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REGIONAL ECONOMIC INTEGRATION IN THE HORN OF AFRICA

PHD DISSERTATION

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DECLARATION

I hereby declare that all information in this thesis has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work; otherwise I accept all legal responsibility.

Abdulqadir Adem Mohammed:

Signature

ABSTRACT

REGIONAL ECONOMIC INTEGRATION IN THE HORN OF AFRICA

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In the last 30 years, the Horn of African region has gone through a far reaching economic transformation. This achievement was made possible partly because of the ongoing regional economic integration process. However, despite the achievements, many aspects of the regional economic integration processes are not thoroughly assessed both by the policy makers and the academia. In this doctoral research assessment of the level of economic integration in the Horn of Africa region is made using the composite index model. The index creates values from 0 to 1, where 0 implies poor performance while 1 represents best performance. The model used 6 dimensions and 20 indicators. The dimensions include trade, infrastructure, production integration, free movement of labor, macroeconomic convergence, and institutional integration.

Data was analyzed to estimate the level of integration at the sectoral and country level. Country wise Kenya came to be the most integrated country in the region with 0.884 average index. It is followed by Uganda with 0.748 index and Djibouti having 0.514. Ethiopia (0.491), Sudan (0.399) and Eritrea (0.335) found to be the 4th, 5th and 6th integrated countries. The data analysis also showed that Somalia to be the lowest performing country in the regional integration effort with 0.212 average index. The overall regional economic integration is found to be 0.512.

The result of the data analysis showed that institutional integration to be the most integrated sector with 0.609 average index. The second and third best performing dimensions were found to be macroeconomic convergence with 0.571 average index and trade with 0.531 average index. Productive integration (average index 0.476), infrastructure (average index 0.463), and free movement of people (average index 0.420) found to be the 4th, 5th and 6th integrated sectors.

The assessment of economic integration in the Horn of Africa region has showed that the region lags far behind the acclaimed objectives that are stated in different treaties and protocols of the regional economic communities (RECs) & individual member countries. Some of the policy recommendations made to make the regional economic integration process more successful and sustainable includes; developing compensation mechanism for potential losers of the integration process, completing the free trade area in the region, strengthen the regional infrastructure base, empowering the Regional economic communities (RECs), involving the private sector and other non-state actors, policy harmonization and structural reform.

Key terms: Regional Economic Integration (REI), composite index, Dimensions and Indicators, Horn of Africa (HoA), Regional Economic Communities (RECs)

ÖZET

AFRIKA BOYNUZU BÖLGESEL EKONOMİK ENTEGRASYON

Abdulqadir Adem MOHAMMED
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Danışman: Doç. Dr. Abdulkadir DEVELİ.

Haziran; 2018 198 sayfa

Son 30 yılda Afrika Boynuzu bölgesi çok büyük bir ekonomik dönüşüme uğramıştır. Söz konusu ilerleme kısmen devam eden bölgesel ekonomik entegrasyon süreci nedeniyle mümkün olmuştur. Ancak, bu ilerlemelere rağmen, bölgesel ekonomik entegrasyon süreçlerinin boyutları politika yapıcılar ve akademisyenler tarafından kapsamlı bir şekilde değerlendirilmemektedir. Bu çalışmada Afrika Boynuzu bölgesindeki ekonomik entegrasyon düzeyinin değerlendirilmesi kompozit indeks modeli kullanılarak yapılmıştır. İndeks 0'dan 1'e kadar değerler üretmektedir, burada 0 yetersiz performansı gösterirken 1 en iyi performansı temsil etmektedir. Ana modelde 6 boyut ve 20 gösterge kullanılmıştır. Bu boyutlar arasında ticaret, altyapı, üretim entegrasyonu, emeğin serbest dolaşımı, makroekonomik yakınsama ve kurumsal entegrasyon yer almaktadır.

Veriler sektörel ve ülke seviyesindeki entegrasyon düzeylerini tahmin etmek için analiz edilmiştir. Kenya, ortalama 0,884 indeks değeriyle bölgeye en fazla entegre olan ülke konumundadır. Kenya'yı 0,748 indeksle Uganda ve 0,514 ile Cibuti takip etmektedir. Etiyopya (0,491), Sudan (0,399) ve Eritre (0,335) ise 4, 5 ve 6'ncı sıradaki entegre ülkeler olarak bulunmuştur. Veri analizi, Somali'nin bölgesel entegrasyon çabalarında ortalama 0,212 indeksle en düşük performans gösteren ülke olduğunu göstermektedir. Genel bölgesel ekonomik entegrasyon ise 0,512 olarak bulunmuştur.

Veri analizlerinin sonuçları, kurumsal entegrasyonun ortalama 0,609 indeks değeri ile en bütünleşik sektör olduğunu göstermiştir. İkinci ve üçüncü en iyi performans gösteren boyutlar ortalama 0,571 ve 0,531 indeks değerleri ile makroekonomik yakınsama ve ticaret olarak bulunmuştur. Üretim entegrasyonu (ortalama indeks

0,476), altyapı (ortalama indeks 0,463) ve işgücünün serbest dolaşımı (ortalama indeks 0,420), 4., 5. ve 6. derecede entegre sektörler olarak bulunmuştur.

Afrika Boynuzu bölgesindeki ekonomik entegrasyonun değerlendirilmesi, bölgenin Bölgesel Ekonomik Toplulukları (REC'ler) ile bireysel üye ülkelerin farklı anlaşmalarında ve protokollerinde ifade edilen amaçların çok gerisinde kaldığını göstermektedir. Bölgesel ekonomik entegrasyon sürecini daha başarılı ve sürdürülebilir kılmak için yapılan politika tavsiyeleri arasında; entegrasyon sürecinin potansiyel kaybedenleri için tazminat mekanizmasının geliştirilmesi, bölgedeki serbest ticaret alanının tamamlanması, altyapının güçlendirilmesi, bölgesel ekonomik topluluklara yetki verilmesi, politika uyumunun ve yapısal reformun özel sektörü ve diğer devlet dışı aktörleri kapsaması yer almaktadır.

Anahtar kelimeler: Bölgesel Ekonomik Entegrasyon (REI), kompozit indeks, Boyutlar ve Göstergeler, Afrika Boynuzu (HoA), Bölgesel Ekonomik Topluluklar (REC)

DEDICATION

This work is dedicated to my mother Aminat Seid and My father Adem Mohammed, who despite their dire need of my care and support allowed me to go far from them for 6 long years to complete my doctoral study. In these long years I was not able to provide them the services that they deserved from me. Rather they suffered the pain of longing for a son thousands of miles away. Not enough; they prayed day and night for the successful completion of my PhD project. They deserve my at most gratitude and appreciation.

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ACRONYMS AND ABBREVIATIONS

ACP	African, Caribbean and Pacific
ADF	African Development Forum
AEC	African Economic Community
AfDB	African Development Bank
ASEAN	Association of South-East Asian Nations
AU	African Union
AUC	African Union Commission
CEN-SAD	Community of Sahara Sahelian States
CET	Common External Tariff
CEWARN	Conflict Early Warning and Response Network
COMESA	Common Market for Eastern and Southern Africa
CPIA	Country Policy and Institutional Assessment
CPMR	Conflict Prevention, Management and Resolution
EAC	East African Community
EAMU	EAC adopted the East African Monetary Union
ECA	Economic Commission for Africa
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
EU	European Union
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FTA	Free Trade Area
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GNP	Gross National Product
HoA	Horn of Africa
IGAD	Intergovernmental Authority on Development
IGADD	Intergovernmental Authority on Drought and Development
IGOs	Inter-Governmental Organizations
IPF	IGAD Partners Forum
LDC	Least Developed Countries

MTCI	Merchandise Trade Complementary Index
NAFTA	North American Free Trade Agreement
NEPAD	New Partnership for African Development
OAU	Organization of African Unity
ODA	Official Development Assistance
REC	Regional Economic Community
REI	Regional Economic Integration
SADC	Southern African Development Community
SMSEs	Small and Medium Size Enterprises
UNCTAD	United Nations Conference on Trade and Development
UNECA	United Nations Economic Commission for Africa
WTO	World Trade Organization
ECDPM	European Centre for Development Policy Management

CHAPTER 1

INTRODUCTION AND OVERVIEW

1.1 Background

For almost three decades, regional economic integration in the Horn of Africa region has remained one of the dominant issues of economic policy among policy makers and researchers and other stakeholders. In line with this policy orientation, the need for comprehensive system to monitor and assess the processes of economic integration between countries of the region and between sectors felt unaddressed. An assessment tool was needed in order to determine the dynamics and direction of economic integration strategies in the Horn of Africa region. Economic researchers have developed different econometric and statistical models to measure regional economic performance. The latest in this attempt is the **composite model** which uses quantitative and qualitative data to measure the level of economic integration in a particular region.

Regional economic integration is a worldwide phenomenon widely practiced both in Africa and other parts of the world. In the last half a century, regional integration agreements have been spreading everywhere including Africa (Melo & Tsikata, 2014). Specifically in Africa, regional integration has been an important economic and political aspiration since the early days of independence. Immediately after their independence in the 1960s and 1970s, many African countries were concerned, among others, on the economic development future of their countries. Many of the countries have taken a wide range of economic reform programs intended to accelerate their economic development. The immediate strategy to boost the national economy was to embark on an extensive fiscal and monetary policies and sectoral reform program which mainly included land and privatization of industries.

Not even a decade elapsed for the **'founding fathers'** of the then Organization of African Union (OAU) to realize that unilateral efforts to revitalize the post colonial economy was not sufficient. Most of the African leaders at that time, including those in Horn of Africa,

realized the limitations of the domestic policies and sectoral reform programs. Such an apprehension paved the way to consider other policy options that not only help and strengthen local economic develop efforts of individual countries, but also releases positive externalities for the development of other fellow African countries in the neighbourhood. Such change in economic attitude was partly shaped by the Pan-African ideology that was the driving force for the decolonization of many of the African countries from their former European masters.

Such a political and economic awareness ushered a new era which culminated in the establishment of regional and continental organizations that are believed to add to national development endeavours of countries. The move ultimately led to the establishment of the OAU, the predecessor of the African Union (AU), on 25 May 1963 in Addis Ababa, Ethiopia with 32 signatory governments. The OAU established different economic institutions to help accelerate the process to create a prosperous and economically integrated Africa. The Regional Economic Communities (RECs) represent the heart of these institutions established by the OAU, with a giant goal of fostering inter and intra Africa trade and strengthen economic integration at sub-regional level. In this regard 8 RECs were established covering all regions of Africa in which at least three of them incorporate most of the countries in the Horn of Africa.

In additional to political-economic dynamics within Africa, the drive for regional economic integration was influenced by global developments. The post-war period has witnessed the emergence of Preferential Trade Agreements (PTAs) in different parts of the world. The huge economic and human cost of the war forced the European countries to take measure to avoid distractive war again. The reconstruction effort to rebuild war torn European economies, was the major factor that pushed European nations to integrate their economies through increased production and trade. These political and economic views made some of the European countries, France and Germany to take the initiate to establish a ‘multilateral institution’ which is now called the European Union.

The ambition for a regional economic integration and intra-regional trade arrangements (IRTAs) was not limited to Europe. In the 1950s and 1960s many Asian and American

countries were also engulfed by a number of regional agreements and PTAs. The beginning of the 21st century has also seen an increased number of bilateral trade agreements.

Hence, both the internal and external dynamics has pushed the African countries in general and the Horn of African countries in particular, to take steps to integrate their economies. Intra-regional trade liberalization and promotion was one of the strategies pursued by many of the African nations.

The regional economic integration initiative that was taken by the countries in the Horn of Africa region namely, Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan and Uganda is part of this continental move which resulted in the establishment of the Regional Economic Communities which includes the Inter Governmental Authority fir Development (IGAD), the East African Community (EAC) and the Common Market for East and Southern African (COMESA). Countries in the Horn of Africa Region have very weak and fragile economies. Accordingly, regional economic integration is believed to play a crucial role to enhance trade, build regional economic infrastructure, ease free movement of labor and capital, harmonize economic policies etc that can help these countries effectively pursue their common strategic interests for the successful economic and social development of the countries. This doctoral research is a humble attempt towards realizing the economic and political aspiration of the Horn of African countries to build a prosperous, peaceful and integrated region.

1.2 Regional integration in the Horn of Africa: History, achievements and challenges

1.2.1 The Horn of Africa in Brief

As per the definition of the Intergovernmental Authority for Development (IGAD) the Horn of Africa region includes the countries of Djibouti, Eretria, Ethiopia, Kenya, South Sudan, Sudan, and Uganda with a total are of the region is 5.2 million km^2 (IGAD , 2011, p. 12). Around 80% of the region is dry and semi dry lowlands and receive less than 400 mm of rainfall per year. The region also has vast range of climates and topography including cool highlands, marsh areas, hot rain forests and other features typical of an equatorial region. (IGAD, 2008, p. 5) Agricultural lands constitute for about 7% of the total land mass, forests

19% and 28% are pasture. The remaining 46% of the land is nearly unproductive. The rainfall pattern in the region is highly variable. The region is venerable to regular droughts making it one of the most vulnerable regions climatic variations in Africa.

Demography

The total population of the Horn of Africa region is estimated to be more than 254 Million and it is described with high population growth rates. The average population density is about 30 persons/km^2 (IGAD , 2011). Nevertheless, countries in the region have considerable disparity in population density, from the lowest 15 persons per km^2 in Somalia to the highest above 95 per km^2 in Uganda. The changes in the density of population are even more among different ecological zones. Areas with hot climate are generally sparsely populated and some pocket areas have population density of more than 600 persons per km^2 (IGAD, 2008).

The region is experiencing a rapid trend of urbanization as a result of exodus of people migrating from rural areas to big urban centres and cities in search of employment opportunities and better income. The situation has resulted massive social and economic problems in the ever-growing urban centres threatening the peace and security situation in some of the countries.

No	Country	Area (sq km)	Population	GDP ($ billion)	Per capita income	Former colony
1.	Djibouti	23,200	846,687	3.3	3,400	France
2.	Eretria	117,600	5,869,869	9.169	1,300	Italy
3.	Ethiopia	1,104,300	102,374,044	174.7	1,900	NO
4.	Kenya	580,367	46,790,758	152.7	3,400	British
5.	Somalia	246,201	10,787,104	5.925	549	British & France
6.	South Sudan	644,329	12,530,717	20.88	1,700	British
7.	Sudan	1,861,484	36,729,501	176.3	4,500	British
8.	Uganda	241,038	38,319,241	84.93	2,100	British
9.		4,818,519	254,247,921	627.949		

Table 1:Schematic representation of the Horn of African countries (2016):

Compiled by the author

Economy

The Horn of Africa is endowed with considerable natural resources, like oil and gas reserves, various flora and fauna, different energy resources, maritime, water and cattle resources.

These resources, which if properly managed, can radically contribute to the development of the Region (IGAD, 2010, p. 7). Regardless of the vast and rich economic potentials that the region has, most of the countries in the Horn of Africa region suffer from a poor economic and social background. All the countries in the Region, with no exception, are notorious for their poorly developed domestic market, grave debt burden and week infrastructure, low savings and investment.

Agriculture is the main stay of the regional economy which is composed of livestock and crop production. Agriculture provides the basis for domestic food consumption and also for export income. It also make-up huge job opportunities for over 80% of the labor force. The contribution of the industrial sector to the national economies is very low. Compared with other countries in the region, Kenya has better industrial background. Most of the countries in the region produce similar goods and services which contributed for the low level of trade among these states. Furthermore, the markets of member states are neither dependent nor linked with each other. Globalization trends of the world economy have also posed both challenges and opportunities for the overall development of the region. (IGAD, 2010).

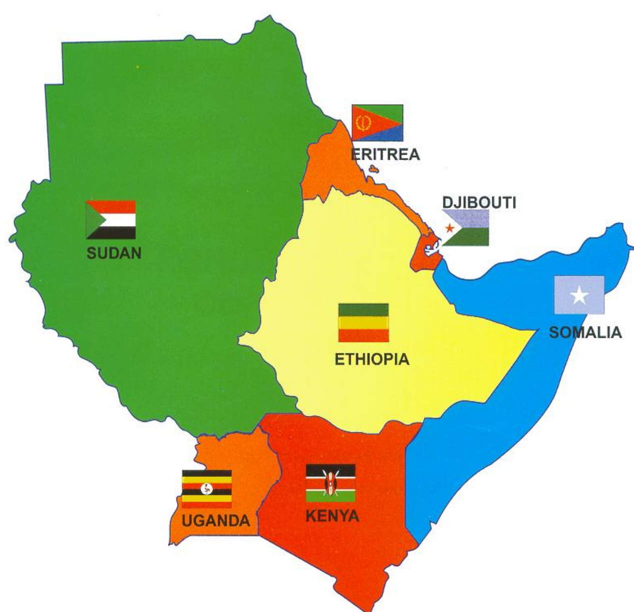


Figure 1: Map of the Horn of Africa region: Source: IGAD

The Horn of Africa is often associated with armed conflicts, failed states, refugee flows, widespread famine, drought, poverty and, in the last decade with piracy (IES, 2011). The

countries in the region have significant differences not only in their geographic area and population but also in their climatic conditions, natural resources and other social, economic, political and cultural characteristics. The countries also differ in their colonial background, which is one of the roots for the current socioeconomic and political orientations among the countries in the region. In relation to their economy we have Ethiopia, Sudan and Kenya at the one end of the scale rich in human and natural resources and fast growing economy, and Djibouti, Somalia and Eretria at the other end of the scale with low economic performance and relatively poor human resources and capital. These remarkable differences significantly and constantly affect their relations and their ability to meaningfully participate in regional economic integration program.

1.2.2 Regional integration in the Horn of Africa

Like many of the region integration initiatives in the Sub-Sahara Africa (SSA) region, regional economic integration in the Horn of Africa has a history of more than half a century. It started way back in the colonial era. More formal integration process started in the post colonial period together with the establishment of various Regional Economic Communities (RECs).

IGAD, ECA, and COMESA are the three Regional Economic Communities in which countries in the Horn of Africa are members. The roles of these RECs in supporting regional economic integration and in particular intra-regional trade are clearly indicated in their treaties and subsequent protocols. The legal documents also gave specified timelines for attaining the different goals of the economic integration. Trade liberalization constitutes the main element of the economic integration scheme in the region. However, the RECs also have far reaching objectives and targets to promote overall economic development and hence formulated policies at national and regional levels to that end. The RECs formulate sectoral policies in such areas as infrastructure (transport, energy, ports and telecommunications), agriculture, industry, tourism and science and technology. They have also adopted policies to promote macroeconomic convergence towards achieving credible and stable regional economic regimes (Ngeno, 2008).

The Horn of Africa region has three landlocked countries (Ethiopia, South Sudan and Uganda) and common environmental challenges which make regional economic

integration and cooperation imperative. Statistical data shows that functional integration and interconnection in the areas of water, energy and physical infrastructure are growing. Yet to date these features have been largely mitigated by the long-run historical conflicts and tensions in the region (Byiers, 2016, p. v). It reportedly costs less to transport a container from China to Djibouti than from Djibouti to Addis Ababa which is an indicator of the region's very poor infrastructural base (2016, p. 9).

According to a report by Mo Ibrahim Foundation (2014), the Horn of Africa region is relatively homogeneous, with the richest country income per head only three times that of the poorest. Three economies dominate the region, namely Sudan, Kenya and Ethiopia whose combined GDP represents more than 80 percent of the region's GDP with 31.9, 26.5 and 22.8 percent of regional GDP respectively (World Bank , 2014, p. 7)

The future of the countries of the Horn of Africa, thus, highly depends on the pace and depth of economic integration in the region. Countries of the Horn of Africa cannot afford to develop their economies in isolation from one another and hence economic integration which includes among others trade, infrastructure, free movement of labor etc is the only way out for a successful meaningful and result based battle against the proliferation of poverty in the region (Dibaba, 2016).

The Horn of Africa become the site of a pioneering African experiment in regional cooperation in the early 1990s after it has acquired notoriety as disaster and conflict prone zone in the 1970s and 1980s (El-Affendi, 2009, p. 1). However, many research related with the progress and status of regional integration in the region has showed the slow progress of the regional integration and failure to achieve the acclaimed objectives of the RECs for which they were established. Many of the regional policies, programs and projects were left unimplemented and left on paper. Many of important articles in the treaties and the protocols of the RECs left without implementation. The RECs and specially IGAD failed to deepen economic integration via free trade area and also to develop sectors vital for regional economic integration like infrastructure. Many of the researches regarding the challenges of economic integration in the Horn of Africa empathised lake of political will as one of the most serious bottleneck for successful economic integration in the region.

Another important impediment in the regional integration process is the perceived uneven distribution of benefits from integration in terms of the share of intra-regional trade, distribution of industries and employment creation. RECs in collaboration with member countries must design systems to deal with this problem by introducing policy instruments to compensate countries that are negatively affected as a result of a policy or specific integration program. A successful compensatory system requires the establishment of a special fund designated for this purpose and member countries need to make sufficient payments to the fund. Without such a system, the negative perception of unfair distribution of the gains from trade keeps member countries to remain hesitant to deepen the integration process.

Trading partners

Intra-regional trade among the countries in the Horn of Africa is very low and carried both in a formal and informal ways. Among the regional countries Kenya-Uganda, Somalia-Ethiopia, and Uganda-Sudan (including South Sudan) rank in each other's top five import and export partners (Byiers, 2016, p. 43).

Table 2: Top 5 import sources for the Horn of African countries.

Djibouti	Eritrea	Ethiopia	Kenya	Somalia	Sudan	Uganda
China (34.2%)	China (31.9%)	China (27%)	India (23.8%)	Oman (23%)	China (29.5%)	India (26.8%)
India (12.9%)	Egypt (14.6%)	India (11.2%)	China (19.5%)	Ethiopia (22.9%)	India (10.2%)	China (10.7%)
Indonesia (9.6%)	Germany (9.4%)	Saudi Arabia (8.5%)	Japan (5.5%)	India (13.4%)	Egypt (6.4%)	Kenya (9.7%)
Saudi Arabia (6.6%)	Italy (8.4%)	Japan (4.7%)	South Africa (4.9%)	China (9.6%)	Saudi Arabia (6.3%)	UAE (6.7%)
USA (5.7%)	Saudi Arabia (4.1%)	USA (4.7%)	UK (4.3%)	Pakistan (4.5%)	Uganda (4.9%)	Japan (5.7%)

Source: Byiers, 2016

Looking at the regional trading partners, Saudi Arabia is one of the top five trade partners (exports or imports) for four Horn of African countries. Similarly Egypt is major trading partner for three Horn of African countries. Yemen and Oman are trading partners for two and one countries respectively (Ibid, 43). China is among the top five import partner for all the countries in the region and it is also among the top five export destinations for

Ethiopia, Sudan and Eritrea. Similarly India ranks among the top five import partner countries except for Eritrea. The G8 countries also represent major trading partners for all countries in the region. Table 2 (import) and table 3 (export) show the 5 major trading partners for the year 2013 as a share of their total imports and exports.

Side by side with the formal trade among the countries in the region, there is an estimated high level of informal trade, approximately 40% of GDP (Byiers, 2016, p. 44). The large portion of the cross border trade in the region supposedly involves medicine, clothing, foodstuffs and fuel. A study conducted in Ethiopia in 2007/08 revealed that informal exports which mainly include beans to Kenya, Khat to Djibouti and coffee to Sudan worth tens of millions of dollars (Healy, 2011). Livestock trade also constitutes the major part of the regional informal trade with estimated value of at least 200 Million. The existence of such a large informal trade in the region poses a serious challenge to the overall regional trade and complicates the already low intra-regional trade.

Table 3: Top 5 Export Destinations for the Horn of African countries.

Djibouti	**Eritrea**	**Ethiopia**	**Kenya**	**Somalia**	**Sudan**	**Uganda**
Saudi Arabia (38.7%)	Canada (60.3%)	Somalia (12.3%)	Zambia (13.5%)	Saudi Arabia (56.3%)	China (68.7%)	Sudan (17.2%)
Egypt (10.2%)	China (19.8%)	China (11.9%)	Uganda (10.6%)	Oman (21%)	Saudi Arabia (7.8%)	Kenya (13.1%)
Yemen (6%)	Republic of Korea (7.1%)	Germany (6.8%)	Netherlands (9.3%)	Yemen (8.4%)	Japan (6.8%)	DRC (11.1%)
India (5.8%)	Venezuela (3.9%)	Netherlands (6.5%)	USA (8.8%	India (7.4%)	India (5%)	Rwanda (9%)
USA (4.6%)	Egypt (3.7%)	Saudi Arabia (6.4%)	UK (8.1%)	China (3%)	Korea (1.8%)	Switzerland (6.6%)

Source: (Byiers, 2016, p. 44)

1.3 Research Objective and questions

The overall objective of this PhD research is to develop a measurement tool for comprehensive monitoring and systematic evaluation of regional economic integration dynamics in the Horn of Africa region. The specific objectives include:

- Measuring the level of economic integration that the Horn of Africa region in general and individual countries in particular during the last twenty years, after the entry in to force of the Abuja treaty in 1994.

- Identify policy options that can enhance and accelerate the economic integration process in the Horn of Africa region, so that the region moves within the integration time frame of the African Union as revealed in the treaty establishing the African Economic Community.

As studies by different African and international organizations have proved, the Horn of Africa region is lagging behind the continental integration time frame; and hence there is a strong need for accelerating the process. This doctoral research is a modest contribution to this regional and continental economic integration initiative for building a strong Economic community in the Horn of Africa region.

Specific research questions that this doctoral dissertation tries to deal includes,

a. **What is the level of economic integration in the Horn of Africa?** This is done by measuring the level of Economic integration in the Horn of Africa using data from wide economic indicators and dimensions which includes trade, regional infrastructure, productive integration, free movement of people, institutional integrations and financial and/or macroeconomic integration.

b. **Which countries have integrated more and which countries less?** Among the 7 countries in the Horn of Africa, the level of integration is different. Some counties are more integrated in the regional economy than others which have less integrated. Accordingly, the research will assess the performance of each of the countries towards regional economic integration.

c. **Which sectors of the regional economy have integrated more and which sectors poorly integrated?** In any regional integration setup some of the sectors integrate faster than others. The situation in the Horn of Africa is the same. Hence, the research will assess the sectors that have integrated more than those integrating at a slower pace.

d. **What are the real and apparent obstacles to the economic integration process in the Horn of Africa and what are the solutions thereof?** There are numerous challenges that hinder the economic integration process in the region which includes economic, political and other non-economic factors. The research will single out the major challenges of the regional economic integration with an emphasis on the economic challenges.

1.4 Scope and limitations of the study

Regional integration is a multidisciplinary concept that includes economic, social, political issues. Embarking upon a research that fully discusses all dimensions of regional integration initiative is cumbersome. Hence, the scope of this research is limited to the economic dimension of the regional integration project that has been under progress since the 1990s.

Most regional integration studies base their analysis on intra-regional trade and trade policies. Such analysis presents only one aspect of the complex process, which can't be captured by trade and trade liberalization policies. Hence the analysis to measure the level of economic integration in the region needs to include more dimensions and indicators. In this research 20 indicators put under 6 dimensions including trade, infrastructure, productive integration, free movement of people (talent mobility), macroeconomic convergence and institutional integration are included. The research couldn't include more variables due to data limitations.

Regarding the timeframe, this research focused on the economic integration process after 1990s in which the three RECs that covers the Horn of Africa region namely IGAD (1996), COMESA (1994) and EAC (1999) were established as a full-fledged regional economic communities. The establishment of the African Economic Community, also known as the Abuja Treaty, constitutes the main framework for regional economic integration in Africa. The treaty specifically provided the legitimacy and inspiration for the regional integration process in the Horn of Africa region.

Different authors have given definition regarding the Horn of Africa region and the countries included thereof. In relation to the scope of the research in terms of the geographic area, the definition adopted in this research is that of the IGAD which defines

the Horn of Africa region to incorporate in alphabetical order, Djibouti, Eretria, Ethiopia, Kenya, Somalia, South Sudan, Sudan, Uganda. Due to absence of data, South Sudan is not included in this research.

Like any measurement using the composite indicators, the regional economic integration indices produced by this research are not perfect mainly because of data limitations both in quantity and quality. Missing data on some indicators were a challenge in developing the measurement system and analysing data. More over even the available data, most of which is provided by international organizations and States is expected to have quality limitations as most of the states in the region have limited capacity for data collection and management. Nonetheless, the indices produced by this research provide the best picture regarding the status of economic integration in the Horn of Africa region.

1.5 Justification: Why Measure Economic Integration in the Horn of African?

Economic policy makers in many countries are convinced about the importance of economic integration and cooperation to achieve sustainable economic development and eradicate poverty. This is pronounced time and again in Africa where individual countries have limited economic, financial and human capacity to trigger their economies. Limited productive capacity and inadequate market size makes many developing countries to look for alternative platforms that can substantiate their development efforts domestically. This ambition is best served by participating in regional economic integration and trade arrangements.

Countries in the Horn of Africa region, in their effort towards sustainable economic and social development, have long realized and embarked on regional economic initiatives. To this end they have initiated and participated in large number of regional and sub regional trade and economic arrangements since the early days of independence. Such effort has been further reinvigorated after the launch the African Economic Community in 1994. The countries in the Horn of Africa participate in three RECs namely Intergovernmental Authority for Development (IGAD), The East African Community (EAC) and The Common Market for Eastern and South Africa (COMESA). As discussed in chapter three, these RECs were initiated in different times and for different economic, social and

economic and security purposes. However, economic development is the single important factor common to all these RECs.

Regional economic integration is a development priority for the Horn of African countries and hence assessing and measuring where the region stands on regional economic integration is both an academic and policy requirement. Measuring the process of economic integration is necessary to properly realize the costs and benefits of any integration initiative. This doctoral research provides an assessment of the economic integration process in the Horn of Africa in a bid to identify the contribution of the integration process to the development of the region and the member states and identify gaps for improvement. The research measures the regional economic integration using the composite indicators and produces indices for the level of integration between countries and sectors. Unlike other assessment tools employed to measure a single aspect of integration like the gravity model etc, the composite index model provides a comprehensive picture showing the facts both at the policy and operational level.

The integration index helps as both a monitoring and evaluation tool and also as a dashboard for policy makers on issues related with regional economic integration. The index also assist policy makers at national and regional level to device better quality policy instruments by creating access to key information on regional integration. The Horn of Africa regional economic integration index is expected to contribute to more informed policy and decision making process, towards a regional economic integration that can help member states realize their quest for sustainable development and equitable growth that benefits all the peoples in the region and ensures better future.

Hence, beyond its academic purpose as a partial fulfilment of PhD in economics, this research aims to make a direct contribution to the policy debate and design on the regional economic integration process in the Horn of Africa. To this end, direct contact with one of the RECs in the region, IGAD, is made before and during the beginning of the research. Discussions with different IGAD work units and specially the economic department head and other experts were made with an aim of explaining the research design, purpose, objective, scope, knowledge gap, data and methodology, etc.

As the research is the first of its kind, it has received excellent appreciation and acceptance by concerned bodies in IGAD and other stakeholders. Hence, this research is expected to make a humble contribution to the regional economic integration process in the region. Considering the Horn of Africa, being the list developed and list integrated region of Africa, the findings of this research is more likely to make modest contribution to the regional economic integration process.

1.6 The research Hypothesis

Regional economic integration among the countries in the Horn of Africa will bring significant economic gains to all the nations in the region. This is possible through increased trade volume of goods and services, construction of regional infrastructure, free movement of labour, productive integration, financial and macroeconomic convergence, institutional integration etc. The countries in the region have been taking different policy actions for the last thirty years or more end poverty and ensure sustainable development. Boosting Intra-regional trade through removal of tariff and non-tariff barriers and developing regional infrastructure to boost movement of goods and people was among the priority programs that received the attention of national and regional policy makers. Other functional areas of integration have also been designed and implemented by the states and RECs like IGAD, EAC, and COMESA. However, no concert information is available about the level of integration among the countries in the region and also among the sectors.

Regional trade, infrastructure, production integration, free movement of people and financial and macroeconomic convergence represent the most important sectors that can speed up the ongoing economic integration in the Horn of Africa. The hypothetical assumption in this research is that the level of integration of these leading sectors is significantly different and in most cases very low. Some of these sectors are integrated more and some like financial and macroeconomic integration are lagging behind. Similar to the variation in the level of sectoral integration, the performance of countries on regional integration is also different. The research attempts to found out which countries are more integrated and which are integrated less. The finding of the

research will provide important information for proper policy intervention to speed up integration among the sectors and between the countries in the region.

1.7 Research Methodology and Data

The research uses the composite indicator model to assess the level of economic integration in the region. The composite model uses different economic and non-economic variables and produces indices at different levels. The composite model of integration is a comprehensive tool to measure where a region or a country stands in a regional economic integration scheme. Because of the different type of data used in calculating the composite indices, it is a more powerful measurement tool to study regional economic integration programs. One of the main features of the composite method lies in the simplicity and robustness of the indicators used to assess the level of integration.

The analysis of the regional integration in this research covers the following six dimensions: trade, regional infrastructure, productive integration, free movement of people, macroeconomic convergence and institutional integration. Indices are estimated both at Country and sectoral levels. The composite model to analyze regional economic integration is different from the traditional gravity model which is based on trade creation and trade diversion approach. The integration index produced using the composite model helps to design appropriate policy interventions to improve economic integration and maximize the benefits thereof.

Chapter five provides detailed explanation of the composite index model. It provides introduction about the composite indicators including its benefits, the pros and cons of the composite indicators, and how to develop composite indicators. The chapter also contains explanations regarding the principles of selecting the rights indicators and the steps in calculating composite indices etc.

Data sources

Assessment of the level of regional integration in the Horn of Africa region is based on secondary data collected from different regional and international institutions. The major data sources include the UNECA, the World Bank, Africa Development Bank, UNCOMTRADE, UNCTAD, World Bank’s Directions of Trade (DOTs), IGAD

secretariat, the African Union Commission (AUC) and the African Development Bank (AfDB). The base year for the study is 1994, which is the establishment of the African Economic Community (AEC). The AEC is the foundation for all regional and sub-regional economic integration initiatives in Africa. Both quantitative and Qualitative data are used in the analysis.

Some primary information, though very limited, has been used in the research. The primary data includes interview with distinguished academicians, practitioners, and renowned experts in regional integration. Discussions have also been made with experts in the African Union (AU) and UNECA head quarters in Addis Ababa as part of the data collection visit to that country in the summer of 2017. Similar visit has been paid to IGAD secretariat office in Djibouti during the visit made in April 2011 and February 2013. Planned visit to the secretariat offices of the EAC (Tanzania) and COMESA (Lusaka) was not realized due to limitations of research resources.

1.8 Organization of the Study

The main body of this research is divided in to six chapters. The first chapters provides general background and overview of the research, specifies the major research questions, the objectives and scope of the research, the research methodology and data, policy relevance etc.

The second chapter is fully dedicated for a comprehensive review of the conceptual and theoretical framework of regional economic integration. Accordingly, it gives a brief introduction of basic integration concepts like alternative definitions of Regional Economic Integration (REI), benefits of REI, a comparison of regionalism vs multilateralism, trade creation vs trade diversion, regional integration vs convergence, indicators and measurement of regional integration, the static and dynamic effects of economic integration. In reviewing the major literary works I have benefited a lot from Bella Balassa's the theory of regional economic integration. This book is known to be one of the best materials regarding the theoretical foundations of regional economic integration and the theory of custom unions.

The third chapter looks in to regional economic integration in Africa. It was found relevant to provide a bird's eye view of the African economic integration, to better understand the

discussion on the economic integration in the Horn of Africa, which is part of the African economic integration endeavour. In this chapter, among others, the African integration timeline, the building blocks of the African integration, the regional economic communities (RECs), intra-Africa trade, the Tripartite Free Trade Area (TFTA) & Continental Free Trade Area (CFTA) and finally the major challenges of the Africa economic integration process are discussed.

Chapter four dedicated for methodological issues. It discusses the methods and formulas used to calculate composite indices. The steps used to calculate the composite indices have been thoroughly discussed in this chapter. This chapter is the base for the assessment and measurement of regional economic integration done in the next chapter. Chapter five can be said as the core of this research. It assesses the level and depth of regional integration in the Horn of Africa. It contains detail analysis of the regional economic integration in the Horn of Africa, by using the data on the six dimensions/sectors and 20 indicators. The output of the analysis is given using tables and figures, the radar diagram, which enable visual display of the findings. Chapter six concludes.

CHAPTER 2

THEORETICAL FRAMEWORK

2.1 Definitions of Regional Economic Integration

The early definition of the concept of economic integration is given by Tinbergen (1954) and Balassa (1961). Tinbergen defines economic integration as ‘the creation of the most desirable structure of international economy, removing artificial hindrances to the optimal operation and introducing deliberately all desirable elements of coordination or unification’ (p. 95). For Balassa the word "integration" denotes the bringing together of parts into a whole (1961).

However, in economic literature the definition of economic integration is not as simple as that. The term Regional Economic Integration (REI) has been in use for a long period of time and defined in different ways. The concept of REI can include economic activities that range from a mere existence of trade to social issues or other forms of international cooperation, like aid or development assistance. Balassa, one of the classical theorists of economic integration, defines integration as absence of discriminate (Streeten, 1963). He conceives regionalism as ‘economic integration’ which involves the evolution of formal cooperation between states and the continuous movement towards a free trade area, a customs union, a common market, monetary union and ultimately total economic integration (Izuagie, 2014, p. 3).

For Balassa economic integration is both a process and also state of affairs. By process, it means measures intended to eliminate discrimination between economic units in different national states. On the other hand, as a state of affairs, economic integration implies the absence of different forms of discrimination between national economies. Balassa’s definition was criticized for it’s over emphasis on economic and institutional aspect of integration and less importance for other dimensions of integration.

Robson (1984) regarded international economic integration as a means and not an end. Sheer defines economic integration as a process by which nations reduce such trade

barriers and reorganize multiple economies to meet national and supranational objectives (Sheer, 1981, p. 33).

Lipsey (1960) defined the customs union theory, which is the bases for economic integration theory, as "... that branch of tariff theory which deals with the effects of geographically discriminatory changes in trade barriers". Kahnert et al (1969) defines economic integration as "the process of removing progressively those discriminations which occur at national borders". Allen (1963) argues that economic integration implies different meaning for almost everyone and agrees to Balassa's dichotomy integration from cooperation. In his review to Balassa's (1961) book, Allen states that the basic ingredient of any integration form is the elimination of barriers to trade among two or more countries (1963). In the same review he stresses the limitations of the traditional international trade theory which only dealt with the effects of reduction of trade barriers; and, hence, pointed to the need for a separate theoretical framework to study issues of economic integration.

Economic integration is different from economic cooperation both in quantity and quality. Economic cooperation involves actions designed to minimize discrimination while economic integration consists of measures that lead to the suppression of some forms of discrimination. The main characteristic of economic integration is the abolition of discrimination within an area.

Economic Integration was defined by Karl Deutsch as the power of countries in a region building the sense of economic community through the establishment of institutions and policies to ensure sustainable and long term exchange of goods and services among the people, firms and governments in the block. Deutsch's definition of integration emphasises the importance of institutions for successful and sustainable regional integration.

Ernst Hass defined regional integration from a political-economic perspective. In his monumental book the Uniting of Europe, Hass defined economic integration as a political process in which political leaders and policy makers of neighbouring countries agree to transfer part of their political powers and decision making rights to an independent third party with a mandate and institutional authority to take decisions and polices on behalf of the countries that established it (2008, p. 4).

Lombaerde and Langenhove described regional integration as a territorial phenomena having a global dimension creating new types of institutions, rationalizing the relationship among their components and harmonizing with local institutions. They describes regional integration as a regional arrangement within a specific geographical area to expand their level of interaction in the fields of social, political, economic, and also cultural issues (Langenhove H. V., 2003). According to Langenhove and Lombaerde the scope of regional integration which started with focus on trade and economics has expanded through time;

> The processes of regional integration that emerged after WW II, were originally about trade and economics, but it has become clear that, especially since the 1980s, with the so-called *'new regionalism'* wave, regional integration can be seen as a multidimensional process that implies, next to economic cooperation, also dimensions of politics, diplomacy, security, culture, etc (2016, p. 1)

However, both academic and policy debates on regional integration in different parts of the world are still dominated by trade and economic issues.

According to Marrli (1999) integration is mostly used in a context of economy and international trade. "Integration then becomes economic integration and can be defined as "the voluntary linking in the economic domain of two or more formerly independent states to the extent that authority over key areas of domestic regulation and policy is shifted to the supranational level" (Mattli, 1999, p. 41). Marrli stresses the importance of market forces in determining the outcome of integration and also emphasize the role of institutional factors for successful regional integration. Machlup (1977) describe integration as a process of combining separate economies into a larger economic region. Machlup (1977) and Staley (1977) also argue that integration entails "utilization of all potential opportunities of efficient division of labor".

Similar to the theoretical and academic, different international institutions also have different definitions for economic integration. The Economic Commission for Africa (ECA) defines regional integration arrangement as a preferential (usually reciprocal)

agreement among countries that reduces barriers to economic and noneconomic transactions (UN ECA, 2004). Integration arrangements can take different shapes depending on the level of discrimination applied between members and non-members of the block. Economic integration is considered as an instrument to pursue deeper forms of integration with broader objectives (Sanoussi Bilal, 2007).

2.2 Rationale for Regional Economic Integration

Regional economic integration has demonstrated to be an indispensable development policy option for most of the developing countries in African, Asian and the Caribbean. But what is the real economic benefit of regional integration? Why do countries need to join regional blocks of various types? In this part, I shall describe some of the major benefits of regional integration from economic perspective.

Promotion of economic cooperation and maximizing intra-regional trade are the most significant justifications and motivations for many of the regional economic integration initiatives in sub-Saharan Africa, Asia or Europe. This economic justification is based on the fact that the production capacity and market of developing economies are small in size and fragmented and hence is not able to enjoy economies of scale. It is generally accepted that regional economic integration promotes competition and increases the regional market which paves the way for greater investment in the region (Ngeno, 2008, p. 13). According to Pangestu and Scollay motivations for economic integration includes trade, development and political and security (Pangestu & Scollay, 2001).

Access to Markets:

The motive of getting access to hitherto inaccessible markets serves as a strong motivational force to join regional blocks. Countries and businesses are interested to get access to existing blocs or who want to create larger regional markets. Economic integration helps to increase market size and hence creates opportunities to increase productions. Economic integration is also an important policy instrument to foster the domestic growth of participating countries.

> The standard argument that an economic integration can affect the rate of output growth is realized through a faster growth of factor inputs, particularly return on investment in human and physical capital, and through increases in the growth of total factor productivity (Frimpong, 2013).

Regional economic integration as a rule consists policies to reduce or remove tariff or non-tariff trade barriers and also decrease in investment restrictions. Such actions are expected to provide significant stimulus to draw Foreign Direct Investment (FDI), both from within and outside the regional block, which in turn serve as an engine for economic growth. Regional Economic Integration can also help maximize welfare as a result of increased scale economies and declining average production costs. Stronger market power and increased output in the market, helps to boost economic welfare of the society through the economic effect of increased consumption. Both developmental and environmental efficiency gains can be secured for all the states in the block, using a harmonized regional policy towards the provision of regional public goods. Regional economic integration also helps to empower member countries to take their rightful position in the global economy through the economic power created by integrating and harmonizing there, otherwise, weak economies.

Countries also join regional blocks for defensive motivation. In a bid to protect themselves from the negative consequence of preferential trading arrangements, some countries which are, otherwise reluctant, to join regional trading blocs may find it unavoidable to join the trading bloc. This is true for both small and big economies. By joining the trading bloc, the small economies try to minimize the risk of losing their competitive power with their neighbours and the big economies try to maintain their competition power and economic position with other big economies at the global level.

