



Graduate School of Development Studies

**FOREIGN AID AND ECONOMIC GROWTH:
THE CASE OF TANZANIA**

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List of Acronyms

CIS	Commodity Import Support
CRDB	Cooperative and Rural Development Bank
DAC	Development Assistance Committee (of the OECD)
DCs	Developing Countries
ERP	Economic Reform Programme
ESAF	Enhanced Structural Adjustment Facility
FA	Foreign Aid
GBS	General Budget Support
GDP	Gross Domestic Product
GNI	Gross National Income
GNP	Gross National Product
HIPCs	Highly Indebted Poor Countries
ICOR	Incremental Capital Output Ratio
IMF	International Monetary Fund
MDGs	Millennium Development Goals
NBS	National Bureau of Statistics
NGOs	Non-Governmental Organizations
NMB	National Microfinance Bank
OECD	Organization for Economic Co-operation and Development
OGL	Open General Licence
PRSPs	Poverty Reduction Strategy Papers
SAPs	Structural Adjustment Programmes
SWA	Sector-Wide Approach
SSA	Sub-Saharan Africa
UNDP	United Nations Development Programme
URT	United Republic of Tanzania
WB	World Bank
WDIs	World Development Indicators

Abstract

This study has examined the impact of foreign aid on economic growth in Tanzania. It was interested in the analysis of this relationship because the country receives a considerable amount of foreign aid but still experiences very low economic growth and high poverty levels. The period under study is from 1990 to 2004 and used data from the World Bank, World Development Indicators 2006 and the former Ministry of Planning, Economy and Empowerment (Tanzania). The analysis of the contribution of foreign aid to economic growth has combined other variables which are net national savings, export growth (annual percentage growth), and total debt service. Except the export growth, other variables were measured as % of Tanzania's Gross National Income (GNI) for the period under study. Furthermore, aid was disaggregated in terms of government's development or recurrent expenditures and their impact on GDP growth was analysed.

The main findings are that foreign aid and total debt service have a negative impact on GDP growth for the case of Tanzania. On the other hand, export growth and net national savings have shown a positive impact on GDP growth as it was expected because they increase the country's capacity to invest. Both government's development and recurrent expenditures of foreign aid resources have shown a negative impact on GDP growth. This implies that the development expenditures undertaken were not enough or not productive enough to impact on GDP growth positively. The overall aid and aid for development expenditures have shown to have more negative impact in the 1990s than in the early 2000s.

Relevance to Development Studies

Development studies are not only concerned with economic development but also to a wide range of issues such as globalization, poverty, culture and environment. This study is relevant to development studies because it is concerned with obstacles to growth in Tanzania (as a developing country) given that the country is receiving considerable amount of foreign aid. The outcome of the study will enable the country to understand the contribution of aid to the country's growth and take measures to make aid work better to contribute to growth and development in general.

Keywords

Foreign aid, savings, economic growth, debt servicing and government expenditures.

Dedication

I dedicate this research paper to my beloved parents Mr. and Mrs. Nestory Kabete for their educational and parent support for all of my study life. Secondly, to my beloved husband Mr. Eustadius Kyaruzi, for his lovely care and support during my study at ISS. Last but not least, to my beloved sons Edison and Erick who accepted missing their mother and provided lovely support to me while studying at ISS.

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Chapter 1

INTRODUCTION

The aim of this study is to analyze the impact of foreign aid on economic growth in Tanzania. Furthermore, it aims at analyzing the impact of government's expenditures of foreign aid (FA) resources on Gross Domestic Product (GDP) growth. In the literature on aid-growth relationship, there is an on-going debate among economists and other development practitioners. On one hand there are views that FA has a negative impact on growth while other views argue that FA has a positive impact on growth. With this on-going debate, the study has been interested to find out what is the impact of FA to growth in Tanzania given that the country is aid dependent and still ranks high among the poorest countries of the world. Descriptive statistics and simple regression data analysis are the main methods which have been applied to analyze the impact of FA on GDP growth and how government expenditures influence the GDP growth.

The conclusion drawn from this analysis is that FA has a negative effect on GDP growth for the case of Tanzania. In addition, the type of government expenditures on FA resources plays a major role in determining the impact on GDP growth. The study has found that FA directed to both, development and recurrent expenditures has a negative impact on GDP growth.

The subsections that follow provide an overview of the country's economy and poverty status. Furthermore, the statement of the problem, relevance of the study, the objectives, limitations of the study and the methodology used in the analysis are elaborated.

1.1 Background of the Study

Tanzania like any other developing country has been facing low economic growth rates with low income per capita in US dollar terms. The country has limited capacity to invest because of inadequate resources resulting from low savings rates and poor export performance. To fill the saving- investment gap, the trade gap and the fiscal gap, the country has been receiving substantial aid from bilateral and multilateral donors. Appendix 1 shows that Tanzania is among the countries which received large volumes of foreign aid in Sub-Saharan Africa in 2002-2006. Others include Congo DRC, Ethiopia and Mozambique. Foreign Aid (FA) to Tanzania has been provided in form of grants, concessional loans, technical assistance, and project aid, and programme aid, food aid during acute food shortage and humanitarian aid.

The main objective of the donors in providing aid is to fill the saving – investment gap, the foreign exchange gap and the fiscal gap and thus help the country to achieve economic growth and poverty reduction. It is donors' expectation that if FA is used properly, it can increase the savings and reduce foreign exchange constraints and thus increase investments and economic

growth. In addition the availability of foreign exchange will increase the importation of capital goods necessary for investments. Programme aid supports the budget thus filling the fiscal gap and thus increasing the capacity of the government to meet its development and recurrent expenditures (although donors' interest is to support development expenditures).

Despite the fact that Tanzania has been among the top countries in receiving FA, it has remained among the top poorest countries of the world for many decades. This phenomenon has prompted this research to find out why the country has not been able to increase investments and growth despite additional resources. The GDP growth rate has remained below 10 % for the period under study. The GDP growth rate ranges from 7% in 1990, with a slowdown of 0.5 % in 1992 and 6% in 2004 (World Development Indicators (WDI), 2006). The findings from this research are expected to shed light on what can be done for proper use of FA to achieve economic growth and reduce aid dependence.

1.2 Statement of the Problem

Tanzania has been receiving foreign aid for many decades (since its independence in 1961), but it still ranks high among the ten poorest countries of the world. It is the second after Sierra Leone, with 490 \$ GDP per capita.¹ It has been ranked the 20th out of 149 countries which received economic aid in 2006, with the amount of \$ 1,200,000,000 (as published in the 2006 World Fact Book of the United States Central Intelligence Agency).² It is expected that the country would be with a reasonable GDP growth rate as it is receiving resources for investments and for import support particularly of capital goods and technology necessary for investments. But contrary to these expectations, the country still ranks high among the poorest countries of the world, it is highly indebted, aid dependent³ and with balance of payments problems. Tanzania has been experiencing low and varying domestic savings pattern which has made it unable to meet investment requirements by relying on domestic investment funds. Furthermore, its reliance on primary exports has made it unable to get considerable foreign currency from export earnings.

1.3 Policy Relevancy and Justification

Being one of the developing countries, Tanzania is experiencing very low domestic savings and foreign exchange earnings which results in low investments and growth. This has caused the country to experience low income per capita for many decades. FA has played a major role in filling the saving – investment gap, trade gap and fiscal gap by supplementing domestic savings required for investment. In connection to this view, the early literature on aid (in the 1960s and 1970s) focused its analysis on the impact of aid on total savings and investments. Example, Rosenstein-Rodan (1961) assumed that each dollar foreign resources in the form of aid would result in an increase of one dollar in total savings and investments.⁴ Also the empirical analysis

based on the Harrod-Domar growth model focused on the direct link from aid to growth via savings and investments.

However, some studies show a negative relationship between foreign aid and the rate of growth of the recipient country because it was observed that aid leads to lower domestic savings and increase consumption⁵. Howard White argued that although FA is expected to lead to higher investments and thus growth, it should not be considered automatic. The main attention should be paid to the productivity of the investment financed by FA (White, 1992).

Also Mosley (1987) found that there is no significant relationship between aid and growth. Conversely, his study shows that exports have a positive and significant impact on economic growth.

With these opposing views on the contribution of foreign aid to economic growth, the findings of this research will contribute to this ongoing debate by shedding light on what can be done to make aid more effective in bringing economic growth. More effective use of FA can be achieved by increasing its development expenditure vis -a –vis recurrent expenditure from FA resources. Also low rate of domestic savings indicate the inability of a country to increase its investments thus the study will highlight on the importance of increased savings and investments to reduce aid dependency and attain sustained economic growth.

1.4 Research Objectives and Research Questions

The main objective of the study is to analyze the contribution of foreign aid to economic growth in Tanzania. The specific objectives are: first, to find out whether foreign aid complements national savings and increases resources for investments thus increasing economic growth. Secondly, the study aims at analyzing the impact of governments recurrent and development expenditures of foreign aid resources on GDP growth. Third, the study aims at finding out the impact of national savings, export growth and debt service on economic growth.

Research questions:

1. Does foreign aid complement savings and increase economic growth?
2. To what extent has debt servicing affected GDP growth?
3. How does government's spending of aid affect the GDP growth?

1.5 Scope and Limitations of the Study

Data used for this study are for the period from 1990 to 2004 as most of the variables analysed were not available in the (WDIs) for the period before 1990. This has limited the study in analyzing a reasonably lengthy period.

Furthermore, the data for different forms of aid were obtained from different sources, the project and programme aid data were obtained from the database prepared by Ouattara B, 2005 (website is provided under appendix 2).

Although the author used data which existed in commitment form in the OECD database, he made some adjustments to make the data feasible for analysis). The data on grants, technical cooperation, and food and emergence

relief were obtained from the OECD/DAC database. Furthermore, government's FA spending on recurrent expenditures were not available in the WDIs and the 2005 Tanzania's economic survey. They were calculated using the exchange rates for the years under study and the data which were available in the WDIs data base. Despite these limitations, analyses from the data which were obtainable were sufficient to provide meaningful conclusions to the research questions.

1.6 Research Methodology and Data Sources

The study has used both, simple regression analysis and the descriptive statistics to analyze the impact of foreign aid on economic growth (assessed in terms of GDP growth). Furthermore, the study has used exploratory data analysis using statistical tables and graphs on explanatory variables which are aid inflow, net national savings, export growth and debt service (all of the variables are measured as percentage of GNI) and the dependent variable, the GDP growth rate. In addition the analysis of government's spending on FA resources was made to be able to identify the type of government spending which has a positive impact on economic growth. The data on government's spending on FA resources for development expenditures were obtained from the Tanzania's 2005 economic survey, which was prepared by the former Ministry of Planning, Economy and Empowerment. To be able to calculate the government's recurrent expenditures of FA, exchange rates for the years under study were used on the data from the economic survey and the WDIs. The exchange rates were obtained from the US's Central Intelligence Agency's World Fact Books as elaborated in the notes under appendix 5. Also the analysis on the forms of foreign aid (project, programme, technical cooperation, and humanitarian and food aid) has been made using descriptive statistics. Data on programme and project aid were obtained from the database created by Ouattara B, 2005 as already explained under section 1.5. Data for the technical assistance/cooperation (TC), development food aid and humanitarian aid were obtained from the OECD/DAC database. Furthermore, the data from the National Bureau of Statistics (NBS), Tanzania were used although no particular data in the analysis are directly from this source.

1.7 Organization of the Study

This research paper is organized as follows. Chapter two provides a review of theoretical and empirical studies on the relationship between FA and growth via savings and investments. Chapter three provides a discussion of different aid modalities in Tanzania since 1960s and their contribution to economic growth. Chapter four analyzes the contribution of foreign aid to economic growth through its impact on domestic savings and investments and on debt service. Also the chapter looks at the influence of debt service on growth. This analysis is made by using the simple regression of GDP growth rate on foreign aid, net national savings, annual growth of exports (of goods and services) and the total debt service. Furthermore, the analysis of government's spending on

foreign aid and impact of such spending on growth is made. Finally chapter five concludes the study and provides the policy recommendations for the government of Tanzania.

Chapter 2

THEORETICAL AND EMPIRICAL STUDIES ON FOREIGN AID AND ECONOMIC GROWTH

2.1 Introduction

This chapter starts by defining aid and outlining the benefits and shortcomings of foreign aid in the aid recipient countries. Furthermore, the chapter presents a review of the literature on aid and economic growth where by some of the theoretical and empirical debates are presented and discussed. Some studies show a negative impact of FA on economic growth while others observe a positive impact. For example Chenery and Strout (1966) support FA with the view that it is important to fill the saving gap and the trade gap in developing countries, increasing their investment capacity and thus growth. On the other hand Paul Mosley (1987) observed that there was a little correlation between aid flows and economic growth rates.

Moreover, major theoretical and empirical models justifying the importance of FA are presented and discussed. Among these models is the Harrod-Domar model, the two gap model, the three gap model. Also Mosley's model is analyzed in detail as it will specifically be used for data analysis in chapter four of this study. In addition, the direct and indirect effects of FA on savings, investment and growth and the impact of debt servicing on growth are discussed. Furthermore, the discussion of different forms of food aid is discussed in brief as they will be discussed in detail in chapter three. These forms of development aid include project aid, financial programme aid, technical assistance or technical cooperation, food aid and humanitarian or emergence relief aid.

2.2 Definition of Aid, Advantages and Disadvantages of FA

2.2.1 *Definition of Foreign Aid*

“Foreign aid consists of all resources- physical goods, skills and technical know -how, financial grants (gifts), or loans (at concessional rates) transferred by donors to recipients” (Riddell 2007:17). Also the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD) defines aid as Official Development Assistance (ODA). According to the DAC, aid qualifies as ODA on three criteria: it has to be undertaken by official agencies; it has to have the promotion of economic development and welfare as its main objectives and it has to have a grant element of twenty five percent or more.⁶ In most cases foreign aid is provided in form of project aid, humanitarian aid including food aid, technical assistance and programme aid (balance of payments support and budget support). Also the Non-Governmental Organisations (NGOs) provide aid in support of

poverty reduction activities and emergency relief in aid recipient countries. This study uses the DAC definition of foreign aid.

