Trade Liberalization, Export and Import Growth: Evidence from Uganda

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A Report submitted to the University of Mauritius under the WTO Chairs Programme

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Abstract

The study explores the impact of trade liberalization on export and import growth in Uganda. A number of developing countries have opened up their own economies to take full advantage of the resultant opportunities for economic development through trade. Proponents of trade liberalization envisage positive results emanating from the increased competition in the sector. For instance, liberalization aids competition in the market, by increasing the basket of goods and services with better quality and lower prices.

However, trade liberalization in developing countries has been criticized for increasing import penetration on the pretext of opening up the sector to more competition. The reason is that trade policy reforms tend to have a more immediate effect on the imports than on the exports. This concern has motivated researchers to investigate whether or not the impact of trade liberalization has been greater on export growth than on import growth. This is because Uganda is one of the countries to have implemented significant economic reforms, including the liberalization of the trade regime, over the last two decades and a half. These reforms have been both external and domestic. Substantial progress has been made to reduce tariff and non-tariff barriers through the EAC.

The study investigated the issue using macro and micro analysis of the Ugandan economy. The macro analysis was employed by estimating the export and import models estimated using Vector Error-Correction modeling (VECM) using time series macroeconomic data for the period 1981-2009. The results of the study suggest that trade liberalization has led more to growth in imports than exports. The macro study findings are in line with previous observations made by Morrissey, et al., (2003); Santos-Paulino (2003); Santos-Paulino & Thirlwall (2004) and Hye & Mashkoor (2010).

With regard to the micro analysis several, issues under the trade sector were highlighted that could be linked to the macro evidence which were; larger growth in imports than exports. Such critical issues included the adverse effect of the dismantling of the marketing boards, the inadequacy of the trade sector infrastructure, the low value addition and limited research and dissemination of the ever-changing trends in international trade regarding the products on high demand, the standards required to access such markets as well as the absence of value chains in the tradeables sectors. These have served to inhibit export growth. These issues were manifested at a macro level analysis for instance in the weak significance of the coefficient of the foreign income as well in that of the reel exchange rate in the export growth model. This specifically is in terms of the inability for exports

to substantially respond to changes in foreign income as well as prices. The findings point to a number of policy implications that require attention.

The need for vigorous marketing campaigns for Uganda's exports and improvements in the physical infrastructure in terms of road, rail and port as well as the trade mechanism specifically, the need to streamline production and marketing in order to boost the country's export potential. This strictly calls for the development of value chains in the entire tradable sectors. A very good case of best practice that would potentially increase Uganda's exports is that of Good African coffee which is operational in one sub region in the coffee sector. This needs to be replicated across all tradeable sectors in a scrupulous manner. This in addition also involves expansion and harnessing the production and export of new dynamic products such as fish, vegetables and cut–flowers away from the traditional commodity exports. Such interventions according to the authors are among the means to close the gap between export and import growth following trade liberalization. Any interventions short of these may not in any way help to close the ever increasing trade deficit which has been discussed at length in the background to the economy section of the study.

1.0 Introduction

In recent decades, international trade has grown sharply. This growth has been driven in part by the even a faster rise in international trade. The growth in trade is in turn the result of both technological developments and concerted efforts to reduce trade barriers through trade liberalization (IMF, 2001). Some developing countries have opened their own economies to take full advantage of the opportunities for economic development through trade, but many still have misgivings about the resultant effects (IMF, 2001, Gauci and Karingi, 2008). Other countries are interested to know whether greater liberalization will lead to rapid and sustained poverty reduction (Gauci and Karingi, 2008). However, proponents of trade liberalization envisage positive results emanating from the increased competition in the sector. For instance, liberalization aids competition in the market, by increasing the basket of goods and services with better quality and lower prices.

Uganda is one of the countries in the world that has implemented significant economic reforms, including a liberalization of the trade regime, over the last two decades and a half. Indeed, Uganda presents an interesting case study of a developing country that has undergone important reforms of its trade policy regime in the last two decades and a half. These reforms have been both external and domestic. External trade liberalization included a whole range of measures that included lowering and binding of tariffs, simplification of trade procedures and abolition of licensing as well as administrative controls. Domestic trade liberalization included elimination of state controls and monopoly commodity marketing boards and state companies, liberalization of the foreign exchange market as well as an attempt to open rural areas to markets through improvement of infrastructure (DENIVA, 2005). Substantial progress has been made to reduce tariff and non-tariff barriers through the EAC (Ng'ang'a, 2006). Evidence of the potential gains from eliminating remaining trade barriers for the country is clear and substantial (IMF, 2001; Dollar, 2001; Gauci and Karingi, 2008).

Policies that make an economy open to trade and investment with the rest of the world are needed for sustained economic growth. This consideration points to the need to liberalize trade further (IMF, 2001). In efforts to realize trade's potential as a driving force for economic growth and development, empirical studies have been conducted to guide and influence policy making in area of trade in a number of countries. The studies that have been conducted in Uganda for example, have mainly looked at the impact of trade liberalization on agricultural supply response, poverty and economic performance among others (see for example McKay *et al.,*1997; Morrissey *et al.,*1998; Blake *et al.,*2002; Kanji; 2002; Morrissey *et al.,*2003).

However, one of the most common criticisms of trade liberalization in developing countries has been increasing import penetration on the pretext of opening up the sector to more competition (Pacheco-Lopez, 2003). The reason is that trade policy reforms tend to have a more immediate effect on the imports than on the exports (Morrissey, *et al.,* 2003). This concern has motivated researchers to investigate whether the impact of trade liberalization has been greater on export growth than on import growth or vice versa (Santos-Paulino, 2003; Santos-Paulino & Thirlwall, 2004; Hye & Mashkoor, 2010).

This particular concern has been neglected for Uganda yet trade imbalance is widening, a development which has serious ramifications for the development and shaping of the economy's economic growth and development pattern. When growth in the trade sector is unevenly distributed between exports and imports, it is dangerous for the country in long run and can undermine development. Therefore, the purpose of this study is to examine the extent to which the composition and growth of exports and imports have responded to trade reform inititiates in Uganda controlling for other factors as well as assess how the prevailing trade sector policy framework is useful in engendering performance of the sector.

Findings and conclusions from the study will have a strong bearing on future policy making particularly in areas related to the management of a liberalized trade sector in a manner that

will maximize the benefits that accrue to the Ugandan economy while minimizing the adverse effects. More specifically, what policies can complement trade liberalization reforms and ehnance or hinder its effects on export and import response respectively? The question of which policies are needed to complement trade liberalization reforms so as to enhance export growth and reduce huge imports has not been answered in Uganda. This is critical given the fact that if liberalization is not managed well, the resultant effect is balance of payments difficulties that often arise if imports are more responsive than exports to the elimination of trade barriers. The results of the study will have policy implications with regard to the ongoing debate concerning the 'sequencing' of export and import liberalization; and the implementation and monitoring of trade-related policies. This is the first study to look at this topic for the case of Uganda.

1.1 Objectives

The major objective of the study is to assess the extent to which imports and exports have responded to the liberalization of the trade sector in Uganda. Specifically, the study seeks to explore the following issues:

i) Examine the composition of the country's trade flows.
ii) Establish the import and export elasticities with respect to prices and income.
iii) Document the factors which have accounted for the prevailing trends in the trade sector.
iv) Assess the performance of the various trade sectors.

1.2 Research Questions

The purpose of this study is to examine this issue in a systematic way by looking at Uganda which has undergone extensive trade liberalisation since the mid-1990s. We are interested in answering a number of questions:

(i) How has the composition of exports and imports changed following trade liberalization?

(ii) Has the impact of liberalization been greater on export growth or import growth?

(iii)How has liberalization affected the price and income elasticities of demand for exports and imports?

(iv) Which sectors have registered growth and the plausible reasons such has been the trend.

(v)Which policy interventions can be used to maximize the benefits from the trade sector?

2.0 Background to the Study

2.1 Policy Framework: The National Trade Policy

The National Trade Policy (NTP) provides the guiding principles on which the trade sector operates. With regard to international trade, the NTP recognizes that developing international trade, using a vibrant domestic production and trade subsector as a springboard is an endeavor worth pursuing. The overriding objective of Government policy on international trade is to ensure effective integration of the economy into the regional economy and the multilateral trading system, enhancing national capacity to take advantage of the above, while minimizing the negative effects of globalization.

Government policy actions in the international trade sub-sector is focused at: (1) ensuring that the sub-sector effectively and efficiently complements the domestic trade and production sub-sectors; (2) ensuring that what is produced domestically can be competitively traded at international level; (3) using trade negotiations to influence policies and practices of the country's trading partners' so that they are conducive to the development of Uganda; and (4) adapting Uganda's economy to the trade and trade-related policies and practices of the country's trading partners.

In this regard, the NTP sets out some of the following policy actions:

i) Enhance the capacity of the country to engage in trade negotiations.

ii) Constitute/establish The National Trade Negotiations Team (NTNT) that shall be led by the Minister responsible for Trade. The Permanent Secretary in the Ministry responsible for Trade shall determine the technical composition of the Team; and shall, in collaboration with relevant Ministries and agencies, appoint members, who shall represent their parent institutions on the Team.

iii) Post and maintain Trade Officers to Embassies/Missions that participate in various trade negotiations or are located in countries and/or regions in which Uganda has strategic trade interests. The implementation of this policy activity will be undertaken in close coordination between the Ministries of Trade, and of Foreign Affairs

iv) Pursue regional economic integration with a view to increasing effective market access opportunities for Uganda's goods and services.

v) Work within the multilateral trading system to ensure that Uganda's economic and commercial interests are an integral part of its work programme and outcomes

vi) Identify and develop products and services where the country has comparative and competitive advantage, together with the respective markets and promote product/service and market specialization.

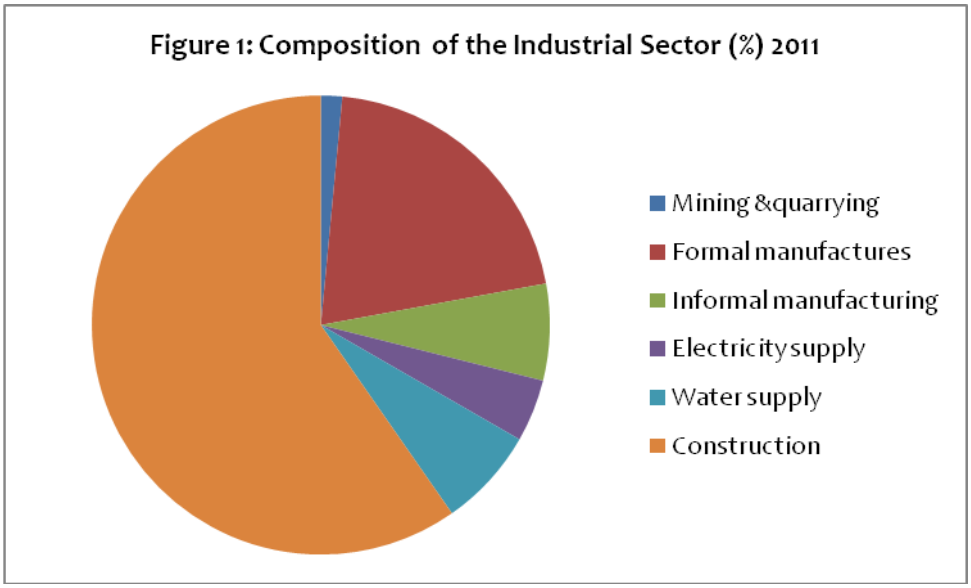
vii) Maintain a liberal trade policy and at the same time enhance capacity to adjust to trade liberalization, including development of social safety nets in instances where it is envisaged that the liberalization may have negative effects

viii) Continue to implement trade facilitating measures.

2.11 Sectoral trade policy patterns

Small-scale coffee growing and subsistence farming are among the few activities that emerged largely unscathed from Uganda's slide into political and economic disarray in the greater part of the 1970s through the 80s. However, other agricultural production, has responded swiftly to the economic recovery registered over the past two decades. To encourage product diversification and promote food self-sufficiency, many farm sectors have been granted above-average tariff protection on final products, combined with free entry for inputs (fertilizers, pesticides, seeds, agricultural machinery and tools).

Past import-substitution policies for manufacturing have largely been abandoned. Uganda's small industrial sector accounts for some 25.3 per cent of GDP (MFPED 2011). It mainly constitutes farm-based processing industries such as coffee, beverages (beer and soda), textiles and leather, mining, quarrying, construction among others.



Source: MFPED 2011

As in the agricultural sector, the Government has sought to enhance industrial efficiency through deregulation, privatization and trade liberalization. However, a combination of tariffs and duty exemptions - or, in some cases, import bans under the negative list - is geared to promoting selected "infant" industries. In addition, under the Investment Code, the UIA may grant investment incentives conditional upon the use of local inputs or export performance.

Rehabilitation and modernization of the infrastructure and of basic business services have been given priority over time. The Government has sought, in particular, to make the banking sector more efficient and deregulate the transport industry. There are efforts to establish a pension regulator and liberalise the pension sector, introduce Government Bonds for small savers as a mechanism to increase domestic resource mobilization, review the tax treatment of small savers' interest income, taking into account revenue and equity issues, efforts to popularize the Uganda Securities Exchange and opening up competition in the banking sector with close supervision of the Bank of Uganda to ensure prudential regulation. Reforms in telecommunications have followed suit; in this connection, modernization of the basic telecommunications network and reform of the pricing structure has been of significant

benefit to Uganda's economy. The same applies to electricity generation and distribution, whose reliability seriously suffered from outdated equipment.