Another justification for the proliferation of regional economic blocks deals with discontented with slow process of globalization. Many countries seem less enthusiastic about the process and strategies of the multilateral trade negotiations orchestrated by the WTO and other international globalization. The suspension of the Doha trade negotiations is a good point to show the dubious future of the multilateral initiative. Hence, countries

turn their face towards regional arrangements, which is more practical and efficient, considering the geographical proximity and the transportation advantage their off. Accordingly, countries in different parts of the world are highly motivated to enter into deeper and faster integration at the regional level. Economists and policy makers are also convinced that such regional arrangements consistent with the multilateral trading scheme.

Economic integration and growth

The hypothesis that economic integration improves an economy's overall efficiency is at least as old as Adam Smith. His famous dictum that "the division of labour is limited by the extent of the market" implies the role of specialization through division of labour to enlarge markets and hence increase production, which is an important element for economic growth of nations and regions. In their desperate quest for local economic development, nations consider regional trade and economic arrangements to complement their local development efforts. Economic development, which is defined as economic progress that is accompanied with the improvement of the standard of living and welfare among the population of a nation or region, has been a core aspiration of many of the regional integration initiatives in Africa and elsewhere. Many of the regional initiatives in Africa, which includes IGAD, aim to promote sustainable economic development in the Africa. Indeed, there are significant development achievements on the ground, although there are gaps between the rhetoric and the reality about the role of regional integration schemes.

The founding documents of most of the regional integration initiatives in Asia, Africa, Europe, Latin America or the Caribbean, specifically mention the potential contribution of the regional arrangements in the sustainable development of the member countries and the region at large. For example the constitute act of the African Union explicitly mentions promotion of sustainable economic development and integration of African economies as its objectives. Similarly ASIAN aims member countries to attain their economic and social development through "joint endeavours" and "active collaboration and mutual assistance".

A research by the ASIAN about the contribution of regional development after the establishment of the ASIAN in 1967 showed that the role of the regional institutions is mixed (Chandra, 2009). The research has identified that despite successive achievements

in economic growth and improvements in the standard of living, levels of economic development among Southeast Asian countries remain diverse. Countries in the region have registered diverse development achievements and standard of living. Countries like Singapore and Brunei Darussalam made great strides in increasing their GDP per capita, while Cambodia, Lao PDR and Myanmar did very well (Chandra, 2009).

In the African context, the African Economic Commission counts some of the important benefits of integration: sustainability, increased investment, the consolidation of economic and political reforms, increased global competitiveness, the promotion of regional public goods and the prevention of conflict (UN ECA, 2004). Scholars, policymakers, development practitioners and activists continue to debate the possible advantages and contributions of regional economic integration in pursuing sustainable development goals. Venables (2003) and Bhattachargay and De (2005) think about regional integration as important policy direction for developing countries in their endeavour towards poverty reduction and attain economic growth. In the same way, Slocum-Bradley (2006) emphasizes the huge potential of regional integration towards economic development. According to Chandra one of the primary motives for nationalists to join regional integration strategy arrangements is reap the potential of sustainable economic development.

2.3 Levels of economic integration

Regional economic integration arrangements widely differ in their forms and depth, but all of them have the objective of reducing both tariff and non tariff barriers to trade among the countries in the block. In their simplest form, regional integration agreements intend to remove tariffs and nontariff trade barriers on goods and services within the bloc. They also attempt to liberalize investment and other trade and/or economic policies. In their deepest level, regional economic arrangements include the goal of economic and monetary union (Schiff & Winters, 2002, p. 1). Regional integration arrangements may take different forms depending on the level of discrimination applied on non-members. The different phases of integration were at first identified by Professor Bela Balassa in 1961 and further developed by other economists. The six stages of integration namely preferential trade area, a Free-

Trade Area (FTA), a Customs Union, a common market, an economic union, and political union are briefly discussed below.

2.3.1 Preferential Trade Area (PTA)

PTA is the first stage in any economic integration deal. PTA is a deal where members of the trading block apply lower tariffs to imports of certain products from member countries than to imports from nonmembers. In PTA members are free to establish tariffs on imports from nonmembers. PTA implies a reduction in tariffs and doesn't imply a total abolishment of them. Panagariya (1998) describe PTAs as an arrangement between two or more countries in which goods produced within the union are subject to lower trade barriers than the goods produced outside the union (Panagariya, 1998, p. 2). The term PTA is used to stand for Preferential Trade Area, Preferential Trade Agreement or Preferential Trade Arrangement. Panagariya argue that PTA is a wide concept which can be used to describe FTAs, CUs and arrangements involving partial trade preferences. The D8 trading arrangement which includes eight Muslim countries of Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan and Turkey is a good example of PTA (D 8).

2.3.2 Free Trade Area (FTA)

FTA is a PTA in which member countries do not impose *any* trade barriers (zero tariffs) on goods produced within the union (Hosny, 2013, p. 134). It is the second stage in the process of economic integration in which countries in the trading block completely abolish tariffs and any other quantitative restrictions among themselves, while maintaining their own tariff rates and other measures (technical or administrative) against non-members. FTA enable the participating states to specialize on the production of goods that they have comparative advantages, and hence increasing the efficiency and profitability of the countries in that trading block. The aim of a FTA is to produce a trade policy that all countries in the free trade area agree upon. The North American Free Trade Agreement (NAFTA) formed by the United States of America (USA), Canada, and Mexico in 1993 is a good example of FTA.

Paragraph (8) of article (XXIV) of the GATT defines a free trade area as follows: "A free-trade area shall be understood to mean a group of two or more customs territories in which

the duties and other restrictive regulations of commerce …. are eliminated on substantially all the trade between the constituent territories in products originating in such territories (WTO, 1986)."

2.3.3 The Custom Union (CU)

CU is a FTA where member countries apply common external tariffs on goods and services imported from non-member countries. Hence, customs union deals with not only tariff among the participating countries, but also is concerned with common tariff against nonmembers of the club. In this stage Member countries may also give up some sovereignty to a single customs organ. According to Wooton (1988), a CU is a coalition of countries that does not charge any taxes on goods traded between themselves and impose a common structure of taxes on goods traded with the rest of the world, irrespective of which of the member countries produces the goods or finally consumes them. The common external tariff (CET) is the factor that differentiates the CU from the FTA, where each country imposes its own set of taxes on external trade. GATT's Paragraph (8) of article (XXIV) characterizes a CU as:

(a) A customs union shall be understood to mean the substitution of a single customs territory for two or more customs territories, so that

(i) duties and other restrictive regulations of commerce …... are eliminated with respect to substantially all the trade between the constituent territories of the union or at least with respect to substantially all the trade in products originating in such territories, and ,

(ii) subject to the provisions of paragraph 9, substantially the same duties and other regulations of commerce are applied by each of the members of the union to the trade of territories not included in the union (WTO, 1986)

A good example of a CU is the European Community (EC), established in 1957 by the 6 European countries of Belgium, France, Italy, Netherlands, Luxembourg and West Germany. With the advent of the EC the analysis o f customs union theory became a pertinent issue.

2.3.4 A common market (CM)

CM is a customs union that also permits the free movement and employment of factors of production (Wooton, 1988, p. 526). It is a deeper integration in which members abolish restrictions not only on goods but also on factors of production such as capital and labour across their national borders. The goal of a CM is to make the movement of capital, labour, goods, and services between the members, as easy as within their own boarders. A common market is often referred to as the first stage on the way to the establishment of a single market. The general conviction about CM is that factor movements would make production within the CU more efficient and therefore brings about increased welfare for the trading partners. Central American Common Market (CACM) is just an example of a CU.

2.3.5 Economic Union (EU)

A common market accompanied by unified monetary and fiscal policies, including a common currency, leads to the creation of Economic union. EU is the most advanced type of economic integration in which fiscal and monetary policies of participating states are harmonized. Sometimes countries may adopt what is known as "policy integration" which signifies a complete merge of their policies. The extreme case of an Economic Union could be a Monetary Union (MU). The countries of the EU who use a single currency, the Euro, represent a good example an economic union. Some characteristics of the Economic Union includes a) Standardized economic and social policies b) Single currency and single central bank c) Removal of physical borders within and d) Balanced economic growth between the countries through compensation funds. The European Union (EU) is the famous example of an economic union. An Economic union that uses common currency and centralized bank is sometimes referred to as economic and monetary union.

2.3.6 Full economic integration (FEI)

The full economic integration is the final stage of economic integration. According to Balassa the full economic integration (FEI), implies "the unification of monetary, fiscal, social and anti-cyclical policies and requires the establishment of supranational authorities whose decisions are binding on the member-states" (Balassa, 1961, p. 2). After complete

economic integration, states will have no or slight control of economic policy. FEI signifies full monetary union and complete or near-complete fiscal policy harmonisation.

Levels of integration: A summary

The higher the level of economic integration, the more national economic policies must be coordinated and harmonized closely to prevent any macroeconomic downturn including recession and inflation in any of the countries involved. Countries need to design common countercyclical policies as increased intra-regional trade and movement of labour and capital, economic fluctuations are more likely to be transmitted from country to country. Higher level of economic integration implies and necessitates deeper and extensive harmonization of monetary and fiscal policies.

Table 4: Stages of Economic integration

Stage	Free intra block trade	Common Trade policy	Free factor mobility	Common Monetary & Fiscal policy	One government
Preferential trade area	No	No	No	No	No
Free Trade Area	Yes	No	No	No	No
Customs Union	Yes	Yes	No	No	No
Common Market	Yes	Yes	Yes	No	No
Economic Union	Yes	Yes	Yes	Yes	No
Political union	Yes	Yes	Yes	Yes	Yes
Source : ECA, 2004					

In theory nations move from FTA to form CU and then CM, and embark on a full fledged economic union, as discussed by Balassa and other theorists. However, in practice, the path is not always that simple and linear. Balassa’s five integration stages are said to be Eurocentric, defining to the European integration experience and do not necessarily fit to the economic integration experiences elsewhere. One of the challenges of the five stage model is that it implies sequencing of economic integration, from purely trade, through free movement of the factors of production, to the establishment of supranational organisations, laws and policies (Lombaerde P. D., Dorrucci, Genna, & Mongelli, 2009, p. 20). This sequence of integration is mostly available in the European integration process,

but not necessary applicable for integration initiative outside EU and which is characterised by the ***"menu approach"***. Even in the European case there were some aspects of supranational institutions even at the beginning of the integration process in the early 1950s. The table 4 below summarizes the stages of economic integration discussed above with their corresponding features.

2.4 Evolution of theories of Economic integration

Regional economic integration is perceived as a policy instrument to contribute to economic development and welfare through the enhancement of trade and other forms of economic cooperation. According to Marinov, the theory of regional economic integration incorporates two levels, where each of the levels deals with the relevant economic issues specific to that level of integration. The first stage is known as the classic theory or static analysis. It includes the traditional theories of economic integration that explain the possible benefits of integration. The second stage includes the new economic integration theories that are often referred to as dynamic analysis of economic arrangements (Marinov, 2015).

Economic integration affects the participating economies in different ways. Theoretically two broad types of effects of economic Integration are identifies. These are **Static and Dynamic** effects. The Static effect assumes relatively short-term effects and no changes in technology, which implies constant costs. The Dynamic effect, on the other hand, shows growth effect and includes the impact of regional trading arrangements on productive factors accumulation which includes labour, capital, and technology. The dynamic effect of economic integration looks to the accumulation effects. The static and dynamic effects are the two important theoretical effects of integration considered in most theoretical and empirical research on integration and RTAs. In the following paragraphs further details about the two effects of integration are given.

2.4.1 Viner's static analysis

Traditional economic integration theories explain possible gains from trade and economic integration, or what is commonly referred to as the static analysis of PTAs (Bhagwati & Panagariy, 1996, p. 82). The Chicago School economist Jacob Viner's (1950) pioneering

book titled "*The Customs Union Issue*" served as a base for discussions on the gains of trade and theoretical foundation of PTAs. Viner introduced the concept of trade creation and trade diversion effects into the literature in 1950. According to Bhagawati and Panagarity (1996) the formation of the European Community in 1957, and of the European Free Trade Agreement (EFTA), gave a more direct policy dimension to the static effect theory and provided an important analytical insights.

In order to distinguish between the potential advantages and disadvantages of economic integration, Viner used concrete criteria. What he referred as "static analysis" of integration has divided the effects of integration in to trade creation and trade diversion effects. Viner (1950) asserted that trade diversion lowers the welfare of the home country whereas trade creation raises it. He also identified that the larger the economic area, the probability a free trade area to move towards a custom union is high. The essence of Viner's static analysis theory mainly specify that countries are motivated to integrate if integration is likely to produce static gains more than losses; i.e when trade creation out weight trade diversion.

The static effect of integration assumes perfect competition market structure. It analyzes how elimination of trade barriers inside RTAs brings about better resource allocation. The theoretical body most commonly drawn upon for integration matters is static customs union theory (Clayton, 1974, p. i). The static effect or static analysis is regarded as classic theory and includes the traditional theories of economic integration that explain the possible benefits of integration. The classical static effect is further divided in to trade creation and trade diversion effects.

2.4.1.1 Trade creation

The terms *trade creation* and *trade diversion* are closely associated with Viner (*The Customs Union Issue*, 1950). Viner demonstrated that whether economic integration leads to welfare losses or gains depends on the relative strength of "trade creation" and "trade diversion" effects of customs unions. Trade creation takes place when relatively high cost domestic production in one country is replaced with lower-cost imports from a partner country, leading to welfare gains for both trading countries (Kar & Kaplan, 2006). Trade creation emerges when increased trade takes place among countries in a trading block due

to the reduction or total removal of trade barriers. Assuming full employment of all economic resources before and after formation of the customs union, the shift in output increases the welfare of all participating countries. This is because RTA leads to more specialization based on comparative advantage. Once a custom union is created, member countries will eliminate tariffs which results in lower priced, zero-tariff, imports from member countries. Consequently consumers increase their demand for these goods, and new trade will be created – a process called *trade creation*.

Trade creation consists of consumption effect and production effect. Consumption effect results from removal of the customs duties and subsequent import of goods at lower prices from the member countries of the block and production effect results from more efficient use of resources. The full range of assumptions of the static model includes:

> perfect competition in commodity and factor markets, full employment of all resources, no adjustment costs resulting from changes of the pattern of production, perfect factor mobility nationally but perfect immobility across national boundaries, prices determined by costs of production (Wyrzykowska, 2011).

2.4.1.2 Trade Diversion

Trade diversion occurs when imports from a low-cost non member country are substituted by imports from a higher-cost member country because member countries of the trading block have preferential access to the market and are exempted from payment of tariffs (Yang & Martínez-Zarzoso, 2014). Trade diversion is simply the process of efficient producers losing out to inefficient ones due to the creation of PTAs (Moses, 1997). Trade diversion can reduce welfare as it shifts production from more efficient production non-member country to less efficient production by the member country of the trading block. Thus, trade diversion worsens the international allocation of resources and shifts production away from comparative advantage (Salvatore, 2016). Consequently, trade diversion alters the structure of production away from one based on comparative advantage. This will eventually worsen the international resource allocation.

2.4.1.3 The Net effect

Looking at the concepts trade creation and trade creation, it is difficult to conclude about the gains from regional trading or the effect of RTAs on growth. One has to see the net effect of the trade creation and trade diversion to conclude the overall costs or benefits of a custom union or any other regional trading arrangements. However, it is generally accepted that customs union will lead to an increase in welfare to all the participating countries of the union. However, for a given custom union to result in more trade creation and add to welfare and growth, some conditions must be fulfilled. Some of the most important conditions are listed below.

- The larger the number and the bigger the size of the member countries of the trading block, the higher the probability for low cost producer countries to be member of the block is high. This helps other member countries to import from the low cost countries.

- Member states having competitive rather than complementary economies. Such a condition paves the way for greater specialization after the formation of the custom union. Hence, a custom union formed by two competitive industrial countries rather than by an industrial and an agricultural (complementary) country is more likely to increase welfare.
- The close members of a custom union geographically are the higher the trade creation. This is possible due to less transportation costs which amounts an important part of the price of goods.
- The greater is the pre-union trade and economic relationships among potential members of the customs union. This leads to greater opportunities for significant welfare gains as a result of the formation of the customs union,
- Higher pre-union tariffs of member states. In such a case abolition of high tariffs will result in a significant decline of prices and hence higher level of trade created. On the other hand removal of an already low tariff will have little change on prices of goods.
- Similarity in the product mix in the member countries. Such background entails higher trade creation effects that are more than the trade diversion. This is because of the fact that countries will have better opportunity for specialization within the custom union.
- higher differences in costs of production between member countries,

- Higher price elasticity of demand and supply. Such an economic condition helps for the higher proportional change in demand than the proportional change in the price. Similarly supply will adjust smoothly to the reduction of prices.

2.4.2 Balassa's Dynamic analysis

The static analysis of economic integration was found incomplete. Studies based on static analysis have proved the invalidity of forming customs union for a better allocation of resources. Hence economists tried a different analytical tool and policy instrument, to show the impact of economic integration on welfare. Balassa (1961) developed a different theoretical concept called the dynamic effects to better analyze the welfare effects of regional economic integration. The dynamic effects were considered a stronger and comprehensive economic explanation for economic integration initiatives in general and for the formation of customs unions in particular.

Perhaps for the first time Balassa and Cooper and Massell (1965a, p.743) explained the concept economic integration using the dynamic analysis method. Their analysis brought a new element to the study of regional economic integration. Schiff and Winters (Schiff & Winters, 1988) defined the dynamic effects of economic integration schemes as anything that affects the country's rate of economic growth over the medium term. The dynamic effect analysis has shown that the static analysis of economic integration in terms of trade creation and trade diversion is not adequate to evaluate the welfare effect of economic integration.

According to Balassa for any regional economic integration initiatives to contribute to welfare large-scale economies and technological change are needed. Balassa also identified the mechanisms through which economic integration contributes to welfare. These are productivity growth, risk and uncertainty, investment activity, market structure and competition. According to Brada and Mendez (Brada & Mendez, 1988) integration is assumed to raise investment and reduce risks. This is realized through the creation of larger markets which increase the expected return on investments and reduce uncertainty. Integration also enables firms to enjoy economies of scale due to lower production costs and higher demand.

Similarly Cooper and Massell (1965) asserted that the Vinerian analysis which is based on free trade theory, fails to prove why a custom union would ever be preferred to a non preferential tariff policy. Sheer (1981, p. 53) as well asserts that the magnitude of trade creation and of trade diversion, identified by the static analysis, cannot be predicted a priori. Accordingly, he concluded that the static customs union theory provides no simple maxims and suggested for the dynamic effect as the better analytical tool to show the impact of economic integration. According to Streeten the dynamic effect is mostly concerned with the relation between market size and growth and facilitates the accumulation of capital. It also helps to analyze the effects of internal and external economies of scale. It includes the impact of integration on competition, market structures, technological change, risk and uncertainty (1963, p. 4).

The dynamic aspect economic integration was largely neglected for a long time but has recently experienced renewed attention in the wake of endogenous growth theory (Bretschger & Steger, 2004, p. 2). The dynamic effect includes the new economic integration theories that are often referred to as dynamic analysis of economic arrangements (Marinov, 2015).

2.5 More on the theories of regional economic integration

2.5.1 Regionalism vs multilateralism

With both theoretical and policy justification in favour of multilateral and regional trading, the policy and academic debate on regionalism and multilateralism is growing wider and deeper. There is a quest for global free trade as advocated and supported by the WTO while regional economic blocks are pushing for a preferential trading bloc within a specified regional setup. However according to Philippe et al (2005) trade liberalisation is more often regionally than multilaterally organised.

Economists and policy makers contemplate over the problem of whether regional economic integration initiatives have a positive or negative effect on the multilateral system, the debate on regionalism versus multilateralism is mounting. The issue was succinctly captured in Jagdish Bhagwati's renowned phrase "are regional integration arrangements "building blocks, or stumbling blocks," toward multilateralism? The academic and policy debate on the dilemma increased as world-class integration

arrangements, like EU, AU, NAFTA etc. emerged. The ever-growing economic arrangements both at regional and global level, has also raised the question of how important the move towards global integration as enshrined in the WTO.

The geographical features that divided the world, naturally affects all aspects of life including trading and all economic activities. The motive for rapid economic development pushes countries to production capacities both with and outside the country. This creates the desire to create regional preferential arrangements which essentially intends to benefit participants at the expense of non-participating economies. In such arrangements geographical proximity and neighbourhood plays a crucial role. Despite the increasing prominence of globalization, countries continue to trade with their neighbours first before dealing with partners located outside their regions. Advances in transportation and telecommunications technological significantly reduced economic barriers to exchanging goods, services, and factors of production. Nevertheless, the importance of geographical proximity for economic transactions is still strong. Economies seem as prone as ever to integrate within their own regions. This fact is one of the strong arguments in favour of regionalism. According to Capannelli et al the continuous importance of proximity and hence regional trade is explained by several factors.

> The persistent importance of distance in international transactions could be explained by several factors. One possible explanation involves the homogenization of technology: as technology diffuses rapidly, specialized products do not need to be sourced from distant locations, but can be found within an economy's own region (Capannelli, Lee, & Petri, 2009).

A second reason is related with production costs specifically related with labor costs. The fragmentation of production has necessitated skilled human capital to manage and organize production processes which in turn increases travel costs. And minimizing travel and related costs remains an important issue pushing for regional interdependence. The third justification includes non-economic factors which include social and cultural values, political ideologies and interests, religious beliefs, which directly or indirectly influence economic decisions and create an incentive for regional affiliations; in the case of

similarities. All these factors of course do not stop long-distance economic transactions from happening, but they may explain why short distance exchanges remain and, perhaps, are becoming more attractive; Capannelli et al (2009, p. 1). Given these and other factors, indeed the number of regional economic integration arrangements is gradually increasing. According to the WTO report more than 600 RTAs are currently in force (WTO).

According to Philippe and Van (2005) the constantly increasing trend of RTAs raises the question about the impact of regional economic integration both for the participating and non participating countries in a given regional integration arrangement. One of the factors that gave justification for regionalism is the belief that 'new regionalism' is said to have at least the potential to protect countries from possible negative aspects of globalisation (Van Langenhove, 2003). However, it seems difficult to assess such claims (UN ECA; AU; AfDB, 2016, p. 1). For instance, it is difficult to address the question to what extent regional integration initiatives can help reduce the possible negative consequences of globalisation. (UN ECA; AU; AfDB, 2016, p. 2). The development of the concept of new regionalism has shown strong interdependence and interaction between the concepts of regionalism and multilateralism.

The mutual relations among globalization, multilateralism and regionalism has been so far studied mainly as a dilemma between globally free trade and world economy's fragmentation through competing trade blocks (Hnát, 2008, p. 22). Hnát argues that with the rise of globalization, the concept of multilateralism and regionalism has changed markedly and hence their mutual relations have changed as well.

2.5.1.1 Old and New regionalism

What is referred as the 'old regionalism' is similar to the static theory of integration and uses tools from old trade theory in the Viner-Meade tradition, focusing on trade creation and trade diversion. It is a shallow integration limited primarily to removal of tariff and non-tariff trade barriers. The third quarter of the 20th century (20 - 30 years after WWII) can be considered as a period dominated by shallow integration. This was true both at regional and global level (Burfisher, Robinson, & Thierfelder, 2004). The concept of New Regionalism, however emphasis on more complex and open trade agreements, it seems that multilateralism and regionalism can be understood as compatible dimensions of

broader efforts on an economic reform of globalized world order (2008, p. 22). Today's global economy and trade is formed by a deep and transparent global arrangement organized by WTO and a global network of complex economic integration arrangements dictated by the New Regionalism theory.

The European Union is one of the economic blocs entertaining a heated debate regarding its nature; whether it is a regional or global phenomenon? The EU allows one convincingly to reject the hypothesis that one act of regionalism necessarily leads to the collapse of the multilateral system (Winters, 1996, p. 4). One might ask whether the European economic integration favours the regional or multilateral argument. According to Winters, that the advent of the EU aided multilateralism. The EU experience shows the growing interaction and interdependence of the two concepts.

To conclude the discussion regarding the regionalism vs multilateralism debate, even though modern economic analysis suggests that the society can benefit from interaction between globalization and liberalization in a long run, general feelings are often negative (Hnát, 2008, p. 6) and hence there is a significant trend towards regional economic arrangements.

2.5.2 Developmental Regionalism

A new term called "developmental regionalism" was coined to show the nexus between regional arrangements and economic development. Developmental regionalism can be defined as "concerted efforts from a group of countries within a geographical region to increase the complementarity and capacity of the total regional economy as well as finding the right balance between function and territory" (Hettne, 2001). Many scholars recognize the deficiencies of confining regional integration solely with trade flows, despite their appreciation for the importance of regional trade in strengthening regional cooperation initiatives worldwide.

The theory of 'developmental regionalism' tries to analyze integration much deeper and beyond trade to find ways to address the problems of economic competitiveness and developmental gaps among the member countries of a regional grouping (Chandra, 2009,

p. 5). To this end, the theory of developmental regionalism distinguishes regionalism as open and closed.

2.5.2.1 Open and closed regionalism

Open regionalism deals with regional integration schemes that are fundamentally about engaging, or being a stepping stone to, the world market (Gamble & A. Payne, 1996). On the other hand closed regionalism refers to more inward-looking regional integration schemes, seen as a model of regionalism that serves the function of resisting the "predatory forces" of globalization. Closed regionalism is justified by its advocates for its contribution for economic development through the imposition of high tariffs on products imported from countries outside the block. The idea is supported by the infant industry argument which justifies protectionist policies to enable less developed countries of the economic bloc to develop their own indigenous industries and avoid the danger of competition with advanced firms outside the bloc.

2.5.3 Regional integration vs Convergence

Both theoretical and empirical observation of regional economic arrangements asserted the role of RTAs in economic development. According to this view members of a custom union or any RTA are expected to grow faster, though in different pace. However, does this imply convergence in the development levels of the participating countries in any RTAs? This question has raised a hot debate among economists and policy makers. The theory of convergence is related with the neo classical growth model (Solow, 1956) which presume that the poor countries to grow faster than the rich ones. The theory implies that regardless of the initial conditions, the real per capita income of the countries tend to converge to the same steady state in the long run (Barro & Sala-I-Martin, 1991).

Research has shown that different regional economic communities have different convergence rate (Gohou, 2013). One way to gauge the distribution of the real income effects of regional economic integration is through the systematic analysis of the comparative advantage of customs union members in relation to each other and in relation to the rest of the world. Accordingly, countries whose comparative advantage lies between that of their partners and the rest of the world benefit better than countries with an

‘extreme’ comparative advantage. Hence, while economic integration arrangements between high income countries cause convergence, economic integration between less developed countries tends to lead to divergence of member country incomes (Venables, 2003). In the case of the EU for example studies have showed that the EU custom union has contributed towards the convergence of income.

The study by Ben-David, from the late 1940s to early 1980s, for example, identified income convergence within the European Union. He found that per capita income differences narrowed, falling by about two thirds over the period, due mainly to more rapid growth of the lower income countries (August 1993). The performance of Ireland, Spain and Portugal in the 1980s and 1990s clearly showed narrowing of the income gap between these countries and the rest of EU countries. Whereas in the mid 1980s these countries’ per capita incomes were, respectively, 61%, 49% and 27% of the income of the large EU countries, by the late 1990s the numbers had risen to 91%, 67% and 38% (Venables, 2003).

Empirical research with regard to the income effects of economic integration among low income countries has shown the opposite, which is divergence in income. The concentration of manufacturing in the old East African Common Market is a good example in this respect. In the 1960s Kenya steadily enhanced its position as the industrial centre of the Common Market, producing more than 70% of the manufactures and exporting a growing percentage of them to its two relatively less developed partners (Venables, 2003, p. 1). These studies signify the risk related with the economic integration scheme among low income countries and policy remedies needed to compensate potential losers in regional integration.

The effects of economic integration on income distribution can be explained in different ways and theories including the traditional trade creation and trade diversion. Other factors including policy framework, technology, FDI and agglomeration forces can also influence the direction of income distribution due to economic integration. Clustering of manufacturing activities in specific areas within a customs union might be created by some agglomerating forces. Such trends are mainly more likely in low income countries. The probability for development and flourishing of manufacturing is high if manufacturing

activities are started in or around an area where activities complementary to manufacturing like transport, communication are easily available. The following diagram shows the trend in per capita growth, which is diverging specially in the last 10 years.

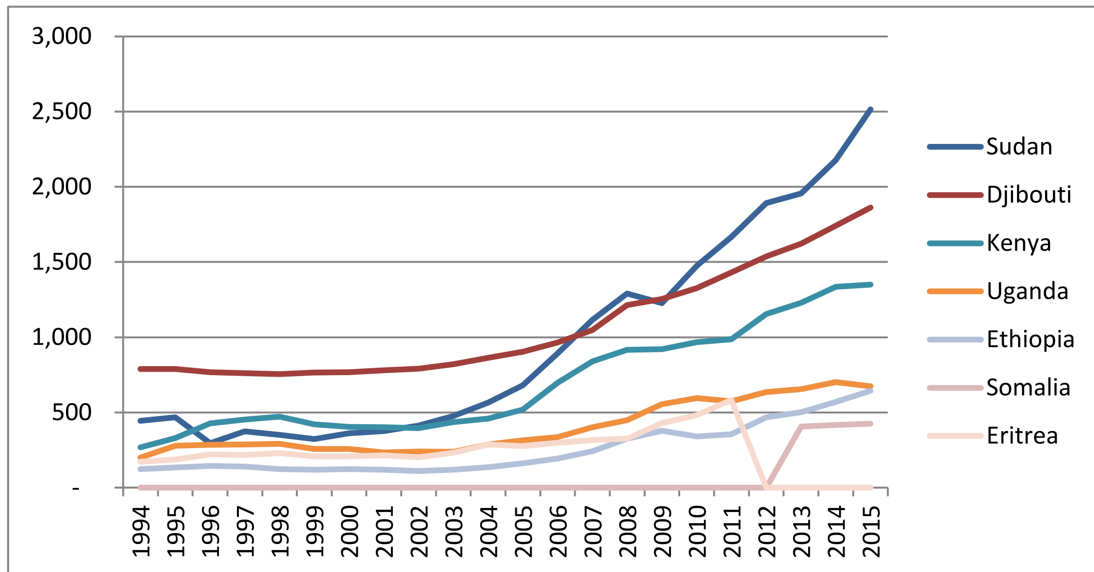


Figure 2: Per capita income in the Horn of Africa countries

Source: World bank data bank

2.5.4 Theories of Economic Integration for Developing Countries

The idea of economic integration started to get prominence after the European experience to establish a regional trade and economic block in the aftermath of the Second World War. Consequently, most of the theoretical and empirical studies on regional economic integration has European roots and deals with trading blocs among the industrialized European countries. None of the integration theories and policy instruments deals with the developing countries. These industrialized European countries have economic and technological background completely different from the developing countries. Moreover, their economic challenges and policy instruments are also different. Hence, according to Balassa (1965, p.16) the economic and political theories of regional economic integration that are exclusively developed for the industrialized economies are less relevant for the developing countries like in Africa.

To this end studies have disproved Viner's standard custom union theory and his trade creation and trade diversion analysis. Meier (1960) and Abdel Jaber (1971) have asserted the limited relevance, if any, of Viner's analysis of economic integration to the developing countries. Consequently, new theories of economic integration that can fit to the needs and explain the process of economic integration of developing countries were developed. Some of the major studies in this regard include El-Agra (1988), Allen (1961) and Cooper & Massell (1965).

The factors and effects of economic integration agreements that are relevant to developing countries are different from those proposed by the traditional theories, which applies only for the industrialized countries. Marinov listed the economic determinants of integration agreements, which motivate developing countries to participate in integration, in three main groups: general economic, market-related and trade-related factors and effects (Marinov, 2015). Marinov mentioned that these countries decide to join regional integration initiatives not only to enjoy the expected gains but also to avoid feared negative consequences.

Marinov asserts that most of the developing countries consider economic integration as an instrument for their economic development, and not that much as customs or even trade policy. The developing countries are more concerned about the benefits from faster economic growth in the long term and the utilization of underutilized resources and production factors. As a result most of the economic integration efforts in the developing countries intend on the implementation of common development projects related with poverty reduction, better healthcare and education systems, achievement and preservation of regional security etc.

Particularly in Africa the very idea of integration was crafted with the expectation of concrete economic benefits. The benefits or gains from economic integration are determined by the level of integration; the deeper the integration, the greater the benefits to the participating countries, which is also determined by the political will and commitment of individual countries (Mwasha, 2005). The forces and motivations for integration are diverse which includes trade, development and other political interests. Uneven distribution of benefits among member countries is found to be the key setback to the

successful economic integration in African. Generally, the greater portion of the benefits goes to the relatively developed economies in the trading block.

2.5.4.1 Other theories of integration

What we have discussed in this chapter is about the economic dimensions of regional integration. However, regional integration is a multifaceted process where different elements interplay. Political and international interests are among the forces that drive regional integration. Hence the theoretical discussion of a regional integration scheme is better conceptualized using a multidisciplinary perspective. The practice of regional integration also embodies the interdisciplinary nature. The same is true for the African integration trajectory. For more than half a century, African countries have aggressively pursued towards continental economic integration. The force behind the drive for the integration is more political and power than economics. Hence, while discussing the African integration phenomena, political theories of integration are as important as the economic or trade theories of integration. The two can't be separated from each other and can be better understood when regional integration is discussed together. Accordingly, a brief discussion of the political theories of regional integration seems important.

Out of the long list of political theories, the three major theories are discussed here. These dominant classical political theories are selected as a sample to show the significance of political theories in any economic integration process. These are neo-functionalism, intergovernmentalism, and liberal intergovernmentalisim. Many of the political theories have emerged, especially during the post war period which attempt to explain the process and outcome of integration in Europe. Most of the integration theories were developed in an attempt to understand the integration process of the European Union, which is one of the most successful integration attempts at the international level. The theories try to explain how and why the European Union came about and how it is functioning today. The theories have also served to analysis and understand the regional integration process in other parts of the world including the Americans, Asia and Africa.

The theories help to understand how regional integration arrangements work and allow us to hypothesis about what these and other regional integration arrangements might be like in

the future. In the following pages an attempt is made to briefly describe three of the most dominant theories of regional integration namely neo-functionalism, intergovernmentalisim and liberal intergovernmentalisim. These theories were selected because of the fact that these were the dominant theories that shaped the debate on integration during the post-war period both in Europe during the 1950s and 1960s and later in other parts of the world.

Neo-functionalism

The neo-functionalism theory was developed by a group of American political scientist in the mid 1950s who tried to apply the functionalist thinking to a particular region of the world. They attempted to theorize the new forms of regional co-operation in the wake of the Second World War. "Using the experience of the European Coal and Steel Community (ECSC) and the European Economic Community (EEC) as their starting point, neo-functionalists set about the task of describing how the deliberate merger of economic activity in particular economic sectors across borders could generate wider economic integration" (Rosamond, 2000, p. 2). The neo-functionalists also tried to show how functional or 'sectoral' integrations helps the creation of political integration and supranational institutions which further strengthen and speed up the whole integration process.

The theory was first formulated as an effort to explain regional integration processes and as a theory of international relations. It was a popular theory of European integration in the 1950s and 1960s. Ernst Haas is the most well-known neo-functionalist thinker and leader. He tried to define and elaborate his neo-functional approach to integration in his famous book '*The Uniting of Europe'* in 1958. He use a concept called 'spill over' to explain the essence of integration which basically means that enhanced cooperation and integration between states in one policy area will subsequently create pressures for further integration in other policy and program areas (Aston, 2004).

This way the neo-functionalists tried to show and explain how cooperation in specific economic sectors leads to greater economic integration in other sectors. They forwarded two types of spill over, namely functional spill over and political spillover. The functional spillover was used to explain the way in which integration in one policy area, such as

energy, creates pressure for integration in other areas, such as transport. On the other hand political spillover tries to explain the importance of ***supranational*** and sub-national actors in the integration process, as they create further pressure for more integration to pursue their interests (Hattan, 2011). In regional integration process, other actors like pressure groups and political parties are also considered important.

Inter-governmentalisim

Intergovernmentalism is one of the most important theories developed to explain the European integration process. It emerged as a negation to the neo-functionalism approach and understanding which predicts that as a result of spillover effect, the European Community will evolve into a state in its own right. The intergovernmental theory gained theoretical and practical recognition especially during the 1960's

The essence of the intergovernmental theory is that national governments hold an important place in the process of regional integration. Inter-governmentalism argues that "European integration is driven by the interests and actions of nation states." (Aston, 2004). The theory is highly related with the classical theories of international relations and accepts the neo-realist viewpoint concerning the role of the nation states and relations among them. Alan Milward, one of the prominent writers of the intergovernmental school, while explaining the position of intergovernmentalists regarding the EU integration process, underscores that EU national governments were the principal actors in the European integration trajectory. Alan Milward argues that as a result of delegating some of their sovereignty to the EU, the EU nationals benefited rather than lost their interests by the integration process.

Another intergovernmentalist's view was put forward by Putnam who analyzed integration as a two level game played by participating states at the national and EU levels. "At the national level officials build alliances among domestic groups. And at the European level the national governments bargain with key interest groups by fulfilling their demands so as to fortify their positions domestically.

Another very important intergovernmentalist is Moravcsik. He also supports the view that national governments have strong hold on any integration initiative and specially the EU integration process. He says that the level, speed and modality of integration are decided

by the member governments. They are the ones who drive the process and take the integration process to the direction and height they want it. He also argues that supra-state institutions (like EU) exist due to the will of national governments to persuade their individual interests and are used as means to complement their domestic interests. To summarize, the basic synthesis of inter-governmental theory is that national governments, not supra-state institutions, play the leadership in any integration arrangements.

Liberal Inter-governmentalisim

The Liberal inter-governmentalism theory is an extension of the intergovernmental, which was developed to explain the EU integration. The theory was formed by Andrew Moravcsik in his book '*The Choice for Europe'* published 1998. It was the dominant theory of European integration in the 1990s. The Liberal intergovernmental theory proposes that all the actions and policies taken by the EU organs are in fact the outcome of bargaining among national states.

Like inter-governmentalism, liberal intergovernmentalism emphasizes national governments as the key actors in the process of integration. However, it also incorporates the liberal model of preference formation, whereby national governments have a strong idea of what their preferences are and pursue them in bargaining with other member states. Liberal intergovernmentalists argue that the ***bargaining power*** of member states is important in the pursuit of integration, and package deals and side payments also occur in the process of making deals. They see supra-state institutions as a tool to establish credible commitments for national governments. In contrast to neo-functionalists, liberal intergovernmentalists argue that supranational institutions to be of limited importance in any integration process among countries.

CHAPTER 3

REGIONAL ECONOMIC INTEGRATION IN AFRICA

"Regional integration is a key strategy for development and intra-regional trade and is expected to produce considerable economic gains for Africa. Although it is widely recognized that intra-regional trade could play a significant role in accelerating economic growth and poverty reduction and enhancing food and energy security in Africa, the continent continues to trade little with itself" ***The UN Economic Commission for Africa.***

Africa: Brief introduction

Africa is made of 54 countries, constituting the world's second largest continent covering about over 30 million square kilometers. Except Ethiopia and Liberia all of the Africa countries were once colonized by foreign powers. Algeria is Africa's largest country by area, and Nigeria by population. The Pharaonic civilization of ancient Egypt, in north east Africa, is the birth place of one of the world's oldest and longest-lasting civilizations. Africa is also the second most populous continent with about 1.1 billion people which accounts 16% of the global population. Nigeria with a population of 150 million ranks the first, followed by Ethiopia and Egypt, with 100 and 90 million respectively. Africa has a dynamic demography. More than half of Africans are under the age of 25. In an aging world, Africa has the advantage of a young and growing population and will soon have the fastest urbanization rate in the world (McKinsey Global Institute, 2016). By 2034, the continent is expected to have a larger labour force than either China or India. The continent's population is expected to be 2.3 billion people by 2050, which is more than double of the current population size.

Economically speaking, Africa is the world's poorest and most impoverished place with a continental GDP of just 2.4% of global GDP. Until the middle and towards the end of the 19th century, most of the African countries had an economic structure designed by the colonial regimes. Export of agricultural single of products to the colonial powers had dominated the economies of most of the Africa nations. Most of the products were grown

not because of the local consumption, but because of their demand for the European industries as raw materials. During the “scramble for Africa”, France, Germany, Great Brittan, Italy and Portuguese colonized most of the African courtiers and controlled their economies. The legacy of the colonial economic structure is still one of the main bottlenecks against Africa’s effort for economic progress.

Africa is also each in water resources. The Nile River, the longest river in the world and Lake Victoria, the largest lake in Africa and the second-largest freshwater lake in the world are found in the continent. However Millions of Africans suffer from water shortage. Water scarcity impacts the lives of over 300 million Africans. Approximately 75% of Africans rely on groundwater as their primary source of drinking water. The water problem is getting worse and more complex due to the Global warming. Limited groundwater represents only 15% of the continent’s total renewable water resources. New discoveries of groundwater reserves in large sedimentary basins in Libya, Algeria and Chad may slack Africa’s growing thirst for the next few decades. Over 1,270 large dams have been built along the continent’s many rivers. Africa has the most extensive biomass burning in the world, yet only emits about 4% of the world’s total carbon dioxide emissions.

Approximately 30% of the earth’s mineral resources is found in Africa. Africa also has huge reserves of precious metals. The continent holds 90% of the platinum, over 40% of the gold and over 60% of the cobalt of the global reserve. According to the AU report, Africa has 64 per cent of world reserves of manganese, 25 per cent of world reserves of uranium, 97 per cent of world reserves of chrome and 13 per cent of world reserves of copper. It also has 70 per cent of world cocoa production; one-third of world coffee production and 50 per cent of palm produce (1980, p. 5).

Despite the positive performances and huge potentials, Africa still faces difficult economic challenges. Per capita income in many African countries is very low. Three out of every four Africans (75%) still live under poor human conditions, compared to one in five globally (20%) (AfDB et al, (2016). Most of the African population has no or little access to education having around 40% of adults illiterate; of which two-thirds are women. The causes for Africa’s awkward development performance and level are complex and intermingled; colonial legacy, geography and natural resources, poor macroeconomic

policies and poor institutions, cultural characteristics- any or most of these might be potential candidates for explaining Africa's poor economic performance and level of economic and social development. (Coyle, 2007).

Resource and access to Energy

Similar to the other natural resources and minerals, Africa is also rich in energy resources. Oil is one of the major energy sources and one of the Africa export commodities generating huge income for some Africa countries. With about 2.2 million barrels produced every day, Nigeria is the Africa's biggest oil producer and the fourth largest oil exporter in the world. Nigeria, Algeria, Angola, Libya, Egypt, Sudan, Equatorial Guinea, Republic of Congo, Gabon, and South Africa occupy the 10 major oil producers in order. Provision of affordable and reliable energy is very crucial for the economic development of Africa. With high population growth rate the demand for energy keeps increasing and, hence, African economies need to keep the pace of investment on Energy have to increase accordingly. According to the report of the International Energy Agency (IEA), since 2000 energy use in Sub-Saharan Africa has risen by 45% due to rapid economic growth in the continent (2014, p. 13).

Several African governments are now making very big efforts to introduce structural and adjustments to get rid of the multiple institutional obstacle that are holding back progress in domestic energy supply. African governments are paying more attention to boost the energy infrastructure very much needed to improve the living standards of African citizens. Data collected by the IEA Special Report on World Energy Outlook disclosed the severe shortage of modern energy services in many African countries. In Sub-Saharan Africa only 290 million out of 915 million people (31%) have access to electricity (IEA, 2014). The total number without access is rising despite the efforts to promote electrification. The electrification efforts are also outpaced by the fast increase in population.

3.1 Economic development in Africa

Measured by any economic or social indicator Africa persistently remains the lowest. Africa's poor economic achievements during the 1990s, the continent was given cover story by the Economist in one of its issues in the year 2000 "the hopeless continent." The

continent was hit by conflict and social strife, starvation, killer disease and other economic, political and social challenges. In each year after this pessimistic and gloomy story the continent, Africa recorded average growth rate of 5.5% for about a decade, surpassing the global growth. The unanticipated growth Africa forced the Economist in 2011 to rename it the "Hopeful Africa" (Lagatum institute , 2016, p. 7).

