ANALYSIS OF AID FOR TRADE ON UGANDA’S TRADE PERFORMANCE

By

AKORAEBIRUNGI JOHN

THESIS

Submitted to
KDI School of Public Policy and Management
In partial fulfillment of the requirements for the degree of
MASTER OF DEVELOPMENT POLICY
(Sustainable development, Public finance and social policy)

2016
ANALYSIS OF AID FOR TRADE ON UGANDA’S TRADE PERFORMANCE

By
AKORAEBIRUNGI JOHN

THESIS

Submitted to
KDI School of Public Policy and Management
In partial fulfillment of the requirements for the degree of
MASTER OF DEVELOPMENT POLICY
(Sustainable development, Public finance and social policy)

2016

Professor Chrysostomos TABAKIS
ANALYSIS OF AID FOR TRADE ON UGANDA’S TRADE PERFORMANCE

By

AKORAEBIRUNGI JOHN

THESIS

Submitted to
KDI School of Public Policy and Management
In partial fulfillment of the requirements for the degree of
MASTER OF DEVELOPMENT POLICY
(Sustainable development, Public finance and social policy)

2016

Committee in charge:

Professor Chrysostomos TABAKIS, Supervisor

Professor Siwook LEE

Professor Sherzod SHADIKHODJAEV

Approval as of May, 2016
ABSTRACT

The gainful participation of developing countries like Uganda in international trade activities is not affected by foreign market access but mostly domestic supply constraints. Among them include reliable production capacity, poor quality products, and poor infrastructure. WTO kick started the “Aid for Trade” (AFT) undertaking in 2005 with major focus on helping developing countries overcome the fore mentioned challenges. Taking Uganda as the case study, I critically examine the role played by Aid for Trade in strengthening the overall domestic trade capacity. However from the analysis there is little evidence on the impact of this initiative specifically on exports compared to the imports. However it is worth noting that whereas some effort is noticed in trying to enhance Uganda’s capacity to trade, I strongly in this paper recommend that the forth coming aid support to Uganda be channeled into unleashing Uganda’s domestic productive capacity, improving on the economic infrastructure, emphasizing on quality improvement and finally Trade policy formulation should be strengthened if Uganda is to benefit from the AFT initiative.
Dedication

I dedicate this paper to my late dad John TibihikiraAtwooki who laid a strong foundation to my Academic journey.
Acknowledgement

In the very first place I thank God for his endless guidance in this endeavor, which has enabled me to put together this paper. Secondly, I thank my supervisors for their support and guidance in writing this paper. I acknowledge KDI School of Public Policy and management for giving me the scholarship to further my studies. In the same spirit I Acknowledge Mr. Alex Ojiambo and family, my friends Anthony, Steven, Dickens, and Mariam for their continued encouragement throughout this journey and finally my lecturers at Makerere university school of Economics.
# TABLE OF CONTENTS

ABSTRACT ..................................................................................................................................... i  
Dedication ....................................................................................................................................... ii  
Acknowledgement ......................................................................................................................... iii  
LIST OF ABRVIATIONS .......................................................................................................... vi  
CHAPTER ONE ............................................................................................................................. 1  
INTRODUCTION .......................................................................................................................... 1  
1.0 Background ............................................................................................................................... 1  
CHAPTER TWO ............................................................................................................................ 7  
LITERATURE REVIEW ............................................................................................................... 7  
2.0 Introduction............................................................................................................................... 7  
2.1 Aid for Trade ............................................................................................................................ 8  
2.3 Literature Gap ......................................................................................................................... 14  
CHAPTER THREE ...................................................................................................................... 15  
THEORETICAL FRAMEWORK ................................................................................................ 15  
3.0 Introduction............................................................................................................................. 15  
3.2 Imports Determinants ............................................................................................................. 17  
CHAPTER FOUR ......................................................................................................................... 18  
METHODOLOGY ....................................................................................................................... 18  
4.0 Introduction............................................................................................................................. 18  
4.1.2 Trade Balance Function ........................................................................................................ 19  
4.2 Brief Data Description and Data Source ................................................................................. 20  
CHAPTER FIVE .......................................................................................................................... 21  
DATA ANALYSIS ....................................................................................................................... 21  
5.0 Introduction............................................................................................................................. 21  
5.3 EMPIRICAL MODELS ......................................................................................................... 26  
5.3.1 Trade Openness Equation ................................................................................................. 26  
5.3.4 Long Run Model for Trade Balance .................................................................................. 30  
CHAPTER SIX ............................................................................................................................ 35
POLICY RECOMMENDATION AND CONCLUSION ............................................................... 35
6.0 Introduction .................................................................................................................. 35
BIBLIOGRAPHY ............................................................................................................... 40

List of Tables
Table 1External sector performance for Uganda 2008- 2012 (USD millions)………23
Table 2:Adf unit roots test results for stationary test.................................25
Table 3: Pesaran (2001) Bounds Tests Results for Trade Openness Model........27
Table 4: long run relationship results for trade openness model...............27
Table 5: short-run dynamics, error correlation model.................................28
Table 6:pesaran (2001) bounds tests results for trade balance model...........30
Table 7:long run relationship results for trade balance model....................31
Table 8:short-run dynamics, error correlation model for trade balance.........32

List of Figures
Figure 1 cumulative AFT Disbursements by Sector for Uganda..................5
Figure 2 Uganda’s total trade value trend between 2001- 2013 ....................22
LIST OF ABRVIATIONS

AA   = Absolute Advantage
AAA  = Accra Agenda for Action
AFT  = Aid for Trade
AGOA = African Growth and Opportunity Act
BOT  = Balance Of Trade
CET  = Common External Tariff
COMESA = Common Market for Eastern and Southern Africa
EAC  = East African Community
EAC-CU = East African Customs Union
EBA  = Everything But Arms
ECM  = Error Correction Model
FDI  = Foreign Direct Investment
GCF  = Gross Capital Formation
GDP  = Gross Domestic Product
GFCF = Gross Fixed Capital Formation
GNI  = Gross National Income
IMF  = International Monetary Fund
ITC  = International Trade Centre
LDCs = Least Developed Countries
LLC  = Land Locked Country
MDD = Millennium Development Declaration
MDGs = Millennium Development Goals
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDP</td>
<td>National Development Plan</td>
</tr>
<tr>
<td>NG0s</td>
<td>Non-Government Organization</td>
</tr>
<tr>
<td>NS</td>
<td>National Savings</td>
</tr>
<tr>
<td>NTP</td>
<td>National Trade Policy</td>
</tr>
<tr>
<td>ODA</td>
<td>Official Development Assistance</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>OTT</td>
<td>Openness to Trade</td>
</tr>
<tr>
<td>PD</td>
<td>Paris Declarations</td>
</tr>
<tr>
<td>REER</td>
<td>Real Effective Exchange Rate</td>
</tr>
<tr>
<td>RRA</td>
<td>Rwanda Revenue Authority</td>
</tr>
<tr>
<td>SCT</td>
<td>Single Customs Territory</td>
</tr>
<tr>
<td>SGR</td>
<td>Standard Gauge Railway</td>
</tr>
<tr>
<td>TB</td>
<td>Trade Balance</td>
</tr>
</tbody>
</table>
CHAPTER ONE
INTRODUCTION

1.0 Background
Several important economic reforms have been implemented in Uganda. Liberalization of the trade regime since 1987 is one of those reforms that cannot go unmentioned. These reforms include both internal and external trade liberalization. External trade liberalization covered measures which included easing of trade procedures, scraping off licensing and administrative controls and reducing tariffs across borders. Internal trade liberalization among others included abolition of state monopoly marketing boards and state parastatals, liberalization of foreign exchange market and more effort bent towards opening rural areas to viable markets especially by improving infrastructure. Uganda is an active member of East African Community (EAC) as well as Common Market for Eastern and Southern Africa (COMESA) these arrangements provide her with preferential trade arrangements. However, Uganda has not gainfully benefited from such liberal trade arrangements as a result of various supply constraints such as unreliable production, undeveloped infrastructure, and failure to meet the required quality and standards on the global market (WTO, 2005).