2.12 Trade Policies and Foreign Trading Partners

Government recognizes that economic growth not only involves mobilization and efficient utilisation of resources, capacities and capabilities but also to transform the outlook of the economy by pooling together regional and sub regional capacities. Cognizant of this, autonomous trade and investment liberalization has been a key to Uganda's economic performance since the mid-1980s. It has helped to attract foreign donors and investors and create the conditions for rapid economic recovery. To improve the resource base for continued expansion, investment flows would need to be complemented by enhanced domestic capital formation. The principal macroeconomic conditions have been in place - fiscal prudence and a low-inflation environment with the exception of the recently registered macroeconomic instabilities. However, private savings have remained low standing at 61 percent compared to the COMESA average of 18 percent.

Trade policy and, in particular, the creation of a domestic trading environment in which anti-export bias is diminished or absent, export duty reductions or elimination have an important role to play in Uganda's future development. Enhanced international integration based on commitments under WTO and COMESA, and the current developments within the East African Community (EAC). The country is also a member of the African Union and a signatory to the New Partnership for Africa's Development (NEPAD). Such regional economic cooperation is crucial for strengthening social and economic advance for the country and Africa as a whole. This is in light of the fact that since industrialization is still in its primary stages, it is highly pertinent that economies in the sub-region pool resources together to establish industries, set up industry related institutions, including research and development facilities.

Efforts are being made to improve government's trade related capacity by mainstreaming trade issues in the overall National Planning Strategy. Specifically, the implementation of the

National Trade Policy is aimed at eliminating barriers to trade and mitigating the effects faced by domestic producers and traders on the international market. Deliberate interventions are being implemented in the spheres of regulation, eliminating trade distorting policies and practices, both locally and internationally. There is recognition by Government with regard to the need for supportive and effective institutions responsible for policy formulation, implementation and monitoring, customs, and bodies for export promotion.

Similarly, a supportive legal regime, and an efficient trade facilitating infrastructure and appropriate human capital and skills in both the private and public sectors are some of the salient features that are nested in the national planning strategy. As such, Government has been working through the Integrated Framework and with the donor community to benefit from trade-related technical assistance. Such arrangements help to ensure the momentum for reform, spur resource efficiency, provide market potential for emerging industries, and encourage long-term development of trade and investment.

It is on the basis of the recent liberalization and economic reforms that the study sought to investigate how such policy changes have influenced the trends in import and export growth with a view to documenting mechanisms thought which the opening up of the economy can be used to maximize trade related benefits for the country.

2.13 EAC regional integration

The East African Community (EAC) is the regional intergovernmental organization of the Republics of Kenya, Uganda, the United Republic of Tanzania, Republic of Rwanda and Republic of Burundi with its headquarters in Arusha, Tanzania, whose agenda is to attain economic, social and political integration of East Africa (EAC Trade Report, 2006).

History and evolution of EAC

In the past, Kenya, Tanzania and Uganda had enjoyed a long history of co-operation under successive regional integration arrangements. These included the Customs Union between

Kenya and Uganda in 1917, which the then Tanganyika (Tanzania now) later joined in 1927; the East African High Commission (1948-1961); the East African Common Services Organisation (1961-1967); the East African Community (1967-1977) and the East African Co-operation (1993-2000). All these were aimed at forming the East African Common Market.

It was also aiming at strengthening and regulating the industrial, commercial and other relationships of the partner states to the end that there shall be accelerated, harmonious and balanced development and sustained expansion of economic activities. Despite the above good intentions, EAC collapsed and dissolved in 1977 because of political discord amongst the members, coupled with an increasing trade imbalance but the Member States negotiated a Mediation Agreement for the Division of Assets and Liabilities, which they later signed in 1984.

One of the provisions of the Mediation Agreement, the three States agreed to explore areas of future co-operation and to make concrete arrangements for such co-operation. Subsequent meetings of the three Heads of State led to the signing of the Agreement for the Establishment of the Permanent Tripartite Commission for East African Co-operation on November 30, 1993. Full East African Co-operation operations started on March 14, 1996 when the Secretariat of the Permanent Tripartite Commission was launched at the Headquarters of the EAC in Arusha, Tanzania.

Considering the need to consolidate regional co-operation, the East African Heads of State, at their 2nd Summit in Arusha on 29 April 1997, directed the Permanent Tripartite Commission to start the process of upgrading the Agreement establishing the Permanent Tripartite Commission for East African Co-operation into a Treaty. The Treaty-making process, which involved negotiations among the Member States as well as wide participation of the public and the Treaty for Establishment of the East African Community was signed on 30 November 1999 and entered into force on 7 July 2000 following its ratification by the original three Partner States – Kenya, Uganda and Tanzania. The Republic of Rwanda and the Republic of

Burundi acceded to the EAC Treaty on 18 June 2007 and became full Members of the Community with effect from 1st July 2007.by 1998.

Objectives of EAC

The EAC aims at widening and deepening co-operation among the Partner States in, among others, political, economic and social fields for their mutual benefit. To this extent the EAC countries established a Customs Union in 2005 and a Common Market in November 2009, subsequently a Monetary Union by 2012 and ultimately a Political Federation of the East African States by 2014.

East African Community Achievements

Since its establishment, the East African Community has made steady progress based on a series of its development strategies. Among the significant achievements are those in confidence building measures and harmonization of Partner States' policies and programmes. The primary objective is to reinforce a common East African identity within the vision of a fully integrated East Africa, where there shall be guaranteed movement of the factors of production. Steps already taken in this regard include the signing of East African Customs Union Protocol in March 2004 and came into effect in January 2005. The main elements of the Protocol are: removal of internal tariffs and all non-tariff barriers on intra-EAC trade; introduction of common external tariffs (CET); and, agreement on a list of products classified as sensitive and therefore requiring additional protection.

However, non-tariff barriers to trade remain a major challenge. National Committees have been established through a directive of the Council Ministers and have been inaugurated in all the Partner States to monitor the removal of NTBs. The CET is in full implementation. The initial fear of revenue losses from the implementation of the Customs Union failed to materialize as revenues have increased in all the countries.

The other achievement was the introduction of the East African Passport and harmonization of vehicle transit procedures and requirements to ease border crossing and later on the signing of the EAC Common Market protocol in November 2009 and its implementation will commence in July by 2010. The main elements of Common Market are the "four freedoms" involving free movement of goods, labour, services and capital. The freedoms to be granted to East Africans under the Protocol comprise the right to freely leave, or enter and reside in a Partner State for the purpose of work, or establishment, or access and provision of services in the fields of health, education and training, legal and judicial affairs, tourism and communications, among others.

Other measures include the already established convertibility of East African currencies (since 1997) and preparations towards the realization of a single currency by 2012; progressive reduction of tariffs and revival of regional co-operation in research, human resource, and science and technology development. Co-operation in political affairs involve activities in the areas of legal and judicial affairs, regional defence and security and co-ordination of foreign policy. Similarly, progress has been made in the promotion of investments and trade as well as identification and development of various regional infrastructure projects cutting across roads, railways, civil aviation, posts and telecommunications, energy and the Lake Victoria Development Programme.

In November 2007, the Partner States signed an interim EAC/EU Economic Partnership Agreement (EPA) which replaces the non-reciprocal Cotonou Agreement and provided the legal framework for the trade between the EU and the EAC pending the conclusion of EAC EU EPA by July 2009. However, although the EAC intra trade performance has taken positive trend, its performance with rest of the world is still low. The table presents the direction of EAC exports to the entire African continent and to global markets alongside other African economic regional groups. The results show that EAC still perform poorly in terms of its exports to Africa, China, Asia, EU, Japan, USA and world.

Table 1: Direction of African regional groups exports (US$ millions, Averages)

RECs	Africa	China	Asia	EU	Japan	USA	Rest of the World	World
CEMAC	558.8	2594.5	1948.1	4453.9	142.5	4887.7	1641.8	16227.2
CEN-SAD	8813.5	4294	5750.7	50831	1879.9	20682.4	15218.3	107469.9
CEPGL	93.3	146.9	66.6	898.6	23.1	176.2	168.9	1573.6
COMESA	4761.1	3986.8	1925.6	27827.5	1046.8	3432	9366.3	52346.1
EAC	1499.7	156.1	532.8	1515.9	113.6	199.1	1026.1	5043.3
ECCAS	990.4	6502.3	2351.8	8125.6	370.1	10234	4992.5	33566.7
ECOWAS	6125.7	616.3	3693.6	13556.4	788.6	17073.2	6168.6	48022.3
IGAD	1646.2	2740	552.8	1480.6	545.1	212.7	1412.6	8590
IOC	223.2	35.9	106.7	1930.1	59.3	515.5	170.6	3041.4
MRU	85.7	39.2	206.3	1327.7	4.2	167.9	387	2218
SADC	8704.9	7139.5	5184.6	20679.4	2672.8	11266.5	14973.9	70621.6
UEMOA	2828.4	253.9	776.4	3549.8	42.6	589.9	853.9	8894.9
UMA	2158.4	1079.9	1511.6	50915.4	485.1	9147.5	10996.8	76294.7

Source: Africa Trade Policy Centre, 2010.

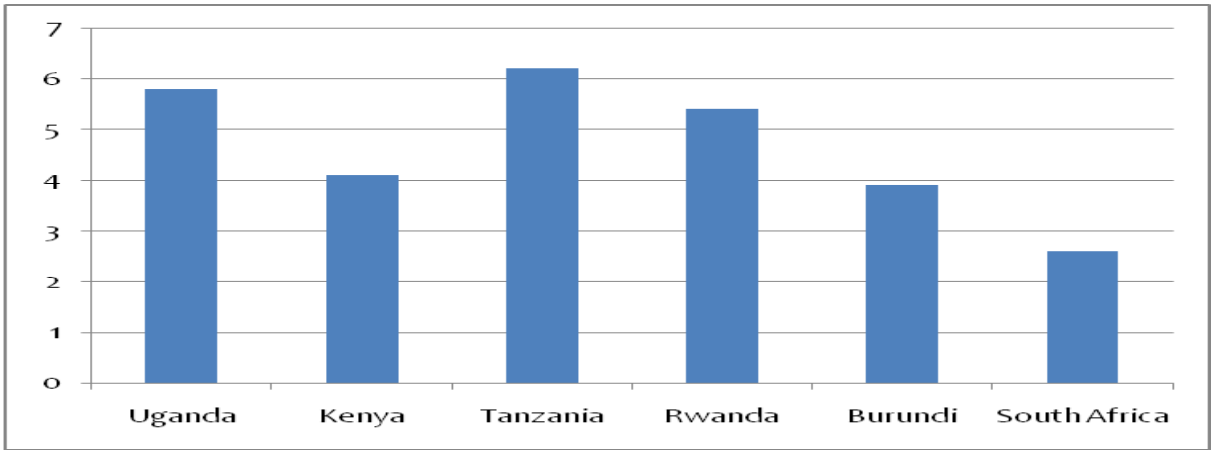
2.21 Macroeconomic Developments

This section presents an in-depth discussion of the macroeconomic developments in the Ugandan economy, highlighting emerging trends from both the domestic, regional; continental as well as international perspective. Domestically, the Ugandan economy grew at the impressive rate of 7% in 2009, despite the continued weakness of the world economy. There had been instability resulting from the disruption of the trade link between Uganda and Kenya following the post-election violence in Kenya in early 2008. This had eased.

However, the current instabilities in the oil producing countries, the uncertainty following the conclusion of presidential elections in February 2011 have had a sustained adverse effect on the economy, the later leading to a slowdown in external trade, production and investment which in turn has largely caused a trended depreciation in the Uganda shilling, while the former has further constrained economic activity through increasing the cost of production.

Demand for Uganda's exports and remittances from abroad had started to pick up as the global recession also eased. The economy grew by 5.8 percent in financial year 2009/10, which is 1.4 percentage points less than the growth rate of 7.2 percent achieved in 2008/09. Although there was a slowdown in the growth rate, it was nevertheless robust given the adverse external shocks as well as natural disasters which the economy faced during the year. Sectoral growth recorded industry at 8.9%, services (5.8%) and 2.1% for the agricultural sector. In a regional context, the recent growth of the economy has been impressive. Uganda's economic growth in the year 2009/10 was among the highest in the East African Community and all of Sub-Saharan Africa (see the figure below):

Figure 2: Economic Growth: for Selected countries in Sub Saharan Africa and South Africa, fiscal year 2009/10[3].

