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The KENYA INSTITUTE for PUBLIC
POLICY RESEARCH and ANALYSIS

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Abstract

This study investigates the effects of integration process, trade and foreign direct investment (FDI) on economic growth of East African Community (EAC) member countries. Using a panel data and a single equation model, the study uses generalized least square technique (GLS) to estimate the relationship. The results obtained show that trade within the EAC has no significant impact on the economic growth of these countries. However, the EAC trade with the rest of the World and FDIs have a significant effect on the growth of EAC member countries. The study therefore suggests that for the EAC member countries to benefit fully from the integration process, they need to streamline their custom clearance procedures and standards; establish a single custom territory and harmonize national laws that contradict the common market protocol.

Abbreviations and Acronyms

RTA	Regional Trade Arrangement
REC	Regional Economic Community
EAC	East African Community
SADC	South Africa Development Community
COMESA	Common Market for Eastern and Southern Africa
ECOWAS	Economic Community of West African States
WAEMU	West African Economic and Monetary Union
CEMAC	Economic Community of Monetary Union of Central Africa
ECCAS	Economic Community of Central African States
AMU	Arab Maghreb
PTA	Preferential Trade Area
FTA	Free Trade Area
CU	Custom Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
ECA	Economic Commission for Africa
LPA	Lagos Plan of Action

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1.   Introduction

Regional trade arrangements (RTAs) are increasingly becoming instrumental in promoting global trade and foreign direct investment. It is estimated that between 50 and 60 per cent of global trade benefits are from regional preferences (WTO, 2007). It was Adam Smith who first stated the importance of market size to economic development, in that regional integration results to larger markets that enable entrepreneurs to achieve economies of scale in production, driving prices down and promoting specialization. The specialization, in turn, forms the entire foundation for efficiency gains with exchange based on the principle of comparative advantage (Kapstein, 2010).

The East African Community (EAC) is one of the regional groupings in Eastern and Southern Africa, a common market consisting of Kenya, Tanzania, Uganda, Rwanda and Burundi. Other trade groupings in the region include the Common Market for Eastern and Southern Africa (COMESA), and Southern Africa Development Community (SADC). The present EAC is a revival of the original EAC, a free trade area (FTA) founded in 1967 after the demise of the colonial regimes, and which collapsed in 1977 because of, among other factors: inequitable distribution of costs and benefits among the partner states; the ideological differences between the partner states; and the personality clashes between the heads of state of the partner countries (Kibua and Tostensen, 2005). Other reasons for the collapse include structural problems, which impinged on the management of the common services and inadequate involvement of the people in decision making. The present EAC reaches beyond the earlier attempt at regional integration by aiming at the ever closer integration, first by establishing a customs union (CU), then a common market, monetary union and ultimately a political federation.

The EAC re-establishment treaty was signed on 30 November 1999 by Kenya, Uganda and Tanzania. The objectives of the community was to develop policies and programmes aimed at widening and deepening co-operation among the partner states in political, economic, social and cultural fields, research and technology, defence, security and legal and judicial affairs, for their mutual benefits (EAC, 2000). The EAC treaty was ratified on 7 July 2000, 23 years after the collapse of the defunct erstwhile community and its organs. A custom union was signed in March 2004, which commenced on 1 January 2005. Kenya, the region's largest exporter, continued to pay duties on goods entering

the other two countries on a declining scale until 2010. Ideally, under a fully fledged customs union, goods manufactured in one partner state should move to another partner state without suffering any import duties, while goods imported into the customs union should move freely from one partner state to another. In 2007, Rwanda and Burundi joined the community. The EAC Common Market Protocol was signed in November 2009 and ratified by the partner states in July 2010. With the implementation of the Common Market Protocol, it is expected that there will be free movement of persons and capital within the region. The effect of this freedom will be increased cross border investment in all sectors of the EAC. Ultimately, the new business climate will increase profitability, incomes and general welfare of East Africa. Thus, the new stage will have a positive impact on the allocation of resources in the region, exploitation of scale economies, profit margin, distribution of income, market size, efficiency of production and balance of trade in the intra-regional trade.

1.1.   EAC Economic Structure and Pattern of Trade

The East African region covers an area of 1.8 million square kilometres with a combined population of about 133.5 million, Gross Domestic Product (GDP) of around US$ 79.2 billion, a per capita income of US$ 685 and significant natural resources (EAC, 2011). EAC members vary largely in terms of size and in many other respects. The socio-economic performance among the East African partner states has shown a remarkable improvement as the region seeks to integrate further. Economic growth and per capita income seems to have improved remarkably in recent years, hence giving more prospects for trade and investment in the region.

Between 2000 and 2010, the size of East Africa's economy grew in real terms from US$ 32 billion to US$ 79 billion. Kenya's share of the regional economy was the largest at 40 per cent, while Tanzania had 29 per cent in 2010. East Africa's economy grew at a rate of 6 per cent in 2010, with Rwanda having the fastest growth rate of 7.5 per cent. On average, the economic growth of these countries has been different during the period of integration with Uganda, Rwanda and Tanzania, growing at an average of 7 per cent from 2005 (Figure 1.1).

Figure 1.1: Real GDP growth rate, 2000-2010
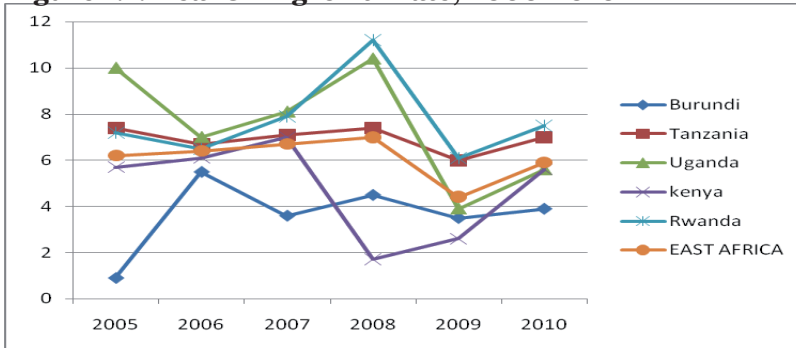
Source: EAC Trade Report (2011)

In terms of relative scale argument, the fast growth of Rwanda, Tanzania and Uganda in comparison to Kenya over the past ten years has not only narrowed the gap between them and their larger neighbour, but it has given these smaller economies confidence in their competitive abilities, and strengthened the argument that the fruits of integration should be shared out evenly among the member countries. The dominant sector in all the partner states by 2010 was agriculture, followed by wholesale and retail trade, and manufacturing.

In terms of per capita income by 2010, Kenya continued to perform well with the highest per capita income of US$ 833.4, followed by Rwanda, Uganda, Tanzania and Burundi (Figure 1.2).

