

Is Economic Integration the Solution to African Development?

Attiat F. Ott*

ABSTRACT

In the African continent several regional integration initiatives have been launched and/or executed. These initiatives gave rise to three major regional groupings: COMESA, ECOWAS and ECCAS. Not all of these arrangements are 'country exclusive', in that a country may belong to one or more regional group. Integrating economies of the African continent was instituted with the expectation that an all inclusive economic Union is more efficient in addressing the political, economic and social problems of the continent. Using data from three periods: 1986, 1996 and 2005 this paper put the Union expectations in an empirical context.

A paper to be presented at
Botswana Conference on August 19-21, 2008.
July 30, 2008

* Attiat F. Ott, Research Professor, Clark University, Worcester, MA, USA , and President of The Institute For Economic Policy Studies, Worcester, MA, USA.
Email: aott@clarku.edu

1. Introduction

A new global order has emerged in the 20th century with national borders no longer define economic interactions. Deep integration both political and economics of states formally autonomous did bear fruits. One needs only to recite the gains achieved by the EU to inspire other countries to follow suit. Yet integration of countries in a continent as vast as Africa poses extreme challenges. With patience, will power and determination, the answer to the elusive objective of the development of the continent may indeed be found.

Optimism about the future unification or full integration of the African continent aside, one has to look at current outlook and assess the prospects of integration in Africa. To do so, one needs to examine a bit closely the gains achieved by current efforts being exerted towards the goal of integration as well as the obstacles that have to be overcome to achieve the goals set up by regional groupings. This is what this paper is about. The organization of this paper is as follows: the first section provides a brief overview of the existing regional blocks in the African continent. Section 2 provides the foundation of economic/political blocks referred to here as the club model. Section 3 examines key parameter values and their significance for the successful formation of the club. Section 4 considers the prospects for a single African Economic club. The final section concludes.

2. Initiatives towards the Integration of the African Economies

2.1 Initiatives

Over the past three decades, several initiatives have been launched and or executed. These efforts have given rise to three major country groups: COMESA, ECOWAS and ECCAS (see Table

A.1 in the Appendix). These three groups are not country exclusive in that a country can belong to more than one group (Angola, Burundi, D.R. Congo and Rwanda).

To understand the selection process, belonging to one group or another, one has to look at the underlying philosophy that constitutes a club formation (see Ott et. al 2003). At the foundation of the club formation is clearly the economic integration of the separate economies. In a continent as vast as Africa with 56 separate countries with the majority (50) countries are in the Sub-Saharan region the task may not be easy. The remaining six countries are in North Africa: Algeria, Egypt, Libya, Morocco, Tunisia and Western Sahara. Although these countries are geographically in the African continent are commonly identified as Middle Eastern countries and not African countries. The geographical distribution of the 50 countries in Africa South of the Sahara is such that 18 countries are in West Africa, 8 countries in East Africa (*including* the Horn of Africa), 10 countries in Central Africa, 10 countries in Southern Africa and 4 countries are Indian Ocean Islands, (see Appendix Table A.2).

The three regional groupings COMESA, ECOWAS and ECCAS were designed as the building block towards the establishment of an African Common Market. The expectation was such that these efforts will lead to the creation of an African Economic Union. With this goal in mind, it is worthwhile to begin with a look at the membership of the three groups.

COMESA is by far the largest. It consists of 21 countries. Membership at least in such a vast continent is a bit unusual in that it includes Egypt in the far north; seven countries in the east: Eritrea, Djibouti, Ethiopia, Kenya, Rwanda, Sudan and Tanzania; three countries in southern Africa: Malawi, Swaziland, Zambia and three islands in the Indian Ocean: Madagascar, Comoros and Seychelles.

ECOWAS, the second grouping has 15 countries. It is an “exclusive” club as none of its members belong to another regional group. Moreover, its members all fall into one geographical area, West Africa which makes integration, at least in terms of location much easier for the movements of goods and labor across national boundaries.