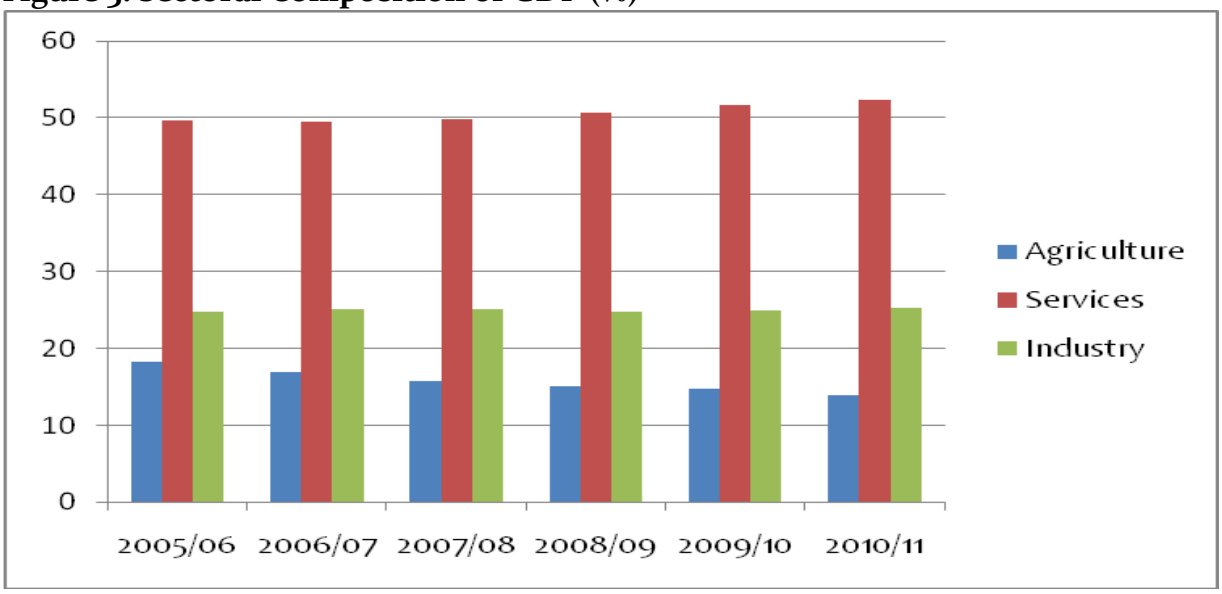


Source: IMF (2010)

The sectoral contribution to GDP shows that the share of agriculture, forestry and fishing in total GDP at 2002 constant prices has continued to decline from 14.7percent in 2009/10 to 13.9 percent in 2011/12. The share of services in total GDP increased to 52.4%, while industry has a share of 25.3% (Figure 3), highlighting the growing importance of these sectors in the economy.

[3] The growth rate for the Uganda was updated from Uganda Bureau of Statistics

Figure 3: Sectoral Composition of GDP (%)



Source: Uganda Bureau of Statistics & Ministry of Finance(2010)

In the external sector, exports as a percentage of GDP are estimated to have decreased from 16.4% in 2008 to 15.7% in 2009, while imports dropped from 24.5% of GDP in 2008 to 23.4%. The overall trade deficit decreased from 8.1% of GDP in 2008 to 7.7% in 2009, while the outlook for 2010 and 2011 is poor, due to the possibility of a surge in non-oil imports as the country speeds up investments in oil production.

The major constraint to further growth remains the inadequacy of the country's infrastructure, particularly electricity and roads, due to lack of investment. The newly launched five year National Development Plan that is laying emphasis on infrastructure and agricultural development in a bid to increase exports and remove the infrastructure bottlenecks that are impeding further growth.

The tax effort (11.9% of GDP in 2008/09) remains low by the standards of many countries in sub-Saharan Africa, which on average collect about 23% of GDP. This is primarily due to the lack of a tax mobilization strategy, which has hindered efforts to tax areas of the economy that have hitherto been hard to reach, such as agriculture and informal trade; other reasons are tax evasion and lingering inefficiencies in tax administration. The country has taken

measures to improve tax collection, however, including the use of *e*-taxation, which has increased compliance rates.

2.22 External Position

Exports of coffee, the main cash crop, increased by about 20% in 2008 but are estimated to have fallen by 10% in 2009 due to the crisis. They are projected to improve by 2.6% and 10% in 2010 and 2011 respectively. Coffee export prices increased by 15% in 2008, fell by about 7% in 2009, and are projected to rise again by 14% in 2010 and 12% in 2011. Other exports are likely to follow the same trend. Consequently, export receipts as a percentage of GDP declined from 16.4% in 2008 to 15.7% in 2009, with further declines expected in the next two years.

Imports increased by 20% in 2009, primarily due to non-oil private sector demand, but the imports to GDP ratio decreased from 24.5% in 2008 to an estimated 23.4% in 2009. Consequently, the trade deficit narrowed from 8.1% of GDP in 2008 to an estimated 7.7% in 2009, and the outlook is grim for 2010 and 2011 due to the possibility of large increases in non-oil imports as the country speeds up investments in oil production(see table 1 below). The current account deficit is estimated to have improved slightly from 6.1% of GDP in 2008 to 5.9% in 2009, with poor prospects for 2010 and 2011.

2.23 Uganda's External Sector performance

Balance of Payments Position

Provisional estimates, indicate that the overall balance of payments is in surplus by US$ 474 million this financial year following a deficit of US$ 43.2 million during 2008/09 (MFPED, 2010). The improvement in the overall balance was mainly attributed to an improvement in the capital and financial account position, which more than offset the deficit on the current account. The capital and financial account is projected to improve to a surplus of US$ 1.29 billion during 2009/10 from a surplus of US$ 1.06 billion recorded during the 2009/10 financial year, while the current account deficit, is expected to record a deficit of US$ 1.08 billion during the 2010/11 financial year. The deficit in the current account position is an

indication of the continuing decline in the trade balance and increased service payments to the rest of the world.

Gross foreign exchange reserves at the Bank of Uganda during 2009/10 were estimated at an equivalent of 5.3 months import cover of goods and services. This followed an increase of US$ 102 million during the 2010/11 financial year as compared to an outflow of US$ 61 million in the previous year.

Table 2: Balance of Payments (Millions US$)

	2002/3	2003/4	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10
Trade Balance	-620.31	-598.84	698.28	-927.72	-995.27	-913.49	-1,198.04	-1,273.95
Exports	506.34	670.92	886.34	1,041.24	1,499.9	2,596.01	2861.18	2756.37
Coffee	105.47	114.13	144.53	144.53	173.37	228.52	348.63	336.65
Total Imports	1,126.65	1,269.77	1,584.62	1,968.97	2,495.16	3,509.5	4,165.22	4,194.32
Gov't Imports	139.99	160.82	157.84	119.52	93.89	176.57	308.58	420.07
Private sector Imports	906.91	1,038.17	1385.97	1,772.90	2339.23	3280.40	3688.71	3513.56
Oil Imports	134.41	139.16	157.59	290.43	403.04	543.08	537.43	486.01
Other imports	79.75	20.77	40.81	76.54	62.04	52.53	61.92	96.70

Source: Bank of Uganda, 2010

Trade Balance

Table 2 shows that the trade balance deteriorated further from a deficit of US$ 1.28 billion in 2008/09 to a deficit of US$ 1.33 billion during 2009/10. These developments are largely due to declining exports receipts which is coupled with a higher level of imports. The widening deficit could largely be attributed to the continued exportation of unprocessed agricultural products which form the bulk of Uganda's exports. There have been ongoing efforts to pursue market diversification strategies and to widen the export base in addition; more effort has been directed towards processing of specific commodities such as Coffee, Tea, tobacco,

Cotton, Maize and fish. These commodities have been targeted under the National Export Strategy (NES) for value addition and are envisaged to improve on the foreign exchange earnings. For instance, total export earnings from goods during 2009/10 were projected at US$ 2.79 billion, which represents a decline of almost 3.8% over the previous year's performance.

Coffee exports declined by 20 percent in value from earnings of US$ 348.6 million during fiscal year 2008/09 to about US$ 336.7 million during 2009/10. The decrease was on account of a projected decline in both volumes exported and unit prices on the world markets. Coffee export volumes were expected to decline by 14.5% to 2.05 million 60-kg bags as compared to the previous financial year. At the same time, the average price was projected at US$ 1.54 per kilogram during 2009/10 as compared to US$ 1.78 per kilogram during 2008/09.

Non-coffee export earnings rose by 10.8 percent to US$ 1,386 million during 2009/10 as compared to US$ 1,251 million the previous year. In value terms, exports of fish, tobacco and tea demonstrated remarkable growth in the wake of the impact of the global economic crisis. The value of exports of fish, tobacco and tea during the financial year 2009/10 rose by 87%, 24.6% and 31%, respectively as compared to the previous year. On the other hand, the value of exports of cotton, beans and maize declined by 23.7%, 19.2% and 15.9%, respectively, largely on account of a slowdown in demand and production.

Total imports during 2009/10 increased marginally to US$ 4.194 billion as compared to US$ 4.165 billion. The increase was largely driven by Government's non project imports which rose by 82.5% to US$ 217 million in 2009/10 as compared to the previous year. On the other hand, private sector imports were affected by the lower than projected import demand, with overall private sector imports declining by 3.2% during 2009/10 as compared to the previous fiscal year 2008/09. Consequently, the oil import bill declined to about US$ 528 million from US$ 537 million spent during 2008/9.

An analysis of the services sub sector indicates that despite registering a 58% increase in services exports, on a net basis, Uganda remained a net importer of services during the financial year 2009/10. Exports of non factor services rose from US$ 588 million in 2008/09 to US$ 927 million in 2009/10, while non factor services imports rose by 29.6% to US$ 1,613 million. Overall, the services account recorded a deficit of US$ 687 million in 2009/10 compared to US$ 657 the previous financial year.

Capital inflows, consisting mostly of foreign direct investment (FDI) and official loans, have more than financed the current account deficit, creating a surplus in the balance of payments and raising international reserves to about five months' imports of goods and services by the end of 2009.

Table 1: The Current Account

	2001	2006	2007	2008	2009	2010	2011
Trade balance	-7.9	-9.3	-6.4	-8.1	-7.7	-10.2	-11.9
Exports of goods (f.o.b.)	7.5	10.8	15.5	16.4	15.7	13.3	11.4
Imports of goods (f.o.b.)	15.4	20.1	21.8	24.5	23.4	23.5	23.3
Services	-4.6	-2.7	-3.2	-3.3	-3.5	-2.9	-2.5
Factor income	-2.6	-2.2	-1.9	-1.6	-1.7	-1.5	-1.3
Current transfers	10.1	10.7	8.7	7	6.9	5.8	4.8
Current account balance	-5	-3.5	-2.8	-6.1	-5.9	-8.8	-10.9

Source: UBoS (2011)

Growth continued to be driven by the services sector, which accounts for about half of GDP and is expected to expand by 9.8% in 2009, slightly above the 2008 rate of 9.2%. The sector's growth has been led by financial services, transport and communications, public administration and defence. The financial industry suffered only slightly from the worldwide credit crunch. Growth in telecommunications was boosted by the mobile telephone sub-sector. Wholesale and retail trade has also boomed in recent years, growing by about 13% during 2008 and an estimated 12% in 2009.

The primary sector (agriculture, forestry and fishing) grew by only 2.2% in 2008 (up slightly from 1.7% in 2007) and accounted for 25% of GDP. This sluggish performance reflected the drop in agricultural exports due to the global recession and the continued underperformance

of the fisheries sector. Output in the latter fell by about 30% in 2008 as a result of chronic overfishing, especially of Nile perch in Lake Victoria. The poor performance of agriculture may also reflect the problems that have arisen in connection with the government's intervention in the sector, particularly through National Agricultural Advisory Services, the national extension and input supply programme, which has been plagued with delivery problems. Food production is estimated to have grown by about 2.6% in 2008 (up from only 2.1% in 2007), largely as a result of the restoration of peace in the north and north-east.

On the demand side, private consumption was the main growth driver in 2009, given its large share of GDP; it rose by 6.7% in 2009, down from 8.1% in 2008. Public consumption grew by only 2.9%. Consumption growth is expected to pick up in the next two years, with private consumption rising by 10.1% in 2010 and 9.8% in 2011, while public consumption should increase by 10% in 2010 and 8.9% in 2011. Investment growth remained high in 2009, at 8% and 10% respectively for private and public investment. Private investment growth was led by construction. The gross public and private investment growth rates are both expected to accelerate to 17% in 2010 and to 18% in 2011. Exports as a percentage of GDP grew by a disappointing 0.9% in 2009 but are expected to recover in the next two years, reflecting the improvement in global economic conditions.

2.24 Uganda's external trade

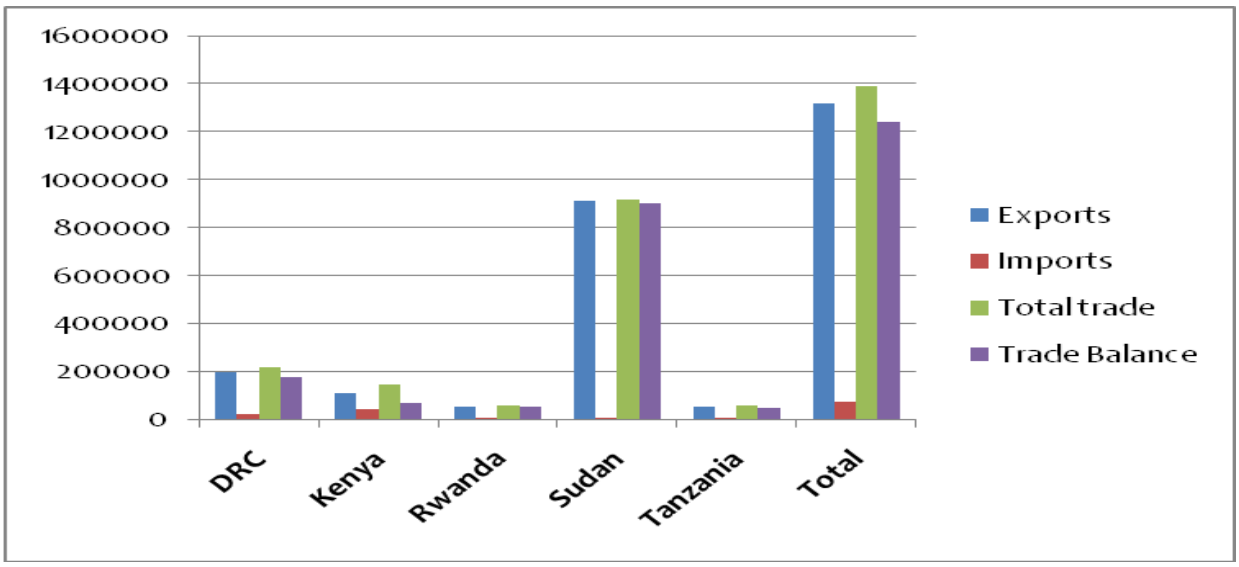
There is a strong view within the country that external trade is an important stimulus for economic growth. Consequently, the Uganda government has been pursuing trade policies that aim to contribute to poverty reduction, creation of employment and diversification and promotion of exports especially of nontraditional products. These policy objectives are being pursued through continued liberalization, deregulation, privatization and participation in regional trade agreements, specifically the Common Market for East and Southern Africa (COMESA) and the East African Cooperation (EAC). However, Uganda's international trade share is still relatively small and lopsided.