With consistent growth in its economy, East Africa has attracted significant investments both from the continent and globally. Within

Figure 1.2: Per capita income (current US$) 2000-2010
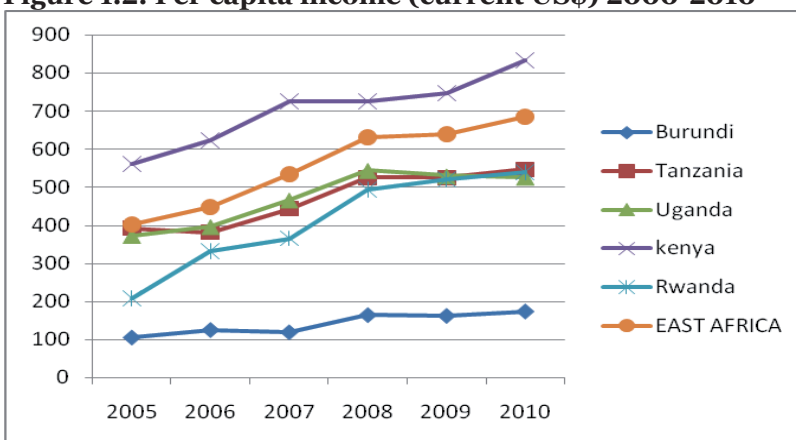
Source: EAC Trade Report (2011)

the five East Africa Community member states, Kenya, despite being the largest economy compared to the other four, has not performed well in terms of attracting foreign direct investment (FDI). During the period between 1968 and 1989, Kenya was the preferred destination for multinational corporations seeking to establish their regional base in Sub-Saharan Africa. However, from 1992 to 2002, the Kenyan economy was in stagnation coupled with high inflation (Government of Kenya, 2005). Ironically, while the Kenyan economy was taking a nose dive, the neighbouring countries of Uganda and Tanzania were fast reforming and opening up their economies for trade and investments. As at 2009, Tanzania had a total foreign investments stock of US$ 7,266 million comprising 31.5 per cent of its GDP, Uganda had a total investments stock of US$ 4,988 million forming 27.8 per cent of its GDP, while Kenya had a paltry US$ 2,129 million forming 6.5 per cent of its GDP. At the same time, Rwanda had foreign investments of US$ 412 million, forming 8.3 per cent of its GDP (EAC, 2010).

In 2010, Tanzania attracted foreign investments worth US$ 700 million, Uganda US$ 848 million, while Kenya attracted US$133 million with investments worth US$ 46 million leaving the country in the same year. Kenya, however, is the only country in the region that has outward bound investments. Kenyans are the second highest investors in Uganda and third highest investors in Tanzania. Overall, the FDI inflows into the region increased by 90.2 per cent in the five-nation trade bloc, rising from US$ 910 million in 2005 to US$ 1.74 billion in 2010 (Figure 1.3).

**Figure 1.3: Foreign direct investment in EAC in US$ millions**
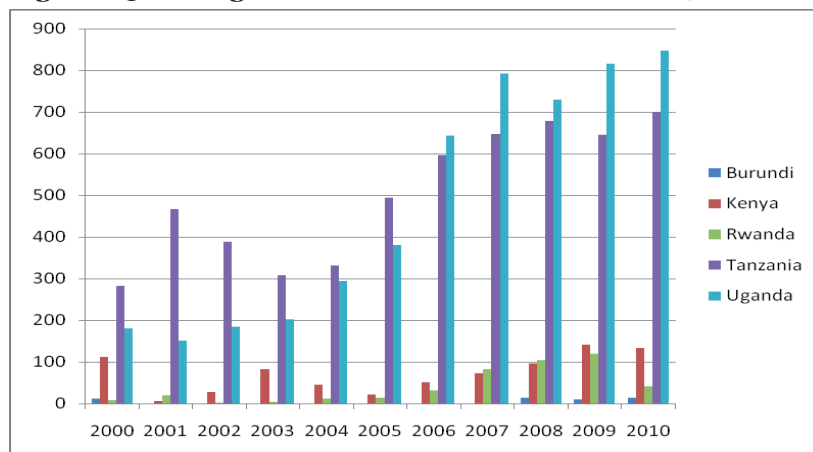
Source: UNCTAD

It is important, however, to note that Uganda and Tanzania have been attracting large stocks of investments because of large chunks of natural resource sectors such as natural gas, oil and precious stones, which Kenya does not have in abundant. The majority of foreign investment in Kenya is in secondary and tertiary sectors such as General Motors assembling plant, British American Tobacco, Toyota East Africa, Unilever, Citibank, among others, who are seeking to benefit from the large EAC market.

On trade performance in 2010 the value of EAC's total trade with the rest of the world was US$ 37 billion, which was double the US$ 17.5 billion achieved in 2005. The region's trade with the rest of the world as a share of its economy expanded from 28 per cent in 2005 to 47 per cent in 2010 (EAC, 2012). The total intra-EAC-trade has also been increasing in recent years, rising by 9.5 per cent and 6.7 per cent in 2009 and 2010 to stand at US$ 3.8 billion and US$ 4.06 billion, respectively. Despite this increase, the share of intra-EAC trade to total EAC trade has been on the decline from 13 per cent in 2004 to 11 per cent in 2010 (Appendix Table 3). This implies that the EAC is conducting almost 89 per cent of its business with the outside world, which compares poorly with other trading blocks. For example, the intra trade in the European Union accounts for 60 per cent of its total trade, while trade within the North America Free Trade Area accounts for 48 per cent of the total trade of its member states. The intra-EAC trade is mainly in

Figure 1.4: Intra EAC exports (US$ millions)
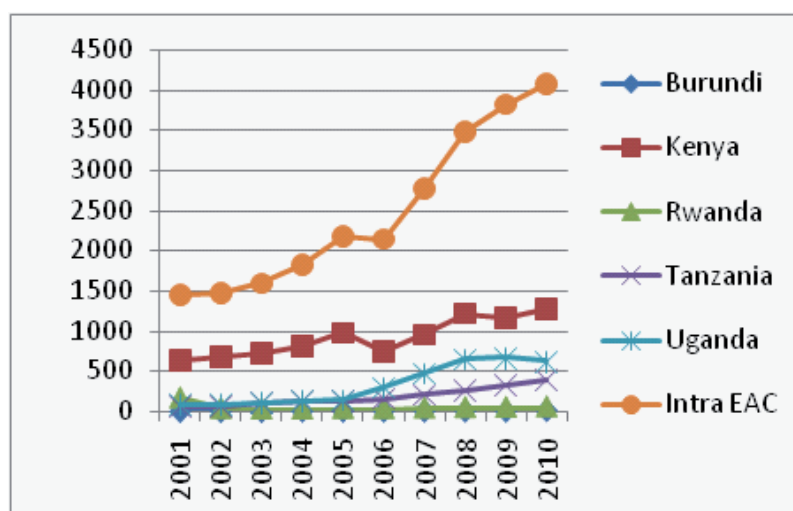
Source: EAC Facts and Figures (2011)