According to the report by McKinsey Global Institute African governments need to plan a central role to avail from the economic dyanamisim of the continent. The study recomended six prioriy areas that need top policy orientation. These are mobilization of more domestic resources, aggressive economic diversification, investment on infrastructure development, deepen regional integration, education and training, and urbanization. To be successful in these priorities sectors require the vision and determination of the African leadership and policy makers to introduce comprehensive reform programs in many areas of the economy. It also requires capable public administration with the skill and commitment to implement such reforms. Africa has four hundred companies with annual proceeds of more than $1 billion. Moreover these companies are more profitable in general than their global peers and are growing faster.

3.1.1 African economies towards the end of the 20st century

In the 1990s Africa made remarkable economic development where most of the African countries enjoyed persistent double-digit growth. The economic and policy environment became more favourable to domestic and foreign investment. This leads to the expansion of financial markets specially the capital markets, which witness relative boom. African manufactured goods got better demand and prince in international market especially in the United States and Europe. Similar to the demand goods, Africa's export growth also doubled to 8% annually. Similarly Africa's real GDP grew from 3.1% in 1998 to 3.2% in 1999. In the second half the 1990s rate of economic growth in Africa was higher than the population growth rate of 2.8% a year.

Despite the promising growth performance the continent witnessed in the 1990s, it was found to be fragile. The first reason for the fragility of the then economic recovery was that the growth was not supported by strong domestic savings. This means the growth was dependent on foreign capital for investment which cannot be sustained and reliable. The

second economic challenge was that the African economies were highly vulnerable to outside economic and financial shocks. Indeed, Africa's average economic growth in the 1990s was 2.1% a year, which was significantly less than the 7% growth needed to reduce the ratio of poor Africans by half by 2015. Economic growth drooped in the first half of 1999 due to multiple economic and non-economic factors which includes bad weather, deteriorating primary commodity prices, declining external resource flows, and external debt servicing. Although the bad weather did not improve, a strong recovery in commodity prices helped reverse the trend and create positive economic growth in the second half of the year (UNECA, 2001, p. 1).

From 1970 to 2000, Africa's share of FDI has significantly decreased. Like most of the developing countries, FDI constitutes the most important source of external finance for Africa. Africa's share of FDI in developing countries dropped from 25% in the early 1970s to just 5% in 2000. South Africa is by far the continent's most important source of FDI. Since 1994 South African FDI in other African countries has averaged $1 billion a year (UNECA, 2002).

3.1.2 Recent Economic Developments in Africa

In recent years Africa has registered significant progress in all aspects of economic and human development. Compared with other regions of the world with similar economic track records, the continent has achieved some of the fastest growing economies amid turbulent global economic conditions. Nevertheless, Africa economic success stories were not without challenges. Heavy dependence on the production and export of raw materials and commodities and very low share of manufacturing, which is stagnated around 11% over the last decade, remains one of the challenges of the African economies (ECA, 2016). Accordingly, most of the African economies remained highly vulnerable to commodity price fluctuations.

The joint report by the African Development Bank, OECD, and UNDP published in the African economic outlook 2016, Africa's economic performance remained intact in 2015, despite regional shocks and global economic challenges. Africa's real GDP growth was estimated at 3.6%, which is higher than the global economy (3.1%) and the euro area (1.5%).

> In 2015, sub-Saharan Africa (excluding South Africa) grew faster than the continental average, at 4.2%, with East Africa leading the way at 6.3%. Growth in Central, North and West Africa was above 3%, while Southern Africa grew by an average of 2.2% (AfDB et al, (2016, p. 5).

With this economic performance Arica become the second fastest growing economy in the world, following the East Asia.

External financial flow to Africa is increasing. In 2015, Africa has received estimated total external flows of USD 208 billion, with remittances constituting the major source. African institutions have been able to actively participate into international financial markets through sovereign bond issuances, which is a sign of the world's positive outlook on the continent. The effect of the global economic conditions and performance on Africa is mixed. Some resource-rich countries have experienced drop in revenue, while oil importers are benefiting from lower inflation as well as less pressure on current accounts. Some countries face large fiscal deficits, in the midst of stretched global financial situations.

The 2016 annual economic report of the ECA finds that economic growth in Africa has dropped off by half to 1.7% in 2016. The reduced economic performance was attributed to weak global economic conditions, low oil and commodity prices and adverse weather conditions specifically drought. The decline was below the global rate (2.3%) and also that in most developing countries. Most of the largest African economies have also experienced low growth rate in the same year; Nigeria (-1.6 per cent), South Africa (0.6 per cent) and Angola (0.8 per cent). Similarly, growth deceleration hit Algeria (2.9 per cent), Egypt (3.4 per cent) and Morocco (1.7 per cent) (ECA, 2017). Among other reasons, the fall in the price of major commodities since 2014 adversely affected current accounts and shrunk government revenue.

Being an emerging part of the global economy and also being dependent on the price of its commodities on the global market, Africa is highly sensitive to the adverse affects of the global economy. Accordingly, the overall poor world economy of 2016 has directly

affected Africa. Drop off in Europe, which is Africa's main trading partner, and the slowdown in China, because of its economic reorientation from an investment-led to a consumption-based economy, has hit many African countries directly through a fall in demand and indirectly via lower global commodity prices (ECA, 2017, p. 4). Countries having strong investment and trade ties with the EU and the UK, like Nigeria and South Africa, are expected to might feel the impact more.

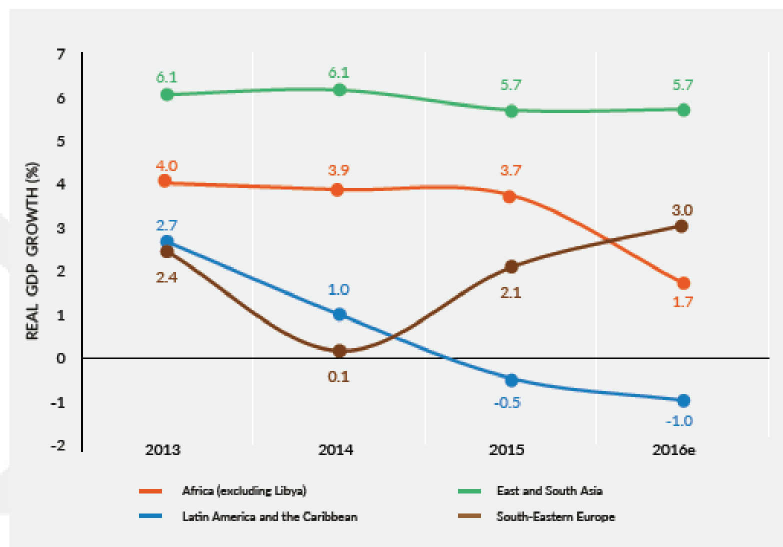


Figure 3: Economic growth in Africa, emerging and developing countries

Source: ECA, Economic report on Africa 2017

Domestic factors including public infrastructure development, private investment and private consumption, have significantly contributed to the Africa's growth resilience. The same report on the African economy estimates that in the medium term, continued improvement in the business environment and fast expanding regional markets may increasingly become new sources of growth for the continent (AfDB, OECD, UNDP, 2016, p. 5). The increasing intra-regional trade particularly signifies emerging opportunities for trade diversification of African producers. Endowed with young and dynamic generation, Africa also have untapped demographic potential which, if used properly, can change the fate of the continent and individual African countries. African

countries should put the right policy and especially proper education and skill training to make the best out of their human resources.

After falling for two consecutive years (2014 & 2015), commodity prices started to increase starting from the end of the first quarter, 2016. However, prices of most commodities are still below the 2014 annual average level. Comparative studies regarding the performance of different economic groupings namely oil-exporting, oil-importing and mineral-rich economies decreased to 0.8 per cent, 2.5 and 2.2 percent respectively. On the other hand growth in the non-oil sector of the oil-exporting economies was not sufficient to compensate the impact of decrease in the oil prices and hence a fall in the overall growth level.

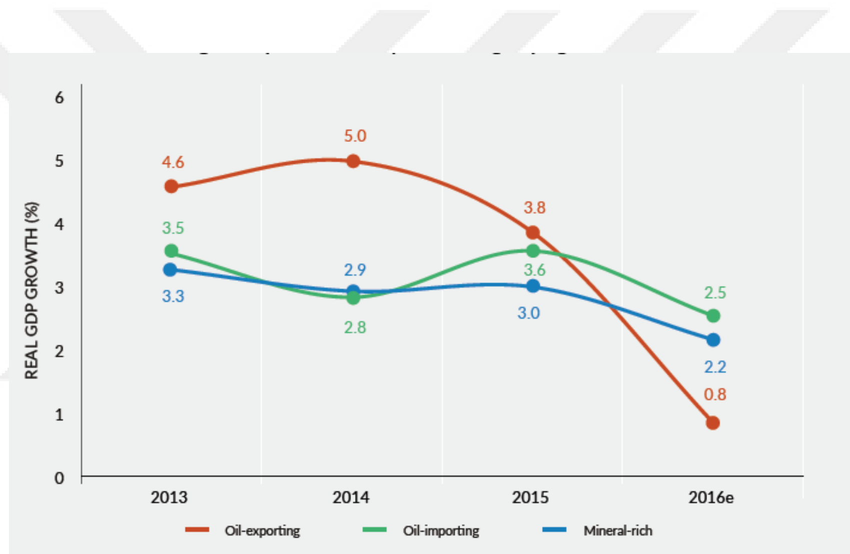


Figure 4: Africa's growth performance by economic groupings, 2013-2016
Source: ECA, Economic report on Africa 2017

Africa’s recent overall economic performance has seen turn down due to a sharp decline in some economies particularly in North Africa. The economies of Egypt, Libya, and Tunisia were badly affected by the political turmoil of the Arab Spring, and Africa’s oil exporters were left vulnerable to the decline in oil prices. Nevertheless, Sub-Saharan Africa has robust economic growth with varying degrees. All in all the fundamentals across the whole continent are strong, and long-term growth projections are good (McKinsey Global Institute, 2016, p. 1). Africa’s economic growth is expected to grow in the years to come due to multiple positive economic factors which includes

> increasing domestic demand, driven mainly by the rising middle class, improving regional business environment and macroeconomic management, increasing public investment, especially in infrastructure, a buoyant services sector and robust trade and investment ties with emerging economies (ECA, 2015).

The level of intra-African trade is still very low, accounting for only 10.5% of Africa's total trade. Major reasons for that are the lack of complementarity between countries and diversification of production structures. High costs of doing business, especially high transport costs, and inadequate finance for regional trade are also factors that hampered trade. Trade liberalization schemes need to be accompanied by the implementation of policies to support the cross-border mobility of inputs (labour, finance), the removal of nontrade barriers, and the harmonization of the macroeconomic stance. Regional Economic integration in Africa: More myth and little reality (UN ECA, 2004, p. 243)

In 2014 African leaders adopted key frameworks to transform the social and economic development of the continent. The frameworks are the Africa Union's Agenda 2063 and "Common African Position (CAP) on the post 2015 development agenda".

3.2 African integration timeline

3.2.1 African economic integration trajectory

African history on economic and political integration dates back the colonial period. A number of kingdoms in different parts of Africa have extended their territories over large parts of present-day African nation states. According to a study by the UN Economic Commission of Africa (UNECA) on the regional integration in Africa, the advantages of regional integration in Africa were recognized long before the term "globalization" was coined (UN ECA, 2004). With regard to the evolution of regional integration in Africa, the report has identified Africa's long history on regional integration and collaboration. The establishments of the South African Customs Union (SACU) in 1910 and the East African Community (EAC) in 1919 are among the oldest attempts of regional integration in Africa

long before independence. The Southern Rhodesia Customs Union was established in 1949 between South Africa and present-day Zimbabwe.

The Ghana–Upper Volta Trade Agreement between Ghana and Upper Volta (now Burkina Faso) emerged in 1962 (UN ECA, 2004, p. 38). In the same year the African Common Market linking Algeria, United Arab Republic (Egypt), Ghana, Guinea, Mali, and Morocco was initiated. Similarly, West African countries have history in economic and social integration in which the Ashante Union is a celebrated example. The East African Community (EAC), considered to be the most far-reaching of early integration attempts in Africa, began in 1967. EAC comprising Kenya, Tanzania, and Uganda. Despite the long history of the African regionalism, the pre-colonial history is mostly omitted from the contemporary African integration discourse (Izuagie, 2014) and hence the formal African integration process starts in the post colonial period.

Hence a more formal economic integration of Africa was launched immediately after the decolonization of the African countries in the second half of the 20th century by the first African leaders as a means to demonstrate African solidarity and stand firm against the adverse effects of African balkanization. The move was both an economic and political reaction to the poor economic development and backwardness that engulfed the whole of the continent. The integration project triggered the formation of large number of regional agencies to help African countries able to speak in one voice expand production to a wider regional market which was otherwise limited to national markets. A full-fledged economic and political integration was also perceived as a crucial strategy for Africa in order to mitigate the challenges of globalization and get credible capacity of negotiation in international debates (Kouassi, 2007).

Faced with a multitude of socioeconomic and political challenges surrounding the emergence as newly independent states, the leaders realized that self-reliance and economic development could be achieved through collective efforts. The early decades of independence therefore witnessed an up-surge of diverse regional schemes in West Africa covering economic, social and political issues (Izuagie, p. 21). In the 1980s and 1990s the number of regional institutions working on integration has reached its the maximum. Different documents, treaties and plans were prepared during these periods which include

the Lagos Plan of Action and Final Act of Lagos, the Abuja Treaty establishing the Regional Economic Communities (RECs).

The entry into force of the Treaty establishing the African Economic Community (AEC), on 12 May 1994, marked a landmark in the persistent efforts by African States to integrate. Since then the African countries has continued to show their commitment to this grand goal. The Lagos Plan of Action and the Abuja Treaty spell out the economic, political, and institutional mechanisms for attaining this ideal (UN ECA, 2004, p. 1). The success of the African integration process was considered to be as serious political-economy objectives in order to effectively deal with the subsequent challenges of globalizations. The charter of the Organization of African Unity and the Constitutive Act establishing the African Union define regional integration as one of the anchoring ideals of African unity. The year 2000 has seen the move towards the formation of the African Union as adopted by the Constitutive Act to establish the African Union. The adoption of these and many other documents has rendered a strong institutional foundation for the African integration process.

According to Kimbugwe et al, the most persuasive argument for regional economic integration in Africa is small fragmented African markets, represented by 54 small countries whose average gross domestic product (GDP) is $4 billion. These small markets, combined with generally high production and transaction costs and poor investment climates, attract limited foreign direct investment (FDI) (Kimbugwe, Perdikis, Yeung, & A. Kerr, 2012, p. 32). They asserted that rapid and unchecked population growth has added to the intense pressure on the provision of services and infrastructure, thus offsetting any gains that might have been realized (Kimbugwe, Perdikis, Yeung, & A. Kerr, 2012, p. 32). The small, sparsely populated, fragmented, and often isolated economies across Africa make a compelling case for these economies to integrate regionally to reap efficiency gains, exploit economies of scale, and reduce the thickness of borders (Melo & Tsikata, 2014).

The poor economic and political performance in the early decades of independence raised the need to look for alternative policy options for development. This led to series of brain storming sessions aiming at removing the political and economic obstacles and challenges

that may lead to low economic and political achievements. In this connection three major activities related with African integration were taken during the last quarter of the 20th century; 1975-2000, namely the Monrovia conference (1979), the Lagos plan of action and the Final Act of Lagos (1980), and the Abuja Treaty (1991) which established the African Economic Community which entered into force in 1994. In the following sections more information regarding these initiatives is given in a chronological order.

3.2.1.1 The Monrovia conference

As a result of series of meetings organized by the first African leaders after independence, a conference was held in 1979 in Monrovia, the capital of Liberia, to mull on policy directions for Africa's economic independence. The series of meetings has identified the need for Africa to relay on itself in order to permanently get rid of poverty and backwardness. The conference, among other issues, dealt with such issue like "what kind of Africa by the year 2000?" (Seka, 2009). The conference was attended by many African intellectuals whose views have strongly influenced the resolutions setting the ground for the upcoming meetings of the OAU including the Lagos Plan of Action for economic development of Africa 1980-2000. The Monrovia Declaration of Commitment calls, inter-alia, for the creation of an African Common Market as a prelude to an African Economic community (AEC). The Monrovia declaration rehearsed the position of African leaders, taken in the Addis Ababa Declaration made in 1973, about the inability of the international community to create the favourable conditions for Africa's development (Kouassi, 2007, p. 2)

Major objectives of the declaration, inter alia, includes building strong and self –sustaining economic, achieve sub-regional and regional collective self reliance, human resources development for greater participation in the development process and industrialization compatible with the socia-economic and cultural background of each country, not a copy of the industrialization policies and strategies of the western nations (Sekgoma, 1994, p. 70). According to Sekgoma, the Monrovia declaration deals with three essential issues namely achieve collective self-reliance, human resources development through education and short term trainings and the development and proper management of the African

natural resources (Sekgoma, 1994, pp. 71-72). The issues articulated in the Monrovia declaration were expatiated further in the Lagos Plan of Action which is discussed below.

3.2.1.2 Lagos Plan of Action and Final Act of Lagos

The Lagos Plan of Action for the Economic Development of Africa, 1980–2000, or simply known as the Lagos Plan of Action was a plan prepared by the Organization of African Unity planned to boost Africa's self-sufficiency and accelerate its continental economic development. The Lagos plan was a response by African leaders for the failure of the international community to fulfil their promises made to support for the development of the continent. It was drafted in Lagos, Nigeria in April 1980, during a conference which included a variety of African leaders. The plan was a result of a series of deep deliberation of' the economic challenges of the continent made concerned Ministers and experts. It was a continuation of the Monrovia Declaration made in the previous year towards national and collective self reliance in economic development (AU, 1980, p. 3).

The plan is also believed to be a collective response of African states to the World Bank's 1981 Berg report which blames African leaders for their failure to adopt proper structural reform programs designed by the World Bank and International Monetary Fund. The report emphasis increased agricultural exports. In formulating the Monrovia Declaration and Lagos Plan of Action African governments wanted not only to register their protest to the World Bank's "Berg Report" with its emphasis on increased agricultural exports, but also to address and redress the critical development crisis which has characterized the region's political economy over the last two decades.

The Lagos plan of Action was a commitment by the African leaders of the time towards continental social and economic development, regional integration, development of human resources, progress in science and technology, self sufficiency in food production and supply, develop the transport and communication infrastructure of the continent etc. Article 3 (ii) specifically mentions the plan towards economic integration in the following words "We commit ourselves, individually and collectively, on behalf of our governments and peoples, to promote the economic integration of the African region in order to facilitate and reinforce social and economic intercourse. (AU, 1980, p. 4).

The Lagos plan of action was said to be an Endogenous development approach in its development philosophy and approach. This is because of its policy orientation and its total rejection of the ‘development thesis’, which prescribes the development experience policy tools of the industrialized countries, whose application to the African context has failed. Using the Lagos plan the African leaders reaffirmed their commitment to establish an African Economic Community in order to ensure the economic, cultural and social integration of Africa by the year 2000. The Lagos Plan of Action, followed by the Final Act of Lagos, was borne out of the necessity for continental and national self-sufficiency and the creation of a self-reliant continental economy (ECA, 2016).

3.2.1.3 The Abuja Treaty

The Abuja Treaty establishing the African Economic Community (AEC) entered into force on 12 May 1994. The Abuja treaty opened a new chapter in the history of the African economic integration. The treaty was signed by 49 countries out of 51, and was an expression of the Africa leaders towards dipper economic integration and collective development (Kouassi, 2007, p. 5). The objectives of the treaty are listed under Article 7 as follows (AU, 1991):

a. To promote economic, social and cultural development and the integration of African economies in order to increase economic self-reliance and promote an endogenous and self-sustained development;
b. To establish, on a continental scale, a framework for the development, mobilisation and utilisation of the human and material resources of Africa in order to achieve a self-reliant development;
c. To promote co-operation in all fields of human endeavour in order to raise the standard of living of African peoples, and maintain and enhance economic stability, foster close and peaceful relations among Member States and contribute to the progress, development and the economic integration of the Continent; and
d. To coordinate and harmonize policies among existing and future economic communities in order to foster the gradual establishment of the Community.

3.2.1.4 The Sirte Declaration

The Sirte declaration was the resolution adopted on 9 September, 1999 (9,9,99) by the than Organization of African Union. The declaration has taken important decisions that aim to take the African economic integration a step ahead. The declaration included variety of issues related with economic, political and security. Acceleration of the implementation of the Abuja treaty, which established the African Economic Community, has received important attention in the Sirte declaration and in particular the declaration called for:

- Shorten the time frame for the full implementation of the Abuja Treaty.
- Ensure the fast establishment of all the institutions provided for in the Abuja Treaty, such as the African Central Bank, the African Monetary Union, the Court of Justice and, in particular, the Pan-African Parliament by the year 2000 (OAU, 1999).
- Harmonize and strengthen the regional economic communities which constitute the founding blocks of the African Economic Community and also the African Union, which is proposed by the Sirte declaration.

3.2.1.5 The African Union (AU)

The Sirte declaration adopted for the African Union, which substitutes the Organization of the African Unity (OAU). The decision was part of the African leaders' commitment to deepen the African integration and particularly trade and economic less than the time table proposed in the Abuja treaty and using more efficient institutions. Some of the objectives listed under article 3 of the constitutive act of the AU deals specifically with economic integration. This includes coordination and harmonization of policies among regional economic communities as a vehicle towards the gradual attainment of the objectives of the African Union (AU, 2000). Coming out OAU, the old continental institution, the AU was loaded with splendid objective of linking the African economies to the driving force of globalization (Kouassi, 2007, p. 12). The African Union charter contains provisions totally different from the OAU and the Abuja treaty that can better facilitate economic integration.

3.2.1.6 New Partnership for African Development (NEPAD)

NEPAD is an initiative taken by the African leaders to support a unified action by African states to realize Africa's quest for development and break the vicious circle of poverty

(Gelp, 2002). NEPAD is a vision and strategic framework for Africa's economic revitalization. It was a response by the African states to the emerging risks due to the ensuing globalization which is adversely affecting Africa's competitiveness and lay the foundations for Africa's increased integration with the international market.

The NEPAD is also believed to provide opportunity and institutional framework to revamp economic cooperation between African countries (individually and as a group) and their industrialized development partners. Despite its wide-ranging program, the NEPAD primarily focuses on the challenges of weak and incapable African states. The NEPAD constitutive document calls for the reversal of the awkward socioeconomic conditions of many of the Africa states, the depressing poverty of African citizens and also reverse the unfair economic and trade relations between Africa and the developed world (AU; NEPAD, 2001) .

Origin of NEPAD

NEPAD was original know as the New African Initiative (NAI) which was an amalgamation of two independent continental development initiatives: the Millennium Africa Recovery Plan (MAP) and Omega Plan. The MAP and OMEGA plans were prepared by South Africa and Senegal, respectively as a comprehensive development plan to transform the continent based on a big push investment on infrastructure. The Organization of the African Unity (OAU in its extraordinary summit in March 2001 held in Sirte Libya decided the MAP and OMEGA plans be merged. NEPAD was established in 2001 by the following founding member states; South Africa, Nigeria, Algeria, Egypt and Senegal. It is a continental program of the AU to accelerate regional and continental economic integration. The NEPAD strategic document was adopted in July 2001 by the 37th summit of the OAU in Lusaka Zambia.

NEPAD has four primary objectives which are eradicating poverty, promote sustainable growth and development, integrate Africa in the world economy, and accelerate the empowerment of women (NEPAD). The UN, G8, the EU and other international including China and Japan expressed their support for the plan.

3.3 Building Blocks of the African Economic integration

The African Economic Community (AEC) provides a general framework for African economic integration and considers the Regional Economic Communities (RECs) as building blocks towards achieving the grand African vision. The African Union (AU) has entrusted the implementation of the actual task of integration to the RECs and considers them the pillars of Africa's integration. All the RECs were formed prior to the launch of the AU. The RECs have established independently with different roles, responsibilities and structures. The main purpose of the RECs is to support and facilitate the process of regional economic integration between countries of the individual regions (AU, 2017, p. 13). So far the RECs have made significant success in infrastructure, trade and regional public goods. The AEC forms the economic wing of the African Union and relies on the building blocks which includes the following Regional Economic Communities (RECs),

i. Arab Maghreb Union (AMU)
ii. Common Market for Eastern and Southern Africa (COMESA)
iii. East African Community (EAC)
iv. Economic Community of Central African States(ECCAS)
v. Economic Community of Sahel-Saharan States (CEN-SAD)
vi. Economic Community of West African States (ECOWAS)
vii. Inter-Governmental Authority on Development (IGAD)
viii. Southern African Development Community (SADC)

There are also other seven, sub regional economic communities, which are geographically more limited and subset of the above RECs (UN ECA, 2004, p. 28).

- "The Central African Economic and Monetary Community (CEMAC), a group of six ECCAS countries".
- "The East African Community (EAC), made up of COMESA members Kenya and Uganda and SADC member Tanzania".
- "The Economic Community of Great Lakes Countries (CEPGL), consisting of three members of ECCAS".
- "The Indian Ocean Commission (IOC), made up of four members of COMESA and one (Réunion) that is a dependency of France".

- “The Mano River Union (MRU), consisting of three members of ECOWAS”.
- “The Southern African Customs Union (SACU), consisting of five members of SADC”.
- “The West African Economic and Monetary Union (UEMOA), encompassing eight members of ECOWAS”.

Three of the 8 AU recognized RECs namely IGAD, EAC and COMESA cover countries in the Horn of Africa, and hence special attention is paid to them in this research.

3.3.1 The Regional Economic Communities (RECs)

In the following pages a brief discussion of the main regional Economic Communities is given.

3.3.1.1 The Intergovernmental Authority for Development (IGAD)

The Intergovernmental Authority on Development (IGAD) in was established in 1996 as a full-fledged Regional Economic Community (REC). IGAD was originally established in 1986 as the Intergovernmental Authority on Drought and Development (IGADD) with the purpose of combating desertification and to mitigate drought in the Horn of Africa region. IGADD has made efforts to mitigate the effects of the recurring severe droughts and other natural disasters that resulted in widespread famine, ecological degradation and economic hardship in the region (IGAD, 2016, p. 2). IGADD was established by the then drought then drought afflicted six Eastern African countries of Djibouti, Ethiopia, Kenya, Somalia, Sudan and Uganda.

Given its limited mandate related with agriculture, drought and ecology, IGADD couldn’t deliver to the growing social, economic and political dynamics of the region and the countries in the region. Hence the need to revitalize IGADD in to a comprehensive and full-fledged regional organ was felt by the leaders of the countries in the region. Accordingly in April 1995, the assembly of Heads of State and Government took the decision to invigorate IGADD and enlarge its mandate and areas of operation with a bigger role to work towards better cooperation among Member States. Following the decision of the leaders the new IGAD was launched in 1996 at the 5th IGAD summit held in Djibouti 25-26 November 1996. The strategic objectives and institutional setup was systematically

boosted with a focus on three priority areas of food security and environmental protection, economic cooperation, regional integration and social development peace and security (IGAD, 2016, p. 2). In addition to the six founding member states mentioned above, Eritrea and South Sudan became the seventh and eighth members of IGAD in 1993 and in 2011 respectively.

Aims and Objectives

The aims of IGAD, as stated in Article 7 of the Agreement Establishing IGAD, are listed below:

- Develop regional development policies and strategies, harmonize macro-economic polices
- Coordinate polices related with trade, customs clearance, manufacturing and agriculture,
- Promote free movement of goods, services, capital and labor
- Promote cross boarder investment and attract FDI inflow to the region
- Identify, design and implement projects that contributes to the sustainable development of the region
- Support initiatives for the protection of the environment and natural resources so as to assure food security and mitigate the impact of drought in the region and member countries.
- Contribute for the development of the regional transportation and communication infrastructure to facilitate smooth and fast transportation of goods, services and people.
- Collect process and disseminate relevant and timely information to help member countries develop informed development policies at national and regional levels.
- Build the human resource of member countries through education and training, research and development, promotion of science and technology.

Other IGAD bodies

The IGAD structure also incorporates also incorporates other institutions on different fields. These institutions are:

- The IGAD Inter-Parliamentary Union (IPU–IGAD). IPU started operation in November 2007, after the protocol establishing it came in to force. The IPU includes the speakers of the IGAD Member States' Parliaments.
- IGAD Civil Society Forum (CSF). The CSF was set up in 2003 to strengthen the operation and cooperation of non-governmental and civil society organisations in the region with IGAD.
- IGAD Partners Forum (IPF). IPF was established early 1997 and aims to foster relation and collaboration mostly with donors which includes Turkey, Italy, the UK, EU etc. The forum facilitates resource mobilization and close relation between IGAD secretariat and these partners.

3.3.1.2 The Common Market for Eastern and South Africa (COMESA)

The Common Market for Eastern and Southern Africa (COMESA) was established in 1994 substituting the Preferential Trade Area (PTA), which had been in operation since 1981. The formation and later transformation from the PTA to COMESA was made in line with the objectives of the Lagos Plan of Action (LPA) and the Final Act of Lagos (FAL) of the Organization of African Unity (OAU). Including 22 member states (42.6% of total African surface and 44.6% of the total African population), COMESA constitutes the largest regional economic block in Africa (Muuka, Harrison, & McCoy, 1998). Some of members of COMESA are the world's poorest countries which includes the countries in the Horn of Africa namely Eretria, Ethiopia, Somalia and Sudan. The total GDP of COMESA covers 32% of total GDP of the continent (Carmignani, 2005, p. 213).

In conformity to its historical roots as a PTA, COMESA has organized itself as a Regional Economic Community (REC) with special focus to trade- and economic integration. This is clearly demonstrated in COMESA's strategic plan which gives emphasis to trade and related programs as the pivot of the COMESA integration initiative. The importance of trade in COMESA is also reflected to its member states and partners which also attach enormous importance to trade. The formal trade integration agenda is complemented by specific programmes, which seek to facilitate intra-regional trade through improving infrastructure and boosting the supply side capacity (Woolfrey, 2016, p. iv).

The objective of COMESA as stated in its charter is to cooperate in developing their natural and human resource for the good of their people. The objectives of COMESA in the economic sector are attaining sustainable growth and development of Member States, promote joint economic development, creation of an enabling environment for investment, (FDI, regional and domestic). More over COMESA is also aims to work in other areas including peace and security and stability among the Member States and strengthening relations between the Common Market and the rest of the world. Details of the aims and objectives, as given under article 3 of the organization are (COMESA secretariat, 1994, p. 18)

(a) to attain sustainable growth and development of the Member States by promoting a more balanced and harmonious development of its production and marketing structures;
(b) to promote joint development in all fields of economic activity and the joint adoption of macro-economic policies and programmes to raise the standard of living of its peoples and to foster closer relations among its Member States;
(c) to co-operate in the creation of an enabling environment for foreign, cross border and domestic investment including the joint promotion of research and adaptation of science and technology for development;
(d) to co-operate in the promotion of peace, security and stability among the Member States in order to enhance economic development in the region;
(e) to co-operate in strengthening the relations between the Common Market and the rest of the world and the adoption of common positions in international fora; and
(f) to contribute towards the establishment, progress and the realisation of the objectives of the African Economic Community.

Looking at the objectives of COMESA stated above, it is clear to see that almost all of the objectives are related, directly or indirectly, with economic development both of member states and the common market at large. It also aims to make contribution to the creation of the African Economic Community. Even the non economic objectives of promotion of peace and security are stated as a means towards the enhancement of economic development. In addition to the charter and as part of bringing some of its policies and strategies in to action, member countries have signed numerous agreements and protocols.

The COMESA strategic plan (2016-2020) has identified 9 strategic objectives most of which deal with trade and economic activities. According to the COMESA strategic plan (2016), these strategic objectives are:

- Strengthen Market Integration
- Attract Increased Investments
- Strengthen the Blue / Ocean Economy
- Harness the Benefits of Strategic Partnerships
- Strengthen Development of Economic Infrastructure (Energy, Transport and ICTs)
- Industrialization
- Foster Gender Equality & Social Development
- Ensure Regional and Secretariat Readiness
- Strengthen Regional Knowledge and Skills Capacity

The COMESA Free Trade Area (FTA) was launched in October 2000, which was the first FTA in Africa. Nine countries including Djibouti, Egypt, Kenya, Madagascar, Malawi, Mauritius, Sudan, Zambia and Zimbabwe, were among the first batch of countries to join the FTA. The removal of tariff and non-tariff barriers to intra-COMESA trade is the most important instrument for trade liberalization. Accordingly COMESA has taken measure and tools for the decreasing and ultimate eradication of tariffs and non-tariff barriers within the block. In a bid to enhance cooperation between COMESA and Regional Economic Communities (RECs), COMESA has taken the initiative to promote collaboration with three RECs namely the East African Community, the Intergovernmental Authority on Development, and Indian Ocean Commission. In terms of both membership and population, COMESA is the largest RTA in Africa followed by ECOWAS and SADC; but in per capita income SACU is the richest followed by SADC and CEMAC (Ngeno, 2008, p. 16).

3.3.1.3 East African Community (EAC)

The East African Community (EAC) is a regional intergovernmental organization of 6 member countries namely the Republics of Burundi, Kenya, Rwanda, South Sudan, the United Republic of Tanzania, and the Republic of Uganda. The total population of the EAC is estimated to be 150 million around ¾ of which living in the rural areas. The EAC

covers a land area of 1.82 million km^2 with a combined Gross Domestic Product of US$ 146 billion (EAC Statistics for 2016). The activities of the EAC are governed by its Treaty which was signed on 30 November 1999 and entered into force on 7 July 2000 following its endorsement by the three founding Partner countries viz Kenya, Tanzania and Uganda. The Republic of Rwanda and the Republic of Burundi became full Members of the Community starting from 1 July 2007. The last to join the community was the Republic of South Sudan which joined the block on 15 August 2016 (EAC, 2010) after preliminary acceptance as member on the 15th of April in the same year.

The objectives of the EAC, as stated under article 5 of the treaty establishing the community emphasize trade and economic cooperation and integration. EAC aims to develop policies and programmes that can help to widen and deepen cooperation among the member states of the community in economic, social, research and technology etc. The treaty envisions to serve as a platform for EAC countries to be able to create a custom Union, a common market, monetary Union and ultimately a political union that would help realize member countries' aspiration for the industrial, commercial, infrastructural, cultural integration and facilitate and harmonize accelerated and balanced economic growth for the member states and their citizens. In order to realize these macro-economic and strategic objectives and vision the community shall ensure important services that are stated under article 5 sub-articles a to h (EAC, 1999). The EAC member states endorsed common external tariff in 2017.

According to a report by the EAC secretariat, the EAC is one of the fastest growing regional economic blocs in the world, and is widening and deepening cooperation among its member countries in various key economic sectors. The EAC regional integration process advancing as is demonstrated by the formation of the East African Customs Union, the establishment of the Common Market in 2010 and the implementation of the East African Monetary Union Protocol. The East African Community (EAC) is the only community that has attained the stage of Customs Union in January 2005, and expects to start the East African Common Market by the year 2010 (AU, 2010, p. 6). EAC member States recently agreed on direct convertibility of their currencies (ECA, AfDB, AU, 2017, p. 23).

3.3.1.4 Arab Maghreb Union (UMA)

UMA was established in 1989 by the Treaty of Marrakesh (Morocco) to fulfil some economic and political objectives which includes foster bilateral and multilateral relations among the member states of the union, support economic prosperity, harmonization of policies towards the free movement of not only goods and services but also people and capital. UMA members include Algeria, Libya, Mauritania, Morocco and Tunisia. Development of agriculture, industry, commerce, food security, and the setting up of joint projects and general economic cooperation programs are identified as the main areas of intervention by the Union and member countries (Hadili, Raab, & Wenzelburger, 2016, p. 3). The Term Maghreb is an Arabic word for the western region of the Arab world (Ibid p. 3).

In the last ten years the union is exerting effort to boost the infrastructure base of the north Africa region by means of modern transport and communication. In this regard in April 2008, UMA signed memorandum of understanding to upgrade and improve the Trans-North Africa highway which connects the capital cities of three of the UMA member countries; Casablanca, Algiers, Tunis. The Union has also completed a feasibility study for a high speed train project that would connect Casablanca and Tripoli through Algiers and Tunis (UN ECA; AU; AfDB, 2016).

AMU is completing its preparations to begin its regional FTA, after its member countries signed the protocols required for launching the FTA. The members are expected to sign one final protocol on rules of origin (UN ECA; AU; AfDB, 2016, p. 2). In spite of near to three decades of operation, the AMU's achievement in intra-Maghreb trade is very low. World Bank report on the status of regional integration in the region shows that in 2007 intra-regional trade was less than 3 percent of total regional trade and less than 2 percent of the regional GDP. The report also found that the region mainly trades with Europe. The intra-regional trade data indicates that the region is one of lower world's trading blocks. High barriers to intra-regional trade, infrastructure limitations, narrow product diversification, and lack of political commitment were among the reason for the poor achievements of regional integration in the Maghreb region (Office of the Chief Economist, 2010, p. 1).

Individual countries in the Maghreb region have paid greater attention for trade liberalization arrangement with the European Union (EU) which is believed to provide better prospect for the countries. Compared with the trade liberalization efforts with the EU, the countries paid less attention to liberalize and boost trade among themselves, which would have helped them bring in considerable economic benefits. The Maghreb region has huge economic potential in different sectors including finance, transportation, communication, ICT. Structural and policy reforms in the service sector including creation of better competitive environment and regulatory rearrangements would bring economic gain at least double the benefits from tariff removal (Ibid). The 5 member countries of the union have made different economic reform programs through trade liberalization to promote growth and increase welfare. However, attempts have made very limited achievements (Hadili, Raab, & Wenzelburger, 2016, p. 3).

3.3.1.5 Economic Community of Sahel-Saharan States (CEN-SAD)

CEN-SAD is one of the Regional economic communities in Africa recognized by the African Union (AU). It was established in 1998 in Tripoli, under the leadership of Libya and became a full-fledged regional economic community during a meeting in Togo, from 4-12 of July 2000. It has 29 countries which include Benin Burkina Faso, Cabo Verde, Central African Republic, Chad, Comoros, Côte d'Ivoire, Djibouti, Egypt, Eritrea, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Libya, Mali, Mauritania, Morocco, Niger, Nigeria, Senegal, Sierra Leone, Somalia, Sudan, Togo, and Tunisia. CEN-SAD is the biggest trade bloc in Africa in terms of number of countries and size of GDP (UNCTDA, 2013, p. 20). The aims and objectives of the block as stated in its founding treaty includes, among others;

- Found a wide-ranging economic union with special attention to agricultural, industrial, and energy sectors.
- Promote free movement of people and capital
- Support inter-regional trade through enhanced transportation and telecommunications networks

3.3.1.6 Economic Community of Central African States (ECCAS)

The decision to establish ECCAS was taken by the leaders of a former regional organization called the Customs and Economic Union of Central African States (UDEAC) and formally established in October 1983 (UNECA, 2017). The idea behind the establishment of ECCAS was to transform UDEAC in to a wider and full-fledged regional economic block that coordinates and facilitates the regional integration process. ECCAS has 10 member states which include Angola, Burundi, Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Republic of Congo, Equatorial Guinea, Gabon, and Sao Tome and Principe. For almost thirteen years ECCAS was not active because of different economic, political and security reasons which includes financial constraints, civil war in the DR Congo, instability in the Great lakes region. In 1999 the AU accepted ECCAS as one of the eight officially recognized RECs in Africa.

ECCAS aspires to create a customs union by removing all kinds of tariffs, quotas, restrictions and organizational bottlenecks that hinder trade among the regional States. The long term vision of ECCAS is to establish a custom union by enforcing a common external tariff with non-member countries (AfDB, 2005). As stated in its treaty, ECCAS works for the development of physical, economic and monetary integration of the central Africa region. ECCAS launched a free trade area in 2004 and the Intra-regional trade within ECCAS is less than 2%. Infrastructure bottlenecks, absence of the free movement of labor, high tariff and non-tariff barriers, poor private sector participation in the integration process are but some of the factors that delay intra-regional trade and overall regional economic integration in the ECCAS sub region (ECCAS; AU, NEPAD, 2015, p. v).

3.3.1.7 Economic Community of West African States (ECOWAS)

ECOWAS was established by the Lagos Treaty on 28 May 1975 with the main objective of promoting economic integration among 15 West Africa countries. Main areas of cooperation includes industry, transport, telecommunications, energy, agriculture, natural resources, commerce, monetary and financial questions, social and cultural matters (AU, 2017, p. 135). Extended areas of cooperation also includes trade, money and finance, taxation, economic reform policies, human resources, information, science, technology,

services, education, health, tourism, legal matters (UN ECA, 2016). As per the revised treaty o ECOWAS, the main objectives of the block includes (ECOWAS, 1993, pp. 5-6)

- Harmonize and co-ordinate national policies and promotion of integration programmes, projects and activities including policies for the protection of the environment;
- Promoting for the establishment of joint production enterprises;
- Establishing a common market and economic union by adopting common economic and financial policies, creating a monetary union.
- Promoting joint ventures among private enterprises and other economic operators by adopting instruments for the integration of private firms, mainly through the creation of conducive environment to support small and medium size enterprises (SMSEs)
- Harmonizing the investment laws of member countries towards the promulgation of a single investment code for the member countries;
- Ensure balanced regional development with special attention to the unique challenges and problems of landlocked and small island member States;
- Promote and assist the free flow of information among citizens and specially among rural populations, women and youth organizations and socio-professional organizations,
- Adoption regional policy related with demographic issues so as to balance socio-economic development with population and Harmonize standards among Member states.

Table 5: Selected regional indicators for ECOWAS (2014)	
GDP	US$716.7 billion
GDP per capita	US$2130.4
Area (sq. km)	5.1 million sq. km
Total population	339.8 million
Total imports	US$113.2 billion
Total exports	US$138.7 billion
Source: United Nations Conference on Trade and Development statistical database (2016)	

3.3.1.8 Southern African Development Community (SADC)

The South African Development Community (SADC) was formed on 17 August 1992 as a successor to the Southern African Development Co-ordination Conference (SADCC), which was established in 1980 in Lusaka, Zambia. The main objectives of SADC as indicated in the amended treaty includes, among others, promoting sustainable and

equitable economic growth and development, maximizing productive employment and use of resources; achieving sustainable use of natural resources and effective protection of the environment etc. As SADCC transformed in to SADC in 1992, the legal basis of cooperation among member states was redefined from a loose and informal one to a more formal and legally binding agreements. The purpose of the new SADC was also redefined to be a spearhead organization for successful economic integration of the South African region (AU, 2016). SADC had the largest level of trade with Africa, averaging $53.8 billion in the period from 2007 to 2011 (UNCTDA, 2013, p. 20)

SADC ushered in a new era for regional economic integration and cooperation among countries in the Southern Africa region after the Cold War, a troubled colonial past, liberation wars, apartheid rule in South Africa, and long period of economic and military destabilization that happened in the region. SADC symbolized the transition from a purely political coalition of former frontline states to a comprehensive partnership with wider and deeper program of regional integration (Vanheukelom & Bertelsmann-Scott, 2016). Table 6 summarizes the eight major RECs, their members, specific objectives and their current status.

3.3.2 Performance and Status of RECS

The RECs are the building blocks of the Africa economic integration. The AU has bestowed clear mandates, roles and responsibilities and also specific activities bounded by time fame. The RECs also have prepared series of strategic plans and different action plans to effectively discharge the tasks given to them by their member counties and articulated in their agreement to establish the RECs. Since the entry in to force of the Abuja treaty the RECs have accomplished different tasks in different magnitude and level. Some like EAC and ECOWAS have performed better than other and other like IGAD and CEN-SAD are lagging behind due to different economic and political reasons.

