

**IMPACT OF GOVERNMENT EXPENDITURES ON ECONOMIC GROWTH  
IN ZANZIBAR**

**MAJID SALEH SALIM**

**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT FOR THE  
REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS  
ADMINISTRATION OF THE OPEN UNIVERSITY OF TANZANIA**

**2017**

**CERTIFICATION**

The undersigned certifies that has read and hereby recommends for acceptance by the Open University of Tanzania, a dissertation entitled, “*Impact of Government Expenditures on Economic Growth in Zanzibar*”, in partial fulfilment of the requirements for the degree of Masters in Business Administration.

.....

**Dr. Salum Soud Mohamed**

Supervisor

.....

**Date**

**COPYRIGHT**

No part of this dissertation may be reproduced, stored in any retrieval system, or transmitted in any form or by any means without prior written permission of the author or the Open University of Tanzania.

**DECLARATION**

I, **Majid Saleh Salim**, do hereby declare that this dissertation is my own original work and that it has not been and will not be presented to any other University for a similar or any other degree award.

.....  
**Signature**

.....  
**Date**

## **DEDICATION**

For the memory of my late Father, who encouraged and supported me towards educational field. Though physically he is not with us, his spirit, initiatives and goals still guide us. Without his love, dedication, encouragement and commitment, I couldn't be able to develop my carrier.

I also dedicate this work to my daughter Miss Fatma Majid Saleh, who was born during my MBA studies.

## ACKNOWLEDGEMENTS

Many people have contributed to the accomplishment of this dissertation, and I will forever be grateful to them. I am immensely indebted to the Revolutionary Government of Zanzibar, which through the Zanzibar Water Authority Pemba Branch provided financial support for my studies.

I am extremely grateful to the support and encouragement of my supervisor Dr. Salum Soud Mohamed, not only did he advise, encourage, offer constructive criticism and comments but also he offered me relevant literature and data. In spite of his tight schedule and endless workload he spared his time to help me with some difficulties I constantly faced. His ideas helped me a lot to improve my work.

I wish to express my authentic thanks to Mr. Faki Othman Faki, He provides prompt and valuable intellectual inspiration and guidance. His constructive criticisms and positive encouragement made this study highly possible.

My gratitude is also extended to my family, special my beloved parent Mrs. Fatma Majid Salim for their support, love and patience, also special thanks go to my wife Mrs. Zainab and my daughter Miss. Fatma Majid Saleh for her endless support.

Finally, I would like to thank all my classmates and friends for their support during the whole period of writing this dissertation.

**ABSTRACT**

The objective of this study was to assess the impact of various government expenditures on the economic growth in Zanzibar. All data used were from the Ministry of Finance of Zanzibar. The study was a case study by design and quantitative in approach. Data were collected through secondary sources by use of Documentary review. This impact of government expenditures on economic growth was explained by econometric analysis of the data used in the study. Although the rate of growth of expenditure as a ratio of GDP has been increasing consistently over time, its absolute per capita magnitude is too low, thus, there is a need to increase government expenditure and to effectively and efficiently utilize it in a way it will hasten economic growth. The need for increasing government expenditure is also evident in an effort towards achieving the Millennium Development Goals (MDGs). This calls for, in general, non distortionary and reliable source of revenue, capacity building, and preventing the expenditures that can be efficiently provided by private sector. Simple OLS single-factor regression models were employed in analyzing the effect of government expenditure on economic growth. The models regressed both total government development expenditure and government recurrent expenditure of the selected sectors with the Gross domestic product (GDP) based on Purchasing Power Parity, i.e. per capita GDP.

## TABLE OF CONTENTS

<b>CERTIFICATION.....</b>	<b>ii</b>
<b>COPYRIGHT .....</b>	<b>iii</b>
<b>DECLARATION .....</b>	<b>iv</b>
<b>DEDICATION .....</b>	<b>v</b>
<b>ABSTRACT .....</b>	<b>vii</b>
<b>TABLE OF CONTENTS.....</b>	<b>vii</b>
<b>LIST OF TABLES.....</b>	<b>xi</b>
<b>LIST OF ABBREVIATIONS.....</b>	<b>xiii</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
1.1 Background to the Problem .....	1
1.2 The Statement of the Research Problem .....	3
1.3 Objectives of the Study .....	4
1.4 Research Questions .....	5
1.4.1 General Research Question.....	5
1.4.2 Specific Research Questions.....	5
1.5 Significance of the Study.....	6
<b>CHAPTER TWO .....</b>	<b>8</b>
<b>2.0 LITERATURE REVIEW .....</b>	<b>8</b>
2.1 Introduction.....	8
2.3.1 The Economic Growth Theories.....	11
2.3.2 The Nature of Government Expenditures.....	16
2.3.3 The Effects of Government Expenditure on Economic Growth.....	18

2.3.4	The Relationship between Government Development Expenditure.....	23
2.4.1	Empirical Literature Review Worldwide .....	26
2.4.2	Empirical Literature Review in Africa .....	27
2.4.3	Empirical Literature Review in Tanzania.....	29
<b>2.5</b>	<b>Research Gap .....</b>	<b>30</b>
2.6	Conceptual Framework .....	31
<b>2.7</b>	<b>Theoretical Framework .....</b>	<b>32</b>
<b>CHAPTER THREE.....</b>		<b>33</b>
<b>3.0</b>	<b>RESEARCH METHODOLOGY .....</b>	<b>33</b>
3.1	Introduction .....	33
3.2	Research Design.....	33
3.3	Area of the Study .....	34
3.7	Reliability and Validity of Data.....	37
3.7.1	Reliability of Data.....	37
3.7.2	Validity of Data.....	38
<b>CHAPTER FOUR .....</b>		<b>40</b>
<b>4.0</b>	<b>PRESENTATION AND DISCUSSION OF FINDINGS .....</b>	<b>40</b>
4.1	Introduction .....	40
4.2	Correlation Analysis .....	41
4.3	Regression Results.....	42
4.4	Discussion of the Results .....	44
<b>CHAPTER FIVE .....</b>		<b>47</b>
<b>5.0</b>	<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS .....</b>	<b>47</b>
5.1	Introduction .....	47

5.2 Summary of the Main Findings .....	47
5.4 Conclusion.....	49
5.5 Recommendations.....	49
5.6 Limitations of the Study.....	50
<b>REFERENCES .....</b>	<b>53</b>

**LIST OF TABLES**

Table 4.1 The Correlation Coefficient Matrix.....	42
Table 4.2 Regression Result.....	44

**LIST OF FIGURES**

Figure 2.1 Conceptual Framework .....31

**LIST OF ABBREVIATIONS**

GDP	Gross Domestic Product
GDE	Government Development Expenditure
GRE	Government Recurrent Expenditure
MDGs	Millennium Development Goals
NGOs	Non Government Organizations
OCGS	Office of Chief Government Statistician
OECD	Organization of Economic Cooperation and Development
OLS	Ordinary List Square Methods
R&D	Research and Development
TZS	Tanzania Shillings
ZRG	Zanzibar Revolutionary Government

## CHAPTER ONE

### 1.0 INTRODUCTION

#### 1.1 Background to the Problem

The role of any government is to provide goods and services to the public to achieve different economic and social objectives. The efficiency with which governments provide these goods and services is important to the macroeconomic stabilization, economic growth and also to the policy makers who want to know which sector to spend more or less in order to speed up the economic growth in the country. Government expenditure comprises of the recurrent expenditures and development expenditures. Government development expenditures are those devoted for the purposes of carrying out various governmental projects which are designed to improve the growth of the economy. Some other factors that contribute to economic growth of a country have been identified by economists to include the growth in economic productivity, the number of equipment and number of workers.

But what is the relationship between government spending and economic growth? This is a matter of research as current theoretical and empirical literatures do not offer a conclusive argument. For example, Landau (1996), Grier and Tullock (1999), and Barro (1990), find a negative impact whereas Ram (1996) and Aschauer (1999), among others, observe a positive impact while Kormendi and Meguire (1995) find no distinct relationship. Barro (1990) said that the nature of the impact of government expenditure on economic growth depends on its form. Barro argued that the expenditure on investment and on productive activities should contribute positively on growth while expenditure on consumption is expected to hinder the growth.

Furthermore, the direction of impact of government expenditure on economic growth differs by country/region, analytical method employed and classification of government expenditure. The increase in government expenditure on socio – economic and physical infrastructures encourages economic growth. For example government expenditure on health and education raises the productivity of labour and increase the growth on national output. Similarly, expenditure on infrastructure such as roads, communications, power etc reduces production cost, increases private sector investment and profitability of firms.