Figure 1.5: EAC intra-imports (US$ millions)
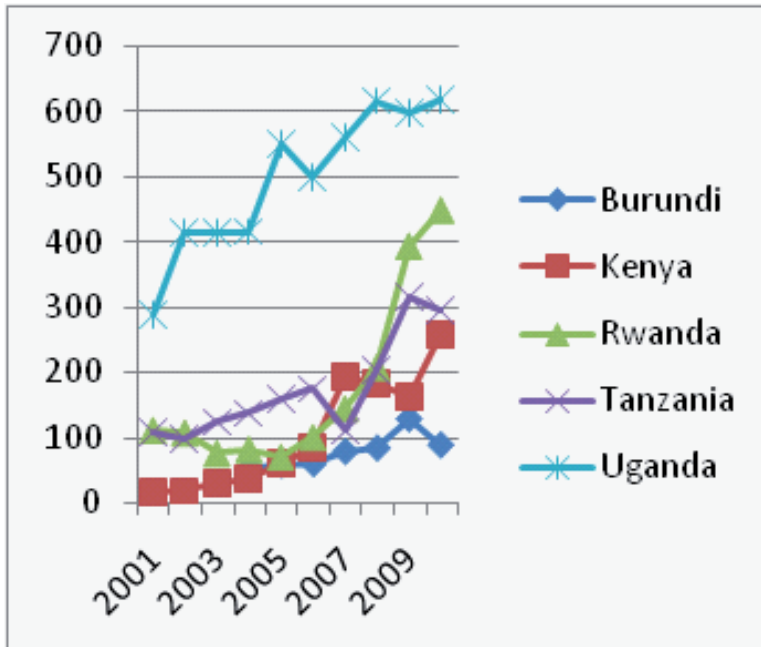
Source: EAC Facts and Figures (2011)

agricultural commodities and manufactures. Food and live animals as a group continue to dominate the formal intra-EAC trade of almost all the EAC members, except the exports of Kenya. The two other important groups, especially for Rwanda and Burundi, are beverages, tobacco and inedible crude materials (soaps, refined oil, perfumed and other types of oil). The intra-EAC exports by Kenya show increasing diversification into more specialized manufactured goods and articles, and gradually so by Tanzania and Uganda. Chemicals, fuels and lubricants, as well as machinery and transport equipment are other significant groups in Kenyan exports to the rest of EAC. The intra-EAC trade is expected to grow even further in coming years with the signing of a common market protocol.

1.2.   Statement of the Problem

The EAC is the most advanced and active regional economic community (REC) in Africa with the signing of the common market protocol. Both COMESA and SADC are still at the customs union stage. However, the past experience of developing countries with regional integration schemes has not been encouraging. This is because the design of REC

among developing countries in the past tended to maximize the costs of trade diversion and also encourage regressive transfers from the poorer to better-off members of such arrangements (Lunogela *et al.*, 2009).

A crucial issue in the success of integration schemes is the equitable distribution of the gains from integration among the member countries. Fouroutan (1993) argues that a common reason for the failure of the regional integration in Africa is the concern among the poorest African countries that the removal of trade barriers may cause the few industries that they possess to migrate to industrially more advanced countries (infant industry protection argument). The initial fears in EAC that smaller economies were not to benefit have been proved wrong by increased trade volumes for Uganda and Tanzania.

The integration process is geared towards improving the general welfare of the people of the member countries. This can be achieved only if the gains of the integration process are reflected in the economic growth of these countries. One of the key goals of any economic integration is the increased benefits accruing from intra-trade through increased trade volumes (trade creation)[1]. The other goal is increased FDI. The increased market size because of integration provides greater opportunities to entrepreneurs and multinational enterprises to realize greater profits because of economies of scale and scope, and hence attract more investment and trade.

As the East African countries move towards the creation of monetary union and eventual creation of political federation, there is need to take stock of the achievement made so far, since the inception of EAC with regards to economic growth.

1.3. Objective of the Study

The broad objective of this study is to analyse the gains achieved so far among the partner states since the inception of EAC, and the adoption of the customs union. Specifically, the study seeks to analyse if there has been any significant effect of intra-trade and foreign direct investment (FDI) on economic growth of the member countries.

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[1] The formation of a customs union leads to elimination of custom tariffs on inner border of unifying states, causing decrease of price of the goods, hence increased trade. The opposite takes place in the case of trade diversion, when the flow is diverted from actually cost-effective partner state to the less efficient one, but which became a member of economic union and made its goods cheaper within a union, but higher compared to the rest of the world.

2.   Literature Review

2.1.   Theories of Regional Integration

Theories of integration draw heavily from the standard trade theory which states that free trade is superior to all other trade regimes. From this basic principle, it is assumed that integration among two or more countries will improve the welfare of member countries, provided the arrangements lead to trade creation, minimal trade diversion and/ or trade creation that exceeds trade diversion (Ng'eno *et al.*, 2003). The term integration entails the coming together of two or more states, normally through reciprocal preferential agreements, based on one or more of the following successively integrating cooperation arrangements:

(i)   Preferential Trade Area (PTA) or Agreement, where member states charge lower tariffs to imports produced by fellow member countries than they do for non-members;

(ii)   Free Trade Area (FTA), a PTA without any tariffs on fellow members' goods;

(iii)   Customs Union, a FTA using the same or common tariffs on imports from non-members;

(iv)   Common Market, a customs union with free movement of the factors of production;

(v)   Economic Community, a single-currency common market or monetary union in which fiscal and monetary policies are unified. If political sovereignty is given up, an economic community becomes a federation or political union with common legislation and political structures.

The above classification of schemes is hierarchical, with each level embracing the one before it. In the formation of new EAC, the creation of a Customs Union was considered to be the entry point and was launched in 2005. In 2010, the EAC launched a Common Market to enable free movement of labour and capital within the region, with the goal of a common currency by 2012 and full political federation in 2015.

Most of the theories of regional integration take as their starting point the conditions of the twentieth century, which see integration as a process of reducing international tensions and improving the lot of humanity (Harrison, 1974). Five main theories are discussed

in this paper, namely, the functionalism, neo-functionalism, inter-governmentalism, organizational theory and supranational governance theory.

The functionalist thesis upon which most of the popular theories of integration are based was not originally designed for either explaining or advocating regional organizations. The functionalists focus on common interests and needs shared by states in a process of global integration triggered by the erosion of state sovereignty and the increasing weight of knowledge, hence of scientists and experts in the process of policy-making. The classic statement of functionalism is attributed to Mitrany (1968) who says that the collective governance and 'material interdependence' between states-develops its own internal dynamic as states integrate in limited functional, technical, and/or economic areas. International agencies would meet human needs, aided by knowledge and expertise. The benefits rendered by the functional agencies would attract the loyalty of the populations, stimulate their participation, and expand the area of integration. This argument is based on the assumptions that the process of integration takes place within a framework of human freedom, that knowledge and expertise are currently available to meet the needs for which the functional agencies are built and that states will not sabotage the process.