Moreover, different forms of FA have varied effects on the recipient economy where they influence the macroeconomic variables positively and negatively as it is shown in the summary effects of different types of aid (table 2.1).

2.2.2 Advantages of Foreign Aid

Early economic growth theories in the 1950s and 60s stressed that the basic problem for many developing countries was precisely capital formation. These theories were in the view that development assistance was important for these countries as capital formation played a great role in economic growth. The reason behind such argument is that these countries have insufficient private and public savings to finance large investments such as economic infrastructure. Furthermore, developing countries had few resources in form of foreign exchange to finance imports of machinery and other capital goods. Therefore FA was essential to fill the savings – investment gap and the trade gap by increasing investments and thus growth⁷. However, from the 1980s, there have been varied objectives of providing aid with the expected benefits in terms of economic growth, poverty reduction, investments and public expenditures in services in aid recipient countries.

Moreover, FA in form of technical assistance provides technical knowledge and skills which influences positively the development process. The technical knowledge and skills are expected to influence the development process by improving the quality of the labour force (human capital) and filling the skills gap.

Aid in form of budget support helps the government to meet its development and recurrent expenditure, although the donor intended expenditures are the development expenditures. Therefore FA used for investments in education, health and infrastructure contributes to economic growth and development.

The import support (which is under programme aid) helps to increase the production capacity for private and public enterprises thus resulting into higher output and increased goods availability.

Furthermore, FA is very crucial for emergency relief particularly in war prone areas and areas affected by natural disasters such as cyclones. In most cases humanitarian aid has achieved saving lives, providing food to the hungry and healthcare and medicines to those vulnerable to acute diseases in emergencies.

Debt relief relaxes foreign exchange constraint and helps to reduce the debt overhang. The additional resources from debt cancellation help to increase imports and investments.

Table 2.1 Summary effects of different types of aid

Type of aid	Rationale	Major Macroeconomic effects	Possible adverse macroeconomic consequences
Project aid	investment or rehabilitation	higher output (and improved social indicators)	White elephant projects; distort spending patterns, tie up recurrent resources
Programme aid Import Support	Raise capacity utilization	higher output, increased goods availability	easily fungible to non-priority imports
Debt relief	Relax foreign exchange constraint; remove debt overhang	increased imports and investment	policy disincentive effects, highly fungible
Budget aid	Relax government recurrent constraint	higher public spending and lower inflation	distort government spending
Counterpart funds	Relax budget constraint	reduce need for deficit financing redirect government spending to priority sectors	Inflation
Food aid	food security and support to agricultural development	increased agricultural output and labour efficiency	disincentive effects
Technical assistance	filling skills gap; human capital development	Greater efficiency	labour market distortions; encourage brain drain hinder human capital development

Source: Howard White (1998:88)

2.2.3 Disadvantages of Foreign Aid

Project aid distorts spending patterns as aid recipient governments are supposed to cover the recurrent costs of the projects. Also proliferation of numerous projects creates pressure to the already constrained capacity in developing countries. In addition, aid tying which is associated to project aid, leads to the exploitation of FA recipient country because it is obliged to procure items from the donor country (Riddell, 2007).

FA may result in an appreciation of the real exchange rate of the recipient country resulting in rising domestic inflation. This is referred to as the Dutch disease effects, whereby an inflow of foreign exchange (in form of export earnings, private capital inflows or foreign aid) puts upward pressure on the real exchange rate of the recipient country. Foreign aid may result in the appreciation of the exchange rate of the recipient country thus reducing the competitiveness of its export sector.

Debt overhang has remained as a major obstacle to development in most of LDCs. Despite the Highly Indebted Poor Countries (HIPC) initiative, these countries still face debt burden. This may be attributed to high interest rates on loans for which these countries have to use a large share of their budget for repayment.

FA is fungible in recipient countries thus resulting in limited impact on growth and poverty reduction (Pack and Pack, 1993). FA frees national resources for other purposes whereby the recipient government can use local taxes and other sources of income for military armaments, extended oppression and luxury consumption (Degnbol-Martinussen and Engberg-Pedersen, 2003:237-238).

2.3 Theories of Foreign Aid and Economic Growth

There are various factors which determine economic growth of a country. They include the quality of labour force, resources (natural and financial), capital, technology and the institutional setting of economic activities. Early economic growth theories in the 1950s and 1960s stressed that the basic problem for many developing countries was precisely capital formation in achieving economic growth. Thus these theories were in the view that development assistance was important for these countries to fill the finance gap and technology gap. More popularly, these gaps were known as saving gap and the trade gap.

However, there are different views on the role of FA in filling the savings gap and the trade gap and thus contributing to growth in developing countries. According to the Orthodox position, example Chenery and Strout⁸, all capital inflows constitute net additions to a less developing country's productive resources thus increasing its growth rate. This line of argument is based on the two gap models where these foreign capital inflows facilitated and accelerated growth by removing foreign exchange and domestic savings gaps. In contrast, this orthodox position was challenged by radical economists like Griffin and Enos⁹ and Weisskoff¹⁰. They argued that foreign capital inflows exercised a depressing effect on the savings propensities of the developing countries. This resulted to a reduction of the domestic saving rates and lower rates of capital formation and consequently lower rates of growth. These economists argued that foreign aid was a substitute and not a complement to domestic savings (Gupta and Islam, 1983: 21). The sub-sections that follow are looking at some of the theories explained in the literature.

2.3.1 Harrod-Domar Model

The Harrod-Domar model, points out that output depends on the investment rate and the productivity of that investment. In an open economy, investment is financed by savings which is a sum of domestic and foreign savings. This model explains economic growth in terms of a savings ratio and capital-output coefficient. The model (as cited in Easterly W, 2003: 31) is expressed as follows,

$$g = (I/Y) / \mu \quad \dots \quad (2.1) \text{ and}$$

$$I/Y = A/Y + S/Y \quad \dots \quad (2.2)$$

where I is required investments,

Y is output; g is target GDP growth,

A is aid, S is domestic saving and μ the incremental capital-output ratio (ICOR).

The ICOR gives how many units of additional capital are required to yield a unit of additional output, thus the ICOR is the ratio of investment ratio to the growth rate. The incremental capital-output ratio (ICOR) is thought to range between 2 and 5(ibid). A high ICOR is often taken as a measure of poor quality of investment. Using the idea of ICOR, the Harrod-Domar model was the base for the first national development plans in Less Developed Countries (LDC) (de Silver, 1984). This made possible to estimate the capital investments and aid needs for a given target rate of growth as it provided the simple framework used for quantitave planning techniques.

However, the stable linear relationship between investment and growth over the short to medium term is doubtful. For example, the endogenous growth models of growth stresses the multitude of inputs besides physical capital such as technology, human capital, intermediate new goods, organizational capital, social capital and institutional design. Despite this argument, savings, especially domestic savings play a major role in providing resources for investment and thus boosting growth. Thus for developing countries to minimize their dependence on FA, they need to increase their saving propensities which will increase funds required for investments.

2.3.2 The Two Gap Model

The standard model used to justify aid was the 'two gap model' of Chenery and Strout (1966) which has been already referred to in the previous sections. In this model the first gap is between the amount of investment necessary to attain a certain rate of growth and the available domestic savings (the saving gap). The second gap is the trade gap or foreign exchange gap. This occurs when there is a gap between import requirements for a given level of production and foreign exchange earnings. Even though the saving investment gap would be small, a larger trade gap would undermine productive investment due to limited imports of capital goods needed for investment. It is argued that at any moment in time one gap is binding in aid recipient countries thus foreign aid is required to fill that gap. The 'two gap model' supports the hypothesis of investment-limited growth based on the Harrod- Domar model which assumes a specific amount of investment to increase growth.

However, the assumption that FA fills these gaps will hold true only if investment is constrained by liquidity but the incentives to invest are favourable. If the cause of low investment is the poor incentives to invest, then aid will not increase investments as it will finance consumption rather than investment. Furthermore, the effectiveness of FA in filling these gaps will depend on the productivity of the investments made (White, 1992). In addition, aid dependency by developing countries has been sustained due to other factors which constrain growth in these countries apart from the two gap models discussed above. Some of these factors include political instability (in some countries), low technology, low education, poor economic and social infrastructure, rapid population growth and interest payments on foreign debts.

2.3.3 Three Gap Model

The three gap model, refers to the saving- investment gap, trade gap and the fiscal gap. The fiscal gap refers to a gap between government revenues and expenditures although the fiscal gap is a subset of the saving gap. Due to this fiscal gap, government efforts to stimulate private investment may be restrained when government resources for investment and imports are insufficient, among other things, as a result of debt service. There is enough evidence showing that government expenditures in Sub-Saharan African countries have been curtailed by foreign debt service¹¹ despite HIPIC initiatives. Thus, the closing of this fiscal gap may be facilitated by external resources directed to the government budget.

In contrast, if aid is in form of a loan and not a grant, may have adverse implications for the savings, foreign exchange and fiscal gaps in the long-run and for the macroeconomic performance in general. For example, debt payment creates a further demand on foreign currency and government revenue in general. This is supported by the view of Peter Hjertholm when he points out that "... a loan aid inflow may fill the trade gap today, but necessitates a faster rate of export growth in the future for the country to become independent of foreign inflows" (*ibid* p. 358). Also debt service can result in the reduction of import capacity of the government thus reducing government investment, particularly in infrastructure, education and health facilities, a factor which is likely to affect negatively private investments.

2.4 Review of Empirical Studies on Aid and Economic Growth

Government investments in developing countries especially in Sub-Saharan Africa (SSA) are largely financed by FA, *inter alia*, due to narrow domestic revenue base (from exports and tax revenues). Despite huge FA inflow in SSA, various studies have found that aid effectiveness have been low in these countries compared to other regions. The studies by Cassen (1986), Gupta and Islam (1983) and Mosley (1987), as cited in Hadjimichael et al. (1995: 49) found that the relationship between FA and economic performance/growth to be much weaker in this region than in other developing regions.

In addition, Mosley (1987) found no statistically significant correlation between FA on one hand and savings and growth on the other as discussed in section 2.4.2. He pointed out that fungibility of FA has shifted some of the domestic expenditures to less productive purposes. To improve the situation, he suggested the channeling of FA to countries which have a proven track record of using it effectively and increasing policy conditionality in the use of aid funds.

Boone P, done a study on the impact of FA on savings and growth, and found that no significant correlation between aid and growth. His estimated results show that the marginal propensity to consume is insignificantly

different from one and the marginal propensity to invest is insignificantly different from zero (Boone, P 1994: 21).

In contrast, other studies have found that there is a positive and significant relationship between FA and savings/ investment and economic growth.

Burnside and Dollar (2000) concluded that FA has a positive impact on economic growth if a good policy environment is in place in aid recipient countries.

Only two models will be discussed in detail to provide the basis for the choice of the model to be used in the analysis by this study. These are Gupta and Islam model and the Mosley model.

2.4.1 The Model by Gupta and Islam

Gupta and Islam developed a single equation model of growth which allows for the fact that the effect of foreign capital may depend on the economic stage of development of a country (Gupta and Islam, 1983: 26-31). The model was estimated using cross-section data for fifty-two developing countries.

Their empirical model is as follows

$$G = \alpha_0 + \alpha_1(SD) + \alpha_2(S/Y) + \alpha_3(S/Y)(SD) + \alpha_4(AID) + \alpha_5(AID)(SD) + \alpha_6(FPI) + \alpha_7(FPI)(SD) + \alpha_8(RFI) + \alpha_9(RFI)(SD) + \alpha_{10}(GL) + \mu$$

Where:

Y = Gross National Product (GNP) and $G = \Delta Y / Y$

SD = a proxy for state of development

(S/Y) = ratio of domestic saving to GNP

AID = Foreign capital inflows. $F = F_1 + F_2 + F_3$

F_1 = foreign aid

F_2 = foreign direct investment

F_3 = other capital inflows

$FPI = F_2 / Y$: ratio of foreign direct/private investment to GNP

$RFI = F_3 / Y$: ratio of other capital inflows to GNP

$GL = \Delta L / L$: growth rate of labour force (annual)

μ = a random error term

The results of the model are reported in table III.2 (ibid p. 29).

The results of the estimated equation reported in column 1 with the t- values in brackets are as follows:

$$G = 0.002 + 0.23S/Y + 0.13AID + 0.16FPI + 0.39RFI + 0.32GL$$

(0.15)	(3.58)	(0.50)	(0.53)	(1.62)	(1.45)
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From these results it was observed that the effect of domestic savings on growth is highly significant. The effect of aid is significant and positive. However, the effect of foreign private investment is statistically insignificant. Furthermore, they found out that private foreign investment continues to be

statistically insignificant even with its interaction term. The general conclusion by Gupta and Islam was that domestic capital formation and foreign capital continue to be significant determinants of growth in developing countries.

Furthermore, the results reported in table II on the coefficient of the interaction term for foreign aid and the state of development was significant. From this observation, Gupta and Islam concluded that aid component of foreign capital is useful only when it associated with a higher state of development. They concluded that at a higher state of development, the economy is better organized and managed and aid is more effectively utilized. However, at a lower state of development a significant portion of aid may be used for consumption purposes rather than capital formation (Gupta and Islam, 1983: 31).

2.4.2 Paul Mosley's Model

To measure the relationship between foreign aid and economic growth, Mosley used both, the cross section data and made the comparisons across time. In the cross section data, he used eighty developing countries in the period between 1970 -1980 (as was listed in the 1984 World Development Report) where the observations on aid flows and growth rates were plotted in a scatter diagram (Mosley P. 1987:122). There was a little correlation between aid flows and economic growth rates and this was attributed to non aid influences on growth and to inter country differences in the way aid is used. He found that the only non-aid influences on the growth rate of GDP in the 1970s which were significant across all samples of third world countries were the savings rate (as a proportion of GNP) and the growth rate of export values (*ibid*, table 5.3 pages 132-133). From his study it is observed that there is a need for developing countries to increase the saving rates and export growth rates in order to augment resources required for investments. But in most of these countries, there are very low savings rates and export growth rates, a fact which has made them to be aid dependent for many decades.