Agricultural products still dominate exports, with coffee's contribution at 2,225 US$ millions (Ministry of Finance, 2011). There has been a degree of recovery in other traditional areas, such as tea, cotton and tobacco, and diversification into non-traditional products, including cereals, cut-flowers and fish (see Appendix. I). This trend has benefited from the reduction of policy distortions and moves towards regional trade integration. The previous decline in world prices of most of Uganda's traditional exports has led to a fall in their earnings. However, there has been an upward trend in export earnings standing at 3.6 US$ billion for formal trade alone. Total export revenue earnings with informal trade inclusive were 4.7US$ billion (UBoS 2009). This can be attributed to government's diversification efforts.

The expansion of the East African Community (EAC) customs union, with Rwanda and Burundi joining Uganda, Kenya and Tanzania in 2009, and the common market should in the medium and long term boost intra-regional trade. In addition, the planned merger of the EAC, the Common Market for Eastern and Southern Africa and the Southern African Development Community would greatly increase the region's bargaining power in negotiations with the European Union (EU) over economic partnership agreements (EPAs). The EAC is jointly negotiating an EPA that would guarantee duty-free and quota-free access to the EU market for EAC countries' goods and would gradually open the EAC markets to goods from the EU; after 15 years, 80% of goods from the EU would have free access to EAC markets, with the remaining 20% exempted from liberalization.

Uganda's top four market destinations by earnings contributions are Sudan ($184m), Kenya ($172m), Rwanda ($135m) and D.R. Congo ($134m). Combined markets in the Great Lakes region, that is within COMESA and the EAC regional economic blocs therefore, constitute 46% of Uganda's total formal merchandise export earnings while the UK which for a long time was Uganda's export destination is 10th on the list of Uganda's export destinations. Subsequently, exports to these countries have been growing rapidly (see appendix II). Overall, agriculture still accounts for the bulk of Uganda's exports, contributing to over 70 percent of the total merchandise exports.

Figure 4: Regional trade flows (US$ Millions)



Source: UBoS, 2010

With regard to imports, the Asian continent maintained its position as the leading source for Uganda's imports. In 2008, the share of the imports bill to the Asian countries increased marginally to 34.8 percent from 33.6 percent during 2007. The total expenditure bill to the region in 2008 was US $1,574.0 million as compared to US $ 1,175.0 million in 2007. The main countries that contributed significantly were India, China, Japan and Malaysia with market shares estimated at 10.4 percent, 8.1 percent, 5.9 percent and 3.2 percent respectively. Countries that were among the major sources of imports to Uganda are Kenya (11.3 percent), South Africa (6.7 percent) and Tanzania with 1.2 percent market share.

3.0 Literature Review

2.1 Empirical Literature

Trade liberalization does not necessarily lead to faster export growth, but in practice the two seem to be strongly correlated. The impact of trade liberalization on economic growth probably works mainly through improving efficiency and stimulating exports which have powerful effects on both supply and demand within an economy. There are several different measures of trade liberalization or trade orientation, and all studies tend to indicate a positive effect of liberalization on economic performance.

One of the major purposes of trade liberalization is to promote economic growth by capturing the static and dynamic gains from trade through a more efficient allocation of resources; greater competition; an increase in the flow of knowledge and investment and, ultimately, a faster rate of capital accumulation and technical progress. Barriers to trade and anti-export bias will reduce export growth below potential. Import controls are likely to reduce efficiency, although, at the same time, they protect the balance of payments. The presumption is that trade liberalization will raise the growth of exports and imports but the implications for the trade balance and the balance of payments are uncertain because this depends on the relative impact of liberalisation on export and import growth and on what happens to the prices of traded goods. Trade liberalisation may promote growth from the supply side but, if the balance of payments worsens, growth may be adversely affected from the demand side because the payments deficits resulting from liberalisation are unsustainable and may not easily be rectified by relative price (real exchange rate) changes (Khan and Zahler, 1985).

A country's trade policy is concerned with the rules and arrangements that influence what foreign trade can occur, and with which partners. However, any move to adjust tariffs may count merely as a slight policy change, not as a change in the underlying institutional framework for trade. Conversely, comprehensive liberalization that not only simplifies and reduces most tariffs, but also removes many of the regulatory barriers to trade, would count

as an institutional change; for it should start to shape the behaviour of private sector agents, encouraging more to engage in trade, and providing them with greater security in doing so. At the same time, issues of credibility and consistency are bound to emerge. For instance, can the private sector be sure that, if they engage in trade, their gains will not be swallowed up by a subsequent change of trading regime?

And is the new trading environment consistent with other elements of the country's economic institutional set-up? The institutional framework for trade is especially important, since in this globalizing age developing countries are often advised to liberalize their trade, to open themselves up much more to the world economy, in order to reap the full benefits of globalization. However, whereas this is true is not always the case atleast for most developing countries. Ackah and Morrissey (2005) find that for a number of sub-Saharan African countries, trade liberalization was followed quite quickly by increases in imports, but that these increases were not accompanied by a corresponding growth in exports; rather, exports stagnated and trade deficits escalated, raising issues of sustainability of the original liberalization.

Iyoha (2005) focuses on the exporting issues, emphasising that successful development in much of Africa is likely to be export-led. Given this, a number of constraints stand in the way for the achievement of export expansion in many countries. Some, such as infrastructural constraints, are linked to physical deficiencies of particular goods and services and are not directly institutional; however, a country's institutional infrastructure, its priority, and the mobilization of resources to ameliorate infrastructural deficiencies. Other constraints, though, are more immediately institutional. These would include the choices that countries make regarding the trade agreements they wish to adhere to, and their approach to customs rules and other formalities associated with foreign trade. It is important to point out that trade liberalization *per se* – usually involving a mix of tariff reductions, and lifting of quantitative restrictions on imports –does little directly to stimulate exports (Hare, 2007).

Indirectly it might help to a limited extent, since some of the inputs used to produce exports might be imported, and might have been subject to higher rates of import duty before trade liberalization occurred. To this extent, trade liberalization can make some existing export products more competitive in the world market, but that is usually quite a small effect. In principle, too, since import restrictions stimulate the production of import substitutes, the lifting of restrictions ought to encourage some shift of domestic production towards exportables. But this effect is also small in economies with few exportables, and facing difficult external market conditions.

If trade liberalization boosts imports much more than exports, however, one would expect the country's equilibrium exchange rate to fall, in other words it is likely to devalue. This makes imports relatively more expensive in the domestic market, and exports relatively cheaper in foreign markets. The result should be some stimulation of export growth, and some discouragement of imports growth, tending to bring the balance of payments back into a sustainable equilibrium. These points do assume, though, that the country in question already produces sufficient goods and services that are potentially exportable, and can do so in significantly larger volumes than when the whole liberalization process started. Given the huge decline over recent decades in Africa's share of world trade, for some countries this basic assumption is highly questionable.

The relatively easy cases are those countries with substantial natural resources – such as oil and some minerals – where the world market demand is extremely strong and where, although there have been some price fluctuations, prices have tended to be stable or even rising in real terms. A little harder are the countries like Uganda producing agricultural products under conditions where international competition – mostly between developing countries – keeps earnings extremely low; items that come to mind here are coffee, tea, tropical crops such as bananas, among others. Markets for these items are difficult and relatively unrewarding, with returns subject to massive fluctuations, and little or no capacity in the world market for poor countries (or their farmers) to insure against the associated

income risks. One implication of this could be the suggestion that countries might be better advised to defer significant trade liberalization until a strong growth of exports is already taking place. However that perspective tends to run the developing countries into the risk of leaving them locked into a low trade, low income equilibrium, whereas the whole point is to find ways to break away from such a position; trade liberalization may, in that context, be a critical initial step.

Finally, despite more liberalization, and an ever more complex network of regional free trade agreements, only a very small fraction of sub-Saharan African trade is with neighboring countries. Intra- African transport links remain poor, and the trade agreements are often both too complex, too numerous and too poorly implemented, thus having little or no practical impact on trade flows. It is on the basis of such findings that the study in Uganda constitutes an interesting empirical investigation.

4.0 Methodology

This section presents the econometric techniques and describes different approaches to be employed in order to examine the impact of trade liberalization competition policy on export and import growth. The model estimation techniques are adopted from studies by Santos-Paulino (2003); Pacheco-Lopez (2003); Santos-Paulino & Thirlwall (2004); and Keshab *et al.,* (2005). Standard equations for export growth and import growth are specified.

4.1 Theoretical and empirical Framework

The theoretical formulation of import demand and export demand equations derives from a standard micro-theoretic framework (Agama & McDaniel, 2002). Theoretical literature behind the theory and actual empirical estimation exists (see Goldstein and Khan 1985). The assumption that is usually adopted is that neither imports nor exports are perfect substitutes for domestic goods (imperfect substitute's model) (Agama & McDaniel, 2002).[4]

Assume that the consumer maximizes utility subject to a budget constraint, and the resulting demand for imports (and exports) can be specified as a function of foreign demand (income) and relative prices (Santos-Paulino, 2003). A logarithmic functional form is adopted because it allows imports and exports to react proportionately to changes in their arguments (Keshab *et al.,* 2005)[5]. They also argue that to capture the partial adjustment behaviour, a lagged term in both dependent variables should be included in the estimated equations. Hence, inclusion of lags in exports and imports models, respectively.

First, an economy's export performance largely depends on competitiveness (measured as the price of a country's exports relative to the foreign price of related goods expressed in a common currency) and the level of 'world' demand which determines shifts in the demand curve for a country's goods. If the price and income elasticities of demand are assumed constant, the export function can be written as:

[4] This assumption rests on two observations. First, neither domestic nor foreign goods have full market share, and second, each country imports and exports goods.

[5] In addition, Keshab et al., (2005) pointed out that this specification avoids the problem of drastic falls in elasticities (see Khan (1974) for details).

$$X_t = X\left(P_d/P_f\right)_t^{\delta} W_t^{\mu} \qquad (1)$$

where X_t is the level of exports at time t; X is a constant; P_d/P_f is relative domestic and foreign prices measured in a common currency; W is the level of 'world' income; μ (< 0) is the price elasticity of demand for exports, and δ > 0) is the income elasticity of demand for exports. Taking logs of equation (1) and differentiating with respect to time gives:

$$X_t = \delta\left(P_d - P_f\right)_t + \mu W_t \qquad (2)$$

It is important to note that whereas the traditional export growth function provides a useful framework in which to analyse the responsiveness of exports to price and income variations, a number of modifications have been made to the basic export model in order to suit our analysis. First we assume that the adjustment of export demand to changes in prices and income is not instantaneous, so that we have a dynamic specification for estimation (including a constant). The second modification is the introduction of the proxies for trade liberalisation: export duties *(d)* on the one hand and a dummy variable *(c)* for the year of significant trade liberalisation on the other. In addition, capital stock is included in the model as a proxy for supply capacity. This gives an augmented estimating equation of the form:

$$Ex_t = \alpha_0 + \alpha_1 reer_t + \alpha_2 yf^*_t + \alpha_3 X_{t-1} + \alpha_4 cap_t + \alpha_5 xd_t + \alpha_6 dlib_t + u_t \qquad (3)$$

The expected signs are: α1< 0, α2>0, α3>0, α4>0, α5> 0 and α6 > 0.

Where: X_t is the volume of exports; $reer_t$ is a measure of the real exchange rate (reer)[6]; y_t^* is foreign income[7] ; X_{t-1} is the lagged export term; cap is capital stock; u_t is an error term; α_2, α_2 are the price and income elasticities of exports respectively; t is a time subscript.

A fall in the foreign price of domestic currency (devaluation), or a fall in domestic prices relative to foreign prices, reduces *reer* and thus is expected to raise the level of exports. Thus $\alpha_1 < 0$. An increase in the trading partner's income is expected to increase the country's exports; therefore $\alpha_2 > 0$. In addition, Capital stock (CAP) was included in the export model. The inclusion of total capital stock (CAP) in the model is derived from the theory of money in the production function. A related treatment is found in Wang (2000); World Bank (1998); Kang and Sawada (2000); Evans, Green and Murinde (2002). In the empirical model, Capital stock is used as a proxy for a country's supply capacity.