ECCAS, the third group is a “non-exclusive” club consisting of eleven countries. Four of its members: Angola, Burundi, D.R. Congo and Rwanda are also members of COMESA.

For details about the formation of these three groups see the excellent articles and/or reports by Musila (2005), Carmigani (2003), Harvey et. al (2001) and Harrijetal (2001).

2.2 Regional Arrangements as Clubs

James Buchanan (1965) was the first to formulate an economic theory of clubs. Buchanan provided a framework for analyzing a “club good” and the “optimal membership”. Other notable contributions include Berglas (1976); Sandler and Tschirhart (1980); Sternberg and Sandler (1992) to name a few. In the context of African regional grouping, the two issues that we need to discuss are: “the club good”, hence the objective of the regional arrangement and secondly the group “membership”.

As to the good, all three groups aim (sooner or later) at the establishment of an economic union. Thus, one may ascribe to the club good the character of a collective good (a la Buchanan) which is the attainment of full integration for its members. With respect to membership, it is less clear that the membership in any one of the three groups: COMESA, ECOWAS, and ECCAS is either optimal and or beneficial to its members compared to an alternative arrangement. The political economy of club formation suggests that to pass a judgment on the success, actual or potential requires an evaluation of the costs and benefits of membership. In the African context one

needs to extrapolate from the data these costs and benefits. Perhaps more to the point (in terms of an African Union) is to ask why restrict membership? Why not open the membership to the African Universe? This clearly leads us to examine criteria for membership. The example of EU may give clues as to the “sequencing” of membership but not for inclusion or exclusion of a member in a given club.

2.3 Costs and Benefits of Membership

The motives behind the formation of a club, any club are clearly varied. In the African continent, the stated motive or objective is economic integration which is presumed to be the foundation for economic growth and prosperity. Other motives obviously cannot be ruled out: political stability, exercise of political power in the global economy, and/or improving the continent’s “image” in the international arena. One can deduce the motive(s) from the pronouncement that usually accompanies the formation of the club but the ultimate judgment is reached as time goes by. Aside from the underlying motive, a club arrangement cannot be viable unless it satisfies a “communality” of interests. Again data sheds light on this communality of interests and hence offers additional information on the future prospects of the club.

2.4 Key Parameters in Club Formation

An analysis of a club or a regional grouping usually starts with identifying the costs and benefits of membership. The cost of belonging to one club and not another as well as the allocation of benefits of membership depend on the “shared” good. Thus, the size of the group is important for two reasons: the distribution of benefits and the cost of excluding an extra member. In a formal model the size of the sharing group (N) as well as the benefits of belonging (B) enter in the group

member's utility function. A cost function is spelled out in terms of conditions the member has to meet and the size of membership (negative externality). From the usual maximization conditions the optimal group size is obtained. Here, it suffices to point out that the optimal choice for a country belonging to one group say COMESA versus ECCAS, entails the country specific calculations of benefits and costs of membership (see Ott et al 2003).

Rather than duplicate the excellent work that has been done already analyzing regional groupings in Africa as separate entities, the procedure followed here is to look at the African continent as one Universe. This Universe consists of 44 members belonging to the three regional groups. Limiting the analysis to forty four countries rather than the 56 African nations is dictated by data availability.

2.4.1 The African Universe: Attributes

The African Universe is marked by a high degree of diversity among its members. Sorting among the attributes of members of this Universe enables us to determine whether or not the existing grouping is optimal or that a different structure would have been more appropriate. In this scenario, attributes are used as a proxy for the shared good denoted here as communality of interest. A profile of selected attributes by country is given in Table 1. The table gives a summary of these attributes for the three regional groups as well as the African Universe sample countries. The data reported in Table 1 warrants a few comments.

First of all, countries in the African Universe sample share one attribute; they are all in Africa, hence the communality of interest which is the development of the African continent.

