

**Impact of Programme versus Project Aid on Economic Growth in Sub Sahara Africa**

**By**

**ENIA DAMBUDZO RUGARE**

**THESIS**

Submitted to

KDI School of Public Policy and Management

In partial fulfilment of the requirements

for the degree of

**MASTER OF DEVELOPMENT POLICY**

2016

**Impact of Programme versus Project Aid on Economic Growth in Sub Sahara Africa**

**By**

**ENIA DAMBUDZO RUGARE**

**THESIS**

Submitted to

KDI School of Public Policy and Management

In partial fulfilment of the requirements

for the degree of

**MASTER OF DEVELOPMENT POLICY**

2016

Professor Kye Woo Lee

**Impact of Programme versus Project Aid on Economic Growth in Sub Sahara Africa**

**By**

**ENIA DAMBUDZO RUGARE**

**THESIS**

Submitted to

KDI School of Public Policy and Management

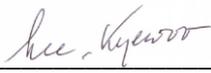
In partial fulfilment of the requirements

for the degree of

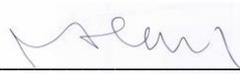
**MASTER OF DEVELOPMENT POLICY**

Committee in charge:

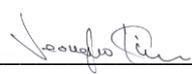
Professor Kye Woo LEE, Supervisor

  
\_\_\_\_\_

Professor Baran HAN

  
\_\_\_\_\_

Professor Jeong-Ho KIM

  
\_\_\_\_\_

Approval as of December, 2016

## **ACKNOWLEDGEMENTS**

I would like to express my profound gratitude to my supervisors, Professor Kye Woo Lee, and Professor Han Baran for their invaluable guidance and support throughout this study. My special acknowledgement goes to my husband, Joyful Tatenda Rugare, and my kids, Anotidaishe and Mukundi Rugare for their immeasurable support during my entire stay in Korea. Lastly but not least, I would like to thank KOICA and the KDI School of Public Policy and Management for granting me the opportunity to study in Korea, and ensuring that my stay in Korea was smooth and memorable.

## TABLE OF CONTENTS

INTRODUCTION .....	1
1.1 Purpose.....	1
1.2 Statement of the problem .....	1
1.3 Significance of study.....	2
1.4 Research questions.....	4
1.5 Hypothesis and assumptions .....	5
1.6 Research Method .....	6
1.7 Data and sample .....	6
1.8 Organisation of the study .....	6
CHAPTER 2 .....	7
LITERATURE REVIEW .....	7
2.1 Empirical review of the impact of project and programme aid on economic growth.....	7
2.2 Empirical review on the effectiveness of Programme aid .....	9
2.3 Theoretical review on the effectiveness on project and programme aid.....	11
2.31 <i>Project aid is preferred over programme aid</i> .....	11
2.32 <i>Programme aid is preferred over project aid</i> .....	11
2.4 Conclusion .....	14
CHAPTER 3 .....	16
METHODOLOGY .....	16
3.1 Model 1 .....	16
3.2 Model 2 .....	17
3.3 Analysis Methodology .....	17
3.4 Sample selection and Data .....	17
3.5 Variables .....	19
CHAPTER 4 .....	21
RESULTS AND DISCUSSION .....	21
4.1 Model 1 .....	21
4.2 Model 2 .....	24
CHAPTER 5 .....	27
CONCLUSION AND RECOMMENDATIONS.....	27
5.1 Conclusion .....	27
5.2 Policy Recommendations.....	27
REFERENCES .....	30

## ABSTRACT

As the ongoing debate on aid effectiveness takes a new trail of assessing the efficiency of aid in a disaggregated manner rather than aggregate aid as done in the past, this study seeks to compare how aid delivery modalities affect economic growth. The study analyses the relative effectiveness of programme and project aid effectiveness in promoting economic growth in the Sub Sahara Africa region, one of the world's poorest region, yet claimed to be the leading beneficiary of foreign aid. Programme aid is allegedly more effective in promoting growth and poverty reduction than project aid since it entails the building of local capacity as well as, strong partnerships between donors and recipient countries. Project aid is blamed for aid fragmentation, and misalignment of aid funded activities with national priorities. To prove the better modality for aid effectiveness, two growth models are estimated using panel data from 41 Sub Sahara African countries for the period 2005 to 2014. In the first model, total aid is disaggregated into programme and project aid variables to see how they relate with growth, and in the second model the aid variables are interacted with policy to see how policy affects their effectiveness on growth. The findings show that indeed programme aid is effective in promoting growth in the Sub Sahara region, though it has diminishing marginal returns on growth. Project aid is shown to have no effect on growth on its own, but will positively affect growth in good policy environments as shown by the positive marginal effect of project aid on growth when it is interacted by policy. The study concludes with a discussion on the application of programme aid and policy recommendations for aid effectiveness in Sub Sahara Africa.

# CHAPTER 1

## INTRODUCTION

### 1.1 Purpose

The purpose of this study is to analyse and compare which aid delivery modality between programme and project aid is more effective in promoting economic growth in the Sub Sahara African (SSA) region. The better modality would then be strategically applied to achieve aid effectiveness in the region.

### 1.2 Statement of the problem

Being host to a large part of the world's "bottom billion", the Sub Saharan Africa region has attracted significant foreign aid over the years. The region is claimed to be the leading beneficiary of foreign aid globally. Since 1960, the region received over US\$568 billion through foreign aid, representing roughly 15% of the African continent GDP (Douznet and Urbain, 2013). Despite these huge inflows, the region's economic development has very much been subdued, and as a result, the region hosts most of the world's poorest countries. Most of the SSA countries are faced with high unemployment and poverty levels, high mortality rates, low levels of education and limited access to health care facilities (Ogundipe, Ojeaga, & Ogundipe, 2014).

The SSA experience differs from some developing countries such as China, where an increase in aid from 0.2% in 1980 to 3% in 1985 resulted in an increased economic growth rate from approximately 6% to 12% during the same period, signifying that aid was effective in accomplishing economic growth (Ogundipe et al., 2014).

One potential cause of the aid ineffectiveness in the region could be the fact that aid was not strategically delivered for economic growth. It was delivered without putting consideration on which aid delivery modality between programme and project aid is better

[best] for promoting economic growth. The region receives its aid mostly through programme and project aid modalities with development oriented countries receiving relatively higher program aid than those countries which are not development oriented receiving relatively high project aid.