The above specification allows us to distinguish short and long run elasticities. The short run price and income elasticities are α_1 and α_2 respectively; and the long run elasticities are $\frac{\alpha_1}{1-\alpha_3}$ and $\frac{\alpha_2}{1-\alpha_3}$. The above model development will similarly apply to the import demand below.

The import demand function is given as:

$$M = M\left(\frac{eP^f}{P}, Y\right); M_1<0; M_2>0 \qquad (4)$$

The main determinants of import demand are income (domestic) and relative prices. Thus, the import demand function takes the following form:

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[6] The real exchange rate is defined as $REER = E\frac{P_f}{P}$ where E is nominal exchange rate that is adjusted by the ratio of the foreign price level (Pf) to the domestic price level (P). In Uganda's case, the underlying CPI is used to proxy for domestic price.

[7] This will be proxied by the OECD GDP (data was taken from World Bank, World Development Indicators).

$$im_t = \varphi_0 + \varphi_1 reer_t + \varphi_2 y_t + \varphi_3 im_{t-1} + \varphi_4 gex_t + \varphi_5 pex_t + \varphi_6 libd_t + \varphi_7 mdd_t + \mu_t \quad (5)$$

Where

im is the volume of imports;

$reer$ is a measure of real exchange rate; y is domestic income; gex is government consumption; pex is public consumption; μ is an error term; φ_0 is intercept term; φ_1, φ_2 are price and income elasticities of imports respectively; $libd$ and mdd are dummy variables and t is the time subscript.

It is expected that an increase in import prices relative to the domestic price level will reduce import volume, resulting in negative import price elasticity $(\varphi_1 < 0)$. Additionally, it is expected that an increase in domestic income will stimulate imports yielding positive income elasticity $(\varphi_2 > 0)$. The signs of the coefficients of government consumption, private consumption as well as the dummy variables respectively are: $\varphi_3 > 0; \varphi_4 > 0; \varphi_5 > 0; \varphi_6 > 0$

4.2 Model modifications

Equation (3 and (5) were modified to include two shift dummy variables, one for the first period of trade reforms and the other the import and export duties. This gives the augmented estimating equations. Each dummy variable takes the value of zero prior to liberalization and one afterwards. The argument for using a 'continuous' dummy variable is that although serious trade liberalization took place in 1987, more reforms have been instituted in most recent years. For instance, tariff rates have been reduced, often significantly, and many non-tariff restrictions (e.g. quotas, import bans) have been converted into tariff equivalents. The tariff schedule with rates of zero, 10, 20, 30 and 60 percent in 1995 has been reduced to a standard schedule with rates of zero, 7 and 15 percent in 2002 (Morrissey *et al.*,2003).

3.3 Data analysis

The study used Vector Error-Correction (VECM) method to investigate the relationship between export, import, and trade reforms for period between 1981 and 2009. To in order to test for structural breaks in the export and import growth functions coefficients, two dummy variables were used in both equations.

3.4 Estimation and testing procedures

To ascertain whether there are long run equilibrium relationships among the arguments of the export and import demand functions, co-integration analysis will be employed. This is necessary to avoid spurious correlation and misleading and incorrect regression results that might otherwise arise despite the absence of any correlation between the underlying series (Keshab *et al.,* 2005).

The first step of the analysis involved pre-testing each variable to determine its order of integration, since by definition, co-integration necessitates that variables be integrated of the same order. The Augmented Dickey fuller test (ADF) unit root testing procedure (Dickey and Fuller, 1979) will be used to test for stationarity of series. This tests the size of the coefficient in the following equation:

$$\Delta y_i = B_o + \lambda t + \psi y_{t-1} + B_i \sum \Delta Y_i + \varepsilon_i \qquad (6)$$

Where, t denotes the time trend. Acceptance of the null hypothesis that $|\psi|$ =0 confirms the presence of non-stationarity process.

Assuming that the results in equation (6) indicate that at least one series is integrated of the order as the dependent variable, step two involves formulation and estimation of a theoretical long run equilibrium relationship. The concept of cointegration implies that if there is a long run relationship between two or more non-stationary variables, deviations from long run relationship are stationary. To test for cointegration among the series, a multivariate cointegration technique developed by Johansen (1988) and applied in Johansen and Juselius (1990) will be used. Johansen (1988, 1995) derives maximum likelihood

procedures for testing for cointegration in a finite-order Gaussian vector autoregression (VAR). That system evolves as follows:

$$x_t = \sum_{i=1}^{\ell} \pi_i x_{t-1} + \Phi D_t + \varepsilon_t, \qquad \varepsilon_t \sim IN(0, \Omega), \qquad t = 1, ..., T, \tag{7}$$

where x_t is a vector of k variables at time t; π_i is a $k \times k$ matrix of coefficients on the i^{th} lag of x_t ; ℓ is the maximal lag length; Φ is a $k \times d$ matrix of coefficients on D_t , a vector of d deterministic variables (such as a constant term and a trend); "t is a vector of k unobserved, sequentially independent, jointly normal errors with mean zero and (constant) covariance matrix Ω; and T is the number of observations. Throughout, x is restricted to be (at most) integrated of order one, denoted I(1), where an I(j) variable requires j^{th} differencing to make it stationary.

The VAR in (7) may be rewritten in vector error correction form such that:

$$\Delta x_t = \pi x_{t-1} + \sum_{i=1}^{\ell-1} \Gamma_i \Delta x_{t-i} + \Phi D_t + \varepsilon_t \qquad \varepsilon_t \sim IN(0, \Omega), \tag{8}$$

where π and Γ_i are:

$$\pi = \left(\sum_{i=1}^{\ell} \pi_i \right) - I_k, \tag{9}$$

$$\Gamma_i = -(\pi_{i+1} + ... + \pi_l), \qquad i = 1, ..., \ell - 1, \tag{10}$$

I_k is the identity matrix of dimension k, and Δ is the difference operator[8].For any specified number of cointegrating vectors r ($0 \le r \le k$), the matrix π is of (potentially reduced) rank r and may be rewritten as $\alpha\beta'$, where α and β are $k \times r$ matrices of full rank. By substitution, (8) is:

[8] The difference operator 1 is defined as (1 – L), where the lag operator L shifts a variable one period into the past. Hence, for x_t , $Lx_t = x_{t-1}$ and so $\Delta x_t = x_t - x_{t-1}$. More generally $\Delta^i_j \; x_t = (1 - L^j)^i x_t$ for positive integers i and j .If i or j is not explicit, it is taken to be unity.

$$\Delta x_t = \alpha\beta^{'} x_{t-1} + \sum_{i=1}^{\ell-1} \Gamma_i \Delta x_{t-i} + \Phi D_t + \varepsilon_t, \qquad \varepsilon_t \sim IN(0,\Omega), \qquad (11)$$

Where β the matrix of cointegrating vectors, and α is is the matrix of adjustment coefficients (equivalently, the loading matrix). The system represented in the equation (8) also contains information on both the short and long-run adjustment to changes in χ_t , via the estimation of Γ_i and π respectively and specifically whether the dynamic responses of the variables conform to theory.

Granger representation theorem, states that if 2 variables y and x are co-integrated, then the relationship between the 2 can be expressed as Error Correction Model. Therefore, a third step involved an estimation of the ECM model and testing the adequacy of the estimated model. Diagnostic tests for the model will be undertaken.

3.5 Data and data sources

The study used secondary data. The data sources to use in this study are International Financial Statistics (IFS) of IMF for exchange rates, World Development Indicators (WDI), Uganda Bureau of Statistics (UBOS), East African Development Bank, and Bank of Uganda. More data was obtained from World Integrated Trade Solution (WITS), and the World Bank.

5.0 Empirical Results and Interpretations

5.1 Time Series Properties: Export Growth Model

Preliminary tests were carried out to establish normality and stationarity of the data. First, descriptive statistics for the data were undertaken for variables in levels, a summary of which is given in table5.1 below. The results show that the variables are normally distributed. The unit root test results are presented in table5.2 and the results for variables in levels indicate that all the variables are non-stationary at all levels of significance.

Table.5.11: Unit Root test Results for Variables in Levels

Macro Variable	ADF	Order of Integration
LEX	2.386339	I(1)
LREER	-1.337252	I(1)
LCAP	2.921604	I(1)
LYF	3.079706	I(1)

Notes: the asterisk* ** *** denotes significance at 1, 5 and 10 percent levels respectively

The critical values at 1, 5, and 10 percent levels respectively, are: -4.0400, -3.4491, and 3.1495

The order of integration identified in table 5.11 is confirmed when the log of the first differences of the non-stationary series are subjected to the unit root tests. The summary of the results is presented in table5.12.

Table5.12: Unit Root test Results for Variables in First Difference

Macro Variable	ADF	Order of Integration
LEX	5.873565*	I(0)
LREER	-3.400917***	I(0)
LCAP	3.633595**	I(0)
LYF	7.845335*	I(0)

Notes: the asterisk* ** *** denotes significance at 1, 5 and 10 percent levels respectively

The critical values at 1, 5, and 10 percent levels respectively, are: -4.0387, -3.4484, and 3.1491

Unit root test results for variables in first differences (table5.12) confirm that the series are integrated of order zero in their first differences.

Cointegration tests

Engle and Granger (1987) argue that individual time series could be non-stationary, but their linear combinations can be stationary if the variables are integrated of the same order. This is because equilibrium forces tend to keep such series together in the long- run. As such, the variables are said to be cointegrated and error-correction terms exist to account for short-term deviations from the long-run equilibrium relationship implied by the cointegration.

Cointegration analysis was conducted by estimating a long-run equations in levels for both models and testing whether the residuals are I~(0). The analysis was carried out using the Johansen procedure (see Johansen, 1988; and Johansen and Juselius, 1990). The eigenvalue statistics reject the null hypothesis that there are zero cointegrating vectors for both models. In general, more than one cointegrating relationship does not mean that there is more than one long-run equilibrium position. More likely, it means that there is one long-run equilibrium relationship which is embodied within it, several sectoral equilibria or cointegrated subsets of variables (Kennedy, 1998).

Table 5.13: Long-run Export Growth Function

LEX	1.000000
C	-6923.883
LCAP	135.8781 (21559.6)
LYF	4291.074 (676238)
LREER	-4660.259 (735642)

Log likelihood = 1740.850

Notes: In the parentheses are the standard errors, before parentheses are parameter coefficients

Cointegration was accepted and therefore the residual generated from the long-run growth function tabulated in table 5.13 was lagged once as (ECT_1) and used as an error-correction term in the dynamic model.

Estimation of the Error-Correction Model

According to the Engle-Granger (1987) representation theorem, an error-correction model can be estimated for the relationship and tests the adequacy of the estimated equation. Therefore, an error correction specification for our estimated relationship takes the following form:

$$\Delta LEX_t = \pi_0 + \sum_{i=1}^{k} \pi \Delta LEX_{t-i} + \sum_{i=0}^{k} \pi_i \Delta V_{t-i} + \phi_1 ECT\_1 + \varepsilon_t, \qquad (12)$$

Where V_t, a vector of cointegrated variables is as defined before and ECT_1 is the error-correction term lagged one period with ϕ_1 as a measure of the adjustment mechanism, is formulated and estimated. The results of the error-correction model for the variable ΔLEX estimated by OLS are presented in the following section.

Empirical Results

The results of the estimated equation in table.5.14 show that the coefficient of the lagged real exports *(DLEX_1)* and the first difference of the real exchange rate *(DLREER)* are insignificant while the capital formation variable *(DLCAP)* is significant. The dummy variables for both export duty elimination as well as the overall economic liberalization are significant in both equations. The implication is that such measures to reform the economy served to improve the performance of the export sector. However, the foreign income variable *(DLYF)* is insignificant.

The error-correction term is significant at 5 percent level and bares the correct sign. The implication from these results is that only the past values of real export growth, capital formation play a significant role in explaining the variations in export performance in Uganda while the growth in OECD income is weakly significant at ten percent. This could partly be explained by the fact of the nature of the Uganda's exports which are largely agricultural products as well as manufactured re- exports and that the largest proportion of Uganda's exports go to the regional markets of the EAC and COMESA. The EU market has in recent years been replaced by COMESA as Uganda's leading export destination. In fact, the

country's exports to COMESA are in excess of US$506million compared to the European Union market which has been declining overtime and stands at US$324million. (UEPB, 2008).

Regression results in table5.14 show that the goodness of fit is satisfactory (Adj. R-squared), implying that the regressors in both the estimated equations explain a significant percentage of the variations in export performance during the 1982-2009 study period. Thus, a small percentage of export performance remains unexplained. The F-statistics of the two estimated equations indicate that the models are highly significant. This implies a rejection of the null hypothesis that all their right hand variables except the constant have zero parameter coefficients.

The Durbin-Watson statistic (DW) indicate that there is no autocorrelation problem. The results of the evaluation of the models reveal that no weaknesses have been found. The fundamental statistical requirements have been adequately met, thus it can be inferred that the empirical results of the model are indeed reliable. The ECM coefficient gives the speed of adjustment of each endogenous variable towards equilibrium where there is an economic shock while its sign gives the direction of adjustment towards equilibrium. The higher the coefficient, the faster is the speed of adjustment towards equilibrium (Pesaran. e*t al.,* 1997).

From our results, the coefficient of -0.051(see ECM 1, table. 5.14) is significant with a slow speed of adjustment. The results indicate that the level of exports adjusts by about 5 percent of the gap between the current level and the long-run equilibrium level.

