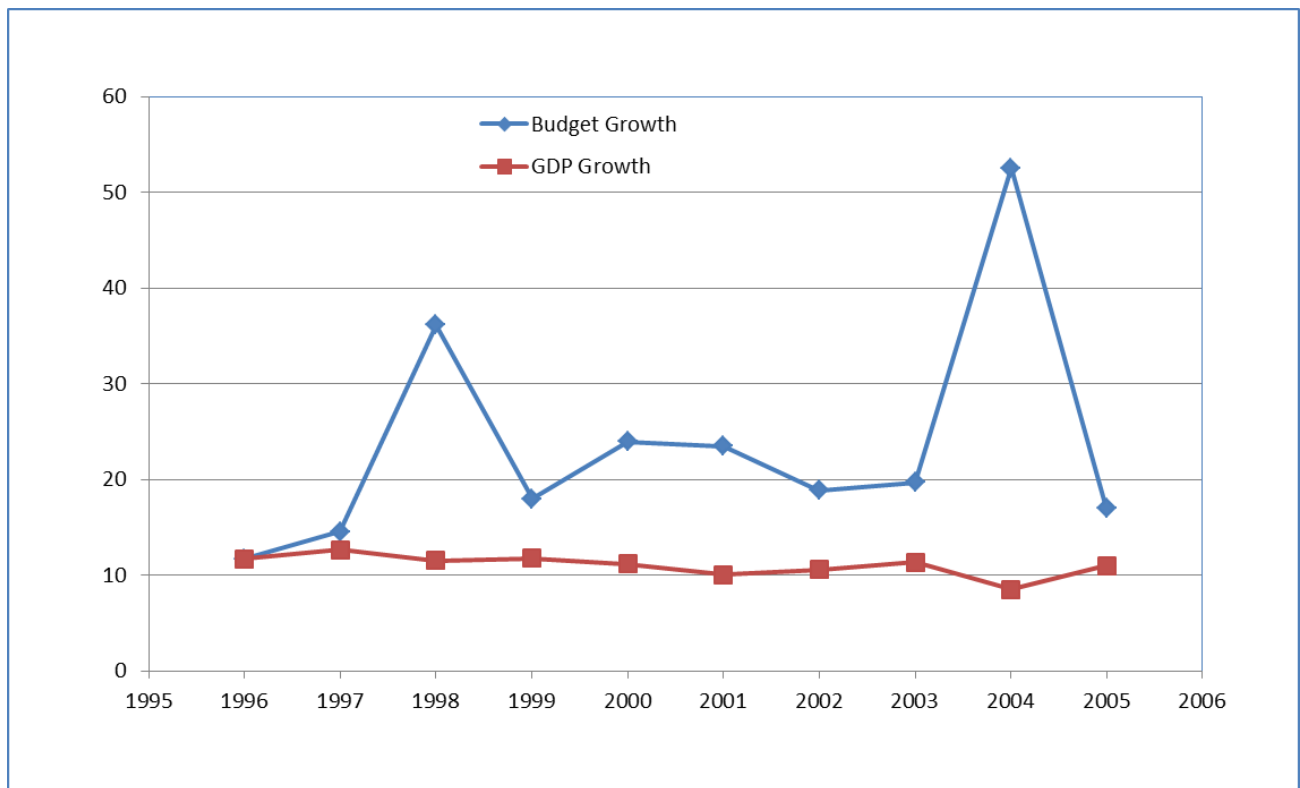
Source: Own computations from MOFED data and own computation

Average

The average budget growth from the year 1996 to 2005 EC is 23.601 and the average GDP growth from the year 1996 to 2005EC is 16.93.

Max

The maximum budget growth is registered in 2004 EC is 52.55 in and Maximum real GDP growth is 12.64 which is in the year 1997 EC.

Table 2 Average share of tax and non-tax revenue for total domestic revenue

|	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average
Total domestic revenue	100	100	100	100	100	100	100	100	100	100	100
Tax revenue	78.6	77.8	72.8	78.2	75.3	70.4	78.6	85.3	83.4	84.9	78.5
Direct Taxes	26.8	24.6	24.6	23.6	24.0	24.1	30.2	28.3	28.1	29.5	26.39
Domestic indirect taxes	13.4	15.8	14.8	15.0	14.8	16.6	21.7	22.7	22.7	25.5	18.3
Import duties and taxes	38.3	37.4	34.4	39.6	36.5	29.7	26.7	34.3	32.6	30.0	33.96
Export tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Non Tax Revenue	21.4	22.2	27.2	21.8	24.7	29.6	21.4	14.7	16.6	15.1	21.47