In the time series data, Mosley checked whether aid effectiveness has changed overtime and ascertained the factors responsible for those changes. He attempted to ascertain the effects of aid from the estimates of the single equation:¹²

where Y = national income

$A \equiv$ aid inflows

S= domestic saving and

I_f = inflows of private capital from overseas

ΔY is the rate of change in national income which measures economic growth.

Each of the variables was measured as a proportion of national income in the recipient country over a period of one year in order to control for the influence of country size and of price changes between periods (*ibid* p:130). According to this model, investment is divided into three components

according to the source of finance which are aid, commercial inflows from overseas or domestic saving. The equation was expanded to include literacy rate (which imply changes in skills which has influence in the stock of human capital) and export growth (which may influence the Less Developed Country's income directly and indirectly by creating or removing a balance of payment problem).

The new equation becomes:

where X = percentage annual rate of growth of export values

L = percentage annual rate of growth of literacy and other variables remain as defined in equation (2.3) above.

The findings of the multiple regressions by Mosley reported in table 5.3 were that the coefficient of aid on growth a_{18} is strongly negative and almost significant in the 1960s, positive but insignificant in the 1970s and negative and insignificant in the 1980s (*ibid* p.132-134). He concluded that aid in aggregate has no effect on economic growth in recipient countries in any of the three periods (1960s, 1970s and 1980s). However, the growth rate of exports is the only independent variable which retains significance throughout the period 1960-1980. The growth in literacy rate is significant for the 1960s and the saving rate for the 1970s. Even when Mosley used the two -stage least squares (treating aid as endogenous as it may be determined by as well as determining the economic conditions of the recipient country) and the Cochrane- Orcutt iterative method of estimation , aid inflows remain insignificant as a determinant of GNP growth.

Moreover, Mosley analysed the way in which aid can act as an instrument of development by looking at the channels through which aid inflows may affect the recipient's economy (fig. 2.1). Injection of FA into a recipient country has the direct effects (as it alters income as direct consequence of FA). It has the indirect effects on both, public sector and private sector of the developing country. Resources in public sector may be used for cuts in taxation, cuts in borrowing, increases in development expenditures and increases in non-development or recurrent expenditures. The indirect effects of FA on the private sector of the developing country, is that FA alters the relative prices facing the private sector (Mosley, 1987:120). He argued that the public sector may switch resources released by the inflow of aid into developmental forms of expenditure or into wasteful ones such as enlarging the army, paying off debts, reductions in taxation or reductions in borrowing (*ibid* p. 121).

The manifestation of tax efforts cuts and increased government's recurrent budget is observed in the following quote:

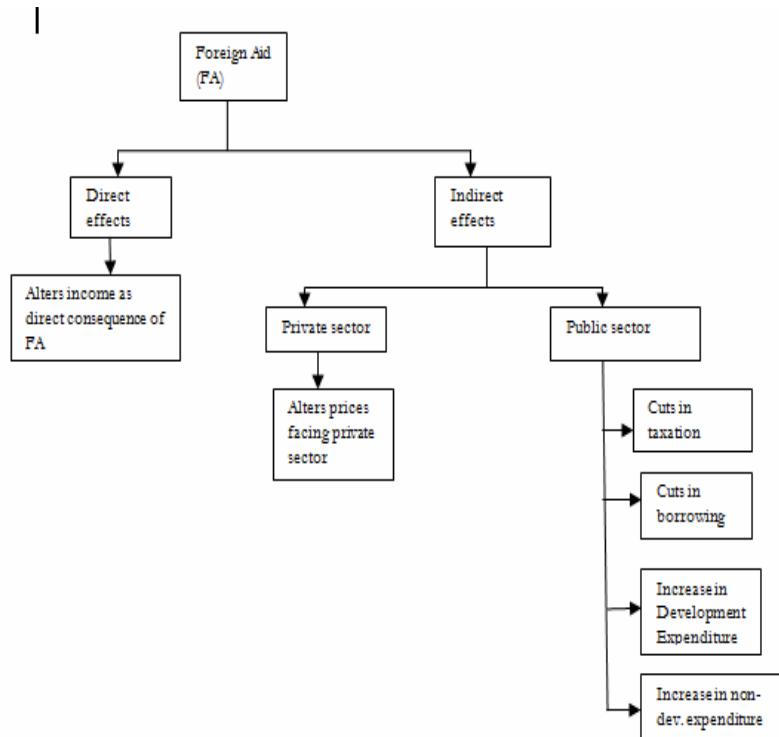
If a decline in tax effort or an increase in the ratio of recurrent expenditure to national income regularly accompanies an increase in the share of aid inflows to national income, this implies that some aid is serving purely to facilitate tax cuts or increases in the recurrent budget, particularly if the share

of development expenditure in national income is not rising at the same time (Mosley P, 1987: 141) .

In connection to this observation, Tanzania is characterised by rising recurrent expenditures and falling development expenditures (Tanzania's Economic Survey 2007, table 26 p. 74 and 75)¹³. Also it is experiencing rising share of FA inflows to national income (table 4.1). It can be argued that most investment resources are used to finance recurrent expenditures that is why the share of development expenditures is declining. This behaviour tends to make aid ineffective because it leads to diversion of public- investment resources into consumption.

In chapter four, this study has analyzed the influence of foreign aid, net national savings, export growth and total debt service on Gross Domestic Product (GDP) growth using Tanzanian data¹⁴. All the variables are expressed as percentages of Gross National Income (GNI). This study was interested in using the Mosley's model because the explanatory variables in his model are in line with the factors which are likely to affect the economic growth of Tanzania. For example, high savings rates and export growth rates are considered important for increasing investment and growth in Tanzania. From his analysis, Mosley observed the need for developing countries to increase the savings rates and export growth rates in order to augment resources required for investments. Also the insignificant result of aid on growth which he observed, present a similar challenge to Tanzania. This is because, the country is among top twenty aid recipient countries, but it is also among the top ten poorest countries of the world (as already discussed in chapter 1).

Figure 2.1: Channels through which aid affects the recipient economy



Source: Adapted from Mosley (1987:120)

On the other hand, Gupta- Islam model was not chosen for the analysis by this study because foreign capital in Tanzania is mainly in form of FA and very little is in form of foreign private/direct investments and other foreign capital inflows. Even the few foreign direct investment (FDI) firms which exist are resource seeking and the government receives very little share of the revenues especially from the mining companies. In addition, very few FDIs invest in direct productive investments in the manufacturing sector which would have a greater positive effect on economic growth. This argument is in line with the regression results from Gupta and Islam model which revealed that foreign direct investments had a negative effect on GDP growth.

2.5 Effects of Foreign Aid on Savings, Investment and Growth

As Mosley pointed out, there are various determinants which influence aid effectiveness. Some of these include the marginal productivity of public and private capital; the share of aid allocated to the recurrent budget and development expenditure and the extent to which aid crowds out or supports private sector investment (Mosley 1987). In connection to these arguments, the subsections that follow explain the impact of FA on savings, investment and growth in the public and private sectors.

2.5.1 Direct Impact of Aid on Domestic Savings, Investment and Growth (public sector)

Most of government investments in developing countries are constrained by the lack of sufficient domestic resources from domestic saving; as a result most of development expenditures are financed by aid money. For example, project aid permit governments to finance higher level of investment than it could be made possible from domestic saving. However, donor funded projects require recipient country to take full responsibility for the recurrent financing cost of the investments. This cost component on aid funded project, shared by aid recipient country, leads to increase in government consumption and hence decline in government saving. However, the programme aid in form of budget support augments public investments in human capital through provision of education and health services. Investment in human capital increases productivity and thus increasing investments and national savings.

Furthermore, Trygve Haavelmo as cited in Gupta K. L, (1983: 39) proposed an interesting hypothesis:

$$I(t) = a [Y(t) + H(t)] \dots \quad (2.5)$$

Where, I stand for gross investments, Y for gross national product, H for capital inflows.

This equation implies that investment is a function of income including what the developing countries get from abroad and he stated the possible implications that “domestic savings could be negative if H is large enough (*ibid*). Rahman concluded from his study that it was quite likely that foreign capital was used not only for augmenting investments but also as a substitute for domestic savings (*op. cit*). From this conclusion he advanced the behaviouristic hypothesis that the governments in developing countries may voluntarily relax domestic savings efforts when more foreign aid is available than otherwise.

Although the traditional macroeconomic rationale for foreign aid emphasizes its ability to supplement domestic savings, foreign exchange and government revenue thus contributing to higher economic growth, there is a need to consider the factors complicating the macroeconomic reality of foreign aid in aid recipient countries. Some of these factors include the effects of aid on government fiscal behaviour (aid fungibility), the problem of foreign debt and the Dutch disease effects¹⁵. Fungibility may or may not involve diversion of funds, but it refers to funding an activity that would have happened in the absence of aid thus aid frees up resources to be used elsewhere. The adverse impact of fungibility is that the expenditure for which aid is intended does not rise by exactly the amount of aid inflow.

In addition, the FA inflow may result in the Dutch disease effect. The Dutch disease concept refers to a situation where an inflow of foreign exchange (in form of export earnings, private capital inflows or foreign aid) puts upward pressure on the real exchange rate of the recipient country resulting in rising domestic inflation. Foreign aid may result in the appreciation of the exchange rate of the recipient country thus reducing the competitiveness of its export sector. However the study by Nyoni (1998) for the case of

Tanzania (*op cit*) suggests that foreign aid inflows caused a real depreciation of the exchange rate thus contradicting to the Dutch disease phenomenon.

Despite the results of Nyoni's study, Tanzania being an aid dependent country, needs to be aware of the dangers of aid induced real exchange rate appreciation by improving the capacity of the economy to absorb foreign aid.

In addition, Dacy (1975: 551) argued that government can increase consumption in different ways as a result of receiving FA. Such government consumption expenditures include increasing the size of the army, increased pay of government employees (particularly teachers and policemen), and expensive buildings and automobiles for officials. The negative impact of increased government consumption is that the country will be stuck with such behaviour even when the FA has been terminated. To maintain this consumption trend, the government will consume a large share of the budget at the expense of government saving and investments hence hampering growth.

2.5.2 Indirect Impact of Aid on Domestic Savings, Investment and Growth (private sector)

The private sector is affected by the receipt of FA both positively and negatively. The private sector benefits (crowding in effect) when the government uses FA to invest in public infrastructure for which the private sector has no incentive to do so. Government investment in economic infrastructure (roads, power and communication) and social infrastructure (education, health and water) promotes private sector investment and thus growth. In addition, increased public spending (resulting from FA) can have a positive impact on the private sector by stimulating aggregate demand and thus motivating private investments.

Furthermore, aid money can be directly channelled to the private sector through development banks or through agricultural finance corporations thus increasing the capacity of the private sector to invest. An example for Tanzania's context is the implementation of the National Economic Empowerment Policy which was established in 2004. This policy takes into account the private sector development policy objectives with the need to create more opportunities for the private sector as well as setting out rules and regulations on competition and fair economic participation in a market oriented economy. The implementation of this policy started in 2007 whereby some of the government budget, with FA through General Budget Support, provided credit guarantee to the private sector. By the end of December 2007, the Credit Guarantee and the Employment Creation Fund had disbursed loans worth Tshs 31.5 billion to entrepreneurs through the National Microfinance Bank (NMB) and the Cooperative and Rural Development Bank (CRDB) in the first phase. In addition, the government has set aside a total of Tshs 10.5 billion for more loans in the second phase (Tanzania's Economic Survey 2007: 102).

However, the private sector can be negatively affected by the receipt of FA. It is argued that at the microeconomic level, FA would be expected to

affect the labour-leisure decision of individuals and thus domestic saving efforts. On average, aid makes it possible for individuals to maintain a given level of income and consumption without being forced to offer the same numbers of hours of work as before the inflow of aid. As work efforts decreases, income out of own labour supply falls and thus lowering savings and investment and thus growth.

Moreover, FA can put upward pressure on the real exchange rate of the recipient country thus resulting in rising domestic inflation. The appreciation of the real exchange rate of the FA recipient country reduces the competitiveness of its export sector hence affecting the private sector producers (the Dutch disease effects already explained in the proceeding sections).

2.6 The Impact of Debt Servicing on Domestic Savings and Growth

In the decades before 1990s, most of the developing countries had received very large amounts of loans, in most cases at highly concessional interest rates. However, the repayments of the net present value of the obligations were likely to severely constrain economic performance of the debtor countries. In the second half of the 1990s, high external indebtedness of developing countries received an increased attention from policymakers and public opinion around the world. It was thought to be one of the main factors limiting the development of many poor countries. This resulted to the implementation of the Heavily Indebted Poor Countries (HIPC) initiative from 1996 by the multilateral and bilateral creditors. The HIPC initiative provides conditional assistance to countries that meet specific policy and performance criteria but the problem is that the fiscal burden placed on government budgets from debt servicing is not sufficiently addressed.

There are various reasons which explain why large levels of accumulated debt stocks lead to lower growth. Some of these reasons include the following:

Firstly, where political economy considerations lead to over-borrowing and low growth, it may lead to capital flight if the costs of high taxes to service the debt are not internalized. Secondly, the debt overhang theory argue that if there is some likelihood that in the future debt will be larger than the country's repayment ability, then expected debt service will be an increasing function of the country's output level. The returns from investing in the country therefore face a high marginal tax by the external creditors, and new domestic and foreign investment is discouraged¹⁶. This implies that large debt stocks would lower growth through the channel of reduced investment. Finally, the debts may have negative effects on economic performance because of the uncertainty about what portion of the debt will actually be serviced with the countries own resources. It may not be clear at what terms debt will be rescheduled, whether there would be additional lending and what change in government policies the rescheduling will entail. With such uncertain debt environment, investments are likely to be in trading activities with quick

returns, rather than long-term, high-risk, irreversible investment (ibid p.5). This misallocation of investment in turn will lower the efficiency of overall capital accumulation, thus suggesting that high levels of debt and associated uncertainty might affect growth also via investment efficiency and productivity. The continued borrowing and poor export performance of developing countries led to very high accumulated debt stocks that have likely created uncertainty and debt overhang effects. Apart from the explained indirect effects of accumulated debt stock on private investment, debt servicing consumes government resources which would be used for investments and thus reducing growth.

