

EFFECT OF FISCAL POLICY ON ECONOMIC GROWTH IN UGANDA (1985-2016)

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DECLARATION

"This thesis report is my original work and has not been presented for a degree or any other academic award in any university or institution of learning".





Signature

Date

APPROVAL

"I confirm that the work in this thesis is carried out by the candidate under our supervision

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Name and Signature of Supervisor

HArch 27/08/2018

Date

DEDICATION

I do dedicate this report work to my mother and father who have stood with me in everything I have gone through during my academic pursuits may God, bless you abundantly

ACKNOWLEDGMENT

I wish to acknowledge the valuable contribution of all those persons who assisted me in the completion of this research.

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LIST OF ACRONYMS

ADB	African Development Bank
ADF	Augmented Dickey-Fuller
ANOVA	Analysis of Variance
BOP	Balance of Payment
BOU	Bank of Uganda
EAC	East African Community
FDI	Foreign Direct Investment
FY	Financial Year
GDP	Gross Domestic Product
GNP	Gross National Product
IFS	International Finance Statistics
IMF	International Monetary Fund
LCU	Local Currency Unit
MS	Micro soft
MW	Mega watts
OECD	Organization for economic cooperation and Development
PPT	Philips Perron test
SPSS	Statistical Package for Scientists
SSA	Sub Saharan Africa
TFP	Total Factor Productivity
UBOS	Uganda Bureau of Statistics
URA	Uganda Revenue Authority
USD	United States Dollars
VAT	Value Added Tax
WEO	World Economic Outlook

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ABSTRACT

The purpose of the study was to investigate the effect of fiscal policy on economic growth in Uganda (1985-2016). The study objectives were (i) To determine the effect of government expenditure on economic growth of Uganda (ii) To examine the effect of government tax revenue on the economic growth of Uganda and (iii) To assess the effect of government non tax earning on the economic growth of Uganda. The study was entirely secondary data which was collected from World Bank and OECD and world economic indicators on government expenditure, tax revenue, nontax revenue and economic growth in Uganda shillings (LCU) period of 32 years. The study used time series analysis Ex-post facto design based on quantitative techniques to analyze secondary data scientifically to critically conclude the research objectives. The study conducted a series of tests ranging from unit root test, normality tests, regression analysis and serial tests to establish the status of the variables and also establish the effect of the variables using regression. The study findings indicate that all the coefficient of the Tax revenue significantly correlated to economic growth at 0.001 while public expenditure and non tax revenue was statistically not significant at 5% level of significance in explaining variations in economic growth in Uganda because their p-values 8.17 for public expenditure 0.001 for Tax revenue and 0.802 for Non tax revenue are all less than 0.05. The study concludes that public expenditure was increasing over the period of the study; the results reveal that the public expenditure had a significant effect on economic growth in Uganda. The study concludes that public expenditure needs to be improved for attaining economic growth of Uganda. The study findings on the second objective conclude that tax revenue was increasing over the time and the effect was significant, the study concludes that the tax revenue increase lead to generation of values for the economy and need more comprehension for attaining economic growth of Uganda. The study finally established that the non tax revenue earnings had a low effect on the growth in Uganda. The study on overall concludes that fiscal policy had high effect on economic growth Uganda's economic growth for Uganda from 1985 to 2016. The studies recommend that there is need for government increase in expenditure on social services and rejuvenation of infrastructure. There is need for government policy ensuring quality and sustained growth that can potentially improve the pace of Uganda's economic advancement. On the second objective tax revenue contributes to improved economic growth. There is need for increasing revenue generation preferably through encouraging investments and supporting the creation of small business that can yield capital in order to generate more tax revenue for economic growth. The third objective recommends that there is need for generation of non tax revenue through improving accessibility to the tourism sector and growth of the tourism sector including gazeting the economic activity that generate the tax. The study contribute to prominent findings from this study is the fact that it has provided evidence to support the Keynesian theory. Indeed, economic growth or GDP can significantly be increased with public expenditure increase and tax revenue. It is now clear that an effective tax regime generates economic growth of a country. This is contrary to common belief that taxes alone cannot generate growth.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

This section is concerned with background of the study, statement of the problem, purpose of the study, objectives, research questions, hypotheses, and scope, significance of the study and operational definitions of key terms.

1.1.1 Historical Perspective

Before the great depression, which lasted from Sept. 4, 1929, to the late 1930s or early 1940s, the government's approach to the economy was laissez-faire. Following World War II, it was determined that the government had to take a proactive role in the economy to regulate unemployment, business cycles, inflation and the cost of money (Sakar, 2007). By using a mix of monetary and fiscal policies (depending on the political orientations and the philosophies of those in power at a particular time, one policy may dominate over another), governments can control economic phenomena. Fiscal policy is based on the theories of British economist John Maynard Keynes (Yang, 2011).

On the global scale in the latest IMF World Economic Outlook 2010 (WEO), growth projections for the world economies in 2009 were revised down to 1½ percent. This projection is almost 5 percentage points lower than both the forecast a year ago and trend growth in 2004-08. Although declining fuel and food prices have eased inflationary pressures in many countries, the global external current account deficit excluding grants is projected to widen to 8½ percent of GDP in 2009, significantly higher than the forecast a year ago. The macroeconomic fiscal policies according to IMF in the world economies need to be revised to ensure a steady macro-economic stability necessary for growth (Galor, 2005).

Bidani and Ravallion (1997) contend that during 2004–08, Sub Saharan African countries enjoyed high growth rates (averaging about 6½ percent), and a number of these countries achieved macroeconomic stability, as reflected in low inflation and sustainable debt. Improved economic policies, market-oriented reforms, and the reduction in the number of armed conflicts have contributed to strong performance.

Rapid growth has been facilitated by improvements in terms of trade, growth of exports, debt relief under different initiatives, and increasing aid flows and private inflows. Macroeconomic conditions in Sub Saharan African countries are now being adversely affected by the global financial crisis. The negative effects in Africa were felt first in emerging and frontier markets, where financial sector linkages are better established, but have now reached most countries in Africa.

The Ugandan Economy despite establishing successful implementation of sound economic policies. The success is never strong due to inflation, reducing increasing per capita incomes, and marked decline in the incidence of poverty. Real GDP growth remained is low 2001/02 at 5.6 per cent that reduced from the annual average rate of 6 per cent achieved since 1994/95. The outlook on growth is stabilization in 2002/03 with real GDP growth estimated at 5.7 per cent. Prudent fiscal management enables a country to maintain an increased expenditure program for poverty alleviation, which is beginning to make a positive impression on the poverty situation of the country. However, the recent budget outcome has been characterized by a widening deficit financed by large inflows of external budgetary support that has increased the dependence of the economy on foreign donors. The deficit widened in 2001/02 though the outlook on the public finances is a gradual contraction in the budget deficit in 2002/03. Though Sound monetary management result in a slowdown in monetary expansion, the status of the fiscal policy does not provide a contributing situation to inflationary pressures, declining interest rates, and relative stability in the exchange rate of the shilling (IMF, 2010).

1.1.2 Theoretical Perspective

The study is premised on Keynesian theory (1936) the Keynesian model indicates that during recession a policy of budgetary expansion should be undertaken to increase the aggregate demand in the economy thus boosting the Gross Domestic Product (GDP). Keynes regards public expenditures as an exogenous factor which can be utilized as a policy instruments to promote economic growth. From the Keynesian thought, public expenditure can contribute positively to economic growth. Hence, an increase in the government consumption is likely to lead to an increase in employment, profitability and investment through multiplier effects on aggregate demand. As a result, government expenditure augments the aggregate demand, which provokes an increased output depending on expenditure multipliers. In economic theory, it appears as HarrodDomarkeynesian theory of growth or simply, Harrod Domar growth model.

A mathematical equation of this model: $y = f(k, s)$ shows the existence of a direct relationship between savings and the rate of economic growth.

Institutional Fitness theory

Developed by Wilhelms and Witter (1998), the term FDI fitness focuses on a country's ability to attract, absorb and retain FDI. It is this country ability to adapt, or to fit to the internal and external expectations of its investors, which gives countries the upper-hand in harnessing FDI inflows. The theory itself attempts to explain the uneven distribution of FDI flows between countries. Wilhem's institutional FDI fitness theory rests on four fundamental pillars- Government, market, educational and socio-cultural fitness. At the base of the pyramid are socio-cultural factors which according to Wilhelms and Witter (1998) are the oldest and most complex of all institutions. The theory also account that that of markets, accounts for the economic and financial aspects of institutional FDI fitness, in the form of machinery (physical capital) and credit (financial capital). Developed and well functioning financial markets are hence a prominent feature in the MNC's investment decision-making process. The fourth and final pillar as put forth by Wilhelms is the Government. The role of a country's political strength plays the biggest role in the FDI game. Government fitness requires the adoption of protective regulation to manage market fitness.

Endogenous growth theory

The study was premised on the endogenous growth theory by Romer (1994). The endogenous growth theory holds that economic growth is primarily the result of endogenous and not external forces. Endogenous growth theory holds that investment in human capital, innovation, and knowledge are significant contributors to economic growth. The theory also focuses on positive externalities and spillover effects of a knowledge-based economy which will lead to economic development.

Endogenous growth theory tries to overcome this shortcoming by building macroeconomic models out of microeconomic foundations. Households are assumed to maximize utility subject to budget constraints while firms maximize profits. Crucial importance is usually given to the production of new technologies and human capital. The engine for growth can be as simple as a constant return to scale production function (the AK model) or more complicated set ups with

spillover effects (spillovers are positive externalities, benefits that are attributed to costs from other firms), increasing numbers of goods, increasing qualities, etc.

Endogenous growth models have found in Total Factor Productivity (TFP) and the accumulation of knowledge channels to relate trade (in the form of openness) and growth. Basically, participation in world markets and importation of technology can lead to faster growth in the long run. Grossman and Helpman (1990, 1991), on the one hand, highlight that in a theoretical framework the relationship between opening up to trade and long run growth is in fact ambiguous. Therefore, for them, trade does not necessarily lead to faster growing.

1.1.3 Conceptual Perspective

Betcherman and Carmen (2007) assert that fiscal policy refers to the means by which a government adjusts its spending levels and tax rates to monitor and influence a nation's economy. It is the sister strategy to monetary policy through which a central bank influences a nation's money supply. These two policies are used in various combinations to direct a country's economic goals. Here we look at how fiscal policy in this study is conceptualized under government expenditure, government tax revenue and government non tax revenue.

According to Keynes (1936) are government expenditure and government revenue through taxes and government revenue through non tax sources.

Components of Fiscal Policy

According to (Akrani, 2012) Public expenditure is spending made by the government of a country on collective needs and wants such as pension, provision, infrastructure, etc. Until the 19th century, public expenditure was limited as laissez faire philosophies believed that money left in private hands could bring better returns. Government expenditures in this study will be based on establishing and evaluating the data on government expenditures in general over the period of 31 years under the study. The expenditure will be general expenditures by the government expressed per year in percentages.

Yang (2011) contends that taxable revenue included the data on the sources of revenue that are form taxes. The description includes both direct and indirect sources of revenue that are available to the people in the country by the different parties or people of a country.

Economic growth is an increase in the capacity of an economy to produce goods and services, compared from one period of time to another. Economic growth can be measured in nominal terms, which include inflation, or in real terms, which are adjusted for inflation (Galor, 2005). According to Bergsten (1997) Gross domestic product (GDP) is defined as the monetary value of all the finished goods and services produced within the country borders in a specific time period. This includes value of production of monetary and non-monetary goods and services within a country (UBOS, 2006).

Components of Economic Growth

Over decades and generations, seemingly small differences of a few percentage points in the annual rate of economic growth make an enormous difference in GDP per capita. This therefore discusses some of the components of economic growth, including physical capital, human capital, and technology.

The category of physical capital includes the plant and equipment used by firms and also things like roads (also called infrastructure). Again, greater physical capital implies more output. Physical capital can affect productivity in two ways: (1) an increase in the quantity of physical capital (for example, more computers of the same quality); and (2) an increase in the quality of physical capital (same number of computers but the computers are faster, and so on). Human capital and physical capital accumulation are similar: In both cases, investment now pays off in longer-term productivity in the future (Sakar, 2007).

To obtain a per capita production function, divide each input in by the population. This creates a second aggregate production function where the output is GDP per capita (that is, GDP divided by population). The inputs are the average level of human capital per person, the average level of physical capital per person, and the level of technology per person. The result of having population in the denominator is mathematically appealing. Increases in population lower per capita income. However, increasing population is important for the average person only if the rate of income growth exceeds population growth. A more important reason for constructing a per capita production function is to understand the contribution of human and physical capital (Sakar, 2007).