While some of the existing studies on government expenditure and economic growth, such as Landau (1995). Barro (1991) and Lindauer (1992). were cross-sectional in nature and spanned both developed and developing countries. This study then intends to analyze the impact of government expenditure on economic growth in Zanzibar. The study intends to assess the year on year governmental expenditure and their impact on the economic growth of the country. Most of the previous studies on the topic revealed that government development expenditures are an important ingredient in development and attainment of a steady growth of the economy. Although the rate of growth of expenditure as a ratio of GDP has been increasing consistently over time, its absolute per capita magnitude is too low, thus, there is a need to increase government expenditure and to effectively and efficiently utilize it in a way it will hasten economic growth. The need for increasing government expenditure is also evident in an effort towards achieving the Millennium Development Goals (MDGs). This calls for, in general, non distortionary and reliable source of revenue, capacity building, and preventing the expenditures that can be

efficiently provided by private sector. Simple OLS multiple regression models were employed in analyzing the effect of government expenditure on economic growth. The models regressed both total government development expenditure and government recurrent expenditure of the selected sectors with the Gross domestic product (GDP) based on Purchasing Power Parity, i.e. per capita GDP.

### **1.2 The Statement of the Research Problem**

Government expenditure as has been argued is one of the important ingredients and catalysts when analyzing the economic growth of a nation. The allocation of public expenditure should focus on increasing economic growth for the purposes of increasing GDP in the country for bettering the standard of living of the people. According to the study conducted by Othman (2012) on the impact of total government expenditures and economic growth in Zanzibar, said that development expenditure in Zanzibar has recently focused mostly on financing the education sector, health sector, agriculture and physical infrastructures which in general improve human development.

Thus, it seems that the best approach to analyse the effect of government expenditure on economic growth is through examining the sectoral contributions. According to study conducted by Mitchell (2005). increase in government expenditure argues that government programmes provide valuable “public goods” such as education and infrastructure. They also claim that increase in government expenditure can encourage economic growth by putting money into people’s pockets while proponents of decrease in government expenditure argue that government is too big and that higher spending undermines growth by transferring additional resources

from the productive sector of the economy to government, which uses them less efficiently. They also warn that an expanding public sector complicates the efforts of implementing pro-growth policies. To ensure well-functioning markets and stimulate economic growth, governments must spend resources to enforce contract, maintain national security, protect against criminals and provide valuable “public goods”. Mitchell (2005) argued that increased government expenditure beyond these has a diminishing effect on the growth of the economy. Of course, if the government is to be helpful in bringing about a faster rate of growth, it has to do this by discouraging the allocation of resources to non-productive uses. Tanzi (1994) for example reflected that, perhaps more importantly, the government must always be on guard not to be, itself, a major source of misallocation.

To know the relationship between government expenditure and economic growth is especially important for developing countries like Zanzibar, because most of time have experienced increasing levels of government expenditure over time. The study aims at empirically investigating this relationship in Zanzibar, with a view of explaining the reason behind the observed causality between them. This study was concerned with assessing the impact of government expenditures only in Zanzibar and does not address means of financing.

### **1.3 Objectives of the Study**

#### **1.3.1 General Objective of the Study**

The general objective of this study was to determine the role of government expenditures on economic growth in Zanzibar using time series of data for the period 2000 – 2013.

### **1.3.2 Specific Objectives of the Study**

Specifically the study was attempt the total development and recurrent expenditure in the following selected sectors:-

- i. To investigate the effects of expenditure in education on economic growth in Zanzibar.
- ii. To investigate the relationship between expenditure in health and economic growth in Zanzibar.
- iii. To determine the impact of expenditure in agriculture on economic growth in Zanzibar.
- iv. To determine the effects of expenditure in infrastructure on economic growth in Zanzibar.

## **1.4 Research Questions**

### **1.4.1 General Research Question**

Is there any significant impact of government expenditures and economic growth in Zanzibar?

### **1.4.2 Specific Research Questions**

- i. Is the expenditure on education positively related on economic growth in Zanzibar?
- ii. Is there any relationship between expenditure in health and economic growth in Zanzibar?
- iii. What is the impact of expenditure in agriculture on economic growth in Zanzibar?

- iv. What is the effect of expenditure in infrastructure on economic growth in Zanzibar?

### **1.5 Significance of the Study**

One among the requirement of Open University of Tanzania to graduate student in Master of Business Administration is to write a dissertation, so the student has to write this dissertation proposal and letter research for the award of Master of Business Administration. The second is to add to the existing literature on the impact of government expenditure on economic growth in terms of data used, specificity and coverage. Also this study was taken at a time when:-

- (a) Zanzibar has embraced multi-party democracy and government expenditures are coming under intense scrutiny from lawmakers and the disgruntled public.
- (b) The world is still reeling from the effects of global economic and financial crises and countries have to implement unpopular austerity measures; and
- (c) Much of the country's budget depends on donor funds.

For these reasons, the study will provide guidelines to create the basis of expenditure preferences that will rely on the relative contribution to economic growth.

### **1.6 Scope of the Study**

This study is focus on the impact of government expenditures and economic growth in Zanzibar. The study will covers the period from 2000 – 2013, this period has been chosen because of unavailability of data at the time before the year 2000. The study has beenheld in the Islands of Zanzibar with a population of about 1,303,569. Most of the Ministries' headquarters are situated in Zanzibar Town. Zanzibar is a

heterogeneous Island, economic and social conditions are relatively similar in all big towns. Zanzibar Islands were considered to be a representative sample of the rest. The study covered only selected sectors of the economy. These are expenditure on education, health, agriculture and infrastructure. Infrastructure is an umbrella term for many activities referred to as social overhead capital. The study has been considering only expenditure on transport, power and water.

### **1.7 Organization of the Study**

This study is divided into five chapters. After chapter one, chapter two comes and covered both the theoretical and empirical review of the relevant literature to the study, the research gap, the statement of hypotheses and the conceptual frame work. Chapter three covers the research methodology while chapter four covers presentation and discussion of findings. Finally, on chapter five brief summary, conclusion, recommendation and policy implication are presented.

## CHAPTER TWO

### 2.0 LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviews various literatures available in Africa, Tanzania and around the world in the area covered by the study. In the first part of this chapter the study has scoured the theoretical literatures on the subject of the interrelationship between various government expenditure programs and economic development and growth. This part was expected to build the theoretical foundation that has been assist in the understanding of the later part of the literature review and the data analysis. In the second part of the literature review the study made available various study findings around the globe on the effect of government expenditure on economic development and growth of a country. This part was review empirical researches undertaken around the world in both developed and developing countries and economies.

#### 2.2 Conceptual Definitions

Conceptual definition means the process of establishing what a concept means in the context of a particular study (Singleton, 1999). Cozby (2007) gives the meaning of the term as defining a concept in terms of operations or techniques the researcher uses to measure or manipulate it. He further argues that conceptual definition forces researcher(s) to discuss abstract concepts in concrete terms. Conceptual definition helps to avoid misconception to the users of a particular study. Based on the above elucidation, the key concepts that have been presented in this study include government expenditure and economic growth.

### **2.2.1 Government Expenditure**

According to Othman (2012) define government expenditure as expenses incurred by the government for its own preservation, the expenses can be social as well as economical. The government expenditure should reveal the policy choice of the government. Government expenditure comprises of the recurrent expenditures and development expenditures. Recurrent expenditure includes spending on wages and salaries, supplies and services, rent and so on. These are broadly considered to be consumable items, the benefits of which are consumed or exhausted within each financial year while Government development expenditures are those devoted for the purposes of carrying out various governmental projects which are designed to improve the growth of the economy.

On the other hand, development expenditure include spending on fixed assets such as land, buildings and plant and machinery, the benefits of which are more durable, lasting several years of decades. The development expenditure can influence economic growth if government will allocate available resources from low to high productive sector. The investment expenditure can stimulate the accumulation of capital and increase productivity on both public and private sector. If development expenditure can be efficiently used in the country will provide quality of labour force, advanced technological change and capital formation which will lead to the higher productive and economic growth.

### **2.2.2 Economic Growth**

Economic growth corresponds to the increase of the country's potential GDP caused by the increase on advanced technology, capital stock and improvement in the

quality and level of literacy. Economic growth is essential to every country and particularly to developing countries in order to get out of predicament of prehistoric poverty. This is the increase of country capital stock, the technological advances and the improvement in the quality and level of illiteracy in the country. The value of goods and services produced in the country can be also determining the country economic growth. The economic growth will be measured by comparing the gross national product (the standard measure of the output of an economy) in a year with the gross national product of the previous year. The economic growth of the country can be positive or negative while negative growth indicates the depression of the economy and recession.

GDP per capital (GDP) is the estimation of the value of goods produced per person in the country, equal to the GDP of the country divided by the total number of the people in the country. This can be seen as a roughly display of a nation's prosperity. The picture of a country productivity and its international competitiveness can be observed on the GDP per employed person is the average labour productivity. The real GDP growth rate will be determined by the percentage change in real GDP from year to the next. The term economic growth primarily concerned with the long run economy measured by the GDP of the country taken as the increase of standard of living of the people. The economic growth of the country should focus on the growth rate of GDP per capital, thus the output per person rather than to consider the overall output. The output of the economy as explained by the Solow (1997) mathematically can be illustrated on the production functions on association of various inputs and the level of output. The flow of output mostly depends upon the different types of capital

that makes production possible. The simple form of an economy-wide production function assumed by Solow is written in the form:

$Q = A K^a L^b$  Where A indicating as multifactor productivity, a is less than one and also b are the diminishing return to a single factor but  $a+b = 1$  showing constant return to scale. While Q is the aggregate output, and any increase on Q should come from one of three sources. The increase in L due to diminishing return to scale will cause the reduction of Q/L thus output per worker while the increase of stock capital will also increase both output and Q/L and the increase in A increase output per worker Q/L. The model tries to highlight that in order to raise income per capital achieving economic growth there is a need to increase the amount of capital that each person works and to increase technology.