Table 1: Selected Attributes for the African Universe by Regional Groups

	COUNTRY/ REGIONAL GROUP	FRACTIONALIZATION INDEX			DEMOCRACY	CORRUPTION SCORE	LITERACY RATE
		ETHNIC	LANGUAGE	RELIGION			
	ECOWAS						
<u>1</u>	Benin	0.7872	0.7905	0.5544	F	2.9	34.7
<u>2</u>	Burkina Faso	0.7377	0.7228	0.5798	PF	3.4	21.8
<u>3</u>	Cape Verde	0.4174	...	0.0766	F	...	76.6
<u>4</u>	Cote D'Ivoire	0.8204	0.7842	0.7551	NF	...	50.9
<u>5</u>	Gambia	0.7864	0.8074	0.097	PF	2.7	40.1
<u>6</u>	Ghana	0.6733	0.6731	0.7987	F	3.5	57.9
<u>7</u>	Guinea	0.7389	0.7725	0.2649	NF	...	29.5
<u>8</u>	Guinea-Bissai	0.8082	0.8141	0.6128	PF	...	42.4
<u>9</u>	Liberia	0.9084	0.9038	0.4883	PF	2.2	57.5
<u>10</u>	Mali	0.6906	0.8388	0.182	F	2.9	46.4
<u>11</u>	Mauritania	0.615	0.326	0.0149	NF	...	51.2
<u>12</u>	Niger	0.6518	0.6519	0.2013	PF	2.4	28.7
<u>13</u>	Nigeria	0.8505	0.8503	0.7421	PF	1.9	68
<u>14</u>	Senegal	0.6939	0.6961	0.1497	F	3.2	39.3
<u>15</u>	Sierra Leone	0.8191	0.7634	0.5395	PF	2.4	35.1
<u>16</u>	Togo	0.7099	0.8980	0.6596	NF	...	60.9
-	COMESA						
<u>1</u>	Angola	0.7867	0.787	0.6276	NF	...	67.4
<u>2</u>	Burundi	0.2951	0.2977	0.5158	PF	2.3	59.3
<u>3</u>	Comoros	0.000	0.0103	0.0137	PF	...	56.6
<u>4</u>	Congo D.R.	0.8747	0.8705	0.7021	NF	2.1	67.2
<u>5</u>	Djibouti	0.7962	0.6558	0.0435	PF	...	67.9
<u>6</u>	Egypt	0.1836	0.0237	0.1979	NF	3.4	71.4
<u>7</u>	Eritrea	0.6524	0.6530	0.4253	NF	2.6	58.6
<u>8</u>	Ethiopia	0.7235	0.8073	0.6249	PF	2.2	42.7
<u>9</u>	Kenya	0.8588	0.8860	0.7765	PF	2.1	85.1
<u>10</u>	Madagascar	0.8791	0.0204	0.5191	PF	2.8	68.9
<u>11</u>	Malawi	0.6744	0.6023	0.8192	PF	2.8	62.7
<u>12</u>	Mauritius	0.4634	0.4547	0.6385	F	4.2	84.4
<u>13</u>	Namibia	0.6329	0.7005	0.6626	F	4.3	85
<u>14</u>	Rwanda	0.3238	...	0.5066	NF	3.1	70.4
<u>15</u>	Seychelles	0.2025	0.1606	0.2323	PF	4.0	91.8
<u>16</u>	Sudan	0.7147	0.7190	0.4307	NF	2.1	61.1
<u>17</u>	Swaziland	0.0582	0.1722	0.4444	NF	...	81.6
<u>18</u>	Tanzania	0.7353	0.8983	0.6334	PF	2.9	69.4
<u>19</u>	Uganda	0.9302	0.9227	0.6332	PF	2.5	66.8
<u>20</u>	Zambia	0.7808	0.8734	0.7359	PF	2.6	80.6
<u>21</u>	Zimbabwe	0.3874	0.4472	0.7363	NF	2.6	90.7