1.1 Aid for Trade (Aft)
Aid for trade can be defined as that element of the official development assistance (ODA) being channeled towards trade growth related undertakings such as infrastructure targeting trade improvement, improving supply capacities, improving quality of the goods and services to be traded among others in the recipient’s national development strategy. It is imperative to note that supply constraints related challenges in LDCs are an old phenomenon. UNCTAD since its birth
in 1964 has been availing help aimed at boosting the trade capacities of LDCs such that they can competitively penetrate the world market (UNCTAD, 2008). The aid for trade approach was reached and launched by world trade organization (WTO) during its ministerial conference in Hong Kong in the year 2005. This was aimed at helping developing countries particularly LDCs strengthen their competitiveness in the global market and engage fully in international trade through boosting their supply capacity. In line with the decision adopted in the former, Ministers at the Ninth Ministerial Conference held in Bali in 2013, developed an Aid for Trade work program to provide a framework for activities over the period 2014-2015 (WTO, 2013). The Work Program’s key areas of focus include:

- Value chains.
- Monitoring and evaluation.
- Private sector development.
- Infrastructure development.
- Regional trade integration.

Work program activities will culminate in a fifth global review of aid for trade tentatively programmed for mid-2015 (WTO, 2013). It is worth noting that the international trade Centre (ITC) has played a significant role in enhancing aid for trade critical components of value chains promotion and private sector growth through enhancing the importance of small- and medium enterprises in circles of the aid for trade undertaking (ICT, 2011). During the fourth global review, held on 8th to 10th July in Geneva, the major theme was ‘Connecting to value chains’ (ITC, 2013) aiming at focusing ODA more on bridging the gap between LDCs and the global value chains with emphasis on:
The relationship between value chains, trade and the post-2015 development agenda
Strategies that enable developing countries to connect to value chains
Challenges and development benefits associated with the strategies; and
Future perspectives for the Aid-for-Trade Initiative. (ICT, 2013).

The Paris Declaration (PD) guidelines of 2005 also aimed towards strengthening aid optimization and basing on various aid-related experiences over time. The PD principles emphasize aid efficiency and effectiveness plus accountability on both the developing countries and donors since weak accountability especially in developing countries is a major setback to aid effectiveness and development. The PD principles include effective “alignment” of donor funds to the established national development and growth agenda, “national ownership” of development plans, the “harmonization” of aid input from donors, “result orientation” in properly managing aid and proper mutual “accountability” of developing countries and the donors. These principles were still priority in the Accra Agenda for Action (2008) plus in 2011 the Bussan partnership for effective development cooperation. All these efforts by different development partners, donors and other stakeholders are geared towards ensuring better utilization of aid resources directed to trade in developing countries to further enhance their development potential.

1.2 Uganda’s Current Trade Status

Uganda just like many developing countries faces a challenge of supply constraints related issues. This is evident when you critically look at Uganda’s external trade status. Imports for decades have continued to be more than exports and therefore no doubt that Uganda is experiencing a wide trade deficit. Important to note is that Uganda’s Export growth is relatively low, this explains why Uganda has not fully exploited the wide concessional market openings
such as the US’s African Growth and Opportunity Act (AGOA), the East African Community (EAC) market, and EU’s everything but Arms (EBA) among others. The total formal plus informal exports have grown to US$ 2.5 billion and on the other hand, imports have shoot to US $ 5.6 billion by 2011 (UBOS, 2012). Statistics clearly show growth in both exports and imports over the years; however, growth in exports is lower than that in the imports explaining the decline in trade balance mostly from financial year 2009 to date (UBOS, 2012). It is worth noting however that Uganda’s export structure has changed over time. For instance, number of non-traditional exports like flowers, fresh fruits and vegetables, vanilla, beans among others increased, and manufactured products have taken a larger share in the sector till date. However, the development of Uganda’s export capacity and global competitiveness is still a strong challenge, and it is from such a background, that I am interested in critically examining aid for trade initiative which is a major driver of external trade competitiveness and improving trade capacity of LDGS and check if there are visible positive impacts on Uganda’s Trade sector from such strong initiatives by development partners and donors.
Fig: 1


From the AFT breakdown by sector in the graph above, it is clear that a big portion of the aid for trade money is directed towards improving the transport infrastructure, for example, construction of roads networking Kenya, Tanzania, Burundi, Rwanda and South Sudan. Various warehouses have been constructed in various corners of Uganda especially at the major borders of Mutukula, Malaba among others. Important to cite out here is the ongoing construction of the standard gauge railway (SGR) that is financed by China to connect Uganda, Kenya, Rwanda, Tanzania, the Democratic Republic of Congo, Burundi and South Sudan, this is intended the reduce the
cost and time to trade among these countries. This no doubt provides a great opportunity to Uganda due to the fact that it is a land locked country (LLC).

1.3 Study Objectives

The main purpose of the study is to critically analyze the AFT initiatives directed towards Uganda’s trade sector and examine whether there are visible impacts such initiatives have had on Uganda’s economy in terms of strengthening its trade performance. In the course of my data analysis, I will employ econometric models of openness to trade, plus TB using ODA as one of the independent variables and try to find out whether there is significant impact of ODA on Uganda’s external trade from the analysis results.

The other strong incentive behind my study is to provide relevant policy alternatives aimed at strengthening the relationship between aid resources and Uganda’s national development and growth priorities such that positive impact on trade resulting from AFT initiatives further match with the countries development goals for better development outcomes.

1.4 Research Question

This paper examines one basic policy question namely;

1. Could there be tangible and visible aid driven effects on Uganda’s ability to trade?
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Trade has been of significant importance to the development of various economies from the traditional time to date. Classical economists emphasized the vital role of “openness” in international trade to the economic growth of any country. The concept of “trade openness” now constitutes a critical platform in the perspective of neoclassical economist growth. And various studies have been conducted to demonstrate the positive role of openness in trade to growth and development (Wacziarg and Welct, 2003, Dowrick and Golley, 2004). The most relevant question, however, is whether the necessary conditions to gain from trade liberalization have been fulfilled, especially for least developed countries (LDCs) such as Uganda which is suffering from various trade related challenges, such as: supply related constraints, poor trade infrastructure and poor quality products which are less competitive on the global market to name but a few.

This literature review intends to explore, specifically, areas of aid for trade in relation to the fore mentioned challenges and also provide an insight into the area of development and trade, which provide a strong foundation for the analysis of aid for trade in Uganda, and finally, to critically identify the literature gap in these areas which require further analysis with respect to Aid for Trade (AFT) initiatives.
2.1 Aid for Trade

Aid for trade is that portion of Official Development Assistance (ODA) that is channeled into trade “initiatives” or “facilitation”. It is important to note that most LDCs are experiencing various trade related challenges, ranging from trade infrastructure to limited access to markets, due to failure to meet the global quality standards and supply related constraints among other things. According to WTO in its publication “aid for trade in action “aid for trade aims at helping developing countries overcome the supply-side and trade-related infrastructure constraints that inhibit their ability to benefit from market access opportunities.” (WTO, 2013)

The importance of foreign aid as an instrument aimed at accelerating economic development in various countries, especially LDCs, was born during the Marshall Plan (1947) including United States (US) resources of financial aid aimed at the rehabilitation of the after-war European zone, and elaborated in the Millennium Development Declaration (MDD), 2000. Others include the big push theories of economic development that evolved in the 1950s also clearly established and explained the Millennium Development Goals (MDGs), 2005 PD on aid effectiveness, the 2008 Accra Agenda for Action (AAA), including the most current Bussan gathering in South Korea on aid efficiency and effectiveness in 2011 (Alex, Isaac,2014). This therefore shows how the concept of AFT has evolved over time.

AFT is that portion of ODA channeled to “trade facilitation”. From the UNCTAD Report (2008) “As part of the development component of the United Nations, UNCTAD since its formation in 1964 provided trade-related and capacity-building support, namely, aid for trade to developing countries and countries with economies in transition, to effectively integrate into and achieve development and growth benefits from the global trading system” (UNCTAD, 2008). In fact, UNCTAD already was allocating a portion of ODA targeted towards the growth and
development of trade in LDCs which could be classified as AFT, even before the official initiative was launched in 2005 (Alex & Isaac, 2014).