2.7 Forms of Foreign Aid

It is important to disaggregate different forms of aid as they are likely to exert different macroeconomic effects on the recipient economies. For example Ouattara (2005)¹⁷ tested empirically the impact of different forms of aid on savings in aid recipient countries. He found that, in overall, project aid flows and food aid (excluding emergency and relief food aid) are associated with a reduction in domestic savings. On the other hand, financial programme aid and technical assistance grants did not appear to reduce domestic savings (Ouattara 2005: 1).

There are four main forms of development aid which include project aid, financial programme aid, technical assistance, food aid and humanitarian aid or emergence relief (Riddell, 2007). However, White indentified three major forms of aid which include project aid, programme aid (including food aid) and technical assistance (White 1998: 69). The subsections that follow briefly discuss these forms of aid and a detailed discussion will be in chapter three using Tanzanian context.

2.7.1 Project Aid

Though there has been a decline of ODA in form of project aid from the mid 1990s, ODA to specific projects still exist. Project aid is dominated by funds channelled to interventions in sectors such as health, education, rural development including agriculture, transport and power, housing, and water supply and sanitation. However, small amounts of project aid are channelled to industrial, mining, trade and cultural projects (Riddell 2007: 180). Many ODA funded development projects aim at achieving specific outputs by providing resources, skills and systems which the recipient country needs.

2.7.2 Programme Aid

Programme aid is defined by OECD as financial contributions not linked to specific activities (as cited in Riddell 2007: 434). The programme aid is divided into two forms, the balance of payments (BOP) support and the budget support. Under the budget support, aid funds are provided to boost

aggregate revenue and increase overall spending (*ibid p. 195*). Aid funds channelled to ministries of finance are termed as General Budget Support (GBS) while those channelled to particular sectors are termed as Sector Budget Support (SBS). Under the GBS, donors provide funds for implementation of development and poverty alleviating strategies paying attention to the capacity of the recipient governments to use funds efficiently.

2.7.3 Technical Assistance

Technical Assistance (TA) includes the provision of skills, knowledge know-how and advice. For many decades, technical assistance has also been provided in form of teaching staff mainly in primary and secondary education in developing countries. Furthermore, more specialised trainers have continually performed skills training functions to meet their needs and to achieve their immediate objectives. For example the London-based Overseas Development Institute (ODI) has been running its fellowship scheme for graduate economists and placing them in key ministries in developing countries (Riddell 2007: 203). Despite this positive impact of TA, there have been several problems associated with it. Some of these problems include high costs of providing the TA (especially the consultancy costs).

2.7.4 Humanitarian Aid or Emergency Aid

The definition of humanitarian aid is defined according to its purpose, that is, “to save lives, alleviate suffering and enable those suffering to maintain (or retain) their human dignity during and in the aftermath of natural disasters and man-made crisis”¹⁸. Humanitarian aid has been successful in most cases in achieving its tangible outcomes such as saving lives, providing food to the hungry; healthcare and medicines to those vulnerable to acute disease in emergencies; and water, sanitation and shelter to those whose homes have been destroyed. However, the sustained internal conflicts in war prone areas reduce resources to meet development objectives as more resources are directed to meet humanitarian needs.

2.7.5 Food Aid

Food aid comprises of programme food aid and humanitarian food aid. Programme food aid may relieve the foreign exchange constraint to the import of the necessary intermediate inputs or by providing fiscal resources through counterpart funds generated by the local sale of programme food aid (Barret, 1998:567). These resources can be used by the recipient country to invest in agricultural research and extension and improvement of rural infrastructure in particular. However, programme food aid may have Dutch disease effects on domestic food producers and thus hurting the food sector’s competitiveness in the world markets.

2.8 Conclusion

The chapter has reviewed the theoretical and empirical studies on FA and growth. The discussion on the main theories behind the FA activities has been provided especially basing on the gap models. A review of empirical studies on the FA- growth nexus has been made by using the Gupta-Islam model and Mosley model. These empirical studies analyze the impact of FA on growth through its impact on domestic savings and investments. Gupta and Islam found a positive relationship between FA and growth while Mosley found a negative relationship. Furthermore, the brief discussion on the forms of FA was made to get a clear picture of FA activities.

Chapter 3:

FORMS OF AID AND THEIR IMPACT ON GROWTH

3.1 Introduction

This chapter starts by giving a brief background on the different forms of aid aiming at different development strategies from the late 1950s to 2000s.

Furthermore, the chapter reviews different forms of aid in Tanzania and their contribution to economic growth and poverty reduction. Also the overview of the country is provided in brief as follows: Tanzania covers a land area of 945 thousands km squared with a population of 39.03 million people (2006 figures). GDP per capita, in US dollar purchasing power parity valuation was 594 (in 2006)¹⁹. The chapter further discusses the different forms of FA which include programme aid, project aid, technical assistance, and food aid and emergence relief. The role of FA in Tanzanian economy is also discussed in detail as it is known that Tanzania is an aid dependent country thus aid plays a major role in the economy.

3.2 Background on Forms of Aid

In the 1950s and 1960s, donors focused on the provision of capital for investment and modern technology to the developing countries in order to close the gaps in their economies and thus boost their economic growth. Most donors notably, the WB, the USA, Great Britain and France provided financial assistance and experts to improve and implement projects with modern technology especially for development of modern infrastructure such as roads, ports, telecommunications and energy (Engberg-Pedersen and Degnbol-Martinussen 2003: 44). However, this aid strategy resulted in a division between a modern, urban based economy and the traditional peasant economy whereby the poor got very little out of resource transfers and technology was not adapted to local conditions in developing countries.

In the 1970s the main focus of development strategy was the integrated rural development projects and fulfilment of basic needs thus donors' focus, especially the WB, was on poor people. The main idea was to fight increasing poverty in developing countries and to include the whole world's populations in one world economy. Large aid projects covered many productive and social sectors and they involved several line ministries from the central via the regional to the local level. Although the aid strategy built the institutional framework (in central and local administrations and the organised civil society) in developing countries, it lacked the capacity and the resources to implement the development strategy (*ibid p. 47*).

In the 1980s, donors particularly the WB and the IMF developed the structural adjustment programmes as conditional for providing aid to

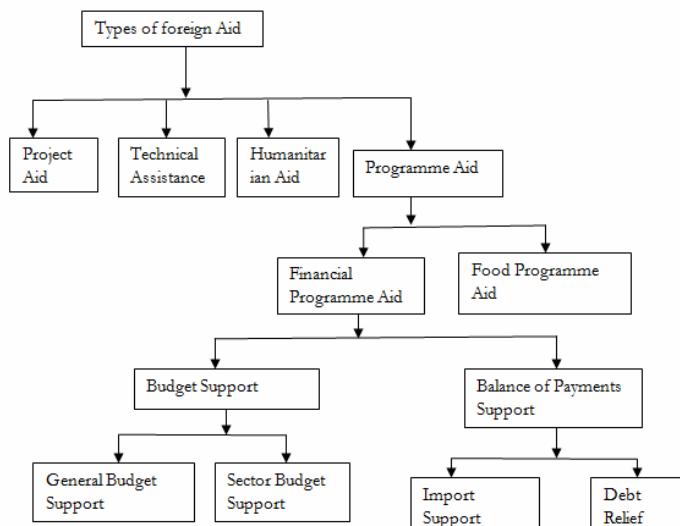
governments in developing countries in exchange for promise of liberalization. Liberalization aimed at removing the states' control in many areas of the national economy and to create the macroeconomic balances (balance of payments, debt, inflation and state deficits) (*op.cit*). The structural adjustment programmes were initiated due to the macroeconomic imbalances which were facing most of developing countries in this period.

From the 1990s, the emphasis of the development strategy was on the political, economic and institutional society building. The instability which occurred in the Soviet Union and Eastern Europe around 1990 influenced the OECD countries to shift the focus of their aid towards Eastern Europe and the former socialist countries. This resulted in a sharp decline in aid amounts received by the developing countries and the strong demands for political reforms in these countries (multiparty elections, observance of political human rights and good governance). The SAPs reduced public services in the social sector (particularly education and health) in the poorest countries despite the increasing poverty in these countries. This gave rise to the introduction of the sector programme support to social sectors such as health and education.

3.3 Forms of Foreign Aid in Tanzania

FA in Tanzania has been provided in different forms as discussed in the sub-sections which follow. They include financial programme aid (including balance of payments support and budget support), project aid, technical assistance, food aid and emergence relief aid or humanitarian aid (fig.3.1)

Fig. 3.1 Forms of foreign aid



Source: adapted from Howard White 1998 p. 72 and own formulation

3.3.1 Programme Aid

Financial programme aid has been provided in form of both, budget support and balance of payments support. According to White H, budget support consists of free foreign exchange which is provided for sale to raise local currency to support government budget. On the other hand balance of payments support consists of debt relief and import support (foreign exchange or commodities untied to project activities (White 1998). Budget support is divided into sector budget support and general budget support. Programme aid in Tanzania during the 1970s and 1980s was provided in form of Commodity Import Support (CIS), co-financing of Structural Adjustment Programmes (SAPs) and debt relief. The CIS was used to support the industrial companies and it consisted of two chief categories, intermediate goods for the manufacturing sector and the essential inputs (especially fertilizer) for the agricultural sector. The debt relief was primarily used for cancellation of previous loans provided by donors in the 1970s. The availability of foreign resources resulting from debt relief has helped the country to minimize its debt overhang despite the fact that it is still facing the debt burden.

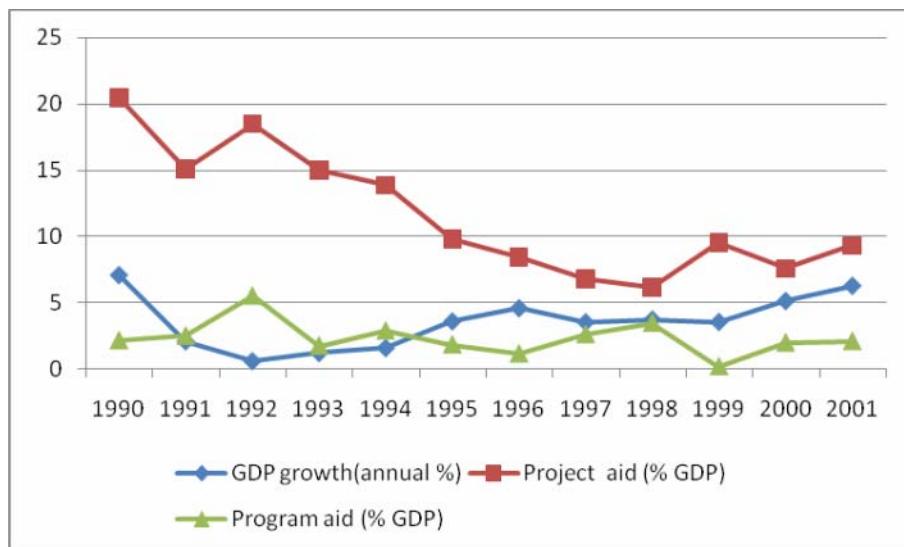
In the late 1980s and 1990s, financial programme aid (budget support and balance of payments support was widely used in support of structural adjustment programmes). However, in this period the trend was increasingly shifting from balance of payments support to towards budget support. This emanated from several studies and evaluations done in the late 1990s and early 2000s which increased the awareness of donors and partner countries that traditional forms of conditionality (which were often linked to SAPs) had been less effective than expected. Since then, there has been recognition that domestic political considerations are very essential in determining economic and political reforms and the importance of addressing development jointly. In order to tackle the problem of increasing poverty, development partners introduced the Poverty Reduction Strategy Papers (PRSPs) which describes a country's macroeconomic, structural and social policies and programs to promote growth and reduce poverty, as well as associated external financing needs.

Using the PRSPs, development partners started using the General Budget Support (GBS) which is partnership based and supports the recipient country's ownership in the development process. GBS is defined as a financial assistance that supports a medium -term programme and is provided directly to a recipient country's budget on a regular basis, using the country's own financial management systems and budget procedures²⁰. FA provided as GBS is linked to sector or national policies rather than to specific project activities. Thus the GBS aims to promote pro-poor growth through encouraging fiscal and macroeconomic stability and more efficient allocation of public funds (*op.cit*).

However, there has been a fluctuating trend in programme aid due to different donors' objectives in different periods (fig.3.2). In the 1970s and 1980s programme aid was provided for CIS, SAPs and debt relief. In the mid 1990s there was an increasing trend, *inter alia*, due to the fact that Tanzania

was included in the Highly Indebted Poor Countries (HIPC) initiative in 1996. From 2001 there was an increase in programme aid provided in form of general budget support.

Fig.3.2 Project and Programme aid in Tanzania (1990 to 2001)



Source: OECD database and the World Bank, WDIs 2006.

3.3.2 Project Aid

Project aid is defined as investment in a development activity where funds are provided to achieve a specific objective within a set period of time (Netherlands' Development Cooperation Report 1995:157). This aid modality was most popular until the beginning of 1980s. Project aid was used to be provided in form of capital investment projects, rural development projects and technical cooperation. In the 1970s, most capital investment projects involved large scale, capital intensive and import intensive projects which were concerned with infrastructure and manufacturing industry. However, these projects were influenced by the commercial interests of donors and thus made the Tanzanian economy increasingly import dependent.

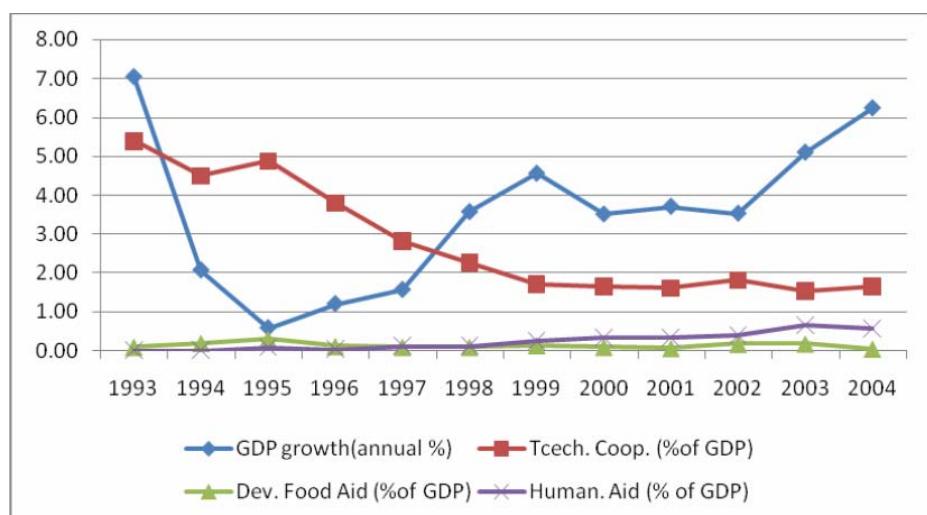
However, there was a declining trend of project aid especially in the 1990s (fig. 3.2). This resulted from the donors' policy which requires the aid recipient government's capital budget to meet local and recurrent costs for a growing number of projects. This resulted to many projects being unsustainable after the donor's support had come to an end. Furthermore, there is an increasing trend of the project aid in the early 2000s, this was attributed to donors' involvement in investing in social sectors especially education and health. This is connected to the desire to achieve the millennium development goals which generally are targeting to reduce poverty by half in poor countries by year 2015.