### **1.3 Significance of study**

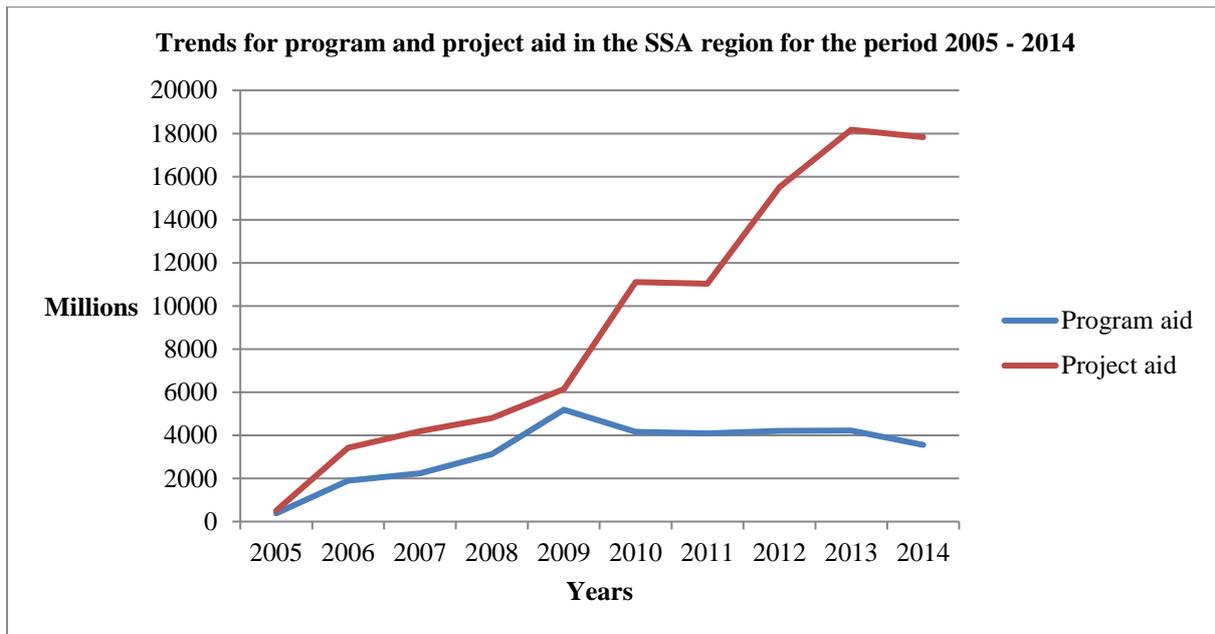
Aid can be applied in two ways to contribute to poverty reduction. One way is to allocate the aid directly to the people, and the other one is through economic growth. In his survey of empirical studies on aid paradigm for poverty reduction, Weiss (2008) found out that economic growth was the major factor behind poverty reduction in developing countries. Thus one way of reducing poverty effectively in SSA will be to ensure that the foreign aid delivered to this region promotes economic growth. This can be done through adopting pro-poor growth strategies which are broad and inclusive. As the ongoing debate on aid effectiveness takes a new path in assessing the efficiency of aid in a disaggregated manner rather than aggregate aid as in the past, it is therefore, critical to compare how aid delivery modalities affect economic growth so that the best modality for promoting economic growth can be adopted.

Of late program aid has been promoted as a preferable aid delivery modality over other alternatives including project aid because it is believed to: increase local ownership of development programs; improve local accountability through use of country systems, make aid inflows more predictable; and reduce transaction costs (European Commission, 2013). Moreover, assessments of program aid in supporting public sector reforms affirms its ability to improve recipient countries' public finance systems and improving capacity in policy making processes (Independent Evaluation Group, 2008). In Mali for example, program aid contributed to the achievement of an average economic growth of 5% during the implementation period of the Joint Budget Support Programme from 2003 to 2009. This

achievement is believed to have been anchored on the sound macroeconomic policies pursued as well as a significant increase in budget resources coming through program aid (OECD DAC Joint Evaluation, 2011).

On the other hand, despite being the mostly favoured delivery modality by donors, project aid has been touted as ineffective in promoting economic growth in recipient countries, as it leads to the proliferation of parallel management systems within or outside the public administration, which impedes smooth coordination, planning and budgeting, of aid financed operations. Furthermore, project aid is associated with high transaction costs, policy inconsistencies as each project will tend to have its own priorities which might not be reflective of the national developmental goals, but reflecting the views of the donor and the project staff (Jelovac & Vandeninden, 2008).

The statistical trends on the two modalities for SSA show that the region receives more project aid than program aid, and that the project aid trend is increasing at a faster pace than that of program aid. The seemingly less uptake of program aid in comparison with project aid may imply that donors have not developed confidence in country systems of recipient countries. The prevalent use of the project aid modality at the expense of program aid could be one reason why aid has not been effective in promoting growth in the SSA region since project aid has been shown to be ineffective in promoting growth (Jelovac & Vandeninden, 2008). Figure 1 below shows the program and project aid trends for SSA during the period 2005 to 2014.



Source: OECD Creditor Reporting System

*Figure 1: Program and project aid trends for the SSA region*

Currently, not much empirical work has been done to compare in a formal model the relative effectiveness of programme and project aid in stimulating growth (Cordella and Dell’Ariccia, 2003). This study therefore, wishes to fill in this gap by comparing empirically, the relative effectiveness of program and project aid on economic growth using recent data for the Sub Sahara African region.

#### **1.4 Research questions**

- i. Which aid delivery modality between programme and project aid promotes more economic growth in SSA; and
- ii. Is the impact of programme or project aid on growth conditional on economic policies.

## **1.5 Hypothesis and assumptions**

With the assumption that donors allocate aid resources for purely developmental purposes, the hypothesis of this study is that programme aid is more effective in promoting economic growth than project aid in the Sub Sahara Africa region.

Programme aid entails building of strong partnerships between donors and recipient countries, involves participatory development and country ownership of aid funded programmes. It also gives basis for mutual accountability between donors and recipient countries, as well as use of country systems, which are the key principles of aid effectiveness (Paris declaration on aid effectiveness (2005)).

Most SSA countries are signatories to the Paris Declaration and are working towards building strong partnerships with donors for aid effectiveness. The 2011 OECD report on implementation of the Paris declaration during the period 2005 to 2010 showed that notable progress had been made by both donors and recipient countries in implementing the Paris declaration on aid effectiveness, though most of the targets were unmet. This progress and the increased capacity development efforts by donors to increase local capacity for participatory development in the Sub Sahara region (Jones, Bailey, & Lyytikäinen, 2007), position the region at a better place for programme aid effectiveness.

Though by design the insulation of project aid from government manipulation is desirable since it gives donors more power to control the aid funded activities, and ensuring development objectives are met (Gunatilake, 2007), its drawbacks which include, aid fragmentation, lack of ownership by local governments, misalignment of aid objectives to national priorities, and high transaction costs far outweigh the benefits, thereby thwarting project aid's effectiveness in stimulating economic growth.

## **1.6 Research Method**

The study will run regressions to estimate the impact of programme and project aid on economic growth, using panel data from 41 SSA countries for the period 2005 to 2014. The dependable variable will be the growth rate of the real GDP per capita as a proxy for economic growth. Independent variables will be Programme and Project aid as a ratio of GDP, whilst control variables will be; logarithm of initial real GDP per capita, investment, trade, education, life expectancy, economic and institutional policy.

## **1.7 Data and sample**

Panel data for 41 Sub-Sahara African countries will be collected from the World Bank Development Indicators, and the Creditor Reporting System of the OECD.