## **2.3 Theoretical Literature Review**

This section highlights some basic theories that have been used to support the impact of government expenditure on economic growth.

### **2.3.1 The Economic Growth Theories**

According to Branson (2002) economic growth theory generally concerns with the economic long run trends or potential growth path. The theory entails the factors that contribute to economic growth over time and explore the factors that allow some nations to grow faster, some gradually and others not at all. The earliest explanation of economics growth theory was provided by IbnKhaldun's in his Muqaddimah (1377) where he wrote that "when civilization population increases, the available labor again increases. In turn, luxury again increases in correspondence with the

increasing profit, and the customs and needs of luxury increase. Crafts are created to obtain luxury products. The value realized from them increases, and as a result, profits are again multiplied in the town. Production there is booming even more than before. And so it goes with the second and third increase. All the additional labor serves luxury and wealth, in contrast to the original labor that served the necessity of life.” The economic growth theory was followed by the Western European nations advocating the idea that economies could grow faster by producing a great economic surplus which could be used for consumption and increase welfare of the people. They continue explaining that the process of economic growth is a continual rapid replacement and human activities reorganization facilitated by the investment motivated aimed to maximize return.

Towards the end of 18<sup>th</sup> century physiocrats accentuated on agriculture and on its capacity to create investible surplus and source of wealth of the state and the citizens. The Mercantilist period saw growth as involving the increase in the amount of specie, the circulating medium such as gold and silver, under the control of state. In economic growth theory mercantilists give emphasis to surplus balance of trade while Cameralists pay attention on taxation and state regulation for well-built economy. For example, Ricardo tried to highlight the benefit of trade on the country, and the theory of comparative advantage as the important component of growth. Keynesian analysis concludes that aggregate demand management policies should be used to improve economic performance. For Keynesians demand is a precondition for growth. For example, the Harrod-Dommar growth model, the well known model in Keynesian framework, provides some insight into the dynamic of growth. On

determining equilibrium growth rate ( $g$ ) in the economy the Harrod-Domar model demanded that the balance between demand and supply for a nation's output should be maintained. The supply side says saving is a function of the level of GDP ( $Y$ ) given  $S = sY$ . The capital level  $K$  required to produce an output  $Y$  given by the equation  $K = vY$  as  $v$  defined as the capital output ratio. Investment ( $I$ ) stands as an important component of demand for the output in the economy as well as the enlarged capital stock given as ( $K = vY - I$ ) consequently the equilibrium rate of growth ( $g$ ) is set as  $g = \frac{\Delta Y}{Y} = \frac{s}{v}$ .

This is an interesting result, as it informs us that in economic growth the capacity of the economy to produce should be matched by the demand for economy's output. The above analyses describe the output movement along some growth path as warranted. When the economy attains this path it will carry on moving along it, the investment will increase output and will expand production by introducing the essential new capital equipment. Due to Harrod-Dommar model lack of self-correcting forces the warranted growth path is said to be typified by 'knife-edge instability'. This implies that market-regulated growth is unstable hence the need for a planned economy. Another limitation of this model is the postulation of fixed coefficient of production function and the fixing saving ratio. The model is also considered irrelevant to developing countries due to adopting full employment policies and problematic availability of capital. Nurske (1995) explained the problem of capital accumulation in poor countries and argued that poor countries remain poor due to lower per capita income where they could not be able to save enough to increase reproducible capital.

Kalecki (1992) refined the growth theory by classifying consumption goods into necessities and nonessential, grouping the majority of the people on necessities and only higher income group to nonessential. According to Kalecki consumption demand of necessities and output growth are functional related and argued that growth of output is reliant on the rate of increase of supply of necessities. Kalecki further explained that there are institutional factors constraining the supply of necessities, highlighting the domination of peasants by money lenders, merchants and feudal land ownership as institutional barriers that hinder economic growth.

### **2.3.1.1 Modern Conception of Economic Growth Theories**

Adam Smith and David Hume (1996) came with the modern conception of economic growth theory by starting with the critique of mercantilism and introducing the concept of "the wealth of nations" emphasizing on the importance of agriculture and manufacturing as the key sector to economy. Explaining the endogenous economic growth Adam Smith developed a simple production function  $Y = (L, K, T)$  where Y is output, L is labor, K is capital and T land; thus indicating output is related to capital, land and labor input. Smith explored the importance of division of labour and improvement of machinery and international trade as they improved on growth. He believed on savings because of its importance of creating investment and income distribution as the determinants of national growth. Adam Smith and Malthus on classical model described economic growth on provision on fixed land and growing population. In the non existence of technological change, increasing population eventually weakened the supply of free land. The consequence of increase in population density generates law of diminishing returns. Malthusian equilibrium

comes up when the wages of labour had gone down to subsistence level, under which the supply of labour will not produce itself. On criticizing the Classical model, however, Samuelson and Nordhaus (1999) argued that it did not consider the reality that technological change kept economic development moving ahead in industrial countries by repeatedly shifting the productive curve of labour forward.

#### **2.3.1.2 The Solow – Swan Model**

The Solow and Swan (1996) introduced the Solow's model in 1996. Their model is also known as Solow-Swan model or simply Solow's model. In Solow's model, other things being equal, saving/investment and population growth rates are important determinants of economic growth. Higher saving/investment rates lead to accumulation of more capital per worker and hence more output per worker. On the other hand, high population growth has a negative effect on economic growth simply because a higher fraction of saving in economies with high population growth has to go to keep the capital-labour ratio constant. In the absence of technological change and innovation, an increase in capital per worker would not be matched by a proportional increase in output per worker because of diminishing returns. Hence capital deepening would lower the rate of return on capital.

#### **2.3.1.3 The Endogenous Growth Theory**

In the late 1980s and early 1990s (Paul) Romer came up with a new growth theory, the Endogenous growth theory, explaining the need of new concept of human capital, the skill and knowledge that increase productivity. Endogenous growth theory argued that the size of savings is an important factor in shaping the long run growth rate of an economy. The theory emphasizes that there are constant returns to capital and

economies never reach a steady situation as accumulation of capital growth does not slow but the rate of growth mostly depends upon the type of capital the country invests in. Economic growth theory put emphasis on the importance of capital accumulation in the realization of economic growth, the stock of capital can increase the economic output in the long run, and government can increase the productive capacity of an economy by investing on physical investment like infrastructure.

A German economist, Wagner (1993). identified a growing share of government in the economies of industrialising European countries. He used some empirical evidence from a number of Western industrializing countries to formulate what is today generally known as “the Wagner’s law”. According to Wagner, rising government expenditure was an inevitable feature of the developing countries of his time also known as industrialising countries, the law simply states that “public expenditure will increase if the per capita income of industrialising countries increases”. The implication of this law is, therefore, that government expenditure will increase faster than output of the economy.

### **2.3.2 The Nature of Government Expenditures**

Government expenditure means expenses incurred by the government for its own preservation; the expenses can be social as well as economical. The government expenditure should reveal the policy choice of the government. The cost of carrying the policies is determined by the decision of the government expenditure on type and quantity of goods and services provided by the government. The justification behind the need for government expenditure is related to the existence of externality associated with the market failure. Thus without market failure there is no rationale

for the additional public sector investments to be more productive than investment of private sector. Government expenditure on public services has a reflective effect on standard of living of the people and life opportunities. The objective of expenditure on public service is the provision of chance to the citizen to realize the potential associated on that service and strengthening a competitive economy. The government objective for public expenditure should cover both elements of equity and efficiency. There is argument that improvement of efficiency must not be realized on the expenses of equity. Conversely inefficiency in the provision of government service has the result that chances for improved equity are missing because of uneconomical use of resources. This consequence may worsen to the extent that financing and provision of public service crowds-out the private sector and finally reduce economic growth. This in turn reduces the availability of resources to undertake the social programs.

Additionally financing and provision of services is not basically concerned with the redistribution of income but also the provision of equal opportunities and incentive for merit and effort. Government expenditures can be characterized by two broad categories namely development expenditure and recurrent expenditure. Development expenditures are those which correspond with government development activities like investment on infrastructure, education, health, communication and agriculture. Recurrent expenditures correspond with the government spending on suppliers and services, wages and salaries rent and administration services. In truth, there is no standardized approach of classifying expenditure into development or recurrent hence countries may suffer conceited differences in classifying government

expenditures. Moreover because it is easier for countries to obtain concessional credit and foreign grants for development expenditure than recurrent expenditure, there is a reason for countries to make larger development expenditures. However, Barro (1990) classified government expenditure into productive expenditure and non productive expenditure. Productive government expenditure would include the resources committed to property rights, reinforcement and those activities on production function. Unproductive government expenditures are those which could not enter into production function such as government service consumptions.