Source own computations from the MOFED data

Total Domestic Revenue= Tax Revenue + Non Tax Revenue

Total Tax Revenue= Direct Taxes + Domestic Indirect Taxes +Import duties and Taxes + Export tax

The table shows the percentage contribution of tax and nontax revenue for the total government revenue from the year 1996 to 2005 EC. As clearly shown in the table the highest percentage of tax contribution for total government revenue budget was recorded 84.9% which is in the year 2005 and the lowest percentage of tax contribution for the total government revenue budget was recorded in the year 2001 which is 70.4%. The highest percentage contribution of import duties for government tax revenue budget was recorded in the year 1999 which is 39.6% and the lowest

Percentage contribution of import duties was recorded in the year 2002 which is 26.7%. Therefore, the contribution of customs duty for government tax revenue was high in the previous years and declining in the recent years.

Figure 3 The share of Customs duty in the total government tax revenues (1996-2005 EC)
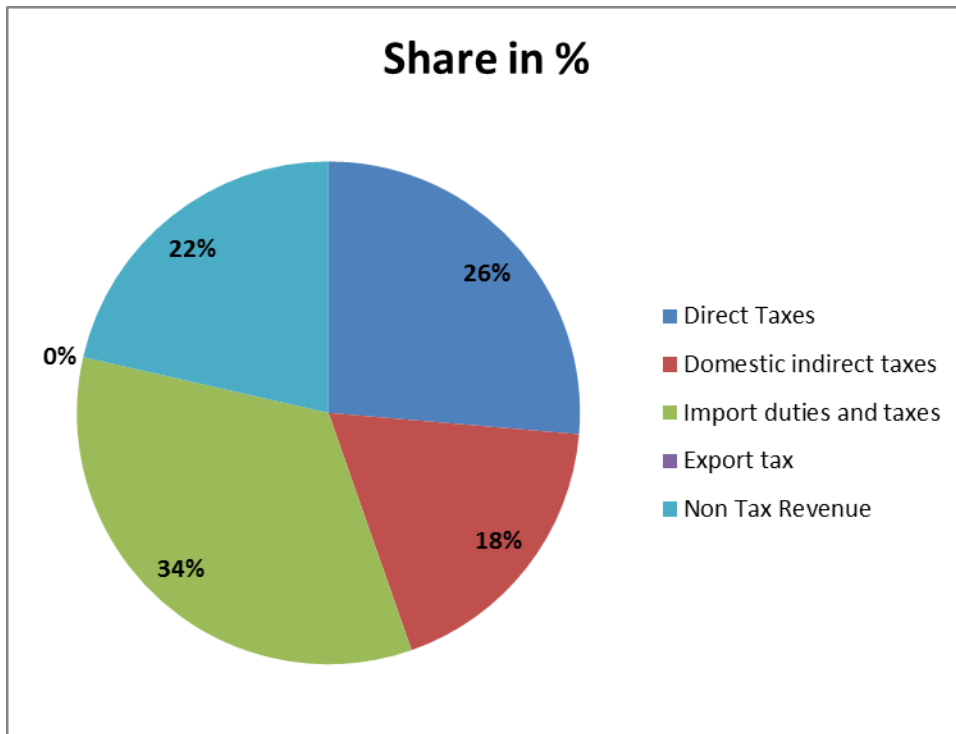
Source own computations from the MOFED data

Even though the average contribution of customs duty for the past 22 years is 9 % the share of the customs duty rate was much higher in the earlier years than the recent years. The data gathered from MoFED for the study period reveals that the average contribution of customs duty to total government revenue has been declining over time.

According to Lemma (2014), during the majesty era, the highest share of Customs duty for total government revenue was 26% which was attained 1965/66 fiscal year. In the military government the highest share which is 10% was recorded in 1976/77 fiscal year. Since the current government took up power in 1991, the highest share 14% was attained 2003/2004 fiscal year.

This shows how much the role of customs duty, in the total government revenue budget, has steadily declined over time.

4.1.2. Estimation Results

The next step is to check for the existence of a long run relationship among the variables. This is done by examining whether any linear combination of the series are taken from a stationary distribution. In such a case the series are said to be co-integrated, in which case the model under consideration can be used to make conclusions about long run relationships.

This will be dealt with in the following sub section.