1.1.4 Contextual Perspective

Mugambe (2004) stressed that historically, twenty years ago Uganda faced daunting economic challenges. The country had only just started to recover from a long period of civil strife and economic mismanagement which had caused rampant inflation, the contraction of the productive base of the economy and of tax revenue and brought large parts of the public administration to the verge of collapse. In the first half of the 1990s Uganda implemented bold economic reforms to tackle these problems; reforms which restored macroeconomic stability, laid the foundation for a recovery of exports and tax revenues and led to 20 years of sustained growth, averaging around 7 percent per annum.

Mukwaya (2004) argued that the focus of fiscal policy of the Ugandan government in 2001/02 was on three key objectives: stimulating the economy; strengthening tax administration; and raising tax revenues. This policy stance was aimed at adjusting the underlying feature of a widening fiscal deficit in relation to GDP, financed by large foreign inflows of budget support. The ever-widening fiscal deficit is seen as the major challenge to Uganda's fiscal performance as it exposes the government's budget position to policy changes with respect to foreign aid and foreign policy. It also strains private sector activity in the country, as the government competes for the same domestic financial capital, leading to appreciated real exchange rates and interest rates. During the 2001/02 fiscal year although the government's tax revenue as a percentage of GDP improved, the improvement was not substantial enough to prevent the fiscal deficit from worsening. The overall budget deficit rose to 5.1 per cent of GDP from 2.2 per cent of GDP in the previous year. Consequently, the primary balance also worsened to a deficit of 3.7 per cent of GDP in 2001/02 from the deficit of 1 per cent of GDP the previous year. The outlook on the budget situation is a contraction in the overall deficit to an estimated 1 per cent of GDP in 2002/03, with the primary balance also improving to an estimated small surplus of 0.3 per cent of GDP.

In recent times, the underlying feature of the government's fiscal performance, on the revenue side, has been the rather low revenue base, which continued in 2001/02. During 2001/02, tax revenue increased to 10.8 per cent of GDP from 10.4 per cent of GDP the previous year. The increase was, however, largely due to the inclusion of non-tax revenue collected by government departments in the revenue of 2001/02, which was not the case in 2000/01 prior to the abolition

of the appropriation in aid provision, which had allowed government departments to retain their nontax revenue to finance expenditure. The domestic tax effort in 2001/02 remained generally lower. In those taxes where the yield was higher, such as in income tax, this was mainly to the result of significant increases in wage rates of civil servants and the elastic nature of the tax, rather than any expansion in the tax base. Tax revenues from other sources such as import duty were poorer in 2001/02 owing to the failure of the government to realize efficiency gains in collection as well as from the appreciation of the Ugandan shilling (World bank, 2008).

1.2 Problem Statement

Uganda is among the countries that have been credited for establishment of sound policy intended to stabilize the economy, this although is not the case as since the country still register low degrees of economic growth.

The policies to expenditure and earnings are properly stipulated though this has not resulted in the generation of growth since the country growth is low. The road to attaining economic growth is normally through implementing the pragmatic policies in the economy intended to ensure the attainment of economic growth, these in most cases is monetary control both at the receipts and expenditure (fiscal policy).

The fiscal policy has not generated economic growth in Uganda despite the existence of the policy on tax revenue, Non tax revenue and expenditure (IMF report, 2010). Even the empirical studies conducted provide a similar revelation for instance, Nijkamp and Poot (2016) conducted a meta-analysis of past empirical studies of fiscal policy and growth and found that in a sample of 41 studies, 29% indicate a negative relationship between fiscal policy and growth, 17% a positive one, and 54% an inconclusive relationship. Kamin and Rogers (2017) assert that governments use fiscal policy to influence the level of aggregate demand in the economy, in an effort to achieve economic objectives of price stability, full employment, and economic growth. Amanja and Morrissey (2005) used time series techniques to investigate the relationship between various measures of fiscal policy on growth on annual data for the period 1964 – 2002 all the empirical studies are outside the Ugandan context. It is based on this analogy that the researcher intend to conduct an empirical study by analyzing time series observations of fiscal policy and economic growth of Uganda in the period of 31 ears (1985 to 2016) to establish the relationship

between fiscal policy and economic growth that would provide a basis for policy intervention to enhance economic growth of Uganda's future.

1.3 Purpose of the study

The purpose of the study was to investigate the effect of fiscal policy on economic growth in Uganda (1985-2016).

1.4 Objectives of the study

- 1) To determine the effect of Public expenditure on economic growth in Uganda.
- 2) To examine the effect of government tax revenue (taxation) on the economic growth in Uganda.
- 3) To assess the effect of government non tax earning on the economic growth in Uganda.

1.5 Hypotheses

H0₁: There is no significant effect of Public expenditure on economic growth in Uganda.

H0₂: There is no significant effect of government tax government earning on economic growth in Uganda.

H0₃: There is no significant effect of government non tax government earning on economic growth in Uganda.

1.6 Scope of the study

This shows the parameters of the study in terms of its content, time, geography and theory. It is aimed at ensuring that the study remains focused on variables it set out to investigate as seen under.

1.6.1 Content Scope

The study was limited to analyzing the variables as stated in the specific objectives: hence empirically describing the effect of fiscal policy that is government spending and public earnings on economic growth.

1.6.2 Geographical scope

The study covered Uganda's economy from 1985 to 2016. Republic of Uganda is a landlocked country in East Africa. It is bordered on the east by Kenya, on the North by South Sudan, on the West by the Democratic Republic of the Congo, on the Southwest by Rwanda, and on the South by Tanzania. Uganda is the second most populous landlocked country. The southern part of the country includes a substantial portion of Lake Victoria, shared with Kenya and Tanzania,

situating the country in the African Great Lakes region. Uganda also lies within the Nile basin, and has a varied but generally equatorial climate.

1.6.3 Time Scope

The study covered a range from 1985-2016 using the data of statistical data for the period of 31 years.

1.6.4 Theoretical Scope

The study was based on Keynesian theory of 1936 and Endogenous growth theory (1936) who argued that the solution to the Great Depression was to stimulate the economy through some combination of two approaches: A reduction in interest rates (monetary policy) and Government investment in infrastructure (fiscal policy). By reducing the interest rate at which the central bank lends money to commercial banks, the government sends a signal to commercial banks that they should do the same for their customers.

Endogenous growth theory: The study was premised on the endogenous growth theory by Romer (1994). The endogenous growth theory holds that economic growth is primarily the result of endogenous and not external forces. Endogenous growth theory holds that investment in human capital, innovation, and knowledge are significant contributors to economic growth. The theory also focuses on positive externalities and spillover effects of a knowledge-based economy which will lead to economic development.

1.7 Significance of the study

The integrated study on fiscal policy and economic growth of Uganda is intended to provide data significant to several stakeholders.

- 1) Basing on the content and literature review, the stakeholders such as government through the Uganda revenue authority (URA) Uganda bureau of statistics, among other policy makers will benefit from the findings through providing empirical evidence on the relationship between taxation and economic growth.
- 2) It would have a direct effect in the efficiency and the effectiveness of the use of policy instrument in the stabilities of macroeconomic variable to stimulate production.
- 3) It would also provide an explanation for Uganda's stunted growth a ground that can be explored to arrive at development of Uganda.

- 4) The study will explore the means through which tax revenue can enhance and generate the economic growth of a country through assessing the state contributions made through the period of the study.
- 5) The study explore the state of fiscal policy implementation in Uganda by exploring the means through which the organizations can enhance the performance mechanism through government expenditure explaining the situation in Uganda contrary to the existing environment for the study.

1.8 Operational definitions

Fiscal policy

Fiscal policy is the use of government revenue collection that include tax revenue and non tax revenue and expenditure to influence the economy. The two main instruments of fiscal policy are changes in the level and composition of taxation and government spending in various sectors. These changes can affect the following macroeconomic variables in an economy.

Public expenditure is total expenditure consists of total expense and the net acquisition of nonfinancial assets. The expenditure in this study is expressed in Uganda shillings (LCU).

Tax revenue is the collections through taxations carried out within the boundaries of the country. The tax revenue in this study is measured through Uganda shillings over the period of 32 years (LCU).

Non tax revenue is the collections of the country that contribute to revenue of the country. The non tax revenue in this study is composed of revenue from government rents, commissions but excludes grants, loans and any other financial aid to the country. The non tax revenue is measured in Uganda shillings over the period of 32 years (LCU).

Economic growth

Economic growth is the increase in the level on goods and services of a country within a fixed period of time; in this case economic growth is measured in term of Gross Domestic Product the economic growth measured in Uganda shillings over the period of 32 years (LCU).

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CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter is concerned with review of information that different authors have advanced on the topic in regard to study objectives, it therefore looks at the theoretical review, conceptual framework, related literature and related studies.

2.1.1 Theoretical Review

The Keynesian theory of 1936 indicates that during recession a policy of budgetary expansion should be undertaken to increase the aggregate demand in the economy thus boosting the Gross Domestic Product (GDP). Keynes regards public expenditures as an exogenous factor which can be utilized as a policy instruments to promote economic growth. From the Keynesian thought, public expenditure can contribute positively to economic growth. Hence, an increase in the government consumption is likely to lead to an increase in employment, profitability and investment through multiplier effects on aggregate demand. As a result, government expenditure augments the aggregate demand, which provokes an increased output depending on expenditure multipliers. In economic theory, it appears as Harrod-Domar-Keynesian theory of growth or simply, Harrod-Domar growth model. A mathematical equation of this model: $y = f(k, s)$ shows the existence of a direct relationship between savings and the rate of economic growth (Thirlwall, 2013).

Keynes argued that reducing the interest rate at which the central bank lends money to commercial banks, the government sends a signal to commercial banks that they should do the same for their customers. Investment by government in infrastructure injects income into the economy by creating business opportunity, employment and demand and reversing the effects of the aforementioned imbalance. Okafor (2012) argued that governments source the funding for this expenditure by borrowing funds from the economy through the issue of government bonds, and because government spending exceeds the amount of tax income that the government receives, this creates a fiscal deficit.

Endogenous growth theory

The study will be premised on the endogenous growth theory by Romer (1994). The endogenous growth theory holds that economic growth is primarily the result of endogenous and not external forces. Endogenous growth theory holds that investment in human capital, innovation, and knowledge are significant contributors to economic growth. The theory also focuses on positive externalities and spillover effects of a knowledge-based economy which will lead to economic development.

The long-run rate of growth is exogenously determined by either the savings rate (the Harrod–Domar model) or the rate of technical progress (Solow model). However, the savings rate and rate of technological progress remain unexplained. Endogenous growth theory tries to overcome this shortcoming by building macroeconomic models out of microeconomic foundations. Households are assumed to maximize utility subject to budget constraints while firms maximize profits. Crucial importance is usually given to the production of new technologies and human capital.

Keynesian models in Kaldorian lines, such as Thirlwall's Balance-of-Payments constrained growth (BOP) model, find the channel between trade and growth by means of demand-pull characteristic of exports. Valadkhani (2008) argued that trade represents an important constraint to economic growth by means of balance of payments problems. Static trade models suggest that movements toward openness can temporarily increase the rate of growth due to short-run gains from the reallocation of resources, which would imply a positive relationship between changes in openness and GDP growth. The new growth literature also identifies a number of avenues through which openness might affect long run growth. Some of these channels are technological change and technological gaps. The idea behind this statement is that countries, which are more backward and provide more opportunities to absorb new ideas, will converge faster to international norms, allowing them to benefit from technological change Yang, 2011).

Endogenous growth models have found in Total Factor Productivity (TFP) and the accumulation of knowledge channels to relate trade (in the form of openness) and growth. Theoretical framework the relationship between opening up to trade and long run growth is in fact ambiguous. Therefore, for them, trade does not necessarily lead to faster growing. Empirically,

on the other hand, these connections are far from conclusive. In contrast, some cross-section and time series/cross-section econometric studies presented different result and, in some cases, divergent results regarding these connections.

Institutional FDI fitness theory

Developed by Wilhelms and Witter (1998), the term FDI fitness focuses on a country's ability to attract, absorb and retain FDI. It is this country ability to adapt, or to fit to the internal and external expectations of its investors, which gives countries the upper-hand in harnessing FDI inflows. The theory itself attempts to explain the uneven distribution of FDI flows between countries. Wilhem's institutional FDI fitness theory rests on four fundamental pillars- Government, market, educational and socio-cultural fitness. At the base of the pyramid are socio-cultural factors which according to Wilhelms and Witter (1998) are the oldest and most complex of all institutions. Above that is education, which the authors affirm to being necessary in ensuring an attractive environment for FDI as educated human capital enhances R&D creativity and information processing ability. The actual level of education does not seem to matter much for FDI as the requirements are dependent on the various skills needs of projects to be undertaken. However what is certain is that basic education may impact on the productivity and efficiency of FDI operations, making formative education such as the ability to speak, hear, understand, interpret and implement instructions key for attracting FDI.