Neo-functionalist theory is centred on the view that society is composed of various groups of interests, and the integration process would better satisfy them. Essential for the neo-functionalist thesis is the idea of spillover, according to which integration would deepen from economic to political, leading to an integrated union of states (Rosamond, 2001). Another key element is the existence of a high authority (above the nation states), which would give the integration process the right direction. A high authority that wrongly guides member states would be, in the view of neo-functionalists', the definite element that drives a given union to failure. This theory, therefore, places major emphasis on the role of non-state actors, especially the "secretariat" of the regional organization involved and those interest associations and social movements that form at the level of the region in providing the dynamic for further integration. Member states, however, remain important actors in the process. They set the terms of the initial agreement, but they do not exclusively determine the direction and extent of subsequent change. The critiques of neo-functionalism point to the argument of decreased role and authority of the member states. Empirical evidence indicates the opposite (Rosamond, 2001).

Inter-governmentalism considers economic interdependence as a necessary condition for integration (Moravcsik, 1993). Therefore, its working mechanism consists of the impact that increases in the exchange and the capability of single state to manage individually a higher level of complex interaction. Export dependence and intra-industry trade are thus reckoned to generate the strongest pressures for trade liberalization, which in turn is the main cause of integration. Inter-governmentalism appeared as a reaction to neo-functionalism their arguments are based on two views: neorealism whose core ideas are that the distribution of capabilities between member states induces differences of power, and neo-liberalism, which focuses on the interaction of states' interests. Inter-governmentalism views integration as a two level game played by the member states, both at national and regional level. At the national level, office holders build coalitions among domestic groups, and at regional level, they bargain in ways that enhance their position at the domestic level by satisfying demands of key interest groups.

Heavily drawing on neo-functionalism, supra-national governance theory (Sandholtz and Alec, 1998) highlights the "inherent expansionary" nature of integration processes, sustained "by means of policy feedback" and the role of supranational organization. Integration has favoured devolution of power from the state to both sub- and supra-national levels, but with significant differences among sectors of policy making. However, it does not dismiss the power of national governments and the primacy of inter-governmental bargaining in a number of areas.

Organizational theory lays more emphasis on why organizations emerge. Organizations are seen as better means of satisfying the individuals' interests than each of them would satisfy on their own. Individuals' interests are not necessarily pragmatic; they could also be ideological. Organizations exist because of their ability to create value and accept outcomes for various groups of stakeholders, where stakeholders are actors who have an interest, claim or stake in the organization in what it does, and in how well it performs (Jones, 2004). Stakeholders are motivated to join and participate in an organization as long as the 'inducements' they receive exceed the value of the contribution they make for the organization to exist. Thus, an organization is used by different groups of stakeholders at the same time, and the purpose of each of them is to accomplish its own goals. The effectiveness of the organization varies for each group, as each

group evaluates the organization by judging how well it fulfills the specific group's goals. Obviously, the goals of stakeholders vary and can be contradictory, and therefore they bargain over their gains.

2.2.   Linking Trade to Growth

The theory that trade is positively correlated with economic growth goes back to Adam Smith (1776), who argued that trade allows for increased specialization. Specialization permits increased attainment of economies of scale, especially from countries with relatively small domestic markets. A country's abundant means of production is also fully exploited through trade. Domestic businesses are forced to improve their technologies because of competition from imports. Further, increased economic integration with the outside world encourages technological innovation through the diffusion of new technologies from more advanced countries. Increased imports curb domestic monopolies that hold production below, and prices above socially optimal levels (UNECA, 2010).

Trade affects economic growth via two mechanisms: efficiency gains from specialization, and economies of scale. For example, because of efficiency gains through specialization, most developing countries will obtain aircraft more cheaply by importing them from Boeing or Airbus using earnings from exports than by building them domestically. Most developing countries, moreover, depend even more on the world market for economies of scale than do large industrial countries. The link between trade and growth may occur through increased productivity. Grossman and Helpman (1994) show that integration with the world economy can boost a country's productivity. First, residents of a country that is integrated into world markets are likely to enjoy access to a larger technical knowledge base than those living in relative isolation, because trade helps disseminate technology. Second, exposure to international competition may mitigate redundant industrial research. While a firm that develops a product for a domestic market needs only to use technologies new to the local economy; one that hopes to compete in the international market place will be forced to generate ideas that are truly innovative on a global scale. Third, by expanding the size of the potential customer base, international integration may bolster

incentives for industrial research.

To illustrate this connection between trade and growth, some economists use neoclassical models that are essentially general equilibrium models, with constant or decreasing returns of scale and with no transaction costs. In this case, the trade patterns among countries are determined by comparative advantage. Other economists use Ricardian and the Heckscher-Ohlin models. The comparative advantage in Ricardian models are in the form of technological differences, while the Heckscher-Ohlin models take the form of differences in resource endowment. Results obtained from the neoclassical models is that a country will have static gains from trade liberalization, the most important being an increase in allocative efficiency. By lowering trade barriers, a country faces the international relative prices that induce the efficient allocation of domestic resources to sectors with comparative advantage, thus increasing aggregate welfare.

In trying to improve the neoclassical growth models, some economists, while preserving most of the model, have introduced new features that consider growth to be endogenous. The theory is that there is an "accumulable" factor, technology, which is produced by intermediate inputs. An increase in the productivity of the intermediate input leads to an increase in the rate of accumulation and growth of output in subsequent periods.

The empirical assessment of the connection between trade and growth is not conclusive. Some studies find a positive correlation between the two (Dollar, 1992; Sachs and Warner, 1995; Ben-David, 1993), while others conclude that the impact of reducing trade barriers has a negative effect (Rodriguez and Rodrik, 1999; Rodrik, 2001). To address the problem of causality, Frankel and Romer (1999) analyzed only the effect of the component of trade that cannot be influenced by growth in the short term, mainly caused by population, land areas and distances. They observe that this component accounts for a significant proportion of the differences between countries in income and growth and suggest a general relationship connecting increased trade to increased growth.

In their study on effects of trade on growth in Sub-Saharan Africa, Bruckner *et al.* (2012) find an empirical evidence that within country variations in trade openness cause economic growth.

2.3   FDI and Growth

The existence of an "additional" growth impact of FDI is widely accepted. The magnitude is, however, less clear particularly in the least developed countries, where low educational and technological standards and weak financial markets can hold back the benefits. The keen interest in FDI is part of a broader interest in the forces propelling the ongoing integration of the world economy, or what is popularly described as "globalization". Together with the more or less steady rise in the world's trade-to-GDP ratio, the increased importance of foreign-owned production and distribution facilities in most countries is cited as tangible evidence of globalization.