On the other hand Bleaney (2001) categorized education expenditure, defense expenditure, general public service expenditure, transport and communication and health expenditure as productive expenditure. Education expenditure because of its additional to human capital is considered as investment. Expenditures on welfare, social security, recreation and economic service expenditure are classified as unproductive expenditure. There is no strong conclusion generated by the economic theories on development expenditure to faster economic growth as there are circumstances in which lower development expenditure would enhance economic growth and other circumstances in which higher development expenditure would be undesirable. Nonetheless, economic theories provide guidance that expenditure on physical infrastructure and human capital under effective public budget administration can influence growth in developing countries.

### **2.3.3 The Effects of Government Expenditure on Economic Growth**

The argument of non-state intervention and allowing for self-correcting system of economic activities advocated by the classical economists was thought to be a failure

due to the nature of public expenditure to rise greatly in unconditional terms. Musgrave (1999). Brown and Jackson (1996) and Bailey (2002) acknowledged three macro models of public expenditure on how government expenditure performs over a long term. These models are development models of public expenditure, the Peacock and Wiseman's model of public expenditure growth and Wagner's law of expanding of state activity.

Public expenditure growth on development model was explained by Musgrave and Rostow (1999) by examining many different cases of developed economies. In the early stages, they argued, public sector investment as a component of the total investment of the economy influences capital formation which finally leads to the economic growth. Governments therefore provide social infrastructure, transportation system, education, health, law and order and other investment. The investment is seen to be important on increasing productivity and speed up the economic growth and development from middle stage up to the growth stage. Governments continue to supply investment goods in the middle stage of growth where it comes the time the government investment is corresponding to the growth in private sector investment. Government involvement is seen to be very important as it deals with the market failures which exist and which can discourage the push towards maturity.

Musgrave (1999) explained that over the growth period total investment as a percentage of GDP increases, while the public sector investment share falls relatively, leading to the availability of large flow of savings due to the growth of economy which built up the capital stock in private investment and agriculture. The

situation will cause the creation of stock of social overhead capital, comparable to public utilities which turn to a declining share of net capital formation. On the other hand, Rostow argues that when the economy comes to the maturity period there will be a shift of mix of public expenditures from expenditures on infrastructure to increasing expenditures on health sector, welfare services and education sector. On the mass spending period there will be policies intended to redistribute welfare, income maintenance programs, which will grow considerably relative to other substance of public expenditure and also relative to GDP.

Wagner developed further his “law of increasing public expenditure” by examining trends in the growth of government expenditure and the size of government sector in many countries of the world. In his law of increasing expenditure he assumed that; (i) government function expansion will lead to an increase in government expenditure on administration and regulation of the economy (ii) Because of the modern industrial society there will be increasing political pressure for social development and claims for increased expenditure for social thought in the conduct of industry (iii) the increase in government expenditure will become more than comparative increase in the national income and the outcome will be the expansion of public sector.

Brown and Jackson (1996) criticizes Wagner’s model on his assumptions as they explained that Wagner by employing an organic theory of state didn’t consider the problem of public choice and his predictions have lack of theoretical basis. They go further by saying that Wagner assumes as if the state acts as individual existence with independently decision of the members of society.

Musgrave (1999) says Wagner's assumptions were based on expectation on greater expansion of public enterprises as growth occurred; while this failed to materialize but also is not the kind of activity which can be explained within the perspective of public expenditure development. Brukheid and Miner (1999) described the relevant expenditures to be those which are not the result of a saleable product; that is, expenditure made for services provided without direct charge or transfer payment. One of the most known analyses of the public expenditure is Peacock and Wiseman's analysis founded on political theory of public expenditure determination explaining that government wishes to spend more money, while society does not like to pay more taxes, and governments have to consider the wishes of the society. Peacock and Wiseman (1996:26) continue by saying that government expenditure increases at the time of war or during social crisis periods and falls after the ends of war or when the social crises have been resolved.

Beside the three macro-models mentioned above demographic change has been frequently mentioned as a factor that contributes to the growth of public expenditure. It is being seen that the population increase would expand the activity produced by the government sector for the purpose of saving the large population. On considering the demographic trends we have to take into account the structure changes of the population like age, sex and geographical distribution. The relationship between the expenditure size and population size is mostly depends upon the goods and service that is being supplied. As it is known that the marginal cost of public goods of an additional member to the population is zero. For that matter in the case of public goods there is no reason to expect that an increase in population will cause an

increase in expenditure. In other words, if population increases and the level of output consumed by every member of the population remains constant then for those goods that are close to public goods an increase in population would result in a less than relative increase in expenditure. The general effect of the different trends on government expenditure may be such that cancelling each other out. Generally the growth of population and the growth of government expenditure depend upon the specific circumstances in different countries. Dickson (1996) Brown and Jackson (1996) provide awareness on modelling of the relationship between rate of change of total government expenditure and population size.

Priest (1995) explaining that in developing countries the accumulation of human capital is the most significant reason for growth in government expenditure mainly in education expenditure. He continued by insisting that mental dexterity, greater willingness to take risks, better knowledge of job opportunities and commencing on new enterprises with new jobs and the possible effect of bringing down the growth rate of population as potential qualitative advantages. He finally argued that in developing countries it is not always easy to measure the economic advantage of education expenditure due to intervention of the political and social influence. Tanzi and Schuknecht (1997) together explaining that, the expansion of public role in education, provision for public pension, health, and government assistance on unemployment generally increases government expenditure. Tanzi also emphasizes that the policy adds to the growth of public welfare in different ways and also increases the literacy rate in the country. Trotman–Dickenson (1996) says the new technology and science, nationalization and external aids contribute to the growth of

government expenditure. Although in developing countries the general trend of increasing government expenditure is explained to have a limit to the level of government expenditure of a country at a particular moment of time. Tanzi (1994) on his conclusion explain that a country in a given fiscal year may plan to have any level of expenditure in nominal value but on the future the country will come to realize that there is limitation in expenditure as proportional of GDP due to the source of financing. On other hand higher level of public sector borrowing may cause higher interest rate which lead to lower private sector investment and on the long run result to inflation. Alternatively there will be increase in general price level and reduction of the of country real monetary unit due to the monetary expansion. The real revenue from inflationary finance would fall if the rate of monetary expansion is pressed above certain level. Generally there are clear limitation to the size of government expenditure and the size of these sources of financing.

#### **2.3.4 The Relationship between Government Development Expenditure and Economic Growth**

Classical economists and philosophers of the eighteen century described the principle of *laissez-fair* in the workings of the world economy. Adam Smith explaining this said that governments without exception spend other people's money in the society. Advocating the idea of indivisible hand he believes that public goods will be promoted by the self-interest of individual and not the government. Those who support the idea they explain that people should be allowed to practice their best interests and in the course of action they would benefit the society. Lin (1994) ideally says that government activity such as the provision of goods, infrastructure and

interaction with the private sector may increase output which may lead to economic growth. Dickenson (1996) emphasizes the need for minimal level of public expenditure for accelerated economic growth. Although the classical economists theoretically don't consider the problem of unemployment on exclusion of government intervention Keynes (1996) acknowledged the influence of governments and economists for many years explaining that there is a need for governments to use public expenditure as an instrument of economic policy to control national economy and to work against unemployment.

Stiglitz (1996) on his contribution on government expenditure and economic growth emphasizes that government expenditure are for investment thus substantial government expenditure should be engaged on physical infrastructure such as building and roads. He also continues on explaining the importance of government expenditures to be invested on human capital and technology as both they can serve to increase economic growth. The extent to the government development expenditure to affect the speed of economic growth is mostly dependent upon the correct form and size of government expenditure allocated to economic and social development project in the economy. When government development expenditure is incurred in particular investment the investment itself can bring about re-allocation of the investible resources in private sector of the economy in the country.

Vedder and Gallaway (1998) on his idea explain the importance of the government on influencing the high level of economic growth as he argue that where government did not exist, and revolution take place little wealth was accumulated by productive economic activity with no incentive to save. Break (1992) on his argument tries to

point out the multidimensional comprehensive measure of the economic role of the government. He explain the two important facts of life concerning economic role of government, one is that there may no particular answer whether the role is increasing or contracting and the other is no easy way to keep effective limits on the rate of growth of that role. Government intervention through provision of infrastructure and social overhead capital would facilitate economic development from low level to high level. Bhatia (2002) argued that government development expenditures have an active role on creating infrastructure of economic growth in the form of capital goods, education and training and communication facilities.