The third pillar that of markets, accounts for the economic and financial aspects of institutional FDI fitness, in the form of machinery (physical capital) and credit (financial capital). Developed and well-functioning financial markets are hence a prominent feature in the MNC's investment decision-making process. The fourth and final pillar as put forth by Wilhelms is the Government. The role of a country's political strength plays the biggest role in the FDI game. Government fitness requires the adoption of protective regulation to manage market fitness.

Popovici and Calin (2014) add that Government fitness is considered to include economic openness, a low degree of trade and exchange rate intervention, low corruption and greater transparency. If policies are hostile and unfavorable towards investors, MNCs will shy away from such countries as the political instability increases the risk burden on their investments. (Wilhelms & Witter, 1998). The authors concluded that although the pyramid is represented in a

specific order, the four institutional pillars in fact are inter-related and interact in unison in different forms. For example, Government policies shape markets, education and socio-cultural activities; market forces impact on the Government, education and socio-culture; education affects human capital and hence Government, markets and socio-cultural norms and practices; and finally, socio-cultural systems are the origin of Government, markets and education, respectively.

2.2 Conceptual Review

2.2.1 Fiscal policy

Fiscal policy is the use of government revenue collection (taxation) and expenditure (spending) to influence the economy. The two main instruments of fiscal policy are changes in the level and composition of taxation and government spending in various sectors. Fiscal policy is largely based on the ideas of British economist John Maynard Keynes (1883–1946), who believed governments could change economic performance by adjusting tax rates and government spending (Bloom and Jaypee, 2001).

During the first half of 2011 the government adopted an expansionary fiscal policy stance, driven by its plans to boost infrastructure investment as well as added security costs incurred during the February 2011 elections, an increase in energy subsidization and tax revenue collections that were below the set target set for FY 2010/11. This fiscal policy stance resulted in a budget deficit (excluding grants and oil capital gains tax revenue) estimated at 11.2% of GDP, compared to the target of 6.2%. Taking into account grants (3.1% of GDP) and oil capital gains tax revenue (2.6% of GDP), the deficit is estimated at 7.4% of GDP, underlining the potential significance of oil revenues in financing the deficit, as well as the importance of putting in place rules that contribute to offsetting the risks associated with natural-resource wealth and that ensure long-term fiscal sustainability with prudent macroeconomic management (Mugambe, 2004).

Against this background, the government has increasingly been resorting to supplementary budgets, with supplementary expenditure increasing by 78% in FY 2009/10 and 32% in FY 2010/11. Thus, in January 2011, only 6 months after introducing the 2010/11 budget, the government requested supplementary financing of 605 billion Ugandan Shillings (UGX), equivalent to 8.1% of the approved budget.

A study undertaken by the African Development Bank (AfDB) in 2010 found that, although progress has been made to expand the tax base, Uganda has the lowest tax-to-GDP ratio in the East African Community (EAC) at 13%, a rate which is well below the sub-Saharan African average of 26%. Factors that contribute to this poor performance include the existence of a large informal sector, ad-hoc tax exemptions, and loopholes in tax legislation and corruption in the tax administration. This same study noted that, despite these problems, the Uganda Revenue Authority has made considerable progress in increasing the efficiency of tax administration and taxpayer compliance, as well as in reducing the cost of collection. Nevertheless, it remains to be seen whether the programmed 0.5% annual growth in tax-to-GDP ratio, which is expected to lead to an increase in tax revenues from 12.4% of GDP in FY 2010/11 to 15% in FY 2014/15, will be achieved. Cashin (1995).

Mugume (2007) stressed that in response to this situation, the BoU tightened its monetary policy stance throughout 2011 by raising interest rates. The BoU raised the Central Bank Rate (CBR) to 16% in September, from 13% in July, and then to 20% and 23% in October and November 2011. At the same time, it raised the rediscount and bank rates to 25% and 26%, respectively, up from a low of 6.83% and 7.83% in March 2010. Following the adoption of these measures, inflation dropped to 27% in December 2011 and is expected to continue doing so during 2012, although the BoU admits that its 5% inflation target can only be reached in 2013. In this context, the BoU has said that it intends to maintain its current monetary policy stance until significant falls in annual inflation have been achieved. While such tightening indicates the seriousness with which the BoU regards its price-stability mandate, the central bank recognizes that reining in inflation will not be an easy task, as some of the determinants of price dynamics are out of its direct control.

2.2.2 Economic growth

Coricelli (1997) defined Economic growth as the increase in the level of goods and services of a country within a fixed period of time, in this case economic growth will be measured in terms of Gross Domestic Product therefore GDP is defined as Jeff Holt (2007) defined Gross domestic product as the total market value of all final goods and services produced annually within the

boundaries of the country whether by national or foreigner-supplied resources. This study adopted Jeff Holt definition and the GDP growth will be measured in billion of US\$ dollars.

Pamela (2006) presented that the 2012 African Economic Outlook projects real GDP growth to improve to 4.5% and 4.9% in 2012 and 2013, respectively, mainly premised on good prospects in the oil sector. However, attaining these rates will depend on the ability of the authorities to address major infrastructural constraints, particularly in the energy sector, and to mitigate risk factors, including those linked to climate change. Inflationary pressures are forecast to subside in 2012 and to reach single digits in 2013, reflecting both global declines in food and fuel prices, as well as the impact of monetary tightening by the Bank of Uganda (BoU). The government is expected to rein in expenditure growth; yet slower revenue collections brought about by the slowdown of economic activity are likely to offset any improvements on the fiscal balance. On the external front, the current-account deficit is projected to deteriorate in 2012 and 2013 to 10.2% and 11.1% of GDP, respectively, as import growth accelerates and exports are hit by the global economic slowdown.

The slowdown in the Ugandan economy is partly due to difficulties in the European and US economies, both important markets for Ugandan exports. The BoU considers that the sustained slowdown forecast for the advanced economies in the near term, together with financial instability in global markets, will continue to dampen demand for Uganda's exports and reduce foreign direct investment (FDI), remittances, and aid flows in the short to medium term. On a more optimistic note, the global economic downturn could cut Uganda's import.

On the monetary front, the BoU increased the rate at which it lends to commercial banks from 11.97% in December 2010 to 29% at the end of 2011, in an attempt to slow down money supply and credit growth, and thus cool aggregate demand. These efforts were aimed at bringing down inflation, which reached a peak of 30.5% in October 2011, driven by a combination of both domestic and external factors. These include the sharp increase in global commodity, fuel and food prices throughout 2010 and 2011, the impact of the 2011 East African drought on food production, as well as a sharp increase in credit growth since 2010. Inflation started to decline in November 2011 and is expected to continue falling to 16% by the end of December 2012 and to

14.1% by 2013. Despite this improved inflationary outlook, the BoU intends to maintain high interest rates for the foreseeable future until inflation is fully under control. Granger C, (2005) Fölster and Henrekson (2001) pointed out productive-sector activities in 2011 have continued to be dominated by developments in the power and oil industries, both of which are critical to Uganda's development prospects. With current national hydro generation levels at around 200-250 megawatts (MW) and electricity demand at 440MW in peak hours, energy poses one of the most important challenges to sustained economic development in Uganda. In 2011 the main power distribution company, Umeme, implemented a load-shedding (rationing) program that has led to nationwide power cuts of up to 12 hours per day, disrupting production activities and causing considerable social unrest. The commissioning of the Bujagali hydropower dam, which is planned to start operating in 2012 and which will increase generation capacity by 170 250MW, is expected to ease power shortages in the short term.

Uganda is planning to start large-scale oil production and expects to reach a peak of 200 000 barrels per day in 2015/16. It could yield revenue of up to USD 2 billion annually to the government. Whilst this revenue windfall presents a unique opportunity to address the various investment bottlenecks in areas such as infrastructure, agriculture and social development, the materialization of these benefits will require important investments in oil production, refinery and distribution, and will ultimately rest on having a strong legal and regulatory framework that ensures the transparent and prudent use of oil resources.

On the other hand, according to the 2011 Index of Economic Freedom prepared by the Heritage Foundation, Uganda's labour regulations are flexible, with a score of 87.8 out of a possible maximum value of 100, although this represented a decline of 0.3 from 2010. According to this study, the non-salary cost of employing a worker in Uganda is low, whilst dismissal costs and associated procedures are reasonable. Moreover, regulations on working hours remain relatively flexible. However, this same study finds that the enforcement of labour standards and regulations in Uganda is often compromised by a chronic lack of supervisory resources, Garcia, Jose Ramon, and Hector Sala (2006).

2.3 Empirical Review

2.3.1 Effect of Public expenditure and economic growth

Mohanty (2014) argued that public expenditure and economic growth have adopted either the aggregated or disaggregated approach. With respect to studies that adopt the disaggregated approach, the general view is that public expenditure, notably on physical infrastructure or human capital is growth enhancing, while government consumption is expected to be growth retarding thus, the concept of productive and unproductive government expenditure.

Mitchell (2015) argued that the American government expenditure has grown too much in the last couple of years and has contributed to the negative growth. The author suggested that government should cut its spending, particularly on projects/programs that generate least benefits or impose highest costs. Sáez and García (2016) studied the relationship between government expenditure and economic growth in the EU-15 countries. The results obtained based on regressions and panel techniques suggest that government spending is positively related with economic growth in the EU countries. Gregoriou and Ghosh (2017) used the heterogeneous panel to investigate the impact of government expenditure on economic growth. The authors employed the GMM technique, and discovered that countries with large government expenditure tend to experience higher growth, but the effect varies from one country to another.

Kitov (2016) argued that an obvious deficiency of economic theory is that it does not provide a well developed methodology to incorporate government expenditures in standard growth models. To assuage this, empirical studies have been carried out to establish a relationship between size of government and economic growth. While some studies have found a negative relationship between government expenditure and economic growth others have found a positive relationship. Showed that government capital expenditure has a significant positive effect on real output, but that real government recurrent expenditure has insignificant effect on growth.

Olugbenga and Owoye (2007) investigated the relationships between public expenditure and economic growth in a group of 30 OECD countries for the period 1970-2005 using regression analysis. Their analysis showed that a long-run relationship exists between government expenditure and economic growth. The study also indicated a unidirectional causality from government expenditure to growth for 16 of the countries, thus supporting the Keynesian

hypothesis government intervention. But, causality runs from economic growth to government expenditure in 10 of the countries, thereby confirming the Wagner's law. For the remaining four countries, findings indicated existence of feedback relationship between government expenditure and economic growth.

Coricelli, Fabrizio (2007) investigated the differential effects of various categories of expenditures on economic growth for a sample of 58 countries. Their findings suggested that while government expenditures on education and defense have positive effect, expenditure on warfare has insignificant negative effect, on economic growth.

Other researchers have examined the effect of public expenditure on economic growth. Galor, Oded (2005) examined the effect of government expenditure on economic growth for a sample of 96 countries. He found that public expenditure exerts a negative effect on real output. Similarly Gilpin, (2001), employing the Granger causality test, examined the relationship between government expenditures and economic growth in Thailand and found that government expenditures and economic growth are not co-integrated. The result also suggested that a unidirectional relationship, as causality runs from government expenditures to growth. However, the result indicated a significant positive effect of government spending on economic growth.

Ketema (2006) however, noted that in empirical work it is difficult to determine which particular item of expenditure should be categorised as investment and which as consumption. Most empirical studies have supported either of the two views stated above. Few, however, have found no relationship. It is important to note that these results differ by country / region, analytical method employed, and categorization of public expenditure. Initial studies on this topic focused on the aggregate size of government spending, while recent studies emphasize the composition of public expenditure.

Thirlwall (2013) the relation between the share of total public expenditure in GDP and the growth in per capita real GDP and found negative and significant relationship between the two. Using an endogenous growth model of the U.S. economy in which government purchases directly affect both the utility of consumers and the productivity of firms, Kentor (2003) examined the relationship between government expenditure and economic growth in Saudi Arabia using the series of the growth rate in per capita real GDP and the share of government

spending in GDP. He found no consistent evidence that government spending can increase Saudi Arabia's per capita output growth.

Erkin (2007) examined the relationship between public expenditure and economic growth, by proposing a new framework for New Zealand. The empirical results showed that higher government expenditure does not hurt consumption, but instead raises private investment that in turn accelerates economic growth.

Foster and Mijumbi (2012) found a robust negative relationship between public expenditure and growth. The study was based on advanced countries between 1970 and 1995. Their estimated coefficient suggested that a 10 percentage increase in government expenditure is associated with a decrease of 0.7 percentage point in growth rate. Ramayandi (2003) investigated the impact of government size on economic growth using a sample of time series data on Indonesia (1969-1999). He found consistent evidence that the share of government consumption spending decreases economic growth.