No Table 6: RECs recognized by the African Union

No	Community & Members	Specified objective	Current status
1	**East African Community (EAC/2000)-** Burundi, Kenya, Rwanda, Tanzania, Uganda	Full economic union	• FTA, Custom Union and Single market established
2	**"Common Market for Eastern and Southern Africa (COMESA/1994)-** Angola, Burundi, Comoros, Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, Zimbabwe"	Common market	FTA established
3	**Economic Community of West African States (ECOWAS/1975)-** Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo	Full economic union	FTA and Custom union established
4	**Southern African Development Community (SADC/1992)-** Angola, Botswana, DRof the Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic, of Tanzania, Zambia, Zimbabwe	Full economic union	FTA established
5	**Economic Community of Central African States (ECCAS/1983)-** Angola, Burundi, Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Republic of Congo, Equatorial Guinea, Gabon, São Tomé and Principe, Rwanda	Full economic union	FTA established
6	**Community of Sahel-Saharan States (CEN-SAD/1998)-** Benin, Burkina Faso, Central African Republic, Chad, Djibouti, Egypt, Eritrea, Gambia, Libya, Mali, Morocco, Niger, Nigeria, Senegal, Somalia, Sudan, Togo, Tunisia	Free trade area and sectoral integration	Study on feasibility of FTA launched.
7	**Inter- Governmental Authority on Development (IGAD/1996)** - Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan, Uganda	Full economic union	• Multilateral programmes elaborated in key priority areas
8	**Arab Maghreb Union (UMA/1989)** - Algeria, Libya, Mauritania, Morocco, Tunisia	Full economic union	FTA underway, conventions in force for investments, payments, and land transport.
	Sources: (UN ECA, 2004)		

Review of treaties and protocols of the African RECs revealed that the program, depth and priorities of the RECs differs from one another. Nevertheless, all the RECs have some common agenda in their drive for regional economic integration which includes, but not limited to trade and trade-related programs like removal of tariff and non-tariff barriers, rules of origin etc. The RECs also work on different programs policy harmonization and the duties and responsibilities of members thereof, creation of workable business environment, programs to attract more FDI (Zelenka, 2015, p. 9).

In spite of the slow and sometimes regressing developments in the regional integration which is mainly orchestrated by the RECs there are some positive developments in some sectors including transport and communication, trade, free movement of people, information sharing and energy. Five of the eight AU recognized RECs, namely EAC, COMESA, SADC, ECCAS, ECOWAS, have already established free trade area while CEN-SAD, IGAD and AMU are working to complete the free trade area (ECA, AfDB, AU, 2017, p. 14). In addition EAC and ECOWAS have already established the Custom Union. Most of the RECs are running programmes related with transport and logistics to get rid of legal and administrative bottlenecks to trade and to harmonize customs, improve overall trade efficiency and facilitate transit. In this connection, ECOWAS and SADC have introduced broader programs to facilitate the regional transport service and network.

In the energy sector, RECs are developing regional policies to efficiently utilize hydropower electric sources and minimize energy costs. In this regard in 1995 twelve SADC member states have taken the initiative to create the Southern African Power Pool (UN ECA; AU, 2006, p. 8). Similarly, in the communication sector some RECs including AMU, COMESA, ECOWAS and SADC have made good stride to create a strong regional connection using high tech information and communication technologies (ICT). These RECs and their member countries have successfully taken advantage of the ongoing globalization and global revolution specifically in communication sector (UN ECA; AU, 2006, p. 8).

Motivated by the apparent achievements of the EU single currency, Euro, interest in regional and sub-regional monetary integration has increased in the continent since the early 2000s (University of Cape Town, 2014 –2016, p. 7). 14 African countries have a

common currency, the CFA franc (MO ibrahim Foundation , 2014) most of which are the west African countries that are members of ECOWAS. Moreover EAC member states have signed Protocol on 30 November 2013 in Kampala, Uganda to establish the East African Monetary Union during the EAC Head of States Summit.

3.3.3 Key milestones of the Abuja Treaty

The African Economic Community (AEC) set a time frame of 30-39 years, for a far reaching economic transformation of the continent which is categorized in to 6 phases. The following table summarizes the stages with the key milestones.

Table 7: Key milestones of the Abuja Treaty

Phase	Duration	Key milestones
First stage	1994-1999	• Strengthening of existing regional economic communities (RECs); establishing new RECs in regions where they did not exist previously
Second stage	1999-2007	• Stabilization of tariff and non-tariff barriers, customs duties and internal taxes in each REC • Schedules for the removal of such barriers • Harmonization of customs duties • Strengthening of sector integration • Coordination and harmonization of the activities of RECs
Third stage	2007-2017	• Establishment of a free trade area and customs union in each REC.
Fourth stage	2017-2019	• Coordination and harmonization of tariffs and non-tariff systems among RECs, leading to a continental customs union
Fifth stage	2019-2023	• Common sector policies • Harmonization of monetary, financial and fiscal policies • Free movement of persons and rights of residence and establishment
Six stage	2023-2028	• African Common Market • Pan-African Economic and Monetary Union • African Central Bank and a single currency • Pan-African Parliament • Development of African multinational enterprises
Source: UNECA		

In a way to realize the targets set in the African Economic Community, large numbers of protocols related with trade and custom, infrastructure and on different other sectors were

signed. The protocols deal with large areas of trade, economic development, infrastructure etc. The full list includes:

- Protocols on trade and customs (trade liberalization)
- Protocols on sectoral and infrastructure development and cooperation
- Protocols on special treatment and exemptions to certain categories of countries
- Protocol on relations between the African Economic Community and others
- Protocol on full involvement of peoples of Africa in the African Economic Community process
- Protocol on establishing the Court of Justice to ensure adherence to African Economic Community process and settle disputes

A total of 26 protocols were assigned under the above listed broader areas of operation which includes, among others, RECs, regional continental organizations, elimination of tariff and non-tariff barriers, simplification and harmonization of documents and procedures on trade, intra REC transit facilities, rules of origin and Reexport of goods, free movement of people and residence permits. Protocols related with infrastructure deals with agriculture, science and technology transfer, manufacturing, environment, natural resource and energy, transport and communication. Protocols on capacity building, education and training, health and population issues, civil societies have also been signed.

3.4 Intra-African trade

One of the main objectives of the African integration agenda is to increase the intra-African trade on goods and services by eliminating or minimizing trade barriers and liberalizing trade. Boosting the intra-Africa trade and economic ties is believed to improve welfare by allowing African citizens to have access to goods and services from cheaper producers through a comparative advantage. Moreover higher intra-Africa trade, in proportion to Africa's overall trade with the rest of the world, empowers Africa vis-a-vis the rest of the world and speed up its economic independence. Intra-Africa trade is expected to create employment opportunities and hence increase income, and facilitates product specialization. Moreover intra-Africa trade can serve as an engine of growth for pave the way for an integrated and prosperous Africa.

Research on trade has showed that countries that trade more and well integrated into the global trading system have realized sustainable development and change in their economies. This is true both in Africa and elsewhere. To this end most of the African countries, regional and continental organizations like the African Union and the ECA etc, are exerting maximum effort to promote and enhance trade among the Africa countries. In this, a brief review of the level of the intra-African trade is made.

Intra-African trade as a share of total trade and Africa's GDP

Figures 1 and 2 represent the overall picture of intra-African exports and imports between 1995 and 2013. As percentage of gross domestic product (GDP), the intra-African trade in 2013, stood at around 9%. This is very low compared to intra-regional trade in other parts of the world. In the same manner the intra-Africa trade in 2014 was found to be 14% of Africa overall trade, which implies that 86 percent of Africa's imports and exports were traded with the rest of the world. Despite some fluctuations, the average intra-African trade has constantly remained around 15 per cent of Africa's total trade over the past decade (ECA, 2015).

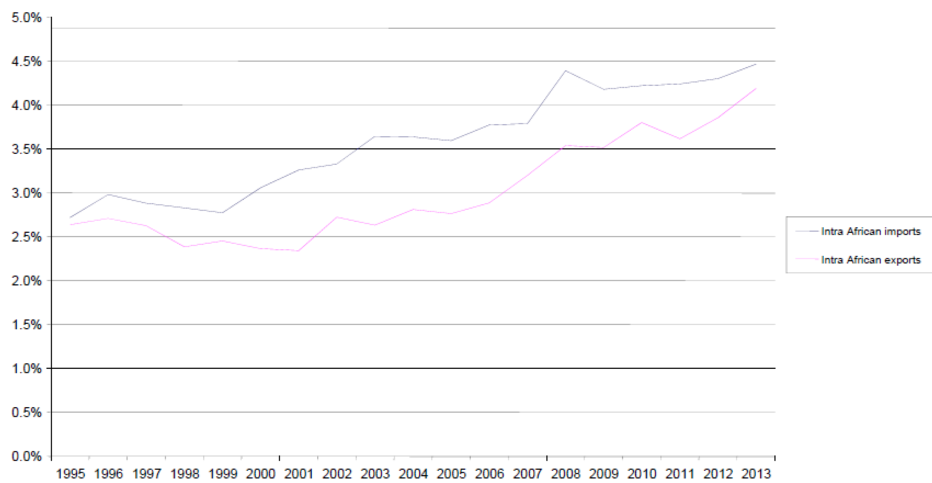


Figure 5: Share of intra-African trade in Africa's GDP
Source: Progress report on intra-African trade, ECA Committee on Regional Cooperation and Integration

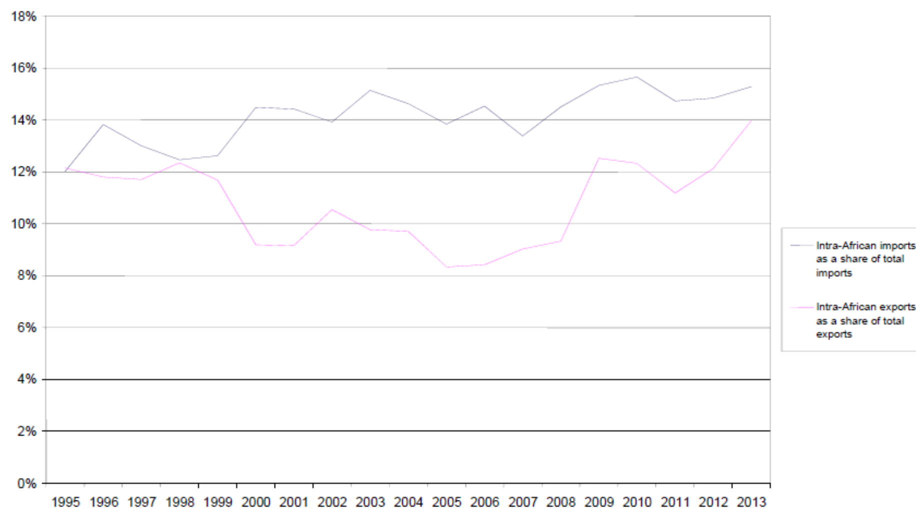


Figure 6: Share of intra-Africa trade in Africa's total trade
Source: Progress report on intra-African trade, ECA Committee on Regional Cooperation and Integration

3.5 Tripartite Free Trade Area (TFTA) & Continental Free Trade Area (CFTA)

Africa's ambition for strong regional and continental economic integration is not limited to RECs. Different initiatives at Supra-REC level is also going on. The TFTA and CFTA are two best examples in this regard.

Tripartite Free Trade Area (TFTA)

In 2008 three RECs namely EAC, COMESA, and SADC have taken the first initiative to establish a larger and more ambitious economic block called the Tripartite Free Trade Area (TFTA). The TFTA was incepted in 2008 in Kampala, by the decision of the Heads of States and governments of the 26 member countries of the three RECs. TFTA will stretch from Egypt to South Africa, almost completely covering the eastern and southern parts of the continent (Zamfir, 2015). The main objective of the TFTA is to create and expand the market for goods and services produced in the countries of the three RECs.

The TFTA identified three main pillars namely infrastructure development, industrial development and market integration. The pillars clearly show the significance of trade for Africa and manifold challenges hindering trade among the TFTA member countries. The three pillars also reflect the strong link between trade and diversity in industrial production and boost the transport and communication infrastructure (Zamfir, 2015). Specific objectives and targets of the TFTA are explicitly stated in the agreement which includes abolition of all kinds of tariff and non-tariff restriction on goods and liberalization of

service trade, free movement of people and capital, harmonizing trade facilitation instruments and procedures for customs clearance, building regional infrastructure, promote competition at the firm, industry and regional levels to make use of regional and global markets and investment opportunities, and secure better position in the global market (Makochekanwa, 2014, p. 186).

The TFTA represents the largest REC in the African continent with combined population of more than half a billion people and GDP of more than 600 Billion. The Tripartite Free Trade Area (TFTA) is expected to liberalize more intra-African trade in the shirt and medium run (ECA, AfDB, AU, 2017, p. 35). Studies on the potential contribution and impact of the TFTA show a considerable rise in intra-regional trade mainly due to the removal of tariff. This is in turn expected to boost trade in the intra-TFTA region by 29 %. Simulations about the impact of the TFTA also disclosed that manufacturing sector, specifically light and heavy manufacturing and also processed food to benefit the most. Accordingly, countries like Egypt and South Africa that have relatively better productivity capacity will attract more investment in manufacturing (Mold & Mukwaya, 2015).

The Continental Free Trade Area (CFTA)

The CFTA is another mega integration project of Africa. As part of the effort to boost the inter-Africa trade, and to reviving and launch the continental integration program the OAU’s Abuja Treaty adopted the establishment of the African Economic Community in 1991. The treaty emphasised the need to establish a continental free trade area as a stepping stone toward the realisation of the African Economic Community. The formation of the African Union added momentum towards implementing this objective (UNCTAD, 2016)

The CFTA is one of the initiatives which aim to create a single continental market for goods, services people and capital. The CFTA is the first step towards the establishment of the African customs union. Through better harmonization and coordination of trade liberalization and facilitation regimes and instruments across RECs and across Africa in general, CFTA is expected to boost intra-African trade (AU, 2017). Negotiations began in 2015 and a text was finalized at a meeting in December 2017 by African trade minsters

(Africa looks to build Continental Free-Trade Area, 2018). The CFTA was adopted in 2012 by the AU Summit with an indicative date of 2017 to put the imitative in to practice.

The AU also endorsed an Action Plan aimed at Boosting Intra-Africa Trade (BIAT) which identifies seven areas of cooperation namely trade policy, trade facilitation, productive capacity, trade related infrastructure, trade finance, trade information, and factor market integration (UNCTAD, 2016). The CFTA is expected to boost with intra- African trade by an estimated 50–200 per cent over the long run. It is also accepted to bring additional benefits in facilitating trade in food security products, improving the stability of fragile countries, enhancing firms' access to inputs and intermediate goods, and reducing the costs of innovation (ECA, AfDB, AU, 2017, p. 3). The CFTA initiative is expected to create great opportunities to boost intra-African trade. The stated objectives of the CFTA

- Facilitate the establishment of the Continental Customs Union and the African customs union by creating a single African market for goods, services and capital and forming the legal bases for the free movement of people.
- Harmonize and coordinate trade liberalization and facilitation policies and instruments across RECs and across Africa in general so as to expand intra African trade.
- Remove the bottlenecks in the regional and continental integration processes which includes the challenges of multiple and overlapping memberships
- Boost efficiency and competitiveness at the firm and industry level by enlarging economies of scale, increasing continental market size and better resource reallocation.

3.6 Institutions working on African regional integration

Different organizations at different level are working to realize African's aspiration for a strong, prosperous and integrated Africa. These organizations can be grouped as national, regional and continental. At national level, the institutional arrangement to handle the integration agenda is bestowed for different ministries, and other similar organizations. Some countries like Tanzania have a full ledged organization dealing solely with regional integration issue. Others (most of the African countries), the ministry of foreign Affairs and other line ministries and engaged in the integration Agenda. At regional level the Regional Economic Communities (RECs) are responsible to coordinate the multifaceted integration activities. At the continental level, there are three main organizations that are

fully engaged in the African integration agenda. These institutions are the African Union Commission, the UN Economic Commission for Africa (UNECA) and the African Development Bank Group (AfDB). In this part a brief introduction of these important institutions is given.

- ***The United Nations Economic Commission for Africa (ECA)***

The ECA was established with the objective of providing technical support through research and policy analysis to build up the institutional capacity of the agents working on regional integration and related issues. It was established in 1958 by the UN Economic and Social Council as one of the five regional commissions of the UN to support the activities of African countries, the African Union and other partners towards sustainable development in Africa. ECA is mandated to encourage and support the economic and social development of individual African States, promote regional integration, and contribute to Africa's development through international cooperation. ECA provides its technical support to the African Union, regional economic communities, member States etc. Working as a regional arm of the UN, ECA aspires to make special contributions to address Africa's development challenges.

In order to do its activities effectively and efficiently, ECA pays special attention to and is engaged in gathering up to date and original statistics. This will help to make its policy research and advice activities to be based on clear and objective evidence which includes promoting policy consensus; providing meaningful capacity development; and providing advisory services in key thematic fields (UN-ECA). ECA's thematic areas include: Macroeconomic Policy, Regional Integration and Trade, Social Development, Natural Resources, Innovation and Technology, Gender and Governance. Working within these thematic areas the ECA endeavors on set of key priority activities of tackling the development challenges of Africa, poverty reduction, sustainable growth and also help African countries establish good governance and promoting international cooperation (ECA, 2016) .

- ***The African Development Bank (ADB)***

The African Development Bank Group (AfDB) was established immediately after the establishment of the Organization of the African Union (OAU). The bank was established in 14 August, 1963 after an agreement was signed in Khartoum, Sudan by 23 founding member States. The bank includes two other financial institutions viz the African Development Fund and 13 non-African countries. The ADF as established on 29 November 1972 by the AfDB. The bank was established to cater financial services for investments projects that are likely to contribute for deeper cooperation and integration of the African economies.

The main objectives of the bank includes mobilization and allocation of resources for investments in member States, and provide technical support and policy advice to support and compliment the efforts of the African countries realize fast and comprehensive economic development (ECA, 2016)

3.7 African economic integration vs international experience

Like Africa, many other regions in Europe, Asia and the Americans realized the economic benefits of integrating economies and took steps to that direction. The European Union (EU) remains one of the most successful examples of integration in the world (UN ECA; AU, 2008, p. 5) and, hence, EU's experience is widely perceived not only as example, but also as a model for regional economic integration in Africa and elsewhere (Sanoussi Bilal, 2007). According to Fraser Cameron there are four main factors for the success of European integration,

- Committed and visionary politicians who realized the imperative of development approach based on supra-national "community method" rather than the traditional nation-state approach. In this connection economic and political support from foreign countries especially from the United States, in the form of the Marshall plan, was very vital, particularly, in the early years of the European integration process.
- The core-countries of the European integration namely Germany and France, have played an indispensable role and remain the driving force behind European integration.

- Strong political of the founding fathers of the European Union, their readiness o share sovereignty and build strong and legal supra-national institution to manage the integration project.
- Consensus building together with commonality and tolerance of the European countries and a readiness to grant significant financial transfers to help poorer member states, such as Greece in the 2007/8.

Despite the similarities in the strategies and objectives of regional integration in Africa and Europe, there are many differences which make taking the EU experience as a model for the integration process in Africa. Resource endowment and technology, historical conditions, startup conditions and methodology are but some of the areas of differentiation between AU and EU. Whereas the architects of the AU relied on the EU template, the two entities are not only spatially apart, but fifty years apart. Hence, while it can be useful to employ tools and lessons from the experience of the EU to critically examine the AU, there are limits to the comparisons. The AU will have to chart its own course, travel at its own pace, find its own rhythm, and write its own history (Babarinde, 2007).

One of the reasons to consider the European experience as a model is its long experience which started by the treaty of in 1957. The EU also exerted concerted efforts to make its integration experience as the best success story. The EU stepped up efforts to influence the process of regional integration of developing countries through comprehensive agreements with regional groupings, which includes, among others trade and trade-related issues and other development concerns (Sanoussi Bilal, 2007). The European Commission provided support for the designing and developing the institutions and programs of the African Union, which contributed for the AU to consider the EU as a model for its ambitious integration project. EU’s vested interest to present itself as a model has also been clearly observed in the creation of African, Caribbean and Pacific (ACP) through the Cotonou Agreement, also known as the "ACP-EC Partnership Agreement" which binds EU to 79 African, Caribbean and Pacific states (ACP, 2017).

3.8 Major challenges of the African Economic integration

The African Union has celebrated its 50th anniversary in 2012. The event was taken as an important moment to take the African continent into another phase with deeper economic,

social and political integration. While celebrating the remarkable achievements that the African integration initiative has realized during the past 50 years, some of the major challenges of the process have also been noted. Despite extensive political and diplomatic rhetoric and extended efforts by African governments, regional and multilateral institutions, and other entities, regional economic integration in Africa hardly produced tangible results except a limited success. Among the many limitations and criticisms directed to the Africa economic integration agenda includes its little contribution to intra-Africa trade and poor impact to accelerate African economic development.

The poor performance of regional blocs is constrained by different economic and political factors which include problems of variation in initial condition, compensation issues, insufficient real political commitment, overlapping membership, policy harmonization and poor private sector participation (Geda & Kibret, 2002). In this part, some of the major challenges of the African economic integration are discussed.

- ***Complex institutional setting***

Different regional and continental organizations and institutions were initiated to harmonize the efforts of cooperation at the sub regional level. The creation of multiple institutions has helped to push the integration agenda forward. However, it also created a duplication of programs and efforts and some misunderstanding and overlap of authority. Hence, the complex institutional setting under which regional integration schemes have been operating has become one of the major challenges of the integration process. (UN ECA; AU, 2006). Moreover, like arrangements of economic integration in other regions like Europe and Asia, most of the treaties forming Africa’s regional economic communities are sophisticated mechanisms.

- ***Multiple and overlapping membership***

Duplication of membership has always been singled out as the most important challenge of the African integration process. The large RECs having multiple and overlapping memberships contribute for wasting effort and resources. Having multiple and overlapping membership complicates the continental integration process and the eventual unification of the regional economic communities into one continental economic as the African Union.

On average, 95% of the members of a regional economic community belong to another community (UN ECA; AU, 2006, p. xvii).

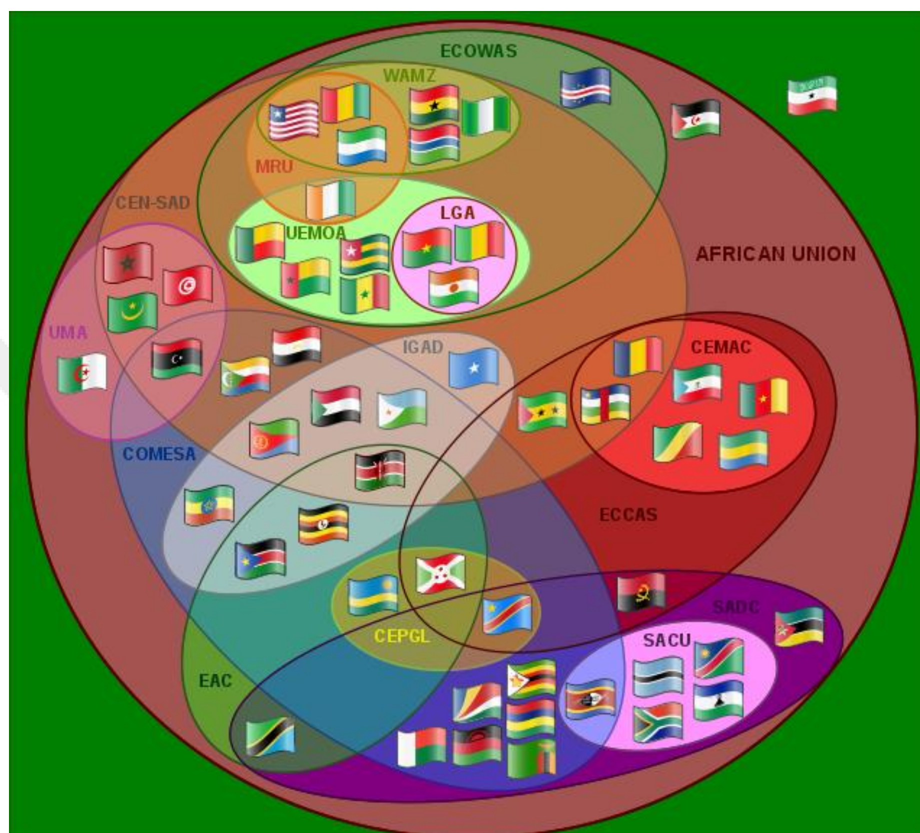
Even though the African Union recognizes 8 RECs, currently there are fourteen inter-governmental organizations (IGOs) that are actively engaged in regional integration issues. These IGOs have several treaties and protocols that govern the relationships between the institutions and their respective member states. Such a large number of regional organizations and protocols implies that out of the 53 African Union member countries 26 belongs to two of the fourteen IGOs, 20 belongs to three of the IGOs, and one country to four (UN ECA; AU, 2006, p. viii).

Although the countries may have economic and political justifications for joining more than one regional block, the various regional clusters and memberships creates different challenges. Overlapping memberships and mandates has created unconstructive multiplication of efforts and programs which in turn has lead to wastage of scarce resources. More grave than these undesirable outcomes membership duplication has rendered the regional economic communities very much inefficient. The joint ECA AU joint report regarding the impact of multiple and overlapping membership identified the following drawbacks:

> Fragmented economic spaces and approaches to regional integration, increased cost of membership in regional economic communities, unhealthy rivalry for donor funds, contradictory obligations and loyalties for member countries, inconsistent objectives and conflicting operational mandates, duplicated efforts, reduced ability for regional economic communities to pursue coherent and Effective integration programmes (UN ECA; AU, 2006, p. 7).

Different proposals have been made to limit membership in RECs but little has been achieved to limit the interest of countries to join different groups. Both the Abuja Treaty and the Constitutive Act of the AU have terms calling for the harmonization and coordination of the policies of RECs. However despite strong efforts, success has been

limited. In this connection the AU, the regional blocks and other relevant institutions need to devise strong mechanism that forces the African states to be a member of only one REC. Figure 6 shows the existence of duplication of membership in the Eastern and Southern African states.



COMESA: Common Market for Eastern and Southern Africa
ECOWAS: Economic Community for Western African States
EAC: East African Cooperation
ECCAS: Economic Community of Central African States
IGAD: Intergovernmental Authority on Development
IOC: Indian Ocean Commission
SACU: Sothern African Customs Union
SADC: Sothern African Development Community
SEN-SAD: The Community of Sahel-Saharan States
Figure 7: African regional economic integration arrangements.
Source: Africa Union

➢ ***Limited capabilities and inadequate funding***

According to the survey done by the African Union as part of its effort to assess regional integration in Africa, poor organizational capacities, inadequate and irregular funding, poor remuneration for staff members were found to among the major challenges facing the

regional economic communities (UN ECA; AU, 2006, p. 7). Member countries of the regional economic communities didn't increase funding commensurate to the extended power that they gave to them. In most of the time member countries pay their membership contributions and other obligations very late. Poor motivation and hesitant behavior related with funding has lead, among others, to weak staffing of the secretariat offices of the regional economic communities that are responsible to manage and coordinate the integration activities in the specific regions.

Poor funding leads to poor executive capacity with in turn leads to the absence of strong and capable supranational entity that can enforce commonly agreed decisions, impose sanctions on governments that breach agreements etc. The situation has put significant limitation for the regional communities to realize the ambition of African governments to establish a prosperous, integrated, and peaceful regions and continent.

➢ ***Little complementarity across economies***

Endemic poverty across most of the Sub-Saharan African countries and the subsequent low purchasing power resulted a fall in effective demand in Africa. The low level of demand contributed to poor economic integration and trade. Reduced degree of complementarity among and across economies due to weak manufacturing and industrial development has contributed for slow integration.

Many African countries have basic, small and medium sized industries and lack sophisticated and large scale manufacturing enterprises. The only exception to this type of manufacturing is South and North Africa, which has a better and advanced industrial sector compared with the rest of Africa. The low and demand and complementarity problem is further exacerbated by the existing fragile communication and transport system.

➢ ***Week industrial base***

High dependence on agriculture and primary commodity has left the African economies to be highly vulnerable to price fluctuations of these commodities in the global market. Except the oil producing countries, agriculture constitutes the larger share of income for most of the African countries. Similarly, agriculture remains the major sector for employment. To ensure sustainable economic development in Africa, the continent should

gradually industrialize its economy. Africa needs to add value to its exports by processing its natural resources and primary commodities. Africa's existing export structure, highly concentrated on raw materials and unprocessed or partially processed commodities, is hindering the African economies to fully avail their economic potentials to reach acclaimed level of economic development and strong economic integration.

Industrialization is an imperative for Africa to meet most of the economic and social objectives of Africa. Accelerated and deep structural transformation from agriculture based to industrial economy looks the only viable development strategy to eradicate the endemic and awful poverty in Africa. Industrialization in Africa is believed to boost economic growth by reallocating factors of production from less productive to more productive sectors and, hence, lead to sustainable and inclusive growth and fast and deeper economic integration (ECA, 2016, p. xvi).

With appropriate policy, inter Africa trade can lead to industrialize African economy. African countries, regional and continental institutions responsible for trade and economic integration need to designing practical trade policy that can promote trade in intermediates: joining, creating, and upgrading along value chains (ECA, 2015). African countries need to make sure that their industrialization program is not compromised with some of the bilateral and multilateral trade agreements and negotiations that most of African countries are indulged in. In order to harmonize trade policies with industrialization programs and maximize their contribution to national economic development there should be strong coherence between national development strategy, trade policy, and industrial policy. In their quest for industrialization African countries should give priority to agro-processed products and value addition to mineral exports. They should also focus on regional markets via enlarge intraregional trade before entering the international market and global supply chain.

According to the report by the UN Economic Commission for Africa (2016), transforming mineral exports volume by just 5% before exporting them can create 5 million jobs a year. This is indeed a large amount for African economies that are suffering from high unemployment rate and low income. Added to this, recent estimates show that African countries spend about $30 billion each year to import processed food from different parts

of the world. With this import-export structure, it is clear to see the significant contribution of industrialization to reverse these trends through value addition to Africa's primary commodities and raw materials. The impact of industrialization on job creation is also equally important.

Continued dependence on traditional agriculture and the services sectors could help Africa to achieve limited growth. However, Africa cannot register sustainable growth with this existing business as usual modus operandi. Africa needs to industrialize. Industrialization has the capacity to generate employment opportunities (direct and indirect) and creates strong forward and backward linkages with other sectors of the economy. With this features industrialization can help to transform African economies and also ensure sustainable economic growth and faster economic integration both at regional and, gradually at continental level (UN-ECA, 2015).

- ***Lack of strong regional economies***

Successful and efficient regional initiatives can be achieved in a better way when there are some strong economies that can serve as a focal point for the regional economic process in the region. This was practically realized in the integration process of the EU and other regions. European integration was successful largely because of France and Germany's willingness to serve this role (UN ECA; AU, 2006, p. 9). The role of Germany in the establishment and progress of the European Union was instrumental. In the middle of the 1990s Germany had one of the world's largest and strongest economy in the world with much higher efficiency than other European economies.

Having strong and well functioning economy and financial capability Germany has played a significant role as the focal point for the functioning of the European Union. Germany had strong Currency, the Deutch, and strong and efficient central bank the Bundesbank, which also served as a model for the European Central Bank. Germany has made huge contribution to the European Union's budget. Only in 1996, Germany contributed 2/3 of the EU's annual income (Katzenstein, 1997).

Such strong economies that can play a pivotal role in the African integration process; similar to what Germany did in the EU, is missing in Africa. Most of the African

economies are too weak to support the other less fortune countries. Very few governments are willing to serve as the paymaster in the regional economic process.

➢ ***Diverse political agendas of countries***

Most of the African governments have divergent and sometimes conflicting political and economic interest detrimental to the common interest. Some countries, especially neighbours, have deeper political, cultural conflicts which in some cases may lead to armed conflict between the nations. Boarder conflicts, ethnic and social hostilities play the bases for widespread political divisions between the African nations. In addition the local dynamics, the diverse political agenda and foreign policies of European powers that colonized the region made the inter-state political problems more complex and difficult to solve (Izuagie, 2014).

➢ ***Other challenges***

According to the joint study by the Economic commission for Africa there are other challenges that are hindering the African economic integration process. Some of these challenges include:

- Lack of clarity about the gains and losses of integration sometimes becomes a cause for countries to stick to regional integration programs. They hesitate to implement agreements like elimination of tariffs. Such behaviours contribute for slow progress of the integration process and hence continuous barriers against the free flow of goods and services between nations.
- Insufficient capacity and resources among the member countries and regional economic communities to effectively organize the regional integration process. Some of the regional communities lack clarity regarding the vision, strategies, and plans of the regional integration process. This leads to wrong interpretation and application of the 'principle subsidiarity' and, hence, mix up national and regional roles and responsibilities.
- Divergent and unstable national macroeconomic policies and lack of consistency and coordination in sectoral cooperation and macroeconomic policies applied by the RECs.

Ineffective and poor system for the planning, coordinating, organizing, implementing, managing, monitoring, and evaluating the regional integration initiatives.

- Absence of viable mechanisms to coordinate, implement and monitor integration programs and policies at the national/country levels.
- Failure to incorporate and harmonize regional integration objectives, plans, and programmes in the national development frameworks of member countries.

CHAPTER 4

METHODOLOGY: MEASUREMENT & INDICATORS OF ECONOMIC INTEGRATION

Introduction

It is generally assumed that regional economic integration helps to boost growth and welfare through reduced barriers, increased trade and investment, facilitating factor mobility etc. Accordingly, regional integration arrangements are increasing year after year, according to the report by the WTO. As regional integration arrangements increased both in number and depth, the need for assessment and measurement of integration schemes become imperative both from theoretical and policy perspective. Hence, there is a growing effort to build theoretical and empirical models that can be used to assess the level and impact of regional economic integration.

In the last decade, economists have developed different measurement tools and models to better assess regional economic integration arrangements both for theoretical as well as practical use. Better assessment tools can also help to make an easy and practical comparison between different regional integration schemes. With the objective understanding more accurately the direction, speed and depth of the regional integration process, individual countries, regional and international organization that are working on regional integration increasingly felt the need to monitor the integration process (Lombaerde P. D., Dorrucci, Genna, & Mongelli, 2009).

Studies on regional economic integration have resulted in the development of wide range of theories, models and methodologies. Researches on regional integration are made for different purposes some of which includes assessing the impact of regional economic integration on growth, FDI, the role of integration on employment creation, trade creation and diversion etc. However, most of the existing theories, models and research methods on regional integration use single variable, usually trade, to make their analysis. The study of

the classical trade creation and trade diversion analysis dominates most of the old and contemporary studies on economic integration, both at regional or global levels.

However, regional integration is a complex economic, political and social phenomenon that cannot be successfully measured or assessed by using a single economic variable (ADB, 2010). This methodological limitation seems received greater attention in recent times by both the academic and policy researches. Accordingly, recent studies to assess the level of regional economic integration are using the composite approach.

In this chapter an introduction to the theoretical and practical aspects of the ***composite indicators*** for the assessment of regional economic integration is made. The composite indicator model is the most comprehensive regional economic integration assessment tool increasingly used in both theoretical and empirical studies. The composite indicator model is used by many regional and international organizations including, but not limited to, the Economic Commission for Africa and the African Union to assess the progress of the regional integration program in Africa. The model is also used by the EU and ASEAN to develop better policy frameworks regarding the economic integration process in their specific areas.

Unlike the traditional gravity model which is mainly based on data on trade and income, the composite model uses different economic and non-economic variables. It is a comprehensive tool to measure where a region or a country stands in the integration process. The integration index produced using the composite model helps to design appropriate policy interventions to improve integration and maximize the benefits thereof. Considering the variety of the data used in the composite model, it is a more powerful tool to study regional integration initiatives. More information about the composite model and related methodological issues is given in the following parts of this chapter.

4.1 Measurement of regional economic integration

Regional economic integration is gaining momentum through time both at the global and Africa. New initiatives are made in different parts of the world with the objective of boosting economic growth through increased trade, investment, fiscal and monetary policy integration, etc. However, little has been done to identify indicators and measurement of

economic integration. Indicators have significant implication for the designing and application of appropriate public policies and strategies. Understanding the process and measuring the level of economic integration with the right indicators is crucial to make regional economic integration initiatives a success. Policy makers some time employ measures of cross-country trade and investment flows to gauge levels of integration. Such measures are not incorrect; they are incomplete (Prakash & Hart, 2000, p. 95). Hence there is a need to develop indicators in a systematic and comprehensive way. Developing indicators for regional economic integration is an economic as well as political exercise. Prakash and Hart believes that

> developing indicators involves confronting political issues. What we choose to measure (if it can be measured at all) and how we measure it is not value-neutral-the politics of identifying indicators is important. By focusing on specific dimensions of economic activity, indicators significantly influence policy debates (2000, p. 95).

4.1.1 Approaches to measure level of integration

According to Prakash and Hart there are two approaches to measure the levels of economic integration.

a. Institutional approach

The institutional approach deals with the stage of convergence of institutions or coordination among countries. This approach states that the minimum the institutional barriers for trading, the higher the potential for countries to integrate their economies and boost cross-border trade. Some of the institutional bottlenecks for economic integration include tariffs and nontariff barriers, restrictions to foreign direct investment (FDI), capital controls, technology transfer etc. Removing these barriers will pave the way for greater economic integration among countries in a region. Hence, countries in a trading block must strive to completely remove, or at least minimize such type of institutional bottleneck to move towards greater and deeper economic integration.

These and other institutional obstacles can be removed in different ways. Countries may take a unilateral or bilateral action to remove these obstacles. Countries in a trading block can also take multilateral action to remove or minimize the extent of these blocks. The determination and coordination of the right institutional setup, often, requires the creation of supranational regional organizations. Such organizations play an important role to facilitate negotiations and agreements between countries. The regional Economic communities RECs like IGAD, ECA and COMESA can play similar role in the Horn of Africa and East African regions.

b. Approach based on the outcome of integration (Actual integration)

The second method is concerned with the outcome of integration rather than the regional trade institutions. In this regard the ratio of foreign trade to gross domestic product (GDP) and the ratio of FDI inflows to GDP are the most prominent techniques used. In recent times the latter has gained acceptance due to an increase in FDI faster than trade among as a form of international economic activity. Since FDI and trade represent the two major cross boarder economic activities, combining FDI-based and trade-based indicators is expected to provide a better way to measure regional economic integration. Another approach to measure level of integration, deals with the integration of factors of production, known as the micro-foundations of economic activity. Including factor-based indicators in measuring the level of regional economic integration gives more realistic picture of the process. Hence, to assess levels of regional economic integration, a combined use of the flow of goods, services, and investments and also the flow of factors of production is required.

Assessing regional integration from both the institutional and outcome perspective has some advantages (Lombaerde, Flôres, Iapadre, & Schulz, 2011, p. 327). The first advantage is that it helps to understand the diverse nature and aspects of regional integration in different regions. In reality there is always some element of institutional and actual regional integration in most of the regional integration arrangements. For example while the EU has good record in both actual and institutional aspects of integration while East Asia has relatively high record of actual integration with low level of institutional integration. Comparison of the EU and Asian integration experience revels that while the

East Asian integration is driven by market to develop regional production chain, the EU integration is founded, mainly, on joint policy orientation adopted by EU governments that are designed to promote regional integration. The situation in the Latin American countries is also different from that of the EU and East Asia. Regional integration in Latin America is dominated by high level of institutional integration with relatively low level of actual integration with lower level of outcome.

Another advantage of assessing regional integration using both the institutional and actual aspects of integration is that it provides information to better understand the relations between the decisions adopted towards integration and the actual level of integration. Such kind of analysis provides a convenient framework to appraise the performance of institutions and policies of regional integration. Such type of analysis would help to answer questions related with regional integration process related with the efficiency of regional institutions in attaining set goals, the capacity of member countries to coordinate and implement joint policies and programs etc.

4.1.2 Developing indicators

While developing indicators to assess and measure regional integration initiatives, changing of economic or non economic variables to integration indicators is crucial. Though each variable may have its peculiarities, setting some general criteria for selecting the right and appropriate indicators is important. The need to construct criteria becomes very much necessary when developing a multi-dimensional system.

Indicators can be categorized as traditional (Comparative) and relative (reflexive). Comparative system of indicators is used to monitor different regional integration processes in the world. It has the advantage of direct comparison between regions related with a particular variable. On the other hand the relative or reflexive indicators are used for comparing the performance of each region against its set objectives. The World Bank (2002) used the comparative system of indicators to make a comparison of regional integration initiatives in different parts of the world. It is also possible to use both types of indicators jointly. Such an approach is used by the UNECA in its system of Indices used to measure the status of Economic Integration Effort in Africa (UN ECA; AU; AfDB, 2016, p. 4).

Indicators can use qualitative, quantitative or both types of data depending on the type of indicator and the purpose it was developed. Using both types of data, though have the risk of reducing clarity, can be more attractive. The World Bank (2002) suggests accompanying the quantitative data with qualitative assessments. In international and interregional contexts, qualitative assessments look more difficult to implement than quantitative ones. Some of the most frequently used criteria for selection of indicators include ***policy relevance, Simplicity, validity, availability of data, and reliability***. Hence potential indicators selected for composite analysis should fulfil all or most of these criteria.

Policy relevance is critical condition to include an indicator in the composite model. Developers must be sure that the indicators will be related with one or some of the issues for which the intended policy is formulated. A clear link between the indicator and the policy will make the policy implementation easy and motivate policy makers to execute the policy recommendations. Simplicity is the sinequanone of selection of indicators. It emphasizes the importance of an indicator to be presented in an easy, appealing and understandable manner for the users of the composite indices.

Similarly, validity of the indicators and data must ensure that they reflect the facts and phenomena to be measured. To this end data must be collected in scientifically acceptable techniques and methods. Methodological rigor is needed to make the data credible for both experts and laypeople (EU, 2016). The sensitivity and reliability criteria should also be taken seriously to make sure that the indicators are sensitive enough to detect even a little change in the composite system. Finally, the data should be reliable, i.e. the same conclusion should be reached if the research is conducted by two different researchers or the same result should be found using two or more measurements of the same indicator.

4.1.3 Dimensions and categories of variables

After determining the scope of indicators for assessing regional integration, specific variables need to be organized systematically. Considering the multidimensional nature of regional integration, the variables could be organized according to ***policy areas*** (trade, investment, migration, competition, agriculture, industry, infrastructure, legal cooperation, etc.). This approach is known as the traditional sectoral approach to integration (UN ECA; AU; AfDB, 2016, p. 13).

There are a number of proposals developed by different regional and international institutions to classify the variables that constitute the indicators for assessing regional integration. The European Commission (EC), European Central bank (ECB) and the UNECA are just some of the international institutions that are engaged in the development of tools with the objective of assessing regional economic integration.

4.2 Composite indicators

Composite Indicators (CIs) are used in different fields of study and development sectors; economy, technology, governance, education, health etc. One of the important applications of composite indicators is ***regional economic integration***. In the field of economic integration, composite indicators are used to assess the performance and status of a country or a region in the integration scheme. The CIs are increasingly recognised as a useful tool in policy analysis and public communication. Composite indices provide simple comparisons between different regions or countries which help to easily understand and compare complex issues in wide-ranging fields like environment, economy, society or technological development (OECD; JRC, 2008). A composite indicator is an aggregated index comprising individual indicators and weights that commonly represent the relative importance of each indicator (Nardo, Saisana, Saltelli, & Tarantola, p. 5).

There is growing demand, among academics and policy people, for summary indicators. Accordingly, the number of CIs developed and used around the world is growing year after year. Over 300 reports are evaluated by international organisations that present composite indicators (UN-ECA et al, 2015). The United Nations and the World Bank are among those that intensively use the composite model and indicators. According to the same report, the United Nations, for example, uses the composite indicator to build Technology Achievement Index and the Human Development Index and to rank countries. Similarly the World Bank uses the composite model to build international ranking of governance indicators.

Some of the advantages of the composite indicators stem from their capacity to provide information that is simple, easy to remember or communicate and also form their benefit to make comparisons and rank countries or regions easily. Interpretation of composite indicators often seems easier than classifying and analysing trends in wide range of

variables (Saltelli, 2007). Nevertheless, composite indicators must be used with caution. This is because; poorly constructed composite indicators can lead to wrong and misleading policy recommendations (OECD; JRC, 2008, p. 13). Misinterpretation of the aggregated indices can transfer wrong information to user about the facts under investigation.