## **1.8 Organisation of the study**

The paper is outlined as follows: Chapter 2 will discuss the theoretical and empirical literature on aid effectiveness, putting particular emphasis on how programme or project aid affects growth. Chapter 3 will look at the model description, data used, as well as the methodology. Chapter 4 discusses the results and interpretation, whilst, the conclusion and recommendations will be discussed in chapter 5.

## CHAPTER 2

### LITERATURE REVIEW

Literature on the effect of aid on stimulating economic growth has been ambiguous; with some studies claiming that aid promotes growth (Hansen & Tarp 2001; Moreira, 2005), while others declared that aid has a negative (Easterly, 2003) or no impact on growth (Rajan & Subramanian, 2008) or that it can only promote growth under good policy environments and good political institutions (Burnside & Dollar, 2000; Kosack, 2003).

Though much work has been done on determining the impact of aggregate aid on economic growth, most of these studies have neglected a fundamental issue of the functional classification of development aid and how different aid delivery modalities may have different effects on governments' behaviour and the macro economy. Ouattara and Strobl (2004) claimed that ignoring the effects exerted by the different aid delivery modalities may result in aggregation bias in the findings which in turn will mislead policy recommendations. Thus the ensuing review of literature will discuss the rationale and assumptions behind programme and project aid.

#### **2.1 Empirical review of the impact of project and programme aid on economic growth**

Cordella and Dell'Araccia (2003) estimated the impact of project aid and budget support on economic growth, using the Burnside Dollar (2000) methodology and dataset, and data from the OECD Creditor Reporting System for budget support and project aid during the period 1970 to 1993. They also used the GMM estimators to check robustness of their results. They consistently found that neither the budget support nor project aid on their own had significant impact on economic growth. However, when interacted with policy the two modalities become significant, therefore, implying that the relationship between the two modalities and growth is more conditional to policy environment. Furthermore they found

that budget support is more effective than project aid where macroeconomic policies are relatively good and less effective with poor macroeconomic policies.

On the other hand, Ouattara and Strobl (2004) also following the Burnside and Dollar approach and using the Easterly, Levine and Roodman (2003) dataset for the period 1970 to 1997, which is an extension of the Burnside and Dollar dataset, used the GMM systems estimator to compare the effect of programme and project aid on growth. They found that project aid had a positive effect on growth, whilst programme aid had a negative effect. When they interacted the two modalities with policy, the results showed that good policies had no effect on the impact of programme or project aid on growth.

The difference in findings when the two studies basically used the same methodology could have emerged from the fact that the two studies used different forms of data for programme aid and project aid. Despite the point that both studies retrieved their data from the OECD Creditor Reporting System, Cordella and Dell'Araccia (2003) used project aid and budget support data in commitment form, whilst Ouattara and Strobl (2004) converted the data from commitment to net disbursement forms, using a method which assumed that the respective share of programme and project aid in commitment form to the total aid in commitment form was more or less similar to their respective shares in total aid disbursement form.

The Ouattara and Strobl (2004) approach is preferable although not reliable in that it tries to present the two aid variables in a more realistic though not accurate form, because usually what is committed is not be what is disbursed. Thus using data in commitment form as done by Cordella and Dell'Araccia can overestimate the true effect of aid on growth since commitments are normally higher than disbursements (McGillivray & Quattara, 2003).

However, besides the afore mentioned studies, not much empirical work has been done to test and compare the relative effectiveness of budget support and project aid in stimulating economic growth. The limited empirical literature and the mixed findings

highlighted above leave much room for more research on the topic. Thus this study seeks to add to the empirical literature on the relative effectiveness of budget support and project aid in stimulating economic growth, putting focus on one of the leading aid recipient region, the Sub Sahara Africa.

## **2.2 Empirical review on the effectiveness of Programme aid**

As the prominence of programme aid increases, a number of evaluations have been made to assess its effectiveness in some countries where it has been applied. This section discusses the assessment results for three Sub Sahara African countries namely; Mali, Tanzania, and Zambia.

In Mali, programme aid helped in increasing national budget financing and the predictability of aid, promoting efficiency in execution of national policies, facilitating the attainment of sustainable outcomes and economic growth and development. The main lesson from the assessment of the Mali experience was that programme aid was effective when the objective of the aid was to support and monitor the implementation of a given policy, rather than when the objective was to change policy through conditionality (OECD DAC Joint Evaluation, 2011). It was therefore, concluded that programme aid is most effective when used to support well-established national policies, with clear implementation structures and strong political commitment, and that in circumstances where these elements were absent, it was hard to institute them through programme aid (OECD DAC Joint Evaluation, 2011).

Tanzania is one of the largest recipients of programme aid globally, having received approximately US\$5 billion during the period 2005 to 2012 (Budget Support Development Partners' Group, 2015). Tanzania has had 14 donors contributing to its Budget Support programme (programme aid) since 1995. Two main assessments of the programme were conducted for the periods (1995 – 2004) and (2005 – 2012). The first assessment confirmed that programme aid improved the government's ownership of the development process,

through decision making on the use of the aid resources, and that the link between citizens and government was reinforced through parliamentary involvement in the application of aid resources. On the other hand programme aid helped in improving donor harmonisation; where donors synchronised their development efforts and activities with each other (Budget Support Development Partners' Group, 2015).

The second assessment found that in addition to the gains obtained from the first phase, programme aid also made crucial contributions to improve educational, health and financial management quality in Tanzania (Budget Support Development Partners' Group, 2015). However, not much change was registered on capacity building as there was a weak demand from government for technical assistance, which could have arisen from lack of trust of externally financed technical assistance. Overall, the second assessment concluded that, "...neither project funding nor common basket funding could have achieved these same results with the same degree of efficiency, effectiveness and sustainability", as was achieved through programme aid (Joint Independent Evaluation, 2013 pp 114). This conclusion shows that programme aid was considered as the best aid delivery modality for the Tanzanian experience.

For the case of Zambia programme aid increased budgetary finances, facilitated the establishment of a comprehensive dialogue structure between donors and government which helped with strengthening policy dialogue, as well as alignment and harmonisation of donor efforts. The application of programme aid also helped the government to maintain fiscal discipline, improve on public expenditure and financial accountability, maintain an average growth rate of 6.1% during the evaluation period (2005-2010), as well as, improve quality of life through increased access to healthcare, and increased enrolments in schools (Kemp, Faust, & Leiderer, 2011). Similarly to the Tanzanian case, capacity building was not very successful as there was a weak demand for technical assistance from the government. Where it was provided it was largely supply driven (Kemp, Faust, & Leiderer, 2011).

## **2.3 Theoretical review on the effectiveness on project and programme aid**

Though there is limited empirical work on comparison of programme and project aid's impact on growth, theoretically much ground has been covered in comparing the two. The theoretical rationale for the two aid delivery modalities is discussed below.