Krueger (1990) explain the inefficient and wasteful of government investment programs and argue that the control done by the government over private sector is costly and invasive and government excessive investment programs, government public sector deficits and other government expenditure brings to higher rate of inflation which finally lead to the consequences to economic growth. On the other hand Vedder and Gallaway (1998) say that excessive stifles the spirit of private enterprises by the government lowers the rate of economic growth. Additionally Krueger (1990) endows with the directions for policy makers to how government may spend to influence positive impact on the economy. First the decision on public spending can be made where there is a set of procedure in place followed by the device for implementing the policy. Second though may be appearing that government action would really effective; there is something of an assumption in favour of policies and programs involving a minimum of administration and bureaucratic input. Third the policies towards controlling private sector activities are

likely to be less effective particularly on achieving their policies objectives that of provision of incentive for individuals to undergo the economic activities which are seen desirable. Thus the prediction here is the choosing a mechanism which offers least scope for rent-seeking. Barro (1990) on explaining and evaluating the impact of government expenditure and economic growth classifies government expenditure into productive and unproductive and emphasizes that it is the productive role (government development expenditure) that provide the potential positive linkage between the government and growth. The increase of share on government development expenditure has direct positive effect on private sector productivity which lead to economic growth rather than the increase share on nonproductive government expenditure (consumption and services) which lowers growth and saving rates.

## **2.4 Empirical Literature Review**

### **2.4.1 Empirical Literature Review Worldwide**

On investigating the relationship between government development expenditure and economic growth many studies have been conducted. This section has provided a concise review of the existing study of the topic. The contribution of development expenditure to economic growth divides the researchers. On one extreme there are those who argue a positive impact exists and on the other side there are those holding the view that there is a negative impact on government development expenditure to the economic growth. Still there is the middle of the roaders who argue that the impact could be positive or negative. Landau (1996). Devarajan (1996). and Miller and Russek (1997) examined public spending and economic growth in developing

countries. They determined that the share of government development expenditure in GDP is positively and significantly correlated with economic growth. On the study conducted by Easterly and Rebelo (1993) the government investment shows to be consistently and positively correlated with economic growth. The study on disaggregated government spending on Greek economy conducted by Alexiou (2007) evidence a positive association with economic growth. A cross section study of 98 countries conducted by Barro (1991) using growth rates in real per capital GDP and the relation between economic growth and government spending shows a significantly negative relationship.

Aschauer's (1990) and Ram's (1996) studies indicate a highly significant positive impact on economic growth on government spending on capital formation. Hague and Denise (2007) on empirical research for 30 developing countries they come with view that the government development expenditure share is positively related and significantly correlated with economic growth. Using a panel data for 47 countries on total government consumption spending and other variable from International Financial Statistics Kormendi and Maguire (1995) found a significant relationship between the average growth rates of real GDP and the level of share of government expenditure on consumption.

#### **2.4.2 Empirical Literature Review in Africa**

Fan and Rao (2003) analyzed the impact of different types of government expenditure on overall GDP growth across 43 developing countries between 1980 and 1998 using OLS method. Their study came up with mixed results. However, their study revealed a positive relationship between economic growth and

government expenditure on education, defence and agriculture in Asia countries. The study also highlighted a positive relationship between economic growth and government expenditure in agriculture and health in Africa countries. In Nigeria, many authors also attempted to examine government expenditure and economic growth relationship. For example, Akpan (2005). used a disaggregated approach to determine the components (that include capital, recurrent, administrative, economic service, social and community service, and transfers) of government expenditure that enhances growth, and those that do not. The author concluded that there was no significant association between most components of government expenditure and economic growth in Nigeria.

Nurudeen and Usman (2010). show that government total recurrent and capital expenditure had insignificant growth effects and the impact of expenditure on education was negative. Only expenditure on transport and communication, and health had positive effects on growth in their findings. Victor (2000-2011) analyse the impact government spending or expenditure on the economic growth in Nigeria from the periods of 2000-2011. This study employed the use of annual Nigerian data for the period 2000 to 2011 for all the variables and the stationarity, granger causality; co-integration and autocorrelation tests were conducted. The study showed that government expenditure had a significant and positive impact on economic growth while imports, savings and unemployment rate had negative impacts on economic growth. Oil revenue also had a positive but insignificant impact on economic growth. Abu and Abdullah (2010) investigates the relationship between government expenditure and economic growth in Nigeria from the period ranging

from 2000 to 2008. They used disaggregated analysis in an attempt to unravel the impact of government expenditure on economic growth. Their results reveal that government total capital expenditure; total recurrent expenditure on Education has negative effect on economic growth. On the contrary, government expenditure on transport, communication and health result in an increase in economic growth. They recommend that government should increase both capital expenditure and recurrent expenditure including expenditure on education as well as ensure that funds meant for development on these sectors are properly utilized.

#### **2.4.3 Empirical Literature Review in Tanzania**

In Tanzania a case study conducted by Kweka and Morrissey (1999) on the impact of government expenditure on economic growth in Tanzania using the OLS method for a sample of time series for 32 years they point out that the increase on government productive expenditure is linked with the lower economic growth. The negative correlation between the total government expenditure and economic growth indicates the unproductive effect of government expenditure on investment. They associated that condition to the inefficiency of the use of government expenditure and government investment in Tanzania. However, Kweka and Morrissey (1999) concluded that, a positive relationship between government expenditure on human capital and economic growth in Tanzania. In a case study conducted by Harrison (2002) on the impact of government expenditures and economic growth in Tanzania for the period from 1995 to 2001. The study was show that private investment is statistically insignificant while public investment is statistical significant, also expenditure on secondary education and total education are significant while

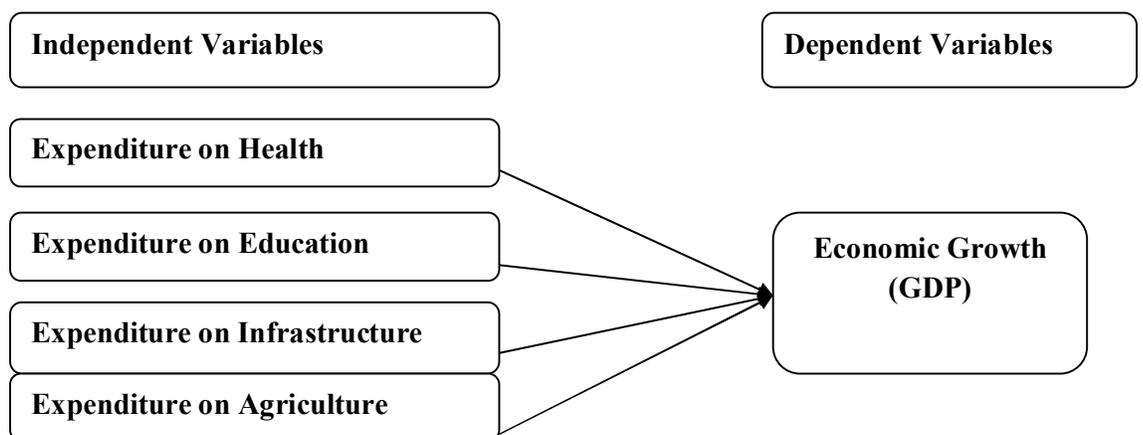
expenditure on primary education, health, defence and debt servicing are insignificant in determining economic growth in Tanzania. However, the expenditure on public investments, secondary and total education are positively related to economic growth of Tanzania as expected, while that on defence does not influence growth. Also a case study conducted by Othman (2012) on the impact of government expenditures and economic growth in Zanzibar using time series data for the period from 2000 to 2011 using STATA 2011. Hence according to Othman (2012) on impact of both recurrent and development expenditure on Economic growth has been investigated and found that both to significant relationship to the economic growth.

## **2.5 Research Gap**

This literature review has served to show that the relationship between government expenditure and economic growth is a contradicting. Both empirical evidence and theory have arrived at different conclusions. For example, Landau (1995). Diamond (1999) and Barro (1991) concluded that larger government expenditure is negatively related to growth Odedukun (1993) found that government expenditure in GDP contributed positively to economic growth. Ram and Grossman (1996) on the other hand mixed results but were more inclined to a positive relationship. However, in the majority of studies, total government expenditure appears to have a positive effect on economic growth. Most of this studies attempted to use two approaches (cross-sectional and panel data) to show the empirical relationship between government expenditure and economic growth while this study differs from observed studies by using times series data from 2000 to 2013. However, a case study conducted by Kweka and Morrissey (1999) on the impact of government expenditure on economic

growth in Tanzania using the OLS method for a sample of time series for 32 years and they concluded that, a positive relationship between government expenditure on human capital and economic growth in Tanzania while this study employs empirical investigation to examine further this relationship and to provide additional empirical evidence in this regard in Zanzibar using STATA 2011. Also a case study conducted by Othman (2012) on the impact of total government expenditures and economic growth in Zanzibar using time series data for the period from 2000 to 2011 using STATA 2011. According to Othman (2012) on impact of both total recurrent expenditure and total development expenditure on Economic growth has been investigated and found that both has significant relationship to the economic growth while this study employs to analyse the effect of government expenditure on economic growth through examining the selected sectors in Zanzibar using time series of data for the period from 2000 – 2013. (i.e expenditure on health, education, agriculture and infrastructure).