The existence of long run relationship between the variables depends on whether there is a linear relationship between the variables that is stationary. Technically, this requires for there to be linear relationship among the dependent variable and the independent variables that is integrated of order zero,that is there needs to be a β such that Yt- β Xt is I (0). In such a case Yt and Xt are said to be co-integrated or that they share a common trend (Verbeek).

Even though the ordinary asymptotic theory is nonstandard, β can be consistently estimated from regression Yt upon Xt using OLS. The estimator of βis found to be super consistent because it converges to β at much faster rate than the ordinary asymptotic (Verbeek,2004).

The existence of co-integration and, hence, an error correction mechanism can be tested by performing an Augmented Dicky Fuller test on the residual from the regression of the dependent variable on the independent variables. If one rejects the null hypothesis that there exists a unit root then the distribution of an error term is stationary which, therefore, indicates that there exists long run equilibrium and an error correction mechanism that adjusts the short run fluctuations in to the long run equilibrium.

Accordingly a regression was run to find out whether there exist a long run relationship between the dependent variable and independent variables of this study.

Table 3 Results of the Regression Analysis

Dependent Variable: Government budget

Variable	Coefficient	t-value	p-value
Custom duties	3.271132	2.60	0.014
RGDP	.0082503	0.70	0.487
Government spending	.5829654	5.64	0.000
Constant	29073.07	0.02	0.986

Source: STATA result

As indicated in the above estimation Customs duty and Government spending are significant variable but real GDP is not significant variable. Customs Duty is statically significant at 5% and government spending is significant at 1%. The main reason for the significant result is Government spending has a significant impact on the government budget and customs duty is has less contribution for the budget is 9% on average for the past 22 year.

Table 4 The Contribution of Customs duties for Government Budget (1984-2005)

Year	Contribution of the Custom duties to the government budget (% share)	Year	Contribution of the Custom duties to the government budget (% share)
1984	4.7	**1995**	9.8
1985	5.9	**1996**	12.6
1986	7.5	**1997**	11.4
1987	7.5	**1998**	9.9
1988	9.1	**1999**	9.5
1989	11.1	**2000**	8.6
1990	9.8	**2001**	7.3
1991	9.7	**2002**	9.1
1992	7.7	**2003**	10.0
1993	8.0	**2004**	9.4
1994	10.0	**2005**	9.3

Source: MoFED

This table shows the government budget is generated from other taxes (Income Tax,VAT ,Sure tax) and aid from different countries. This may have happened due to the government policy of liberalizing the economy since 1991 (1983 E.C).

On the other the real GDP is also insignificant variable for affecting government budget that means the government budget increment is not highly dependent on the growth in the economy rather it follow the normal own trend.

The ADF test statistc obtained for the residual error term from the above regression is
shown in Table 5.

Table 5 Augmented Dicky Fuller (ADF) Test Statistics for the Residual Error Term

	Test Statistics	1% critical value	5% critical value	10% critical value
Z(t)	16.936	3.702	2.980	2.622

Source: STATA result

As can be observed from Table 4, the error term from the regression of the government budget on the other explanatory variables is stationary indicating the existence of co integration, hence a long run relationship between variables. The existence of long run relationship has its implications for the short run behavior, because there has to be some mechanism that drives the variable to their long run equilibrium relationship.

CHAPTER FIVE

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

As stated in this study, the purpose of the study was to examine the role of customs duty, GDP growth and Government spending on government budget in the case of Ethiopia. Specifically, the research discussed the impact of customs duty on government budget, the effect of customs duty on real GDP growth and access the implication of customs duty on the country's budget.

Consequently, the researcher reached the following Conclusion, which is analyzed from the secondary data analyzed.

- Customs duty is a significant variable that affects the Ethiopian government's total budget. Therefore any change in customs duty policy can have a significant impact on government's revenue budget.

- Real GDP is not a significant variable. The main rationale for the insignificant result is that the government budget increment is not highly dependent on the growth in the economy rather it follows the normal trend mainly and highly influence by government policy.

- The government spending is a significant variable which affect the government budget. The explanation was a 1% increment in budget spending result 0.5% increment in government budget.

- The performance of customs duty measured in terms of its contribution to total government budget has declined over time.

- The low performance of customs duty could be one of the major factors that is lowering the country Tax/GDP ratio.

- Most of the government budget is generated from other tax (Income tax, VAT, Sur tax) and aid from different countries.

5.2 Limitation of the study

This paper addresses the role of customs duty, real GDP and Government spending on government budget in the case of Ethiopia.