### *2.31 Project aid is preferred over programme aid*

By design, project aid is usually directed towards specific projects and is intended to improve the recipient countries' investment with limited or no government intervention. Gunatilake (2007) argues that since project aid gives donors more power to control the aid funded activities, and can bypass the central government, it is effective when there is none or limited agreement between government and donor on specific sector policies and priorities which may be due to political reasons.

Cordella and Dell'Araccia (2003) also claim that in recipient countries where the governments are not development oriented, project aid is effective because donors would bypass the government and direct aid resources to developmental activities to promote development.

Camara (2004) also advocates for project aid for recipient countries with relatively lower budget resources than aid flows. Since project aid is delivered outside government systems; governments cannot divert the aid for unintended purposes when they are faced with budget pressures.

### *2.32 Programme aid is preferred over project aid*

Programme aid is offered to support government policies and expenditure programmes usually conditional on specific policy reforms (White 1996). Its administration is done through recipient's public finance management systems, (recipient's ownership is strengthened, and its capacity building is more promoted since the recipient can learn by doing) and seeks to increase the overall government resources for economic development.

Gunatilake (2007) asserts that when recipient governments are development oriented, their objectives and priorities usually collide with that of donors (assuming that donors allocate aid resources for purely developmental purposes). Under such circumstances, the use of programme aid is more effective than project aid because donors and recipient countries' objectives and priorities can be easily harmonised.

Foster and Fozzard (2000), also claim that programme aid is more effective than project aid, where stronger partnerships exist between donors and recipient governments. This is due to the fact that donors have the opportunity to influence the national budget process representing the poor, by ensuring pro poor policies are adopted, and that the government systems relate expenditure to resource availability and outputs.

Similarly, Jelovac and Vandeninden (2008) maintain that the partnerships between donors and recipient governments enable effective platform for dialogue, planning processes, coordination of projects, and inhibits the principal-agent relationship between governments and donors as depicted in project aid. The coordination of projects and joint planning processes enhance the building of local capacity, as well as reduce transaction costs of aid delivery.

Chatterjee, Giuliano, and Kaya, (2007) found striking evidence of fungibility in investment aid which was shown to have had substituted government investment expenses. Since project aid is mainly channelled towards investment purposes, this creates room for fungibility, as governments tend to reallocate budget resources away from sectors receiving project aid (Cordella & Dell'Araccia, 2003; Wilkes, 2001). Thus the use of programme aid can avert such problems, because donors can put conditionalities on how the aid can be used thereby reducing the risk of fungibility.

There are also arguments that the conditionalities which often come with programme aid can help in making aid effective. Radelet (2006, pp 13) claims that; "If government policies have led to high rates of inflation, massive inefficiencies and waste of public

spending, and extensive corruption, then providing aid – whatever the specific purpose -- without requiring fundamental change would provide no benefits and perhaps could perpetuate damage.” Thus this justification for policy conditionalities is based on the belief that some fundamental policies and structures need to be in place for growth and development. So if these are not in place, then provision of aid will be futile as it will not be effective.

The tables below gives a summary of findings by the empirical studies conducted on relationship between programme or project aid and economic growth, as well as summary of theoretical studies on effectiveness of programme or project aid respectively.

**Table 1: Summary of empirical studies reviewed on impact of programme or project aid on growth:**

Author	Sample	Programme aid	Project aid	Policy condition
Ouattara and Strobl (2004)	71 countries (1974 –1997)	Negative impact	Positive impact	No influence
Cordella and Dell’ Ariccia (2003)	45 countries (1974 – 1993)	No impact	No impact	Policy influences effectiveness of the two modalities

**Table 2: Summary of theoretical studies reviewed on impact of programme or project aid on growth:**

Author	Date	Programme aid preferable	Project aid preferable
Jelovac and Vandeninden	2008	Where stronger partnerships exist between donors and recipient countries	
Gunatilake	2007	Where recipient countries are development oriented	
Camara	2004		Where own resources of recipient countries are relatively less than aid inflows
Cordella and Dell’ Ariccia	2003		Where recipient countries are not development oriented
Foster and Fozzard	2000	Where stronger partnerships exist between donors and recipient countries	

## **2.4 Conclusion**

The discussion above reflects the different circumstances where programme and project aid are expected to be effective in promoting growth. Though much theoretical work has been done on the merits and demerits of the two modalities, there is much room for empirical studies, which is still limited. Furthermore, the few empirical studies give conflicting views regarding the most effective aid modality between the two. Thus this study seeks to add to the limited empirical literature, giving particular focus on the Sub Sahara Africa region.

The approach of analysing how the policy environment affects the effectiveness of both programme and project aid is key because economic growth is widely believed to be anchored on prevailing policy conditions within a particular country (Acemoglu & Robinson, 2008). Moreover, the design of programme aid (government -donor partnership) makes it more vulnerable to the internal macro-economic conditions, thus making policy consideration a key issue. In this regard, this study will also follow the Burnside and Dollar (2000) hypothesis, in determining if the impact of programme and project aid is conditional on good policies. To cater for potential endogeneity bias in the estimation of the growth models, two equations will be estimated for each model. The first equation will be estimated using 2 five-year periods averaged data for all the variables and in the second equation, programme and project aid data will be lagged by one year to cater for potential endogeneity of the aid variables, and also the fact that aid is believed to have a delayed impact on economic growth (Moreira, 2005).

This study will use actual disbursement data on programme and project aid which has now been updated on the OECD Creditor Reporting System for the period 2005 to 2014. The actual disbursement data is accurate, thus the estimated effect of both programme and project

aid on growth will not be subject to overestimation or underestimation bias which Cordella and Dell'Araccia (2003) or Ouattara and Strobl (2004)'s studies were prone to since actual disbursement figures were not available at the OECD Creditor Reporting System when the studies were conducted.

## CHAPTER 3

### METHODOLOGY

The purpose of this study is to determine which modality between programme and project aid has more impact on economic growth, as well as to determine if the impact of the two modalities on economic growth is conditional on good policy environment. The description of the models, variables, data, and the sample will be given below, followed by a discussion on how potential endogeneity of the aid variables has been catered for.

#### 3.1 Model 1

To determine which modality is more effective for economic growth, model 1 will be estimated as follows:

$$(1) \ G_{it} = y_{it}\beta_0 + Proj_{it}\beta_1 + Prog_{it}\beta_2 + Prog_{it}^2\beta_3 + Proj_{it}^2\beta_4 + Pol_{it}\beta_5 + Invst_{it}\beta_6 + Trade_{it}\beta_7 \\ Lifexp_{it}\beta_8 + Edu_{it}\beta_9 + \varepsilon_{it}$$

In the model,  $i$  shows countries,  $t$  shows time,

$G_{it}$  is per capita real GDP growth rate,

$y_{it}$  is the logarithm of initial real per capita GDP to capture the conditional convergence effects,

$Proj_{it}$  is project aid received as a percentage of GDP,

$Prog_{it}$ , is programme aid received as a percentage of GDP,

$Pol_{it}$  is the World Bank country policy and institutional assessment CPIA index,

$Invst_{it}$  is gross fixed capital formation as a percentage of GDP,

$Trade_{it}$  is total exports and imports as a percentage of GDP,

$Lifexp_{it}$  is life expectancy,

$Edu_{it}$  is logarithm of primary enrolment, and

$\varepsilon_{it}$ , is a mean zero scalar.