## 2.6 Conceptual Framework



**Figure 2.1 Conceptual Framework**

## **2.7 Theoretical Framework**

The effect of government expenditure on economic growth normally will be examined in two ways. By estimating either a single growth equation or simultaneous equations. The former involves estimating the basic equation of growth which relates to production (production function or output equation). The latter includes both the output equation and an investment demand function. Thus, the estimation of only the growth equation may underestimate the effect of government expenditure on sustained economic growth if a causal relationship exists between the growth and investment. In this study, the effect of government expenditure on Zanzibar's economic growth will be examined using a single growth equation. To establish whether recurrent or development expenditure of Zanzibar effects the economic growth or not, we will must collect data and build empirically testable hypotheses

## CHAPTER THREE

### 3.0 RESEARCH METHODOLOGY

#### 3.1 Introduction

This part of the study describes the research design, methods, and techniques that have been used in the data collection, the various sources of data, and types of data collected the methods of collections as well as the techniques that have been used to analyze the data.

#### 3.2 Research Design

Research design is an activity plan based on the research objective and it guides the selection of source and types of information. Koda(2006) defines research design as arrangement of conditions for collecting and analyzing data in a manner that it aims to combine relevance of the research purpose with economy in procedures. Corlien, (2003) adjoins that research design is not related to any particular method of collecting data or any particular type of data. Any research design can, in principle, use any type of data collection method and can use either quantitative or qualitative data.

According to Wiley (2005). qualitative research involves studies that do not attempt to quantify their results through statistical summary or analysis, qualitative studies typically involve interviews and observations without formal measurement, qualitative research is often used as a source of hypotheses for later testing in quantitative research and quantitative research involves studies that make use of statistical analyses to obtain their findings. Key features of quantitative research

include formal and systematic measurement and the use of statistics data. The study used a case study design to analyze the effects and relationships between government expenditure and economic growth in Zanzibar. Due to the objectives of this research, a methodology of quantitative approach has been applied. The quantitative approach in this research is mainly for answering the first, second and third hypothesis. From the research aims it can be seen that the focus is on reviewing the impact of different level of government expenditures on Economic growth, therefore this quantitative part of the research actually served as analytical work for making the whole dissertation a little more comprehensive.

### **3.3 Area of the Study**

Zanzibar is made up of two main islands, Unguja and Pemba, about 40 km off the eastern coast of The United Republic of Tanzania (Slade, 2012). The study will be conducted on the island of Unguja, which has a surface area of 2,577 square kilometers (Slade, 2012). This study on the impact of Government expenditure on economic growth will be done in Unguja where by Ministry of Finance of Zanzibar has been considered as a centre of the study. The fact that Ministry of Finance is a base centre to collect, organizes, compile and interpret all sectoral data of the economy, hence it lead to be selected.

### **3.4 Population of the Study**

According to Bryman (2003). Population basically is the universe of units from which the sample is to be selected. The term 'units' is employed because it is not necessarily people who are being sampled, the researcher may want to sample from a universe of nations, cities, regions, firms, etc. Thus, population has much broader

meaning than the everyday use of the term, whereby it tends to be associated with a nation's entire population. The targeted population for this study were the data of all government expenditures and economic growth of Zanzibar of the selected sectors from 2000 - 2013.

### **3.5 Sampling Design and Sample Size**

#### **3.5.1 Sampling Design**

According to Kothari, (2004). a sample design is defined as a plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Sample design may as well lay down the number of items to be included in the sample, that is, the size of the sample. Sample design is determined before data are collected. There are many sample designs from which a researcher can choose. Some designs are relatively more precise and easier to apply than others. Researcher must prepare a sample design which should be reliable and appropriate for his/her research study.

Sampling is dependent on many things mostly on the research questions. If the objective of the research is to study and describe a specific situation, then non-probabilistic methods like purposive or convenient sampling is appropriate. However, when the objective is to generalize about the findings, it is necessary and important to apply probabilistic methods. After harmonizing different considerations, this study employed non-probabilistic sampling methods since the objective of this study was to study and describe a specific situation.

### **3.5.2 Sample Size**

According to Cohen (2001), a sample is a representative group drawn from the population in such a way that the findings from the sample can be generalised on population. Kombo and Tromp (2006) defined sample as the analysis of large population where bias is minimized and the chance of inclusion of every member. Also according to Kothari, (2004: 56) a sample size refers to the number of items to be selected from the universe to constitute a sample. The size of sample should neither be excessively large nor too small. It should be optimum. An optimum sample is one which fulfills the requirements of efficiency, representativeness, reliability and flexibility.

Times series data have been collected from the Ministry of Finance of Zanzibar from the period started the year 2000 to 2013. This sample was technical chosen because of unavailability of data at the time before the year 2000. The main problem encountered during data collection was inconsistency of the data. Mikesell and Zinser's (1973) observed that it is very difficult to obtain accurate data on economic variables in many developing countries. These problems come mainly from weak institutional framework in monitoring the economy associated with poor reporting and recording.

### **3.6 Methods of Data Collection**

This study based on secondary time series data of government expenditure and Gross Domestic Product (GDP) in order to explain any relationship that may exist between levels of government expenditure and levels of economic growth as measured by levels of Gross Domestic Product (GDP). The annual data on the above variables

were used from 2000 – 2013. The data on the impact of Government Expenditure on Economic growth a case study of Zanzibar are collected through documentary review. The annual secondary data regarding the research topic and selected sectors was collected so as to reach the objective intended to be attained in this research. These data obtained from the Office of the Chief Government Statistician Zanzibar (OCGS) and Ministry of Finance of Zanzibar.

### **3.7 Reliability and Validity of Data**

#### **3.7.1 Reliability of Data**

Reliability refers to the consistency with which repeated measures produce the same result across time and across observers. Reliability denotes to how consistent a research producer or instrument. So, Reliability implies stability or dependability of an instrument or procedure in order to obtain information (Bryman, 2001). A proper study will have to regards reliability, consistency, stability and predictability (synonyms for reliability). whether the result is replicable. Therefore the stability and equivalence aspect of reliability of this research study has been achieved carefully by replicating the research methods. The main problem encountered during data collection was inconsistency of the data. Mikesell and Zinser's (199;3) observed that it is very difficult to obtain accurate data on economic variables in any developing country. These problems come mainly from weak institutional framework in monitoring the economy associated with poor reporting and recording.

### **3.7.2 Validity of Data**

Validity refers to the extent to which concept one wishes to measure is actually measured by particular scale or index. That is, the extent to which an account accurately represents the social phenomena to which it refers (Kombo, 2006). Also according to Graziano & Raulin, (2004) Validity is an important term in research that refers to the conceptual and scientific soundness of a research study. The primary purpose of all forms of research is to produce valid conclusions. Validity is, therefore, a very important and useful concept in all forms of research methodology. Its primary purpose is to increase the accuracy and usefulness of findings by eliminating or controlling as many difficult variables as possible, which allows for greater confidence in the findings of a given study. In order to achieve it, the non-probabilistic research process should be adopted from designing the research problem and undertaking the research process.

### **3.8 Data Analysis**

The study carried out to evaluate the significance of the levels of various government expenditure programs on the level of economic growth achieved at any time. This has been achieved by testing the following appointed hypotheses:

- i. Expenditure on education is positively related to economic growth.
- ii. Expenditure on health is positively related to economic growth.
- iii. Expenditure on agriculture is positively related to economic growth.
- iv. Expenditure on infrastructure is positively related to economic growth.

In this section, the results of regression analysis were presented. The approach examined the impact of government expenditure on economic growth by expressing

it as a function of government expenditure. The aim of this approach was to examine the effect of the independent variables on economic growth. The following are the relationships that were presented in this approach:-

$$RGDP = f (EDE, HE, AGE, INFRE) \dots\dots\dots i$$

Where:-

RGDP = Real Growth Domestic Product

EDE = Education Expenditure

HE = Health Expenditure

AGE = Agriculture Expenditure

INFRE = Infrastructure Expenditure

In mathematical form this functional relationship becomes:-

$$RGDP = \beta_0 + \beta_1 EDE_t + \beta_2 HE_t + \beta_3 AGE_t + \beta_4 INFRE_t + \mu \dots\dots\dots ii$$

Where:  $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$ , are the regression coefficients to be estimated,  $\mu$  is the error term, t is a time series (annual) and other variables are as defined earlier.

## CHAPTER FOUR

### 4.0 PRESENTATION AND DISCUSSION OF FINDINGS

#### 4.1 Introduction

As noted earlier, the main purpose of this study is to determine the impact of government expenditure on economic growth of Zanzibar. This chapter presents the analysis and discussion of the study findings. The chapter is divided into three main sections; the first section reminds the research hypotheses and research specific objectives, section two presents the regression results; and the final section presents the discussion of the study findings presented in section two.

Data collected through secondary sources were used to determine the impact of government expenditures on economic growth in Zanzibar in the selected sectors (i.e Education, Health, Agriculture and Infrastructure). Secondary data were used to analyze the effect of government expenditures on economic growth and in assessing whether there has been any improvement in the level of economic growth in Zanzibar. The study focused on the following research hypotheses:

- i. Expenditure on education is positively related to economic growth.
- ii. Expenditure on health is positively related to economic growth.
- iii. Expenditure on agriculture is positively related to economic growth.
- iv. Expenditure on infrastructure is positively related to economic growth.

Together, the study aimed at achieving the following specific objectives;

- i. To investigate the effects of expenditure in education on economic growth in Zanzibar.