4.2.1 Benefits of a composite Regional Integration Index

The composite regional integration index is a crucial and indispensable policy and technical instrument for all that are dealing with regional integration and related issues; regional institutions, national government organs, the media and the general public. A consolidated regional integration index enables countries and regional institutions to have a clear picture of their achievements towards the achievement of accepted goals and programs within a specified period of time. The index also helps to see the countries and sectors lagging behind the integration targets and those that are doing well within the integration framework.

The integration index helps policy makers and the general public to get a general picture regarding the progress towards full-fledged economic integration within the regional economic community. Moreover the index also enables countries to gauge their performance viz-e-viz other countries in the trading block. The integration index, for example, produced by the ECA, the African Development Bank and the African Union Commission enables to summarize information from the many areas that regional integration covers into a single number (ECA; AU, 2015).

Pros and cons of composite indicators

The composite indicators have advantages as well as disadvantages. In order to use the composite indicators, one need to properly understand these advantages and disadvantages so that to mitigate that would otherwise happen as a result of wrong applications of the indicators. The most important advantages (pros) and disadvantages (cons) of the composite indicators are given below (OECD; JRC, 2008).

Pros

- Summarize complex, multi-dimensional realities with a view to support decision makers.
- Easier to interpret than a series of many separate indicators.
- Can assess progress of countries over time.
- Reduce the size of a set of indicators without dropping the underlying information base.
- Thus make it possible to include more information within the existing size limit.
- Place issues of country performance and progress at the centre of the policy arena.
- Facilitate communication with general public and promote accountability.
- Help to construct/underpin narratives for lay and literate audiences.
- Enable users to compare complex dimensions effectively.

Cons

- May send misleading policy messages if poorly constructed or misinterpreted.
- May invite simplistic policy conclusions.
- May be misused, *e.g.* to support a desired policy, if the construction process is not transparent and/or lacks sound statistical or conceptual principles.
- The selection of indicators and weights could be the subject of political dispute.
- May disguise serious failings in some dimensions and increase the difficulty of identifying proper remedial action, if the construction process is not transparent.
- May lead to inappropriate policies if dimensions of performance that are difficult to measure are ignored.

4.2.2 Developing composite indicators

According to Lombaerde et al, the process of building of indicators for regional economic integration is somehow similar to building of indicators for other purposes, with little differences (Lombaerde, Flôres, Iapadre, & Schulz, 2011, p. 324). Regional integration indices are developed based on a predefined theoretical and legal framework. The legal frameworks include sectors of the economic integration process that are agreed upon by member countries in their treaties, protocols and other related agreements. In the case of Africa the basic legal frameworks includes the Charter of the Organization of African Unity, the Treaty Establishing the African Economic Community (Abuja Treaty), the Constitutive Act of the African Union, the African Union Minimum Integration

Programme and the African Union's Agenda 2063 (ECA; AU, 2015). In developing indicators for the Horn of Africa region, the treaty establishing the RECs in the region and related protocols are indispensable legal documents. Hence, the dimensions and indictors should comply with these and other documents that are related with the regional integration process.

According to the report by the ECA regarding the approach and methodological issues of the Africa Regional Integration Index,

> "the methodology developed for the index focuses on measuring progress in the following key areas: liberalization of trade; free movement of persons, goods, services and capital; development of regional infrastructure; development of production capacities and policy harmonization" (2015, p. 4).

Principles to select the right indicators

Regional integration is a multi-dimensional process with a wide array of dimensions and sub-dimensions. Accordingly the list of potential indicators is much larger. While developing a set of indicators the purpose of the indicator and the particular condition of the region must be taken in to account. There is no one-size-fits-all type of indicators that can be used for any condition and for all regions with different economic background and integration history. The selection of the best and proper indicators that fits the purpose should follow a number of guiding principles. In the next paragraphs a list of the most widely used criteria is given.

4.2.2.1 Relevance

Relevance is one of the most important principles for the development of indicators. While building the list of indicators, attention must paid to define the scope of the regional integration; broader vs narrow scope. Hence, relevance can be taken as a relative concept which can be defined considering the context of the integration process being assessed. Hence conceptual clarity is therefore a condition ***sine qua non*** for a good selection of indicators (Lombaerde P. D., Dorrucci, Genna, & Mongelli, 2009, p. 14)

4.2.2.2 Data availability

Availability of data related with the multiple variables is a crucial input for developing the right mix of indicators. One needs to have comprehensive and systematically comparable data in order to make proper assessment and intra-regional comparison between economies and sectors within the trading economic block. Hence data related with the composite indicators should be easily accessible. However, availability and access to relevant regional integration data is problematic. Data limitations are more serious in the case of developing countries which includes most of the African countries including the Horn of Africa region. According to Lombaerde et al indicator systems on regional integration crucially require data on intra-regional interaction and interdependence, but these are usually not systematically available.

To fill the data limitations international data sources like that the UN comtrade and of IMF are often used. Consolidated trade data are available from UN Comtrade, but for several regions, data on bilateral intra-regional flows are missing (Lombaerde P. D., Dorrucci, Genna, & Mongelli, 2009, p. 15). Similarly the IMF data repository contains time series data on large number of economic variables including but not limited to national income, investment, saving, employment etc. However, the data from these and other international organizations is not free from limitations. Data and information related with even OECD member countries is not well organized (Lombaerde et al, 15). Data related with non economic variables like social and cultural, political interaction, diplomatic ties, cross boarder migration and conflict, education and knowledge transfer etc is more challenging and limited.

4.2.2.3 Timeliness

Timeliness of data related with integration should also be taken as important criteria for the construction of the right system of indicators for assessing regional economic integration. The principle of timeliness implies reducing the time gap between the actual realization of the phenomena and its publication. In building the right systems of indicators and composite indices, the more recent and fresh the data the better it explains the assessment.

4.2.2.4 Comparability

Most studies on regional economic integration made comparison between different variables. Comparison between economies, sectors, and regions based on a particular performance becomes necessary to identify the performances. Accordingly, special attention should be paid to data comparability in a research activity that comprises the analysis of two or more regional economic integration initiatives. However, comparison between different regional blocks is not an easy process. Take for example the intra-regional trade share which is often used as good indicator of 'success' of a particular economic integration scheme.

The intra-regional trade simply expresses intra-regional trade as a percentage of total trade of the countries of a particular region. Sometime, however, this simple indicator becomes complicated because of its correlation with the size of the region; i.e economically large (small) regions logically trade more (less) within their region and less (more) with the rest of the world. Different indicators can produce different sectoral and country rankings making comparability of indicators a complex subject (Lombaerde P. D., Dorrucci, Genna, & Mongelli, 2009, p. 17). It shows the inherent problem related with comparison and heralds the special attention and care while doing comparison in assessing regional integration process.

4.2.3 Steps for constructing a composite indicator

Developing a composite regional integration index passes through different levels which ranges from defining theories and concepts, selection of dimensions and sub-dimensions, identification of indicators, classification in to input, output, outcome and impact indicators, design of tools, and finally data collection and calculation of the index. It is worth to note that regional integration can be calculated at different levels of the integration process: input, outputs, outcomes and impact. Indicators at each stage are taken into account in order to avoid measuring the regional integration form a single perspective. The measurement of all aspects of the integration process is not equally easy,

> some aspects are easier to measure than others and, as a result, ***output and outcome*** indicators are dominant in the index. However, it is still

possible to disaggregate the index in order to measure separately the progress in terms of inputs, outputs, outcomes and impact, which allows a richer analysis and results in better policy advice (ECA; AU, 2015).

There are different ways to develop composite indices. According to the Nardo *et al* there are seven major steps for the construction of composite index that shows the level and performance of a region or individual countries in a given regional integration arrangement. However, it must be noted that these steps are meant to give some general guideline for good practice in developing composite indicators. Developers of composite indicators must know that there are always some arbitrariness and personal judgement by the research which is determined mainly by the purpose of the research (Nardo, Saisana, Saltelli, & Tarantola).

1. Developing theoretical framework
2. Data selection
3. Imputation of missing data
4. Normalisation
5. Weighting and aggregation
6. Back to the data
7. Visualisation of the results

In the following paragraph a brief discussion of the above steps is given.

4.2.3.1 Developing theoretical framework

The construction of realistic composite indicators starts by developing a clear theoretical framework. The theoretical framework must show in clear terms the variable to be measured. The framework should also classify the sub-elements of the variable, choose indicators for each of the sub-components and assign weights in a way that show the relative significance of the individual indicators and the overall composite. The theoretical framework should be developed based on what is desirable to measure and not which indicators are available (OECD; JRC, 2008, p. 22).

The importance of developing the right theoretical framework is very crucial to avoid confusion and create common understanding among the users of the composite indicators. Some economic variables, GDP/GNP for example, have strong theoretical foundation and have been in use for almost half a century and the probability for misunderstanding of it is minimal. Nevertheless, a good amount of multi-dimensional economic concepts do not have well established theoretical foundation and hence are prone for misunderstanding. Hence using composite indicators for some emerging concepts would be subjective and hence might be understood by different people in different ways. The need to avoid such misunderstanding necessitates building proper theoretical foundation of the economic phenomena that we are going to measure or deal with. Developing theoretical framework includes the following process; defining concepts, determining subgroups and identifying selection criteria.

Defining concepts: Well defined concepts helps readers clearly understand what the composite indicator is measuring. While defining concepts reference to the theoretical framework should be made by linking the underlying indicators with the various sub-groups. However, sometimes composite indicator builders may encounter complex concepts that are difficult to define and measure accurately or may be subject to controversy among stakeholders. Maximum care must be paid to minimize such controversial concepts by developing strong theoretical foundation.

Determining subgroups: Complex and multi-dimensional concepts and phenomena can be broken up into several sub-groups which need to be statistically independent. The linkages among the subgroups need sufficient theoretically and/or empirically description.

***Identifying the selection criteria* for the underlying indicators:** The decision to include an indicator in the general composite index or not must be based on a clear selection criteria. The selection criteria should be as simple precise and must clearly show the phenomena being measured; input, output or process (OECD; JRC, 2008, p. 22). Generally speaking composite indicators include both input and output measures.

4.2.3.2 Data selection

One of the difficulties in building a composite indicator deals with lack of relevant qualitative and quantitative date. Data challenges may emanate for different reasons. Data

may not be available due to the fact that some economic or social phenomena or behaviour are difficult to measure or because no attempt has been made to measure it before. Some data may also be difficult to use because it does not allow comparison across countries or missing for some countries. Sometime data may be unreliable due to its poor capacity to measure the phenomena or its lacking of strong theoretical foundation.

Data collection and analysis to develop regionally or internationally comparable indicators is both costly and time consuming. As a result builders of composite indicators are often forced to compromise on the quality of the data they use which may measure only the most obvious and easily accessible aspects of performance (EU, 2016). As there is no 'one size-fits-all' set of indicators, data selection for a composite indicator is often subjective. Accordingly, different indicators with different level of quality might be used to assess the performance of a given phenomena or policy area.

In a situation where relevant data is unavailable or missing, or when comparison between countries or regions is difficult, proxy data can be used as a substitute (OECD; JRC, 2008, p. 23). Proxy measures can be used when the desired data are unavailable or when cross-country comparability is limited. For example, data on the number of employees that use computers might not be available. Instead, the number of employees who have access to computers could be used as a proxy. As in the case of soft data, caution must be taken in the utilisation of proxy indicators. To the extent that data permit, the accuracy of proxy measures should be checked through correlation and sensitivity analysis. The builder should also pay close attention to whether the indicator in question is dependent on GDP or other size-related factors. To have an objective comparison across small and large countries, scaling of variables by an appropriate size measure, e.g. population, income, trade volume, and populated land area, etc. is required. Finally, the type of variables selected – input, output or process indicators – must match the definition of the intended composite indicator.

4.2.3.3 Imputation of missing data

Missing data has a grave consequence in quantitative research resulting biased parameter estimation, higher standard error, loss of information, minimized statistical power, and poor generalization of findings. Accordingly, availability of relevant data is most important

factor in the development of composite indicators. Composite indicators require data for each of the indicators incorporated in the composite index. However, like any other statistical work, data limitations are one of the challenges in composite indicators. Generally data might be available for only particular variables or only for some of the countries in the composite model.

Missing data seriously reduces the reliability of the composite indicator and it will also disturb the relative positioning of the countries being assessed. Data can be missing either in a random or in a non-random fashion (EC-JRC, 2005). Different techniques are available to deal with or mitigate the challenge posed by missing data. However all of these techniques have their own limitations and, hence, are not a complete remedy to deal with the data problem. These techniques are data deletion, mean substitution, regression, multiple imputation, using the nearest neighbour and ignoring (EU, 2016). Brief description of these techniques is given below.

- **Data deletion** –when the amount of missing data is significant, the records of the whole variables or countries is omitted.
- **Mean substitution** – this is the case where the missing values of a variable are substituted by the mean value calculated from the data at hand. The mean value is thus used to fill in missing values;
- **Regression** – By running regression on the other variables, the missing values cab be estimated;
- **Multiple imputation** – this is a statistical technique for analyzing incomplete data sets, that is, data sets for which some entries are missing. Multiple imputation uses a large number of sequential regressions with indeterminate outcomes, which are run multiple times and averaged. Unlike the single imputation e.g. mean/median/mode, the multiple imputation method, produces several values for each missing.
- **Nearest neighbour** – here the missing values are substituted by the most similar variable;
- **Ignore the values-** Sometimes the variable with the missing data is completely is ignored and the average index of the remaining indicators is simply taken.

By the end of this step the builder of the composite indicator should have a complete data set with no missing values.

4.2.3.4 Normalisation of data

As the indicators in a data set often have different measurement units, normalisation of data has to be carried out before aggregating data. Indicators must be adjusted on dimensions such as size, population or income and smoothed for cyclical variability observed over time. Then, they need to be put on a common basis to avoid adding up apples and oranges (EU, 2016). This is done by normalizing data. The following are some of the commonly used methods for normalizing indicators: ranking of indicators across countries, standardisation (or z-scores), Mini-max (Re-scaling), distance to a reference country, categorical scales, indicators above or below the mean, method for cyclical indicators, percentage of differences over consecutive time points.

The choice of a suitable normalisation method to build a composite indicator requires special attention. The objective of the composite indicator and the properties of the data should be taken into consideration during the data normalization process. The normalisation method should take into account the data properties and the objectives of the composite indicator. Some of the following aspects of the data dictates the selection of the normalization method: the type of data, i.e. quantitative or qualitative, whether or not to give special weight for exceptional performance or manners, whether or not the variance in the indicators be accounted, the need for benchmarking of the reference country is required or not etc.

The normalization method used in this research is the Min-Max method. The Min-Max normalises indicators to have an identical range [0, 1] by subtracting the minimum value and dividing by the range of the indicator values (OECD; JRC, 2008, p. 28). Alternatively, Min-Max normalisation could widen the range of indicators lying within a small interval which increases the effect on the composite indicator. Min-Max is calculated using the following formula.

Equation: Calculating Min-Max

$$I_{qc}^{t} = \frac{X_{qc}^{t} - min_c(x_q^{to})}{max_c(x_q^{to}) - min_c(x_q^{to})}$$

4.2.3.5 Data aggregation and Weighting

Aggregation and weighting of indicators and/or variables have a significant result on the overall composite indicator. Builders of composite indicators should select suitable method that is compatible with both the theoretical foundations and the data type. Accordingly important attention should be given to this step in the development of indicators.

- ***Weighting***

Central to the construction of a composite index is the need to combine in a meaningful way different dimensions measured on different scales. This implies a decision on which weighting model will be used and which procedure will be applied to aggregate the information (Nardo, Saisana, Saltelli, & Tarantola, p. 54). Weighting is applied in the calculation of indices if and when the variable under consideration is believed to be more important than the other variables included in the composite indicator. Normalizing the indicators before weighting provides better clearance for the researcher to have more control over the amount of weight attached to the variables.

Weighting of components must be made based on theoretical foundations and hence need an expert opinion. If, for example, the index under consideration is meant to measure economic integration, trade between the countries should be given higher importance than other indicators like societal communication. When used in a benchmarking framework, weights can have a significant effect on the overall composite indicator and the country rankings (OECD; JRC, 2008, p. 31).

Many a time applying equal weights is found to be the easiest and most used weighting procedure. However the equal weight approach may lead to misrepresentation of the actual importance of some indicators and/or variables in the integration process (Lombaerde, Flôres, Iapadre, & Schulz, 2011, p. 335). In relation to weighting the general principle is that **"what matters more weighs more"**. A number of weighting techniques exist such as factor analysis, data envelopment analysis and unobserved components models (UCM), like budget allocation processes (BAP), analytic hierarchy processes (AHP) and conjoint analysis (CA). These weighting techniques are broadly categorized as statistical models or participatory methods. No matter which method is used, weights are basically value

judgements of the developer to better reflect policy priorities or theoretical factors. In constructing the ‘Horn index’ in this research, equal weight is applied for all indicators and dimensions.

- ***Aggregation***

This step deals with the combination of all the components to form one or more composite indices (Mazziotta & Pareto, 2013, p. 71). There are different methods used to aggregate individual indicators. The most used are additive methods that range from summing up unit ranking in each indicator to aggregating weighted transformations of the original indicators. Multivariate techniques as Principal Component Analysis (Dunteman, 1989) are also often used. There are different techniques if aggregation in the literature of composite indicators. Additive techniques are most used that range from summing up country ranking in each indicator to aggregating weighted normalised indicators.

4.2.3.6 Back to the data

Composite indicators are summary values that can give starting information for the analysis of phenomena; economic or other non-economic phenomena. They can be broken down to see the contribution of the constituent variables or indicators. The subcomponents can also be further disaggregated or broken down to know their contribution to the composite value.

4.2.3.7 Presentation and dissemination

As the saying goes graphs can speak launder than words. The outcome of the composite indicator must be presented in a way that is easily understandable and illustrative. Decision-makers and other end-users of the composite indicators must be able to understand quickly and accurately. Indexes produced in a pictorial model can facilitate policy makers at all levels (local, national or regional) to easily identify problematic and lagging areas and, hence, design proper policy intervention to deal with those challenges. There are different fascinating statistical techniques to display composite indicators. This ranges from simple tabular means to more complex multi-dimensional graphics. Bar charts, line charts, trend diagrams, dashboards, radar charts are among the alternative

visual tools used to present composite indicators. The radar diagram is the most preferred diagram to present multi dimensional diagram like the composite index. Hence, all the indices in this research are given using the radar diagram.

Having discussed the major steps used to develop composite indicators, the table below shows the stylised checklist for building composite indicators.

Table 8: Stylised checklist for building a composite indicator
1. **Theoretical framework:** Provides the basis for the selection and combination of variables into a meaningful composite indicator under a fitness-for-purpose principle
2. **Data selection:** Should be based on the analytical soundness, measurability, country coverage, and relevance of the indicators to the phenomenon being measured and relationship to each other. The use of proxy variables should be considered when data are scarce.
3. Imputation of missing data (if needed): Is needed in order to provide a complete dataset (e.g. by means of single or multiple imputation).
4. Normalisation: Should be carried out to render the variables comparable.
5. Weighting and aggregation: Should be done along the lines of the underlying theoretical framework.
6. Back to the data: Is needed to reveal the main drivers for an overall good or bad performance. Transparency is primordial to good analysis and policymaking.
7. Visualisation of the results: Should receive proper attention, given that the visualisation can influence (or help to enhance) interpretability
Source: Adapted from the Hand Book for Constructing Composite indicators, page 20-21

4.3 International Experience in composite indicators

Review of important composite indicators

Using the composite indicators to measure regional economic integration is getting an increasing importance both in the academic and policy area. Large numbers of international and regional organizations are increasingly using composite indicators to assess their progress in regional economic integration. In this part a brief revision of the

experience of different international organizations and research centres (academics) to develop composite indicators is discussed briefly. The organizations include:

- "United Nations Economic Commission for Africa" (UNECA),
- European Union Directorate General (EUDG),
- "United Nations University Comparative Regional Integration Studies" (UNU-CRIS)
- "United Nations Economic and Social Commission for Western Asia" (UNESCWA)
- Asian Integration Index

4.3.1 UNECA Integration Index

The United Nations Economic Commission for Africa (UNECA) is one of the international organizations that uses composite indicator to assess the progress of regional economic integration in Africa. The three continental institutions of Africa namely the African Development Bank (AfDB), UNECA and the African Union Commissions (AUC) have jointly developed an Africa Regional Integration Index (ARII). The ARII is based on five main dimensions of regional integration namely trade integration, regional infrastructure, productive integration, free movement of people and financial integration and macroeconomic convergence. The five dimensions are further divided into 16 indicators selected on the basis of the availability of data and their importance to African economic regional integration. Data for 2010-2014 is used to calculate indicators in each of the dimensions.

4.3.2 European Integration index

The European Union is a unique economic and political union of 28 European countries that together cover much of the continent. Over a period of over 60 years, the EU countries were able to create a strong economically time. The EU is a long term economic and political project that developed from a simple functionalist approached which was started in 1950 by the establishment of the European Coal and Steel Community (ECSC). As stated in the treaty of the EU, 'creating an ever closer union' among the Member States is the main objectives of the union (EU, 1992).

Since its establishment the EU has made significant strides and made important contribution for the economic development of its member countries and the continent at

large. The union has managed to most of the macro economic objectives stated in the treaties through consistent monetary and fiscal policies and institutions. The EU now constitutes the world's largest economic union with the highest GDP and represents the most successful economic union, both at regional and global level. In addition to the ongoing widening of the EU, the uniqueness of the European experience lies in the continuous deepening of its integration process (König, 2015, p. 5).

Efforts has been made to develop systems of indicators to assess the level of economic integration in the European Union and the value additions created thereof. Different academic institutions and policy institutions have developed different methodologies and tools to measure some aspects of the European integration process and gains. Jörg König and Renate Ohr developed a system of integration to assess the level of economic integration in the EU using composite indicators. The EU index developed by König and Ohr contains a total of 25 indicators put under four broader dimensions (2013). The dimensions in the index include: the acquis communautaire, the single market, the economic and monetary union, and the level of economic homogeneity within the union to measure the EU's final aim of 'creating an ever closer union'.

The dimensions and indicators are chosen to reflect two important phenomena of the EU. The first if the single market and the second is conformity dimension with EU laws and institutions. The index measures, on annual bases the level of economic integration for each of the EU member countries separately. The indicators represent the main achievements of EU integration and are mainly macroeconomic in nature. The Acquis Communautaire is the collection of EU law and obligations which includes all the EU's treaties, laws declarations and resolutions, international agreements and also the judgments made by the EU's Court of Justice. The 'EU conformity dimension' with its 6 indicators evaluates the degree of compliance of a EU member country with the rules and regulations of the EU (i.e. the acquis communautaire). Details of the dimensions and indicators of the EU economic integration index is given in the following below.

4.3.3 Asian Economic Integration Index

The Asia-Pacific Economic Cooperation (APEC) is a regional economic block established in 1989 to support the ever increasing social, economic and political interdependence of

the Asia-Pacific region. APEC aspires to promote balanced, inclusive, sustainable, innovative and secure economic development and accelerate regional economic integration among the 21 member countries so as to realize higher standard of living and welfare for their citizens. Member states of the APEC are Australia, Brunei Darussalam, Canada, Chile, People's Republic of China, Hong Kong, Indonesia, Japan, Republic of South Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Republic of the Philippines, Russia, Singapore, Chinese Taipei (Taiwan), Thailand, the United States, and Vietnam.

The Asian Development Bank developed a regional integration index for the Asia-Pasific region and published as the Asia Pacific Regional Integration Index (APRII). The APRII includes six dimensions of socioeconomic nature considered to be crucial to the ongoing regional economic integration in the region. A total of 26 indicators that measures different aspects of regional integration are included to calculate the index divided under the 6 dimensions. The dimensions and indicators of the APRII are given in the table below (Huh & Park, 2017).

4.3.4 ASEAN Economic Integration Index

The Association of Southeast Asian Nations (ASEAN) is a regional economic community established on 8 August 1967. ASEAN is made up of 9 countries that include Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam. As stated in the founding charter of the association, accelerating economic growth of member states and promoting regional economic collaboration and integration is one of the most important objectives of the association. In order to assess the progress of economic integration in the region, the Asian Development Bank developed system of indicators with 3 dimensions and a total of 37 indicators. The three dimensions are trade, FDI and money and finance. There are 12 indicators for trade, 8 indicators for FDI and 17 indicators for money and finance. Intra-regional trade share, trade intensity, intra-regional FDI flow and share, and portfolio share are some of the indicators used in the system.

4.3.5 Middle East and North Africa (MENA) Economic Integration Index

This is a regional Integration Index developed by the United Nations Economic and Social Commission for Western Asia for the Arab World developed which includes trade, FDI and workers' remittances.

Appendix to chapter IV: Alternative models to measure integration: The gravity model

The Dutch economist, Timbergen, is the one who first applied gravity model to bilateral trade in 1962. He used trade as dependent variable between two countries C1 and C2 and GDP and geographical distance as independent variables. Timbergen's estimation showed that GDP made a positive effect on the bilateral trade between the two countries. This implies that countries with larger GDP and closer distance are more likely to have higher trade. The gravity model is also used by prominent international trade economist like Krugman and Obstfeld to analyze the impact of trade between countries. The used the following gravity model in their studies.

$$Tij = \mathrm{A}\frac{\mathrm{YiYj}}{\mathrm{Dij}}$$

Where:

Tij is the total trade flow from origin country i to destination country j

Yi, are the economic size of two country i and j. Yi, are usually gross domestic product (GDP) or gross national product (GNP)

Dij is the distance between two country i and j

A is a constant term.

CHAPTER 5

REGIONAL ECONOMIC INTEGRATION IN THE HORN OF AFRICA

5.1 Index make up: Dimensions and indicators

Selection of Dimensions and Indicators

The regional economic integration index is an assessment tool aiming to offer a picture, both general and detailed, of the state of regional economic integration in the Horn of Africa region. The index is built from **SIX DIMENSIONS AND 20 INDICATORS.** The Dimensions and corresponding indicators are important socio-economic sectors that are crucial for the economic integration of the Horn of Africa region. The dimensions and indicators were selected based on their empirical and theoretical relevance. The empirical relevance of the dimensions and indicators takes different conditions into consideration which includes the economic development levels of the countries in the Horn of Africa and the status of the regional integration in the region.

The legal documents that establish the regional economic communities, to which the countries in the Horn of Africa are members, is considered in the identification of the dimensions and indicators. In this regard, the agreement establishing the Intergovernmental Authority for Development (IGAD), The Treaty for the Establishment of the East African Community (EAC) and also The Treaty Establishing Common Market for Eastern and Southern Africa (COMESA) were consulted. Moreover the Dimensions and indicators are selected due to their relevance and conformity to other continental legal documents and policy frameworks like the Abuja Treaty and NEPAD.

The dimensions were also picked considering their strong theoretical foundation and importance in any regional economic integration initiative. As discussed in detail in chapter 3 of this research, trade, infrastructure, factor mobility, and macroeconomic (monetary and fiscal) convergence are among the most important factors for regional economic integration. Most of the theories and models on regional economic integration and cooperation constitute the dimensions and indicators discussed in this research.

In additions to theoretical and/or empirical relevance, availability of data is an important factor for selection of the dimensions and indicators used in this research. The study of regional economic integration needs huge data of different economic variables. Accordingly, availability of data, both qualitative and quantitative, related with the economic integration process in the Horn of Africa region was an important part of the study. Availability data was, thus, an important factor in the selection of the dimensions and respective indicators. Availability of data forces to compromise the selection of indicators.

Data limitation is one of the challenges in any economic research in the Horn of Africa in particular and Africa in general. Most of the countries and regional institutions don't have a system to collect economic data that can be accessed for academic and policy research. Accordingly, reported regional data were substituted for missed data for some indicators and/or countries. This is in line with the statistical techniques for missing data used by most researchers. The remaining part of this section is dedicated to a succinct explanation of the Dimensions and indicators used in this research.

1. **Trade**
    a. Share of total Intra-regional goods trade (% total intra-REC trade)
    b. Market Concentration
    c. Product concentration
    d. Most favoured Nation (MFN) Applied Tariff
2. **Infrastructure**
    a. Proportion of flight connection
    b. Infrastructure index
    c. Average cost of roaming
    d. Mobile subscription per 1000 people
3. **Talent mobility (free movement of people)**
    a. Regional protocols ratified
    b. Visa to enter to other countries in the region
    c. Remittance (%GDP)
    d. Tourist arrival
4. **Macroeconomic convergence**
    a. Inflation, GDP deflator

b. Current account
c. Foreign Direct Investment (FDI)
d. Outstanding debt /GDP
e. Budget deficit

5. Institutional integration

a. Economic Management index
b. Structural Policies index

6. Productive integration

a. Merchandise trade complementary index

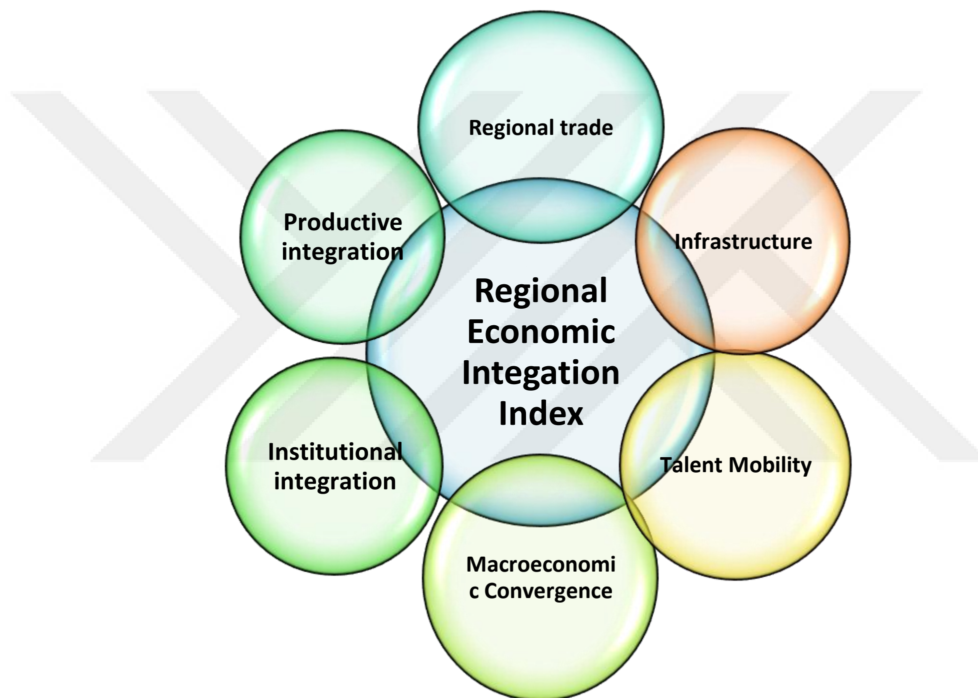


Figure 8: Pictorial representation of Dimensions and Indicators

5.1.1 Trade

In the theory of regional economic integration trade in goods and services comes first in the list of economic activities. Empirical works on integration, weather in Africa or elsewhere, also show the importance of trade in regional economic integration. The importance of trade in the regional economic integration process among the countries in the Horn of Africa is huge. This is clearly demonstrated by the high priority given to trade in the agreement establishing IGAD, (Article 7 (b)), EAC, (Chapter 11 Article 74-77) and COMESA (Chapter 6). All the these treaties and other related protocols in the RECs aim to

liberalize trade by removing all kinds of tariff and non-tariff barriers, harmonize customs duties and internal taxes, facilitate trade through information and promotional services and abolish restrictions to the movement of goods and services.

The significance of trade in the regional economic integration process among the countries in the Horn of Africa is immense. Evidence suggests that trade has high correlation economic growth, poverty reduction, employment creation in Africa, including the Horn of Africa region. Trade is believed to have contributed to current economic development level of the countries in the Horn of Africa, similar to its contribution to the growth of industrialized economies. Success by the countries and regional communities to liberalize trade and remove all kinds of obstacles among the countries in the region will pave the way for millions of people in the region to be free from poverty. Trade also plays a significant role to bring about price reduction and convergence in the region which in turn raise welfare.

Theoretically and empirically trade indicators are used to analyze regional or international trade. The trade indicators help to get an insight for the following and other related issues (Mikic & Gilbert, 2007, p. 5);

- The degree of dependence of a country on a regional trade
- Identify the most dynamic products and/or sectors in world or regional markets
- Measure the contribution of a country or few countries in a region in the overall intra-regional trade
- Compute the trade intense among regional trading blocks
- Get insight about export/import pattern of countries in a trading arrangement which might be either more and more similar (more competitive) or more complementary
- Trace geographical “re-orientation” (if any) of imports and exports after entering a trade agreement or after the experiencing some external shocks such as financial crisis.

With these theoretical and empirical benefits of the trade indicators, four indicators are included in the trade dimensions namely Share of total Intra-regional goods trade (% total intra-REC trade), Market Concentration, Product concentration, and Most Favoured Nation (MFN) Applied Tariff. Short explanation of these indicators is given below.

- ***Share of total Intra-regional goods trade***

Intra-regional trade is the exchange of goods and services between countries within the same region. Intra-regional trade is measured as a proportion of the total value of trade (imports and exports) by the countries in the region. The capacity of countries in a region to get goods and services move more quickly and freely across the region is an important condition for in any regional economic integration process. Fast and efficient flow of goods within the Horn of Africa region brings huge economic benefits to both consumers and producers in the region. Share of intra-regional trade in goods and services is a powerful indicator of the level of economic integration in a regional. Considering this important role the intra-regional trade indicator is included in the index.

- ***Product Concentration***

The product concentration index or (Herfindahl-Hirschman Product Concentration Index) is one of the major trade indicators which measure the degree of dispersion of the export products of an economy. Countries who's exports are predominantly concentrated on very limited products will have concentration index nearer to 1. The higher exports that are dispersed on wide range of export items imply an index closes to zero. Hence, high concentration index indicates that the country is vulnerable to trade shocks and lower index signals the strength of external trade of a country to export multiple products and better capacity to absorb trade shocks. A gradual decline in the market index of a country is an indication of diversification in the exporter's trade profile.

The concentration index seems to contradict with the traditional theory of international trade and the concept of comparative advantage in which specialization of countries on particular goods increases trade and welfare and minimizes costs. However, as proved empirical researches on international trade, dependence on a limited range of exports and a few trading partners made countries vulnerable for trade shocks. This is because if the demand for the main export of a particular country decreases, its export receipts would fluctuations extremely which in turn would destabilise the economy.

- **Market concentration**

Market concentration measures the dispersion of trade between a country and its partners. The index is measured by a value from 0 to 1. A country with a market concentration close

to 1 signifies that the country's exports are predominantly directed to or concentrated in a very few markets. High market concentration signifies a risk of significant loss in export earnings should the partner(s) raise trade barriers of any type. Hence higher market index shows the vulnerability of an economy for economic shocks. A decrease in the market concentration index is an indication of diversification in the exporter's trading partners.

Market and product concentration are sometimes referred as export concentration. Export concentration exhibits a negative link with country size and level of economic development, indicating higher export concentration in smaller and less developed countries, indicating that both size and the stage of economic development are relevant factors in determining export concentration. Note that the formulas to calculate product and market concentration return no value if a country exports to only a single market or exports a single product.

- **Most favoured Nation (MFN) Applied Tariff**

A Most Favoured Nation (MFN) clause is a special privilege offered by a country to another country with the objective of increasing trade with that country. Countries that have the status of MFN are given specific trade advantages, such as reduced tariffs on imported goods. The MFN clause is one of the conditions to increase trade between countries and hence promote economic integration. Considering the important role played by the MFN to advance economic integration in the Horn of Africa region, the MFN is included as one of the indicators in the analysis.

5.1.2 Infrastructure

The link between infrastructure and development, both at the national and regional level, is tremendous. It is the most important critical factor for productivity improvement and sustainable economic growth. Regional economic integration can't be thought of without investment on infrastructure development. The importance of infrastructure development is more serious in less developing countries like those in the Horn of Africa. The results of the Africa Infrastructure Country Diagnostic (AICD) confirmed that 50% of the progress in African economic development is realized through massive investment on infrastructure (AfDB, 2013). According to the report by the Africa Development Group, insufficient infrastructure is found as the third most serious limitation to doing business in Africa.

Inadequate infrastructure remains one of the chief obstacles to intra-regional trade, investment, and private-sector development especially in the Horn of Africa region. Empirical studies have proved that transportation and communication plays a significant role to accelerate economic integration through enhanced trade. National or regional programmes to develop transport and communications networks, energy resources, and information technology would speed up trade and transform the region into the best destination of FDI. Connecting the countries in the Horn of Africa through road, air, railway, or sea makes a significant impact on the ongoing regional economic integration process in the region. The capacity of improving the network of regional infrastructure reduces the cost of doing business and hence prices, through fast mobilization of goods and services across boundaries. The ability for countries to expand mobile phone roaming helps customers to easily access services anywhere in the region.

The infrastructure dimension included four indicators namely, the average cost of roaming, proportion of air flight, the infrastructure index, and mobile subscription per 1000 people. The Africa Infrastructure Development Index (AIDI) is compiled by the Africa Development Bank (AfDB) to measure the level and progress of infrastructure development in Africa. The AIDI includes indicators that have a direct or indirect impact on national economic growth and regional economic integration (AfDB, 2013).

5.1.3 Talent mobility (free movement of people)

Free flow of resources including labour is an important condition for stronger economic integration in a particular region and hence, a good indicator to gauge the status of integration. Free movement of labour is one of the“four freedoms”required for successful economic integration which also includes goods, services and capital. Free movement of labor benefits both the country of origin and destination. People may travel for economic (business and investment), social (education and training) and touristic purpose.

Free movement by people is believed to be the main feature of African integration (AFRAA, 2014, p. 10). Free movement of people enhances talent mobility which in turn reduce wage inequality across countries. It also improves productivity, efficiency, and competitiveness. It facilitates the spread of entrepreneurship and innovation beyond national borders. Free movement of people also helps to reduce the gap in skills and enhances exchange of ideas. Higher freedom to move beyond borders makes a significant

contribution towards regional economic integration. On the other hand, any kind of limits on free movement of labour hinders deeper economic integration. In order to measure the level of free movement of people four indicators are chose, namely regional protocols ratified, entry visa, remittance % GDP, and tourist arrival.

Countries in the region prepare different protocols prepared mainly by the three regional economic communities, i.e. IGAD, EAC, COMESA. Ratification of treaties and protocols among countries in a regional economic block is the first step towards implementing regional integration initiatives. Protocols signed in the framework of regional economic integration are legally binding instruments that create rights and impose obligations on the states that are parties to the treaty and subsequent protocols. The ability of countries in a trading block to sign or ratify different protocol dealing with different sectors and programs is a good indication of a deepening integration. Accordingly, the proportion of protocols ratified by a country (the number of regional protocol on free movement of persons divided by the total number of protocol ratified by a country) is taken as an indicator in the calculation of the regional economic integration index.

The second indicator to measure free movement of people is the issue of visa for citizens from the regional countries. In this case there are three types of visa system. The first is the situation where no visa is required, the second is getting visa on arrival, and the third is visa requirement. In the calculation of the index countries that require no visa get 1, those who require visa on arrival 2 and countries that impose prior visa 3. Remittance is the third indicator used to measure mobility of people which is measured as percentage of GDP. The higher the remittance that a country receives shows that large number of labour form that particular country is working outside.

The fourth indicator included in the index to measure the level of freedom for mobility of people is the number of tourist arrivals recorded in the countries. Being a destination for larger number of tourists implies the countries openness to receive people from other countries. Receiving large number of tourists by a particular country signifies the country’s capacity and readiness for better integration and cooperation. Beyond its economic advantage, receiving large number of tourists facilitates cultural integration, which in turn strengths further economic cooperation.

5.1.4 Macroeconomic convergence

Macroeconomic policy convergence plays considerable role in any regional economic integration process by laying and facilitating the foundation for regional macroeconomic stability and smooth convergence. It promotes public accountability by guiding governments to take tailored polices geared towards achieving priori set targets. Setting and committing macroeconomic convergence criteria is expected to minimize economic fluctuations, which contributes to further macroeconomic stability in a specific region. The underline principle of Macroeconomic Convergence is to achieve and maintain macroeconomic stability by converging on "stability-orientated economic policies implemented through a sound institutional structure and framework" (SADC, 2002). Theoretically and also in most regional integration schemes, inflation, fiscal deficit, public debt, current account balance and budget deficit are considered as the key variables for achieving macroeconomic convergence.

As articulated in many of the African union and other RECs treaties and policies, the essence of macroeconomic convergence deals with the achievement of prudent fiscal and monetary policies, competitive exchange rate and debt policies at the national level and harmonized at the regional levels. A stable macroeconomic environment is considered an essential element for economic development in Africa or elsewhere by attracting FDI in the countries of the economic block. Strong and deeper financial sector integration facilitates the flow of funds and help anchor macroeconomic policies. Strong national and regional capital markets also play a catalytic role in attracting foreign direct investment and promoting cross-border investment. Macroeconomic convergence policies are also crucial for monetary integration which helps deepen regional integration, especially for regional blocks working to create common markets. When countries join a monetary union international trade and economic performance is expected to improve.

Many of the regional economic communities in Africa have set macroeconomic policy convergence targets with different criteria and status due to their historical background and level of economic development. Like the other RECs, Macroeconomic convergence is critical for the economic integration among the Horn of Africa countries to realize their goal. Considering the importance of macroeconomic convergence and monetary integration in a regional economic integration process, the status of macroeconomic

convergence in the Horn of Africa needs continuous assessment. The following table shows the convergence criteria in COMESA, to which all countries in the Horn of Africa are also members.

Table 9: ECA and COMESA convergence criteria

Convergence criteria	Stages of implementation		
	(2005-2010)	(2011-2015)	(2016-1018)
Overall budget deficit/GDP ratio (excluding grants)	≤ 5%	≤ 4%	≤ 3%
Annual average inflation rate	≤ 5%	≤ 3%	≤ 3%
Central bank budget deficit finance	Reduce to 0 %	Abolish	Abolish
External reserves (months of imports)	≥ 4 months of imports of goods/ service	≥ 5 months of imports of goods/services	≥ 6 months of imports of goods/ services

Source: Adapted from: UNECA

5.1.5 Institutional integration

The institutional integration dimension deals with the quality of institutions and policies of countries to insure sustainable development and poverty reduction. Poverty reduction and ensuring sustainable development are among the top policy priorities for almost all of the countries in the Horn of Africa. Large portion of internal and external resources are allocated every year by these countries to realize goals on poverty reduction and ensuring sustainable development. The issues of poverty reduction and sustainable development have both domestic and regional dimensions and hence affects and being affected by regional integration process. Accordingly, assessing the favourability of a country’s institutional framework to deal with the issues of poverty reduction and sustainable development; and their impact on regional integration is important.

Country Policy and Institutional Assessment (CPIA) is a report regularly made by the African Development Bank (AfDB) and the World Bank to measure countries’ capacity to realize sustainable development and poverty reduction agenda which includes the Millennium Development Goals (MDG) and Sustainable Development Goals (SDG). The institutional integration dimension depended on the CPIA report made by the AfDB. Two indicators namely Economic Management index and Structural Policies index are used to gauge the potential and conduciveness of the countries in the region for institutional

integration. The full list of dimensions and indicators are summarized in the table below (World Bank , 2017, p. 88).

5.1.6 Productive integration

Productive integration is about creating a strong supply of goods and services at regional level by interconnecting firms and supply chain. It deals more with trade in intermediate good. As demand for goods and services increase due to increasing consumer, government and investment demands, the demand for intermediate goods that are used in the production of finished goods or services increase. Productive integration implies regional integration at the firm level which becomes an important component of a regional economic integration program. The concept is related with regional value chain mechanism.