### 3.2 Model 2

To determine whether the impact of programme or project aid on economic growth is conditional on good policies and institutions, as hypothesized by Burnside and Dollar (2000), the programme and project aid variables in equation (1) are interacted with the country policy and institutional index as shown in equation (2) below:

$$(2) G_{it} = y_{it}\beta_0 + ProgPol_{it}\beta_1 + ProjPol_{it}\beta_2 + Prog_{it}\beta_3 + Proj_{it}\beta_4 + Prog_{it}^2\beta_5 + Proj_{it}^2\beta_6 \\ Pol_{it}\beta_7 + Invst_{it}\beta_8 + Trade_{it}\beta_9 + Lifexp_{it}\beta_{10} + Edu_{it}\beta_{11} + \varepsilon_{it}$$

### 3.3 Analysis Methodology

The analysis is prone to reverse causality bias, where the effect of the two aid modalities on growth may be running in the opposite direction. Thus it is suspected that the error terms in models (1) and (2) may be correlated with the explanatory variables, so to avoid endogeneity bias; two equations are estimated for each model. The first equation is estimated using two 5-year periods averaged data for the dependent and all the independent variables with the exception of the logarithm of initial GDP per capita variable where the initial figure per period was used. For the second equation, programme and project aid data is lagged by one year to cater for the potential endogeneity of the aid variables, as well as allow for the delayed impact of aid on growth (Asirvatham, 2010; Clemens, Radelet, & Bhavnani, 2004). Furthermore, the Hausman test is conducted to determine the more consistent results between random and fixed effects estimation. To take care of possible heteroscedasticity and raise the confidence level on the results, robust standard errors will be reported.

### 3.4 Sample selection and Data

Panel data for 41 Sub Sahara African countries will be used covering the period 2005 to 2014. The time period has been limited due to unavailability of data on programme and project aid disbursements before 2005.

Table 3 below shows data description and sources.

**Table 3: Data Description and Sources**

Variable	Source	Format
Average real GDP per capita growth rate	World Bank	Average
Logarithm of initial Real GDP per capita	World Bank	Logarithm Real GDP per capita
Programme aid	OECD CRS	Percentage of GDP
Project aid	OECD CRS	Percentage of GDP
Policy (CPIA)	World Bank	Index [1-6], 6 being best quality
Trade	World Bank	Percentage of GDP
Investment	World Bank	Percentage of GDP
Life expectancy	World Bank	Years
Education	World Bank	Logarithm of primary enrolment

**Table 4: Summary statistics**

VARIABLES	N	mean	sd	Min	Max
GDP per capita growth %	410	2.459	3.921	-37.28	18.26
Ln initial GDP per capita	410	2.895	0.487	2.149	4.202
Programme aid (% of GDP)	306	1.775	3.388	0.000115	50.41
Project aid (% of GDP)	387	2.909	3.151	0.00798	17.41
Policy (CPIA index)	391	3.356	0.561	2.300	5.001
Investment (% of GDP)	381	24.11	10.31	3.554	69.32
Trade (% of GDP)	392	81.45	44.69	19.12	321.6
Life expectancy (years)	410	57.81	6.334	43.60	74.23
Education (ln primary enrolment)	344	6.090	0.718	3.936	7.359
Program x policy (interaction term)	292	5.972	9.806	0.000278	142.4
Project x policy (interaction term)	369	10.23	10.99	0.0271	71.66
Number of countries	41				

**Table 5: Correlation Matrix**

	GDPgr	Progaid	Projaid	Policy	Invest	Trade	Life exp	Primary	lgGDPpc
GDPgr	1.0000								
Program aid	0.0169	1.0000							
Project aid	0.0262	0.2459	1.0000						
Policy	0.2027	-0.0699	0.0246	1.0000					
Investment	0.1866	-0.0570	0.1863	0.4009	1.0000				
Trade	0.0979	0.2979	0.0471	-0.0061	0.1557	1.0000			
Life expect	0.0074	-0.0636	0.1057	0.3726	0.5497	0.2006	1.0000		
Education	0.0552	-0.0312	-0.0575	0.0294	-0.2337	-0.4757	-0.3351	1.0000	
Ln GDPpc	0.1009	-0.2050	-0.2752	0.4724	0.1943	0.3724	0.3495	-0.4594	1.0000

### 3.5 Variables

A short description for each of the variables used in the growth models is presented below:

*Dependent variable:*

- i. **Average real GDP per capita growth rate**, which measures the growth averages of GDP per capita as the proxy for economic growth. The data on the variable is collected from the World Bank Development Indicators.

*Independent variables:*

- ii. **Logarithm of initial Real GDP per capita**. This indicator is included to capture the conditional convergence effects of growth across countries. The variable is collected from the World Bank Development Indicators.
- iii. **Project aid**; the indicator is ‘project-type interventions’ from the OECD Creditor Reporting System. The variable is lagged to cater for potential

endogeneity arising from reverse causality between project aid and the GDP per capita growth rate;

- iv. **Programme aid**; the indicator is ‘total budget support’ from the OECD Creditor Reporting System which is the sum of general budget support and sector budget support. The variable is lagged to cater for potential endogeneity arising from reverse causality between programme aid and the GDP per capita growth rate.
- v. **Policy** is the Country Policy and Institutional Assessment (CPIA) index which was developed by the World Bank, and is used as a proxy to measure the quality of public policies and institutions on a scale of 1 to 6, with six representing the highest quality.
- vi. **Investment**; the gross fixed capital formation as a percentage of GDP indicator from the World Bank Development Indicators is used as a proxy for investment;
- vii. **Trade**; the total of exports and imports as a percentage of GDP indicator from the World Bank Development Indicators is used as a proxy for trade openness;
- viii. **Life expectancy**; is measured in number of years, and is used as a proxy to measure the quality of health, and the data is collected from the World Bank Development Indicators;
- ix. **Education**; is the logarithm of primary school enrolment as a proxy for human capital which is believed to positively affect economic growth in the long run (Lee, 2013) also collected from the World Bank Development Indicators.

## CHAPTER 4

### RESULTS AND DISCUSSION

This section provides a summary of the empirical results obtained from the quantitative analysis of the data conducted.