The literature available on aid and trade, however, does not avail sufficient theoretical guidance with respect to the relative impact of AFT on recipient countries versus “donor exports”. Notwithstanding this fact, it has been argued by various authors that, more open trade accompanied by well formulated regulatory reforms and supported by aid for trade can, when combined with the appropriate, complementary and practical policies, help attract domestic and foreign direct investment (FDI), hence stimulating economic growth and poverty alleviation programs (OECD/WTO, 2013). For instance, in 2011, USD 41.5 billion was spent on aid to help alleviate LDCs trade related constraints. (OECD/WTO, 2013)

According to a study conducted by Helbe, Mann, & Wilson (2009) ‘Aid for trade Facilitation’, the study suggests that AFT is a strong foundation on which to build when promoting exports to the developed world (Helbe, Mann, and Wilson, 2009). The other interesting finding of their study is the impact of the two sub-classifications of AFT: (1) Trade Policy and (2) Regulations and Trade Facilitation. The former has significant impact on cost to imports rather than exports, whereas the latter has more significant impact on reducing both costs to imports and exports. (Helbe, Mann, and Wilson, 2009)

Further studies have been carried out to justify the importance of AFT, especially to LDCs. Walkenhorst and Yusui (2003) in their publication “aid for trade facilitation” measured total welfare gains from trade facilitation, assumed to be a reduction in trade transaction costs by one percent of the value of global trade, these gains are estimated at about US$40 billion and benefit all countries, especially those that are not yet members of the OECD (Walkenhorst, P.
and Yusui, T. 2003). The OECD/WTO Report (2013) further emphasized that reducing trade costs is essential to promoting trade and therefore, Aid for Trade facilitation programs focus on reducing trade related costs for LDCs by establishing efficient, soft and hard trade related infrastructure. Soft infrastructure defined as the intangible regulatory framework, while hard infrastructure refers to tangible infrastructure like roads and ports (OECD/WTO, 2013).

According to UNCTAD (2008) various success stories of the positive impacts of aid resources on trade, growth and development have been emphasized. This calls for need to implement the strong foundation for aid to ensure a viable foundation for trade and growth in LDCs. It is important to note that the report also gave examples of success from Asian economies including: Korea Reoublic, Japan, Taiwan, especially in the 1950s and 1970s (UNCTAD, 2008).

Still, the Third Global Review of aid for trade, held on 18th and 19th July 2011, yielded a strong narrative about the impact of aid for trade programs. The 2011 OECD/WTO monitoring exercise associated with this review generated a vast amount of unique information through the 269 case stories submitted by partner countries, bilateral and multilateral donors, and regional economic communities.

It is, therefore, a critical issue for many developing countries to implement trade facilitation measures so that they can reduce trade costs given their financial resource constraints. This will enable them to benefit from the potential gains from such an initiative such as an increase in trade competitiveness on the global market and trade flows across borders, which will in turn boost their economic growth and development through the multiplier effect on various variables such as consumption, investment, government expenditure among others.
2.2 Trade and development

According to UNCTAD (2013), growth and development in developing countries has majorly been driven by domestic demand other than by exports to other external markets, on the other hand external demand emerging from developed countries has substantially remained low. Furthermore, much of the short-term capital inflows to developing economies from developed countries have remained exerting excessive appreciation pressure on the currencies in the developing countries, thereby weakening further their export capacity. (UNCTAD, 2013)

The relationship between trade, development and poverty reduction especially in LDCs has been a critical area of debate among policy makers, the donor community, non-government organization (NGOs), and in academic field for a long period of time (Petrova, 2012). Actually, the OECD (2003) carried out a vital study on the impact of trade on the overall average income per capita in developing economies, and according to the result, it was found that the international trade elasticity was at 0.2, which was indeed statistically significant. It is for this reason that the donor countries came up with the AFT initiative. However, the various definitions utilized in explaining development vary across sectors. While in the 19th century the term “development” was more associated with ideas of stewardship and “progress” in terms of transforming from the evil of poverty and barbarianism towards civilization and wealth (Shanin, 1997), since the late 1960s the explanation has changed to that of a modernization theory paradigm, blended into the orthodox neoliberal framework of modern economics (Simon, 1997: 184). Modernization theory looks at development as a linear stage-by-stage transformation of all “traditional” or “backward” agrarian communities into “modern” or “developed” societies through economic growth which involves replacing traditional practices with Western norms and
institutions through international economic relations such as technology transfer, labour transfer, among others (Cohn, 2008: 85; Easterly, 2009: 373).

According to Hayter (2005), “limited efforts have been bent towards defining development. Instead, there was an unquestioned assumption that ‘development’, whatever it was, could focus towards improving the situation of the poor”. Petrova (2012) further notes, “The extensive use of the term development has created the perception that it was not a social construct, or an outcome of political will, but rather a natural eventuality of an innately existing world order which was both universally desirable and just”.

A commonly used concept when discussing the process of development has been globalization. The concept of globalization has been adopted to explain the surge in interdependency and internationalization of global markets, production means, financial systems, cross border competition, technology merging, which explains an increase in flows of both capital and labor not ignoring the faster growth in technological innovations and transfer through an increasing volumes of international trade (IMF, OECD et al, 2002; Fischer, 2003, World Bank, 2002). The entire process of the concept of globalization era has been broadly characterized by faster technological advancements in transport and communications infrastructure, especially in large developing economies to better their investment climates by opening up to foreign trade and investment (World Bank, 2002, Dowrick and Golley, 2004). Also, the concept of globalization is credited with speeding up development through the creation of greater connection between “economic growth” and “poverty reduction” (Chandy&Getz, 2011). This, no doubt adds “flesh” to the reasons behind aid for trade (AFT), especially in LDCs.
It should be noted that, despite greater restrictions on the use of certain policy instruments on trade across borders, WTO member countries hold some flexibility to support structural transformation, including a flexible tariff policy where some of the lines are still unbound and where the distinction between “bound” and “applied tariffs” provide space for modulating them in their endeavour to support their development targets (UNCTAD, 2014). Therefore, trade through globalization has been viewed as a major tool in fuelling economic development, especially for LDCs, by global development agencies and the international donor community.

According to UNCTAD (2013), the most important lesson to employ especially in the post-2015 development agenda is that trade policy alone cannot be the only component of developing county’s sustainable development agenda. Basing on different county’s circumstances, different mix of fiscal, exchange rate and monetary policies, along with technology policies, will be a strong requirement for ensuring that trade is strengthened to meet inclusive and sustainable development goals.(UNCTAD, 2013)

Frankel and Romer (1999) came up with a constructed measure of geographic component for given countries’ trade, this was used to obtain instrumental variable estimates for the effect of trade on the incomes. The result of the study indicated that trade has a quantitatively huge and robust positive effect on a country’s income though it is moderately statistically significant

In the nutshell, Trade still holds a reliable plus productive way of integrating developing economies into the global sphere and also supporting the various efforts of developing countries towards becoming less aid dependent. Furthermore access to global markets can act as a “vent
for surplus”, such that the unutilized and underutilized resources can be optimally employed, for example land and labour which still remain abundant in the developing countries, thereby easing their trade balance constraint, and also increasing competitive demands to further improve country’s efficiency.

2.3 Literature Gap

The major issue that emerges from reviewing the literature shows limited empirical facts on the effect of aid effectiveness on the growth and development of various developing countries, especially the LDCs. Various factors explain the causal relationship between aid impact, growth and development factors including policy framework, quality of governance, as well as how much aid is given and the conditions placed on aid recipient countries in return.