The study was limited to see the budget data that was originally approved at the beginning of each year from the year 1991 to 2013GC since the researcher is not able to find the data for additional budget at the Ministry of Finance and Economic Development library and other places. Due to this the data used for the research is only the approved budget at the beginning of each fiscal year and the additional budget data was not included in the study.

5.3 Recommendations

On the basis of the findings and conclusions drawn with regard to the effect of customs duty ,real GDP and Government spending towards the government budget, the following recommendations are made with the hope that implementation would help policy makers to handle the problem identified. As per the findings the points below are forwarded as a recommendation.

- Although the share of customs duty for government revenue budget is significant, by all measurements, the performance of customs duty in Ethiopia in terms of its contribution towards the government budget has been declining over time. So, government needs to take actions to revise the trend.

- The government budget should follow the growth in GDP trend rather than the normal trend. The budget increment needs to be depending on GDP growth.

- The other taxes (Income tax, VAT, Sur tax) should have implemented both domestically produced and imported products, which might affect domestic producers negatively. So, to make the domestic product competitive enough and protect them from import surgeon the custom duties should increase except the raw material import for domestic production.

- The government spending is a significant variable which affects the government budget. Therefore the government should be careful before making any changes in government spending policy since it can have an influential impact on the government's budget.

- Customs duty is also a variable which affects government budget significantly. Therefore, the government should collect the tax in a very efficient and effective manner.

Reference

Alekaw Kebede,(2011, June) <u>Effects of Tariff Reduction and Tax Replacement on Growth, Poverty and Income Distribution in Ethiopia.</u> A CGE Micro simulation Analysis. Unpublished Master's Thesis, Addis Ababa University.

Athanasios Vamvakids (2002)" How Robust is the Growth-Openness Connection? Historical Evidence<u>, Journal of Economic Growth</u>, 7, 57-80,

Bailey, Stephen J. (2002), "<u>Public Sector Economics</u>: Theory, Policy and Practice" 2nd ed. Great Britain

Barro, Robert J. (1990), "Government Spending in a Simple Model of Endogenous Growth" <u>The Journal of Political Economy</u>, Vol. 98, No. 5,S103-S125.

Bleaney, Michael; Gemmell, Norman; Kneller, Richard (2001) "Testing the Endogenous Growth Model: Public Expenditure, Taxation, and Growth over the long run" <u>The Canadian Journal of Economics</u>, Vol. 34, No. 1,p p. 36-57.

Bisrat Temesgen(2009) <u>Trade Liberalization, Inequality and Poverty in Ethiopia</u>: A Com Putable General Equilibrium Micro Simulation Analysis'' Unpublished Project Thesis, AAU, Brown, C.V. and Jackson, P.M. (1996), "<u>Public Sector Economics</u>", 4th ed, Blackwell   Publishers Ltd, UK.

Carolyn Bourdeaux, (2008). The problem with programs: Multiple perspective on program structures in program based performance oriented budgets. <u>Journal of public budgeting and finance</u>

C.R.Kothari (Ed). (2014) <u>Research Methodology Methods and Techniques, 2nd   Revised</u> Editi on, New Delhi: New Age International (P) Ltd.

C.RKottari (2004). <u>Research methodology: methods and techniques.</u> 2nded.NewAge International Publishers. New Delhi, India

David N. DeJong and Marla Ripoll (2006) "Tariffs and Growth: An Empirical Exploration of Contingent Relationships" <u>Harvard College and the Massachusetts Institute of Technology</u> Vol.88 No.4 pages 625-640

De Wulf, Luc and Sokol, Jose B., editors. (2005). <u>Customs Modernization Handbook;</u> Washington D.C.: The World Bank.

De Wulf, Luc. (1980) <u>Determinants of the Contribution of Customs Duties to budgetary</u>

Revenue in Less Developed Countries. Public Finance Analysis, New Series, Bd. 38, H 3: 443-468.

Dirk-Jan Kraan, (2007) Program budgeting in OECD Countries. OECD Journal on budgeting. V7 - No 4, ISSN 1608 – 7143

Earl R.Wilson, Jacueline L.Rock, Susan Kattelus (2010), Accounting for governmental and Not for profit entities. 15th Edition, New York: McGraw-Hill/Irwin

Feridoun Sarraf (2006), From Line item to Program budgeting Global lessons and Korean experi -ance ;Korean institute of public finance and the World Bank

Fox, A.M (1936, January) Duties as a Revenue Resource. Analysis of the American Academy Political and Social Science. Vol. 183, Government Finance in the Modern Economy pp.118-123.