Komain and Brahmasrene (2007) study the relationship between government expenditures and economic growth in Thailand, by employing the Granger causality test. The results showed that government expenditures and economic growth are not co-integrated. However, the results indicated a unidirectional relationship, as causality runs from government expenditures to growth. Furthermore, the results illustrated a significant positive effect of government spending on economic growth.

Olugbenga and Owoye (2007) investigated the relationships between public expenditure and economic growth for a group of 30 OECD countries during the period 1970-2005. The regression results showed the existence of a long-run relationship between government expenditure and economic growth. In addition, the authors observed a unidirectional causality from government expenditure to growth for 16 out of the countries, thus supporting the Keynesian hypothesis. However, causality runs from economic growth to government expenditure in 10 out of the countries, confirming the Wagner's law. Finally, the authors found the existence of feedback relationship between government expenditure and economic growth for a group of four countries. In India, Ranjan and Sharma (2008) examined the effect of

government development expenditure on economic growth in India from 1950-2007. The authors found a significant positive impact of government expenditure on economic growth.

Kamin and Rogers (2000) assert that governments spending influence the level of aggregate demand in the economy, in an effort to achieve economic objectives of price stability, full employment, and economic growth. Keynesian economics suggests that increasing government spending and decreasing tax rates are the best ways to stimulate aggregate demand, and decreasing spending & increasing taxes after the economic boom begins. Keynesians argue this method be used in times of recession or low economic activity as an essential tool for building the framework for strong economic growth and working towards full employment.

2.3.2 Effect of government tax revenue earnings on economic growth

Taxation is a way of raising revenue for the day to day running of government activities. Government activities involve generating funds and using same to provide security, social amenities, infrastructural facilities, etc, for the inhabitant of the country. Base on this, it is worthy of note that the objective of taxation is in tandem with the functions of government (Akhor, 2014).

Owolabi and Okwu (2011) examined the contribution of only Value Added Tax (VAT) to Development of Lagos State Economy from 2001 to 2005. The study regressed each development indicator (infrastructural, environmental management, education sector, youth and social welfare, agricultural, healthcare, and transportation) on VAT revenue proceeds generated by Lagos State during the study period. Their finding was that revenue generated from VAT positively contributed to the development of the respective sectors of Lagos State economy during the period studied. Adereti, Adesina and Sanni, 2011. Extended the study by examining the impact of VAT revenue on economic growth of states during the period 1994 to 2008 using time series data on the GDP, VAT Revenue, Total Tax Revenue and the total revenue of the federal government. The result of the study was in line with that of Owolabi and Okwu (2011) showing an existence of a positive and significant correlation between VAT Revenue and Gross Domestic Product of different countries. Success, Success and Ifurueze, 2012 investigated the impact of Petroleum Profit Tax on the economic development of states between the period 2000 to 2010. Their findings reveal that petroleum profit tax positively impacts on gross domestic product (GDP) of Nigeria, and the impact is statistically significant. They failed to report on the

economic development that was the topic of consideration. They argue that the increase in the economic growth rate does not reflect in Nigeria's general economic development. Okafor (2012) examined the relationship between federally generated revenue and economic development in a country using Gross Domestic Product (GDP) for the period 1981 to 2007. The result of the study showed a positive and significant relationship between Income Tax Revenue and Economic Development.

Akhor (2014) stated that the economic effects of tax include micro effects on the distribution of income and efficiency of resource use as well as macro effect on the level of capacity output, employment, prices, and growth. Therefore, the use of tax as an instrument to achieve economic growth in most less developed countries cannot be reliable because of dwindling level of revenue generation.

Consequently, changing or fine-tuning tax rates has been used to influence or achieve macroeconomic stability. Critical examples of governments that have influenced their economic development through revenue from tax are: Canada, United States, Netherlands and United Kingdom. They derive substantial revenue from Value Added Tax, Import Duties and have used same to create prosperity (Oluba, 2008). A significant share of the tax revenue increase in Africa stems from natural resource taxes. This included income from production sharing, royalties, and corporate income tax on oil and mining companies.

Muriithi and Moyi (2013) observe that a good tax system should be able to generate the needed revenue for government; redistribute income; and investment infrastructure that will provide the guarantee for business to thrive and economic growth. The enabling environment created by government encourages the establishment of new business; survival of existing business and the infrastructures provided is a key determinant of political, economic and social well structured tax system provides government the needed fund for capital (infrastructure) and recurrent (administrative) expenditure that would greatly lead to economic growth and development. Therefore, tax can be seen as a fiscal policy, macroeconomic and internal revenue mobilization tool for the attainment of economic growth.

Ogbonna and Ebimobewe (2012) examine the Impact of Tax Reforms and Economic Growth in Nigeria using relevant descriptive statistics and econometric analysis. They found that various

tax reforms are positively and significantly related to economic growth and that tax reforms granger cause economic growth. This means that tax reforms improves the revenue generating machinery of government to undertake socially desirable expenditure that will translate to economic growth in real output and per capita basis.

Kusi (2013) states that many countries of the world depend mainly on taxation for generating required income to meet their financial needs. The tax provides a predictable and stable flow of revenue to finance development objectives (Pfister, 2009). Bird and Zolt (2003) opine that, effective and efficient tax system can assist the government generate enough revenue to take care of its estimated expenditure, meet the needs of the people, and effectively participate in the world economy. The quality of life of people of a state is the focus of any development objectives. Access to education, improved healthcare delivery, employment opportunities, clean air, safe drinking water and security of life and property determine the people's quality of life or standard of living (The World Bank Group, 2004).

The main purpose of a tax is to enable public sector finance its activities so as to achieve some nation's economic and social goals. It can also be for the purpose of redistribution of wealth to ensure social justice (Ola, 2001). Therefore, taxes can be used as an instrument for achieving both micro and macroeconomic objectives especially in developing countries. However, Musgrave and Musgrave (2004) comment that the dwindling level of tax revenue generation in the developing countries makes it difficult to use tax as an instrument of fiscal policy for the achievement of economic development. Some governments like Canada, United States, Netherland, and The United Kingdom have substantially influenced their economic development through tax revenue generated from Company Income Tax, Value Added Tax, and Personal Income Tax, and have prospered through tax revenue (Oluba, 2008). In Africa, natural resources such as income from production sharing, royalties, and corporate income tax on oil and mining companies yield the significant portion of tax revenue (Pfister, 2009). The tax sources are the basic and most reliable sources of government revenue because of their certainty and flexibility characteristics. Certainty characteristic implies that collection of taxes from taxpayers is assured, all other things being equal. Tax collection is not affected by the state of the economy; whether the economy is declining, stagnant or growing. Its flexibility makes it possible for the government to adjust the tax system to suit her desired purpose.

Kalecki (2016) explored what he termed as "the Problem of Financing Economic Development" where governments may use taxation as a tool of managing inflation in a situation where public investments are either partially or fully financed through taxes. The author argued that taxation on lower income groups reduced real wages leading to less savings and, hence, investments. While for the higher income groups, increased taxes decreased the level of consumption; with the overall effect of reducing economic growth. Since demand for goods and services is reduced by a higher tax burden across the board, inflationary pressures are minimized.

Gruber (2016) found that taxes cause growth. According to their findings, corporate taxes are found to be most harmful for growth, followed by personal income taxes and then consumption taxes. Recurrent taxes on immovable property appear to have the least impact. They concluded that a revenue neutral growth-oriented tax reform would, therefore, be to shift part of the revenue base from income taxes to less distortive taxes. Furthermore Kaldor (2011) posed that a country's tax potential depended on per capita real income, distribution of income, structure of the national economy, political and administrative governance. According to the author, the developing country tax performance would best be measured not by static indices such as tax ratios but by dynamic means such as tax effort and income-elasticity of the tax regime.

Lewis (2015) was of the view that governments tend to avoid raising taxes because of the adverse political consequences and instead resort to printing money or creating (easy) credit a monetary policy that leads to or fuels inflation. While taxation may raise prices, depending on income and price elasticities, the development economic scholar concluded that taxation was superior to inflation for a country's capital formation. Bilas (2001) analyzed taxation from a microeconomic perspective and stated that it was one fiscal instrument that a government may use to control monopoly power. In the imposition of a fixed tax per unit, the Kenyan example being an excise tax, is the equivalent of a variable cost to the monopolist. Both the average and marginal cost curves shift upwards resulting in a fall in both output and price of the taxed commodity/service. In this regard, the tax burden is shifted to consumers, an inflationary outcome that may not be politically palatable. The government has the option of ensuring that a monopolist bears the full tax burden in the form of a fixed cost by charging and/or raising the license fee of the monopolist.

Blanchard and Perotti (2012), claim that both increases in taxes and increases in government expenditures affect investment spending negatively. Accordingly, tax reforms through raising individual and corporate taxes do not necessarily spell out economic growth through increased government revenue but they could also derail economic growth through reduced social welfare and poor investment incentives. Taxes levied to the public and business entities must be reasonable and an effective tax reform strategy should not aim at increasing the citizens' tax burden. Instead, reforms should focus on streamlining the system and ensuring that tax proceeds are used effectively to achieve economic growth.

Teixeira and Fortuna (2003) Lin (2001) confirms that a positive dependency can exist between economic growth and taxation if revenues from taxes are used only for human capital accumulation. Individual companies invest into their employees' training and development only once, usually in the first period of employment. However, when companies invest into human capital, they must differentiate between the general and specific capital. General capital can be utilized by employees also at other employer, but they do not bear any investment costs and the employer can therefore afford to pay the employee a higher salary (corresponding to higher labour productivity). Due to this, companies require that spending connected with investments into general human capital is taken up by the employees themselves (Kotlán, Machová and Janíčková, 2011). The situation is different in the case of specific capital since employee productivity is increasing only with the given employer who is then logically willing to take up a part of the investment costs and pay the employee a higher salary than is his/her productivity.

A good approach for literature analysis of the empirical studies on the relationship between taxation and economy growth. He uses the review but focuses on the most important analyses. The literature sources are differentiated in evidence on the tax level and growth and evidence on tax structure and growth. Arnold notes that the findings of the studies, analyzing the link between growth and tax structures provide somewhat more conclusive answers than the studies focused on the level of taxation. The results from the empirical analyses of Widmalm (2001), Schwellnus and Arnold (2008), Lee and Gordon (2005) are considered as sufficiently reliable evidence for the nature of the studied relationship. The collective contribution to empirical analysis on this topic by identifying a depressing effect of 'distortionary taxes', which include

taxes on income and property. They also find that productive government expenditure stimulate economy growth.

Widmalm (2001) estimates a negative relationship between budget revenue accumulated by income taxes and economic activity growth. According to her conclusions, the predictions of conventional wisdom for negative effect of indirect taxes on economy are not confirmed. The empirical results from analyses of Schwellnus and Arnold (2008) and Vartia (2008) indicate a negative effect of corporate taxes on the productivity of firms and industries, based on large data sets of firms and industries across OECD countries. The significant negative correlation between statutory corporate tax rates and growth for 70 countries during 1970-1997.

Romer and Romer (2007) review other papers presenting evidence for various aspects of the relationship between taxation and economy growth. There are different kinds of econometric approaches applied. Some of studies link the GDP growth rate and public spending and receipts. The studies of Blanchard and Perotti (2002) are considered as more sophisticated, because these researches assume that once one corrects for the impact of economic activity on revenues and controls for the behavior of government spending, changes in revenues are uncorrelated with other determinants of output growth. A different approach is applied in studies, which are reviewed and investigate the impact of tax changes on consumption. The estimated impact of tax increases on consumption in these studies ranges from roughly no effect to a substantial negative effect.

2.3.3 Effect of non tax government revenue on economic growth

The importance of non-tax revenue is now being realized by the sub-national governments in India in the context of revenue deficits and, the heavy financial requirements for upgrading and modernizing basic infrastructure (Mohanty, 2014). Therefore, non-tax revenue is essential to finance the repair, maintenance and operations (MRO) of existing capital assets that creates positive externalities as well revenue for the governments. The expenses on account of MRO of capital assets are booked as revenue expenditure. The revenue expenditure may be non-plan and plan expenditure. The Non Plan revenue expenditure essentially includes all committed expenditures such as salary, pension and interest payments. These non-plan expenditures have first charge on the untied own revenue resources of the sub- national governments.