Therefore the present literature does not empirically explain why countries like Uganda continuously exhibit trade deficits despite the huge amounts of aid channeled to the trade sector in the process of trade, given the various strategies identified and introduced by development agencies. This study however, will devote efforts to identifying the position of Uganda in terms of the utilization of aid for trade in the pursuit of development goals by ascertaining whether aid has had visible impacts on the trade related initiatives and Uganda’s overall trade performance.
CHAPTER THREE

THEORETICAL FRAMEWORK

3.0 Introduction

Trade capacity is influenced by two major factors demand and supply. For instance, exports are influenced by local supply and foreign supply factors. However, imports are influenced greatly by foreign supply factors and the domestic effective demand of foreign products. However, according to Funke and Holly 1992 “Traditional research on export and import trade dynamics have largely focused on the demand drivers of any trade” this sidelines the fact that in LDCs like Uganda, supply side conditions play a more critical role in determining the country’s export capacity. Indeed, in developing countries, supply-related constraints have made it even more impossible to fully exploit the opportunities of preferential markets like east African community (EAC), AGOA, among others.

3.1 Export and import Determinants

Majeed and Ahmad (2006) in their study on determinants of exports in developing countries made insightful conclusions to this endeavor. From their study, exports are driven by domestic Gross domestic Product (GDP), this represents the capacity of the domestic producers to invest in the production of goods for export purposes, Official development Assistance (ODA) represents aid support channeled to technical support on trade issues and trade facilitation this is believed to improve the country’s export capacity ,national savings being the savings out of national income which is believed to have a positive impact on exports especially if invested in export oriented ventures thereby improving the country’s export capacity.
Various studies have suggested different factors that influence the import’s equation, for instance, Warner and Kreinin (1983), Kotan and Saygili (1999), and Rogers (2000) looked at imports as a dependent variable being driven by various factors like local income given as GDP, which represents purchasing power of local residents, and ODA. Therefore, in this study I will use openness to trade (OTT) model to represent exports and imports. The common measure of openness to trade is the ratio of actual exports plus imports to GNP or GDP of a given country. The interpretation of the Openness Index is that the bigger the index, the larger the influence of trade on activities domestically, and the stronger the economy. This is driven by various factors such as; foreign direct investment (FDI), in this case, FDI could be aiming at cheap inputs resources in domestic country purposely for producing for export or even the domestic demand. Important to note is that the impact of export-driven FDI is positive on export growth. however, FDI targeting “tariff jumping” will not drive the export growth, gross capital formation (GCF) which has a positive impact on the OTT meaning as the GCF increase for a country, OTT improves for that given country, GDP basically represents the domestic incomes which implies that as the GDP grows holding other factors constant, the purchasing power improves thereby increasing the OTT, working age population of a given country which simply means as the working age population increases, the country’s productivity improves enhancing the export sector and official development assistance (ODA) which represents the aid flow directed to trade which is anticipated to be having a positive impact on the country’s OTT.
3.2 Trade Balance Determinants

Critical insights also come from analyzing the trade balance (TB) through analyzing the effect of the exports and imports drivers on the trade balance. Considering the Marshall-Lerner hypothesis, which states that currency devaluation or depreciation has a positive impact on trade balance, where TB is assumed to be driven by GDP/c representing the domestic incomes which in turn represents the purchasing power of a country and assumed to widen the TB in most developing countries since they rely much on importation, gross domestic savings are assumed to have a positive impact on reducing the trade balance gap of developing countries and foreign direct investment (FDI) in this case, export-driven FDI is positive on export growth thereby reducing the trade deficit (Onafowora 2003). In addition to this, other factors influencing TB in particular ODA will be assessed and this represents the official development assistance extended to developing countries, which is anticipated to have a positive impact on the country’s trade balance.
CHAPTER FOUR

METHODOLOGY

4.0 Introduction

In this chapter I will employ one analytical approach to critically analyze the contribution of AFT initiatives to Uganda’s trade performance. In this analysis I am going to estimate simple macro-models of openness to trade and TB including ODA as one of the independent/explanatory variables.

4.1 MODEL SPECIFICATIONS

This sub chapter presents the two different functions of the macroeconomic model employed in the study.

4.1.1 Openness to Trade Function

In this function, a measure of openness to trade is taken as the dependent variable and gross domestic product per capita (GDP/c), foreign aid (ODA), foreign direct investment (FDI). Gross fixed capital formation (GCF) and population expressed as the explanatory/independent variable. The main interest for this specification is to find out if ODA has either a positive or negative impact on trade openness, which is a critical indicator of a country’s trade performance. This is stated as follows;

\[ OTT \text{ (Openness to trade)} = OTT (GDPPC, ODA, FDI, GFCF, POP). \]

Where,

OTT = Openness to trade

GDP/c = Gross Domestic Product per capital of Uganda

ODA = Official Development Assistance taken as percent of GNI
GFCF = Gross fixed capital formation
POP = population
FDI = Foreign direct investment

4.1.2 Trade Balance Function
Secondly, I examine the trade balance \(|X-M|\) on the variables hypothesized to influence trade balance such as gross domestic product per capital (GDP/c), national savings (NS), foreign direct investments (FDI), and Official Development Assistance (ODA). Uganda has however been running a trade deficit for decades and therefore the trade balance (TB) has been negative, for this study, will employ absolute values of trade balance for simplicity. Therefore the function is specified as follows,

\[X-M = X-M(GDPPC, ODA, NS, FDI)\]

Where;
\(X-M\) = Trade balance
NS = National domestic savings for Uganda
ODA = Official Development Assistance taken as percent of GNI
GDP/c = Gross Domestic Product per capital of Uganda
FDI = Foreign direct investment

The incentive behind trade balance function specification is to critically analyze the impact of ODA on trade balance of Uganda and see if it tries to close the deficit gap or it widens it, this will provide an insight on whether aid for trade is having a positive or negative impact on Uganda’s trade performance.
4.2 Brief Data Description and Data Source

Openness to trade is the ratio of actual exports plus imports to GNP or GDP of a given country sourced from World Bank, GDP/c is the real GDP/c data in constant 2005 USD from world bank development indicators, net ODA received as a percentage of GNI consists of the net disbursements on concessional loans (net of repayment of principal) and grants made by official agencies of members of the official development assistance committee and this data will be sourced from the development assistance committee of the Organization of Economic Cooperation and Development.

On the other hand, working age population is the population in the age range of 15 – 64 who could potentially be economically active and the data is sourced from the United nations population division’s world population prospects, gross fixed capital formation (GFCF) contains elements on extras to the fixed assets of the economy plus the disposable changes in inventory like machinery, plant, land, equipment purchase among others sourced from world bank national accounts data and the OECD national accounts data files and gross domestic savings (NS) as percent of GDP data is obtained from the world development indicators 2015 version.
CHAPTER FIVE

DATA ANALYSIS

5.0 Introduction

In this chapter, I will use time series econometric analysis in order to critically approximate macro-models of openness and TB. I will start by testing the data on the variables specified in the functions in chapter four to check whether the variables are stationary or not. From the results, the data was found to be non-stationary as this is usually the case with macro-economic data. The next step is to carry out co-integration tests following the Johansen procedure. From the co-integration of the variables in question, I will further use error correction model (ECM) after determining the lag length and will proceed to the estimation of the model before drawing the necessary conclusions. However, before proceeding to the estimation of the two models, I will provide a brief descriptive statistical analysis on Uganda’s external sector status, which will further give light on the findings of this paper.

5.1 Brief Descriptive Statistical Analysis on Uganda’s External Sector Performance

In this sub-chapter I will provide a brief descriptive statistical analysis for Uganda focusing on one specific area like external sector status/performance for Uganda. It is important to note that since Uganda got independence in 1962 up to the mid-2000s century experienced a series of political instability, which had a significant negative impact on Uganda’s performance in the external sector. However, in the previous decade, Uganda advanced momentous quantity of effort towards establishing and mounting a strong trade sector growth strategy and merging it
to its policy structure, the National Development Plan (NDP) which has now been developed into “Uganda vision 2040” which was launched in April 2013. Indeed approximately over USD (constant 2011) 3.5 billion of AFT has been channelled to trade related initiative between 2002 and 2012 (OECD-CRS, 2013). Figure below show Uganda’s total trade value trend between 2001-2013.