In a bid to minimize production cost and be competitive in the international trade firms are organizing their production and investments activities within the global value chains in which different stages and components of a production process are located in different countries. Regional economic integration causes companies to restructure their production regionally. This type of integration enables them to produce some of their goods and service at the minimum level. Most firms in the Horn of Africa countries are poorly connected to other firms in the same industry mainly due to their limited size (AfDB, 2017)

Due to limitation of data, merchandise trade complementary index (MTCI) is the only indicator considered for this dimension. MTCI measures to what extent the export profile of a country (or group of countries) matches the import profile of another country (or group of countries). The value of the index values range from 0 to 1 where 1 indicates a perfect match between the import and export profiles of the countries and 0 indicating a mismatch between the import and export structures of the countries. A preferential trade agreement between countries with a high complimentarily index may gain by expanding trade between the countries.

Table 10: Dimensions and indicators

No	Dimensions and Indicators	Explanation
I	Dimension: Trade	
1	Share of Intra Regional Goods (IRG) trade.	Intra-regional trade is measured as a proportion of the total value of trade (imports and exports) by the countries in the region.
2	Market Concentration (MC)	MC measures the dispersion of trade between a country and its partners. The index is measured by a value from 0 to 1.
3	Product concentration	Measures the degree of dispersion of the export products of an economy. Product concentration is measured by a value from 0 to 1.
4	MFN Applied Tariff	A Most Favoured Nation (MFN) clause is a special privilege offered by a country to another country with the objective of increasing trade with that country.
II	Dimension: Infrastructure	
1	Infrastructure Development Index (IDI).	The IDI measure the level and progress of infrastructure development in the regions. The IDI index includes other sub indicators with a direct or indirect impact on economic development and productivity. It is given as a percentage and linearzed.
2	Proportion of intra-regional flights	This indicator shows the proportion of intra-regional air flight as a percentage of the total air flights from and to the region. It is calculated as the total number of intra-regional flights divided by the total flights to and from the region.
3	Average cost of roaming	'Roaming' refers to using phone while a client is our of his/her country and way form his/her telephone operators network. Roaming arrangements between countries significantly reduces costs and hence, facilitate communication for business or touristic proposes.
4	Mobile Subscription/1000	This is the number of people that subscribed for a mobile service for each 1000 people. The higher the ratio, is an indicator of better communication infrastructure, which is one of the important requirements for domestic and regional integration.
III	Dimension: Free Movement of People	
1	Ratification of regional protocol on free movement of persons.	This indicator measure how many protocols, related with free movement of people, a country has ratified form the total protocols signed in the region. The higher the ratio, the better a country is expedient for a free movement of people.
2	Entry Visa	This indicator is about the requirement or not of entry visa into a country for citizens of the region. There are three visa options. First is no visa requirement at all (highly favourable), the second is getting visa on arrival (average favourable) and the third is compulsory visa from original country (unfavourable) for free movement of people.
3	Remittance (%)	Remittance is money sent by people/expatriate to their home land using different financial transfer instruments including Bank and non-bank institutions. Remittance is an important source of foreign currencies for many African countries including those in the Horn of Africa. It has significant economic benefits for the receiving countries.
4	Tourist arrival	This is the total number of tourists arriving a country in period of one year.

IV	Dimension: Macroeconomic convergence	
1	GDP deflator (annual %)	GDP Deflator is a comprehensive measure of inflation, similar to that of CPI but mainly deals with locally produced goods. It is calculated as a ratio of GDP at current prices to constant prices, i.e. Nominal GDP/Real GDP times hundred.
2	Current account balance (%GDP)	Includes trade balance (the difference between the total value of exports and imports), the net factor income and net cash transfers.
3	Foreign Direct Investment (FDI) flows	Investment made in a country by foreign entities in order to get lasting interest in enterprises operating in a particular country. FDI can flow inward or outward. Most of the FDI in the Horn of African countries is inward (to the region)
4	Government debt /GDP	Government debt-to-GDP ratio is an indicator of an economy's health and a key factor for the sustainability of government finance. It is calculated as a ratio of a country's total gross government debt to its GDP.
5	Budget deficit (%GDP)	Government expenditure more than its total receipts, given as a proportion of its GDP.
V	Dimension: Productive integration	
1	Merchandise Trade Complementarity Index:	MTCI measures to what extent the export profile of a country (or group of countries) matches the import profile of another country (or group of countries).
VI	Dimension: Institutional integration	
1	Economic Management index	These are components of the Country Policy and Institutional Assessment (**CPIA**) index prepared by the African development bank. They show the quality of the policies and institutions of Africa countries. Progress in the quality of policies and institutions in economic management and structural policies is a necessary condition for deeper economic integration.
2	Structural Policies index	

5.2 Data Normalization and presentation

Data Normalization is one of the most important methodological aspects in building composite indices. This is because the different indicators are expressed in different units. For example GDP or GDP per capita is given in dollars amounts, while others like share of intra regional trade is given in percentage. These units need to be normalized (linearized) in order to be able to be meaningfully combined and develop the composite index. The approach used in this research is the Min-Max approach. This is the simples normalization technical compared with other normalizations techniques. The Min-Max is just involves of performing a linear transformation of the original data while keeping the relationships between those values. It is similar to the approach used in the development of the Human

Development Index prepared by the UNDP. In addition to its simplicity, the Min-Max approach helps to easily compare the performance of countries in the region and also at the sectors.

Data presentation

The result of the data analysis is presented using the radar chart. Radar charts are one of the often used visual displays of multiple variables. The radar helps to compare the variables; the variables with similar values, high or low values or outliers within the dataset etc. This characteristic of the radar chart makes them ideal tool to present performance. Radar Charts are a way of comparing multiple quantitative variables. This makes them useful for seeing which variables have similar values or if there are any outliers amongst each variable.

Radar Charts are also useful for seeing which variables are scoring high or low within a dataset, making them ideal for displaying performance. Each variable is represented by an axis which starts from the origin of the chart. All axes have equal distance between each other and arranged radially while maintain the same scale between the axes. Grid lines are often used as a guide by connecting the axes. The value of each variable is plotted along its individual axis and all the variables in the dataset are connected together to form a polygon. The radar chart is also referred as surface chart or spider diagram.

5.3 Data analysis and index

As discussed in the last section, the Horn of Africa Regional economic integration index has 6 dimensions and 20 indicators. The data gathered from different sources was systematically organized and analyzed. The result of the data analysis is given in this part substantiated with appropriate explanations.

To determine the level of performance of an indicator the average of the four best performing countries is calculated. Other values are compared against this regional average. Accordingly if an indicator has a value the average value plus 90% confidence interval, it is considered as high performance and low performer if its value is less than the average value minus 90% confidence interval. Value between these intervals is considered as average. The result of the data analysis is given in two major sections. First, the level

integration at sectoral level is discussed followed by discussion on the overall economic integration of the region.

5.3.1 Sectoral integration

In this part the result of the data analysis for each of the dimensions and their respective indicators is discussed with visual presentation using radar graphs.

5.3.1.1 Trade

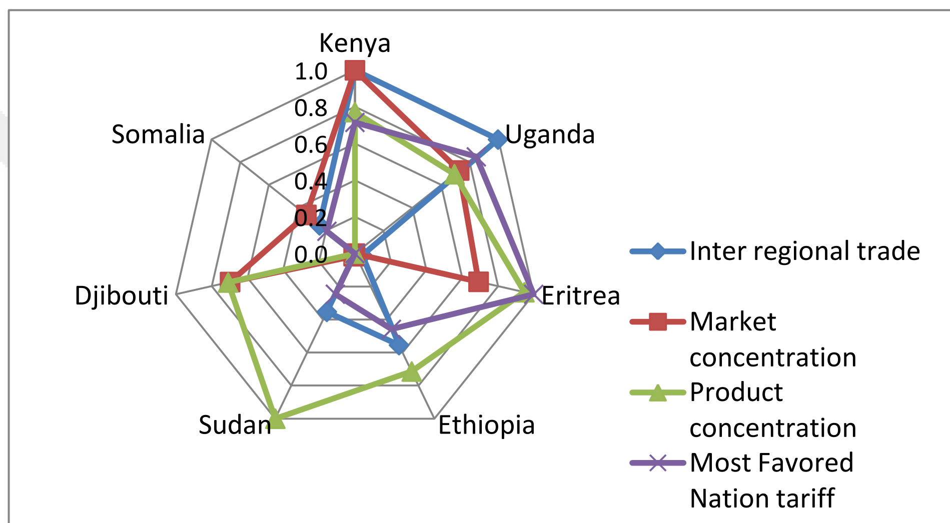
The trade integration index is the simple average of the four trade indicators namely share of Intra regional (IRG) trade, market concentration, product concentration, and MFN tariff. In this dimension no country has show up a high performance in any of the indicators. With regard to the Intra Regional trade, Kenya (1.00), Uganda (0.998) and Ethiopia (0.554) are average performers, while the other countries namely Djibouti, Eritrea, Somalia and Sudan are low performers. For the market concentration indicator four countries; Kenya, Uganda, Djibouti and Eritrea made a high performance while Ethiopia, Somalia and Sudan registered an average performance.

For product concentration three countries namely Sudan, Eretria and Kenya have registered high performance while the Djibouti, Uganda and Ethiopia have average performance. Somalia is the only country with low performance in product concentration. The last indicator of the trade dimension is MFN tariff rate in which Eritrea, Uganda and Kenya have high performance and the other four countries were found to have low performance. Looking the overall integration of the trade dimension reveals that Kenya (0.858) Uganda (0.80), Eritrea (0.670) and Ethiopia (0.432) achieved an average performance while Sudan, Djibouti and Somalia achieved a low performance. The results are show in the table 11.

Despite trade being the most important element in the regional economic integration process, most of the countries in the region have average or low performance. Kenya is the leader country in the region with the highest score in Trade integration index. More over Kenya and Uganda have an average performance in all the four indicators.

Table 11: Trade integration index

Country	Share of IRG Trade	Market Concentration	Product concentration	MFN	Average
Kenya	1.000	1.000	0.772	0.660	0.858
Uganda	0.998	0.727	0.694	0.781	0.800
Eritrea	0.041	0.692	0.948	1.000	0.670
Ethiopia	0.554	0.000	0.714	0.423	0.423
Sudan	0.353	0.016	1.000	0.227	0.399
Djibouti	0.000	0.698	0.709	0.000	0.352
Somalia	0.247	0.338	0.000	0.282	0.217



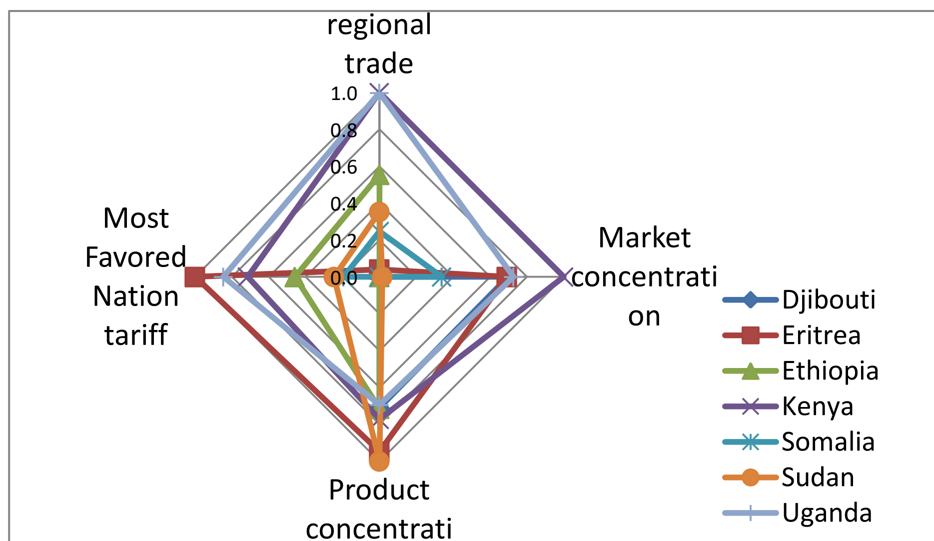
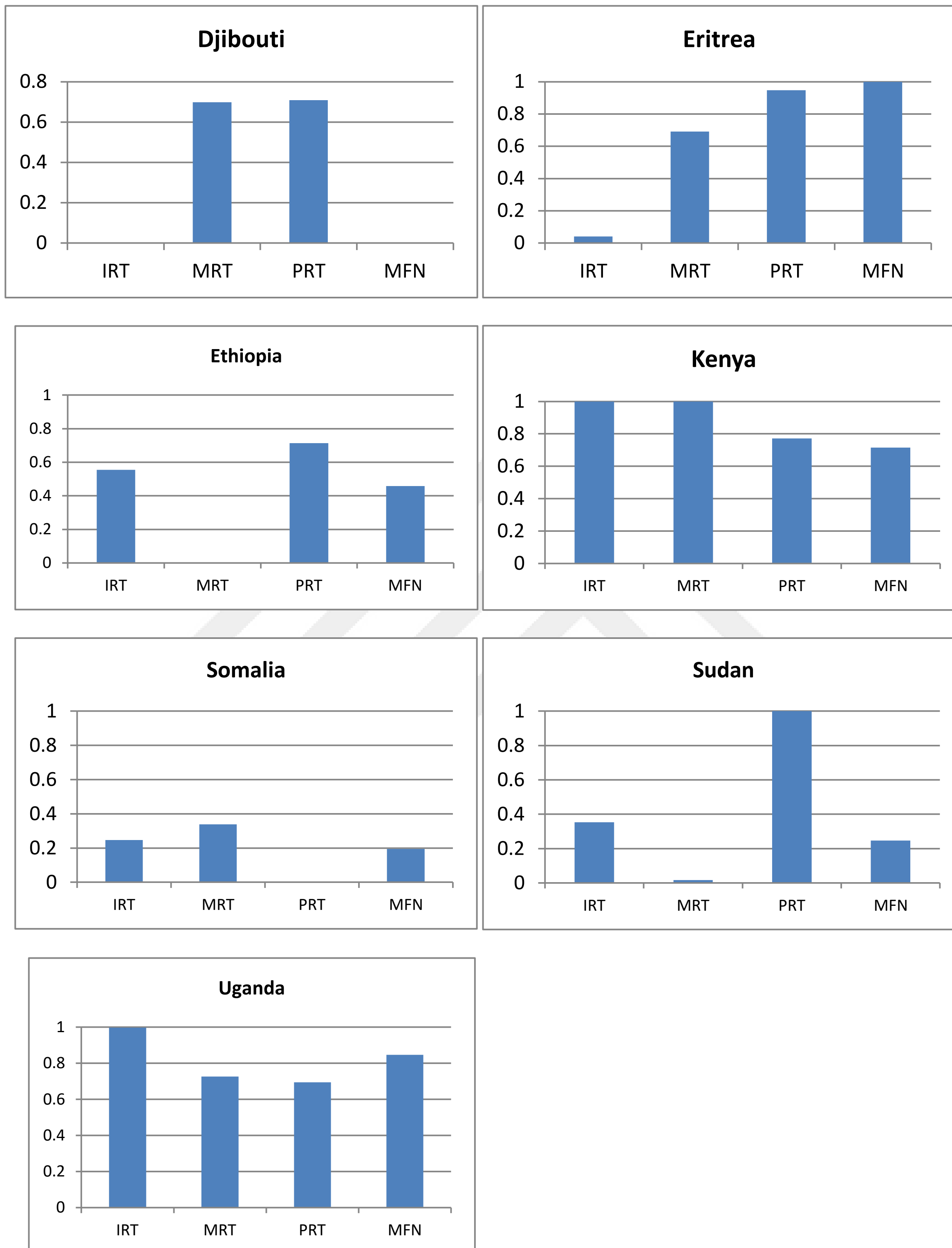


Figure 9: Trade integration

The following column graphs show the level values of each of the four indicators for all the countries in the study.



5.3.1.2 Infrastructure

The infrastructure dimension is made up of four indicators viz, proportion of regional air connections (from the total air connections in Africa), the infrastructure index, the average cost of roaming, proportion of mobile subscription (out of one thousand people). The analysis shows that Ethiopia to have highest (1.0) index in Air connection infrastructure. Two countries namely Ethiopia and Somalia achieved average and the other four countries Djibouti, Sudan, Uganda and Eritrea have low performance. Eritrea's index is the lowest which implies the least interconnected in terms of air transport.

In terms of the regional infrastructure index the four countries namely Djibouti, Kenya, Sudan and Uganda have average accomplishment while Ethiopia, Eritrea and Somalia have low index. Somalia is found to have the lowest integration index in terms of infrastructure. Looking at the data for the coast of roaming, Eritrea, Uganda and Kenya is found to have less roaming cost, which implies higher potential for inter regional telephone communication. Ethiopia, Somalia, and Sudan have average cost of roaming while Djibouti has the lowest index, which implies highest roaming cost. The fourth indicator in this dimension is number of mobile subscription out of 1000 people. Here Kenya has higher index which implies higher number of subscribers. Somalia and Uganda have average number of subscribers. Djibouti, Eritrea, Ethiopia and Sudan have lesser number of subscribers.

Looking at the overall regional infrastructure index revels that Only Kenya has the highest regional average index, and Eritrea the lowest infrastructure index. The other countries have an average index. These countries are Djibouti, Ethiopia, Somalia, Sudan and Uganda.

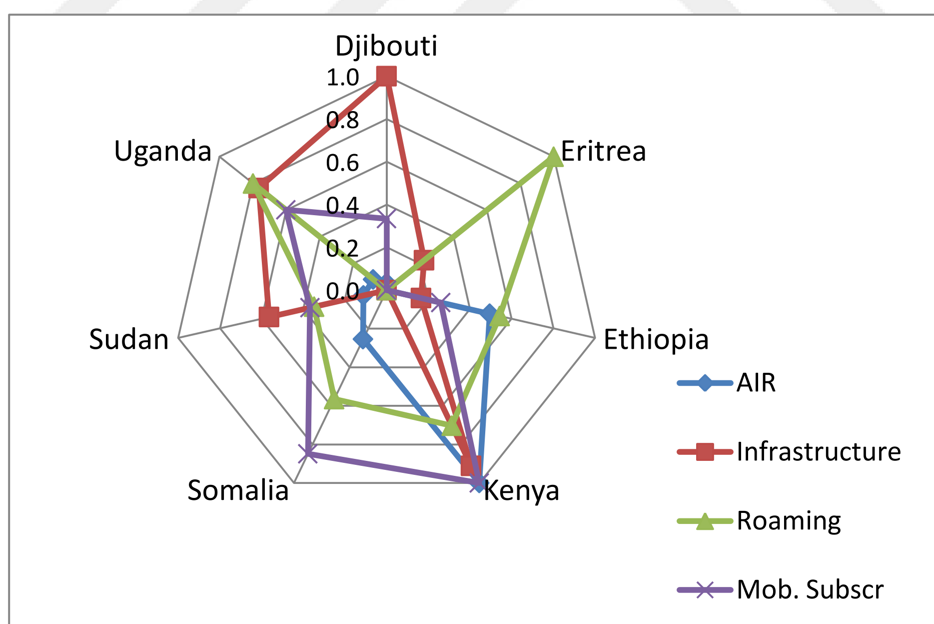
Infrastructure is the most important factor for the development of nations and regions. The same is true for the Horn of Africa region. Infrastructure plays indispensable role for poverty eradication and ensuring sustainable in the Horn of Africa countries and the region thereof. Infrastructure contributes significantly to human capital development, poverty reduction, and the attainment of the Millennium Development Goals (MDGs). Efficient and adequate infrastructure also believed to support African economies to increase the productivity of the manufacturing and service sectors which in turn attract more investment opportunities and generate more jobs. Better infrastructure significantly contribute to social

development like education and health sectors and reduce income inequalities through a more equitable distribution of national wealth.

Despite these and other benefits of the infrastructure sector, the data shows that most of the countries in the regions have poor infrastructure base, which is impeding the economic development of the countries and also slowing down the regional economic integration process. The following table and corresponding radar chart portrays these findings.

Table 12: Infrastructure integration

COUNTRY	Propr. Air connection	Infrastructure Index	Avg. Cost of Roaming	Mobile Subs./1000	Average
Kenya	1.000	0.911	0.703	1.000	0.904
Uganda	0.080	0.765	0.799	0.602	0.562
Somalia	0.254	0.000	0.565	0.849	0.417
Ethiopia	0.495	0.165	0.543	0.260	0.366
Sudan	0.111	0.564	0.347	0.367	0.347
Djibouti	0.034	1.000	0.000	0.334	0.342
Eritrea	0.000	0.224	1.000	0.000	0.306



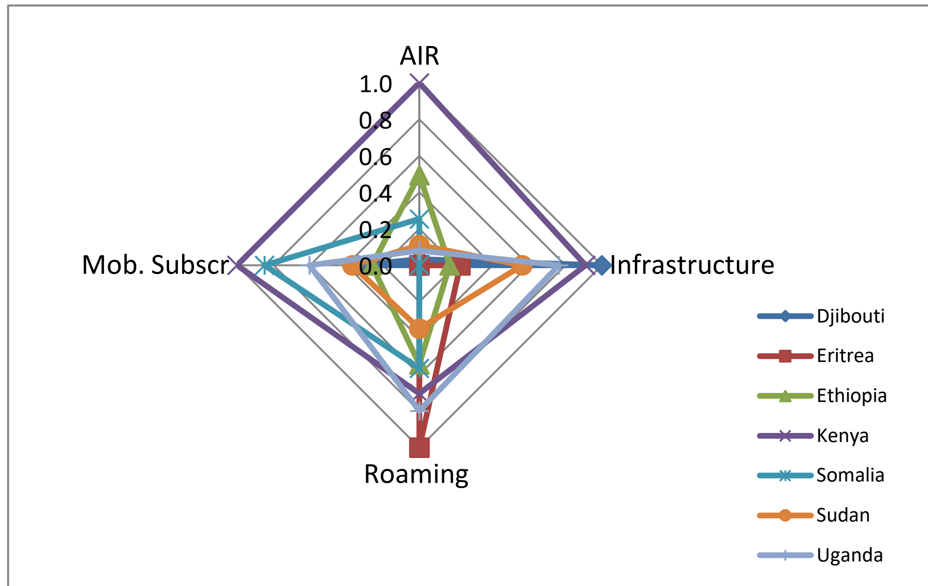
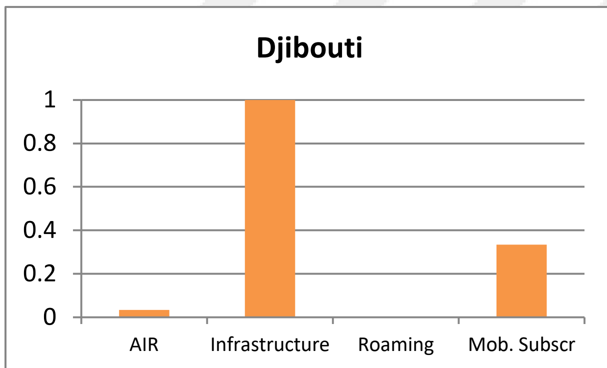
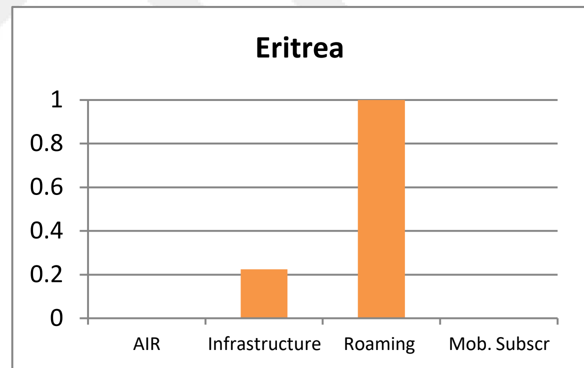
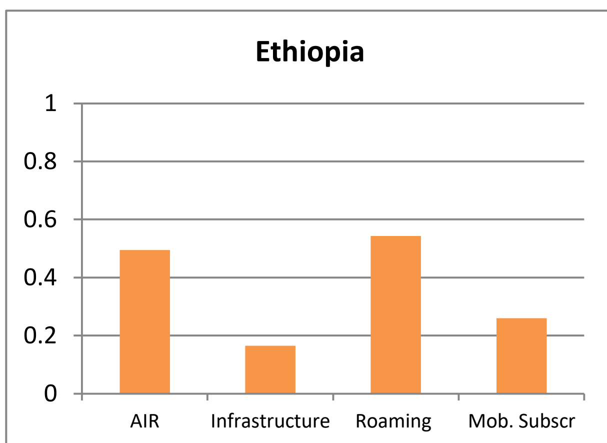


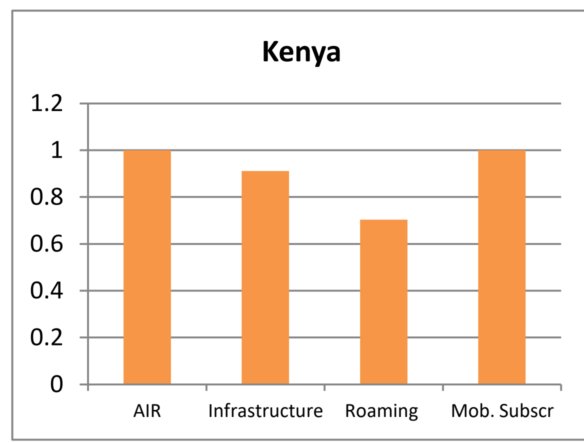
Figure 10: Infrastructure integration

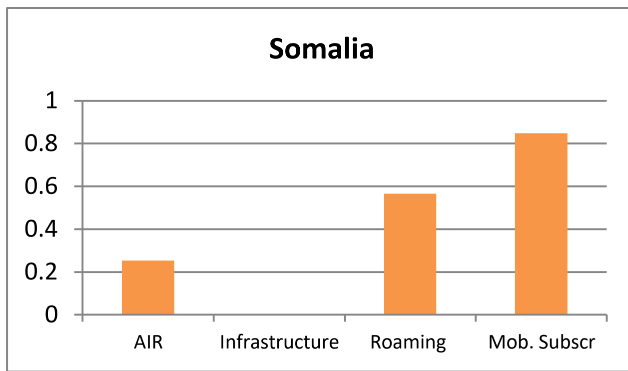
The following column graphs the values of the infrastructure sectoral indicators namely proportion of air connection, the infrastructure index, average cost of roaming, and number of mobile subscribers/1000.

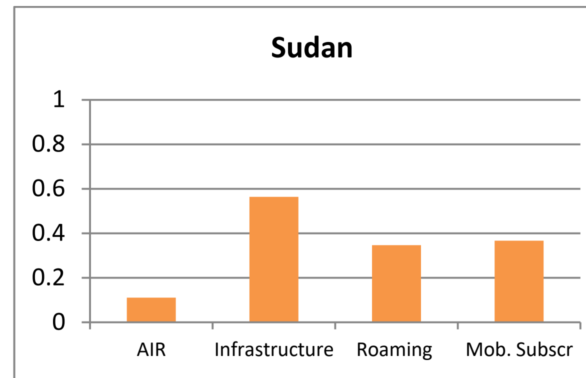


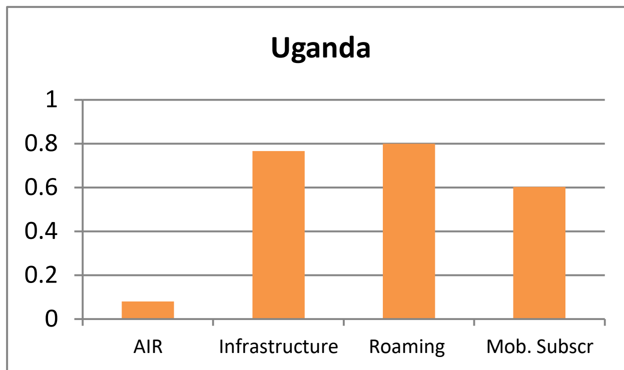












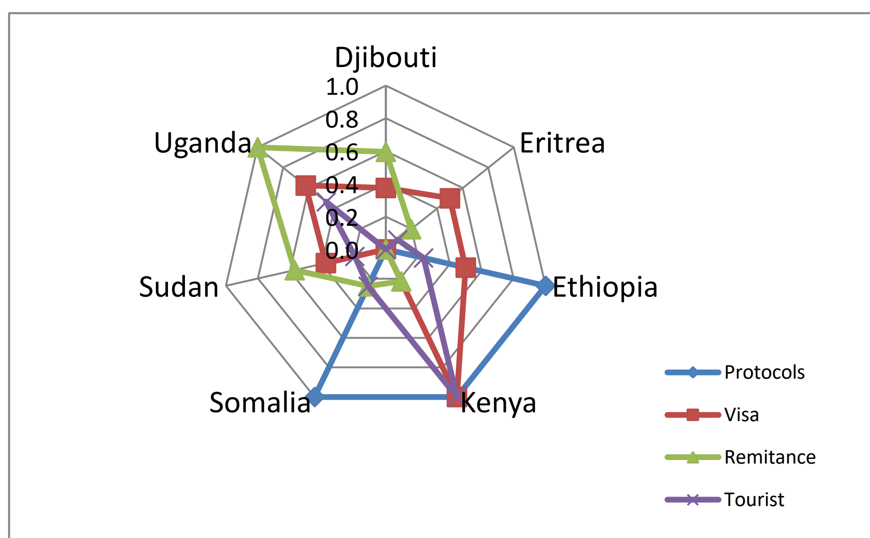
5.3.1.3 Talent mobility (free movement of people)

Free mobility of people among the countries facilitates fast mobility of talent and knowhow within the countries in the region. Free movement of people is one of the freedoms needed for effective regional economic integration. This necessitates avoidance of legal and technical obstacles that hinders free movement of people. All the treats establishing the regional economic communities in the region, underlines the importance of free movement of people as the most important factors to fully enjoy the fruits of regional economic integration. Despite the theoretical and practical importance attached to free movement of people, the regional performance to this goal remains poor. The free movement dimension is made of four indicators namely, the number of protocols ratified, the legal requirements for entry visa, the amount of remittance received by a country as a remittance (as percentage of GDP) and the number of tourist arrivals.

Table 13: Free movement of People

COUNTRY	Protocols Ratified	visa	Remittance % GDP	Tourist Arrival	Average
Kenya	1.000	1.000	0.417	1.000	0.854
Uganda	0.000	0.625	1.000	0.465	0.522
Ethiopia	1.000	0.500	0.256	0.236	0.498
Somalia	1.000	0.000	0.000	0.250	0.313
Sudan	0.000	0.375	0.680	0.194	0.312
Djibouti	0.000	0.375	0.699	0.000	0.269
Eritrea	0.000	0.500	0.087	0.093	0.170

In relation to the number of regional protocols on the free movement of people that are ratified, the result of the data analysis shows that three countries namely Ethiopia, Kenya and Somalia have average achievement which means these countries are moderate regulations regarding the entry of people from the countries in the region. The remaining countries namely Djibouti, Eritrea, Somalia, Sudan and Uganda have low achievement, which implies stiffer regulations and entry requirements for the citizens of the regional countries. More open policy implies better interaction and freer movement of labour within the region. In relation to entry visa, again Kenya holds the highest point (1.0) for its allows citizens of regional countries to enter its territory without visa or by providing visa on arrival. Uganda, Ethiopia and Eretria have average index for visa while Djibouti, Sudan and Somalia have low index.



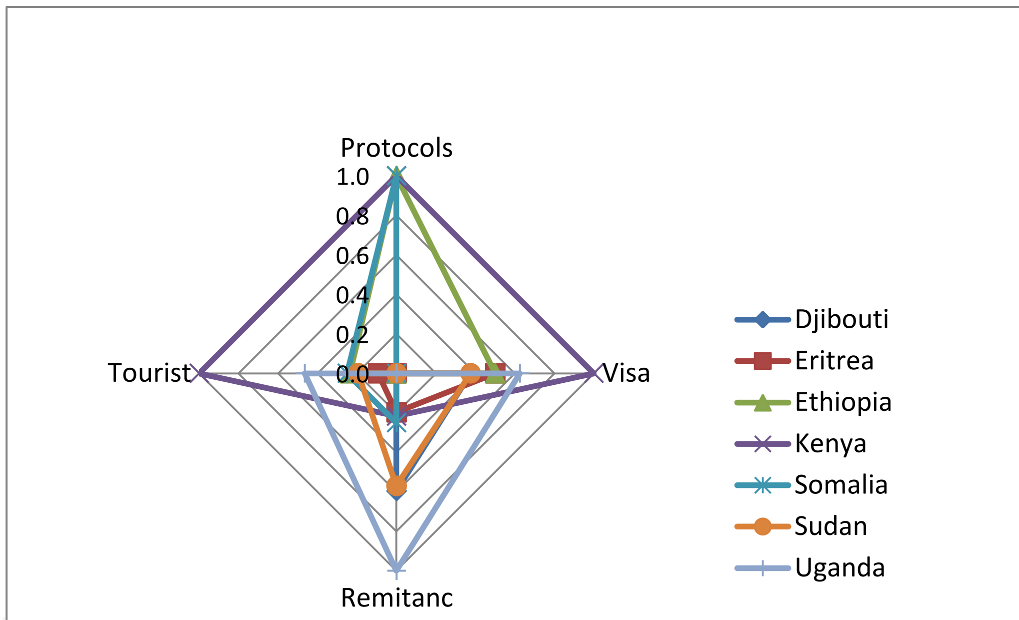
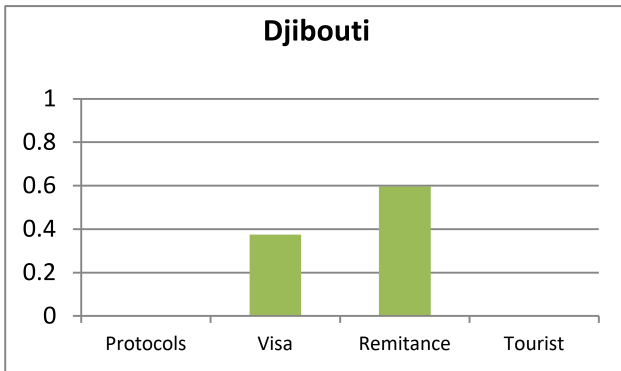
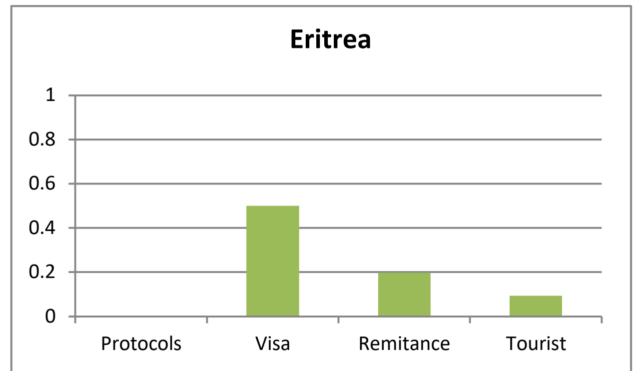


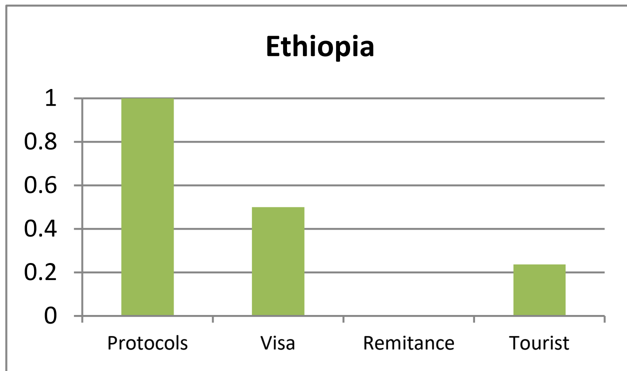
Figure 11: Free movement of people

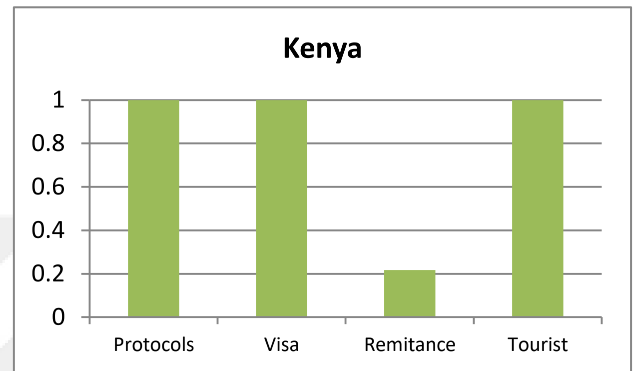
In relation to the amount of remittance received by the countries in the region from their citizens abroad, Uganda received the highest which is more than 4.3% of its GDP. Two countries viz, Djibouti and Sudan have a moderate success in attracting remittance from their citizens abroad. Ethiopia achieved the poorest with an average proportion of 1.15% of its GDP. Similarly Eritrea, Kenya and Somalia also have low performance. Given the importance of remittance as one source of hard currency; countries in the region need to do more to attract more remittance. As for tourist arrival Kenya received the highest number of tourists followed by Uganda and Sudan. Djibouti received the lowest number of tourists in the region. Looking at the overall index for the free movement of people, Kenya has the highest average index of 0.8, followed by Uganda (0.52) and Ethiopia (0.434) which have an average index. Sudan, Djibouti and Eritrea were found to have the lowest index in this dimension.

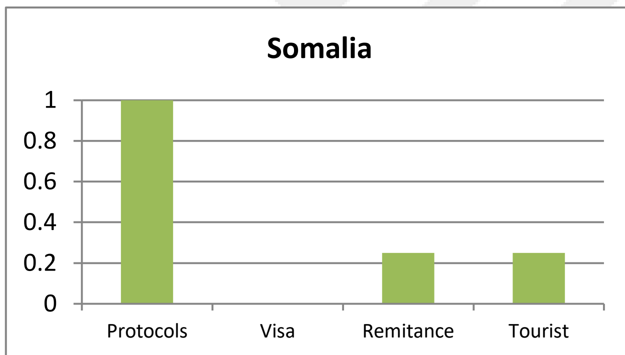
The index is a good indicator that the countries in the region need to do more to get rid of bottlenecks and promote free movement of people among the countries in the region. Free movement of people has a multi dimensions impact on the regional economy. Given the high scarcity of skilled manpower in the region, the chance to move freely from a country to another facilitates of efficient use of scarce human resources. The following column diagrams show the values of the indicators of free movement of people.

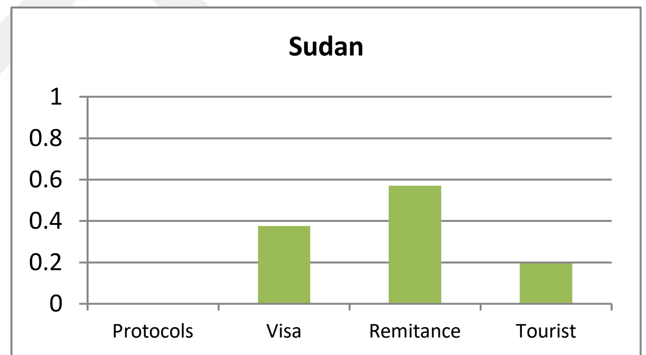

Djibouti
1
0.8
0.6
0.4
0.2
0
Protocols
Visa
Remitance
Tourist

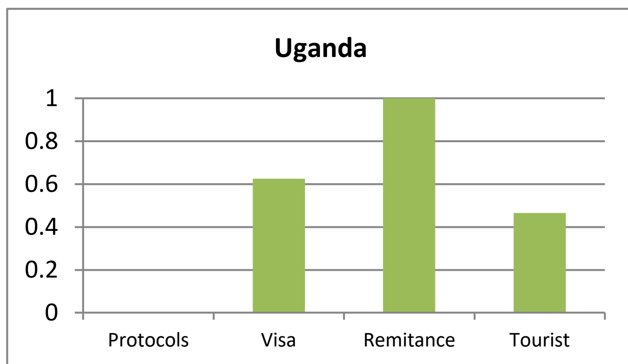

Eritrea
1
0.8
0.6
0.4
0.2
0
Protocols
Visa
Remitance
Tourist


Ethiopia
1
0.8
0.6
0.4
0.2
0
Protocols
Visa
Remitance
Tourist


Kenya
1
0.8
0.6
0.4
0.2
0
Protocols
Visa
Remitance
Tourist


Somalia
1
0.8
0.6
0.4
0.2
0
Protocols
Visa
Remitance
Tourist


Sudan
1
0.8
0.6
0.4
0.2
0
Protocols
Visa
Remitance
Tourist


Uganda
1
0.8
0.6
0.4
0.2
0
Protocols
Visa
Remitance
Tourist

5.3.1.4 Macroeconomic convergence

Macroeconomic convergence is one of the important variables in any regional economic integration process. Macroeconomic and monitary policy convergence among the countries in the Horn of Africa with significant diversity or at different levels of economic development constitutes a major challenge for the regional economic communties and the countries in the region. All the RECs in the region realise, as stated in ther treaties and different protocols, that successful regional and continetal economic integration and cooperation can not be achived without a gradual and successful macroeconomic convergence. The issue of macroeconomci convergence encompass wide policy and program areas aimed at promoting monetary cooperation, secure macroeconomic and financial stability, ensure smooth fiscal policy and public finance management etc.

The macroeconomci convergence dimension is made up of five indicators namely inflation rate (GDP deflator), Current account balance (% of GDP), Foreign Direct Investment (FDI), sovereign debt (%GDP) and public budget deficit (% of GDP). The indicators are taken form the macroeconomic convergeance targets selected by some of the RECs and countries.

In terms of inflation Djibouti was found to be the state with less inflationery trand, which is a good sign of macroeconomic stablility. Kenya and Uganda have almost equal infaltion index which is average rate of inflation. Eritrea, Ethiopia, Somalia and Sudan are found to have higher inflation index. The current account (% GDP) balance for Eritrea is found to be the highest followed by Kenya and Sudan which have average index. Djibouti has the lowest index with very low current account balance. Moreover Ethiopia, Somalia and Uganda are found to have an average current account balance in the region.

The other indicator used in this dimention is FDI inflow in which Sudan has the higher index. Ethiopia, Uganda and Kenya have an avrage index with moderate FDI inflow. Djibouti, Eritrea and Somalia recieved the lowest FDI in the region. Looking to the data of government debt as a percentage of GDP, Ethiopia was found to have the list debt, followed by Uganda and Kenya. Somali is found to be highly indebted country with high debt GDP ratio. Interms of budget deficit, Eritrea is found to have the lowest index which implies high budget deficit.

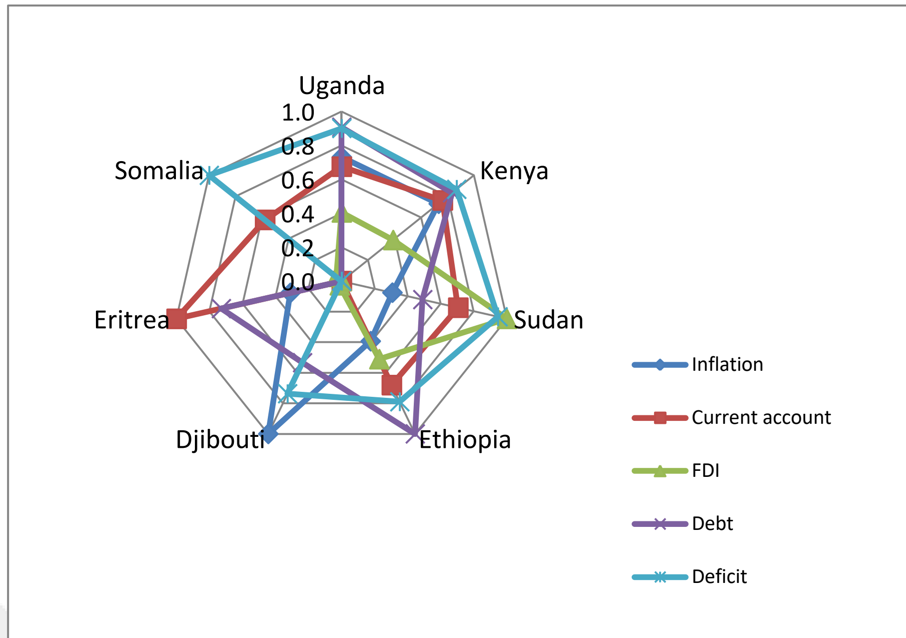
The overall result of the data analysis on macroeconomci convergence proved that Uganda and Kenya to have better performance followed by Sudan and Ethiopia respectively. Eritrea and Somalia are found to have poor achivements in this dimention.