According to Purohit(2006), the marginal cost theory requires that there the external effects should be minimal in consumption and production, and there should be participation of competitive forces in providing the same goods and services. In this study, economic services sector is specifically chosen to link with its non-tax revenue as it has minimal externalities and private sector participation happens through public private sector mode, management contract, build own operate and transfer models. Purohit has further argued that at present, the user charges for the services provided by the Government are negligible or non-existent. Hence, it is generally believed that the user charges must be augmented to reduce the burgeoning Government subsidies and reducing revenue deficits. The Government provides a variety of heterogeneous services. In his opinion, in the economic services sector, all of the subsectors or minor sectors are not amenable to cost recovery. While some services could have a price recovering the cost incurred, others may be priced just to cover a part of the expenditure incurred in their provision. Also, there are few services for which consumers are not charged at all. The policy to recover expenses should depend upon the type of services provided as there cannot be any universal policy prescription for all the services provided by the Government. However, the marginal cost pricing should be benchmark while pricing these services as it would indicate the financial loss and gain in terms of tax revenue.

Dholakia (2006) had considered the fiscal instrument of the non-tax revenue (NTR) of the sub-national governments in relation to only those aspects and instruments over which the sub-national governments has sufficient control and it can, if it so desires, try to achieve the constrained maxima in terms of reduction of revenue deficit as well as fiscal deficit through them. Das-Gupta(1990) had argued for leasing contract to provide public good and services in order to maximize non tax revenue in the economic sector. Das (2011) has emphasized the tax collection efficiency from the revenue expenditure in the economic sector as demand for - on revenues and efficiency in collecting revenue – which, in the literature, has been called collection efficiency, have cause-effect relationship. It implies that reducing efficiency loss in other sub and minor sectors in economic services. Therefore, tax efficiency is an important parameter to optimise non tax revenue in economic services sector of sub-national governments. Dutta (2015) based on secondary data, attempted to analyze revenue mobilization efforts of the

Government of Assam during 1991–2010. By examining the issues of arrears of uncollected both tax and non-tax revenue, high cost of collection of different taxes and non-taxes and collection efficiency cost low-revenue efforts on the part of the state government.

Governments often report revenue, and keep their official accounting records, in terms of a modified accrual form of accounting. Where this happens, Census Bureau statistics reflect this accounting approach, even though it does not correspond exactly to the concept of cash received during the fiscal year. In aggregation and tabulation, aggregate statistics for an individual government reflect the revenue of the parent government and all of its dependent agencies (Chaudhry & Munir, 2010). However, flows of funds between these entities are considered internal transfers and are excluded, by definition, from non-revenue totals. These are treated as intra-governmental revenue and are excluded in much the same way as most intra-governmental service or revolving funds. Tabulated statistics on revenue for multiple governments reflect the fiscal years of the governments being summed.

Government non revenue impacts economic growth through meeting the various governmental needs (Illyas & Siddiqi, 2010). Perhaps the most important mechanism through which government expenditure impacts on economic performance are the costs of raising taxes to finance that expenditure because taxes affect the decisions of households to save, supply labour and invest in human capital and of firms to produce, create jobs, invest and innovate, as well as the choice of savings channels and assets by investors (Johansson, 2008).

Mahdavi (2008) used the advanced estimation techniques with an unbalanced panel data for 43 developing countries over the period 1973-2002. His results showed that aid had a negative effect, non-tax revenue had also negative effect while agriculture sector share had positive but insignificant coefficient. Trade sector share had a positive effect and economically active female variable had a net adverse but insignificant effect while the old-age portion of population showed negative association for both income and sales tax. Extent of urbanization and literacy rate both showed positive effect. Population density, monetization and inflation rate remained negatively correlated. Inverse of GDP per capita was strongly and negatively correlated with the level of taxation. Net effect of political rights and civil liberties was significant.

Auerbach (2006) contends that it is important to develop a modest design into the tax system because countries that are able to mobilize tax resources through broad-based tax structures with efficient administration and enforcement will be likely to enjoy faster growth rates countries with lower efficiency. Generally, efficient non tax revenue is one that reduces the disincentive effects of taxation to work, save and invest by using broad-based income tax structures. Therefore, a broad base of corporate income tax in conjunction with lower administrative costs is often seen as fairer than a narrow-based system because of horizontal and vertical equity considerations. Hence, tax reform in Asia and Europe should thereby focus on enhancing tax enforcement and broadening their tax base by minimizing tax incentives, exemptions and allowances, which would reduce the administrative costs of taxation and lead to an increase in tax revenue. Increases in tax revenue would allow greater government benefits to achieve more equal distributions of wealth and income.

Poulson and Kaplan (2008) describe marginal tax rates as the best measure for determining the impact of taxes on economic growth because increases or decreases in a marginal income tax rate create incentives economic units, like workers or businesses, to increase or decrease their output depending on what is best for them individually (Poulson & Kaplan, 2008). Other researchers like, Mofidi and Stone (1990) chose to use total state revenue per capita, because it more holistically addresses the question of how taxes affect economic growth.

Mofidi and Stone (1990) decided that business location and capital spending reflect the state of an economy, and are therefore suitable measures for economic growth. The reasoning being that an increase in non tax revenue, or decrease in the number of businesses, or an increase in the amount of money a state spends to build infrastructure is representative of the growing needs of a population, which by extension, tells us that economic growth is positive. All of which is probably true to an extent, but probably varies quite a bit by circumstance. A fast growing state like California will, by necessity of size as well as population growth, need to spend more on capital projects than say Rhode Island.

2.4 Effect of fiscal policy on economic growth

Nijkamp and Poot (2016) conducted a meta-analysis of past empirical studies of fiscal policy and growth and found that in a sample of 41 studies, 29% indicate a negative relationship between fiscal policy and growth, 17% a positive one, and 54% an inconclusive relationship. One of the contributory factors to these varied empirical results is the measure used to proxy for fiscal policy. Different investigators have used different measures of government spending as proxies for government size, e.g. total government spending, government consumption, total government revenue, or functional categories of government expenditure among others. Most of these measures are expressed as shares in GDP (GNP) either as levels or as growth rates. Admittedly, the choice of a given measure depends on which data series are available to the researcher, and given that some measures are better than others, results are bound to differ.

Islam and Kamrul (2016) as in other parts of the world, the appropriate fiscal policy response to a negative demand shock in SSA depends on the size and nature of the shock, as well as country-specific characteristics. Fiscal policy may be able to help smooth the impact of the crisis, maintaining critical government services and investment programs and providing countercyclical support to domestic demand. Countries that have macroeconomic stability and fiscal space (i.e., sufficiently strong fiscal accounts that allow them access to financing at sustainable rates) can run expansionary fiscal policy by allowing automatic stabilizers to work and through additional discretionary fiscal stimulus, when appropriate, to contain the impact of a sharp decline in private sector demand in the short run. However, when countries are constrained by a lack of financing or high levels of debt distress, then the scope for an expansionary fiscal policy is limited and there may be no alternative to tightening fiscal policies in the near term. The appropriate speed of adjustment will again depend on debt levels and the availability of financing on sustainable terms.

Kamin and Rogers (2017) assert that governments use fiscal policy to influence the level of aggregate demand in the economy, in an effort to achieve economic objectives of price stability, full employment, and economic growth. Keynesian economics suggests that increasing government spending and decreasing tax rates are the best ways to stimulate aggregate demand, and decreasing spending & increasing taxes after the economic boom begins. Keynesians argue

this method be used in times of recession or low economic activity as an essential tool for building the framework for strong economic growth and working towards full employment. In theory, the resulting deficits would be paid for by an expanded economy during the boom that would follow; this was the reasoning behind the New Deal.

But economists still debate the effectiveness of fiscal stimulus. The argument mostly centers on crowding out: whether government borrowing leads to higher interest rates that may offset the stimulative impact of spending. When the government runs a budget deficit, funds will need to come from public borrowing (the issue of government bonds), overseas borrowing, or monetizing the debt. When governments fund a deficit with the issuing of government bonds, interest rates can increase across the market, because government borrowing creates higher demand for credit in the financial markets. This causes a lower aggregate demand for goods and services, contrary to the objective of a fiscal stimulus. Neoclassical economists generally emphasize crowding out while Keynesians argue that fiscal policy can still be effective especially in a liquidity trap where, they argue, crowding out is minimal.

In the classical view, the expansionary fiscal policy also decreases net exports, which has a mitigating effect on national output and income. When government borrowing increases interest rates it attracts foreign capital from foreign investors. This is because, all other things being equal, the bonds issued from a country executing expansionary fiscal policy now offer a higher rate of return. In other words, companies wanting to finance projects must compete with their government for capital so they offer higher rates of return. To purchase bonds originating from a certain country, foreign investors must obtain that country's currency. Therefore, when foreign capital flows into the country undergoing fiscal expansion, demand for that country's currency increases. The increased demand causes that country's currency to appreciate. Once the currency appreciates, goods originating from that country now cost more to foreigners than they did before and foreign goods now cost less than they did before. Consequently, exports decrease and imports increase (Kitov, 2006).

Charnley (1986) discusses the implications of fiscal policy being chosen optimally in the context of a specific model. In his model there is an inverted U-shape relation between the share of government expenditures in GDP and the rate of growth whenever the rate of income tax is

chosen randomly. In contrast, if governments choose the optimal income tax rate, the relation between the share of government and the rate of growth can be significantly weakened. The second branch of research that makes policy endogenous treats it as the outcome of a political process Rodrick (1991). This 'political economy' approach points to very few exogenous factors that can be used in the empirical analysis but has an implication that we examine below: democracies and non democracies should, in general, implement different policies. We also discuss the relation between policy variables and inequality, since this relation is at the core of many political economy models.

Amanja and Morrissey (2005) used time series techniques to investigate the relationship between various measures of fiscal policy on growth on annual data for the period 1964 – 2002. Categorizing government expenditure into productive and unproductive and tax revenue into distortionary and non-distortionary, we found unproductive expenditure and non distortionary tax revenue to be neutral to growth as predicted by economic theory. However, contrary to expectations, productive expenditure has strong adverse effect on growth whilst there was no evidence of distortionary effects on growth of distortionary taxes. On the other hand, government investment was found to be beneficial to growth in the long run. These results should prove useful to policy makers in Kenya in formulating expenditure and tax policies to ensure unproductive expenditures are curtailed while at the same time boosting public investment.

Benos (2009) researched on the composition of both sides of the government budget, spending and revenues, matters for balanced growth according to endogenous growth models. This paper takes into account explicitly both sides of the government budget, since the policy variables in our growth regressions include both revenues and expenditures. We also extend past work by disaggregating government expenditures in a more detailed way. We find that some types of public spending and taxation affect growth. Specifically, government outlays on infrastructure (economic affairs and general public services) and property rights protection (defense, public order-safety) exert a positive impact on per capita growth.

Kefela (2009) established that Fiscal governance is strong only when governments can deliver their fiscal policy in a sustainable way, and are efficiently applied to the provision of public

goods and services. Fiscal policy and its potential effects on economic activity. The economic roles and potential methods of domestic and foreign debt financing. It focuses on the methodology of fiscal policy for calling and assessing the impacts of alternative tax policies, and debt management requirements. Policy and practice of public finance including decentralization and intergovernmental fiscal relations in developing and transitional economies of Africa.

Bbaale (2005) found out that the major fiscal policy challenge facing Uganda's economy revolves around the possibility of increasing fiscal space and the trade-off between macroeconomic stability on the one hand and the need to solve some pertinent development challenges on the other. In practice, whether it is possible to increase fiscal space or not will largely depend on the implications of these actions on macroeconomic stability and other objectives of economic policy. This study examines both short term as well as long term interactions between selected macroeconomic aggregates with.

Salami and Kelikume (2010) used annual data for the period 1970 to 2008 and 1980 to 2008 to estimate inflation (fiscal policy model for Nigeria. For the period 1970 to 2008, an inflation threshold of 8 per cent was detected, while for 1980 to 2008 an insignificant threshold of 7 per cent is established. In a similar study for Nigeria using annual data from 1970 to 2006, Bassey and Onwioduokit (2011) used the framework of Li (2005) to investigate the relationship between inflation and economic growth as well detected an appropriate model. Having established the presence of a negative relationship, they identified a statistically insignificant threshold level of 18 per cent and established that inflation rates below the threshold are growth propelling.

In Fiji's case, studies by Dewan & Hussei (2015) revealed some insights into the inflation growth relationship. The changes in the difference between actual GDP and potential GDP (output gap) had a bearing on Fiji's fiscal policy outcome. In another study, Dewan & Hussein (2001) found in a sample of 41 middle-income developing countries including Fiji, that inflation was negatively correlated to growth.

Mundell (2015) was one of the first to articulate a mechanism relating inflation and output growth separate from the excess demand for commodities. According to Mundell's model, an increase in inflation or inflation expectations immediately reduces people's wealth. This works

on the premise that the rate of return on individual's real money balances falls. To accumulate the desired wealth, people save more by switching to assets, increasing their price, thus driving down the real interest rate. Greater savings means greater capital accumulation and thus faster output growth.