Figure 2: Source: UBOS 2013.
However, regardless of the noted performance of Uganda’s external sector above, the sector is still weak particularly due lower exports compared to imports flowing into the country which is partly explained by the high demand for imported goods due Uganda’s weak manufacturing sector. For instance in 2012, Uganda’s sum export pay were worth USD 2.8 billion whereas sum expenditure on imports in the similar year was at USD 6.1 billion, this widened the trade deficit to about USD 3.3 billion (UBOS, 2013). It is upon such background that Uganda is putting more emphasis on the growth of exports not only to the European market but also the regional markets like EAC, COMESA, and AGOA among others.

Table 1: External sector performance for Uganda 2008- 2012 (USD millions)

<table>
<thead>
<tr>
<th>Trade Flow</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal Exports</td>
<td>807.7</td>
<td>798.5</td>
<td>528.3</td>
<td>355.8</td>
<td>453.7</td>
</tr>
<tr>
<td>Formal Exports</td>
<td>1724.3</td>
<td>1567.6</td>
<td>1618.6</td>
<td>2159.1</td>
<td>2357.5</td>
</tr>
<tr>
<td>Total Exports</td>
<td>2532.0</td>
<td>2366.1</td>
<td>2146.9</td>
<td>2514.9</td>
<td>2811.2</td>
</tr>
<tr>
<td>Informal Imports</td>
<td>78.1</td>
<td>82.0</td>
<td>66.5</td>
<td>53.9</td>
<td>53.0</td>
</tr>
<tr>
<td>Formal Imports</td>
<td>4525.9</td>
<td>4257.6</td>
<td>4664.3</td>
<td>5630.9</td>
<td>6042.8</td>
</tr>
<tr>
<td>Total Imports</td>
<td>4604.0</td>
<td>4339.6</td>
<td>4730.8</td>
<td>5684.8</td>
<td>6095.8</td>
</tr>
<tr>
<td>Trade Balance</td>
<td>-2,072.0</td>
<td>-1,973.5</td>
<td>-2,583.9</td>
<td>-3,169.9</td>
<td>-3,284.6</td>
</tr>
<tr>
<td>% change (Exports)</td>
<td>-7%</td>
<td>-9%</td>
<td>17%</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>% change (Imports)</td>
<td>-6%</td>
<td>9%</td>
<td>20%</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>

Source: UBOS 2013

Despite the growth in Uganda’s exports of 11.8 percent showed by exports pay of USD 2.8 billion in 2012 compared to 7.2 percent growth in imports in the similar year, the actual trade
deficit increased still widened to roughly USD 3.3 billion (UBOS, 2013). Therefore, closing Uganda’s trade deficit requires more sustainable sound growth in exports and growth in the manufacturing sector with the aim of reducing the local demand for foreign goods since most of the imported goods to Uganda are manufactured goods.

It is important to note that recently, there has been notable growth in Uganda’s manufactured exports mainly to regional markets like EAC, and COMESA among others. Products such as sugar, beer, cement, iron and steel, soap, juices, spirits water, spirits, and wheat flour are now being exported by Uganda to the neighboring trading partners. Therefore, enhancing value addition especially in manufacturing sector will provide the needed value-added diversification to stabilize export receipts of Uganda.

Uganda has further taken a very significant step in the diversification of Uganda’s traditional exports of cotton, coffee and tea to non-traditional exports like beans, flowers, maize, fish, and hides since the last decade. However, the challenge remains that value-added export diversification has not been realized yet. Therefore, Uganda’s exports are still dominated by a limited range of primary unprocessed agricultural goods, which are not competitive enough in the external market.

5.2 Estimation of Trade Openness and Trade Balance Models

The following figure (fig 3) shows the ADF root test results, the importance of this test is to provide information regarding the stationarity of the variables. Given the non-stationarity in the data, using Ordinary Least Squares (OLS) may lead to spurious regression relationships which may further lead to drawing wrong conclusions. The option of co-integration is taken up to check whether the variables in the models specified have clear stable long-run steady-state relationships for proper analysis.
<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>COEFFICIENT LEVEL</th>
<th>COEFFICIENT DIFF.</th>
<th>DESCRIPTION</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ODA</td>
<td>-2.220***</td>
<td></td>
<td>With trend and intercept</td>
<td>I (0)</td>
</tr>
<tr>
<td>SAVINGS(NS)</td>
<td></td>
<td>-5.391***</td>
<td>Trend and intercept</td>
<td>I (1)</td>
</tr>
<tr>
<td>GFCF</td>
<td></td>
<td>-8.053***</td>
<td>Trend and intercept</td>
<td>I (1)</td>
</tr>
<tr>
<td>GDPPC</td>
<td>-1.035***</td>
<td></td>
<td>Trend and intercept</td>
<td>I (0)</td>
</tr>
<tr>
<td>OPENNESS</td>
<td></td>
<td>-5.546***</td>
<td>Trend and intercept</td>
<td>I (1)</td>
</tr>
<tr>
<td>FDI</td>
<td></td>
<td>-7.009***</td>
<td>Tr and intercept</td>
<td>I (1)</td>
</tr>
<tr>
<td>POP</td>
<td></td>
<td>-3.397***</td>
<td>Trend and intercept</td>
<td>I (1)</td>
</tr>
<tr>
<td>BALMIL</td>
<td></td>
<td>-6.934***</td>
<td>Tr and intercept</td>
<td>I (1)</td>
</tr>
</tbody>
</table>

***, **, * Represents significant levels at 1%, 5%, and 10% respectively
5.3 EMPIRICAL MODELS
The following sub-chapter presents the empirical models employed in this study, which will provide guidance to the final analysis results.

5.3.1 Trade Openness Equation
To construct the error correction model for openness to trade and trade balance equations, we join together the long run steady state affiliation with the short-run adjustments as given in the following equations (I) to (IV). In equations (II) and (IV) $Y_t$ represents the dependent variables of openness to trade (OTT) and trade balance (TB) respectively.
Equation (I)

\[ \Delta \ln OTT_i = \alpha_0 \]

\[ + \sum_{i=0}^{n} \beta_i \Delta \ln OTT_{t-i} \]

\[ + \sum_{i=0}^{n} \gamma_i \Delta \ln GDPPC_{t-i} \]

\[ + \sum_{i=0}^{n} \delta_i \Delta \ln ODA_{t-i} \]

\[ + \sum_{i=0}^{n} \pi_i \Delta \ln FDI_{t-i} \]

\[ + \sum_{i=0}^{n} \theta_i \Delta \ln GFCF_{t-i} \]

\[ + \sum_{i=0}^{n} \vartheta_i \Delta \ln POP_{t-i} \]

\[ + \sum_{i=0}^{n} \mu_i \ln GDPPC_{t-i} \]

\[ + \sum_{t=0}^{n} \varepsilon_i \ln ODA_{t-i} + \sum_{t=0}^{n} \tau_i \ln FDI_{t-i} + \sum_{t=0}^{n} \rho_i \ln GFCF_{t-i} + \sum_{t=0}^{n} \sigma_i \ln POP_{t-i} + \varepsilon \]
5.3.2 Long Run Model for Trade Openness

Equation (II)

\[
\ln Y_t = \beta_0 + \sum_{i=1}^{n} \beta_1 \ln Y_{t-i} + \sum_{i=0}^{n} \beta_2 \ln GDPPC_{t-1-i} C + \sum_{i=0}^{n} \beta_3 \ln ODA_{t-i} + \sum_{i=0}^{n} \beta_4 \ln FDI_{t-i} \\
+ \sum_{i=0}^{n} \beta_5 \ln GFCF_{t-i} + \sum_{i=0}^{n} \beta_6 \ln POP_{t-i} + \omega ECM_{t-i} + \varepsilon
\]

Table 3: Pesaran (2001) Bounds Tests Results for Trade Openness Model

<table>
<thead>
<tr>
<th>F-Statistics</th>
<th>Level of sig.</th>
<th>Critical values</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.18</td>
<td>10%</td>
<td>3.35 1(1)</td>
</tr>
<tr>
<td></td>
<td>5%</td>
<td>3.79 1(1)</td>
</tr>
</tbody>
</table>

From the results above we reject the null hypothesis of no levels relationship (\(\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = 0\)) since the F-Statistics is greater than the critical values at 10% and 5% level of significance and conclude that the model is fits the data well for analysis.