3.3.3 Technical Assistance or Technical Cooperation

Technical assistance has been provided in form of support to research institutes and training centres, the fellowship programme and individual expert schemes. Most funds were spent on postings of long-term personnel in addition to the improvement or expansion of the physical infrastructure of research and training institutes. The types of education supported through technical assistance included the higher education (especially the University of Dar es Salaam), vocational and vocational training centres especially agricultural training and research institutes.

Up to the mid 1990s, the effectiveness of technical cooperation in the education sector was low and the quality of education had deteriorated mainly due to shortage of properly qualified teaching staff, lack of teaching equipment and poor staff morale due to the sharp decline of staff salaries in real terms. However, the effectiveness of short term and specialised courses was high or positively rated. An example of the technical assistance was the one provided by The Netherlands in form of short term and specialised courses in Tanzania and under the Fellowship Programme. For the period up to 1995, more than 1,500 Tanzanians had been offered fellowships for courses in the Netherlands (*ibid p. 167*).

Fig. 3.3: Technical Cooperation, Development Food Aid and Humanitarian Aid to Tanzania (1993-2004)



Source: OECD database and the World Bank, WDI 2006.

There is declining trend in technical cooperation/ assistance from the mid 1990s. This can be explained by the increase in other forms of FA especially programme aid. Declining trend in Dev. Food aid and Humanitarian aid in the 1990s but started to rise from 2000. This trend may be explained by the emphasis to pro-poor growth where human development is looked at meeting the basic needs including food.

3.3.4 Humanitarian Aid and Food Aid

Although food aid is assumed to be important during food shortage, it is accompanied with some disincentive effects especially with regard to food production. Among the concerns are the price and the policy effects. With the price effect, food aid pushes out domestic agricultural production, thus lowering the price of agricultural output. For the policy effect it is argued that the availability of food aid may allow the government to postpone policy reforms which are necessary to stimulate domestic agricultural production.

3.4 The role of Foreign Aid in Tanzanian economy

Foreign aid plays a significant role in Tanzanian economy as it is used to finance imports and the government budget. At the beginning of 1990s aid volume was equal to 45 per cent of GNP and two -thirds of all imports were financed with external assistance (ibid p. 149).

3.4.1 The Late 1960s and Early 1970s

In the late 1960s, Tanzanian leadership adopted a socialist development policy with a dominant role of the state in order to speed up the development process, increase economic self reliance and eliminate inequalities in the society. More emphasis was put on rural development to boost agricultural performance. In the 1970s, some of aid was provided in form of fertilizers to support agriculture, particularly the rural development policy. Until the end of 1980s, fertilizer was heavily subsidized between 60 and 70 percent of the cost price. It was distributed through government enterprises but since 1992 fertilizer started to be channelled through private traders (ibid 159).

In the 1970s, more emphasis in the country's development policy shifted from agriculture to industry with the establishment of the Basic Industry Strategy in 1974. Substantial investments in industry were largely financed through foreign aid. For example in late 1970s and early 1980s, the Commodity Import Support (CIS) to manufacturing sector provided subsidies, largely to parastatal enterprises. However, this facility had a weakness that it was a tied facility with donors insisting on procurement of goods from their own countries and they placed restrictions on the type of goods that could be imported (World Bank 2001: 296). With Import Substitution Industrialization (ISI) strategy in that period, the manufacturing sector was subsidized in order to import capital goods so as to boost its production. However, it was revealed that about 70% of import support recipients produced inefficiently. In 1988 it

was agreed by donors to provide resources for essential imports through a highly flexible foreign exchange allocation system. It was known as the Open General Licence (OGL) facility in which the market played an important role in allocation system. It is estimated that between 1988 and 1992 almost US \$ 1000 million was made available by donors through OGL. However, the facility was abolished in 1993 as it suffered from lack of transparency and accountability with regards to the use of aid funds (The Netherland Development Cooperation report, 1995:160). Generally, for most of the 1960s and 1970s, more FA to Tanzania was provided in form of investment project assistance and made up more than two –thirds of total aid (World Bank, 2001: 294).

3.4.2 The Mid 1980s and Early 1990s

Since the mid- 1980s, there was a shift in emphasis from project aid to programme aid. This was mainly attributed to by the country's balance of payments problems and the declining capacity in industry. In the mid 1980s Tanzania was forced by the donor community, particularly the World Bank and the International Monetary Fund (IMF), to change its development policy from a state-controlled economy to a free market system. The provision of development aid was conditional on Tanzania's acceptance of drastic economic reforms as formulated by the WB and the IMF. The country signed the standby agreement with the IMF and a structural adjustment programme with the World Bank in 1986. Tanzania's implementation of the Economic Reform Programme (ERP) from mid 1980s marked its acceptance to a market oriented economy and helped to restore donors' confidence. The objectives of the ERP as outlined in the evaluation report by the Netherlands Development Cooperation (1995: 173) were "the achievement of real GDP growth of 5% per annum, a reduction in the rate of inflation to below 10 % a year, a decrease in the government budget deficit, and an improvement in the balance of payments position". Under the ERP, a wide range of policies was adopted which aimed at liberalising internal and external trade, unifying the exchange rate, reviving exports, stimulating domestic saving and restoring fiscal sustainability (World Bank 2001: 295) During that period, more aid from donors was directed to the economic reform programme.

However, in the 1993-1994 period, the relations between the Tanzanian government and major donors deteriorated seriously due to government's failure to collect counterpart funds under the CIS scheme and to increase the tax collection efforts. Furthermore, the failure of the government to conclude a new Enhanced Structural Adjustment Facility (ESAF) with the IMF worsened donor fears and this had a significant adverse effect on aid flows to Tanzania between 1994 and 1996. Normal aid operations resumed after the new government came into power in 1995, particularly following the conclusion of an ESAF agreement with the IMF in 1996 (ibid p. 296).

Although there was some improvement in the economy due to structural adjustment programmes, the latter brought negative impacts on the poverty situation in the country. The government efforts to reduce huge budget deficit, by reducing government expenditure, hampered its ability to provide social services such as education, water and health services. Furthermore, the

reorganization of the civil service resulted in the loss of many jobs leaving many people without income (especially in the urban areas). This gave rise to the consideration of poverty reduction measures by the donor community from the late 1990s.

3.4.3 The Late 1990s and 2000s

Several studies and evaluations done in the late 1990s and early 2000s increased the awareness of donors and partner countries that traditional forms of conditionality, often linked to SAPs, had been less effective than expected. The implementation of SAPs resulted in impoverishment of majority of the Tanzanian population thus giving rise to the Poverty Reduction Strategy Papers (PRSPs). The Poverty Reduction Strategy Papers (PRSP) described a country's macroeconomic, structural and social policies and programs to promote growth and reduce poverty, as well as associated external financing needs. PRSPs were prepared by the government through a participatory process involving civil society and development partners, including the World Bank and the IMF.

In the 1990s, there was a shift in donors' thinking towards poverty reduction measures, thus the ODA's objectives included the need to address poverty reduction in developing countries. The reasons for the donors' focus to poverty reduction were mainly influenced by the World Bank (WB) new poverty agenda and the influence of the United Nations Development Programme's (UNDP) Human Development Report of 1990. The WB focused on the new poverty agenda by emphasizing labour intensive growth and investment in human capital of the poor people (particularly health and education) to enable them to participate in the growth process (White, 1998: 11). The UNDP's human development reports since 1990 have been putting emphasis on human development including enhanced human capabilities. In emphasizing the pro-poor expenditures, both the WB and the UNDP argue for rural healthcare versus urban hospitals; and the subsidies for primary education versus tertiary education (*ibid p.12*).

Tanzanian government like most other governments, see aid directed through the budget as more efficient and more effective in tackling poverty and as of less drain on capacity than aid channelled to projects through special units in line ministries or through Non-Governmental Organisations (NGOs). Budget support refers to "financial assistance that supports a medium –term program and is provided directly to a recipient country's budget on a regular basis, using a country's own financial management systems and budget procedures"²¹. In general, donor organisations use budget support to refer to predictable, usually annual, aid flows that are disbursed in response to a low income country's progress in implementing a national poverty reduction strategy (op.cit). In addition, budget support is based on aggregate set of performance indicators in the form of policy reform measures or outcome indicators. With the General Budget Support (GBS) facility²², the fight against poverty is at the centre of macroeconomic reform programmes with the focus on pro-poor expenditure particularly protecting spending in social sectors.

Moreover, the existence of the PRSPs had shifted the focus towards partner country owned objectives and strategies implying that GBS should be more partnership based and support country ownership. The government has managed to coordinate FA through GBS by passing a law which requires that all line ministries submit requests for loans and grants to the Ministry of Finance (Human Development Report 2005:106). On the other hand, donors are able to reinforce national budgeting and management by reporting all aid to the appropriate ministry and channelling it to programmes that form part of the national strategy for poverty reduction. The national poverty reduction strategy in Tanzania is known as the National Strategy for Growth and Reduction of Poverty (NSGRP). The NSGRP aims at achieving high and shared growth; high quality livelihood; stability and unity; good governance; high quality education and international competitiveness (NSGRP guidelines, 2005: 1). It is also committed to the achievement of the Millennium Development Goals by 2015.

3.5 Conclusion

Being an aid dependent country, Tanzania is benefiting from huge volumes of FA inflows from both multilateral and bilateral donors. Different forms of aid as discussed in this chapter include programme aid, project aid, technical assistance, food aid and humanitarian aid

The discussion of different forms of aid with their contribution to economic growth has been done by using different time periods from 1960s to present. In the 1960s to early 1970s, more emphasis was put to the rural development with fertilizer subsidies to boost agricultural production. In late 1970s emphasis shifted from agriculture to industry whereby substantial investments in industry were largely financed by FA. This was accompanied with the commodity import support to the manufacturing sector. From the 1980s to early 1990s FA was used to support the Economic Reform Programme under SAPs. From early 2000s to the present, FA is mostly provided in programme aid particularly the budget support used to finance the country's budget where the main targets are to increase economic growth and reduce poverty.

Chapter 4

ANALYSIS OF FOREIGN AID ON GDP GROWTH

4.1 Introduction

As already discussed in chapter two, there has been continuous debate on whether FA contributes to economic growth or not through its influence on domestic savings and investment (or gross capital formation). The aim of this chapter is to present the empirical results of the model analysed and to discuss the results obtained when the data for Tanzania were applied (for the period 1990 to 2004). Also the analysis of the factors which might have caused the results obtained is provided. In analysing the influence of aid on economic growth, the Mosley model has been applied. The study has analyzed the influence of aid, net national savings, export growth and debt service on GDP growth by using a single equation model. The results from regression analysis have shown that foreign aid in Tanzania has a negative impact on GDP growth. Also the total debt service variable has shown a negative impact on GDP growth as it was expected. On the other hand, export growth and net national savings have a positive impact on GDP growth revealing the importance of these variables to economic growth of the country. These findings are in line with the findings by Mosley for savings and export growth variables, and with Islam and Gupta for the savings variable.

Furthermore, the analysis on the government's use of foreign aid between development and non-development or recurrent expenditures has been made by using data from the World Bank, WDI 2006 and the former Ministry of Planning, Economy and empowerment. The regression results have shown that FA for development and recurrent or non-development expenditures has a negative impact on GDP growth.

4.2 Descriptive Data Analysis

The study has analysed data for the period from 1990 to 2004 to investigate the impact of foreign aid, exports growth, the net national savings and debt service on GDP growth. This range of period was chosen because for the period before 1990, some variables were not recorded for some years in the World Development Indicators 2006 (a data source for which the data for the study have been extracted). The dependent variable was GDP growth (annual percentage growth) considered as a variable to measure economic growth. The independent variables were foreign aid (as a percentage of Gross National Income (GNI), net national savings (percentage of GNI), exports of goods and services (annual percentage growth) and total debt service (percentage of GNI). These variables were chosen as they play a major role in explaining GDP growth in Tanzanian context.