Table 5.14: Export Growth function: Regression Results

	Equations	
Variables	ECM 1	ECM 2
Constant	0.006729	0.007049
	(1.527106)	(1.513727)
DLEX_1	0.820437	0.823018
	(14.66862)***	(14.60664)***
DLREER	-0.055792	-0.008281
	(-0.144760)	(-1.848148)*
DLCAP	0.293073	0.295724
	(7.682938)***	(7.484959)***
DLYF		0.080668
		(1.0815667)*
DXD94	0.3699941	0.327792
	(3.450398)**	(3.450398)**
DLIB90	0.283739	0.311225
	(8.070803)***	(8.175433)***
ECT_1	-0.051498	-0.051498
	(-2.532661)**	(-2.393984) **
ADJ.R²	*0.8151*	*0.821049*
Observations	107	107

Notes: (i) The dependent variable is the log of exports
(ii) The t-Statistics are in the parentheses
(iiii) The asterisks *, ** and *** denote significance at the 1, 5 and 10 percent levels

Key: DLIM_1= lag of exports, DLCAP= capital stock, DLYF= Foreign income, DLREER= real exchange rate, ECT_1= the error-correction term, LIBD90= economic reforms dummy, DXD94= export duties duty restructuring dummy.

In ECM 2 (table5.14), another variable is added in the equation, the log of foreign income *(DLYF)*. In this case, although keeping their levels of significance, real exchange rate becomes weakly significant at 10 percent *(DLREER)* but the lag of exports largely remains unchanged. However, the coefficient of the log of foreign income is weakly significantly at ten percent. The coefficient of the error-correction term increases from 5 percent to 5.2 percent implying an increase in the speed of convergence towards long-run equilibrium in the wake of shocks. The adjusted coefficient of determination improves to 0.82 as compared to that of ECM1.

The significance of the real exchange rate is in line with economic theory whereby if everything else is equal, if the domestic currency depreciates, foreigners experience a fall in

the relative cost of their imports (domestic exports), and we see a rise in the demand for domestic exports.

The variable (DLCAP) is a proxy for supply capacity. This increases exports by providing the mechanism to respond to the demand of the international market. In the model, this variable is significant and this could be attributed to the increased capital formation both domestically and through inflows of foreign investments, all of which have worked to enhance the development of the external sector.

5.2 Import Growth Model

Table.5.21: Unit Root test Results for Variables in Levels

Macro Variable	ADF	Order of Integration
LIM	-1.738836	I(1)
LGDP	-2.537445	I(1)
LGEX	-2.947930	I(1)
LPEX	-1.473685	I(1)
LREER	-1.337252	I(1)

Notes: the asterisk* ** *** denotes significance at 1, 5 and 10 percent levels respectively
The critical values at 1, 5, and 10 percent levels respectively, are: -4.0570, -3.4571, and 3.1542

The results in table 5.21 indicate that the variables are non-stationary in levels. The order of integration identified in table 5.21 is confirmed when the log of the first differences of the non-stationary series are subjected to unit root tests. The summary of the results is presented in table 5.22.

Table.5.22: Unit Root test Results for Variables in First Difference

Macro Variable	ADF	Order of Integration
LIM	-4.942546***	I(0)
LGDP	-11.07364***	I(0)
LGEX	-4.402272***	I(0)
LPEX	-5.533153***	I(0)
LREER	-3.400917***	I(0)

Notes: the asterisk***, **, * denotes significance at 1, 5 and 10 percent levels respectively
The critical values at 1, 5, and 10 percent levels respectively, are: -4.0580, -3.4576, and 3.1545

Unit root test results for variables in first differences (table 5.22) confirm that the non-stationary series are integrated of order zero in their first differences.

Cointegration Tests

Cointegration analysis was conducted by estimating a long-run equation in levels and testing whether the residuals are I~(0).

Table 5.23: Long run Import Growth Function

LIM	1.000000
C	0.682653
LGDP	-0.68888 (0.10038)
LGEX	0.212450 (0.15918)
LPEX	-0.359438 (0.08173)

Log likelihood = 191.8214

Notes: In the parentheses are the standard errors, before parentheses are parameter coefficients

Diagnostic tests

The results of the model evaluation reveal that no weakness has been found. The fundamental statistical requirements have been adequately met, thus it can be inferred that the empirical results of the model are indeed reliable. The next section discusses the economic interpretation of the empirical results.

5.21 Interpretation of empirical results

Table 5.24 gives the empirical results of the import growth model. The results are labeled as equations 1, 2 and 3. The first two equations are the reduced forms of equation (5) above, while the third equation is the full model. The results show that the goodness of fit (Adj. R-squared) is satisfactory, implying that the regressors in all the estimated equations explain a significant percentage of the variations in imports during the period of study, 1981-2009. Thus, a small percentage of growth in imports remains unexplained. The F-statistics of the three estimated equations indicate that the models are highly significant. This implies a rejection of the null hypothesis that all their right hand variables except the constant have zero parameter coefficients.

The ECT coefficient gives the speed of adjustment of the endogenous variable towards equilibrium when there is an economic shock, while its sign gives the direction of adjustment towards equilibrium (Hatanaka, 1996). The higher the coefficient is the faster is the speed of

adjustment towards equilibrium. The results show that the coefficient of the lagged imports *(DLIM_1)* and GDP are significant at a one percent level while the real exchange rate *(LREER)* and the dummy variables are insignificant.

The significance of the lagged coefficient of imports could partly be attributed to the real business cycle theory where current performance of macroeconomic variables is explained by their past performance. The error-correction term is significant at 5 percent level and has the expected sign. In Equation 1, the reduced form of the model depicts the impact of GDP and real exchange rates. In this case, both Government expenditure *(DLGEX)* and private expenditure *(DLPEX)* are excluded from the estimation. In the equation, the lag of exports is significant and has the expected signs. However, the coefficient of real exchange rate is insignificant with a wrong sign. This can largely be attributed the nature of the economy which is largely import dependent. In this case, changes in the real exchange rate may not have a significant impact on import growth. The dummy variables are insignificant in the first equation.

Table5.24: Results for the Import demand Vector Error-Correction Model

	Equations		
Variables	**Equation 1**	**Equation 2**	**Equation 3**
Constant	-2.120797	1.154223	1.708055
	(-2.706197)***	(0.992305)	(3.352002)***
DLIM_1	0.18551	0.192071	0.399283
	(4.122140)***	(4.190652)***	(6.546152)***
DLGDP	0.683105	0.693725	1.128036
	(5.051221)***	(5.063486)***	(9.471816)***
DLGEX			0.225999
			(3.952365)**
DLREER	0.002030	0.065399	0.221843
	(0.014122)	(0.441958)	(2.796856)*
DLPEX		0.112530	0.1465902
		(1.899442)*	(1.833475)*
LIBD90	0.366465	0.1551128	0.186653
	(1.445569)	(1.825316)*	(3.046943)***
MDD94	0.000659	0.025327	0.148172
	(0.01003)	(0.373389)	(3.806963)***
ECT_1	-0.214822	-0.183990	-0.355010
	(-2.240231)**	(-1.821130) *	(-4.258310)***
ADJ.R²	***0.817876***	***0.83143***	***0.855573***
Observations	**107**	**107**	**107**

Notes: (i) The dependent variable is the log of Imports
(ii) The t-Statistics are in the parentheses
(iiii) The asterisks ***, ** and * denote significance at the 1, 5 and 10 percent levels

Key: DLIM_1= lag of imports, DLGEX= aggregate stock of government consumption, DLPEX= private consumption, DLREER= real exchange rate, ECT_1= the error-correction term, LIBD90= economic reforms dummy, MDD94= import duty restricting dummy.

In Equation 2, the impact of private consumption *(DLPEX)* is considered. In this case, the size of the coefficients of lagged imports and GDP gain a slight increase and remain significant with the expected signs. However, the coefficient of the log of private consumption is weakly significant at 10 percent and bears the expected sign. Furthermore, the explanatory power of the right hand variables increases from 0.82 to 0.83.

In Equation 3, the log of the government consumption *(LGEX))* is added to the model. The adjusted R-squared improves to 0.85 as compared to that of Equation 1 and 2. The size of the coefficients of the lag of real imports and private consumption has increased. The coefficient of government consumption *(LGEX)* is significant at the five percent level. A comparison of

the size of the coefficient of private consumption with that of government indicates that government expenditure on imports is larger than that of the private sector.

Variance Decomposition Analysis

It is important to note that restrictions need to be imposed on the VAR in order to identify particular "shocks" and account for correlations in innovations across equations and to decompose the forecast error variances to identify the impulse responses. Cholesky's decomposition method was used to impose identification restrictions since it precludes contemporaneous correlation between time series in the system and ensures that the variance-covariance matrix of the residuals is block recursive and provides a minimal set of restrictions that identify the primitive model.[9]

The results from using Cholesky's method demonstrate how the forecast error variance of our focus variables can be broken into components that can be attributed to each of the variables in the VAR. In particular, we examine the relationship between export *(ex),* reel exchange rates (*reer)* and foreign income *(yf)* and capital *(cap)* as well as the import demand function later on. The forecast error variance decomposition of the unrestricted VAR is estimated over a three year period. The results follow in the tables 5.25 and 5.26 below:

Table 5.25: Export model Variance Decomposition of a 36-month error variance (%)

Percentage of forecast error variance in	Typical shock in			
	EX	***REER***	***YF***	***CAP***
EX	77.9	13.9	6.7	9.5
REER	3.5	94.5	4.9	3.4
YF	12.6	1.4	57.8	0.4
CAP	20.7	4.5	10.9	58.6

Source: **Author**

From the above analysis, each time series explains the prevalence of its own past values: exports, *(ex)* explains over 78 percent of its forecast error variance, while the export competitiveness proxy, *(reer)* and foreign income, *(yf)* explain 85 and 88 percent respectively of their forecast error variances. The fact that exports are explained predominantly by its past

[9] See Lütkepohl (1991) for details.

values suggests that the current period's export growth influences future export growth trends. This phenomenon can be attributed to the strong "lag-effect" typical of the business cycle.

That real exchange rate *(reer)* explains 14 percent of the forecast error variance of export growth *(ex)* while capital stock *(cap)* explains 9.5 of the forecast error variance in export growth. Real exchange rate *(reer)* ranks as the most important factor affecting export growth followed by capital stock with 9.5 percent. Foreign income ranks third with 6.7 percent. It is worth noting that real exchange rate contributes most to export growth compared to foreign income and capital stock which supports the hypothesis that changes in the real exchange rate have the effect of influencing export performance. It is therefore critical for policy makers to ensure that the real exchange rate is managed in such a way that exports grow.

Table 5.26: Import model Variance Decomposition of a 36-month error variance (%)

Percentage of forecast error variance in	Typical shock in				
	IM	**PEX**	**GDP**	**GEX**	**REER**
IM	85.5	7.2	12.2	10.9	5.4
PEX	4.2	94.5	7.4	5.1	1.5
GDP	14.1	6.4	83.5	1.1	0.4
GEX	3.8	6.8	0.9	85.1	2.3
REER	5.0	0.7	3.6	9.0	94.5

Source: **Author**

The variance decomposition analysis of the import model indicate that each time series explains the prevalence of its own past values: imports, *(im)* explains over 86 percent of its forecast error variance, while the domestic income proxy, *(gdp)* and government expenditure, *(gex)* explain 83.5 and 85.1 percent respectively of their forecast error variances. That real exchange rate *(reer)* explains 8.4 percent of the forecast error variance of import growth *(im)* while domestic income *(gdp)* explains 12.2 percent of the forecast error variance in import growth.

Domestic income *(gdp)* ranks as the most important factor affecting import growth followed by government expenditure with 10.9 percent. Private expenditure ranks third with 7.2

percent. The major issues to note from the analysis of the import function point to the fact that there exists import price inelasticity of demand for the case of Uganda. Secondly, the analysis highlights the impact of public expenditure in increasing import demand following trade liberalisation.

5.22 Discussion of results

The results from both estimators are given in Table 5.14 focusing both equations show insignificant price and income elasticities of demand for exports with the price elasticity is very low in the second equation. These low price elasticities do not conform to the 'small' country assumption of trade theory. Similar findings are frequently found also in previous time series estimates (see for example Senhadji and Montenegro, 1999; Perraton, 2003). The impact of liberalisation is positive and significant and the effect of the removal of export duties is now shown to be significant in both equations.

The effect of generalized liberalization on export growth seems altogether stronger than the effect of simply cutting export duties given the level of significance of the liberalization dummy versus the export duties dummy. To estimate the impact of liberalisation on import growth, the price and income elasticities of demand are statistically significant in the full model. Unlike exports, there is a difference between both the price and income elasticities. The price elasticity of demand for imports is slightly higher which is different from other previous studies (Senhadji, 1998; Perraton, 2003).