**Table 4: LONG RUN RELATIONSHIP RESULTS FOR TRADE OPENNESS MODEL**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>Std. err.</th>
<th>P.Values</th>
<th>AIC (LAGS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGDPPC</td>
<td>0.2862***</td>
<td>0.0691</td>
<td>0.000</td>
<td>2</td>
</tr>
<tr>
<td>LODA</td>
<td>0.0822**</td>
<td>0.0312</td>
<td>0.015</td>
<td>3</td>
</tr>
<tr>
<td>LGFCF</td>
<td>-0.5801***</td>
<td>0.1371</td>
<td>0.000</td>
<td>2</td>
</tr>
<tr>
<td>LPOP</td>
<td>-2.8585</td>
<td>1.7893</td>
<td>0.124</td>
<td>2</td>
</tr>
<tr>
<td>LFDI</td>
<td>0.0832***</td>
<td>0.0171</td>
<td>0.000</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: ***, **, * represents 1%, 5%, 10% level of significance respectively.
The estimation of the long-run co-integrating equation yields outcome in that the coefficients of the ODA, GDPPC, and FDI, variables carry the predicted positive sign and are significant whereas, GFCF and POP carry a negative sign. The ODA variable exhibits a positive effect on the openness variable meaning that aid translates positively into openness to trade. The coefficient of the ODA variable interpreted as the elasticity of trade openness with revere to ODA is 0.0822 or approximately 0.1 meaning that one percentage augments in ODA translates into approximately 0.1 percentage points of trade openness. However, ODA is a wider measure of aid resources. AFT is just a part of ODA besieged into trade connected sectors it might be therefore concluded that the relationship between AFT and trade openness might be stronger.

Table 5: SHORT-RUN DYNAMICS, ERROR CORRELATION MODEL

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>Std.err.</th>
<th>p.value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ΔlnGDPPC_{t-1}</td>
<td>-0.2084**</td>
<td>0.0899</td>
<td>0.030</td>
</tr>
<tr>
<td>ΔlnODA_{t-1}</td>
<td>-0.0392</td>
<td>0.0423</td>
<td>0.364</td>
</tr>
<tr>
<td>ΔlnGFCF_{t-1}</td>
<td>0.3490***</td>
<td>0.1131</td>
<td>0.005</td>
</tr>
<tr>
<td>ΔlnPOP_{t-i}</td>
<td>5.5786</td>
<td>6.5805</td>
<td>0.406</td>
</tr>
<tr>
<td>ΔlnFDI_{t-i}</td>
<td>-0.0381*</td>
<td>0.0221</td>
<td>0.098</td>
</tr>
<tr>
<td>ECM_{t-i}</td>
<td>-(0.9982)**</td>
<td>0.1577</td>
<td>0.048</td>
</tr>
<tr>
<td>ΔlnOTT_{t}</td>
<td>0.3309**</td>
<td>0.1577</td>
<td>0.048</td>
</tr>
</tbody>
</table>

No. Of observation = 41  \hspace{2cm} R-squared = 0.75

Adj. R-squared = 0.56

The statistically significant coefficient of the ECM is shown in table 5. The results show that the error correction term of − 0.9982 having the predicted negative sign and also significant
at 5% level of significance. The ECM coefficient shows that approximately 99% of any deviations from the long run steady state are corrected for. The regression diagnostics such as R-squared of 0.75, and a significant F-Statistics, we can conclude that the particular model fits the data perfectly. The adjusted R-squared of 0.56 indicates that model is well fitted and the independent/explanatory variables in the model with the variable of focus ODA explain approximately 56% of the disparities in trade openness of Uganda.

5.3.3 TRADE BALANCE EQUATION

Equation (III)

$$\Delta \ln X - M_t = \beta_0 + \sum_{i=0}^{n} \Delta \ln X - M_{t-i} + \sum_{i=0}^{n} \beta_i \Delta \text{in GDP}_P C_{t-i} + \sum_{i=0}^{n} \alpha_i \Delta \text{ln ODA}_{t-i} + \sum_{i=0}^{n} \gamma_i \Delta \text{ln NS}_{t-i} + \sum_{i=0}^{n} \mu_i \Delta \text{ln FDI}_{t-i} + \sum_{i=0}^{n} \pi_i \text{ln GDPP}_C_{t-i} + \sum_{i=0}^{n} \delta_i \text{ln ODA}_{t-i} + \sum_{i=0}^{n} \sigma_i \text{ln NS}_{t-i} + \sum_{i=0}^{n} \rho_i \text{ln FDI}_{t-i} + \epsilon$$

5.3.4 Long Run Model for Trade Balance

Equation (IV)
\[
\ln Y_t = \alpha_0 + \sum_{i=0}^{n} \alpha_1 \ln Y_{t-i} + \sum_{i=0}^{n} \alpha_2 \ln GDP_{PC_{t-i}} + \sum_{i=0}^{n} \alpha_3 \ln ODA_{t-i} + \sum_{i=0}^{n} \alpha_4 \ln NS_{t-i} + \sum_{i=0}^{n} \alpha_5 \ln FDI_{t-i} + \omega_{ECM_{t-i}} + \epsilon
\]

Table 6: PESARAN (2001) BOUNDS TESTS RESULTS FOR TRADE BALANCE MODEL

<table>
<thead>
<tr>
<th>F-Statistics</th>
<th>Level of sig.</th>
<th>Critical values</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.323</td>
<td>10%</td>
<td>3.52</td>
</tr>
<tr>
<td></td>
<td>5%</td>
<td>4.01</td>
</tr>
</tbody>
</table>

From the results above we reject the null hypothesis of no levels relationship \((\alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5 = 0)\) since the F-Statistics is greater than the critical values at 10\% and 5\% level of significance and conclude that the model is fits the data well for analysis.
Table 7 LONG RUN RELATIONSHIP RESULTS FOR TRADE BALANCE MODEL

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>Std.err.</th>
<th>p.value</th>
<th>AIC (Lags)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGDPPC</td>
<td>-3.641145</td>
<td>2.325657</td>
<td>0.131</td>
<td>2</td>
</tr>
<tr>
<td>LODA</td>
<td>-3.847413***</td>
<td>1.381602</td>
<td>0.010</td>
<td>2</td>
</tr>
<tr>
<td>LNS</td>
<td>0.6705475**</td>
<td>0.1049</td>
<td>0.040</td>
<td>2</td>
</tr>
<tr>
<td>LFDI</td>
<td>-0.4198856</td>
<td>0.5752071</td>
<td>0.472</td>
<td>2</td>
</tr>
</tbody>
</table>

For the time period (40 years) considered in this analysis, Uganda’s trade balance has been in deficit, implying imports have been exceeding exports receipts. The analysis took absolute value of the trade balance. The relationship shows that local ODA, GDPPC and FDI emerges to have an in general negative effect on the trade balance meaning they reduce the deficit in the long run. It is important to note that from the results in table 6 above, ODA with coefficient of -3.847413 exhibits a visible impact in dropping the trade deficit of Uganda. On the other hand NS tend to have a positive impact on Uganda’s trade balance in the long run. This is basically because national savings in Uganda are in one way increased through increasing taxes, which in turn crowds out private investment thereby reducing the country’s capacity to exports.