#### 4.1 Model 1

**Table 6: Growth model 1 regression:**

Dependent Variable: GDP per capita growth rate

VARIABLES	Equation 1. (AVERAGES)			Equation 2. (1 YEAR LAG)			Expected coefficient sign
	OLS	RE	FE	OLS	RE	FE	
Initial GDP	0.965 (0.802)	0.203 (0.946)	-6.023 (8.612)	1.210 (1.198)	0.552 (1.166)	9.336* (4.674)	(-)
Program aid	0.759*** (0.270)	0.656** (0.272)	0.0138 (0.387)	0.330** (0.139)	0.258** (0.130)	-0.0122 (0.192)	(+/-)
Project aid	0.0833 (0.284)	-0.0448 (0.346)	-0.273 (0.718)	0.0483 (0.243)	-0.0395 (0.263)	-0.441 (0.290)	(+/-)
Progaid <sup>2</sup>	-0.0483*** (0.0166)	-0.0453*** (0.0160)	-0.00913 (0.0300)	-0.00702** (0.00277)	-0.00583** (0.00267)	-0.000305 (0.00379)	(-)
Projaid <sup>2</sup>	-0.0151 (0.0177)	-0.0101 (0.0211)	-0.00360 (0.0403)	-0.00989 (0.0136)	-0.00625 (0.0154)	0.0151 (0.0176)	(-)
Policy	-0.136 (0.396)	0.00649 (0.414)	1.086 (1.666)	1.055 (0.776)	1.390 (0.988)	5.566** (2.212)	(+)
Investment	0.0771*** (0.0273)	0.0817*** (0.0298)	0.102* (0.0546)	0.0424 (0.0364)	0.0338 (0.0431)	-0.0929 (0.0701)	(+)
Trade	0.0254*** (0.00914)	0.0242*** (0.00885)	-0.00539 (0.0457)	0.0185* (0.00963)	0.0227** (0.0114)	0.0868** (0.0346)	(+)
Lifexpect	0.0563 (0.0561)	0.0518 (0.0624)	0.0534 (0.178)	-0.0632 (0.0605)	-0.0662 (0.0681)	-0.546* (0.299)	(+/-)
Education	1.690*** (0.515)	1.397*** (0.466)	5.142 (4.796)	1.038* (0.611)	1.030 (0.636)	15.57* (8.875)	(+)
Constant	-18.17*** (5.727)	-13.92*** (4.880)	-19.56 (34.40)	-9.949** (4.904)	-8.734 (5.957)	-109.8** (43.56)	
Observations	75	75	75	181	181	181	
R-squared	0.362		0.286	0.113		0.180	
Wald Chi <sup>2</sup> (10)		30.93			52.90		
Prob > chi <sup>2</sup>		(0.0006)			(0.0000)		
Number of countries		41	41		37	37	

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The above table shows the regression results for the first model, which seeks to determine which aid delivery modality between programme and project aid is more effective for economic growth in Sub Sahara Africa region. As afore-mentioned in a bid to avoid endogeneity bias as well as to account for the fact that aid can have a delayed impact on economic growth, two equations are estimated using averaged data for the first equation and lagged aid variables for the second equation. The equations are estimated using three estimation methods namely; the ordinary least squares (OLS) method, fixed effects and random effects models. The Hausman tests conducted on both the averaged data and lagged data show that the random effects estimation is more consistent over the fixed effects, hence preferable.

### Hausman test for Averaged data.

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fixed	(B) random		
lgdpc	-6.023086	.2026715	-6.225758	15.15997
progaid	.0137525	.6560665	-.642314	.4532902
projaid	-.2732454	-.0447998	-.2284457	.5396233
progaid2	-.0091287	-.0453492	.0362205	.0311264
projaid2	-.0035972	-.0100993	.0065021	.0304239
policy	1.085728	.006489	1.079239	2.477863
invest	.1023005	.0816812	.0206194	.1020137
trade	-.005391	.0241867	-.0295777	.0500004
lifexpect	.053387	.0517823	.0016047	.3006249
lgprimary	5.142071	1.396954	3.745117	8.057044

b = consistent under Ho and Ha; obtained from xtreg  
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$\chi^2(9) = (b-B)'[(V_b-V_B)^{-1}](b-B)$   
 = 12.35  
 Prob>chi2 = 0.1945

### Hausman test for the lagged data.

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fixed	(B) random		
lgdpc	9.335805	.551659	8.784146	4.071868
proglag	-.0122062	.2575571	-.2697633	.1070682
Projllag	-.441075	-.0394832	-.4015918	.139673
progsq	-.0003046	-.0058346	.00553	.0023028
projsq	.0150561	-.0062489	.021305	.0073014
policy	5.566412	1.390396	4.176016	1.866852
invest	-.0929098	.0337931	-.1267029	.0327611
trade	.0868294	.0226919	.0641375	.0256573
lifexpect	-.5457018	-.0662338	-.479468	.2350747
lgprimary	15.57498	1.029616	14.54537	8.286168

b = consistent under Ho and Ha; obtained from xtreg  
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$\chi^2(10) = (b-B)'[(V_b-V_B)^{-1}](b-B)$   
 = 20.38  
 Prob>chi2 = 0.0259

In both equations, the random effects estimation, which is the most consistent and preferable estimation according to the Hausman test conducted, shows that programme aid has a positive and statistically significant relationship with economic growth, whilst project aid has no statistically significant effect on economic growth. This finding is consistent with the recent aid effectiveness discourse, namely, the Paris Declaration on aid effectiveness (2005) which advocates for strong partnerships between donors and recipient countries. Through its design, programme aid fulfils the principles of the Paris Declaration which calls for participatory development through country ownership of aid funded programmes by governments, mutual accountability between donors and recipient countries, and use of country systems, ensuring that all aid is channelled through government systems.

The negative and significant coefficient of the squared term of programme aid reflects a non-linear relationship and diminishing marginal returns of programme aid on economic growth. This finding is a generally accepted fact in the aid effectiveness literature (Burnside & Dollar, 2000; Cordella & Dell'Araccia, 2003; Radelet, 2006), and means that the impact of additional aid decreases as aid inflows increase.

## 4.2 Model 2

The second model seeks to address the second research question, whether impact of programme or project aid is conditional on quality of policy in recipient countries. In this regard, programme and project aid variables are interacted with the policy variable, to determine if policy environment affects the effectiveness of the two aid variables.