Comparing with other dimentions, the perfromance of countries on macroeconomic convergence is found to be very low. This is despite significant importance attached to macroeconomic convergence and monitary integration by the regional economic communites, specially EAC and COMESA, and member countries. Article 82 of the EAC states the intention of the member states to undertake actions for monitary and fiscal cooperation. This is planned in accordance with the community's approved macroeconomic policies and harmonization programs and convergence framework. The EAC adopted the East African Monetary Union (EAMU) protocol on 30th November 2013 which is considered to be an importnat step towards the full economic integration of the member states. The EAMU lays the foundation for a full monitary union by 2023 and serve as a legal bases for the harmonization of the member states to gradually but progressivley converge their monitary policies and use of single currency in among the member states.

On the other hand, the lower performacne of the macroeconomic dimention is understandable as it is a higher level of integration that comes after the achivement of free trade area, custom union and common market. Hence, after realizing these prior levels of economic integration, the countries and the regional economic communities will be working on the macroeconomic convergence issues which is highly related with monitary and fiscal policies. The following table and the coresponding radar chart shows the index of the four component indicators and the average values of the macroeconomci convergence dimension.

Table 14: Macroeconomic convergence

OUNTRY	Inflation	Current account	FDI	Debt	Budget deficit	Average
Uganda	0.731	0.675	0.405	0.908	0.900	0.724
Kenya	0.732	0.763	0.388	0.836	0.868	0.717
Sudan	0.307	0.705	1.000	0.490	0.946	0.690
Ethiopia	0.393	0.681	0.511	1.000	0.790	0.675
Djibouti	1.000	0.000	0.027	0.534	0.737	0.460
Eritrea	0.311	1.000	0.000	0.729	0.000	0.408
Somalia	0.000	0.579	0.040	0.000	1.000	0.324



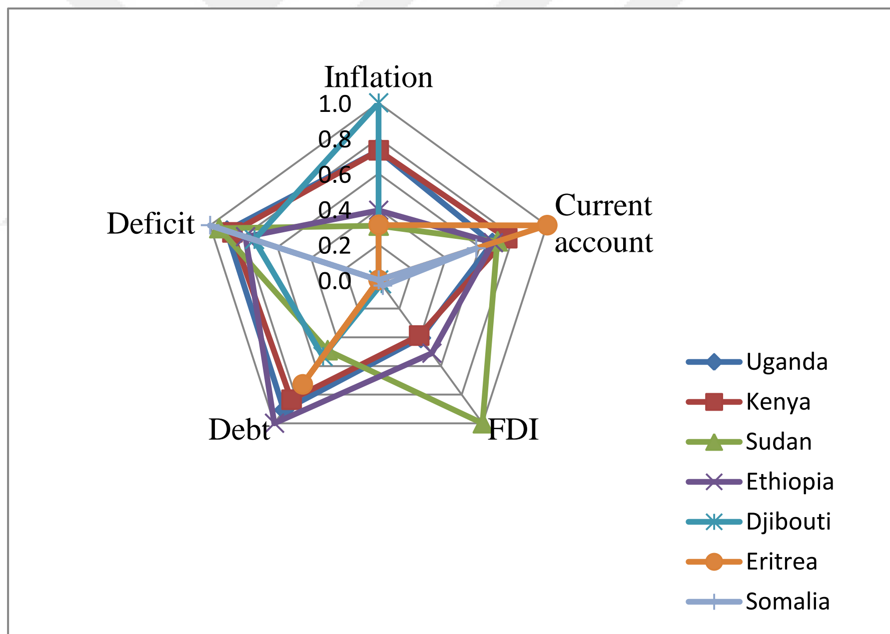
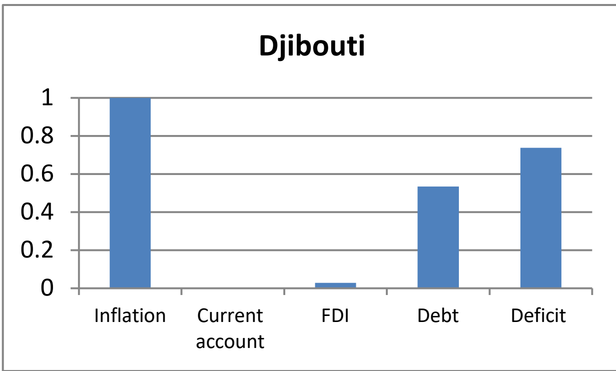
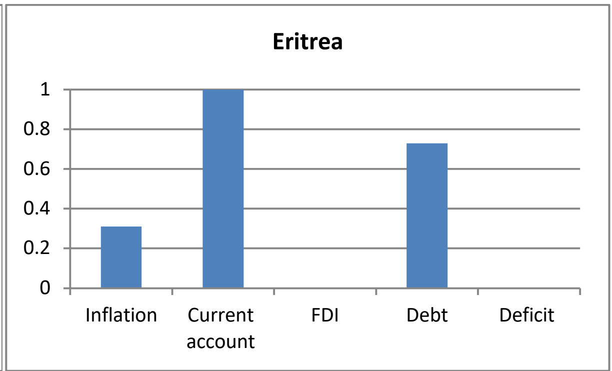
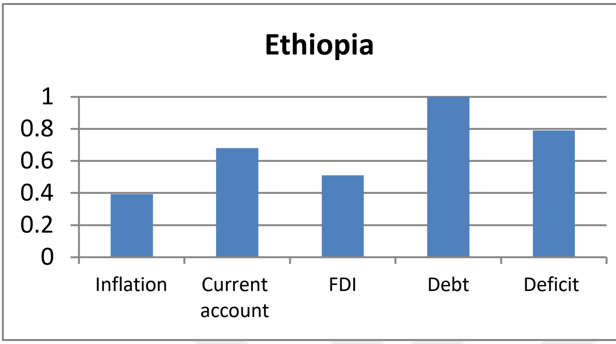


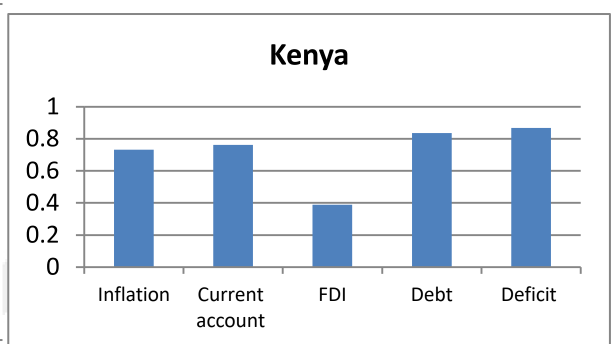
Figure 12: Macroeconomic convergence

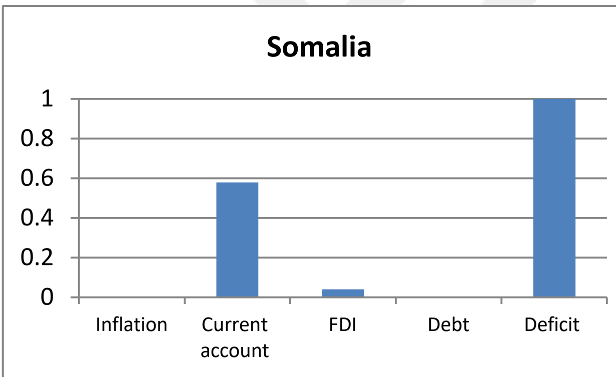
The following column graph provides additional information regarding the values of each of the indicators in the macroeconomic convergence dimension namely inflation, size of broad money, FDI and outstanding debt for each of the countries in the study.

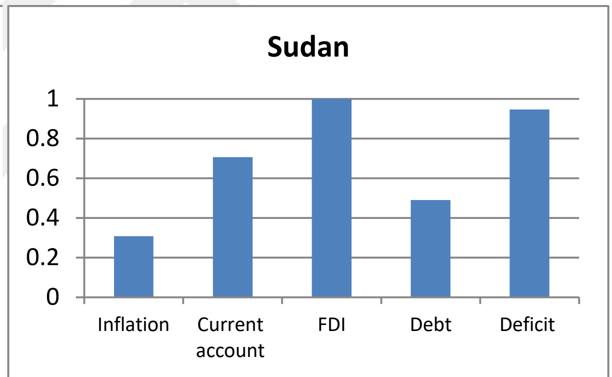

Djibouti
1
0.8
0.6
0.4
0.2
0
Inflation
Current account
FDI
Debt
Deficit

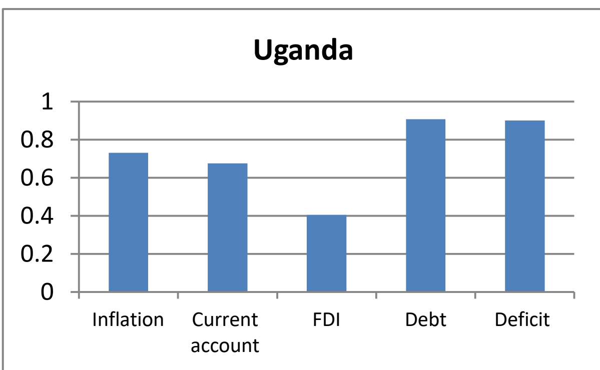

Eritrea
1
0.8
0.6
0.4
0.2
0
Inflation
Current account
FDI
Debt
Deficit


Ethiopia
1
0.8
0.6
0.4
0.2
0
Inflation
Current account
FDI
Debt
Deficit


Kenya
1
0.8
0.6
0.4
0.2
0
Inflation
Current account
FDI
Debt
Deficit


Somalia
1
0.8
0.6
0.4
0.2
0
Inflation
Current account
FDI
Debt
Deficit


Sudan
1
0.8
0.6
0.4
0.2
0
Inflation
Current account
FDI
Debt
Deficit


Uganda
1
0.8
0.6
0.4
0.2
0
Inflation
Current account
FDI
Debt
Deficit

5.3.1.5 Institutional integration

The institutional integration dimension is composed of two indicators namely the economic management and structural policy. The two indicators are part of the Country Policy and Institutional Assessment (CPIA) which is an assessment tool to monitor the quality of policies and the performance of institutional frameworks of countries. The CPIA assessment if annually conducted by the African Development Bank and the World Bank. Quality of policies is an important factor for a successful economic integration of countries in to regional and/or global economies.

With this in mind, the data analysis on institutional integration revealed Uganda to have the better point (1.0) in Economic management followed by Kenya (0.939). Four countries namely Sudan, Djibouti and Ethiopia are found to have middle performance. The lowest performer in economic management is Eritrea (0.229) and Somalia having the (0.00).

For Structural policy, Kenya is the leader country with relatively better institutional setup which is one of the favourable conditions for successful regional integration. It is followed by Uganda, Djibouti and Ethiopia. Three countries namely Eritrea, Somalia and Sudan have low performance in this indicator.

Table 15: Institutional integration

COUNTRY	Economic Management	Structura Policy	Average
Uganda	1.000	0.992	0.996
Kenya	0.939	1.000	0.969
Ethiopia	0.889	0.665	0.777
Djibouti	0.739	0.732	0.735
Sudan	0.653	0.411	0.532
Eritrea	0.229	0.283	0.256
Somalia	0.000	0.000	0.000

Looking at the average of the two indicators Uganda and Kenya have the highest index (0.996) followed by Ethiopia and Djibouti and with (0.777) and (0.735) indices respectively. Again Eritrea, Somalia and Sudan are found to have lowest index. The following table and the associated figure depicts the values of the countries in relation to

institutional integration. The institutional integration index is a proxy variable to see the level of countries' policy and institutional framework to facilitate regional integration.

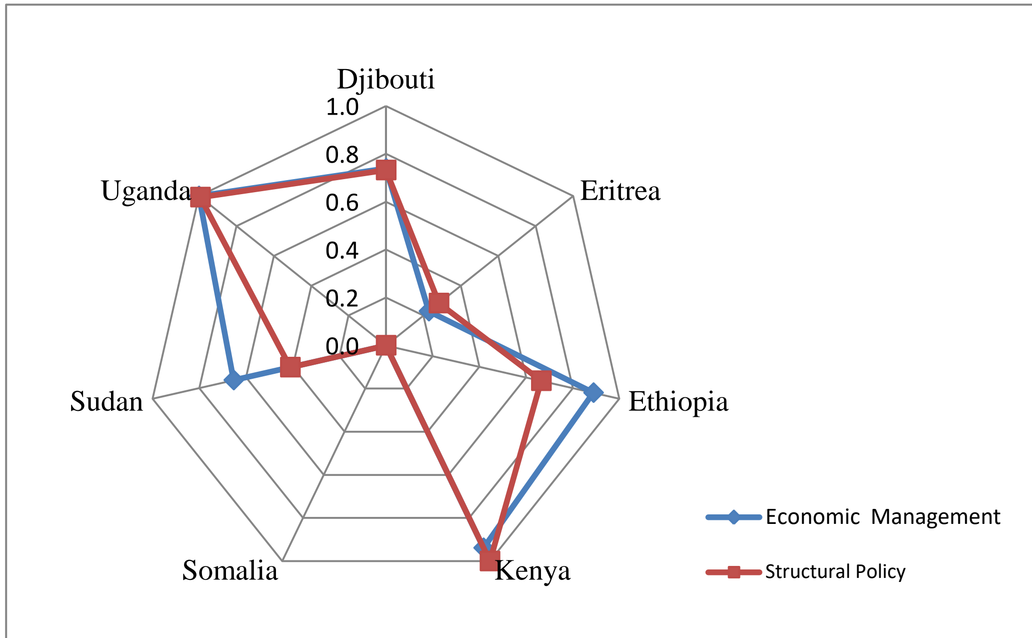
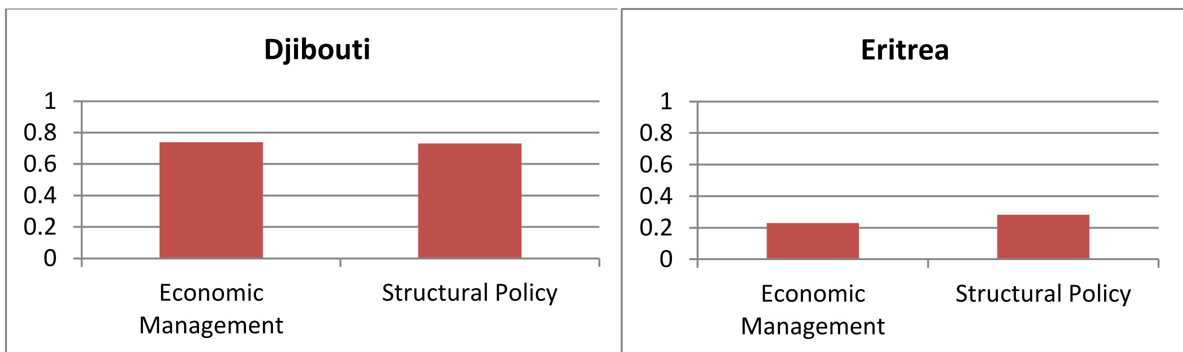
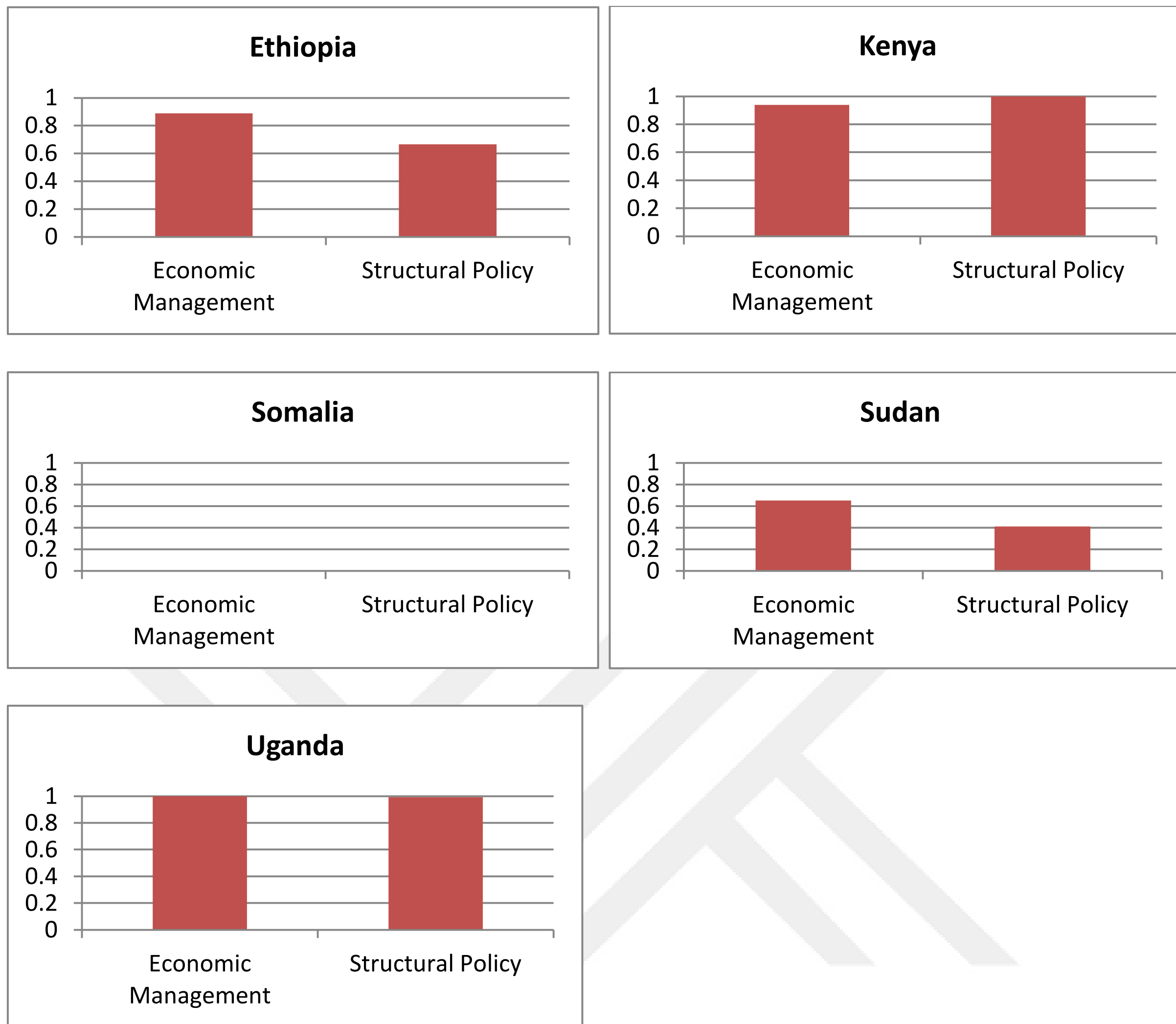


Figure 13: Institutional Integration

The following column graphs show the specific values of the two indicators of the institutional integration namely economic management index and structural policy index.





5.3.1.6 Productive integration

The productive integration dimension is made up of a single indicator which is merchandise trade complementarity index (MCI). Merchandise trade complementarity is a type of overlap index (Mikic & Gilbert, 2007). The MCI measures the extent to which the export profile of an economy fits to the import pattern of another country. The higher the degree of complementarity implies higher opportunity for successful trade and economic integration.

Table 16: Productive integration

Country	Merchandise trade complementarity index.
Kenya	1.000
Djibouti	0.925
Uganda	0.883
Ethiopia	0.210
Eritrea	0.200
Sudan	0.113
Somalia	0.000

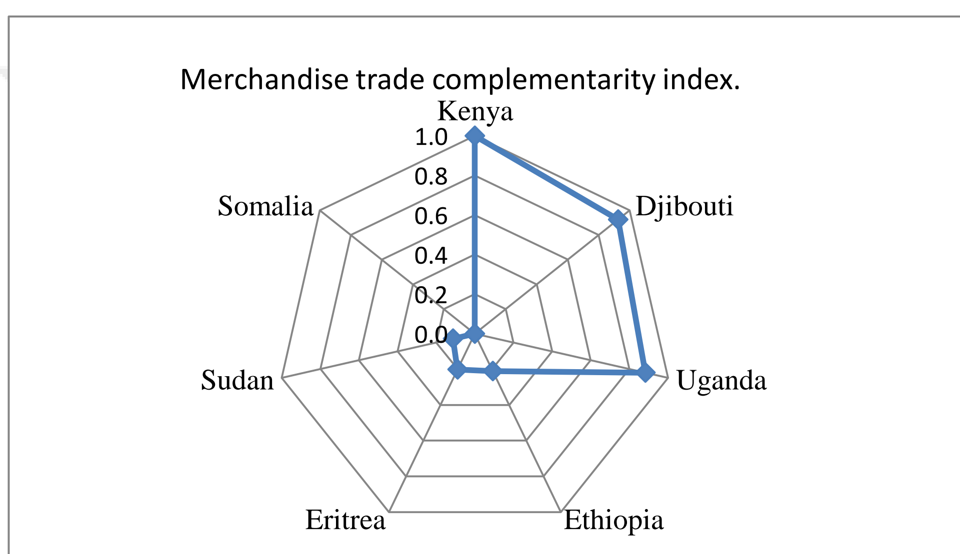
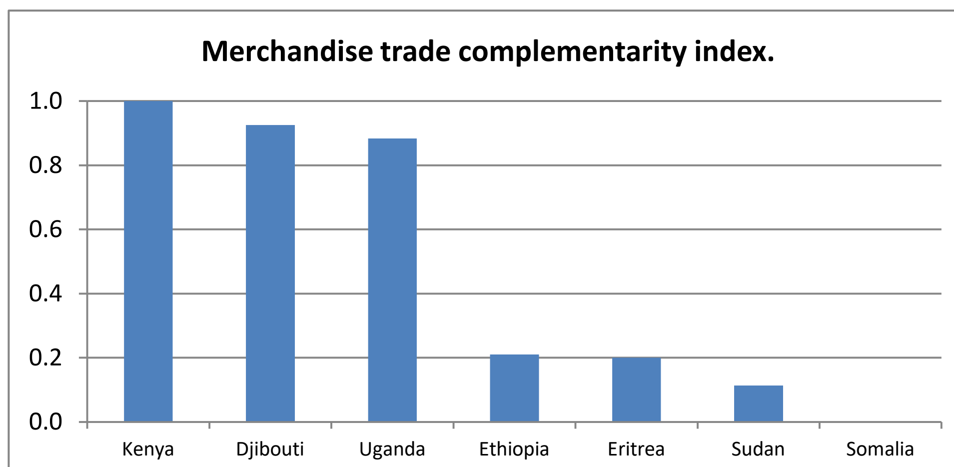


Figure 14: Productive integration

As shown in the above table, Kenya, Djibouti and Uganda have the highest three indices which is average. The remaining countries namely Eritrea, Ethiopia, Somalia and Sudan have lower level of productive integration. The following column graph shows the values of the merchandise trade Complementarity index for each of the countries in which Somalia has the highest rank and Eritrea the lowest.



5.3.2 Overall regional index

After analyzing the level of integration of each of the six dimensions and the performance of the countries related with each of the dimensions, we need to look at overall level of regional economic integration. This can be done by the average values for each of the six dimensions and the 7 countries included in the study. The following table summarizes all the values of dimensions for each of the countries.

Table 17: Average scores of all Dimensions: Index

COUNTRY	Trade	Infrastr-ucture	Free movement	Conver gence	Institution integration	Productive integration	Average: (Countries)
Kenya	0.858	0.904	0.854	0.717	0.969	1.000	0.884
Uganda	0.800	0.562	0.522	0.724	0.996	0.883	0.748
Djibouti	0.352	0.342	0.269	0.460	0.735	0.925	0.514
Ethiopia	0.423	0.366	0.498	0.675	0.777	0.210	0.491
Sudan	0.399	0.347	0.312	0.690	0.532	0.113	0.399
Eritrea	0.670	0.306	0.170	0.408	0.256	0.200	0.335
Somalia	0.217	0.417	0.313	0.324	0.000	0.000	0.212
Average (Dimensions)	0.531	0.463	0.420	0.571	0.609	0.476	0.512

5.3.2.1 Overall integration: By country

The overall performance of the countries in the regional economic integration process in the Horn of Africa is calculated as an average value of their performance in each of the six dimensions. Countries having a composite index value above the average value plus 90% confidence are categorized as high performer. Similarly, countries having an index less than the average value minuets 90% confidence interval are branded as low performer. Countries with an index value between these two ranges are identified as average performer.

Table 18: Average scores of all Dimensions- Level

COUNTRY	Trade	Infrastr ucture	Free movement	Macro Convergence	Institutiona l integration	Productive integration	Overall performan ce
Kenya	Average	High	High	Average	Average	Average	High
Uganda	Average	Average	Average	Average	Average	Average	Average
Djibouti	low	low	low	low	Average	Average	Average
Ethiopia	low	low	Average	Average	Average	low	Average
Sudan	low	low	low	Average	low	low	low
Eritrea	Average	low	low	low	low	low	low
Somalia	low Average	Average Average	low Average	low low	low Average	low Average	low Average

Note
"High" value implies an index greater than the average value of a dimension plus 90% confidence interval.
"Low" value implies an index less than the average value of a dimension minus 90% confidence interval.
"Average" value implies a value between these two ranges

High performer

Looking at the average of the six dimentions (Trade, infrastructure, free movement of labor, macro convergence, institutional integration and productive integration), Kenya has higher overall level of integration with 0.884 point. This is not a surprise as Kenya is a high performer in two our of the six dimensions namely infrastructure and free movement of labour and an average performer in four dimensions namely trade, macroeconomic convergence, institutional integration and productive integration. Kenya is the only country in the region with high performance in the regional economic integration process.

Average performers

There are three countries with avergae performacne in the regional economci integration, namely Uganda, Djibouti and Ethiopia. The second performer in the regional economic integration is Uganda with 0.748 average index. Uganda has average perforance in all the six dimensions. Djibouti Ethiopia is the third best performer in the regional economic integration process in the Horn of Africa region with 0.514 average index points. Djibouti is an average performer in two dimentions namely institutional and productive integration and showed lower performance in trade, infrastructure, free movement of labour and macroeconomic convergence. It is over performacne is thus avegrage.

Ethiopia is the fourth integrated country in the region with its 0.491average index. Ethiopia has an average performance in free movement of labour, macroeconomic convergence and instional integration and low performer in the other three dimentions namely trade, infrastructure and productive integration.

Low performer

The analysis has identified three countries namely Sudan, Eritrea and Somalia as low performers in the regional economic integration process taking place in the Horn of Africa region. Sudan holds the fivth stage in the regional economic intergation process having an average index of 0.399. Sudan is an average performer only in macroeconomic convergence and low performer in all the other five dimentions. Eritrea is the sixth performer in the region with 0.335 composite index. Eritrea is an average performer only in trade and low performer in the other five dimensions.

Somalia is the poorest performing economy in the region with regard to regional economic integration with the regional countries. Its average index is found to be 0.212. Eriteria has an average performance in infrastructure and low performer in all the other dimensions. The folowing radar diagram dipicts the economic integration index of the countries in the region.

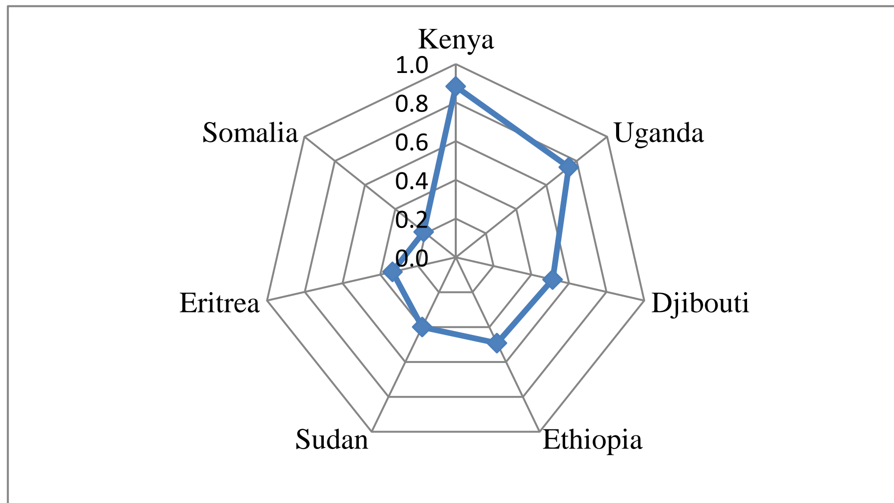


Figure 15: Overall regional economic integration: Country

5.3.2.2 Overall integration: By dimension

In this section we shall look at the average performance of the six dimensions. Accordingly, institutional integration is found to be the most integrated sector in the region with 0.609 cumulative index. In this area Uganda has the highest achievement having a high performance, followed by Kenya and Ethiopia. The performance of Somalia and Eretria with respect to institutional integration is found to be low. Uganda's higher performance in institutional integration shows the qualities and fitness of its institutions and policies for better regional integration. Having a better institutional framework is a necessary condition for a successful regional economic integration.

Macroeconomic convergence is the second integrated sector of the six dimensions included in the study with an average index of 0.571. Out of the seven countries, Ethiopia, Kenya, Sudan and Uganda have shown a better performance on macroeconomic convergence. Djibouti and Eritrea have made an average achievement in macroeconomic convergence while Somalia's performance on convergence is found to be low.

Trade is the third dimension with average index of 0.531. Kenya and Uganda have higher trade index, Eritrea an average index and Ethiopia, Sudan, Djibouti and Somalia have lower index. Looking at the trade indexes of the countries in the region, heralds the need for the low performing countries to review their trade and related policies which includes tariffs.

Trade is the most important of all the dimensions of economic integration. Intra-regional trade has the greatest potential to ensure sustainable economic development. According to African economic outlook report, Africa's recent economic progress has been accompanied through an expansion of inter-Africa. In addition to its important role as an engine of economic development, intra-regional trade is more resilient than trading with other countries. The importance of trade in regional economic integration is also clearly depicted in the stages of economic integration which is a systematic continuum that begins in Free Trade Area (FTA) and grows towards a full-fledged economic community. The low overall trade index in the region needs the attention of policy makers, at the national and regional levels, to take actions that can promote intra-regional trade in goods and services.

Productive integration comes as the fourth dimension/sector with average index value of 0.476. Here also Kenya holds the first rank with 1.00 average index followed by Djibouti and Uganda. All these three countries have average index. The remaining countries namely Ethiopia, Eritrea, Sudan and Somalia have low performance.

Infrastructure is the fifth Dimension in the hierarchy of sectors that contribute towards regional economic integration. The average score of the regional infrastructure dimension is found to be 0.465 with Kenya, taking the lead (0.906) and followed by Uganda (0.562). The importance is infrastructure in regional economic integration is enormous both theoretically and empirically. Infrastructure is the single most important catalyst for successful and efficient regional integration. Poor and inefficient infrastructure is costing Horn of African countries billions of dollars each passing year. Countries in the region need to harmonize their national policies with regional ones for a better performance in this vital sector. The potential benefits of infrastructure to the Horn of Africa includes, among others, boosting the market size and lowering prices of goods and services. This is possible by reaping the economies of scale.

Free movement of people is the last sector with its average index of 0.420. Free movement of labour or what is also known as talent mobility is one of the freedoms in the process of regional economic integration, which also includes free movement of goods, services and capital. Kenya is the highest performer with respect to free mobility with 0.854 average points. This is mainly because Kenya has totally removed entry visa for the citizens from three countries in the region namely Eritrea, Ethiopia and Uganda. Kenya also provides

visa on arrival for citizens of Djibouti, Somalia, Sudan and South Sudan. Kenya is also the only country in the region which ratified 2, out of four, protocols on free movement of people. Uganda and Ethiopia are the second and third with an average index of 0.522 and 0.498.

Policies that encourage free movement of people among the countries in the Horn of Africa can help fill the existing huge skill gap. Countries like Ethiopia and Kenya have large population size and relatively skilled labour force. On the other hand other countries in the region, like Somalia, Djibouti or Eritrea have scarcity in skilled labour. Accordingly, a policy environment that allows citizens to move freely for business, education, or even touristic purposes is very important. Such conditions not only deepen the regional integration process, but also improve the productivity in the region. Improving the free movement of people requires polices which includes visa free arrangement, and the entry into force of protocols that contributes towards a more free labor movement. The following figure shows the level of integration of the six dimensions in the region.

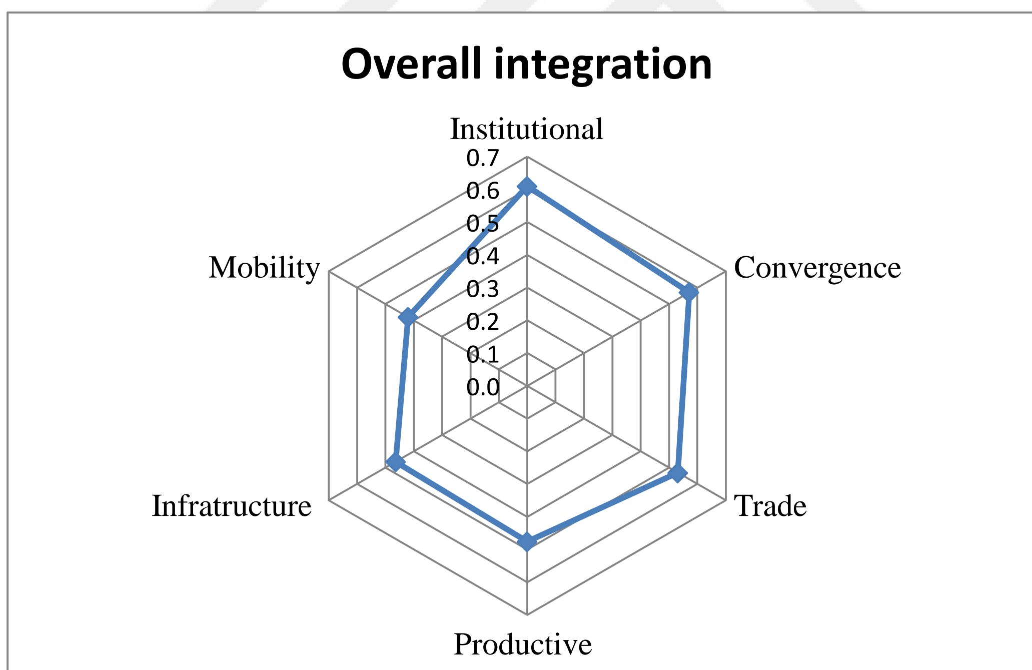
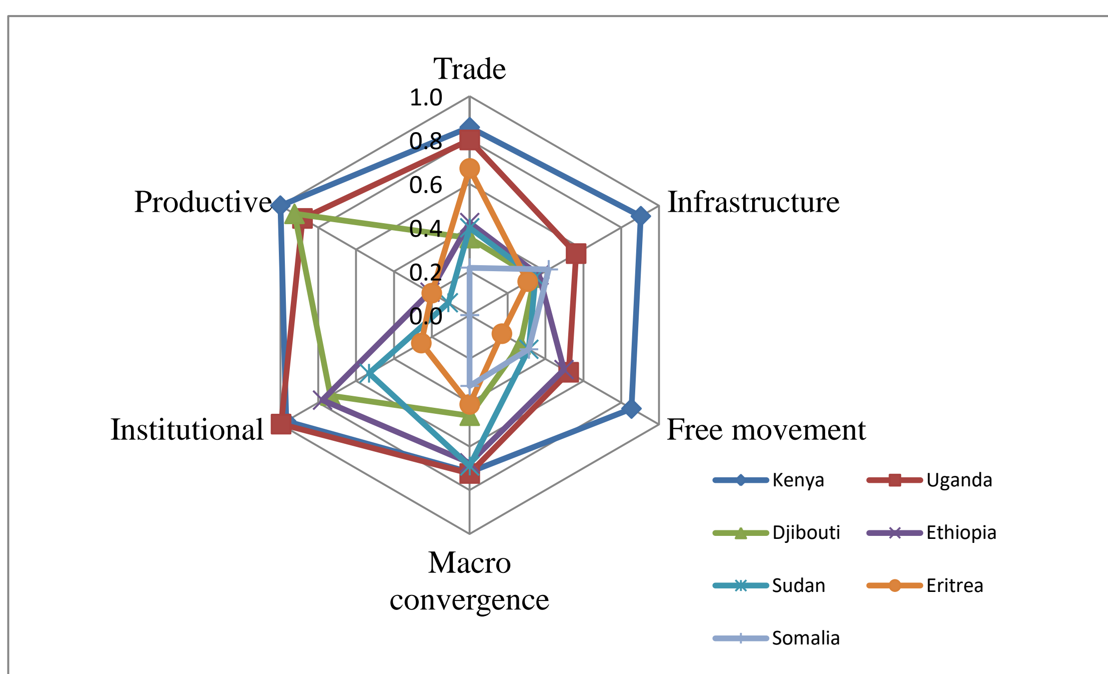


Figure 16: Overall regional economic integration: Dimensions

5.3.2.3 Overall Regional integration

In the last parts of this chapter the result of the data analysis on the average performance of the sectors and countries has been shown. This is made possible first by aggregating the values of the specific indicators in each dimension, to get the values/sub index of each of the sectors analyzed. Then the average values of the six dimensions are calculated to find a average index which shows the level of economic integration in the region. With this respect the regional integration index is found to be 0.512, which is an average performance. Interestingly, the average values of all the six dimensions are also average. There is no dimension that has a high performance or a low performance.

In order to understand, the level of economic integration in the Horn of Africa region, with respect to other regions of Africa, like South, North or west Africa, the Horn of Africa index that is found in this research must be compared with the integration indices of other regions of Africa. Such comparison helps to know where the Horn of Africa region lies in the overall African economic integration process. Similarly, within the Horn of Africa region, regular assessment of the level of economic integration in order to see the progress of the region against the integration targets set by the regional economic communities. The following two figures show the overall regional integration, both the dimensions and countries together.



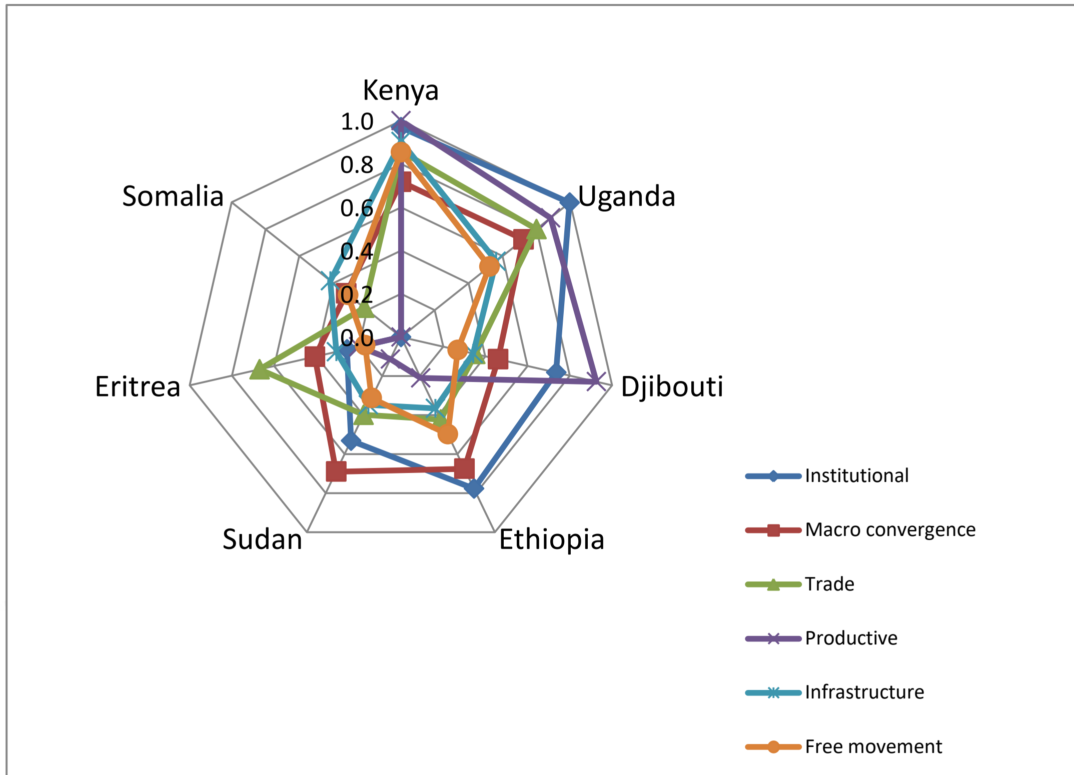


Figure 17: Overall index: Dimensions and countries

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The Horn of Africa region is one of the economically underdeveloped regions of Africa. At least in the last 30 years, countries in the region have exerted huge effort to alleviate poverty, accelerate economic growth, and ensure sustainable development. In addition to the effort that individual countries are making, the countries also opted to take collective actions to substantiate their economic development efforts. Accordingly, they have established and/or participate in regional economic communities. Countries in the Horn of Africa region participate in at least three regional economic communities which include the Inter-Governmental Authority for Development (IGAD), the East African Community (EAC) and Common Market for Eastern and Southern Africa (COMESA). Regional economic integration has become an indispensable policy instrument which is highly vulnerable to external shocks and also fragile.

Regional economic integration arrangements have become fast growing phenomena since the second half of the 20th century. At the international level, even the most advanced economies have showed great interest to be part of larger regional initiatives in order to have better position in the ongoing economic globalization and the severe competition it brings. Different countries and regions around the world are using Regional economic integration arrangements to achieve large number of economic and political goals. Theoretical and empirical analysis has proved that regional economic integration initiatives help create larger economies of scale, increase market size, reduce transport and transaction costs, promote specialization, boost industrial efficiency.

By facilitating effective management of trans-boundary natural resources, regional economic integration helps to reduce, and/or minimize the economic consequences of small-market constraints. Regional economic integration arrangements also help to

enhance economic bargaining power of countries in an economic block in respect of the outside world. This is specifically useful in multilateral trade negotiations between developing countries like those in the Horn of Africa region and the developed countries in Europe and Asia, which the region is trading more. The most significant justifications for the regional economic integration initiatives are promotion of economic cooperation and maximizing intra-regional trade.

Maximizing welfare, boosting investment, especially FDI and crating employment opportunities are also some of the objectives for integration. In addition to these general benefits of integration, developing countries also aspires to ensure sustainable development goals and eradication of poverty through integration. Increasing global competitiveness and promotion of regional public goods is also within the list of justifications for integration. It is generally accepted that the benefits of regional integration are neither automatic nor necessarily large and hence should be applied based on data on the costs and benefits before embarking on any integration initiative.

Regional integration is defined by many academicians, policy makers and practitioners in different ways. Tinbergen defines economic integration as ‘the creation of the most desirable structure of international economy, removing artificial hindrances to the optimal operation and introducing deliberately all desirable elements of coordination or unification’. Balassa conceptualized the word "integration" as the bringing together of parts into a whole. Balassa also defined integration as absence of discrimination and a continuous movement towards a free trade area, a customs union, a common market, monetary union and ultimately total economic integration. Economic integration is both a process and also state of affairs.

Other people like Lipsey related economic integration with the theory of custom union while Kahnert et al identify integration as the process of removing discriminations and barriers among trading partners. Still others like Deutsch defined integration from institutional perspective, underlining the importance of institutions for successful and sustainable regional integration. Hass realized integration from political-economic dimension, where the power of political will and leadership has the leading role. Lombaerde and Langenhove introduced the concept of *new regionalism* where regional

integration is perceived as socio-economic and political process beyond trade and economics.