The impact of some import duties elimination on import growth is significantly positive as well as the effect of import liberalisation. Moreover, liberalisation affects both the price and income elasticities of demand in the expected direction. The impact of the liberalisation dummy is markedly stronger than the import duty variable. The effect of liberalisation on the estimated income elasticities of imports and exports does differ with the effect of liberalisation having a bigger effect on the price elasticity and income elasticity of demand for imports compared to exports. This finding is similar to that of Thirlwall and Santos-Paulino

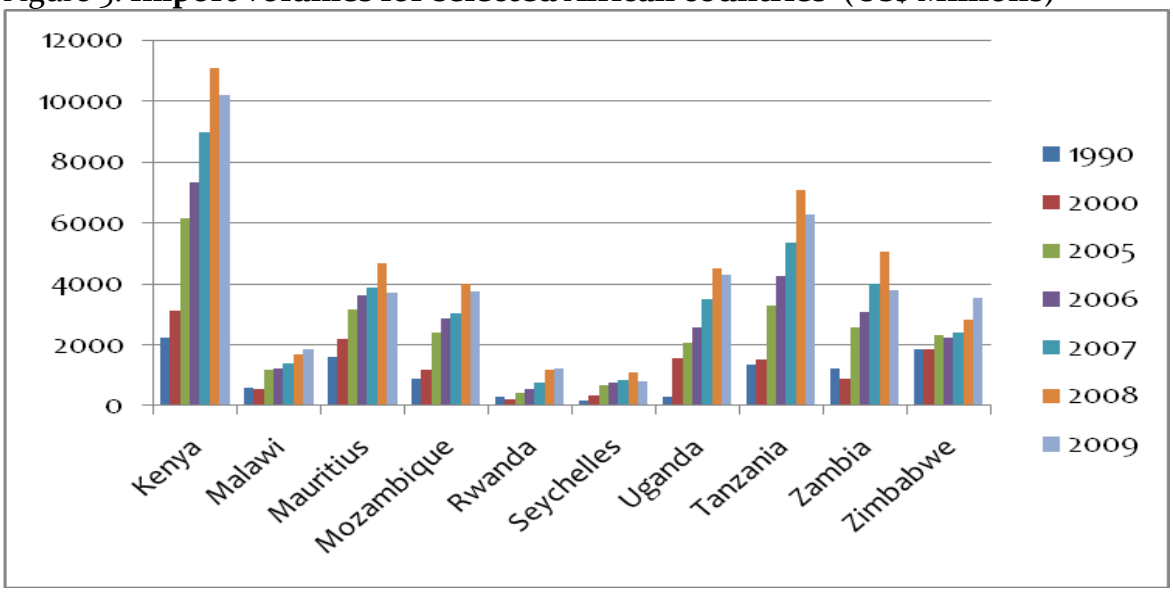
(2004). From the volume effects on trade, therefore, the results indicate that trade liberalisation has worsened the trade balance if not the balance of payments as well.

Macro-micro analysis

The emphasis on trade liberalization and export orientation in the past decade has led to a phenomenal growth in world merchandise trade, which has consistently grown faster than output (see UNCTAD, 2003a, chap. 3). Africa has also witnessed an increase in its trade relative to gross domestic product (GDP). Trade (merchandise imports plus exports), as a share of GDP for sub-Saharan Africa (SSA) (excluding South Africa and Nigeria) has been on the increase overtime, with the exception of the disruptions caused by the global economic slowdown.

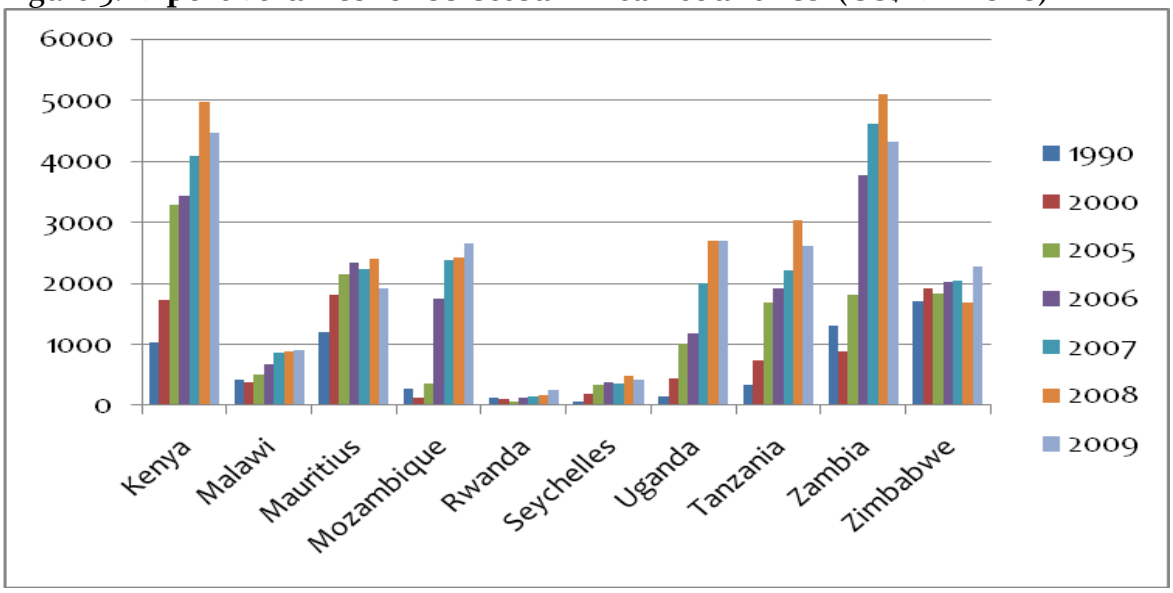
However, studies show that Africa's share in world merchandise trade, measured in value terms, has declined steadily on the other hand. Although the empirical evidence linking trade liberalization to growth is quite weak (Santos-Paulino, 2002a, 2002b), recent data on import and export volumes for selected African countries in figures 5&6 below do appear to indicate an increase in imports relative to exports. Furthermore, SSA countries have failed to expand exports of manufactures, largely due to inefficiency and a lack of investment in technology in African manufacturing firms (Söderbom and Teal, 2003).

Figure 5: **Import volumes for selected African countries' (US$ Millions)**



Source: UNCTAD 2010

Figure 5: **Export volumes for selected African countries' (US$ Millions)**



Source: UNCTAD 2010

Consequently, export response to trade liberalization has been at best slow and apparently, trade has not provided much of a growth payoff for Sub Saharan Africa. However, on the whole, Africa's share in world exports fell from about 6 per cent in 1980 to 2 per cent in 2002, and its share of world imports from about 4.6 per cent in 1980 to 2.1 per cent in 2002.

This phenomenon has as much to do with the structure of international trade as with the composition of Africa's merchandise trade, the trade policies applied on the continent in the past 20 years, market access and agricultural policies in industrial countries. More than for any other developing region, Africa's heavy dependence on primary commodities as a source of export earnings has meant that the continent remains vulnerable to market vagaries and weather conditions. Price volatility, arising mainly from supply shocks and the secular decline in real commodity prices, and the attendant terms-of-trade losses have exerted heavy costs in terms of incomes, indebtedness, investment, poverty and development.

Constraints to export growth

(a) *Market access*

Market access remains a problem, as most of the tariff peaks are in agriculture, including processed products, and most post-Uruguay Round tariffs escalate between raw and semi-finished as well as between semi-finished and finished products, with a greater impact on more advanced stages of processing. Coffee beans and final processed coffee which constitute Uganda's foreign exchange earnings , for example, are subject to tariffs of 7.3 per cent and 12.1 per cent respectively in the EU, 0.1 per cent and 10.1 per cent in the United States, and 6 per cent and 18.8 per cent in Japan. This works against the realization of the benefits from trade liberalization on stimulating exports in Uganda.

It is generally recognized that increased productivity, efficiency and competitiveness are essential preconditions for the integration into the multilateral trading system following trade liberalization. Increasing the country's export capacity may entail among other things; enhancing the competitiveness of indigenous firms through linkages with high-quality, deeply rooted FDI and easier access to global and regional value chains of production.

(b) *Value chains*

There exists a "disconnect" between prices paid by final consumers and those received by producers, because of higher profits at later stages of the value chain. For example, while business in several commodities (such as coffee and tea) has been booming in recent years in the markets of consuming developed countries, this is only reflected in higher prices for final (processed) products, not in the prices received by producers in developing countries.

While African producers have incurred income losses, traders and firms in the higher stages of the value chain have been reaping significant benefits. The International Coffee Organization (ICO) for example, in the early 1990s, reported that earnings by coffee-producing countries (exports f.o.b.) were some $10–12 billion, while the value of retail sales was about $30 billion. Today, the value of retail sales is around $80 billion, while producers

receive only $7 billion. With a considerable portion of people in Uganda dependent on coffee production for their livelihoods, the impact of such sustained low prices has been devastating in terms of social dislocation, including social exclusion, poverty and finally, low foreign exchange earnings coupled with the rise in import prices. This has only served to escalate the BoP deficit for the country.

In fact, a value chain analysis of the coffee market reveals that, since 1985, a growing share of total incomes in the chain has accrued to economic agents in the importing countries. The asymmetrical character of power in the coffee value chain explains the unequal distribution of total incomes. In Uganda for instance, power is very weak – farming is highly fragmented and the general trade liberalization policy which led to the destruction of cooperative marketing boards such as the Uganda Coffee Marketing Board (CMB), The Lint Marketing Board (LMB) and their nationwide network of farmers' unions have served to further curtail the capacity of farmers to raise their share of value chain rents. At the importing end of the chain, there are three major residues of power – importers, roasters and retailers. These compete with each other for a share of value rents, but combine to ensure that few of these return to the farmer or producer country intermediaries or governments. Similar concerns have previously been raised by Fitter and Kaplinsky (2001: 16).

Implications of recent developments in commodity markets

Two main developments have been observed in commodity markets at the global level. First, while the relative growth of global demand for "traditional" commodities (such as coffee and cereals) has weakened in recent years with the exception of the recent spike in 2011, for some primary products, prices have been on the increase. These products include vegetable oils, fruits, vegetables, fish, dairy products, cut flowers and tobacco. The different demand growth for different products has come against a backdrop of changing consumer habits, while growth in trade is determined by market access conditions, marketing and export promotion. Secondly, there is an expanding trade in higher-value-added agricultural commodities, in particular processed foods, in consuming developed countries.

Demand for these products has increasingly exceeded that for basic agricultural commodities. International trade in higher value-added products is dominated by larger and more vertically integrated firms and, in the retail sector, by global supermarket chains. This increasing integration between trade and production has serious implications for the participation of Africa in international commodity trade in that it determines what is produced, how and by whom. Many commodities have become differentiated with tailored supply chains created to control them from production to delivery to the consumer.

This is in response to the interest of consumers in quality, timeliness of delivery, origin and traceability, and in the environment and social conditions in which these commodities were produced. The best examples of these are fair-trading labels and products that meet minimum environmental standards. In Uganda, Good African Coffee founded by Ugandan entrepreneur Andrew Rugasira has capitalized on these recent trends to organize coffee production in Western Uganda and controls the coffee value chain from the slopes of the remote Mt. Rwenzori to the shelves of *Waitrose, Tesco and Sainsburys* in the United Kingdom.

For many firms, production contracts, alliances and other mechanisms designed to coordinate input suppliers, farmers, processors and traders are now important for controlling the marketing chain, thus replacing direct investments. Good African Coffee is one example of such initiatives. Real profits in the commodity chain are made by those who control critical points along the chain, own established brand names or have access to shelf space in supermarkets (and not by trading houses)(United Nations, 2002: 9).

A major implication of these developments for a developing country like Uganda and African producers in general is that they must enter into networks if they want to access developed-country markets. These networks disseminate information about markets to producers and enable buyers to obtain information about and develop confidence in the supplier (UNCTAD,

2000b: 7). For specific products however, the entry of producers, processors and traders into the value chain depends on product characteristics, technical requirements, market structures and the organization of trade. In the last case, entry may depend on whether the products are "half-channel crops" or "entire-channel crops".[10]

Nevertheless, the determining factor in market entry is the capacity to upgrade and produce according to specific requirements relating to quality, health and environmental standards as well as consumer preferences and tastes. The major challenges are how to identify market opportunities and meet the specific requirements for each market. The former necessitates a constant examination of diversification opportunities, as areas of comparative advantage and competitive advantages are dynamic and change over time. The latter requires technical assistance in order for African countries to meet quality and health requirements, particularly in line with the WTO Agreement on Sanitary and Phytosanitary Measures.

The above foregoing presents on ground assessment of the developments in the trade sector and the ways through which Uganda and other Sub Saharan African countries can capitalise on their liberal trade regimes to maximise their trade opportunities in the ever changing global trading landscape. As the figures 5 & 6 demonstrate, African countries have trade deficits in their BoP. The only remedy to this is to relentlessly adapt to the ever shifting global trading landscape.

6.0 Conclusion and Emerging issues

a) Macro analysis

In general, research on trade liberalization in developing countries has paid a lot of attention on its impact on export performance, economic growth, employment, wage inequality and the income distribution but very little to its impact on imports and the balance of trade. Important to note is that if trade liberalisation leads to a faster growth of imports than

[10]The marketing channel is split into two distinct sections in the case of "half-channel crops", with the exporter taking responsibility for the product only up to the point where it is sold to an intermediary. In the case of "entire-channel crops", there is a direct link between the exporter and the importer (UNCTAD, 2000b: 11).

exports, this can have serious implications for the balance of payments of countries that may constrain growth leading to economies growing below the optimal growth path[11]. Put differently, while trade liberalisation may promote growth from the supply side through a more efficient allocation of resources, it may inhibit growth from the demand side unless a balance between imports and exports can be achieved through either currency depreciation or deficits can be financed through sustainable capital inflows. The results of the analysis undertaken are fairly robust which means that the conclusions can be presented with some degree of confidence.