- ii. To investigate the relationship between expenditure in health and economic growth in Zanzibar.
- iii. To determine the impact of expenditure in agriculture on economic growth in Zanzibar.
- iv. To determine the effects of expenditure in infrastructure on economic growth in Zanzibar.

#### **4.2 Correlation Analysis**

Before performing the regression estimation, correlation analysis was performed to see any possible correlation between variables. This approach can help to measure the strength of the regression results. That is, if for example, the correlation analysis indicates the positive association between government expenditure in the selected sectors and economic growth, then, the regression analysis should also indicate the same. Otherwise, the results will be sensitive to change in method and specification and thus can be concluded to be weak. Table 4.1 presents the correlation coefficient matrix for GDP and government expenditure of the selected sectors. The correlation results suggest the existence of strong positive correlation between government expenditure in the four selected sectors and the economic growth.

The correlation coefficient matrix is presented in Table 4.1, the coefficient matrix reveals that all variables are highly correlated with the economic growth since their coefficient value are positive (i.e 0.9598 for education expenditure, 0.9816 for health expenditure, 0.1513 for infrastructure expenditure and 0.7625 for agriculture expenditure) These results are consistent with both theoretical and empirical expectation. Government spending in the form of investment in development projects

such as health, education, economic infrastructure, and social services contribute directly and indirectly to economic growth. For instance, investment in health and education is crucial for enhancing the growth of human capital which is important for endogenous growth of the economy. Furthermore, a public investment in economic infrastructures such as roads, highways, telecommunication networks, and power generations creates the interlink-ages of both domestic and international markets which enhance growth of demand which in turn stimulates domestic production.

**Table 4.1 The Correlation Coefficient Matrix**

	EGt	GEDEt	GHEt	GINFREt	GAGREt
EGt	1.0000				
GEDEt	0.9598	1.0000			
GHEt	0.9816	0.9754	1.0000		
GINFREt	0.1513	0.0161	0.1234	1.0000	
GAGREt	0.7625	0.7295	0.7252	0.3416	1.0000

Source: Stata correlation result : (No. of obs = 14)

Key: EGt - Economic Growth of Zanzibar, GEDEt - Government of Zanzibar Education Expenditure, GHEt- Government of Zanzibar Health Expenditure, GINFREt - Government of Zanzibar Infrastructure Expenditure, GAGREt - Government of Zanzibar Agriculture Expenditure.

### 4.3 Regression Results

In this section, the results for regression analysis are presented. Since this study employs the disaggregated approach to evaluate the impact of government expenditure in the selected sectors on economic growth, only one regression model was estimated. This regression model aimed at evaluating the impact of government expenditure of these four selected sectors (i.e Expenditure on Education, Health,

Agriculture and Infrastructure) on economic growth. The test statistics sometimes called summary statistics include the t-test statistics for ascertaining the statistical significance of the estimated coefficients using percentage levels. The coefficient of determination is to ascertain the percentage of contribution of the independent variables on the dependent variable. Finally the F- statistic is used for the overall significance of the equation . Table 4.2 presents the regression results for the impact of government expenditure of these four selected sectors on economic growth. From the below results show that all sign of independent variables are positively related on economic growth which are correctly sign with the prior expectations.

This means that coefficient of government expenditure of the four selected sectors are significant and positive with the value of 0.443 for education expenditure, 0.692 for health expenditure, 0.500 for infrastructure expenditure and 0.641 for agriculture expenditure. It is estimated from the result that, when everything else is kept constant, 1% increase in education expenditure, health expenditure, infrastructure expenditure and agriculture expenditure leads to increase in the rate of economic growth by 0.443%, 0.692%, 0.500% and 0.641% respectively. This implies that government education expenditure, health expenditure, infrastructure expenditure and agriculture expenditure are very important stimulus of economic growth of Zanzibar. This finding is consistent with the above correlation analysis which suggests the strong positive correlation between economic growth and the government expenditures of the four selected sectors. Also it is clear that the overall performance of the estimated model is good as the value of Adjusted R-squared is big enough for the model to be good ( $AdjR^2 = 0.9553$ ). This show that the four

variables in the equation explain about 95% of the systematic variations in the growth domestic product (GDP) during the period from 2000 to 2013. The F-statistical test of 70.38 was indeed very high at both the 1% and 5% levels of significance which posited that there was a significant linear relationship between the dependent variable (GDP) and the explanatory variables used. Also the t-statistics value of the four selected sectors (2.06 for education with  $P < 0.05$ , 2.41 for health with  $P < 0.05$ , 3.09 for infrastructure with  $P < 0.05$  and 4.95 for agriculture with  $P < 0.05$ ) is greater than 2 by the rule of thumb, showing that education expenditure, health expenditure, infrastructure expenditure and agriculture expenditure have a significant effect on GDP.

**Table 4.2 Regression Result**

EGt	Coef.	Std. Err.	T	P> t	[95% Conf. Interval]	
GEDEt	.4433385	0.260268	2.06	0.041	.98053	.86721
GHEt	.69237	0.425033	2.41	0.039	.371465	.01328
GINFREt	.5007851	0.830429	3.09	0.043	.68856	.69013
GAGREt	.641599	0.852511	4.95	0.036	.073386	.35658
Cons	115.6171	20.75343	5.57	0.000	68.6696	162.5646

Number of obs = 14, F( 4, 9) = 70.38, Prob> = 0.0000, R-square = 0.9690

Adj R-squared = 0.9553, Root MSE = 16.231

Source: Stata Regression Result

#### 4.4 Discussion of the Results

The study intended to test the hypothesis that there exist positive relationship between government expenditure and economic growth of Zanzibar. The regression results reveal that when government expenditure in education, health, infrastructure

and agriculture increase by one unit, the rate of economic growth will increase by 0.443 percent, 0.692 percent, 0.500 percent and 0.641percent respectively. These results are consistent with correlation results, theoretical and empirical expectation. From theoretical perspective, government expenditure in development projects such as economic infrastructures, public utilities, and social services is very important factor for economic growth. Expenditure in education and health are important for development of human capital which is also important for endogenous growth of the economy.

The estimated coefficient of Zanzibar government expenditure carries a positive sign. This indicates that government expenditure and economic growth in Zanzibar move in the same direction and hence the higher the public spending on development programs in Zanzibar, the higher the growth rate of her economy and the faster rate in the development of the economy. In other words, Revolutionary Government of Zanzibar does not waste her financial resources when investing in the sector of the development like Education, health, infrastructure and agriculture but the result is long term sustainability of her economy and development in general.

The positive sign agrees with the a priori expectation of the model that government expenditure of Zanzibar is an important factor in economic growth. The result shows that to a significant extent government expenditure in Zanzibar explains economic growth and supports the findings of the past such as those of Barro (1990). Foster and Henrekson (1999). Kweka and Morrissey (1999). and more recently Base et al (2003). among others. They had all evidenced a positive response on the economy from governmental development expenditure programs (whether called productive

expenditures, human capital or development expenditures, etc) in various countries around the world. The results tend to reject the contentions of Vedder and Gallaway (1998). among others, who argued that increase on government expenditure add to economic stagnation and decline. There is similarity, for example, between this view held by Vedder and Gallaway and the Traditionalists view on the importance of the Current account. However, that view was thrown out of the window when US economic growth rate surpassed growth at any time in its history while running a current account deficit. This growth rate even surpassed of those countries that were running current account surpluses at the time.

## CHAPTER FIVE

### 5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This study was undertaken with the objective of investigating the impact of government expenditures of the four selected sectors and economic growth in Zanzibar. A review of the past studies showed that most of the previous studies have been cross sectional in nature; hence their findings and policy implications may not be applicable to a specific country like Zanzibar. Alongside this, the growth of the government expenditure in Zanzibar called for such study to determine if there is any impact to the economic growth. This study was also aimed to provide guidelines to policy makers on expenditure allocation and rationalization. In order to arrive at the policy guidelines there was a need of knowing the contribution of various types of government expenditure to economic growth. Using a simple factor regression, results showed that in the period of past fourteen years, expenditure on education, health, infrastructure and agriculture respond more positively to the economic growth.

#### 5.2 Summary of the Main Findings

This study has investigated the impact of the government expenditure in the selected sectors on economic growth in Zanzibar for the period 2000-2013. This study recognized that most of the previous studies have been cross sectional in nature, hence their findings and policy implications may not be applicable to a specific country like Zanzibar. To a greater extent, this study has reached its specific objectives that were; to investigate the impact of the government expenditure on

Education, Health, Agriculture and Infrastructure on economic growth, also generate from the empirical analysis appropriate policy recommendations on how the Zanzibar Revolutionary Government will enhance economic growth through the expenditures. All the above objectives have been reached. The impact of the government expenditure on education, health, agriculture and infrastructure has been investigated and found to be significant parameters to the economic growth.

Hence the analysis of the results obtained from the regressions confirmed our previous expectations that levels of government expenditures have a positive influence on the level of economic growth. Hence, increases in government expenditures on various projects would ultimately act as a positive catalyst in speeding up economic recovery and growth.