Government of Kenya, (November, 2011). Program Based Budgeting Manual, Office of the Deputy prime Minister and Ministry of Finance

Grossman, G. and E. Helpman, (2000) Innovation and Growth in the Global Economy, Cambridge: MIT Press, 1991, Solow, R. M., Growth Theory, An Exposition, Oxford University Press, Oxford.

Harvey, David and Kellard Neil (2008) ''The perbish-Singer Hypothesis: Four countries of evidence'' University of Essex and Monash University.

Heller, Peter S. and Diamond, Jack (1990), "International Comparisons of Government Expenditure, Revisited The Developing Countries, 1975-86" Occasional Paper 69 IMF, Washington, D.C.

Harold Kerzner, (2009) Project Management a system Approach to planning, scheduling and control, 10th Edition, New Jersey: John Wiley & Sons, Inc.

John M.Kim(2006)Top down Budgeting as a Tool for central Resource Management, OECD Journal on budgeting, Volume 6, pp.87-125 ISSN: 1681-2336 (online)

Keen, Michael, editor (2003).CHANGING CUSTOMS: Challenges and Strategies for the Reform of Customs Administration. Washington: IMF.

Krugman, Paul R. and Obstfeld, Maurice. (2006). International Economics: Theory and Policy, 7th ed. Boston: Pearson Education, Inc.

Lemma Gudissa (2014) <u>Journal of Economics and sustainable Development</u> ISSN 22222-1700 (Paper) Vol.5, No.13. Pp.97-109)

Lemma Gudissa (2014) The Role of Customs Tariff: A Historical, Theoretical and Empirical Review <u>Journal of Economics and sustainable Development</u> ISSN 22222 1700 (Paper) ISSN 2222-2855 (Online), No.11, pp. 94-102

Lindert, Peter H. (1986). International Economics, 8th ed. USA: Richard Irwin, Inc.

Marno Verbeek (2004) <u>A Guide Modern Econometrics</u>, 2nd edition, Erasmus University Rotterdam.

Marc Robinson and Duncant Last (2009), <u>A basics of performance based budgeting</u>, IMF technical notes and manuals, Fiscal affairs department.

Ministry of Finance and Economic Development (MoFED). (In press).The Annual Reports for the Period of 1990/91-2012/2013 Fiscal Years. Addis Ababa, Ethiopia.

MOFED (2010),"Federal Democratic Republic of Ethiopia Growth and Transformation plan" Volume 1 main text 2010/11-2014/15

MOFED, ''Dynamics of Growth and Poverty in Ethiopia (1995/06-2004/05)'' MoFED, April 2008.

Nathan Nunn and Daniel Trefler, (2010) <u>American Economic Journal</u>: Macroeconomics p.p: 158 -194.

Pawlos, Sewasew (2002), <u>The Relationship Between Import and GDP growth in Policy</u>,7th ed. Boston:Perason Education Inc.(press). Reports for the period of 2004/05-2009/2010 Addis Ababa.

Ranger Nurkse (1955), Internal Growth and external solvency, Journal of Economics & Statistics volume 17, pp.38-50.

Republic of Ghana (July, 2013). <u>Program Based Budgeting Guidelines concepts and specifications</u>, Ministry of Finance

Richard Allen and Daniel Tommasi, (Ed) (2001), <u>Managing public expenditure</u>; a reference book for transitional countries governance, France Paris, OECD

Robert M.Mcnab, (2011). <u>Implementing program based budgeting in Serbian Ministry of – Defense</u>, Public finance publication, Inc, Summer 2011,pp.117- 131

Rodrigez Mauro (2008) ''Import substitution and economic growth'' Universidad de Sao Paulo,Brazil .

Sebastian Edwards, (1998, March)" Openness, Productivity and Growth: what do We Really Know?" The Economic Journal, Vol, 108, No.447 pp.383-398.

Teresa Curristin, Zsuzsanna Lonti and Isabelle Joumard (2007), Improving public sector efficiency: Challenges and opportunities. OECD Journal on Budgeting. V7 -No 1, ISSN 1608 - 7143

Todaro, Michael P, and Smith, Stephen C (2006). Economic Development, 9th ed. University Press. Version of the Harmonized Commodity Description and Coding System.

Yanikkaya, H (2003)Trade openness and economic growth: A cross country empirical investi-Gation ,Manisa 45030, Turkey, Journal of Development Economics, 72, p.p 57 – 89

William C. Rivenbank, (2004), Defining performance budgeting for local government, popular Government, 27-36.

Zikmund W.G et al. Business Research Methods, South western Pub-2009, Eighth edition