Table 4.1: Selected Development Indicators for Tanzania (1990 - 2004)

YEAR	GDP G	AID	NNS	TDS	EG
1990	7.05	28.81	5.86	4.40	na
1991	2.07	22.64	5.44	4.30	-10.52
1992	0.58	30.33	3.10	5.31	22.93
1993	1.21	23.21	-0.18	5.15	29.92
1994	1.57	22.16	6.11	4.21	11.56
1995	3.57	17.10	-2.88	4.53	32.62
1996	4.56	13.75	-0.27	4.22	0.39
1997	3.51	12.49	0.93	2.23	-24.85
1998	3.71	12.08	-4.47	2.86	9.85
1999	3.53	11.59	-1.67	2.65	-6.70
2000	5.10	11.41	4.94	1.91	16.70
2001	6.24	13.59	4.65	1.63	14.80
2002	7.24	12.68	7.88	1.12	3.90
2003	7.10	16.63	1.15	0.89	5.80
2004	6.28	16.17	0.29	1.10	-7.00

Source: World Bank, WDI 2006

Key:

A= Aid (% of GNI)

GDPG= GDP growth (annual %)

NNS= Net National savings (% of GN)

EGS= Exports of Goods and Services (annual % growth)

TDS= Total Debt Service (% GNI)

GNI= Gross National Income

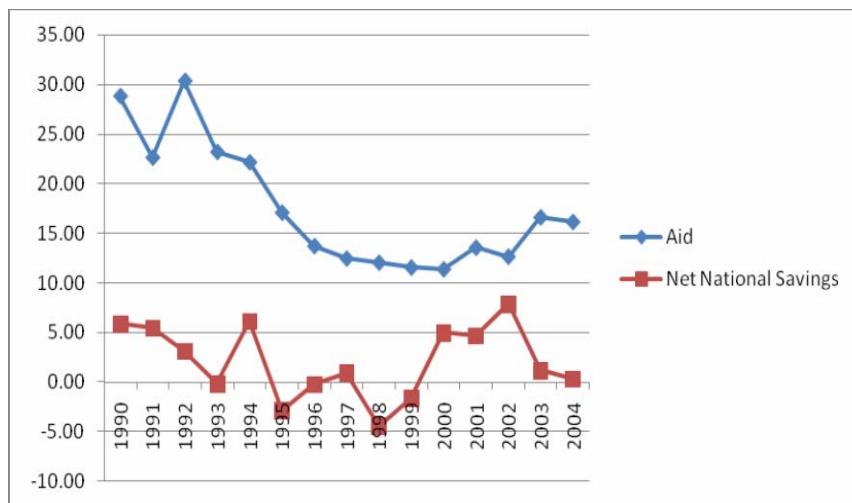
WDI= World Development Indicators

4.2.1 Trends in Aid Flows and Net National Savings

There has been a declining trend in foreign aid inflows particularly in the 1990s with the maximum of 30.33 % in 1992 and the minimum of 11.41% in 2000 although the trend started to raise again from 2001 (fig. 4.1). This might be attributed to the government's failure to sign the Enhanced Structural Adjustment Facility with (ESAF) with the IMF. The failure of the government to conclude a new ESAF with the IMF worsened donor fears and this had a significant adverse effect on aid flows to Tanzania between 1994 and 1996 (World Bank, 2001). Furthermore, in the 1993-1994 periods, the relations between the Tanzanian government and major donors deteriorated seriously due to the government's failure to collect counterpart funds under the CIS scheme and to increase the tax collection efforts. In addition, the closure of the OGL facility in 1993 contributed to the decline in FA resource inflows into the country. As it was explained in chapter three, this facility was closed due to lack of transparency and accountability with regards to the use of aid funds.

However, the commitment to macroeconomic reforms by the third phase government, including the signing of the ESAF with IMF in 1996, helped to restore donors' confidence. Furthermore, aid levels were increased given the commitment by donors in year 2000 to achieve the objectives of the Millennium Development Goals (MDGs) in 2015 whereby donors agreed to increase FA to poor countries in order to fight poverty.

Fig. 4.1 Trends in aid flows and net national savings



Source: World Bank, World Development Indicators 2006.

Key:

Aid = aid (% of Gross National Income (GNI))

Net National Savings = Net National Savings (% of GNI)

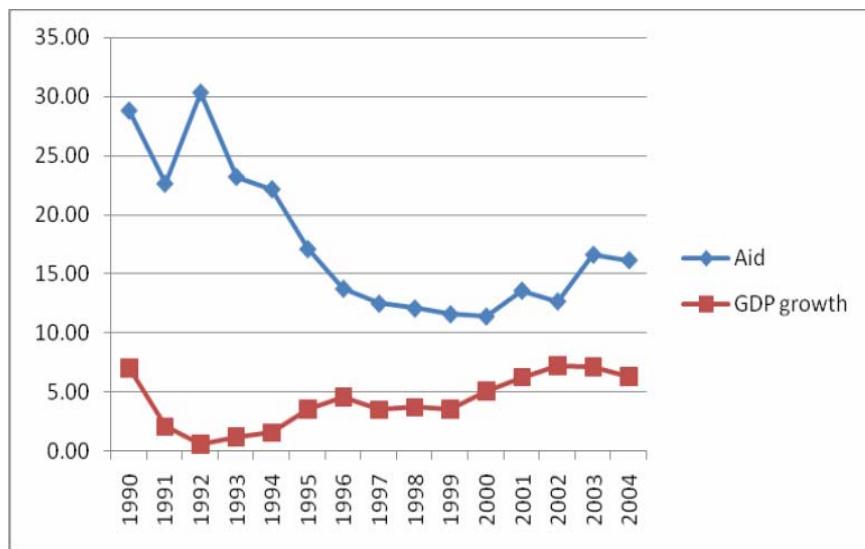
On the other hand, the net national savings have remained below 10 percent for the period under study (figure 4.1), having a negative saving in some periods. This may be attributed to low export performance (as fig 4.3 indicates) due to severe drought which hit the country in 1997 to 1998. Because the country's export revenues are from the primary products particularly agricultural products that is why the exports fell sharply in that period. Furthermore, declining national savings implies that there is an increase in government consumption. Also this may result from increased debt service especially from 1991 to 1995. Despite an increase in aid levels from 1998 up to 2004, the net national savings remained below 10 percent implying that the country increased consumption (particularly in social services such as education, health and water). The graphs in figure 4.1 show no clear pattern between FA and the net national savings, hence implying that FA has limited impact on augmenting national savings.

4.2.2 Trends in Aid Flows and GDP Growth

The graphs on fig.4.2 show a negative relationship between GDP growth and foreign aid inflows. This observation is supported by the empirical results in chapter four, which reveal a negative relationship between GDP growth and

foreign aid. This may be attributed to high population growth and poor export performance which reduces the GNP per capita (one of the indicators used to measure poverty level). Furthermore, it can be attributed to the explanation that more FA in Tanzania is used for consumption and less is used for development expenditures.

Fig. 4.2 Trends in aid flows and GDP growth



Source: World Bank, World Development Indicators 2006.

Definition of variables

Aid = aid (% of Gross National Income)

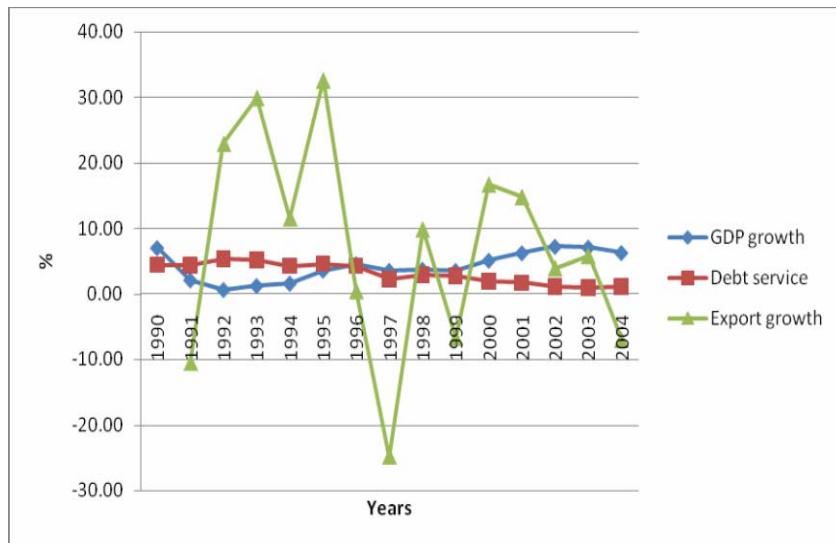
GDP growth= Gross Domestic Product (annual %)

The GDP growth rates were declining from the early 1990s to mid 1990s. This trend may be attributed to the decline in aid levels particularly the closure of the OGL facility in 1993 which was supporting importers of goods including the capital goods required for investments.

4.2.3 Trends in GDP Growth, Debt Service and Export Growth

There was a declining trend in GDP growth in the early 1990s and it increased steadily from 1997 (fig. 4.3). The declining trend was due to the reasons explained in the preceding subsections including the decline in FA inflows in the early 1990s. The increase in GDP growth from the late 1990s may be attributed to the macroeconomic reforms which were implemented particularly under the Economic Reform Programme.

Fig. 4.3 GDP growth, debt service and export growth



Source: World Bank, World Development Indicators 2006.

Key:

GDP growth= GDP growth (annual %)

Debt service= total debt service (% of GNI)

Export growth= exports of goods and service (annual % growth)

The debt service increased from the early 1990s to the mid 1990s, among other things due to the implementation of the Structural Adjustment Programmes (SAPs). Among the requirements of the SAPs was the need to reduce government consumption and increase the debt service. The decline in debt service from the mid 1990s was attributed to the implementation of the Highly Indebted Poor Countries (HIPC) initiative in 1996. Other factors include debt cancellation and debt rescheduling.

From fig 4.3, GDP growth and total debt service show the opposite relationship as expected. The reason is that, when more resources are used for debt service, very few resources are left for investments hence resulting in low GDP growth rate. On the other hand, debt relief released more resources for government investments particularly in infrastructure and social services particularly health and education thus increasing GDP growth.

However, the exports of goods and services have been fluctuating for the period under study with a maximum of 32.62 % annual growth in 1995 and a minimum negative growth of -24.85 in 1997. There was an average increasing trend in the early 1990s and mid 1990s due to the macroeconomic reforms which were taking place during that period especially the macro-economic stabilization policies. In 1997 there was a sharp decline in the export growth, *inter alia*, due to the acute drought which affected severely the agricultural exports. Furthermore, the export growth has remained low even in the early

2000s because some of the privatised companies were not performing at the expected levels thus contributing very little to export growth.

4.3 Econometric Data Analysis

The econometric model which is used to analyse the factors influencing GDP growth (including foreign aid) uses a single equation model. The dependent variable is GDP growth and the explanatory variables lagged for one year are aid, export growth, net national savings and total debt service. The analysis was made by lagging the explanatory variables for one year so as to maintain a reasonable number of the degrees of freedom given the problem of data limitation explained earlier in chapter one. Explanatory variables are lagged because the current GDP growth is dependent on the behaviour of these variables in the previous year. Furthermore, the analysis on the impact of FA has been made by differentiating its impact on GDP growth in the 1990s and early 2000s. This was made by estimating the interaction term between FA and the time dummy for aid in order to determine the influence of FA on GDP growth in the 1990s and the early 2000s.

The model was specified as follows:

$$gdp_g = \beta_0 + \beta_1 La + \beta_2 Lnns + \beta_3 Ldsn + \beta_4 Leg + \beta_5 DtLa$$

Where

gdp_g = GDP growth (annual percentage)

a = aid (percentage of GNI)

eg = exports of goods and services (annual % growth)

nns = net national savings (percentage of GNI)

dsn = total debt service (percentage of GNI)

$DtLa$ = Interaction term between the time dummy and aid.

(Time dummy is defined as 1 for 1990 to 1999 and 0 for 2000 to 2004).

L = implies that variables are lagged for one year

ε = error term and

β_s = are estimated coefficients

Results presentation and analysis

The estimated equation with the t-statistic values in brackets is as follows:

$$gdp_g = 9.0 - 0.22La + 0.16Lnns - 0.46Ldsn + 0.06Leg - 0.04DtLa$$

(9.16) (-2.37) (1.88) (-1.54) (2.94) (-0.60)

The results of the estimated equation are shown in table 4.1 below. The model explains 98 percent of the factors that affect GDP growth for the period 1990 to 2004 (as per the R – squared). FA has a negative and significant

impact on GDP growth implying that FA does not contribute to GDP growth in Tanzania. The negative sign of the coefficient for FA may be attributed to non-aid influences on growth and the way aid is used (whether to finance development expenditure or recurrent expenditures). Net national savings has a positive impact on growth, though insignificant. This can be explained by the low saving levels experienced in the country whereby in some years there is negative savings. This implies that more aid is used for consumption and less is used for savings and investments. From the above observation, the answer for the first research question is that on average FA does not complement savings and it affects negatively the GDP growth.

Debt service has a negative impact on GDP growth as expected complying with the fact that as more money is used for debt service (principal and interest), little is left for productive investments. In answering research question two, the results have shown that debt servicing has negatively affected GDP growth. On the other hand export growth has a positive and significant impact on growth. This provides a lesson to Tanzania that there is a need to expand export volumes and export quality by diversifying the exports. This means to expand the export of manufactured products which are able to compete in the world market and reduce the exports of primary products which face deteriorating terms of trade.

Furthermore, sum of the coefficients of aid and of the interaction term between the time dummy and aid is negative (-0.22-0.04=-0.26). This implies that foreign aid had more negative impact on GDP growth in the 1990s relative to the early 2000s. This may be attributable to the fact that during the 1990s more aid was provided in project form which had a negative impact on savings as the country had to fund the recurrent budget of the numerous projects. From the early 2000s, more aid has been provided in form of programme aid especially in form of debt relief and budget support. Programme aid is likely to have a greater contribution to growth because the government has freedom to decide which kind of investments to undertake despite some policy conditions attached to programme aid.

Table 4.2 GDP growth and aid in the 1990s and 2000s

Variable	Coefficient	Standard error	P> t
constant	9.0	0.9828551	0.000
La	-0.2202293	0.092931	0.056
Lsns	0.1581798	0.843527	0.110
Ldsn	-0.4642091	0.301873	0.175
Leg	0.0598982	0.0203524	0.026
DtLa	-0.0398083	0.667522	0.573
R-squared	0.9814		
Adjusted R-squared	0.9659		

Source: World Bank, World Development Indicators 2006.