2.5 Gap Identification

The related studies presented give implicitly the researcher conducted on fiscal policy and economic growth. Salami and Kelikume (2010) used annual data for the period 1970 to 2008 and 1980 to 2008 to estimate inflation (fiscal policy model for Nigeria. Bassey and Onwioduokit (2011) used the framework of Li (2005) to investigate the relationship between inflation and economic growth as well detected an appropriate model. Having established the presence of a negative relationship, they identified a statistically insignificant threshold level of 18 per cent and established that inflation rates below the threshold are growth propelling. Islam and Kamrul (2016) As in other parts of the world, the appropriate fiscal policy response to a negative demand shock in SSA depends on the size and nature of the shock, as well as country-specific characteristics.vMost of these studies were conducted from other countries other than Uganda; besides the studies which were conducted in Uganda were for periods before 2002 .therefore the researcher intend to conduct a study in Uganda concentrating on fiscal policies and economic growth in Uganda from 1985 to 2016.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This is based on the research design, model specification, variable measurement, data sources, data analysis and ethical considerations in the research.

3.1 Research Design

A time series analysis was adopted an Ex-post facto design based on quantitative techniques to analyze secondary data scientifically to critically conclude the research objectives, secondary data was collected from different ministries. Ex post facto design is a quasi-experimental study examining how an independent variable, present prior to the study, affects a dependent variable. A true experiment and ex post facto both are attempting to say: this independent variable is causing changes in a dependent variable. This is the basis of any experiment one variable is hypothesized to be influencing another. This is done by having an experimental group and a control group. The design is Ex post facto designs are used because the designs do not use random assignment. Because the study used the already available published random data. The design is intended to provide an elaborative assessment of the trend and the association of the variables (Onwuegbuzie and Turner, 2007).

3.2 The Model Specification

In order to determine the effect of fiscal policy on economic growth in Uganda. This study adopted a model based on neo-classical model and founded by Jorgenson (1983) that provide a study on factors that affect the economic growth. The model is aimed at examining the channels through which fiscal policy affect economic growth. The model provides for tests for the effect between fiscal policy and economic growth.

Consider an aggregate production function of the form,

In its most standard form for production of a single good with two factors, the function is

$$Y = AL^{\beta} K^{\alpha}$$

Where:

Y = total production (the real value of all goods produced in a year or 365.25 days)

L = labor input (the total number of person-hours worked in a year or 365.25 days)

K = capital input (the real value of all machinery, equipment, and buildings)

A = total factor productivity and your usual depreciation by utility in day after

α and β are the output elasticity of capital and labor, respectively. These values are constants determined by available technology.

The regression equation is based on the economic growth that is determined by government spending, government tax revenue and government non tax revenue. The economic growth in the model driven is therefore guided by the assessment of the factors; therefore the regression equation is guided by the factors mentioned above. The method that will be adopted by this study is the multiple regressions with OLS technique of estimation. The model has been specified below as;

$$GDP_t = f(GE, GTA, GNTE), \dots\dots\dots (3.1)$$

The above equation can further be expanded with the following regression equation:

$$GDP = \alpha + \beta_1 GE + \beta_2 GTA + \beta_3 GNTE + \varepsilon_i$$

Where

GDP = economic growth defined at a given time period t .

α : Constant Government spending and earning variation

GE : Government Expenditure

GTA : Government tax Earnings

$GNTE$: Government non tax earnings

$\beta_1 \beta_2 \beta_3$ Represent regression coefficients representing the relationships between the dependent variables and each of the independent variables in the model

ε_i represents the error term used to proxy all the other variables that affect the dependent variable, which are excluded in the model. The assumption of the error term is absence of serial correlation and heteroscedasticity.

3.3 Variable definition and Measurements

In our estimation equation, the dependent variable stands for growth rate of the economy; its data is obtained from World development indicators published by World Bank on line. It is intended to capture the role of the “catch up” effect of a country.

Fiscal policy is the means by which a government adjusts its spending levels and tax rates to monitor and influence a nation's economy. It is the sister strategy to monetary policy through which a central bank influences a nation's money supply

Economic growth is the increase in the level on goods and services of a country within a fixed period of time; in this case economic growth was measured in term of Gross Domestic Product expressed in the percentage change.

The economic growth is determined upon the factors such as balance of trade, imports and exports that affect the growth of the economy. The variables measurements are determined based on the definitions of economic growth by Coricelli, 1997 who provided for the measurements based on the production function.

3.4 Nature and Sources of data

Secondary data was used in this study. The data used in this study was annual bulletin of World Bank, OECD statistics, IMF. The data was transformed into log-level and first difference using the following formula.

The method of transformation was $DFP = \ln (FP_t - FP_{t-1})$ 3.2.

Where Dfp is the differences of fiscal policy variable FP_t = is fiscal policy at time t, FP_{t-1} is fiscal policy at time t-1 and Ln is natural log.

3.5 Data Analysis

3.5.1 Descriptive Analysis

Description of the variables during the data analysis involves a discussion of the descriptive statistics of all these different data variables in the study. Different measures of central tendency and spread of the dataset was used to present a view of the data so that preliminary analysis of its nature was presented before an inference about the general populations for further results were made using the results of the sample data at hand.

3.5.2 Trend Analysis

The study employed line graphs to examine the trends of public expenditure, tax revenue, non tax revenue and economic growth in Uganda. Trend analysis was used because it helps visualize the movements and fluctuations of the data series from season to season.

3.6 Time series property of data

3.6.1 Unit Root Tests

In time series analysis, a great deal of attention was given to stationarity of the variables in order to get rid of the problem of spurious regression. It is often said that most macroeconomic variables follow a random walk model, i.e., exhibiting a unit root behavior. According to Studenmund (2011), a random walk process can be identified as stationary when its mean and variance are found to be constant across time, and the value of the covariance between the two time periods is dependent on the lag between them and not the actual time of computing the covariance. This study therefore, employed the stationarity analysis to test whether the mean and variance of the stochastic term was a constant over time. The Augmented Dickey- Fuller (ADF) test is appropriate. The ADF tests the null hypothesis that there exists a unit root in the time series (non-stationary time series), which is $H_0: \alpha=0$ against the alternative hypothesis, $H_1: \alpha < 0$, that the time series is stationary (no unit root). A rejection of the null hypothesis under these tests means the series does not have a unit root. Assumptions of the Classical regression model necessitate that both the dependent and independent variables are stationary and the errors have a zero mean and finite variance. Decisions are made basing on the t-statistic, that is to say, if the absolute value of t-statistic is more than the critical values, then we reject the null hypothesis and conclude that the series is stationary. On the other hand, if the absolute value of the t-statistic is less e than the critical values, we fail to reject the null hypothesis and conclude that the series is non-stationary. The critical values for this t-statistic are given in Mackinnon (1991).

3.6.2 Co-integration Analysis

The notion that there is a long-run tendency for fiscal policy to grow relative to GDP growth or vice-versa has been an issue in economics that is rarely questioned. Thus, if the study variables are considered as stochastic trends and if they follow a common long-run equilibrium relationship, then these variables should be co-integrated. According to Engle and Granger (1987), co-integrated variables must have a long run relationship. The main reason for the

popularity of Co-integration analysis is that it provides a formal background for testing and estimating both short-run and long run relationships among economic variables

3.7 Regression Analysis

Regression analysis is a statistical process for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables while the other independent variables are held fixed. In this case the regression analysis was based on assessing the effect that real exchange rate and nominal exchange rate has on economic growth. The analysis used simple regressions analysis to determine the effect of public expenditure, Tax revenue and Non tax revenue rate on economic growth. The regression model is based on the provision of

$$GDP = \alpha + \beta_1 GE + \beta_2 GTA + \beta_3 GNTA + \varepsilon_i.$$

The method of hypothesis test adopted in this study was the P-value. The decision rule is to reject the null hypothesis if the P-value is less than 0.05, and accept if it is above.

The method of the hypothesis test adopted in the study was P-value based on 0.05 level of significance. If the p-value is less than 0.05 we reject the null hypothesis and conclude that a significant relationship exists between the variables.

3.8 Diagnostic Tests

3.8.1 Serial Correlation Test

Serial Correlation is a correlation among members of the series of error terms ordered in time. It is mainly caused by incorrect functional forms, auto regressions, manipulation of data, data transformation and non-stationarity of the data (Wooldridge 2009: 274). Under this Durbin - Watson d test and Breusch–Godfrey (BG) test. In this study, the BG test that is based on the Lagrange Multiplier principle is chosen since other tests have drawbacks that made the BG test to be favored. The decision rule was based on the p-value of 0.05 level of significance.

3.8.2 Normality Test

In the literature, there are several tests for normality, this employed Jarque–Bera tests. The Jarque–Bera test for normality was employed in this research. The Jarque -Bera test based on OLS residuals mainly used in a large sample test. First, it requires calculating the Skewness and

Kurtosis and then measures the OLS residuals as. In this case, there was use the JB test to determine whether the residuals are normally distributed or not. Under the null hypotheses where the residuals are normally distributed, if the p-value of the statistics is sufficiently low or lower or equal to the level of significance, then it was rejected. But if the p-value is found to be reasonably higher, then the normality assumption was not be rejected.

This employed Shapiro-Wilk W test for Normal data method. The model is based on the p-value is less than 0.05. (P-Value <0.05).

3.8.3 Heteroscedasticity Test

One of the ordinary least squares and Regression Model assumptions is that the variance of disturbance terms should be constant. As pointed out by Engle (1982). When the data is not homoscedastic, although coefficients obtained from the regression analysis would hold, the confidence intervals obtained from them would be extraordinarily large and as a result, would affect further inference to be made about the data. In this study, Breusch Pagan Cook-Weisberg test for Heteroscedasticity was used to test if the residuals from the regression model are homoscedastic or no.

CHAPTER FOUR

PRESENTATION, INTERPRETATION AND ANALYSIS OF THE DATA

4.0 Introduction

This section presents a review of the data with an empirical analysis concentrating on the major variables that were stated in methodology. The study used a combination of graphical and empirical tools for carrying out the analysis in order to answer all the objectives that were inherently stated in the previous sections of the study. The first section of the analysis involves carrying out a comprehensive univariate analysis of each of the variables. This is intended to discover any forms and nature of trends in the data prior to carrying out an in-depth analysis. It involved the use of both the descriptive statistics. Further presentations involve the analysis of association and the relationship between the variables. This is intended to discover any forms and nature of trends in the data prior to carrying out an in-depth analysis. It involved the use of both the descriptive statistics and graphics for summarizing the data.

4.1 Descriptive Statistics

Table 4.1 presents a summary of descriptive statistics for the variables considered for analysis namely GDP growth government spending, government tax revenue as well as government non-tax revenue. It described the distribution of each variable with respect to mean, standard deviation, minimum and maximum values for the 32 observations.