Beyond the initial macroeconomic stimulus from the actual investment, FDI influences growth by raising total factor productivity and, more generally, the efficiency of resource use in the recipient economy. This works through three channels: the linkages between FDI and foreign trade flows, the spillovers and other externalities vis-à-vis the host country business sector, and the direct impact on structural factors in the host economy (Hernández-Catá, 2000).

Foreign direct investment is also viewed as a way of increasing the efficiency with which the world's scarce resources are used. FDI is perceived as the means of stimulating economic growth in many of the world's poorest countries. This is partly attributed to the continued decline in the role of development assistance (on which these countries have traditionally relied heavily), and the resulting search for alternative sources of foreign capital. More importantly, FDI can be a source not just of badly needed capital, but also of new technology and intangibles such as organizational and managerial skills, and marketing networks. FDI can also provide a stimulus to competition, innovation, savings and capital formation, and through these effects to job creation and economic growth. Along with major reforms in domestic policies and practices in the poorest countries, this is precisely what is needed to turnaround these economies.

2.4.   Approaches to Regional Integration

A considerable literature has accumulated on the subject of regional integration. From this body of literature, two contrasting approaches to regional integration emerge. One is associated with the late president of Ghana, Kwame Nkrumah, who is famous for his pan-Africanist

dictum: "Seek ye first the political kingdom and everything else shall be delivered onto you." The underlying thinking was that paramount political institutions would be used as vehicles for bringing about integration in other spheres. Nkrumah saw a loose confederation of economic cooperation as deceptively time-delaying. His top-down approach reflected impatience to forge ahead with haste and banked on political pushes doing the trick. At the other extreme is the functionalist approach whereby regional integration is promoted as a piecemeal through gradual steps to carefully building a web of functional relations in trade, investment, infrastructure, culture, etc. In this building-block approach, the political superstructure such as political federation, would be considered the logical culmination of the integration process from below. Both of these differing strands of thinking appear to be alive in East Africa today (Kibua and Tostensen, 2005).

One major reason why regional integration arrangements fail to produce stability and prosperity can be found in the distribution of costs and benefits among the constituent units. Sovereign territorial states enter into cooperative arrangements with expectations of gain. Over time, these expectations must be fulfilled at least in part. Although short-term losses are weighed against long-term benefits, the net long-term benefits must be positive. A systematically skewed distribution of costs and benefits over time represents the greatest threat to regional cooperation integration. If regional disparities are allowed to persist—or worse, to widen—the weaker partners are likely to see such arrangements as a raw deal even if their net benefits are positive. Correspondingly, the stronger partners may feel that they are carrying a disproportional burden, for example by subsidizing the weaker ones. If the issue of distribution of costs and benefits is not addressed in a manner that is considered legitimate and fair by all parties concerned, the likelihood of a breakdown is high. The failure to deal adequately with these issues was the main reason (along with others) why the former EAC collapsed in 1977. Lest the same happen yet again, it is imperative that mechanisms of redistribution be an integral part of the design of all integration measures.

Apart from addressing the vexing question of distribution of costs and benefits among partners, it is also challenging to allocate tasks and responsibilities in a federal set-up. In Europe, the principle of subsidiarity has been propounded. Although difficult to operationalize, it simply means that responsibilities should be assigned to the lowest tier of a federal structure that can adequately perform them. The underlying

rationale is avoidance of top-heavy bureaucracies overburdened with multiple tasks that can be more efficiently and more responsively geared towards the needs of the citizens, if handled at lower tiers of government. All the East African partner states are currently evolving policies of devolution or implementing such policies.

2.5. Regional Economic Groupings in Africa

The Economic Commission for Africa (ECA) became the champion of regional integration in the mid-1960s, proposing the division of Africa into regions for the purposes of economic development. Current African integration arrangements can be divided into two broad groups: those that fit into the Lagos Plan of Action (LPA) adopted in April 1980, and those that were either in existence or came about outside the LPA. The Lagos Plan was promoted by the ECA and launched in a special initiative by the OAU. It envisaged three regional arrangements, where the Economic Community of West African States (ECOWAS) was to serve West Africa, East and Southern Africa region was to be served by the Common Market for Eastern and Southern Africa (COMESA), while Central Africa was to be served by the Economic Community of Central African States (ECCAS). A second group of integration arrangements has grown up outside the LPA. These include the West African Economic and Monetary Union (WAEMU), the Economic and Monetary Union of Central Africa (CEMAC), the Arab Maghreb (AMU), the Southern African Customs Union (SACU), the Southern African Development Community (SADC) and the East African Community (EAC).

Despite the proliferation of institutions, treaties, protocols and resolutions, the record of regional integration arrangements in Africa has been disappointing. The intra-African trade among the Economic Groupings remains low at around 10 per cent as compared to other Regional Economic Communities elsewhere: for example, 24.1 per cent for ASEAN, 60 per cent for European Union, and 48 per cent for North America Free Trade Area (Velde, 2009). COMESA's exports account for less than one per cent of the world trade, while within trade accounts for only 7 per cent of total trade of the region. For SADC, intra-regional trade as a proportion of total SADC trade has only grown from 15.7 per cent in 2000 to 18.5 per cent in 2009 (Mangeni, 2010). On the other hand, intra-trade within the ECOWAS has not fully taken off. The share of intra-community trade in the total ECOWAS trade volume is around 12 per cent. While total ECOWAS exports by 2009 estimates amounted

to a whopping US$ 70 billion, intra-ECOWAS exports were only US$ 6 billion. Nigeria continues to dominate the ECOWAS trade (Zannou, 2010).

The intra-African trade has been limited by, among other factors, costly overlapping memberships, including some bilateral agreements; different time horizons for full liberalization of trade among member states; and considerable trade barriers—both tariff and non-tariff; and delays by some member states in signing and implementing trade treaties and protocols. There has been relatively more bias towards participation in international trade negotiations at the expense of efforts at the regional level, resulting in a decline of Africa's share of global trade. Trade is also constrained by lack of diversification due to the high concentration on similar primary commodities and lack of value addition, as well as the exclusion of informal sector trade. Some countries face a difficult trade-off between public revenue losses from trade liberalization and the long-term benefits from trade integration.

Given the slow progress among many African regional groupings, including EAC, emphasis is being placed on "fast-tracking" the establishment of regional monetary unions ahead of the AU's 2025 continental target. For EAC, it is hoped that monetary union status will be achieved by 2012. However, rushing prematurely to monetary union without macroeconomic convergence among the partner states, poses problems in the end. Lessons from the experiences in Europe and elsewhere show that for macroeconomic convergence to work, there must be key determinants in place, such as building consensus in developing the convergence criteria and its implementation modalities, and commitment to agreed obligations and the prioritization in the design of policy objectives.