According to the neoclassical economic thinking there are five stages of economic integration. Each level is associated with different level of advantages given to members and discrimination applied on non-members. The levels, according to Balassa, are preferential trade area, a free-trade area, a customs union, a common market, an economic union, full economic integration. In theory nations move from the lower level of integration to the higher; from FTA to form CU and then CM, and embark on a full-fledged economic union. Balassa's stages of integration are criticised for being Euro-centric which might not necessarily work for other regions with different resource endowments, technological background and levels of development.

Theories of economic integration evolved over time. According to Marinov, the theory of regional economic integration incorporates two effects namely static effect and dynamic effect. The Static effect assumes relatively short-term effects and no changes in technology while dynamic effect shows growth effect and includes the impact of regional trading arrangements on productive factors accumulation which includes labour, capital, and technology. Viner is credited for developing the concept of the Static effect in his book "The Customs Union Issue".

Viner divided the effects of integration in to trade creation and trade diversion effects and concluded that countries are motivated to integrate if trade creation out weight trade diversion. Trade creation takes place when relatively high cost domestic production in one country is replaced with lower-cost imports from a partner country, leading to welfare gains for both trading countries. On the other hand trade diversion occurs when imports from a low-cost non member country are substituted by imports from a higher-cost member country because member countries of the trading block have preferential access to the market and are exempted from payment of tariffs.

More concepts related with regional integration were established following developments in the theory and empirical research which broaden the scope of regional integration. Regionalism and multilateralism represent concept related with the geographic coverage of trade where the former emphasise the importance and role of regional blocks while the latter promotes for global free trade as advocated by the WTO. The concept of New

Regionalism emphasise on more complex and open trade agreements and hence lays the conceptual bases to understand multilateralism and regionalism as compatible dimensions of broader efforts on an economic reform of globalized world order. Another concept known as developmental regionalism shows the relations between regional arrangements and development. To this end the concept of developmental regionalism divides regionalism as open and closed regionalism.

Regional economic integration is a priority development policy towards the realization of a prosperous Africa. Key policy sectors for continental Economic integration include intra-Africa trade, infrastructure, communication, free movement of talents and labour. The formal African economic integration process started by the Monrovia conference and passed through trajectory including the Lagos Plan of action, the Abuja Treaty, the Sirte Declaration, the establishment of the Africa Union, and NEPAD. Since the entry in to force of the Abuja Treaty, which lays the foundation for the establishment of the African Economic Community (AEC) African governments have exerted unreserved effort to realize specially the trade and economic objectives of the African countries.

However, the results achieved so far are very much limited compared with the acclaimed vision. This is best observed by the less intra-Africa trade, which is less than 10%, in the last decade. Eight regional economic communities were established to serve as building blocks for the establishment to realize continental integration in 2028. The major challenges that hindered the Africa economic integration process include complex institutional settings, insufficient real political commitment, multiple and overlapping membership, limited capacity and inadequate funding, poor policy harmonization, poor private sector participation and lack of strong regional economies.

Most of the regional economic integration model in the region, and Africa in general, are in one way or another adopted or adapted from other regions and particularly from the European integration experiences. These tendencies are clearly observed in different ways including treaties, protocols, policies, projects, institutions, working modalities etc. However benchmarking the EU or other areas should be done very cautiously as African countries have different socio-economic and political background and very different resource endowments and technological knowhow. A blind duplication of the EU experience may do more harm than good to the regional integration process.

Regional Economic Integration can be assessed using different models and methods. The composite indicators methodology is used in this research. Composite indicators are used to measure the performance and status of a country or a region in the integration scheme. The CIs are increasingly recognised as a useful tool in policy analysis and public communication. Composite indices provide simple comparisons between different regions or countries which help to easily understand and compare complex issues in wide-ranging fields like environment, economy, society or technological development.

A composite indicator is an aggregated index comprising individual indicators and weights that commonly represent the relative importance of each indicator (Nardo, Saisana, Saltelli, & Tarantola, p. 5). Relevance, data availability, timeliness and comparability are some of the most important principles for the development of composite indicators. The steps to build composite index includes developing theoretical framework, data selection, imputation of missing data, multivariate analysis, normalisation, weighting and aggregation, links to other indicators and visual presentation.

Chapter 5 contains the result of Data analysis. The research used 6 dimensions and 20 indicators which are selected based on their empirical and theoretical relevance and availability of data. The dimensions are trade, infrastructure, productive capacity, free movement of people, macroeconomic convergence and institutional integration. The Trade dimension is developed from four indicators namely Share of total Intra-regional goods trade (% total intra-REC trade), Market Concentration, Product concentration, and Most Favoured Nation (MFN) Applied Tariff. Infrastructure dimension includes four indicators, viz proportion of flight connection, infrastructure index, average cost of roaming, mobile subscription per 1000 people.

The dimension on free movement of people also built from four indicators. These are regional protocols ratified by the countries, visa to enter to other countries in the region, remittance (%GDP) and tourist arrival. The macroeconomic convergence is constructed from five indicators; inflation, GDP deflator (annual %), Current account (% of GDP), Foreign Direct Investment (FDI) and public debt (% GDP). The institutional integration dimension is constructed from two indicators which are economic Management index and structural Policies index. The last dimension is productive integration which, due to data

limitation, is constructed from one indicator which is merchandise trade complementary index.

The result of the data analysis shows an average performance for most of the indicators and the dimensions. The data analysis of the trade dimension reveals that four countries namely Kenya (0.858), Uganda (0.80), Eritrea (0.670 and Ethiopia (o.432) to have average performance, while Sudan, Djibouti and Somalia low performers. Compared with the six dimensions included in the study, trade ranked the third well performing sector. The data analysis of the infrastructure dimension reveals that Kenya (0.904) to have the highest index and Eritrea the lowest (0.306). The other countries namely Ethiopia, Somalia, Sudan, Uganda, and Djibouti have average performance. Like trade and infrastructure, Kenya is also the highest performer in the dimension of free movement of people with 0.854 average index. This is followed by four countries namely Uganda, Ethiopia, Somalia, Sudan which have average index.

The data analysis on macroeconomci convergence proved Uganda to have the higher index of 0.724 followed by Kenya with 0.717 average index. Sudan and Ethiopia have the third and fourth highest index with 0.690 and 0.675 average index. Eritrea and Somalia have lower index in this dimension. The data analysis on institutonla integraton showed that Uganda and Kenya to have high average index of 0.996 and 0.969 respectively while Ethiopia, Djibouti and Sudan have average performance. Eritrea and Somalia have the lowest index. Finally the data analysis on productive integration revealed that Kenya and Djibouti to have a higher performance with 1.00 and 0.925 average index respectively. Uganda with an average index of 0.883 achieved an average performance. Eritrea, Ethiopia, Sudan and Somalia was found to have lower index.

6.2 Policy recommendations

Promoting regional economic integration and taking the best out of it requires ‘integration friendly’ policies and economic instruments both by the regional economic communities and member countries. In the following paragraphs policy recommendations aimed to promote and strengthen regional economic integration in the Horn of Africa region are given.

- **Towards a win-win type of integration**

Mal-designed regional integration schemes often results for winners and losers of the economic integration process. Hence, attention should be paid in designing and implementing programs and to include proper instruments to insure fair redistribution of gains from regional integration. Member countries and also RECs should develop instruments for fair redistribution of gains from trade liberalization in the region. For the sustainability and smooth functioning of the economic block there should be a system to compensate losers. Such a system should also have a monitoring mechanism to settle disputes to ensure its appropriate implementation.

Limited and unfair distributions of gains from regional integration programs have reduced the appeal of integration. Regional integration schemes may create economic dynamics which instantaneously produce winners and losers. Such economic outcomes influence member countries to undermine regional projects viz-a-viz national development agendas. Unequal or unfair distribution of gains also contributed for countries to be late or hesitate in ratifying protocols and national policies crowd out resources for regional integration. If the losses from integration are too high, too sudden and, or too detrimental, countries in the block loose the interest to stay in such regional project and triggers others outside the block to reconsider their decision to join such economic block. In order to deal with these difficulties, RECs and member countries should design systems for equitable distributions of gains from integration and compensation mechanisms for members who may loose in the process of integration.

- **Short-term vs long term gains**

Regional integration programs create a trade-off between short-term national goals for long-term regional goals. Hence member countries should show strong political commitment to give up some short term national gains in favour of long term national gains. For a successful regional economic integration countries need to work to mainstream agreements on regional integration with national development plans and must ensure that ongoing and forthcoming regional plans and programs are integrated with domestic plans and programs. Lack of commitment and initiation by the member countries to synchronize national programs and development agenda with regional programs and priorities, the ongoing efforts to deepen regional integration in the region will be seriously hampered.

- **Complete Free Trade Area (FTA)**

Countries in the region need to launch a Free Trade Area (FTA) to generate a more significant impact on the intra-Horn trade. Despite the high priority attached to FTA, most of the countries have not signed FTA agreements. The treaties of the three RECs namely COMESA, IGAD, EAC have emphasized the importance of creating FTA, but member countries have failed to implement those clauses dealing with FTAs. As a result the regional economic integration arrangements have not created the condition to increase the trade, FDI, employment, factor productivity etc among the member countries in the two decades or more. Countries in the region should also address challenges related with non-tariff barriers, which significantly deter the intra-regional trade (UNESCWA, 2015, p. 178).

- **Trade services**

Intra-regional trade is one of the most important economic activities and indicator of regional economic integration. Countries in the Horn of Africa can increase intra-regional trade through diversifying production and specialization in specific merchandise and services, based on the principles of comparative advantage. Countries should build more and better transportation facilities including road, rails and sea transport infrastructure. RECs and member countries should take steps and establish regulatory frameworks on transport facilitation. Programs on transport facilitation must be developed to simplify and harmonise regional transport systems, reducing time and costs of transporting cargo and passengers. Building supply chain among industries in the region plays a crucial role in boosting intra regional trade (ASIAN , 2015, p. XX (Executive sumamry No 4).

Side by side with merchandise trade, countries in the region need also to take measures to enhance trade in service. There is a growing trend in trade in service especially in energy which calls for renewed focus and strategy to avail form the huge potential of integration in the service market. The objective for free flow of goods should also be equally applied to that of the free flow of services. In countries like Ethiopia, Kenya, and Djibouti, the proportion of the services sector in the economy is growing rapidly and similarly the service sector is the biggest recipient of FDI inflows.

- **Infrastructure development**

Infrastructure is a vehicle for regional economic integration programs and as a necessary catalyst of economic growth and development. The Horn of Africa region has a huge infrastructure deficit and developing the infrastructure base requires a daunting cost. In order to develop an efficient infrastructure network, countries in the region must consider infrastructure development projects from a regional perspective rather than as a national project. Such an approach helps to create greater economies of scale for infrastructure development in the region.

Investment on infrastructure development must be accompanied by related policy reform and harmonization including removal of all kinds of barriers to the free movement of goods, services people and capital. Actions for the removal of road blocks, fewer weigh bridges and greater competition among transport providers must go hand in hand with connective transport infrastructure projects. The RECs and member countries need to generate extensive financial resources to bridge the vast infrastructure deficit in vital areas namely transport, industry and ICT. The region should develop Transport Infrastructure network to ensure the un-interrupted flow of inter-regional traffic in order to enhance regional integration. Countries also need to facilitate reforms in the ICT sector in order to increase competitiveness and attractiveness of the economies of the Horn of Africa region,

- **Empower Regional Economic Communities (RECs)**

Regional economic communities need to be rationalized. Member countries need to fulfil their commitment towards the RECs. Duplication of membership in the RECs is one of the biggest bottlenecks in advancing and deepening the regional integration process. Countries in the region are member in at least two RECs; Kenya is member in four RECs. In this connection the three RECs operating in the region, namely IGAD, COMESA and the EAC should merge and operate as a single regional community (UN ECA; AU, 2006, p. 117). This minimizes the cost of operating the RECs and helps to easily harmonize regional and national policies. Moreover, the RECs should have sufficient financial, technical and legal capability to be able to discharge their duties and responsibilities and effectively contribute to the regional integration agenda.

The RECs should be fully empowered so that they can function as nerve centres of the regional economic integration process. The RECs should be empowered by the member countries commensurate with their duties and responsibilities. The three RECs in the Horn

of Africa region should serve as building blocks not stumbling blocks to the regional economic integration process. The RECs should also be given supranational authority to enforce common decisions. They have to be streamlined, better coordinated, equipped and financed to successfully deal with the complex and dynamic developments of the region in particular and Africa in general. Deeper, more coordinated, more effective regional integration implies providing the RECs enough power to direct the planning, implementation, monitoring, and harmonization of regional integration activities.

- **Role of Private sector and other Non-State actors**

Role of the non-state actors in regional economic integration is significant. Countries, RECs and other institutions involved in regional integration activities should give opportunity to the non-state actions in the identification, formulation, and implementation policies and programs related to integration. The private sector plays an indispensable role in regional economic integration by making available human resources and finance to develop and support regional projects including infrastructure.

RECs should review their treaties and also protocols in such a way as to give the private sector more and active space. The current treaties and other legal documents of regional integration do not expressly deal with the role of the private sector. In this connection the IGAD business forum should be reinvigorated and similar institutions should be initiated. Likewise, the private sector and its representatives should pressure policymakers to endorse and apply protocols, facilitate macroeconomic environment, improve the quality of economic institutions, and set up efficient bureaucratic procedures. Similar attention should also be given to other non-stack actors including civil society organization (CSOs). CSOs can make crucial role in deepening the regional integration process. CSOs have the capacity and institutional framework to make integration initiatives “people driven” than a mare bureaucratic and political show up.

- **Structure reform and Policy harmonization**

Countries in the Horn of Africa have made little effort to coordinate and harmonize their macroeconomic policies and strategies. Experience in regional economic integration has proved that achieving successful regional integration requires greater harmonization of national policies, programmes, procedures, and regulations. Policy inconsistencies have

contributed to the low level of implementation of regional programmes destined to enhance intra-regional trade, investment, infrastructure development etc.

Countries should exert effort to harmonize their macroeconomic policies and set realistic and tangible criteria for a gradual macroeconomic convergence which includes fiscal and monetary targets like inflation, budget deficits, interest rates etc. Member States need to deepen their structural reforms to enhance domestic competitiveness and efficiency, which in turn will promote rapid economic growth and poverty reduction. A stable regional macroeconomic environment is a necessary condition to attract FDI without which countries in the region will gain little benefit from the regional economic integration exercise.

- **Leader countries**

As observed in other regional integration initiatives including the EU, the role of leading regional economies is significant. In this regard countries like Sudan, Ethiopia and Kenya can play pivotal role in strengthening the regional economic integration process. These economies occupy the first, second and third largest economy in the region and, accordingly, should take initiatives to implement treaties and protocols and use their relative economic capacity to underwrite the economic integration in the region (Draper, 2010).

- **Statistical data and information management on integration**

Regional economic integration is a multi-dimensional phenomenon which includes large number of dimensions and indictors. Hence research on regional economic integration requires large amount of data on diversified topics and variables. One of the challenges in this doctoral research was lack of data and information on some of the dimensions and indicators used in the research. Regional Economic communities and individual member countries need to established institutions that can collect, process and disseminate statistical data related with each and every economic sector and indicators. Data and information gathering and management is a costly venture that require allocation of money, manpower and other logistical support. Such a project can best accomplished through the institution of the Regional Economic Communities. Accordingly, the RECs should pay maximum attention and take the job as part of their responsibility. Having timely and relevant data on regional integration help to do research and develop informed policy that speed up and deppen the economic integration process in the Horn of Africa region.

Annex 1: Country profile

Annex 1: Country profile.

In this part important macroeconomic data and information about the countries in the Horn of Africa is given. Most of the data is adapted from African Economic Outlook (AEO). It contains macroeconomic indicators, the GDP composition by sector, public finance and information on current account. In the tables (e) implies for estimates and (p) implies for projection. The data for all the countries are originally taken from domestic authorities by the AEO.

1. Djibouti

Table 1. Macroeconomic indicators

Macroeconomic indicators	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	6.5	6.3	6.7	6.8
Real GDP per capital growth	5.2	5.0	5.4	5.5
CPI inflation	2.1	3.1	3.6	3.6
Budget balance % GDP	-15.7	-12.9	-13.2	-15.1
Current account % GDP	-30.7	-27.9	-27.1	-29.4

Table 2. GDP by sector (percentage of GDP at current prices)

Sector	2008	2013
Agriculture, forestry, fishing and hunting	3.5	3.6
Mining and quarrying	0.3	0.3
Manufacturing	3.5	3.2
Electricity, gas and water	4.3	5.1
Construction	12.1	11.1
Wholesale and retail trade;	19.3	22.6
Transport, storage and communication	32.0	27.6
Finance, real estate and business services	8.5	8.6
Public administration and defence	15.5	17.3
Other services	1.0	0.8
Gross domestic product at basic prices / factor cost	**100**	**100**

Table 3. Public finances (percentage of GDP at current prices)

	2008	2013	2014	2015	2016(e)	2017(p)	2018(p)
Total revenue and grants	**41.8**	**31.8**	**30.9**	**36.8**	**38.7**	**37.8**	**34.3**
Tax revenue	20.0	19.8	18.6	21.4	21.0	20.8	20.6
Grants	13.1	4.4	4.7	5.9	8.2	7.5	4.2
Total expenditure and net lending (a)	**40.6**	**37.7**	**43.1**	**52.5**	**51.6**	**51.0**	**49.4**
Current expenditure	26.8	24.0	22.9	23.5	22.5	22.2	21.8
Excluding interest	26.4	23.7	22.6	22.9	22.1	21.9	21.4
Wages and salaries	11.4	9.7	9.4	9.0	9.2	9.5	9.8
Interest	0.3	0.3	0.3	0.6	0.3	0.3	0.3
Capital expenditure	13.8	13.7	20.2	29.0	29.1	28.8	27.6
Primary balance	**1.6**	**-5.5**	**-11.8**	**-15.1**	**-12.6**	**-12.8**	**-14.8**
Overall balance	**1.2**	**-5.9**	**-12.2**	**-15.7**	**-12.9**	**-13.2**	**-15.1**

Table 4. Current account (percentage of GDP at current prices)

Current account	2008	2013	2014	2015	2016(e)	2017(p)	2018(p)
Trade balance	-51.4	-41.2	-42.5	-50.6	-48.7	-49.0	-48.2
Exports of goods (f.o.b.)	7.0	8.2	8.1	7.6	7.1	6.6	6.2
Imports of goods (f.o.b.)	58.4	49.4	50.6	58.2	55.8	55.7	54.4
Services	17.4	11.8	10.3	11.9	12.5	15.3	15.3
Factor income	9.4	5.8	5.9	5.5	5.1	3.7	0.8
Current transfers	0.3	0.3	0.7	2.6	3.2	2.9	2.7
Current account balance	**-24.3**	**-23.3**	**-25.6**	**-30.7**	**-27.9**	**-27.1**	**-29.4**

2. Eretria

Table 1. Macroeconomic indicators				
	2014/15	**2015/16(e)**	**2016/17(p)**	**2017/18(p)**
Real GDP growth	4.8	3.8	3.4	3.7
Real GDP per capital growth	2.5	1.5	1.1	1.4
CPI inflation	9.0	8.9	8.4	9.4
Budget balance % GDP	-14.2	-13.9	-12.7	-12.5
Current account % GDP	-2.2	-0.1	0.5	0.3

Table 2. GDP by sector (percentage of GDP at current prices)		
	2010/11	**2014/15**
Agriculture, forestry, fishing and hunting	17.0	17.2
Manufacturing	6.1	6.0
Electricity, gas and water	1.8	1.8
Construction	16.2	15.7
“Wholesale & retail trade; Repair of vehicles; Household goods; Restaurants & hotels”	19.1	19.2
Transport, storage and communication	12.2	12.3
Finance, real estate and business services	27.6	27.8
Public administration and defence		...
Other services	...	...
Gross domestic product at basic prices / factor cost	**100**	**100**

Table 3. Public finances (percentage of GDP at current prices)							
	2007/08	**2012/13**	**2013/14**	**2014/15**	**2015/16 (e)**	**2016/17 (p)**	**2017/18 (p)**
Total revenue and grants	**21.0**	**14.6**	**14.5**	**14.3**	**14.4**	**15.1**	**15.0**
Tax revenue	11.6	8.2	8.2	8.1	8.2	8.9	8.8
Grants	2.8	0.5	0.4	0.4	0.3	0.3	0.2
Total expenditure and net lending (a)	**43.5**	**28.1**	**28.0**	**28.5**	**28.3**	**27.8**	**27.5**
Current expenditure	32.5	22.4	21.9	22.2	21.9	21.3	21.1
Excluding interest	28.8	19.7	19.4	19.2	18.9	18.3	18.0
Wages and salaries	10.7	8.0	8.1	8.2	8.1	7.8	7.8
Interest	3.7	2.7	2.6	3.0	3.0	3.0	3.1
Capital expenditure	11.0	5.7	6.1	6.3	6.4	6.5	6.4
Primary balance	**-18.8**	**-10.8**	**-11.0**	**-11.2**	**-10.9**	**-9.7**	**-9.4**
Overall balance	**-22.5**	**-13.5**	**-13.6**	**-14.2**	**-13.9**	**-12.7**	**-12.5**

Table 4. Current account (percentage of GDP at current prices)							
	2007/08	**2012/13**	**2013/14**	**2014/15**	**2015/16 (e)**	**2016/17 (p)**	**2017/18 (p)**
Trade balance	-22.0	-5.7	-4.2	-6.4	-5.6	-4.8	-5.1
Exports of goods (f.o.b.)	1.0	13.2	14.4	9.9	9.5	9.8	8.9
Imports of goods (f.o.b.)	23.0	18.9	18.6	16.3	15.1	14.6	14.0
Services	0.3	0.6	0.3	0.1	0.8	0.9	0.9
Factor income	-0.9	-0.9	-0.7	-0.4	-0.2	-0.2	-0.2
Current transfers	17.1	5.9	5.1	4.5	4.9	4.6	4.6
Current account balance	**-5.5**	**-0.1**	**0.6**	**-2.2**	**-0.1**	**0.5**	**0.3**

3. Ethiopia

Table 1. Macroeconomic indicators				
	2014/15	**2015/16(e)**	**2016/17(p)**	**2017/18(p)**
Real GDP growth	10.4	8.0	8.1	8.1
Real GDP per capital growth	7.9	5.5	5.7	5.7
CPI inflation	10.1	6.9	8.4	11.6
Budget balance % GDP	-1.9	-2.4	-3.7	-3.3
Current account % GDP	-10.4	-10.6	-11.3	-11.4

Table 2. GDP by sector (percentage of GDP at current prices)	2010/11	2015/16
Agriculture, forestry, fishing and hunting	44.7	37.2
of which fishing	0.0	0.1
Mining and quarrying	1.4	0.4
Manufacturing	4.0	4.3
Electricity, gas and water	1.0	0.6
Construction	4.0	15.9
"Wholesale & retail trade; Repair of vehicles; Household goods; Restaurants & hotels"	18.5	19.2
of which hotels and restaurants	3.6	5.3
Transport, storage and communication	4.2	4.6
Finance, real estate and business services	11.1	7.6
Public administration and defence	5.4	4.3
Other services	5.7	5.7
Gross domestic product at basic prices / factor cost	**100**	**100**

Table 3. Public finances (percentage of GDP at current prices)							
	2007/08	**2012/13**	**2013/14**	**2014/15**	**2015/16(e)**	**2016/17(p)**	**2017/18(p)**
Total revenue and grants	**16.3**	**15.8**	**14.9**	**15.4**	**15.1**	**15.0**	**14.6**
Tax revenue	8.6	12.3	12.5	12.7	12.5	12.4	12.0
Grants	4.3	1.1	1.0	0.9	0.9	0.8	0.7
Total expenditure and net lending (a)	**16.8**	**17.8**	**17.5**	**17.3**	**17.5**	**18.7**	**17.9**
Current expenditure	7.7	7.7	8.1	7.5	7.9	9.3	8.8
Excluding interest	7.3	7.3	7.7	7.0	7.2	8.7	8.3
Wages and salaries	4.8	3.6	4.3	4.7	4.6	4.4	4.0
Interest	0.4	0.4	0.4	0.5	0.6	0.6	0.5
Capital expenditure	9.1	10.1	9.4	9.8	9.6	9.4	9.1
Primary balance	**-0.2**	**-1.6**	**-2.2**	**-1.4**	**-1.7**	**-3.1**	**-2.9**
Overall balance	**-0.5**	**-2.0**	**-2.6**	**-1.9**	**-2.4**	**-3.7**	**-3.3**
Note: a. Only major items are reported.							

Table 4. Current account (percentage of GDP at current prices)							
	2007/08	**2012/13**	**2013/14**	**2014/15**	**2015/16 (e)**	**2016/17 (p)**	**2017/18 (p)**
Trade balance	-18.0	-18.3	-21.2	-20.1	-20.1	-20.7	-20.8
Exports of goods (f.o.b.)	5.9	5.7	4.7	4.1	3.7	3.5	3.2
Imports of goods (f.o.b.)	23.9	24.0	25.8	24.1	23.8	24.2	24.0
Services	-1.7	1.2	-0.1	-0.7	-0.5	-0.5	-0.4
Factor income	-0.1	-0.3	-0.4	-0.4	-0.7	-0.6	-0.5
Current transfers	12.1	9.6	10.0	10.7	10.7	10.5	10.3
Current account balance	**-7.7**	**-7.7**	**-11.6**	**-10.4**	**-10.6**	**-11.3**	**-11.4**

4. Kenya

Table 1. Macroeconomic indicators				
	2015	**2016(e)**	**2017(p)**	**2018(p)**
Real GDP growth	5.6	6.0	6.1	6.5
Real GDP per capital growth	3.0	3.4	3.5	3.9
CPI inflation	6.6	6.3	5.5	5.1
Budget balance % GDP	-8.2	-7.8	-7.5	-4.3
Current account % GDP	-8.7	-6.0	-6.2	-7.7

Table 2. GDP by sector (percentage of GDP at current prices)	**2011**	**2015**
Agriculture, forestry, fishing and hunting	29.3	32.9
of which fishing	0.7	0.7
Mining and quarrying	1.0	0.9
of which oil	...	...
Manufacturing	13.1	11.4
Electricity, gas and water	2.1	1.9
Construction	4.9	5.3
"Wholesale & retail trade; Repair of vehicles; Household goods; Restaurants & hotels"	10.5	9.1
of which hotels and restaurants	1.5	0.9
Transport, storage and communication	9.8	10.2
Finance, real estate and business services	15.2	15.0
Public administration and defence	4.7	4.3
Other services	9.5	8.8
Gross domestic product at basic prices / factor cost	**100**	**100**

Table 3. Public finances (percentage of GDP at current prices)							
	2007/08	**2012/13**	**2013/14**	**2014/15**	**2015/16 (e)**	**2016/17 (p)**	**2017/18 (p)**
Total revenue and grants	**19.9**	**20.1**	**19.6**	**18.9**	**18.7**	**18.7**	**18.8**
Tax revenue	15.8	16.5	16.8	16.4	16.0	15.4	14.9
Grants	1.1	1.7	0.5	0.5	0.4	1.1	1.8
Total expenditure and net lending (a)	**23.3**	**28.3**	**25.3**	**27.2**	**26.4**	**26.1**	**23.1**
Current expenditure	17.6	18.3	19.5	18.4	19.3	19.4	17.0
Excluding interest	15.5	15.9	16.9	15.5	16.2	16.3	12.2
Wages and salaries	6.4	6.5	5.7	5.1	4.6	8.1	4.9
Interest	2.1	2.4	2.6	2.9	3.0	3.1	4.8
Capital expenditure	5.7	9.9	5.7	8.7	7.1	6.7	6.0
Primary balance	**-1.3**	**-5.8**	**-3.1**	**-5.3**	**-4.7**	**-4.4**	**0.5**
Overall balance	**-3.4**	**-8.2**	**-5.7**	**-8.2**	**-7.8**	**-7.5**	**-4.3**
Note: a. Only major items are reported.							

Table 4. Current account (percentage of GDP at current prices)							
	2008	**2013**	**2014**	**2015**	**2016 (e)**	**2017 (p)**	**2018 (p)**
Trade balance	-15.9	-12.7	-9.6	-16.1	-13.4	-13.3	-15.4
Exports of goods (f.o.b.)	14.2	13.1	12.8	8.5	8.0	9.0	8.7
Imports of goods (f.o.b.)	30.1	25.8	22.4	24.6	21.5	22.3	24.1
Services	3.8	4.6	3.3	2.8	3.0	3.0	3.2
Factor income	-0.1	-0.6	-1.1	-0.8	-1.1	-1.2	-1.2
Current transfers	6.6	5.7	6.2	5.4	5.5	5.3	5.7
Current account balance	**-5.6**	**-3.0**	**-1.3**	**-8.7**	**-6.0**	**-6.2**	**-7.7**

5. South Sudan

Table 1. Macroeconomic indicators				
	2015	**2016(e)**	**2017(p)**	**2018(p)**
Real GDP growth	-0.2	-13.1	-6.1	-2.7
Real GDP per capital growth	-4.2	-16.7	-9.3	-5.9
CPI inflation	52.8	476.0	110.7	49.1
Budget balance % GDP	-25.2	-21.8	-11.4	3.1
Current account % GDP	-22.8	-0.4	-7.0	-8.8

Table 2. GDP by sector (percentage of GDP at current prices)	**2010/11**	**2015/16**
Agriculture, forestry, fishing and hunting		
Mining and quarrying		
Manufacturing		
Electricity, gas and water		
Construction		
Wholesale and retail trade; Repair of vehicles; Household goods; Restaurants and hotels		
Transport, storage and communication		
Finance, real estate and business services		
Public administration and defence		
Other services		
Gross domestic product at basic prices / factor cost		

Table 3. Public finances (percentage of GDP at current prices)						
	2012/13	**2013/14**	**2014/15**	**2015/16 (e)**	**2016/17 (p)**	**2017/18 (p)**
Total revenue and grants	**20.7**	**29.1**	**25.0**	**35.6**	**45.3**	**48.1**
Tax revenue	13.9	21.9	14.1	17.5	24.7	34.4
Oil revenues	6.4	6.8	10.3	17.7	20.0	12.9
Total expenditure and net lending (a)	**26.4**	**37.5**	**50.2**	**57.4**	**56.7**	**45.0**
Current expenditure	22.2	34.0	43.5	50.8	54.2	42.8
Excluding interest	22.1	33.3	42.5	50.0	53.5	41.9
Wages and salaries	6.8	10.4	11.8	7.8	6.0	4.5
Interest	0.0	0.7	1.0	0.8	0.7	0.9
Capital expenditure	4.2	3.5	6.7	6.6	2.5	2.2
Primary balance	**-3.3**	**-1.7**	**-2.4**	**-2.7**	**-3.8**	**-3.2**
Overall balance	**-5.7**	**-8.5**	**-25.2**	**-21.8**	**-11.4**	**3.1**

Table 4. Current account (percentage of GDP at current prices)						
	2013	**2014**	**2015**	**2016(e)**	**2017(p)**	**2018(p)**
Trade balance	15.1	38.5	-5.4	7.3	-0.5	5.8
Exports of goods (f.o.b.)	88.9	106.8	57.2	45.8	42.4	42.3
Imports of goods (f.o.b.)	73.8	68.3	62.7	38.4	42.9	36.6
Services	-12.5	-19.4	-17.9	-17.2	-12.8	-12.8
Factor income	-28.9	-26.7	-13.5	-10.2	-7.8	-8.2
Current transfers	22.2	13.7	14.0	19.7	14.2	6.5
Current account balance	**-4.1**	**6.1**	**-22.8**	**-0.4**	**-7.0**	**-8.8**

6. Sudan

Table 1. Macroeconomic indicators				
	2015	**2016(e)**	**2017(p)**	**2018(p)**
Real GDP growth	4.9	3.0	3.4	3.6
Real GDP per capital growth	1.8	-0.1	0.3	0.5
CPI inflation	16.9	13.5	15.6	12.1
Budget balance % GDP	-1.6	-1.8	-1.9	-1.8
Current account % GDP	-6.4	-5.3	-4.9	-5.6

Table 2. GDP by sector (percentage of GDP at current prices)		
	2008	**2016**
Agriculture, forestry, fishing and hunting	30.1	31.3
Mining and quarrying	11.0	5.1
Manufacturing	11.3	10.4
Electricity, gas and water	2.4	0.9
Construction	3.2	4.8
Wholesale and retail trade; Repair of vehicles; Household goods; Restaurants and hotels	8.8	16.8
Transport, storage and communication	9.9	14.1
Finance, real estate and business services	9.6	7.5
Public administration and defence	11.8	6.2
Other services	2.1	2.9
Gross domestic product at basic prices / factor cost	**100**	**100**

Table 3. Public finances (percentage of GDP at current prices)							
	2008	**2013**	**2014**	**2015**	**2016(e)**	**2017(p)**	**2018(p)**
Total revenue and grants	**20.2**	**10.8**	**10.4**	**9.4**	**9.0**	**8.9**	**8.8**
Tax revenue	5.7	6.3	5.3	5.3	5.4	5.2	5.2
Grants	0.0	0.6	0.5	0.3	0.2	0.2	0.2
Total expenditure and net lending (a)	**19.7**	**13.1**	**11.6**	**11.0**	**10.8**	**10.8**	**10.6**
Current expenditure	17.0	12.0	10.6	9.9	9.7	9.7	9.5
Excluding interest	16.2	11.5	9.9	9.2	9.0	8.9	8.8
Wages and salaries	4.4	4.7	3.4	3.2	3.2	3.2	3.2
Interest	0.8	0.5	0.7	0.7	0.8	0.7	0.7
Capital expenditure	2.8	1.0	1.0	1.1	1.1	1.1	1.1
Primary balance	**1.3**	**-1.8**	**-0.5**	**-0.9**	**-1.0**	**-1.1**	**-1.1**
Overall balance	**0.5**	**-2.2**	**-1.2**	**-1.6**	**-1.8**	**-1.9**	**-1.8**
Note: a. Only major items are reported.							

Table 4. Current account (percentage of GDP at current prices)							
	2008	**2013**	**2014**	**2015**	**2016(e)**	**2017(p)**	**2018(p)**
Trade balance	5.3	-5.9	-4.4	-5.4	-4.9	-4.7	-4.5
Exports of goods (f.o.b.)	18.0	7.2	5.4	3.3	3.0	2.8	2.6
Imports of goods (f.o.b.)	12.7	13.1	9.9	8.7	7.9	7.5	7.2
Services	-3.1	-1.2	-0.7	0.0	0.2	0.3	0.3
Factor income	-8.6	-3.6	-2.4	-2.0	-1.9	-1.8	-2.4
Current transfers	1.0	2.6	1.7	1.0	1.3	1.3	1.1
Current account balance	**-5.4**	**-8.1**	**-5.9**	**-6.4**	**-5.3**	**-4.9**	**-5.6**

7. Uganda

Table 1. Macroeconomic indicators				
	2015	**2016(e)**	**2017(p)**	**2018(p)**
Real GDP growth	5.5	4.8	5.1	5.8
Real GDP per capital growth	2.2	1.6	2.9	3.6
CPI inflation	4.0	5.2	5.3	5.9
Budget balance % GDP	-4.3	-4.8	-4.9	-5.0
Current account % GDP	-6.5	-8.4	-8.7	-8.5

Table 2. GDP by sector (percentage of GDP at current prices)	**2011**	**2015**
Agriculture, forestry, fishing and hunting	28.0	25.0
of which fishing	1.6	1.7
Mining and quarrying	0.8	0.7
Manufacturing	11.2	8.9
Electricity, gas and water	2.4	2.8
Construction	7.6	7.7
Wholesale & retail trade; Repair of vehicles; Household goods; Restaurants & hotels	18.3	16.9
of which hotels and restaurants	2.6	2.7
Transport, storage and communication	7.3	11.9
Finance, real estate and business services	12.0	12.0
Public administration and defence	3.1	2.9
Other services	9.2	11.2
Gross domestic product at basic prices / factor cost	**100**	**100**

Table 3. Public finances (percentage of GDP at current prices)							
	2007/08	**2012/13**	**2013/14**	**2014/15**	**2015/16 (e)**	**2016/17 (p)**	**2017/18 (p)**
Total revenue and grants	**16.3**	**12.8**	**12.6**	**14.2**	**14.3**	**14.1**	**14.5**
Tax revenue	12.9	11.0	11.4	12.7	12.8	12.7	13.0
Grants	3.0	1.4	1.0	1.2	1.1	1.1	1.2
Total expenditure and net lending (a)	**18.1**	**16.2**	**16.6**	**18.5**	**19.1**	**19.0**	**19.5**
Current expenditure	12.9	9.1	9.5	10.2	11.0	10.8	11.6
Excluding interest	11.7	7.7	8.2	8.6	9.0	9.1	10.0
Wages and salaries	4.5	3.3	3.4	3.5	3.6	3.7	4.2
Interest	1.3	1.4	1.4	1.6	2.0	1.7	1.6
Capital expenditure	5.9	6.5	7.0	6.7	6.3	6.8	6.7
Primary balance	**-0.6**	**-2.1**	**-2.6**	**-2.7**	**-2.8**	**-3.1**	**-3.3**
Overall balance	**-1.9**	**-3.5**	**-4.0**	**-4.3**	**-4.8**	**-4.9**	**-5.0**
Note: a. Only major items are reported.							

Table 4. Current account (percentage of GDP at current prices)							
	2008	**2013**	**2014**	**2015**	**2016(e)**	**2017(p)**	**2018(p)**
Trade balance	-8.6	-8.3	-8.3	-8.8	-7.8	-9.4	-10.0
Exports of goods (f.o.b.)	10.4	10.9	9.5	10.3	10.6	9.5	9.0
Imports of goods (f.o.b.)	19.0	19.1	17.8	19.1	18.4	18.9	19.0
Services	-2.0	-1.1	-2.4	-2.1	-2.5	-2.0	-1.8
Factor income	-1.2	-2.5	-2.0	-1.4	-2.8	-2.4	-2.1
Current transfers	6.1	4.9	4.4	5.7	4.6	5.1	5.4
Current account balance	**-5.8**	**-6.9**	**-8.3**	**-6.5**	**-8.4**	**-8.7**	**-8.5**

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Annex 3: Curriculum Vita

♦ Contact particulars

Abdulqadir Adem Mohammed

Date of Birth: 30 June, 1973

Place of Birth Ethiopia, Batti

Marital Status: Married

Nationality: Ethiopian

Country	Mobile	Address
Turkey:	+90-534-584-55-77	Etlik Mh., çerçı sokak 4/4 Ankara, Turkey
Ethiopia:	-	-

E-mail: abdulqadir_adem@yahoo.com

♦ EDUCATION

1. PhD Economics – 2012-2018 Ankara Yıldırım Beyazıt University, Ankara Turkey. Dissertation: Regional Economic integration in the Horn of Africa.
2. Economics, MA, Punjabi University, 2000- India. /Economics, BA, 1998- Ethiopia/
3. Management, Diploma, 2008 – Ethiopia
4. Law, Diploma, 2007- Ethiopia
5. Accounting, Diploma, 1993 - Ethiopia

♦ Language Skills

Languages	Speaking	Writing	Reading	Listening
International languages				
English	Excellent	Excellent	Excellent	Excellent
Turkish	Good	Good	Good	Good
Arabic	Good	Good	Good	Excellent
Ethiopian languages				
Amharic	Excellent	Excellent	Excellent	Excellent
Afar	Excellent	Good	Good	Excellent

♦ SHORT TERM TRAININGS

International

i. New generation Media training, economic journalism. Anadolu Agency, News academy, Istanbul & Ankara, Turkey December 2015
ii. Certificate Leadership Capitalization October 2011, Dubai, UAE.

iii. Certificate of participation 10th Community Development Workshop, November, 2009 Jeddah, KSA.
iv. Certificate in Educational Policy planning and Management, July 2008, Korea (South)

Local

v. Certificate Transformational Leadership and management, July, 2011, Ethiopia.
vi. Certificate of participation Qualitative Research Methods and Report Writing, Ethiopian Economics Association, November, 2010.
vii. Certificate in Project planning and contract formulation, September 2006, Ethiopian
viii. Certificate Reporting and Action plan preparation, January, 2006 , Ethiopia
ix. Certificate in Management and Administration of labor based contracts April 2005.
x. Certificate in Strategic Plan Management (SPM) February, 2005, Ethiopia, Afar.
xi. Certificate in district capacity building program, April 2004, Addis Ababa, Ethiopia
xii. Certificate in Management Development, 2001, Ethiopia, Debrezait
xiii. Diploma in Computer Application from GCS Computer center-India, 2000
xiv. Certificate in complete peach tree accounting software, 1998, Addis Ababa, Ethiopia.

♦ Awards

1. Ethiopian Ministry of Education sponsored my MA program in India, 1998
2. Turkish Government sponsored part of my PhD program.

♦ EMPLOYMENT RECORD

i. Lecturer, Ankara Yıldırım Beyazıt University, Department of economics, since 2015.
ii. Executive Director Pro-Development Network May, 2010-2015
iii. Founder and Senior Consultant, **Center for Development and Strategic Studies /CDSS/,** freelancer, since January 2009.
iv. Project Management Consultant, **Embassy of Italy; Education Sector Development Program**- Afar Regional Education Bureau. Since March 2007 to December 2009.
v. Head: Planning and Contract Administration Division /PCAD/- Afar Rural Roads Authority June 2004 - March, 2007.
vi. Head planning and programming service- Afar education Bureau Feb 04-Apr 04.
vii. Instructor, Nur Selam College-NSC, Addis Ababa Ethiopia, August 2001 to Jan 2004.
viii. Afar management institute, Afar Ethiopia. Acting head Jan- Aug 2001. At the same office, worked as a regional program coordinator of the *LONDON* based *OPEN UNIVERSITY*

♦ RESEARCH AND PUBLICATIONS

- Turkey-Africa relations: The case of Tanzania
- Turkey Horn of Africa relations: Trade and investment since 2000.
- Prepared a distance learning material on **"Introduction to Microeconomics"**
- Prepared a research paper on: Interest free banking system
- **Research interest**
    - ♦ Regional economic integration in Africa, international economics.
    - ♦ African studies
    - ♦ Economic development and poverty reduction.
    - ♦ Applied economics and real world economics
    - ♦ Political economy

♦ MEMBERSHIPS

- Horn of Africa Strategic Studies Center /HASS/ -Ankara Turley. Founder and president Since 2016.
- Ethiopian Economic Association (EEA), Since 2008
- Ethiopian Economic Policy Research Institute (EEPRI).

♦ VOLUNTARY SERVICES

I have initiated and participated in the establishment of a number of local charity organizations on different areas of development including education, health, water, rural development, community development, language and cultural development. Similarly, I have actively supported the establishment of many network/forum charity organizations and served these institutions at different levels.

♦ ATTITUDES AND ATTRIBUTES

- Extensive knowledge of the diverse disciplines, methods and techniques employed in planning, programming, budgeting monitoring and evaluation of development programs/projects.
- Thorough knowledge of the theories, principles and practices of integrated development, basic education, civil society environment and networking.

♦ MISCELLANEOUS

- Professional Competence Certificate. Granted by the Ethiopian Management Institute, September, 2008.

♦ REFERENCE

- Ass. Prof. Abdulkadir Develi, Department of Economics Yıldırım Beyazit University, Ankara Turkey
- Prof. Dr. Muhsin KAR Niğde Ömer Halisdemir University, President, Niğde Turkey.

Annex 4: IGAD letter

Embassy of the Republic of Djibouti
Addis Ababa, Ethiopia

March 28th, 2011

This letter is to facilitate Abdulqadir Adem's application for a visa to Djibouti. Mr. Adem is a prospective PhD student who is conducting research on regional integration in the Horn of Africa. We invite Mr. Adem to utilize the IGAD Secretariat's library in Djibouti. We kindly request your assistance in this matter. Thank you.

Best wishes

Abdullahi Busuri

Acting Program Manager
Information and Documentation
IGAD Secretariat

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Annex 5: Dissertation photocopy permission form.

ENSTİTÜ

Fen Bilimleri Enstitüsü ☐

Sosyal Bilimler Enstitüsü ☐

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