Note: the t-statistics are in brackets beneath the coefficients and the coefficients are significant at 5 % level (or 95 % confidence interval)

4.4 Government Expenditures on Foreign Aid Resources

4.4.1 Descriptive Data Analysis

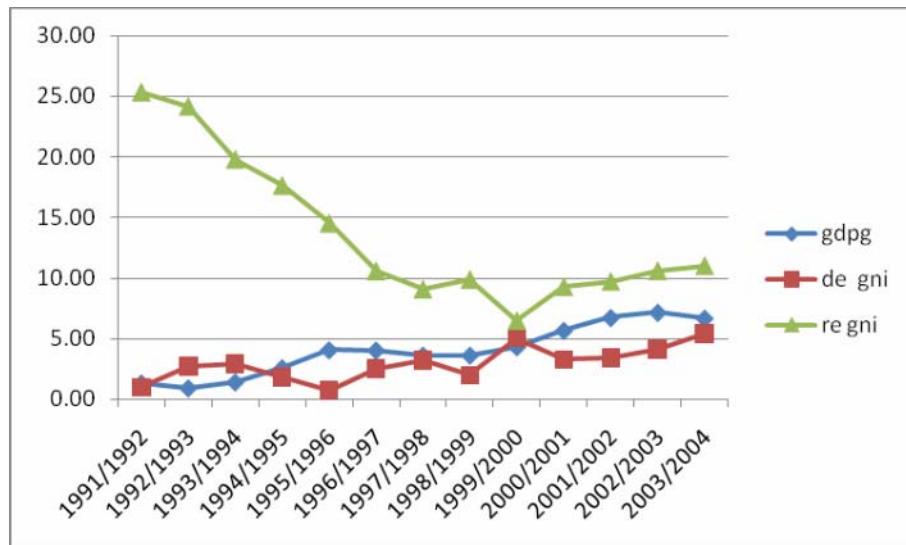
The analysis of the impact of aid for development expenditures and aid for recurrent expenditures has been made by extracting data from the Tanzania's economic survey 2005, and from the World Bank, WDIs 2006. Data on aid for development expenditures were extracted from table 25 on Tanzania's government finance reported under the 2005 economic survey²³. The data analysed are for the period 1991/1992 to 2003/2004. The data on aid for development expenditures which were in Tanzanian shillings were converted into current US dollars by using average annual exchange rates from the US's Intelligence Agency World Fact Books for various years (data for year 1997, 2000 and 2005)²⁴.

Using the data on aid as % of GNI and the GNI data from the WDI, 2006, total aid in US \$ millions were calculated. Data on total aid in calendar years were changed to financial years by calculating the average between two successive calendar years (example the data for 1991/1992 was obtained by adding aid for 1991 and 1992 and divided by two). Exchange rate in financial years were obtained by calculating the average exchange rates in calendar years in order to be able to convert Tanzania's data on aid for development expenditures into current US \$ millions. Data on aid for recurrent expenditures were obtained by subtracting data on aid for development expenditures from total aid in financial years. In addition, the data of aid for development expenditure % GNI and aid for recurrent expenditures % GNI were calculated using the calculated GNI in financial years.

The data on aid for development and recurrent expenditures as % of GNI and the GDP growth rates are plotted in figure 4.4. From this figure it is observed that recurrent expenditures were very high in the early 1990s with the maximum 25 % of GNI for the period under study. From 1992/1993 recurrent expenditures declined sharply to a minimum of 6.46 % of GNI in 1999/2000. This trend may be explained by the implementation of structural adjustment policies which required Tanzania to reduce its budget deficit especially by cutting the recurrent expenditures.

However, FA for recurrent expenditures started to rise from 2000/2001 with the maximum of 11 % of GNI in 2003/2004 for the period under study. This trend may be attributed to the implementation of the Millennium Development Goals (MDGs) whereby donors' emphasis were directed to social expenditures particularly health, education and water. The changing direction of donors' emphasis was in line with the objective to meet the MDGs which include reducing by half the poverty levels in poor countries by the year 2015.

Fig.4.4 Tanzania's development and recurrent expenditures (1991/92 to 2003/04)



Source: MPEE, Tanzania and World Bank, WDI, 2006.

Key:

gdpg = GDP growth (annual %)

de gni = aid for development expenditures as % of GNI

re gni = aid for recurrent expenditures as % of GNI

MPEE = Ministry of Planning, Economy and Empowerment

Notes:

Data for GNI and GDP growth were taken from the World Bank, WDI 2006.

On the other hand, aid for development expenditures shows an increasing trend on average, although there was a sharp decline in 1995/1996 where it reached 0.74 % of GNI. This trend may be explained by the country's failure to sign the Enhanced Structural Adjustment Facility (ESAF) agreement with the IMF which eroded donors' confidence and resulted in the overall decline of FA to Tanzania. However, from 1996/97 there was an increasing trend in aid for development expenditures. This is connected to the country's signing of the ESAF agreement in 1996 which restored donors' confidence. Another factor for the restored donors' confidence was the coming into power of the third phase government under President Benjamin W. Mkapa in 1995. This government was committed to the implementation of economic reforms which were advised by the donor community particularly the WB and the IMF.

GDP growth and aid for development expenditures have a negative relationship as they seem to move in opposite direction. The implication for this negative relationship is that even the development expenditures undertaken by the government for the period under study, had no significant positive impact on economic growth. However under normal circumstances they are supposed to have a positive relationship. On the other hand, GDP

growth and aid for recurrent expenditures show a negative relationship in the 1990s because recurrent expenditures directed to government consumption has no direct impact on growth. However, the two variables show a positive relationship from 1999/2000. This can be explained by the improvement in human capital through increased government's expenditures on health and education from that period.

4.4.2 Econometric Data Analysis

An analysis of the impact of aid for development and recurrent expenditures on GDP growth has been made by using the data from WB, WDI 2006 and the government finance data from the economic survey for 2005 as elaborated in section 4.4.1. As the financial years were not recognised by stata 10 (a statistical tool for data analysis), the analysis has used the initial years in the financial years as the years of analysis. For example, the year 1991/1992 was considered as 1991 for simplicity. Also the GDP figures from the WDI, 2006 were converted into financial years by calculating the average GDP growth between two successive years.

Data for aid was disaggregated into government's development and recurrent expenditures of FA resources to look at their impact on GDP growth. The dependent variable is the GDP growth and explanatory variables are development and recurrent expenditures lagged for one year and other variables as defined in section 4.3.1. Conversely, the analysis of the impact of government's development expenditures has been made by differentiating its impact on growth in the 1990s and 2000s. The estimation of the interaction term between aid for development expenditures and the time dummy was done to capture the impact of development expenditures on GDP growth in the 1990s and early 2000s.

Model specification

The model was specified as follows:

$$gdpg = \beta_0 + \beta_1 Ldeg ni + \beta_2 Lregni + \beta_3 Lnns + \beta_4 Ldsn + \beta_5 Leg + \beta_6 DtLdeg ni$$

Where

gdpg = GDP growth (annual %)

deg ni = aid for development expenditures as % of GNI

regni = aid for recurrent expenditures as % of GNI

eg = exports of goods and services (annual % growth)

nns = net national savings (percentage of GNI)

dsn = total debt service (percentage of GNI)

L = implies that variables are lagged for one year

Dt deg ni = the interaction term of the time dummy and aid for

development expenditures
(Time dummy is defined as 1 for 1990 to 1999 and 0 for 2000 to 2004)

β_s = are the estimated coefficients

ε = error term

GNI = Gross National Income

Table 4.3: GDP growth and government spending on foreign aid in the 1990s and 2000s

Variables	Coefficient	Standard error	P> t
constant	9.840611	.7033529	0.000
Ldegri	-.3199844	.1479064	0.083
Lregni	-.2466136	.0578709	0.008
Lnns	.1613697	.0809855	0.103
Ldsn	-.661031	.254175	0.048
Leg	.06857	.0138032	0.004
DtLdegri	-.0711166	.1519946	0.660
R-squared	0.9841		
Adjusted R-squared	0.9650		

Source: World Bank, WDI 2006.

Notes: the t-statistics are in brackets beneath the coefficients in the estimated equation.

Results presentation and analysis

The estimated equation with the t-statistic values in brackets is as follows:

$$\begin{aligned}
 gdp_g = & 9.84 - 0.32Ldegri - 0.25Lregni + 0.16Lnns - 0.66Ldsn + \\
 & (13.99) \quad (-2.16) \quad (-4.26) \quad (1.99) \quad (-2.60) \\
 & 0.7Leg - 0.07DtLdegri \\
 & (4.97) \quad (-0.47)
 \end{aligned}$$

Regression results reported in table 4.2 show that foreign aid for development expenditures has a negative impact on growth as already explained in section 4.4.1. This may be attributed to the type of investments made by the government. Investments in infrastructures are vital for productive activities but they should be accompanied by investments in direct productive activities particularly in the manufacturing sector. Aid for recurrent expenditures has a negative and significant impact on growth as expected because recurrent expenditures reduce government resources needed for investments. The net national savings continue to have a positive impact though insignificant. Total debt service has a negative impact on GDP growth as already discussed but now turns to be significant. Export growth continues to have a positive and significant impact on GDP growth.

However, the sum of the coefficient of aid for development expenditures and interaction term between the time dummy and aid for development expenditures is negative (-0.32-0.07=-0.39). This indicates that, on average aid for development expenditures had more negative impact on GDP growth in the 1990s relative to early 2000s. This phenomenon may be attributed to the fact that in the 1990s aid for development expenditures was mainly provided in the form of investment projects which were associated with some weaknesses such as tied aid and high degree of aid fungibility associated to project aid. To answer the third research question, the study has shown that government's spending of foreign aid resources for development and recurrent expenditures has negatively affected GDP growth.

4.4 Conclusion

The results have shown that FA in general, has a negative impact on GDP growth for the case of Tanzania. The analysis has shown that both development and recurrent government's expenditures on FA resources have a negative impact on GDP growth. This may be attributed to the fact that more aid is used to finance social expenditures and less is used for investment in direct productive sectors such as manufacturing. Export growth has a positive impact on GDP growth, therefore Tanzania needs to increase exports especially by diversifying from exporting primary products to manufactured products. Also the negative effects of FA to economic growth may be attributed to debt service as the results have shown that debt service has a negative impact on GDP growth. Despite the expected positive contribution of FA on economic growth, there are many problems attached to the achievement of this objective. Some of these include aid fungibility, corruption, and donors' conditionality which can hinder the effectiveness of FA in bringing growth.

Chapter 5

CONCLUSION AND POLICY RECOMMENDATIONS

5.1 Conclusion

The study has used data for the period from 1990 to 2004 to analyze the impact of FA on GDP growth in Tanzania. The first equation in chapter four was used to estimate the impact of FA, in aggregate, to GDP growth. Other variables which were included in the model were net national savings, total debt service and export growth (all variables were expressed as percentage of GNI). The results have shown that foreign aid has a negative and significant impact on GDP growth. Also the total debt service has shown a negative impact on GDP growth as debt servicing reduces resources for investments. On the other hand, net national savings and export growth have demonstrated a positive impact on GDP growth.

The second equation was used to estimate the impact of government's spending of aid resources on GDP growth. Government spending of FA was disaggregated in form of development and recurrent or non-development expenditures. These government expenditure variables were combined with other variables in equation one (as already defined) to evaluate their impact on GDP growth for the period under study. The results have shown that government's spending of foreign aid for development and recurrent expenditures have a negative impact on GDP growth. This observation implies that development expenditures made by the government were not enough or were not productive enough to have a positive contribution to economic growth. Other variables maintained the same trends as already explained above. Furthermore, the study has shown that aid in aggregate and aid for development and recurrent expenditures has more negative impact on GDP growth in the 1990s compared to the early 2000s.

5.2 Policy Recommendations

The results from this study have very important policy implications which necessitate the following policy recommendations.

Despite the country's little domestic revenues, borrowing needs to be minimized and efforts to increase domestic revenues need to be increased so as to reduce debt servicing burden which has shown a negative impact on growth.

There is a need to increase export growth and export diversification as the study has shown that export growth has a positive and significant impact on GDP growth. Increased revenues from exports will enable the country to undertake new investments and to reduce its dependence on foreign aid resources.

There is a need to increase national savings in order to accumulate enough resources for investments.

The government needs to make a proper scrutiny on the types of its investments so as to make development expenditures more productive and be able to contribute positively to economic growth.

Finally, since the study has shown that aid in aggregate has a negative impact on GDP growth, there is a need to address the weaknesses which have hindered aid effectiveness in contributing to growth. Some of these weaknesses include aid fungibility, the Dutch disease effect, aid tying, corruption and policy conditionality imposed by donors. The donor community and Tanzanian government need to work in partnership in addressing these weaknesses in order to make aid achieve its intended objectives of increasing economic growth and reducing poverty.

Notes

- 1 See <http://www.mapsofworld.com/world-top-ten/world-top-ten-poorest-countries-map.html>
- 2 See http://www.photius.com/rankings/index_2006.html
- 3 Budget speech for 2005/2006 indicates that the government budget for Tanzania was dependent on foreign aid by 41 percent.
- 4 Henrik Hansen and Finn Tarp in Finn Tarp and Peter Hjertholm (2000)
- 5 Rahman (1968) and Weisskof (1972) cited in (ibid)
- 6 See Robert Cassen and Associates (1994:2)
- 7 For a detailed argument see Chenery and Strout (1966)
- 8 Chenery H. B and Strout A. (1966)
- 9 Griffin K. B and Enos J.L (1970)
- 10 Weisskof T.E (1972)
- 11 See Gallagher 1994 as cited by Peter Hjertholm et al in Finn Tarp, 2000.
- 12 The model was estimated in the article titled Aid, savings and growth revisited (Mosley P (1980) but the equation has been copied from Mosley P (1987: 130).
- 13 This report is found at <http://www.tanzania.go.tz/economicsurveyf.html>
- 14 However the variable of literacy rate and private foreign inflows are not considered from Mosley's model instead the total debt service variable is added as Tanzania is seriously affected by debt overhang.
- 15 These problems are explained in detail by Peter Hjertholm et al in Tarp, F. and P. Hjertholm 2000 (p. 353 – 361)
- 16 (Krugman, 1988; Sachs, 1989) as cited in Pattillo C , et al (2005:4) IMF WP/02
- 17 This is an economics discussion paper number EDP 0501 by the University of Manchester (http://www.socialsciences.manchester.ac.uk/disciplines/economics/research/discussionpapers/pdf/Discussion_paper_0501.pdf)
- 18 This definition comes from the UN General Assembly resolution 46/82 as referred in Riddell 2007:311
- 19 These figures are quoted from African Economic Outlook 2006/2007 p.501.
- 20 As defined in the World Bank Report 'Budget Support as More Effective Aid?' (World Bank 2006: 5) edited by Koeberles et al.
- 21 As defined in the World Bank report (2006:5) titled, Budget Support as More Effective Aid? Recent experiences and emerging lessons.
- 22 The GBS facility is financed by 14 development partners who are the African Development Bank (Af DB), Canada, Netherlands, Denmark, European Commission, Finland, Germany, Ireland, Japan, Norway, Sweden, Switzerland, the United Kingdom and the World Bank
- 23 The website for this report is at <http://www.tanzania.go.tz/economicsurvey1/2005/tables/table25.html>
- 24 Websites for these exchange rates data are provided in the notes for appendix 5.