European Monetary Union experiences highlight the important role of institutions in influencing the level and distribution of costs and benefits of macroeconomic integration, especially when the region is affected by exogenous shocks. Thus, without proper institutional design and consistent policy objectives (as happens under a federation or political union), heterogeneity of policy preferences among members to a convergence agreement, e.g. choice in the employment-inflation trade-off, can affect the sustainability of monetary integration. Other lessons for Africa from the European Union experience include the need for a common central bank to focus on price stability as its primary objective, thus causing national fiscal compliance with this goal by all

member states. The central monetary authority should be guided by clear and realistic parameters that are equally enforceable amongst all members (Mothae, 2005).

3.   Methodology

The economic model for this study is based on a Classical economic growth model, first expressed by Adams Smith (1776) and later modified by Ricardo (1817) and J. S. Mills (1843, cited in Hollander, 1985). A simple Smith production function is given as:

$$Y = (L, K, T)$$

Where: *Y* is output, *L* is labour, *K* is capital and *T* is land; therefore output is related to labour and capital and land inputs.

The production function is assumed to exhibit constant returns to scale (CRS). The use of the production function is justified by its flexibility and transparency in that a simple production function may be easily complemented with other explanatory variables to explore the effects of integration on growth, and it also provides parameter coefficients that are directly interpretable, and usually accommodates statistical noise (Lundvall, 2002).

To model the growth effects of the EAC integration process, the classical economic growth function is extended with standard control variables such as investment, education, labour and trade openness. The investigated model is thus given as:

$$Y=f (LAB, CAP, FDI, EDUC, OPEN, CU, RB)$$

Where:

> *Y* is the real GDP;
>
> *CAP* is the capital which stands for total investment; and
>
> *LAB* is the labour force (measured as the number of people in employment).

Development in trade and investment generally spells good news for job market and employment. Positive developments in job creation must eventually translate to higher levels of income and economic growth.

FDI is the level of foreign direct investment in the country (measured as the private capital annual inflow to a country). The increased size of the East African market that becomes available to enterprises should provide excellent opportunities for investors to realize greater profits than they would in any of the smaller, single markets to the extent that

their production and distribution processes, their costs and prices, are influenced by economies of scale and scope.

EDUC is the level of literacy, which captures the quality of labour in the country. Although regional integration leads to job creation and employment, it is only those workers with skill, no matter where they are located, who are likely to benefit.

OPEN is the degree of openness of the economy measured as the ratio of total merchandize trade (imports and exports) to goods GDP (that is total GDP net of value added in construction sectors). Modest trade creation can be expected as member states pursue the integration, reaping the associated efficiency and income gains. Trade is also expected to rise as a share of GDP as entrepreneurs in each country realize the opportunities that larger markets afford. The end result is increase in economic growth.

It is important to explore the effect of both intra and extra-trade. The openness of the economy is therefore decomposed to consider trade within the EAC (OPEN eac) and trade with non-EAC members (OPENnon-eac).

CU is the custom union, which came into effect in 2005. This variable is captured by a dummy variable taking value of one since 2005 when the custom union came into being, and zero otherwise. With the adoption of the common external tariff (CET) and elimination of import duties of manufactured goods within the region, intra-trade and FDI are expected to increase and hence foster growth among the member countries.

RB is the dummy to stand for the time Rwanda and Burundi joined the EAC (2007). Ideally, more countries joining the union enlarge the market size, hence attract more investments, which are crucial for growth.

Taking the logs and lower case variables, the estimated model now becomes

$$y_{it} = \alpha_0 + \alpha_1 lab_{it} + \alpha_2 Cap_{it} + \alpha_3 inv_{it} + \alpha_4 cu_{it} + \alpha_5 ed_{it} + \alpha_6 rb_{it} + \alpha_7 open_{eacit} + \alpha_8 open_{non-eacit} + \varepsilon_{it}$$

Where α_0 is the constant term.

$\alpha_1 - \alpha_8$ are elasticities of output relative to labour, investment, education, integration and openness both to the EAC region and outside the EAC, while *i* is the respective countries in the sample and *t* is the time period (2000-2010).

The regression follows Generalized Least Squares Methods (GLS). The use of GLS here is justified in that the usual standard errors of OLS estimators are incorrect and likely to give inefficient estimators. The GLS is used to correct heteroskedasticity and autocorrelation in the case of random effect (Hausman, 1978). Using panel data (pooled cross-section and time series) to make estimates allows researchers to exploit the time series nature of the relationship between growth and trade, and FDI. Thus, the panel approach includes more information than the pure cross country approach. Owing to the limited number of observations, the dynamic panel procedure (Generalized Methods of Moments) could not be used (Arellano and Bond, 1991).

In order to control for simultaneous bias caused by potentially endogenous explanatory variables, potential endogeneity is rectified by use of Two-Stage Least Squares (2SLS). To calculate instrumental variables (IV), estimates using 2SLS follow two stages. In the first stage, each endogenous covariate in the equation of interest is regressed on all of the exogenous variables in the model, including both exogenous covariates in the equation of interest and the excluded instruments. The predicted values from these regressions are obtained. In the second stage, the regression of interest is estimated as usual, except that in this stage, each endogenous covariate is replaced with the predicted values from its first stage model.

The study uses secondary data from various publications, including EAC Facts and Figures (Various), and EAC Trade Reports (Various).

4.   Results and Discussions

This chapter reports the regression results on the effects of intra-trade, FDI and integration process on EAC economic growth using Generalized Least Squares (GLS) technique.

The first step involves testing for stationarity of the variables used in the estimation. This is because the panel data has both the cross-section and time series dimension. To test for stationarity, the Augmented Dickey-Fuller Unit Root Test is used. The variables found not to be stationary are corrected by using 1st difference (Appendix Table 4).

The second step is to solve for endogeneity problem using the 2 Stage Least Squares (Appendix Table 5).

It is crucial in a panel framework to decide which of the two estimators, fixed effect models (FEM) or random effect model (REM) should be used. The Hausman specification test is used in order to decide whether to use FEM or REM. The results show that REM provides better specification of the model relative to FEM (Appendix Table 6).

The results from the estimated model are presented in Table 4.1. They show that EAC trade with outside world (OPENnon-eac) has a negative but significant influence on the economic growth of the member countries. The negative effect can be explained by the fact that EAC countries export less than they import from the outside world. On the other hand, the effect of intra-EAC trade (OPEN eac) on economic growth since its inception in 2000 is positive but insignificant. This

Table 4.1: Regression results for the period 2000-2010

Dependent variable y=log real GDP		
Variable	**Coefficient**	**t- statistics**
Labour	0.439	1.08
FDI	0.237	3.74***
Education	0.007	0.01
Capital	-0.203	-0.54
Open (EAC)	0.53	1.57
Open (non-EAC)	-0.263	-3.05**
EAC Custom Union	0.565	2.98**
Accession Rwanda/Burundi	0.429	2.19*

*,**,*** *Significant at 1, 5 and 10% level, respectively*

implies that although the general trade volume within the region has increased significantly over the years (Appendix Table 3), this increase has not impacted significantly on the economic growth of the three member countries. This can be attributed to the nature of the products being traded in the region, which are mostly agricultural apart from a few manufactured products from Kenya. These results imply that intra-regional trade growth is relatively small in relation to trade with the outside world. These results are in agreement with those of Seetanah (2010) on how intra-COMESA trade remains low to influence economic development of the member countries. The results are also in agreement with those of Bruckner *et al.* (2012) that international trade affects the Sub-Saharan Africa economic growth.