Hausman tests conducted for both the averages data and lagged data for the second model show that again the random effects estimation is more consistent and preferable than fixed effects estimation. The Hausman tests are shown below:

### Hausman test averaged data

	Coefficients		(b-B) Difference	sqrt(diag(V <sub>b</sub> -V <sub>B</sub> )) S.E.
	(b) fixed	(B) random		
lgdpc	-11.99826	.4093918	-12.40765	17.33864
progppl	-.9934261	.2977484	-1.291174	.6663271
projpol	.3117845	-.2075438	.5193283	.3761352
progaid	3.083441	-.3600934	3.443534	2.056761
projaid	-1.312813	.6147979	-1.927611	1.32919
progaid2	-.0222224	-.0337851	.0115627	.0279148
projaid2	-.0068748	-.0065389	-.0003359	.0320715
policy	2.452099	.0465524	2.405547	2.90224
invest	.126853	.0925148	.0343382	.1022522
trade	-.0184673	.0211561	-.0396234	.0509208
lifexpect	.1237585	.0466792	.0770793	.3119674
lgprimary	7.13346	1.350286	5.783174	8.208594

b = consistent under Ho and Ha; obtained from xtreg  
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(11) = (b-B)'[(V<sub>b</sub>-V<sub>B</sub>)<sup>-1</sup>](b-B)  
 = 13.63  
 Prob>chi2 = 0.2542

### Hausman test lagged data

	Coefficients		(b-B) Difference	sqrt(diag(V <sub>b</sub> -V <sub>B</sub> )) S.E.
	(b) fixed	(B) random		
lgdpc	8.850992	.7814341	8.069558	4.117327
progppl	.6192697	.458851	.1604187	.2623071
projpol	-.25783	-.298389	.040559	.1808936
proglag	-2.055647	-1.246939	-.8087079	.9224568
Projllag	.3812109	.9305352	-.5493243	.6789526
progsq	.0054609	-.0018117	.0072726	.0040614
projsq	.0186659	-.0043063	.0229721	.0077629
policy	5.013539	1.344127	3.669412	1.932768
invest	-.0902778	.035737	-.1260148	.0311389
trade	.091838	.0199424	.0718956	.0259529
lifexpect	-.5646241	-.0709433	-.4936808	.2371587
lgprimary	15.28425	.8340903	14.45016	8.611319

b = consistent under Ho and Ha; obtained from xtreg  
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(11) = (b-B)'[(V<sub>b</sub>-V<sub>B</sub>)<sup>-1</sup>](b-B)  
 = 9.07  
 Prob>chi2 = 0.6158

The regression results for model 2 are shown in the table below:

**Table 7: Growth model 2 regression:**

Dependent Variable: GDP per capita growth rate

VARIABLES	Equation 1. (AVERAGES)			Equation 2. (1 YEAR LAG)			Expected coefficient sign
	OLS	RE	FE	OLS	RE	FE	
Initial GDPpc	1.111 (0.867)	0.409 (1.132)	-12.00 (11.70)	1.400 (1.199)	0.781 (1.152)	8.851* (4.887)	(-)
Progpolicy	0.539 (0.416)	0.298 (0.507)	-0.993* (0.549)	0.487* (0.270)	0.459 (0.291)	0.619* (0.352)	(+)
Projpolicy	-0.228 (0.188)	-0.208 (0.264)	0.312 (0.587)	-0.233 (0.202)	-0.298** (0.131)	-0.258 (0.201)	(+)
Program aid	-1.139 (1.531)	-0.360 (1.879)	3.083* (1.725)	-1.286 (0.859)	-1.247 (0.943)	-2.056* (1.114)	(+/-)
Project aid	0.823 (0.777)	0.615 (1.120)	-1.313 (2.521)	0.813 (0.671)	0.931** (0.419)	0.381 (0.621)	(+/-)
Progaid <sup>2</sup>	-0.0267 (0.0254)	-0.0338 (0.0301)	-0.0222 (0.0325)	-0.00244 (0.00299)	-0.00181 (0.00323)	0.00546 (0.00369)	(-)
Projaid <sup>2</sup>	-0.0122 (0.0166)	-0.00654 (0.0186)	-0.00687 (0.0299)	-0.00921 (0.0148)	-0.00431 (0.0184)	0.0187 (0.0199)	(-)
Policy	-0.190 (0.373)	0.0466 (0.380)	2.452 (1.633)	0.866 (0.845)	1.344 (0.998)	5.014** (2.279)	(+)
Investment	0.0830*** (0.0303)	0.0925*** (0.0334)	0.127** (0.0623)	0.0414 (0.0390)	0.0357 (0.0465)	-0.0903 (0.0708)	(+)
Trade	0.0218** (0.0104)	0.0212* (0.0113)	-0.0185 (0.0427)	0.0157 (0.00969)	0.0199* (0.0115)	0.0918** (0.0355)	(+)
Life expectancy	0.0475 (0.0602)	0.0467 (0.0657)	0.124 (0.238)	-0.0670 (0.0607)	-0.0709 (0.0696)	-0.565* (0.304)	(+/-)
Education	1.503** (0.608)	1.350** (0.549)	7.133* (4.224)	0.811 (0.632)	0.834 (0.682)	15.28 (9.724)	(+)
Constant	-16.51** (6.913)	-14.04** (5.740)	-22.54 (37.77)	-7.986 (5.498)	-7.556 (7.370)	-104.2** (47.70)	
Observations	75	75	75	181	181	181	
R-squared	0.378		0.348	0.121		0.192	
Wald Chi2(12)		75.18			81.11		
Prob > chi2		(0.0000)			(0.0000)		
Countries		41	41		37	37	

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The table shows mixed results on the interaction of the two aid delivery variables with policy across the different estimation models. The random effects estimation, which is the more consistent model according to the Hausman tests conducted shows that for Equation 1 (averages) policy has no impact for the effectiveness of the two aid delivery modalities. However, moving to the second equation (1 year lag) the random effects results show that

project aid on its own has a positive significant relationship with growth, however its interacted term with policy gives a negative statistically significant relationship with economic growth. Thus to see the overall net effect of project aid on growth when project aid is interacted with policy, model 2 equation is differentiated with respect to project aid to see the marginal effect of project aid on growth (Lee, 2013). Thus the marginal effect of project aid is calculated as shown in equation 3 below:

$$(3) \quad g_{it} = -0.298 \text{ ProjPol}_{it} + 0.931 \text{ Proj}_{it} + 2*(-0.00431) \text{ Proj}_{it}$$

The marginal effect of project aid on economic growth is positive, which shows that project aid will promote growth in good policy environments. This finding is consistent with World Bank (1998), Burnside and Dollar (2000), and Lee (2013), who also found that aid was effective in good policy environments.

Since both the coefficient of programme aid and that of its interaction term with policy are not statistically significant, it shows that for this dataset, policy environment is not a necessary condition for the effectiveness of programme aid on promoting economic growth. This finding is in line with the findings of Clemens, Radelet, & Bhavnani, (2004), and Ouattara and Strobl (2004).

## CHAPTER 5

### CONCLUSION AND RECOMMENDATIONS

#### 5.1 Conclusion

The overall purpose of this study was to analyse and compare which aid delivery modality, between programme and project aid is more effective in promoting economic growth in the Sub Sahara African region, and to determine if the two modalities effectiveness on economic growth is conditional on good policy environments.

The results indicate that programme aid has a positive impact and promotes economic growth, though it is also shown to have diminishing marginal returns on growth. Project aid on its own has no impact on economic growth, however, it is shown to positively affect growth in good policy environments as shown by the positive marginal effect of project aid on growth when it is interacted by policy.

Since the Sub Sahara Africa region has mainly been receiving aid through the project aid modality, this could be one reason why aid has not been effective in promoting economic growth in this region, because according to this study, programme aid is more effective in promoting economic growth than project aid.