### **5.3 Implications of the Finding**

An instrument influence from analysis that all four explanatory variables have positive impact on growth domestic product (GDP). this implied that all independent variables have a major impact on economic growth and the position of the Government is a good manager of resources. The magnitude of the parameters showed that it would take few years for the economy to feel the impact of Government expenditure in the system. The implication of the above scenario holistically is that Government over the years has come up to the expectation of efficiently managing public resources. This would imply that Government have passed to play their role significantly in the process of economic growth and development.

#### **5.4 Conclusion**

This study has reached its specific objectives that were; to investigate the impact of the government expenditure on Education, Health, Agriculture and Infrastructure on economic growth, also appropriate recommendations and implication of the finding have been outlined. The impact of the government expenditure on education, health, agriculture and infrastructure has been investigated and found to be significant parameters to the economic growth. Hence the analysis of the results obtained from the regressions confirmed our previous expectations that levels of government expenditures have a positive influence on the level of economic growth. Hence, increases in government expenditures on various projects would ultimately act as a positive catalyst in speeding up economic recovery and growth.

#### **5.5 Recommendations**

In the light of the researcher's findings, the following recommendations are presented;

- i. Government should improve her expenditure by attracting and motivating qualified civil servants in order the economic growth to be improved. This is because now days in Zanzibar the salary structure of civil servants is far lower compared to the other private companies and Non Government Organizations (NGOs). There has been noticed high turnover among civil servants in Zanzibar.
- ii. Government should establish and maintain policies that encourage expenditure on development projects and activities particularly in improving infrastructure like building roads and ports. This would insure favorable

environment for local and foreign investors to invest in different grounds of the development like health, education and on production activities. Openly, this will create employment opportunities to the public at a large where by everyone will participating in the improvement of Zanzibar GDP

- iii. Apart from government expenditures prioritization, government expenditures should be considered not only by virtue of its economic returns but also technical, administrative and financial feasibility should be assured. A proper cost and benefit analysis of various government expenditure is important in this regard.
- iv. Government should direct its expenditure towards the productive sectors like education and infrastructure as it would reduce the cost of doing business as well as raise the standard living of poor ones in the country.
- v. Effort should be made to increase government funding on education to restrict the level of strike in our education sector

## **5.6 Limitations of the Study**

### **Data Availability**

The study faced with problem of data availability from the relative sources, accuracy and consistency.

### **Confidentiality Information**

The majority of organizations were not confidently on the provision of their data, so they were not providing adequate and sufficient data. Therefore the researcher worked honestly with management and trust them that data provided was used for the research purpose only, and was not disclosed to anyone who is not concerned.

**Time Limit**

The time for the study was not enough to carry out intensive and extensive study since some of information is not easily and quickly available. Therefore the researcher used extra time, weekends so as to able to collect, analyze and interpret the collected data.

**Financial Constraint**

In order for the researcher to come about with a good report, he/she must have enough money to meet daily financing activities like surfing material related with the study on the internet cafe and other connected expenses, any deficiency will cause ineffective work. In case of any fund deficiency, the researcher asked fund from sponsor, parents, friends and relatives.

**5.7 Suggested area for Further Study**

If the researcher could have an opportunity to proceed with the same study in the future, the following are suggestions for further studies: -

- i. This study has concentrated on the impact of government expenditure on economic growth during the 2000-2013 periods. Further study may expand the coverage in terms of time span.
- ii. Also the study would capture the relationship between government expenditure of the only four selected sectors and economic growth, for the further study more sectors such as defense, foreign investment expenditure etc should be included to assess its contribution to the economic growth because development and growth is multi- sectoral function.

- iii. Having sufficient time for research and asked for sponsorship from my employer, Government or anywhere else for the whole programme in order to overcome financial constraints.

## REFERENCES

- Abu, N. & Abdullahi, U. (2010). "Government Expenditure and Economic Growth in Nigeria, 2000-2008: A Disaggregated Analysis", *Business and Economic Journal*, 4(3), 237-330. Available at: [http://astoujournals/com](http://astoujournals.com). Visited 3/2/2016.
- Aghion, P. & Howitt, P. (2009). *Economics of Development*, Oxford, United Kingdom. MIT Press.
- Akpan, N. I. (2005). Government Expenditure and Economic Growth in Nigeria 1990-1992. Final report, AERC Nairobi, Kenya.
- Aschauer, D. (1990). "Is Government Spending Productive?" *Journal of Monetary Economics*, 23, 177-200.
- Barro, R. (1991). *Economic growth in a cross sectional of countries*. *Quarterly Journal of Economics* 106, 407-443.
- Barro, R. & Martin, I. (1992). "Public Finance in Models of Economic Growth" *Review of Economic Studies*, 59(3), 645-661.
- Barro, R. J. (1990). "Government Spending in a Simple Model of Endogenous Growth", *The Journal of Political Economy*, 98(5), 103-125.
- Blejer, M. & Khan, M. (1984). *Government Policy and Private Investment in Developing Countries*. IMF Staff Papers vol. 31.
- Branson, W. (2002). *Economic Growth Theory*. New York: USA. McGraw Hill.
- Branson, W. (1999). *Macroeconomic Theory and Policy*, New York, USA: Harper and Publisher New York.
- Bryman, A. (2001). (2003). *Social Research Methods*. London, England. Oxford University Press.

- Cohen, L. (2001). Lawrence, M & Keith, M. (2007). *Research Methods in Education*. London: Pearson.
- Corlien, J. S. (2003). *Essentials of Research Design and Methodology*. New York: McGraw Hill.
- Cozby, P. (2007). *Methods in Behavioral Research*. New York: USA. McGraw.
- Devarajan, S. & Heng-fu, Z. (1993). *What Do Government Buy?* World Bank Working Paper No. 1082.
- Diamond, J. (1999). *Government Expenditure and Economic Growth: An American Investigation*. IMF Working Paper May 89/45.
- Fan, S. & Rao, N. (2003). "Public Spending in Developing Countries: Trends, Determination, and Impact", EPTD Discussion PaperNo. 99, USA.
- Grier, K. B. & Tullock, G. (1999). An Empirical Analysis of Cross- National Economics, *Journal of Monetary Economics*, 24, 259-276.
- Grossman, P. (1996). Growth in Government and Economic Growth: The Australian Experience. *Australian Working Papers* 27, 50.
- Grossman, P. (1998). Government and Economic Growth: A Non Linear Relationship, *Public Choice Review* 56 (2), 193-200.
- Gujarati, D. N. & Porter, D. C. (2009). *Basic Econometrics*, 5<sup>th</sup> ed New York, USA: McGraw Hill Publisher.
- Harrison, A. (2002). "Impact of government expenditures and economic growth in Tanzania for the period from 1995 to 2001". *International Journal of Business and Management Review* 1(4), 64-71.
- Koda, C. (2006). *Essentials of Research Design and Methodology*. Oxford, England. Pearson.

- Kombo, B. (2006). The impact of government expenditure on economic growth in Tanzania using the OLS method from 2002-2009.
- Kothari, C. R. (2004). *Research Methodology and Techniques*. New Delhi: India. New Age International Ltd.
- Kweka, J. P. & Morrissey, O. (1999). "The impact of government expenditure on economic growth in Tanzania using the OLS method from 1990-2001.
- Landau, D. (1996). "Is Government Spending Productive?" *Journal of Monetary Economics*. 87(2), 156-159.
- Lawrence, M. & Keith, M. (2007). *Research Methods in Education*. London: Routledge London and New York.
- Mitchell, J. D. (2005). The Impact of Government Spending on Economic Growth. Backgrounder, 1831. [[www.heritage.org/research/budget/bg1831.cfm](http://www.heritage.org/research/budget/bg1831.cfm)] Public Expenditure in Practice, George Allan and Unwin Ltd London. Visited on 2/7/2016.
- Musgrave, R. A. (1997). Reconsidering the Fiscal Role of Government: *The American Economic Review*, 87(2), 156-159.
- Musgrave, R. A. (1999). *Fiscal Systems*, London: Yale University Press
- Musgrave, R. A. & Musgrave, B. (1988). *Public Finance in Theory and Practice*, New York: McGraw-Hill Book Company.
- Othman, F. O. (2012). *Impact of Government Expenditures on Economic Growth*, Coventry University.
- Perkins, K. (2001). *Economics of Development*, 5<sup>th</sup> edition, W.W. Norton Company N.Y.

- Ram, R. (1996). Government Size and Economic Growth: A New Framework and Some evidence from Cross-Section and Time-Series Data. *American Economic Review*, 76: 191-203.
- Slade, T. (2012). Geographical Map of United Republic of Tanzania 2012.
- Solow, R. M. (1996). ‘ A contribution to the theory of Economic Growth’ *Quarterly Journal of Economics*, LXX(XX), 34-56.
- Tanzi, V. & Zee, H. H. (1997). Fiscal Policy and Lon-Run Growth, *International Monetary Fund Working Paper* 44(2), 179-209.
- Victor, O. (2000 – 2011). Impact of Public Expenditure on Economic Growth in Nigeria. University of Nigeria, Nsukka, Enugu.
- Wiley, J. (2005). Essentials of Research Design and Methodology.