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Website for the data from 1989 to 2007 at
<http://www.theodora.com/wfbcurrent/tanzania/index.html>

APPENDICES

Appendix 1 : ODA Receipts for Africa 2002-2006

		Net ODA Receipts (USD Million)				
	2002	2003	2004	2005	2006	
<i>NORTH OF SAHARA</i>						
Algeria	328	234	314	371	209	
Egypt	1 237	987	1 456	995	873	
Libya (d)	-	-	-	24	37	
Morocco	486	539	707	694	1 046	
Tunisia	265	298	328	365	432	
North of Sahara, regional	29	112	181	141	144	
North of Sahara, Total	2 346	2 170	2 986	2 591	2 740	
<i>SOUTH OF SAHARA</i>						
Angola	414	493	1 145	437	171	
Benin	216	295	386	346	375	
Botswana	37	28	47	48	65	
Burkina Faso	471	507	624	681	871	
Burundi	172	227	362	365	415	
Cameroon	656	895	773	417	1 684	
Cape Verde	92	143	143	162	138	
Central African Rep.	60	51	110	96	134	
Chad	228	247	329	382	284	
Comoros	32	24	25	25	30	
Congo, Dem. Rep.	1 175	5 416	1 824	1 827	2 056	
Congo, Rep.	57	69	115	1 444	254	
Côte d'Ivoire	1 068	254	161	110	251	
Djibouti	78	79	64	76	117	
Equatorial Guinea	20	21	30	38	27	
Eritrea	230	316	264	355	129	
Ethiopia	1 297	1 594	1 806	1 910	1 947	

Gabon	72	- 11	40	52	31
Gambia	60	63	55	61	74
Ghana	648	950	1 375	1 125	1 176
Guinea	249	240	272	199	164
Guinea-Bissau	59	145	77	79	82
Kenya	391	521	654	767	943
Lesotho	76	79	96	69	72
Liberia	52	107	213	233	269
Madagascar					
	369	539	1 248	914	754
Malawi					
	376	513	501	578	669
Mali	466	543	568	699	825
Mauritania	344	238	181	196	188
Mauritius	24	- 15	32	34	19
Mayotte	125	166	208	201	338
Mozambique	2 201	1 037	1 235	1 277	1 611
Namibia	134	146	173	115	145
Niger	297	457	541	511	401
			578		
Nigeria	294	308		6 416	11 434
Rwanda	354	335	486	571	585
Sao Tome & Principe	26	38	33	32	22
Senegal	445	447	1 037	672	825
Seychelles	8	9	10	15	14
Sierra Leone	353	304	354	344	364
Somalia	191	174	200	237	392
South Africa	505	641	628	680	718
St. Helena	14	18	26	23	28
Sudan	343	613	992	1 832	2 058
Swaziland	22	34	22	46	35
Tanzania	1 236	1 704	1 751	1 481	1 825
Togo	51	50	64	83	79

Uganda	710	976	1 194	1 177	1 551
Zambia	639	589	1 125	935	1 425
Zimbabwe	199	186	186	376	280
South of Sahara, regional	969	1 362	1 424	1 116	1 581
South of Sahara, Total	18 605	24 166	25 790	31 867	39 922
Africa, regional	416	449	564	698	740
AFRICA, TOTAL	21 367	26 784	29 341	35 156	43 402

Source: OECD database.

Notes; this table was extracted from table 25: ODA Receipts and Selected Indicators for Developing Countries and Territories. (<http://www.oecd.org/dataoecd/52/12/1893167.xls>)

Appendix 2: Programme and Project Aid to Tanzania (1990 to 2001)

Year	GDP (Cur. US \$mns)	Proj. Aid (cur. US \$mns)	proj % GDP	Progr. Aid (cur. US \$ mns)	prog % GDP	GDP growth(%)
1990	4,258.74	872.93	20.5	92.12	2.16	7.05
1991	4,956.60	749.26	15.12	124.46	2.51	2.07
1992	4,601.41	852.66	18.53	255.45	5.55	0.58
1993	4,257.70	639.58	15.02	74.91	1.76	1.21
1994	4,510.85	626.66	13.89	130.21	2.89	1.57
1995	5,255.24	514.94	9.8	97.47	1.85	3.57
1996	6,496.16	548.93	8.45	74.41	1.15	4.56
1997	7,683.88	524.58	6.83	201.98	2.63	3.51
1998	8,382.54	516.23	6.16	293.54	3.5	3.71
1999	8,637.56	825.61	9.56	15.79	0.18	3.53
2000	9,079.26	689	7.59	180.38	1.99	5.10
2001	9,440.94	880.23	9.32	198.67	2.1	6.24

Source: OECD database and the World Bank, World Development Indicators, 2006

Notes:

Proj= project aid; prog= programme aid.

GDP and GDP growth rate data are from the World Development Indicators, 2006.

Project and Programme aid data are in current US \$ millions

Project and programme aid data were from the data base created by Ouattara B, 2005 , appendix tables 1 & 2 found at

www.socialsciences.manchester.ac.uk/disciplines/economics/research/discussionpapers/pdf/Discussion%20paper%200501.pdf

Appendix 3: Technical Cooperation, Developmental Food Aid and Humanitarian Aid to Tanzania from 1993 to 2004

Year	GDP (current US \$mns)	TC (current US \$ mns)	TC (%OF GDP)	DFA(current US \$ mns)	DFA (%OF GDP)	HA	HA (% OF GDP)
1993	4,257.70	229.94	5.40	3.72	0.09	na	Na
1994	4,510.85	203.03	4.50	8.46	0.19	na	Na
1995	5,255.24	256.73	4.89	15.53	0.30	4.35	0.08
1996	6,496.16	246.84	3.80	7.05	0.11	2.09	0.03
1997	7,683.88	217.15	2.83	6.44	0.08	9.86	0.13
1998	8,382.54	189.81	2.26	6.88	0.08	9.98	0.12
1999	8,637.56	148.34	1.72	11.45	0.13	21.02	0.24
2000	9,079.26	149.97	1.65	7.77	0.09	29.94	0.33
2001	9,440.94	151.82	1.61	4.86	0.05	31.22	0.33
2002	9,772.49	177.69	1.82	16.48	0.17	38.11	0.39
2003	10,296.81	157.91	1.53	17.75	0.17	67.63	0.66
2004	10,851.29	179.52	1.65	3.94	0.04	61.49	0.57

Source: OECD/DAC database 2008, table 2a

Notes:

TC= Technical Cooperation, DFA= Development Food Aid and HA= Humanitarian Aid.

na- implies that data was not available for the respective years.

Data for form of aid in this table are in current US dollars in millions

The OECD database can be seen at (

<http://stats.oecd.org/WBOS/Index.aspx?DatasetCode=CRSNEW>

Appendix 4: Tanzania's government revenues and expenditures 1991/92 to 2003/04

	Tshs millions													
	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
A. DOMESTIC REVENUE	173566	164109	242444	331239	448373	572030	627500	689325	777644	929625	1042945	1217517	1459303	
1. Tax Revenue	153356	146420	220358	299899	383744	505355	586164	616284	685106	827789	938478	1105746	1342798	
Import Duty and Excise Duty	38617	31637	50229	81926	131397	176773	187375	171993	178000	250397	266322	293695	352320	
Sales Tax (local & imports)	57884	46117	70388	81965	84558	115278	145371	0	0	0	0	0	0	
Value Added Tax (VAT)	0	0	0	0	0	0	0	208579	222341	301983	351894	424338	548572	
Imports			0	0	0	0	0	104551	109312	182143	208675	249854	315958	
Domestic			0	0	0	0	0	104029	113029	119840	143219	174484	232614	
Income Tax	40143	45455	58505	86645	103871	125716	156951	162355	209712	194013	219852	276050	366651	
Other Taxes	16712	23211	41236	49363	63918	87588	96467	73356	75053	81396	100410	111663	123500	
Refunds Accounts													-48245	
2. Non-Tax Revenue	20210	17689	22086	31340	64630	66675	41336	73041	92538	101836	104467	111771	116505	
B. TOTAL EXPENDITURE	223770	337895	410533	453393	500116	730878	856177	927732	1168778	1307214	1462767	1989538	2516943	
1. Recurrent Expenditure	191165	273185	335844	386573	470014	606308	669592	791208	808865	1020961	1118156	1488641	1780115	
2. Development Expenditure	32605	64710	74689	66820	30102	124570	186585	136524	359913	286253	344611	500897	736828	
Local Funds	20600	23440	18678	20000	5382	20229	24027	18808	19429	35069	50236	95662	133041	
Foreign Funds	12005	41270	56011	46820	24720	104341	162558	117716	340484	251184	294375	405235	603787	
C. DEFICIT/SURPLUS (A-B)	-50204	-173786	-168089	-122154	-51743	-158848	-228677	-238407	-391134	-377589	-419822	-772021	-1057640	

Source: The former Ministry of Planning, Economy and Empowerment .

Notes:

Data were obtained from table 25 of Tanzania's Economic Survey, 2005 available at <http://www.tanzania.go.tz/economicsurvey1/2005/tables/table25.html>

Appendix 5: Calculated total aid for Tanzania 1990 to 2004

Year	GNI(US \$ mns)	Aid (% GNI)	Total aid(calculated)	Exchange rate
1990	4,072	28.81	1173.19	195.06
1991	4,771	22.64	1079.93	219.16
1992	4,414	30.33	1338.95	297.71
1993	4,093	23.21	949.89	405.27
1994	4,357	22.16	965.66	509.63
1995	5,130	17.1	877.32	574.76
1996	6,378	13.75	877.05	579.98
1997	7,562	12.49	944.67	612.12
1998	8,277	12.08	1000.13	664.67
1999	8,542	11.59	990.08	744.76
2000	8,958	11.41	1021.94	800.41
2001	9,355	13.59	1271.13	876.41
2002	9,720	12.68	1232.63	924.7
2003	10,244	16.63	1703.74	1038.42
2004	10,801	16.17	1745.99	1089.33

Source: World Bank, WDI 2006 and the US's CIA World Fact Books

Notes: formula for calculating total aid= (GNI * aid% GNI)/100

Notes for table 5 continued:

Exchange rates for years 1990 to 2004 were obtained from the US's Central Intelligence Agency (CIA's) world fact books titled Countries of the world – 20 years of CIA World Fact Books (<http://www.theodora.com/wfb/>)

Data for exchange rate for specific years are as follows:

1990 to 1994 (data for year 1997) at http://theodora.com/wfb/tanzania_economy.html

1995 to 1999 (data for year 2000) at http://www.photius.com/wfb2000/countries/tanzania/tanzania_economy.html

2000 to 2004 (data for year 2005) at http://www.allcountries.org/wfb2005/tanzania/tanzania_economy.html

Appendix 6: Development and Recurrent Expenditures for Tanzania 1991/1992 to 2003/2004

Financial year	Average ER	DE in Tshs	DE in US \$		RE US mns	GNI US mns	Dev exp (% GNI)	Recur. Exp. (% GNI)	TA (% GNI)	Ave. GDP g
			mns	TA US mns (calc.)						
1991/1992	258.435	12005	46.45	1209.44	1162.99	4592.5	1.01	25.32	26.34	1.33
1992/1993	351.49	41270	117.41	1144.42	1027.01	4253.5	2.76	24.15	26.91	0.90
1993/1994	457.45	56011	122.44	957.78	835.33	4225	2.90	19.77	22.67	1.39
1994/1995	542.195	46820	86.35	921.49	835.14	4743.5	1.82	17.61	19.43	2.57
1995/1996	577.37	24720	42.81	877.19	834.37	5754	0.74	14.50	15.24	4.06
1996/1997	596.05	104341	175.05	910.86	735.81	6970	2.51	10.56	13.07	4.03
1997/1998	638.395	162558	254.64	972.40	717.77	7919.5	3.22	9.06	12.28	3.61
1998/1999	704.715	117716	167.04	995.11	828.07	8409.5	1.99	9.85	11.83	3.62
1999/2000	772.585	340484	440.71	1006.01	565.30	8750	5.04	6.46	11.50	4.31
2000/2001	838.41	251184	299.60	1146.54	846.94	9156.5	3.27	9.25	12.52	5.67
2001/2002	900.555	294375	326.88	1251.88	925.00	9537.5	3.43	9.70	13.13	6.74
2002/2003	981.56	405235	412.85	1468.18	1055.34	9982	4.14	10.57	14.71	7.17
2003/2004	1063.875	603787	567.54	1724.86	1157.33	10522.5	5.39	11.00	16.39	6.69

Source: World Bank, WDI 2006 and The former Ministry of Planning, Economy and Empowerment, Tanzania.

Appendix 7: GDP growth, aid, savings, debt service, export growth and government's aid spending

Year	gdpg	a	nns	dsn	eg	degni	Regni
1991/1992	1.33	26.48	4.27	4.80	6.20	1.01	25.32
1992/1993	0.90	26.77	1.46	5.23	26.42	2.76	24.15
1993/1994	1.39	22.69	2.96	4.68	20.74	2.90	19.77
1994/1995	2.57	19.63	1.61	4.37	22.09	1.82	17.61
1995/1996	4.06	15.43	-1.58	4.38	16.51	0.74	14.50
1996/1997	4.03	13.12	0.33	3.23	-12.23	2.51	10.56
1997/1998	3.61	12.29	-1.77	2.55	-7.50	3.22	9.06
1998/1999	3.62	11.84	-3.07	2.76	1.57	1.99	9.85
1999/2000	4.31	11.50	1.64	2.28	5.00	5.04	6.46
2000/2001	5.67	12.50	4.80	1.77	15.75	3.27	9.25
2001/2002	6.74	13.13	6.26	1.37	9.35	3.43	9.70
2002/2003	7.17	14.66	4.52	1.00	4.85	4.14	10.57
2003/2004	6.69	16.40	0.72	1.00	-0.60	5.39	11.00

Source: World Bank, WDIs and the former Ministry of Planning, Economy and Empowerment.