The coefficient of the ODA variable in table 6 being interpreted as the elasticity of trade balance with revere to ODA is -3.847413 or approximately -3, meaning that one percentage increase in ODA converts into approximately 3 percentage points in the reduction of the trade deficit of Uganda’s trade balance account.
Table 8: SHORT-RUN DYNAMICS, ERROR CORRELATION MODEL FOR TRADE BALANCE

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>Std. err.</th>
<th>p.value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\Delta \ln GDP_{PC, t-1})</td>
<td>3.318479**</td>
<td>1.474399</td>
<td>0.034</td>
</tr>
<tr>
<td>(\Delta \ln ODA_{t-1})</td>
<td>-0.0351083</td>
<td>1.1029</td>
<td>0.975</td>
</tr>
<tr>
<td>(\Delta \ln NS_t)</td>
<td>0.3887952*</td>
<td>0.2043671</td>
<td>0.069</td>
</tr>
<tr>
<td>(\Delta \ln FDI_{t-1})</td>
<td>1.004373**</td>
<td>0.4216596</td>
<td>0.025</td>
</tr>
<tr>
<td>(ECM_{t-i})</td>
<td>-0.62***</td>
<td>0.3170</td>
<td>0.001</td>
</tr>
<tr>
<td>(\Delta X - M_{t-i})</td>
<td>0.49111**</td>
<td>0.2153</td>
<td>0.032</td>
</tr>
</tbody>
</table>

Number of obs = 40  
R-squared = 0.89  
Adj R-squared = 0.83

The error correction model (ECM) with the error correction term of -0.62 while bearing the predicted negative sign is statistically significant at 1%, the ECM coefficient shows that about 62% of long run equilibrium will be achieved. With the regression diagnostics such as R-squared of 0.89, adjusted R-squared of 0.83 and a significant F-Statistics of 5.323, we can conclude that the specified model fits the data well. The adjusted R-squared of 0.83 shows that the independent/explanatory variables in the model with the variable of focus ODA explain approximately 83% of the variation in trade balance of Uganda.

It is important to stress the fact that ODA which I used as one of the explanatory variable for both models is a wider measure of aid than the AFT which is just part of the ODA extended to the developing countries, it can therefore be deduced that the overall relationship between AFT, imports, exports is likely to be much more stronger than the relationship noted in the above
Finally whereas the analysis results shows that ODA can positively pressure Uganda’s trade performance through exports and imports, Uganda needs to strengthen further its export competitiveness given the deficit in the trade balance. It is important to note that enhancing Uganda’s export volume plus competitiveness is a bigger task than building its import volume given the high demand of imported good in Uganda. Thus, evidence of aid for trade impact on Uganda’s trade performance suggests a strong requirement for Uganda to supplement its domestic resources with the aid support so as to improve its trade performance.
CHAPTER SIX
POLICY RECOMMENDATION AND CONCLUSION

6.0 Introduction
This chapter focuses on the policy question asked earlier of whether there are visible aid driven impacts of aid for trade (AFT) on Uganda’s trade performance. In line with the major findings of the study, different policy recommendations under the headings of Government and donors will be suggested. Finally this chapter will provide the final summary and conclusions of this study.

6.1 Policy Recommendations
From the study, the policy recommendations will be split into two broad categories; to the donors and finally to the government as the major actors and stakeholders.

6.1.1 Donors
From the results of this study, it is possible to predict positive long-term impact on Uganda’s trade performance resulting from AFT driven initiatives such as increase in export competitiveness in terms of price and quality and also enhance export volumes. This will only be realized with sound policy framework in place and better AFT targeting options. The more important issue to be addressed is how Uganda as a recipient economy utilizes the aid support directed towards improving Uganda’s trade performance. Therefore, the major challenge is not the aid money but how it is used in dealing with Uganda’s development challenges especially in the trade sector. It is therefore vital for the donors to directly get involved in the monitoring and evaluation of the AFT projects such as infrastructure development to ensure accountability of the funds disbursed to ensure value for money, this will reduce the loss of AFT money to other areas.
of non interest which reduce its overall impact on trade initiatives. Therefore, the issue of establishing sound financial management and accountability system needs to be emphasized by donors to the recipient country to ensure proper and optimal utilization of the aid funds intended for trade development.

It is also important to recommend a continuation of the AFT initiatives to Uganda, however, the donors should demand for robust pro-trade policy reforms such as market oriented reforms and critical emphasis should be focused on Uganda’s export competitiveness not only in the regional markets such as EAC, COMESA but also in the global market. If this area is given serious attention, the impacts of aid for trade are likely to be increased in the long run thereby improving the trade performance of Uganda at large.

“Business people can clear the goods in Kampala with ease through Uganda Revenue Authority (URA) and Kigali through the Rwanda Revenue Authority (RRA) by using one clearing agent unlike in the past when multiple clearing officials were needed,” emphasized the Uganda’s President Yoweri Museveni in his address to the East African Legislative Assembly on Tuesday 20th 2014. Therefore to the donors, future aid support especially targeting the policy area of trade in Uganda should be directed towards strengthening the strategy of Single Customs Territory (SCT), which is projected to reduce the time of clearing the goods and the costs involved. This will enable Ugandan trade actors to take full benefit of the East African Customs Union (EAC-CU), which will increase the efficiency in trade and the overall benefits from trade.

6.1.2 Government
The fundamental requirement to enhance the impact of aid for trade on Uganda’s trade performance is for Ugandan government to show the necessary strong leadership and ownership, which is a key critical principle in the Paris Declaration. Therefore Uganda should be at the forefront of implementing the aid for trade driven initiatives/projects ranging from development of trade infrastructure like roads, railway, warehouses and others to the trade policy formulation areas. It is worth noting that what sometimes has affected the proper utilization of aid for trade resources to Uganda’s trade performance has been leaving most of the fundamental trade policy formulation to the donors or development partners who lack the proper understanding of the local policy environment.

The other notable issue is that for the past decade, more than USD 900 Million of aid resources has been channeled towards Uganda’s agriculture sector. On the other hand, the aid for trade disbursements have indeed been in line with Uganda’s comparative advantage in the sector of agriculture and agro-based processing which is recorded to contribute approximately 61% of Uganda’s export revenue. However much more needs to be given critical attention especially with a major focus on strengthening Uganda’s domestic productive capacity in agriculture sector. Therefore, Ugandan government should invest more in irrigation systems, better technology, and value addition through agro-processing, proper storage facilities among others so as to significantly boost the sector performance, which will in turn improve the overall trade performance of the country. The government of Uganda should also invest part of the aid for trade resources toward enhancing the domestic productive capacity through lowering agriculture production costs such as cost of transportation; utility services costs, and fuel and storage costs.
The other recommendation to the Ugandan government is to focus more on the development of a regionally integrated transport network, which is required to enhance trade growth not only in the EAC but beyond these boundaries. Despite the fact that currently there is a regional Railways construction plan, which constitutes a critical component of the entire transport infrastructure master plan, limited investments and commitment especially on the side of government remains evident. Therefore, it is an urgent requirement to place priority on a regionally planned road network, waterway, railway networks, ports, harbors, and storage facilities such as warehouses. It is pertinent to note that most of the infrastructure depended on for trade is the colonial time inherited infrastructure which cannot best match the current dynamic domestic and inter regional trade.

It is finally important to point out that negotiation for good trade deals which has been of great concern especially in the Ugandan parliament needs to be accompanied by the development of resonance and strong production and supply connected capacities coupled with export promotion strategies. Otherwise, the negotiated facilities end up being underutilized for instance the preferential trade opportunities are not optimally utilized by Uganda due to continued supply constraint.

6.2 Conclusion

In a nutshell, the estimated macro-model of trade balance and trade openness clearly portrays the fact that aid resources have positively influenced Uganda’s trade performance. However the estimated results indicate greater impact of aid for trade resources on imports to Uganda than on its exports for the last forty years. No doubt that Uganda has done its best to build reasonable capacity especially in trade policy formulation and regulation, with a fully-
fledged National Trade Policy (NTP), which covers fundamental areas of national export strategy and external competitiveness strategy. Important to note is that these have been aligned into the NDP and the current Uganda Vision 2040 all with AFT support. However there still remains one critical challenge of luck of dedicated, knowledgeable and fully resourced policy analysis unit to carry out the necessary cross sector policy analysis within an inter-institutional framework to enable optimal benefits from AFT support funds which will in turn improve the overall trade performance in Uganda.

Another issue is that liberalization which led to the formulation of Uganda’s NTP found Uganda unprepared especially in terms of strategic trade options which could quickly help it maximize the liberalization opportunities.

The general conclusion of the study however, is that aid for trade support can improve substantially Uganda’s trade performance if it is properly associated to sound national trade priorities and policy structure.
BIBLIOGRAPHY


Majeed, M. T. (2006). The Pakistan Development Review 45(4 Part II). In M. T. Majeed, *Determinants of Exports in Developing Countries* (pp. 1265-1276.).