Foreign direct investment has a positive significant effect on the economic growth of the five member countries. A one per cent increase in FDI is likely to increase economic growth by two per cent. The market size argument explains why integration would tend to raise FDI because of the region tariff preferences. It must be noted, however, that the strength of this argument depends on the difference between tariffs applied regionally and tariffs applied to others on a Most-Favoured Nation (MFN) basis. The fact that national policies are "locked" in regional treaties should give investors additional security in that policy reversals are less likely, reducing non-commercial risk (Dirk *et al.*, 2004). These results agree with those of Mugisa *et al.* (2009) on the evaluation of EAC custom union.

The enactment of the custom union in 2005 and accession of Rwanda and Burundi in 2007 has positive and significant influence on the economic growth of the member countries. The establishment of the custom union came with the elimination of tariffs and setting of CET, which together with the enlarged market impacted positively on economic growth of the partner states.

Kenya is the largest economy in the five EAC member countries. It is important to investigate further whether trade, investment and the integration process has affected the economic growth of the country. The estimated model is considered for Kenya alone, and the period is extended further to consider the period before the EAC was revived (2000) and thereafter. One more dummy is included to capture the time the EAC was re-established in 2000. The results are presented in Table 4.2.

Table 4.2: Regression results for the period, 1991-2010

Dependent variable y=log real GDP		
Variable	**Coefficient**	**t-statistics**
Labour	0.75	1.13
FDI	1.60	1.94*
Education	0.76	1.10
Capital	0.56	1.31
Open (EAC)	0.32	0.07
Open (non-EAC)	-0.81	-2.51*
EAC community	0.66	0.25
Custom union	0.38	0.99

*Significant at 10

R-sq = 0.54

The results show that Kenya's trade with the EAC member countries has no significant effect on economic growth, implying that although Kenya is the largest economy in the region, it has not fully taken advantage of the custom union to increase its trade in the region. This can be explained by the fact that although tariffs have declined markedly with the adoption of the custom union, the business climate is still poor in most EAC countries. In the last two decades, EAC countries have reduced their tariffs sharply, from an average of 26 per cent in 1994 to 10 per cent in 2011. However, most EAC countries are still struggling to implement critical business reforms. Therefore, while there have been many positive developments over recent years, the full potential of the EAC remains untapped (World Bank, 2012).

Kenya's trade with the outside world has a negative but significant effect, implying that Kenya is importing more than it is exporting to the rest of the world. Likewise, FDI has a positive significant effect on economic growth despite the fact that Kenya continues to receive increasingly less FDI than Uganda and Tanzania.

5. Conclusion and Policy Recommendations

5.1 Conclusion

This study investigated the effects of trade, foreign direct investment and integration process on economic growth of EAC countries. The results obtained show that trade within the EAC has no significant impact on the economic growth of the member countries. However, the EAC trade with the rest of the world has a negative but significant impact on growth. This is also the case for foreign direct investment. Kenya's trade in the EAC region has no significant effect on its economic growth, but its trade with the rest of the world has a significant effect.

From the results, it can be concluded that EAC countries have not taken full advantage of regional integration, especially the custom union to expand their trade to impact on their economic growth and development. Possible reasons for low intra-EAC trade include:

(i)   Inefficient trade facilitation systems covering transport logistics, administrative entry and exit procedures, processes, operations and transit regulations. This concerns the time taken to complete a trade transaction, attendant costs directly related to administrative processes during movement of goods within the domestic markets and across the borders, and time wasting procedures at the border.

(ii)   The proliferation of non-tariff barriers (NTBs) since the reduction of tariff barriers following the formation of a customs union in 2005 seriously impedes growth and smooth running of trade. These NTBs include standards and certifications, export bans, customs clearance, licensing and permits, police checks and road blocks, vehicle inspections and road use, weighing bridges, immigration procedures and language barriers, among others.

(iii)   The economic structure of EAC countries is generally similar. The economies face barriers because of the low capacity of the manufacturing sector, undiversified production, weak infrastructure, weak institutional policies, weak financial and capital markets, and failure to implement trade protocols.

5.2   Policy Recommendations

In order to reap maximum benefits from the integration process through expanded trade within the EAC, the following policies need to be put in place. Firstly, there is need to ensure efficient customs administration by streamlining customs clearance procedures, rules of origin and standards. All the agencies operating at the border points need to have harmonized inspection processes to hasten the clearance process and reduce delays at the borders by establishing one-border-stop shop. Secondly, having established a custom union in 2005, the focus now should be on the attainment of a Single Customs Territory where duties for imported goods are paid at the port of entry in order to stop goods on transit from being diverted to the local market. This will require, among others, a common legal framework; circulation of goods with minimal or no border controls and common systems and procedures among constituent states; institutional framework that is unified at territorial level; harmonized tax regimes on cross-border trade; non-application of rules of origin; and an agreed mechanism for collecting and sharing customs revenues. Thirdly, there is need to strengthen the EAC Secretariat and other EAC institutions to ensure a sustained effort towards reducing and eventually eliminating the various institutional and regulatory barriers to trade. This will be crucial for ensuring a fully-fledged Customs Union as well as one customs territory. Lastly, there is need to fast-track the harmonization of national laws that contradict the common market protocol.