Table 4.1: Descriptive Statistics of fiscal policy and economic growth

	Descriptive Statistics						
	Log-level Series						
	Mean Stat	Std. Dev Stat	Variance Stat	Skewness Stat	Std. E	Kurtosis Stat	Std. E
Public expenditure	23.0987	1.54909	2.400	.071	.041	3.08	.009
Tax Revenue	27.6761	1.42366	2.027	.034	.044	2.96	.019
Non Tax Revenue	23.0987	1.54909	2.400	.071	.034	2.88	.008
GDP	29.5198	2.10994	4.452	.026	.014	3.10	.008

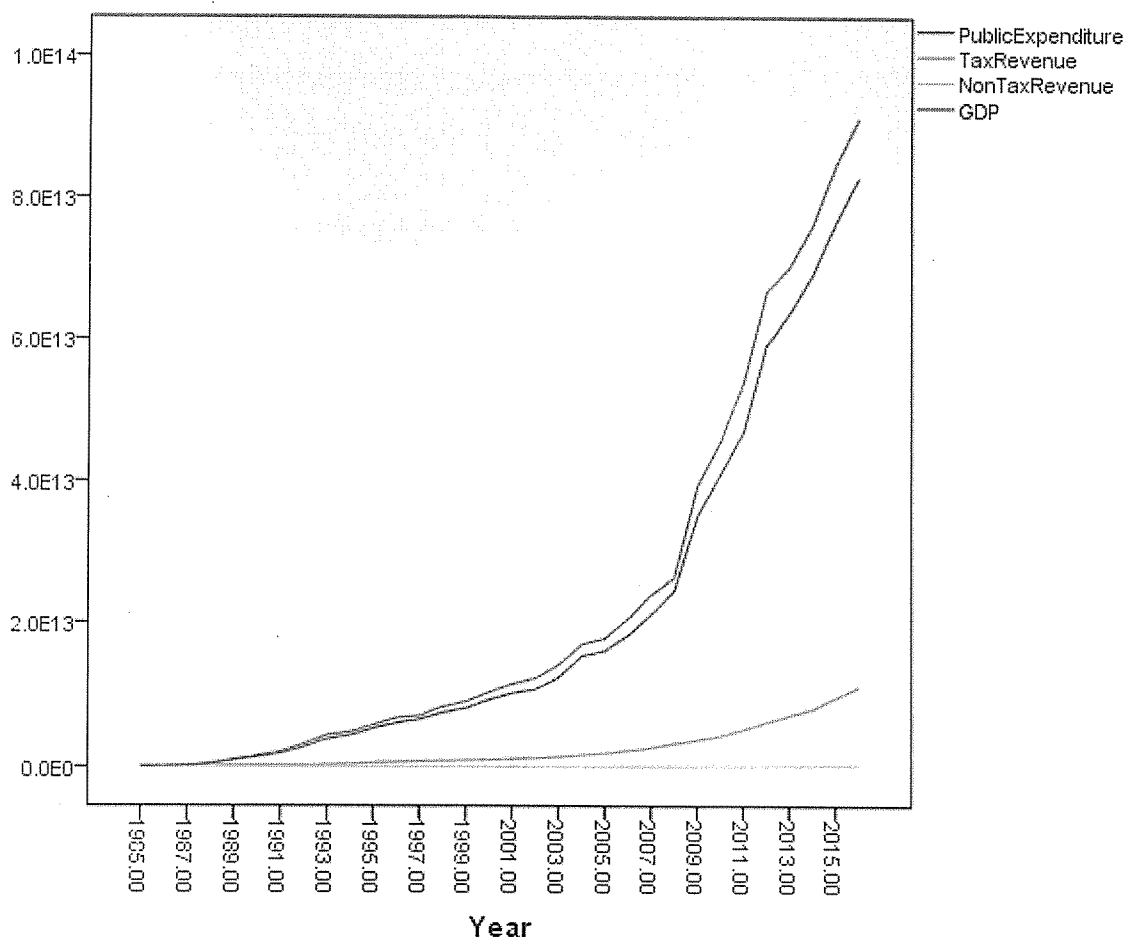
Source: Researcher, 2018

The findings from table 4.1 above show the descriptive analysis of public expenditure, Tax revenue, Non tax revenue and economic growth of Uganda from 1985-2016. The results attained on the mean, variance is, standard deviation, Skewness and Kurtosis are presented as shown below.

As can be seen from the Table, the mean value for the public expenditure, tax revenue, non-tax revenue, and GDP are 23.27, 23, and 29 respectively. The standard deviation value for the public expenditure, tax revenue, non-tax revenue, and GDP are 1.54909, 1.42366, 1.54909, and 2.10994 respectively. The skewness coefficients for the public expenditure, tax revenue, non-tax revenue, and GDP are .71, (.009) 0.34, (.019) .71, (.008) and .26 (.008) respectively. These suggest the series are not skewed, given that the coefficients are all close to zero. The kurtosis coefficients for the public expenditure, tax revenue, non-tax revenue, and GDP are 3.08(0.009), 2.96(019), 2.88(.008), 3.10(.008). The skewness and kurtosis coefficients indicate that the series are approximately normally distributed. This is so given that the skewness of a normal distribution is zero and the kurtosis of a normal distribution is three (Emenike, 2017).

4.2 Trend Analysis

The study employed line graphs to examine the trends of public expenditure, tax revenue, non tax revenue and economic growth in Uganda. Trend analysis was used because it helps visualize the movements and fluctuations of the data series from season to season.



Source: Researcher, 2018

The graphical analysis above has been used to visualize the growth rates of the variables under study from the year 1985 to 2016. The findings from the above graph show that public expenditure and economic growth in Uganda has been growing at the highest rate while tax and non tax revenue is the variable. The findings also indicate that economic growth, public expenditure rate, non tax revenue. The high growth of non tax revenue in the late 1980s could be attributed weakening of the economy by a fragile political environment. The environment of public expenditure has been increasing over the past years, even the GDP in Uganda has been increasing especially over the period from 2008 to 2015.

4.3 Time Series Property of Data

The study set to examine time series property of the data in order to establish if it is auto correlated or its autoregressive. This was done in order to change the variables to stationary as a

key assumption in multiple linear regression analysis and other inferential statistics. Besides, working with highly collinear variables would yield spurious result from which further inference is insignificant. Unit root tests were conducted on all the variables using both the Augmented Dickey-Fuller and Philips Perron test. In each case, the null hypothesis is that the variable has unit root and accepting it would imply the data is non-stationary. The alternative hypothesis is that the data has no unit root (stationary). The result of ADF and Phillips-Perron unit root test are summarized in table provided below. Both tests are tested at the 5% level of significance. The rejection criteria are that we reject the null hypothesis if the computed ADF and PP tests statistic value are greater, in absolute value, than their 5% critical tau values.

Table 4.2: ADF and PP tests of unit roots among variables

Variables	Log-Level series			
	ADF		PP	
	5%	Computed	5%	Computed
Economic growth	-2.955	-9.061	-2.955	-5.934
Public Expenditure	-2.955	-3.649	-2.955	-3.156
Tax Revenue	-2.955	-4.726	-2.955	-3.649
Non Tax Revenue	-2.955	-7.610	-2.955	-3.670

Source: Researcher, 2018

From the observations in table above, it is glaring that all the variables are stationary implying that they do not have unit roots. This is because the computed tau values of the ADF and Phillips-Perron tests are higher than the theoretical critical tau values (-2.955) at the 5% significance level. Therefore the null hypotheses of unit roots are rejected for the entire variable at the 5% significance level. Decision rule; reject the null hypothesis if the test statistic is greater than the 5% critical value.

4.3.1 Test for structural breaks

The second objective of the study was to establish if there is a long run relationship among the study variables for structural breaks. Co-integration method of analysis was used to establish if there were structural breaks.

4.3.1 Co-integration Analysis.

In our study we check for co-integration using Johansen test. This test is based on maximum likelihood estimation and two statistics: maximum eigenvalues and a trace statistic. The Null hypothesis is that there is no Cointegration. A co-integration test is purposely done to check if the variables have structural breaks given the many years of focus for the study. The results of the co-integration analysis have been presented in the table below.

Table 4.3.1: Johansen Cointegration Test Results

					5%
maximum				trace	critical
rank	parms	LL	eigenvalue	statistic	value
0	30	65.44	.	96.65	68.52
1	39	86.92	0.858	53.69	47.21
2	46	101.3	0.729	24.9421*	29.68
3	51	109.4	0.522	8.700	15.41
4	54	113.0	0.280	1.480	3.760
5	55	113.8	0.0651		

					5%
maximum				max	critical
rank	parms	LL	eigenvalue	statistic	value
0	30	65.44	.	42.96	33.46
1	39	86.92	0.858	28.75	27.07
2	46	101.3	0.729	16.24	20.97
3	51	109.4	0.522	7.220	14.07
4	54	113.0	0.280	1.480	3.760
5	55	113.8	0.0651		

Source: Researcher 2018

The table above provides the results from the Johansen cointegrating test on the data. Null hypothesis states that there is no Cointegration. The rejection criteria is that we reject the null hypothesis if the trace statistic is greater than 5% critical value. In the case of the above findings, at zero rank, the trace statistic is greater than 5% critical value implying that we reject the null hypothesis of no Cointegration. A closer look at the findings of the above table indicates the presence of Cointegration relation at rank two, $H: r=0$ is rejected at the 5 % level ($24.9421 < 29.68$). Moreover, for the maximum eigenvalue, at the same rank two, the null hypothesis is also rejected at the 5% significance level. In other words, for both the maximum eigen value and the trace tests, the findings indicate existence of cointegrating equation at rank two because at this rank, we fail to reject the null hypothesis and conclude that there is Cointegration among variables. The presence of Cointegration means that the variables are related to each other in the long term hence low structural breaks. Therefore, the empirical findings lead to the conclusion that there is long run relationship between the variables under study.

4.4 Regression Analysis of the variables under study

The variables were used for the regression analysis so as to minimize the chances of a model suffering from the problems of autocorrelation, non-normal residuals as well as heteroscedasticity. The findings are presented in the table below.

Table 4.4: Regression analysis on Public expenditure, tax revenue, Non tax revenue and economic growth in Uganda from 1985-2016.

Table 4.3: Results of effect of fiscal policy on economic growth

Variables	Coefficients	Std. Error	T-Statistics	P-Value
Intercept	0.449479302	0.502103133	0.895193	0.378315
Public expenditure	0.791985009	0.017378081	45.57379	8.17E-28
Tax Revenue	0.21411285	0.058526033	3.658421	0.001042
Non Tax Revenue	-0.010730931	0.042432259	-0.2529	0.802196

Source: Researcher 2018.

From table 4.4 the value of R is 0.99 on the regression coefficient between public expenditure, tax revenue and Non tax revenue on economic growth of Uganda, the regression coefficient expresses that 99.9% of change in the dependent variable (i.e. economic growth rate) is caused

by in public expenditure, tax revenue and non tax revenue. The R^2 , .997 on the other hand expresses that for this change; 99.7% of the data are accounted. In this case public expenditure, tax revenue and non tax revenue accounts the changes in economic growth. The standard error estimate of shows close scatter of the data.

The table further illustrates the regression analysis between Public expenditure; tax revenue and non tax revenue affect the economic growth of Uganda.

From the data in the above table the established regression equation was

$$Y = 0.449479302 + 0.21411285TR.$$

From the regression equation, it was revealed that holding public expenditure, tax revenue and non tax revenue to a constant zero, the economic growth of Uganda would be at 0.449, a unit increase in public expenditure would lead to a change in economic growth of Uganda by factors of 0.791 the unit increase in Tax revenue would lead to decrease in the economic growth of Uganda by factors 0.214.

At the 5% significance and the 95% level of confidence, public expenditure had 8.17E level of significance, tax revenue had .000 level of significance, and the variable of non-tax revenue had 0.80 level of significance. The results show that the variables public expenditure and tax revenue had significant effect on economic growth. While non-tax revenue had no significant effect on economic growth of Uganda from 1985-2016. The study results imply that public expenditure and tax revenue have had a high contribution to the economic growth of Uganda while non tax revenue has low contribution to economic growth in Uganda.

Regarding the hypotheses.

On hypothesis one: H_{01} , The researcher accepts the null hypotheses and conclude that there is no significant effect of government non tax government earning on economic growth in Uganda

On hypothesis two: H_{02} , The researcher rejects the null hypotheses and conclude that there is a significant effect of tax revenue on economic growth Uganda.

On hypothesis three: H_{03} , The researcher accepts the null hypotheses and conclude that there is no significant effect of government non tax government earning on economic growth in Uganda.

4.5.1 Breusch-Pagan for heteroscedasticity

Table 4.5.2 Breusch-Pagan for heteroscedasticity

Breusch-Pagan		Cook-Weisberg test for heteroscedasticity	
Ho:		Constant variance	
Variables		fitted values of log Economic growth	
chi2(1)	=	0.03	
Prob>chi2	=	0.7312	

Source: Researcher, 2018

The findings from the Breusch-Pagan test for heteroscedasticity above indicate that the model does not suffer from the problem of non-constant variance. This is because the p-value of 0.7312 is greater than 0.05 thus we fail to reject the above stated null hypothesis in table and conclude that there is constant variance in the model.

4.5.2 Diagnostic Tests

Diagnostic tests determine the goodness of the model. Thus, the regression model was preceded by diagnostic tests presented. The diagnostic tests included: Shapiro-Wilk W test for Normal data, Breusch-Pagan test for heteroscedasticity and Breusch-Godfrey Lagrange Multiplier test for autocorrelation.

4.5.2The Jarque-Bera Test for Normality

Table 4.5.2 ShowJarque-Bera Test for Normality

Shapiro-Wilk W test for Normal data					
Variable	Obs	W	V	Z	Prob>Z
Public Expenditure	32	0.84613	1.777	0.940	0.17349
Tax Revenue	32	0.83023	2.327	1.358	0.08719
Non Tax Revenue	32	0.66961	7.505	2.1160	0.01719
Economic Growth	32	0.91572	0.477	-1.204	0.88561

Source: Researcher 2018.

Null hypothesis of normality is H_0 : Residuals are normally distributed. We reject the null hypothesis for normality if the p-value is less than 0.05. In our model since the p-value of 0.88561 is greater than the p-value of 0.05, we fail to reject the null hypothesis and thus conclude that the residuals of the model are normally distributed. The results hence reveal that residuals in the fiscal policy and economic growth data are normally distributed.