First, reductions in export and import duties have significantly affected the growth of exports and imports, with the impact on import growth greater. The plausible explanation for this empirical evidence is that, it has been easier for importers to import than for producers to reallocate resources to the traded-goods sector and to capture export markets. The implications for such a consequence of liberalisation on the current account and hence the economy are clear.

Whereas it appears that liberalisation has had a net positive effect economic growth, the balance of trade consequences may have in turn reduced growth below what might otherwise have been had a balance between exports and imports been achieved. One emerging issue with the results points to the need to take great care in the sequencing of the liberalisation of exports and imports to achieve a better balance between export and import performance if the economy is to realize its potential growth performance. Openness and flexible exchange rates alone have not automatically guaranteed that unemployed domestic resources are easily converted into scarce foreign exchange earnings through exports.

For instance, depreciation of the nominal exchange rate may not translate into a fall of the real exchange rate because of domestic inflation, but even if it does it; may not be effective in reconciling the conflict between output growth and the balance of payments if the Marshall-

[11] See McCombie and Thirlwall (1997) for a thorough exposition.

Lerner condition is not satisfied. The only alternative may be slower growth to adjust import demand to export growth.

b) Micro analysis

The Ugandan experience as is the case with most Sub Saharan African economies suggests that the policies aimed at reducing the role of the state in the commodity sector within the context of trade liberalization have not had the desired outcomes, and that markets have not been able to fill the resulting institutional void. For trade liberalisation to result in a reduction in trade deficits, Government has a critical role to play in fostering macroeconomic management and in encouraging and promoting horizontal and vertical diversification towards higher-value-added products through an integrated programme of "supply-side responses" such as the provision of fiscal and other incentives, extension services, trade facilitation, market research and quality control.

It is therefore critical to not only adapt macroeconomic policies to deal with structural constraints, but also to build up and reinforce institutional capacities. There is also need to promote regional economic cooperation with the objective of overcoming the constraints of small domestic markets and altering the traditional export structure, as well as adapting to the challenges of increasing global integration and the associated challenges of increased competition. To maximise the benefits as well as minimise the costs of opening up the economy to international trade, the following measures have been suggested:

Strengthening institutional capacities: Earlier studies (see for instance UNCTAD, 2004, Ackah & Morrissey, 2005) have indicated that, weakening the role of the state and thus institutional capacities in the trade sector and price liberalization have not had the desired effect of adjustment to a more competitive environment through the free play of market forces. There are a number of areas where the public sector's role and capacity would need to be built up in Uganda in order to meet the development challenges in the trade sector, including the establishment of appropriate institutions. Direct involvement by producers and exporters

could also help to ensure that the interests of producers are put into consideration. This may entail the following measures:

(i) Research: It is important for the country to develop research and analytical capacities under the trade Ministry that will design necessary policies to enable the country to capture a higher proportion of the final products' value added. Gathering and disseminating market intelligence relating to niches and levels of premium available for higher-quality exports, among other things. There is therefore need to capitalize on potential opportunities offered by dynamic sectors in world trade in order to reduce dependence on raw commodity exports. Labour and resource-intensive products; significantly enhance domestic export value added, and lead to the establishment of a virtuous circle between investment, innovation and technological change; productivity and supply capacity; and enhanced export and growth performance.

(ii) Public goods: Institutional capacities must also be enhanced for the provision of public goods that address market imperfections, including eliminating segmentation of rural and urban markets and linking them to regional and global markets. Improvements in road infrastructure, telecommunications infrastructure, together with the removal of non-physical barriers to transportation (for example, through harmonization of customs and transit documentation within the EAC/COMESA region), should reduce costs and increase the price competitiveness of exports, in particular for a landlocked country like Uganda. There is therefore the need to build and consolidate a conducive environment for international trade through the development of supportive modern infrastructure to facilitate the smooth flow of international trade. This is because high transaction costs related to the absence of such infrastructure constitute major barriers to trade and a serious impediment to trade related FDI.

(iii) Quality improvement: A rigid system of quality assurance should be devised and implemented by defining minimum acceptable quality (for example, in terms of moisture content and percentage of broken beans, maize and coffee), backed by a pragmatic

enforcement mechanism. This may necessitate an institutional framework akin to national export or crop marketing boards, which involve exporters. As must be recognized, support structures in Uganda like in many African countries (for activities such as marketing, quality control and inspection services) have been weakened with the dismantling of crop marketing boards as part of the economic liberalization and structural adjustment measures. In most instances, the quality of exports has suffered in contrast to countries such as Ghana where the state has retained some quality control over its main exports (see ul Haque, 2003). This therefore points to the fact that in order to maximise the benefits of having an open trade regime, there should be internal controls for purposes of quality assurance.

(iv) Diversification: Horizontal diversification must incorporate more dynamic, higher-value-added products (such as fruits, vegetables, fish and roasted coffee) as well as temperate products (such as grains and meats) that are unrelated to existing or traditional exports, in order to attain a balance between commodities subject to persistent and short-lived shocks. The strategy of diversification, however, entails the risk of further depressing commodity prices if many countries in Sub Saharan Africa diversify into the same commodities. If this happens, it would be difficult, if not impossible, to avoid a "fallacy of composition" at the regional level.[12]

The strategy's success largely depends on enhanced farmer access to agricultural inputs, including improved seeds and credit, efficient extension services and better cultivation techniques, good rural infrastructure and improved access to land with secure titles. Another area in which Uganda can develop its potential comparative advantage is the export of services, as these have become internationalized in recent years. This great potential could be realized by developing domestic capacity in certain critical areas, such as tourism, and competitive pricing of services. In addition, there is need to increasingly capitalise the country's exports to the new and emerging markets of other developing and transitional economies, including China, India, and Russia, in addition to the growing regional market.

[12] Mayer (2002) presents a detailed exposé on this issue.

Most importantly, any diversification programme has to be consonant with recent and current developments in international commodity trade. Finally, there is need to have a close look at trends in international trade to act as a signal to intensify diversification efforts and better still, an overall change of strategy to policy makers and the private sector especially those in the tradable sectors.

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Appendix.1: Uganda's Exports by Value ('000 US$), 1999-2010

		1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Coffee	**Value**	**186.870**	**109.644**	**85.254**	**105.473**	**114.129**	**144.527**	**173.373**	**228.518**	**348.629**	**336.653**	**262.131**
	Volume, 60-Kg bags	3.039	2.840	3.156	2.993	2.552	2.520	2.102	2.536	3.028	3.198	2.744
	Unit Value	1.025	0.643	0.450	0.587	0.745	0.956	1.375	1.502	1.919	1.755	1.592
Non-Coffee	**Value**	**245.646**	**322.043**	**384.788**	**394.502**	**519.239**	**608.475**	**666.122**	**972.780**	**1,101.331**	**1,150.462**	**1,298.373**
Electricity	Value	13.761	16.668	13.940	15.473	12.639	8.252	4.684	6.312	11.190	11.108	14.384
	Volume(gigawatts)	209.887	224.859	195.509	251.058	198.597	131.049	52.171	56.625	67.446	72.700	81.976
	Unit value	0.066	0.074	0.071	0.062	0.064	0.063	0.090	0.111	0.167	0.153	0.175
Gold	Value	39.393	58.487	56.668	48.184	58.487	71.326	101.554	116.142	44.852	27.836	38.476
Cotton	Value	22.499	14.079	18.000	16.880	42.836	41.343	12.857	19.673	19.904	20.110	17.034
	Volume ('000 mtons)	21.435	12.144	22.500	16.361	29.565	42.132	11.673	15.849	11.874	20.034	10.399
	Unit value (US $/kg)	1.050	1.159	0.800	1.032	1.449	0.981	1.101	1.241	1.594	1.559	1.753
Tea	Value	31.876	35.933	26.851	29.455	39.250	33.130	25.605	45.944	46.757	50.165	70.932
	Volume ('000 mtons)	23.957	28.091	30.301	31.136	36.179	34.008	27.118	41.115	44.430	48.269	52.982
	Unit value (US $/kg)	1.331	1.279	0.886	0.946	1.085	0.974	0.944	1.117	1.052	1.041	1.329
Tobacco	Value	22.432	27.644	32.270	39.891	36.160	36.205	30.632	46.737	64.488	62.635	76.615
	Volume ('000 mtons)	10.309	12.772	17.622	23.478	24.914	28.632	22.116	19.610	26.885	24.407	48.633
	Unit value (US $/kg)	2.176	2.164	1.831	1.699	1.451	1.264	1.385	2.383	2.399	2.626	1.623
Fish & its Products	Value	18.643	50.112	80.848	83.783	88.815	121.220	147.043	140.667	126.589	111.467	130.563
	Volume ('000 mtons)	9.816	22.313	27.375	24.128	29.138	37.836	38.616	35.642	27.992	23.550	24.505
	Unit value (US $/kg)	1.899	2.246	2.953	3.472	3.048	3.204	3.808	3.947	4.537	4.771	5.317
Hides & Skins	Value	6.147	22.700	19.649	4.182	5.860	6.377	7.333	14.694	13.829	8.372	11.279
	Volume ('000 mtons)	8.292	17.847	23.293	15.672	22.650	23.780	25.361	25.985	18.768	13.880	7.052
	Unit value (US $/kg)	0.741	1.272	0.844	0.267	0.259	0.268	0.289	0.565	0.737	0.771	1.522
Simsim	Value	0.825	0.657	0.468	1.550	3.382	3.067	5.515	3.950	13.869	13.242	9.621
	Volume ('000 mtons)	1.050	1.490	1.307	4.927	5.384	4.453	9.515	5.024	10.747	12.159	9.342
	Unit value (US $/kg)	0.786	0.441	0.358	0.315	0.628	0.689	0.580	0.786	1.210	1.311	1.078
Maize	Value	4.010	6.134	13.068	8.163	18.759	13.293	23.728	27.938	17.961	27.513	27.815
	Volume ('000 mtons)	11.740	29.586	89.973	33.823	97.636	52.489	119.455	115.379	83.857	102.582	117.568
	Unit value (US $/kg)	0.342	0.207	0.145	0.241	0.192	0.253	0.199	0.242	0.220	0.264	0.241
Beans	Value	4.818	2.041	1.449	5.491	4.866	4.327	8.280	5.778	5.709	13.775	9.596
	Volume ('000 mtons)	12.167	14.423	4.101	19.240	17.259	14.171	30.699	15.539	20.767	40.465	25.730
	Unit value (US $/kg)	0.396	0.142	0.353	0.285	0.282	0.305	0.270	0.372	0.294	0.361	0.375
Flowers	Value	8.290	13.221	15.907	17.040	27.157	31.705	32.668	32.609	38.983	48.537	49.180
	Volume ('000 mtons)	2.177	3.472	4.288	4.737	6.053	6.677	7.176	6.823	6.299	6.725	9.278
	Unit value (US $/kg)	3.808	3.808	3.709	3.597	4.486	4.749	4.552	4.779	6.178	7.217	6.652
Oil re-exports	Value	7.901	11.116	7.251	11.690	34.317	33.051	29.613	40.966	23.697	54.877	51.411
Cobalt	Value	7.336	12.784	10.945	1.916	2.686	13.703	19.423	16.575	18.944	17.029	16.539
	Volume ('000 mtons)	248.877	533.102	674.490	139.320	101.540	518.770	741.690	658.880	717.610	668.791	683.390
	Unit value (US $/kg)	29.476	23.980	16.227	13.753	26.453	26.414	26.187	25.156	26.398	25.498	24.370
Others Exports	Value	57.716	50.468	87.474	110.804	144.024	191.476	217.187	454.795	654.559	683.796	774.928
Informal Exports	**Value**	**0.000**	**0.000**	**0.000**	**6.364**	**37.556**	**133.336**	**201.747**	**298.588**	**1,146.048**	**1,322.606**	**1,195.868**
Total Value Exports		**432.516**	**431.687**	**470.042**	**506.339**	**670.923**	**886.339**	**1,041.242**	**1,499.886**	**2,596.008**	**2,809.721**	**2,756.372**

Source: Bank of Uganda (2010)

Appendix II: Intra-EAC trade flows for Uganda (US$ Millions)

Partner	Flow	2003	2004	2005	2006	2007	2008	2009
Kenya	Export	78.0	77.0	72.4	88.0	118.2	164.6	174.0
	Import	403.3	399.2	520.7	401.0	495.7	511.3	502.7
	Balance	(325.3)	(322.2)	(448.3)	(313.0)	(377.5)	(346.7)	(328.7)
Tanzania	Export	5.8	12.2	15.4	13.7	30.6	30.5	33.8
	Import	10.8	15.8	30.1	28.7	30.8	55.5	40.8
	Balance	(5.0)	(3.6)	(14.7)	(15.0)	(0.2)	(25.0)	(7.0)
Rwanda	Export	20.8	24.7	36.1	30.5	83.3	136.9	135.3
	Import	0.5	0.6	0.5	0.5	3.8	2.9	3.1
	Balance	20.3	24.1	35.6	30.0	79.5	134.0	132.2
Burundi	Export	10.1	18.1	20.8	20.6	42.7	45.4	55.8
	Import	0.3	0.7	0.2	0.2	0.8	0.9	0.4
	Balance	9.8	17.4	20.6	20.4	41.9	44.5	55.4
Rest of EAC	Export	114.7	132.0	144.7	152.8	274.8	377.4	398.8
	Import	414.9	416.3	551.5	430.4	531.1	570.6	547.0
	Balance	(300.2)	(284.3)	(406.8)	(277.6)	(256.3)	(193.2)	(148.2)

Source: EAC Secretariat Annual Report 2010