#### 5.2 Policy Recommendations

Considering the foregoing results and conclusion, programme aid promotes growth in the Sub Sahara Africa region. As earlier discussed, the use of programme aid entails participatory development and country ownership of aid funded programmes by recipient governments, use of country systems, and can create a base for mutual accountability between donors and recipient countries (Gunatilake, 2007), which are key principles for aid effectiveness (Paris Declaration on aid effectiveness, 2005).

The study also found that project aid has a positive net marginal effect on growth for countries with good policy environments, hence showing the importance of good policy environments in recipient countries.

In this regard, it is recommended that aid to the Sub Sahara African region be delivered through the form of programme aid, and that efforts should be put in place by both recipient countries and donor countries to build strong partnerships as well as, improve the policy environments in recipient countries to ensure aid effectiveness.

Through the nature of its application, programme aid supports macroeconomic stability, makes use of local national accounting and budget systems, reduces transaction costs, and allows for coherence between planning and budgeting, giving it the advantage of improving policy framework and capacity building in recipient countries. An evaluation of the European Union Budget Support programme which was conducted in African, Caribbean and Pacific (ACP) countries, showed that broad progress was made in improving; macroeconomic stability, public finance management, and streamlining transaction costs in the application of aid (European Commission, 2005). This progress shows that indeed the delivery of aid through programme aid modality improves the policy environment as well as, public finance management in recipient countries which contributes to aid effectiveness.

However, the application of programme aid at a large scale may be threatened by the fact that it requires extensive donor collaboration and harmonisation which can be a tall order to arrive at since most donors render aid for different reasons, so to harmonise all aid can be a challenge especially for developing countries which have relatively lower negotiation power.

Moreover, as was seen in the experience of Mali that programme aid was not effective in creating new policies through conditionality, but thrived where good policies already existed (OECD DAC Joint Evaluation, 2011), shows that programme aid is effective under certain circumstances. For non-performing countries with poor public finance management systems, and where even no progress has been achieved through project aid, then programme

aid will not be effective since it requires some degree of sound policies, and public finance management systems for its effectiveness.

This then shows the imperative need for SSA countries to work towards establishment of sound policies and efficient public finance management systems as a basis for ensuring aid effectiveness on promoting economic growth.

## REFERENCES

- Acemoglu, D., & Robinson, J. (2008). *The Role of Institutions in Growth and Development*. World Bank, Washington DC.
- Asirvatham, R. J. (2010). *Foreign Aid and Development*. Copenhagen Business School, Department of Economics, Copenhagen.
- Budget Support Development Partners' Group. (2015). *Budget Support in Tanzania*, retrieved on 19/09/2016 from <http://www.tzdpg.or.tz/dpg>.
- Burnside, C., & Dollar, D. (2000). Aid, policies, and growth. *The American Economic Review*, 90 (4), 847-868.
- Camara, M., (2004). *The Impact of Programme versus Project Aid on Fiscal Behaviour in the Gambia*: Institute of Social Studies, the Hague.
- Chatterjee Paola Giuliano, and Ilker Kaya, S. (2007). *Where has all the Money Gone? Foreign Aid and the Quest for Growth*. IZADP No. 2858.
- Cordella, T. and Dell'Ariccia, G. (2003). *Budget Support versus Project Aid: International Monetary Fund Working Paper*.
- Douzounet, M. and Urbain Y. T. (2013). *Heterogeneity of the Effects of Aid on Economic Growth in Sub-Saharan Africa: Comparative Evidence from Stable and Post-Conflict Countries*, Working Paper Series N° 179 African Development Bank.
- Easterly, W. Levine, R. & Roodman, D. (2003). *New Data, New Doubts: Revisiting 'Aid, Policies, and Growth'*. Center for Global Development Working Paper No. 26.
- Easterly, W. (2003). *Can foreign aid buy growth?* *Journal of Economic Perspectives*, 17 (3).
- European Commission. (2005). *EC Budget Support: An Innovative Approach to Conditionality*. European Union.
- Foster, M. and Fozzard, A. (2000). *Aid and Public Expenditure: A Guide Centre for Aid and Public Expenditure*. Overseas Development Institute, London.

- Gunatilake, H. (2007). Session 2 Aid Modality and Aid Effectiveness: Introductory Course on Economic Analysis of Policy Based Lending Operations. Asia Development Bank.
- Hansen, H. (2001). Aid and growth regressions. *Journal of Development Economics*, Vol. 64.
- Harding, A. (2003). The Case for Increased Aid Final report to the Department for International Development.
- Jelovac, I., & Vandeninden, F. (2008). How should donors give foreign aid? Project aid versus budget support. GATE Working Papers.
- Joint Evaluation. (2011). Joint Evaluation of Budget Support Operations in Mali 2003 – 2009 Final Report.
- Joint Independent Evaluation. (2013). Joint Evaluation of Budget Support to Tanzania: lessons learned and recommendations for the future Final Report: Vol. 1.
- Jones, N. Bailey, M. & Lyytikäinen, M. (2007). Research capacity strengthening in Africa: Trends , Gaps and Opportunities. Overseas Development Institute.
- Kemp, A. Faust, J. & Leiderer, S. (2011). Between high expectations and reality: An evaluation of budget support in Zambia (2005-2010), Synthesis Report, Lusaka.
- Kosack, S. (2003). Effective Aid: How Democracy Allows Development Aid to Improve the Quality of Life. *World Development* Vol. 31, No. 1, pp. 1–22.
- Lee, K. W. (2013). Development Effectiveness of the Paris Declaration: An Empirical Evaluation, *KDI Journal of Economic Policy*, Vol. 35.
- Moreira, S. (2005). Evaluating the Impact of Foreign Aid on Economic Growth : a Cross-Country Study. *Journal of Economic Development*, Vol. 30(2), pp 25–49.
- OECD, (2011). Aid Effectiveness 2005~2010: Progress on Implementing the Paris Declaration. Paris.
- Ogundipe, A., Ojeaga, P., & Ogundipe, O. (2014). Is Aid Really Dead? Evidence from Sub-Saharan Africa. *International Journal of Humanities and Social Science*, Vol. 4.
- Ouattara, B., & Strobl, E. (2004). Disaggregating the aid and growth relationship. School of

- Economic Studies Discussion Paper, (0414).
- Radelet, S. (2006). A primer on foreign aid. Center for Global Development working paper, 92.
- Rajan, R. G., & Subramanian, A. (2008). Aid and Growth: What Does the Cross-Country Evidence Really Show? *Review of Economics {&} Statistics*, 90(4), 643–665.
- Tarp, F. (2000). *Foreign Aid and Development: Lessons Learnt and Directions for the Future*. Routledge, London and New York.
- Weiss, J. (2008). The Aid Paradigm for Poverty Reduction: Does it make sense? *Development Policy Review*, 26 (4) pp. 407-426.
- Wilkes, J. (2001). *Programme Aid: what do we need to learn?* Department for International Development (DFID).
- World Bank, (1998). “Assessing Aid: What Works, What doesn’t and why”, Oxford University Press, New York, NY.