40

OECD/WTO. (2013). *Aid for Trade in Action*. GENEVA.


UNCTAD. (2013). United Nation publications *Sales No. e.13.ii.D.3*

UBOS. (2013 Uganda National statistics Report


## APPENDIX

### Table A1: ADF UNIT ROOTS TEST RESULTS FOR STATIONARITY

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>COEFFICIENT LEVEL</th>
<th>COEFFICIENT DIFF.</th>
<th>DESCRIPTION</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ODA</td>
<td>-2.220***</td>
<td></td>
<td>With trend and intercept</td>
<td>I (0)</td>
</tr>
<tr>
<td>SAVINGS(NS)</td>
<td></td>
<td>-5.391***</td>
<td>Trend and intercept</td>
<td>I (1)</td>
</tr>
<tr>
<td>GFCF</td>
<td></td>
<td>-8.053***</td>
<td>Trend and intercept</td>
<td>I (1)</td>
</tr>
<tr>
<td>GDPPC</td>
<td></td>
<td>-1.035***</td>
<td>Trend and intercept</td>
<td>I (0)</td>
</tr>
<tr>
<td>OPENNESS</td>
<td></td>
<td>-5.546***</td>
<td>Trend and intercept</td>
<td>I (1)</td>
</tr>
<tr>
<td>FDI</td>
<td></td>
<td>-7.009***</td>
<td>Tr and intercept</td>
<td>I (1)</td>
</tr>
<tr>
<td>POP</td>
<td></td>
<td>-3.397***</td>
<td>Trend and intercept</td>
<td>I (1)</td>
</tr>
<tr>
<td>BALMIL</td>
<td></td>
<td>-6.934***</td>
<td>Tr and intercept</td>
<td>I (1)</td>
</tr>
</tbody>
</table>
Table A2: LONG RUN RELATIONSHIP RESULTS FOR TRADE OPENNESS MODEL

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>Std. err.</th>
<th>P.values</th>
<th>AIC (LAGS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGDPPC</td>
<td>0.2862***</td>
<td>0.0691</td>
<td>0.000</td>
<td>2</td>
</tr>
<tr>
<td>LODA</td>
<td>0.0822**</td>
<td>0.0312</td>
<td>0.015</td>
<td>3</td>
</tr>
<tr>
<td>LGFCF</td>
<td>-0.5801***</td>
<td>0.1371</td>
<td>0.000</td>
<td>2</td>
</tr>
<tr>
<td>LPOP</td>
<td>-2.8585**</td>
<td>1.7893</td>
<td>0.124</td>
<td>2</td>
</tr>
<tr>
<td>LFDI</td>
<td>0.0832***</td>
<td>0.0171</td>
<td>0.000</td>
<td>2</td>
</tr>
</tbody>
</table>

Table A3: SHORT-RUN DYNAMICS, ERROR CORRELATION MODEL

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>Std.err.</th>
<th>p.value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\Delta \ln(GDPPC)_t$</td>
<td>-0.2084**</td>
<td>0.0899</td>
<td>0.030</td>
</tr>
<tr>
<td>$\Delta \lnODA_t$</td>
<td>-0.0392</td>
<td>0.0423</td>
<td>0.364</td>
</tr>
<tr>
<td>$\Delta \lnGFCF_t$</td>
<td>0.3490***</td>
<td>0.1131</td>
<td>0.005</td>
</tr>
<tr>
<td>$\Delta \lnPOP_{t-i}$</td>
<td>5.5786</td>
<td>6.5805</td>
<td>0.406</td>
</tr>
<tr>
<td>$\Delta \lnFDI_{t-i}$</td>
<td>-0.0381*</td>
<td>0.0221</td>
<td>0.098</td>
</tr>
<tr>
<td>$ECM_{t-i}$</td>
<td>-(0.9982)***</td>
<td>0.1577</td>
<td>0.048</td>
</tr>
<tr>
<td>$\Delta \lnOPP_t$</td>
<td>0.3309</td>
<td>0.1577</td>
<td>0.048</td>
</tr>
</tbody>
</table>

No. of observation = 41, R-squared = 0.75
Adj. R-squared = 0.56
### Table A4: LONG RUN RELATIONSHIP RESULTS FOR TRADE BALANCE MODEL

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>Std.err.</th>
<th>p.value</th>
<th>AIC (Lags)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGDPPC</td>
<td>-3.641145</td>
<td>2.325657</td>
<td>0.131</td>
<td>2</td>
</tr>
<tr>
<td>LODA</td>
<td>-3.847413***</td>
<td>1.381602</td>
<td>0.010</td>
<td>2</td>
</tr>
<tr>
<td>LNS</td>
<td>0.6705475**</td>
<td>0.1049</td>
<td>0.040</td>
<td>2</td>
</tr>
<tr>
<td>LFDI</td>
<td>-0.4198856</td>
<td>0.5752071</td>
<td>0.472</td>
<td>2</td>
</tr>
</tbody>
</table>

### Table A5: SHORT-RUN DYNAMICS, ERROR CORRELATION MODEL FOR TRADE BALANCE

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>Std. err.</th>
<th>p.value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\Delta \ln GDPPC_t$</td>
<td>3.318479**</td>
<td>1.474399</td>
<td>0.034</td>
</tr>
<tr>
<td>$\Delta \ln ODA_{t-i}$</td>
<td>-0.0351083</td>
<td>1.1029</td>
<td>0.975</td>
</tr>
<tr>
<td>$\Delta \ln NS_t$</td>
<td>0.3887952*</td>
<td>0.2043671</td>
<td>0.069</td>
</tr>
<tr>
<td>$\Delta \ln FDI_{t-i}$</td>
<td>1.004373**</td>
<td>0.4216596</td>
<td>0.025</td>
</tr>
<tr>
<td>$ECM_{t-i}$</td>
<td>-0.62</td>
<td>0.3170</td>
<td>0.001</td>
</tr>
<tr>
<td>$\Delta X - M_{t-i}$</td>
<td>0.491111***</td>
<td>0.2153</td>
<td>0.032</td>
</tr>
</tbody>
</table>

Number of obs = 40  
R-squared = 0.89  
Adj R-squared = 0.83
Figure 1. Uganda’s total trade value trend between 2001-2013.
Figure 2: Aid to building productive capacity 1988-2013
Table A6: External sector performance for Uganda 2008-2012 (USD millions)

<table>
<thead>
<tr>
<th>Trade Flow</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal Exports</td>
<td>807.7</td>
<td>798.5</td>
<td>528.3</td>
<td>355.8</td>
<td>453.7</td>
</tr>
<tr>
<td>Formal Exports</td>
<td>1724.3</td>
<td>1567.6</td>
<td>1618.6</td>
<td>2159.1</td>
<td>2357.5</td>
</tr>
<tr>
<td>Total Exports</td>
<td>2532.0</td>
<td>2366.1</td>
<td>2146.9</td>
<td>2514.9</td>
<td>2811.2</td>
</tr>
<tr>
<td>Informal Imports</td>
<td>78.1</td>
<td>82.0</td>
<td>66.5</td>
<td>53.9</td>
<td>53.0</td>
</tr>
<tr>
<td>Formal Imports</td>
<td>4525.9</td>
<td>4257.6</td>
<td>4664.3</td>
<td>5630.9</td>
<td>6042.8</td>
</tr>
<tr>
<td>Total Imports</td>
<td>4604.0</td>
<td>4339.6</td>
<td>4730.8</td>
<td>5684.8</td>
<td>6095.8</td>
</tr>
<tr>
<td>Trade Balance</td>
<td>-2,072.0</td>
<td>-1,973.5</td>
<td>-2,583.9</td>
<td>-3,169.9</td>
<td>-3,284.6</td>
</tr>
<tr>
<td>% change (Exports)</td>
<td>-7%</td>
<td>-9%</td>
<td>17%</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>% change (Imports)</td>
<td>-6%</td>
<td>9%</td>
<td>20%</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>