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Appendix

Appendix Table 1: Real GDP growth rates and per capita income

| | Real GDP growth rates | | | | | | Per Capita Income (US$) | | | | | |
	2005	2006	2007	2008	2009	2010	2005	2006	2007	2008	2009	2010
Burundi	0.9	5.5	3.6	4.5	3.5	3.9	104.7	124.5	118.5	163.5	161.4	173.0
Tanzania	7.4	6.7	7.1	7.4	6.0	7.0	392.9	381.9	443.8	524.8	525.2	546.7
Uganda	10	7.0	8.1	10.4	3.9	5.6	372.9	396	465.9	543.7	529.2	525.9
Kenya	5.7	6.1	7.0	1.7	2.6	5.6	560.8	622.7	726.0	724.9	746.8	833.4
Rwanda	7.2	6.5	7.9	11.2	6.1	7.5	207.1	331.0	365.0	493.6	520.3	540.0
East Africa	6.2	6.4	6.7	7.0	4.4	5.9	402.7	448.6	535.2	631.1	638.2	685.0

Source: EAC trade report, 2011

Appendix Table 2: Foreign Direct Investment

	Foreign Direct Investment (US$ millions)					
	2004	**2005**	**2006**	**2007**	**2008**	**2009**
Kenya	42	12	27	69	47	94
Uganda	295	380	644	792	729	604
Tanzania	331	494	597	647	679	645
Rwanda	8	11	31	89	85	119
Burundi	0	1	0	1	3	0
Total	676	898	1,358	1,598	1,543	1,462

Appendix Table 3: Intra-EAC trade (US$ millions)

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Burundi	Export				5.4	4.0	5.5	5.3	6.6	6.0	12.6
	Import				54.1	59.1	60.9	79.5	84.7	129.2	89.4
Kenya	Export	623.0	667.0	711.0	810.0	974.0	736.0	952.0	1,213.0	1,167.0	1,278.0
	Import	17.0	19.1	31.7	38.4	61.5	84.1	191.6	182.0	162.2	256.6
Rwanda	Export	164.2	35.1	29.0	25.0	34.9	33.0	40.0	46.2	47.3	54.2
	Import	110.0	105.9	74.6	80.7	68.9	99.1	143.4	207.1	394.2	449.7
Tanzania	Export	58.6	57.1	102.4	123.8	128.9	157.8	205.9	259.9	323.5	394.3
	Import	107.8	97.9	124.2	137.8	160.5	175.5	110.1	205	316.9	295.5
Uganda	Export	87.2	86.0	114.7	132.0	144.7	296.3	476.9	654.7	666.2	616.9
	Import	288.6	415.0	414.9	416.3	551.5	499.0	560.6	617.4	597.4	619.5
Intra EAC trade		1,456*	1,483*	1,603*	1,824	2,188	2,147	2,765	3,477	3,810	4,067
Total EAC trade		9,663*	9,593*	11,430	13,879	17,513	21,069	26,886	34,470	31,807	37,100

Appendix Table 4: Augmented Dickey-Fuller Unit Root test

Hypothesis

Ho:δ=0 (Unit Root)

Ho: δ≠0

Decision rule:

If t*>ADF critical value= not reject null hypothesis, i.e.; unit root exist (prob>0.05)

If t*<ADF critical value= reject null hypothesis, i.e.; unit root does not exist (prob<0.05)

Total Trade		t-statistics	Prob.*
Augmented Dickey-Fuller test statistics		-2.64	0.102
Test critical values	1% level	-3.85	
	5% level	-3.04	
	10% level	-2.66	
1st difference			
Augmented Dickey-Fuller test statistics		-4.64	0.0025
Test critical values	1% level	-3.92	
	5% level	-3.06	
	10% level	-2.67	
Capital			
Augmented Dickey-Fuller test statistics		-2.41	0.1527
Test critical values	1% level	-3.85	
	5% level	-3.04	
	10% level	-2.66	
1st difference			
Augmented Dickey-Fuller test statistics		-5.49	0.0004
Test critical values	1% level	-3.88	
	5% level	-3.05	
	10% level	-2.66	
Employment			
Augmented Dickey-Fuller test statistics		-1.46	0.521
Test critical values	1% level	-3.95	
	5% level	-3.08	
	10% level	-2.68	
1st difference			
Augmented Dickey-Fuller test statistics		-3.98	0.014
Test critical values	1% level	-3.84	
	5% level	-3.04	
	10% level	-2.66	

East establishment			
Augmented Dickey-Fuller test statistics		-1.00	0.729
Test critical values	1% level 5% level 10% level	-3.85 -3.04 -2.66	
1st difference			
Augmented Dickey-Fuller test statistics		-3.98	0.0308
Test critical values	1% level 5% level 10% level	-4.61 -3.71 -3.29	

Appendix Table 5: Testing for endogeneity

Decision rule: If prob <0.05 there is endogeneity

Custom Union			
Dependent variable=log real GDP			
Variable	Co-efficient	t- statistics	P>|t|
Open (non-eac)	-.2108678	-2.35	0.024
Open (eac)	.3808124	1.08	0.285
FDI	.2224779	2.58	0.014
Capital	-.0134971	-0.03	0.977
Education	.1503833	0.35	0.730
Labour	.2122937	0.45	0.653
Accession Rwanda /Burundi	-.0519988	-0.35	0.729
Custom Union_res	.5657022	2.96	0.005
Custom Union_res Prob > F=0.0052 There is endogeneity			
Solving endogeneity-Custom Union			
Instrumental variables (2SLS) regression			
Dependent variable=log real GDP			
Open (non-eac)	-.2657272	-1.77	0.085
Open (eac)	.543767	1.36	0.183
FDI	.2382025	3.22	0.002
Capital	-.2134627	-0.40	0.694
Labour	.4514422	0.75	0.460
Accession Rwanda/ Burundi	.4480492	0.38	0.709
Custom Union	.5940223	0.36	0.724
Instrumented: Custom union			
Instruments: Open(non-eac), Open(eac), Capital, FDI, Education, accession Rwanda/Burundi			
Accession Rwanda/Burundi			
Dependent variable=log real GDP			
Open(non-eac)	-.2267309	-2.42	0.020
Open(eac)	.3574134	0.99	0.329
FDI	.2190942	2.55	0.015
Capital	-.2012615	-0.43	0.669

Education	.0335125	0.07	0.941
Labour	.2887476	0.59	0.556
Custom Union	.2960657	1.74	0.089
Accession Rwanda/ Burundi_res	.4291823	-2.75	0.009

Test Accession Rwanda/Burundi_res Prob>F=0.0088 There is endogeneity

Solving endogeneity-Accession Rwanda/Burundi Instrumental variables (2SLS) regression

Dependent variable=log real GDP

Open(non-eac)	-.1555041	-1.85	0.072
Open(eac)	.0082989	0.02	0.980
FDI	.1936576	1.49	0.144
Capital	-.3156074	-0.44	0.661
Education	.0491628	0.08	0.937
Custom Unions	.2618233	0.22	0.824
Accession Rwanda/ Burundi	.8961746	0.48	0.634

Instrumented: Accession Rwanda/Burundi Instruments: Open(non-eac), Open(eac), Capital, FDI, Education, Custom Unions

Appendix Table 6: Hausman specification test

Coefficients				
Variable	(b)	(B)	(b-B)	Sqrt (diag(V_b-V_B))
FDI	0.218	0.213	0.005	0.132
Labour	0.861	0.388	0.472	1.98
OPEN(eac)	0.516	0.923	-.406	1.31
OPEN (non-eac)	0.011	0.0	0.00	0.00
Education	0.024	-.215	.240	.038
b=consistent under Ho and Ha B=inconsistent under Ha, efficient under Ho Test; ho: difference in coefficients not systematic Prob>chi²=0.147 Since Prob>0.05 we use random effect				