4.5.3 Test for Serial correlation

Table.4.5.3: Breusch-Godfrey LM test for Serial correlation results

Breusch-Godfrey Lagrange Multiplier test for serial correlation			
lags(p)	chi2	Df	Prob>chi2
1	1.245	1	0.4132
H0: No serial correlation			

Source: Researcher, 2018

From table above, the p-value of the chi2 (0.4132) is greater than the p-value of 0.05 level of significance therefore, we fail to reject the null hypothesis and conclude that there is no serial correlation in the model which is desirable of our model.

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This final section of the report deals with the discussion of the findings presented in the preceding chapter. The discussion is made with reference to other similar works done in previous studies. The section then draws conclusions from these discussions after which it offers its recommendations. Finally, it suggests areas that are potential grounds for research that could not be completed in the body of this report.

5.1 Discussion of Findings

This section was further organized into three subsections with respect to the research objectives that guided the study.

5.1.1 Effect of public expenditure on economic growth of Uganda

Through regression analysis, the study results reveal that government spending had a non significant effect on economic growth in Uganda. The study results presented are never the less in agreement with previous studies such as Foster and Mijumbi (2012) on the same ground found a robust negative relationship between public expenditure and growth. The study was based on advanced countries between 1970 and 1995. Their estimated coefficient suggested that a 10 percentage increase in government expenditure is associated with a decrease of 0.7 percentage point in growth rate.

Mitchell (2015) argued that the American government expenditure has grown too much in the last couple of years and has contributed to the negative growth. The author suggested that government should cut its spending, particularly on projects/programs that generate least benefits or impose highest costs. Mohanty (2014) argued that public expenditure and economic growth have adopted either the aggregated or disaggregated approach. With respect to studies that adopt the disaggregated approach, the general view is that public expenditure, notably on physical infrastructure or human capital is growth enhancing, while government consumption is expected to be growth retarding thus, the concept of productive and unproductive government expenditure. The study findings from this study in Uganda are in disagreement with those examined the effect of government expenditure on economic growth for a sample of 96 countries. He found that public expenditure exerts a negative effect on real output. Similarly Gilpin, 2001), employing the

Granger causality test, examined the relationship between government expenditures and economic growth in Thailand and found that government expenditures and economic growth are not co-integrated. The result also suggested that a unidirectional relationship, as causality runs from government expenditures to growth. However, the result indicated a significant positive effect of government spending on economic growth. The study results are in agreement Thiriwall (2013) assessed the relationship between public expenditure in GDP and the growth in per capita real GDP and found negative and significant relationship between the two. Using an endogenous growth model of the U.S. economy in which government purchases directly affect both the utility of consumers and the productivity of firms.

5.1.2 Effect of government tax revenue on the economic growth of Uganda

The study results on the effect of tax revenue on economic growth in Uganda reveal that government tax had no significant effect on the economic growth of Uganda from 1985 to 2016. The variation in tax revenue only accounted to economic growth by 0.001; the results indicate a significant relationship between tax revenue and economic growth of Uganda. The results are in congruence with Ogbonna and Ebimobowei (2012) examine the impact of Tax Reforms and Economic Growth in Nigeria using relevant descriptive statistics and econometric analysis. They found that various tax reforms are positively and significantly related to economic growth and that tax reforms granger cause economic growth. On the same note Owolabi and Okwu (2011) examined the contribution of only Value Added Tax (VAT) to development of Lagos State Economy from 2001 to 2005. The study regressed each development indicator (infrastructural, environmental management, education sector, youth and social welfare, agricultural, healthcare, and transportation) on VAT revenue proceeds generated by Lagos State during the study period. Their finding was that revenue generated from VAT positively contributed to the development of the respective sectors of Lagos State economy during the period studied.

On the contrary however Kaldor (2011) argued that the country's tax potential depended on per capita real income, distribution of income, structure of the national economy, political and administrative governance. According to the author, the developing country tax performance would best be measured not by static indices such as tax ratios but by dynamic means such as tax effort and income-elasticity of the tax regime. Even Lewis (2000) argued that governments tend to avoid raising taxes because of the adverse political consequences and instead resort to printing

money or creating (easy) credit a monetary policy that leads to or fuels inflation. While taxation may raise prices, depending on income and price elasticities, the development economic scholar concluded that taxation was superior to inflation for a country's capital formation. Akhor (2014) stated that the economic effects of tax include micro effects on the distribution of income and efficiency of resource use as well as macro effect on the level of capacity output, employment, prices, and growth. Therefore, the use of tax as an instrument to achieve economic growth in most less developed countries cannot be reliable because of dwindling level of revenue generation.

5.1.3 Effect of government non tax revenue on the economic growth of Uganda

The study results on the effect of Non tax revenue on the economic growth, the study results reveal that non tax revenue earnings had an insignificant effect on economic growth of Uganda for the period under the study, the study reveal that a unit change in non tax revenue earnings only accounted for .355 change to economic growth. The study results are in line with the previous authors such as Mohanty (2014) assessed the importance of non-tax revenue is now being realized by the sub-national governments in India in the context of revenue deficits and, the heavy financial requirements for upgrading and modernizing basic infrastructure. Therefore, non-tax revenue is essential to finance the repair, maintenance and operations (MRO) of existing capital assets that creates positive externalities as well revenue for the government.

Even Kamin and Rogers (2017) assert that governments use fiscal policy to influence the level of aggregate demand in the economy, in an effort to achieve economic objectives of price stability, full employment, and economic growth. Keynesian economics suggests that increasing government spending and decreasing tax rates are the best ways to stimulate aggregate demand, and decreasing spending & increasing taxes after the economic boom begin.

5.2 Conclusion

The study was set to examine the effect of fiscal policy on economic growth of Uganda from 1985 to 2016. The study focus was to examine the effect of public expenditure, tax revenue and non tax revenue on economic growth of Uganda. The study conclude that public expenditure was increasing over the period of the study, the results reveal that the public expenditure had a significant effect on economic growth in Uganda. The study conclude that public expenditure need to be improved for attaining economic growth in Uganda.

The study findings on the second objective conclude that tax revenue was increasing over the time and the effect was significant, the study concludes that the tax revenue increase lead to generation of values for the economy and need more comprehension for attaining economic growth in Uganda.

The study finally established that the non tax revenue earnings had a low effect on the growth of Uganda. The study results reveal that the non tax revenue did not much account for economic growth of Uganda a probable issue could be that improvement of the non tax revenue or possibly more reallocations can improve the economic growth. The study on overall concludes that fiscal policy had high effect on economic growth in Uganda's economic growth for Uganda from 1985-2016.

5.3 Recommendations

The study reveals that public expenditure had a significant effect on economic growth in Uganda. There is need for government to improve tax administration as means for improving the working environment. Expenditure on productive activity can trigger economic growth therefore much emphasis need to focus on generating performance. There is need for government policy ensuring quality and sustained growth that can potentially improve the pace of Uganda's economic advancement. There is need for enhancing the government expenditure on improving the informal sector for generating economic growth in Uganda.

On the second objective tax revenue contributes to improved economic growth. Therefore enterprising of the informal sector is needed for increasing the tax bases. There is need for increasing revenue generation preferably through encouraging investments and supporting the creation of small business that can yield capital in order to generate more tax revenue for economic growth. There is need for enhancing the proper revenue usage of the taxes in the country for infrastructure growth in order to generate the revenue for the country.

The third objective recommends that there is need for generation of non-tax revenue through improving accessibility to the tourism sector and growth of the tourism sector including gazeting the economic activity that generate the taxes. There is need for enhancing the diversity of an environment that provides the need for revenue generation.

5.4 Areas of further research

The results presented in this thesis may not be conclusive and should be treated as being preliminary. Further analysis of the survey data on fiscal policy and economic growth can be done to comprehend the findings and provide wider justification on explaining the fiscal policy and economic growth. Other research need to be done in this field specifically on the following.

1. Government expenditure and economic growth in Uganda
2. Government earnings and economic growth for Uganda
3. Investments and economic growth in Uganda
4. Relationship between fiscal policy and investment growth

5.5 Contribution to Knowledge

One of the most prominent findings from this study is the fact that it has provided evidence to support the Keynesian theory. Indeed, economic growth or GDP can significantly be increased with public expenditure increase and tax revenue. This is one of the premises that are held by the theory in question. Another important revelation that can be attributed to this study is that it is now clear that an effective tax regime generates economic growth of a country. This is contrary to common belief that taxes alone cannot generate growth. Finally, it has been established that though non tax revenue didn't contribute to GDP growth, it was because it was also low otherwise increasing the non tax revenue is fundamental generator to economic growth.

To society, the study contributes a high level of focus for the many community members especially exploring the mechanisms through which the community can benefit through investments in the country.

The study can contribute to a high degree of policy implementation that can enhance the management attributes to the management of the revenues and government expenditures in the country's management stakes.

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Appendix i: Data for Analysis

World bank, World Economic Indicators, OECD Statistics, 2016.

Year	Public Expenditure (Current LCU)	Tax Revenue (Current LCU)	Non Tax Revenue (Current LCU)	Economic Growth (Current, LCU)
985	8,527,833,100.00	140,118,712,000.00	1,904,740,000.00	17,876,737,300.00
986	18,103,737,300.00	147,120,151,000.00	2,147,010,000.00	42,583,546,100.00
987	43,617,546,100.00	152,001,210,000.00	2,240,760,000.00	124,395,260,800.00
988	430,388,899,100.00	168,011,200,000.00	2,420,702,000.00	390,535,899,100.00
989	985,661,000,000.00	170,115,995,000.00	2,540,040,000.00	894,926,000,000.00
990	1,542,599,000,000.00	175,040,914,000.00	2,642,541,000.00	1,375,747,000,000.00
991	2,094,861,000,000.00	178,714,000,000.00	2,801,941,000.00	1,829,999,000,000.00
992	3,171,866,088,500.00	180,280,657,000.00	3,010,617,000.00	2,745,492,088,500.00
993	4,416,684,408,000.00	282,294,057,000.00	3,140,710,000.00	3,870,387,408,000.00
994	4,856,063,000,000.00	382,294,057,000.00	3,241,010,000.00	4,400,270,000,000.00
995	5,852,629,000,000.00	521,679,195,000.00	3,471,811,000.00	5,367,456,000,000.00
996	6,823,880,000,000.00	638,241,257,000.00	3,641,781,000.00	6,122,089,000,000.00
997	7,126,975,000,000.00	733,543,846,000.00	3,800,010,000.00	6,633,475,000,000.00
998	8,385,250,000,000.00	804,900,789,000.00	4,001,001,000.00	7,570,250,000,000.00
999	9,112,092,296,000.00	944,903,757,000.00	4,201,841,000.00	8,170,700,000,000.00
000	10,436,177,299,600.00	999,659,318,000.00	4,602,714,000.00	9,364,317,417,900.00
001	11,562,181,390,300.00	1,088,363,886,000.00	4,904,781,000.00	10,296,365,610,100.00
002	12,342,233,023,900.00	1,222,808,990,000.00	5,719,951,000.00	10,840,666,712,600.00
003	14,162,227,518,100.00	1,418,615,503,000.00	13,166,265,000.00	12,443,497,236,600.00
004	16,908,638,717,700.00	1,650,612,185,000.00	13,913,298,000.00	15,362,227,053,900.00
005	17,757,592,360,000.00	1,935,003,071,000.00	17,359,049,000.00	16,050,626,595,600.00
006	20,591,642,392,200.00	2,272,777,589,000.00	19,948,355,000.00	18,209,404,509,000.00
007	24,010,155,991,400.00	2,713,565,520,000.00	29,400,812,000.00	21,186,563,444,100.00
008	26,383,255,901,000.00	3,272,338,634,000.00	3,6224,246,000.00	24,497,446,506,900.00
009	39,345,902,626,498.00	3,803,051,478,000.00	44,122,701,000.00	35,064,901,924,155.00
010	45,648,018,562,725.00	4,329,610,189,000.00	58,260,435,000.00	40,956,005,316,404.00
011	53,862,971,134,897.00	5,250,149,602,000.00	67,513,403,000.00	46,877,602,538,674.00
012	66,785,890,603,333.00	6,303,346,382,000.00	78,970,889,000.00	59,152,262,124,940.00
013	70,305,845,295,019.00	7,220,537,540,000.00	103,172,659,000.00	63,740,291,673,900.00
014	76,187,031,152,860.00	8,065,048,255,000.00	124,618,011,000.00	69,276,042,928,784.00
015	84,762,033,535,537.00	9,697,883,985,000.00	240,014,058,000.00	76,516,733,783,448.00
016	91,241,566,676,445.00	11,180,556,822,653.00	270,001,712,000.00	82,902,727,252,822.00

Source: World Bank, World Economic Indicators, OECD Statistics, 2016

www.worldbank.worldgdp.data , www.oecdcountrystatistics

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