Table 1: continued

	COUNTRY/ REGIONAL GROUP	FRACTIONALIZATION INDEX			DEMOCRACY	CORRUPTION SCORE	LITERACY RATE
		ETHNIC	LANGUAGE	RELIGION			
	ECCAS						
<u>1</u>	Angola	0.7867	0.787	0.6276	NF	...	67.4
<u>2</u>	Burundi	0.2951	0.2977	0.5158	PF	2.3	59.3
<u>3</u>	Cameroon	0.8635	0.8898	0.7338	NF	2.2	67.9
<u>4</u>	Central African Republic	0.8295	0.8334	0.7916	NF	...	48.6
<u>5</u>	Chad	0.862	0.8635	0.6411	NF	1.7	25.7
<u>6</u>	Congo	0.8747	0.6871	0.6642	PF	2.3	83.8
<u>7</u>	Congo D.R.	0.8747	0.8705	0.7021	NF	2.1	67.2
<u>8</u>	Equatorial Guinea	0.3467	0.322	0.1195	NF	...	85.7
<u>9</u>	Gabon	0.769	0.7821	0.6674	PF	2.9	63.2
<u>10</u>	Rwanda	0.3238	...	0.5066	NF	3.1	70.4
<u>11</u>	Sao Tome and Principe	...	0.2322	0.1866	F	...	84.9

Notes and Sources:

The Fractionalization data (ethnic, language and religion) are calculated as indices given the probability of two randomly selected individuals share these attributes. For details see Alesina, Devleeschauwer, Easterly, Kurlat and Wacziarg (2003).

Data for democracy and corruption scores are for 2005. Literacy rates are for various years. Sources for democracy: Freedom House, "Free In The World, 2005"; corruption scores from Transparency International, "Corruption Perceptions Index, 2005"; literacy rates from CIA World Factbook, for various years.

Freedom House index ranges from 1 to 7, the higher the value the less democratic is the country. Corruption scores ranges from 0 to 10, the higher the value the less corrupt the country. The literacy rate is given as the percentage of population over 15 years for age that can read and write.

Aside from this aspiration that unites them, the African Universe sample is far from being homogenous. Countries in the sample differ in several key attributes. To highlight their diversity, I focus first on the so-called fractionalization index. Calculated by Alesina et. al (2003) it depicts the likelihood that two individuals in a country (say Angola) selected at random would share the given

attribute. Looking at one variable, “ethnicity” within and between groups the index tell us something about this aspect of diversity. The same goes for language and religion. A quick glance at the variable Ethnic, one discerns that in each country within ECOWAS, the probability that two individuals belong to the same ethnic group is quite low (except for Cape Verde) in the range of 1.3 to 0.1 calculated as $1 - \text{index value}$. Within COMESA, this probability is a bit higher as seven of its member countries have probabilities in the range of 0.94 (Swaziland), 0.82 (Egypt) and 0.71 for Burundi.

The ECCAS group (excluding Burundi and Rwanda) of countries are ethnically diverse as the index for each country has similar value to the indices for many members of ECOWAS. In short, the Ethnic variable suggests a high degree of heterogeneity in member countries. Since ethnicity takes on different character between countries (different ethnic groups) one cannot infer the contribution of this variable to club formation in the African continent.

With respect to language and religion, there too a great deal of diversity exists within each country in each group, the exception being notable in four countries. Taken together the fractionalization index data by itself does not provide information as to whether or not the members in a particular regional group share communality of interest beyond the general goal of development.

From this index few predictions may be made: the less homogenous the population of a country is, the higher the likelihood of conflicts, and the more diverse quality of government, schooling and literacy and political rights (see Alesina et. al).¹ That being the case, the group with heterogeneous population in terms of the index, the less likely the success potential of the club.

¹ Some information about ethnic groups in Sub-Saharan Africa are reproduced in the Appendix, Table A.3 from Alesina et. al (2003, p. 164).

Turning to the democracy variable, the rating shows diversity in the political structure. Countries within ECCAS have the least democratic regimes compared to ECOWAS and COMESA. As shown in the summary table, Table 2 over 60 percent of ECCAS members are classified as **Not Free** whereas only 18 percent are classified as such for ECOWAS. The general observation is that the label **Partly Free** characterizes the majority of regimes for countries belonging to either ECOWAS or COMESA.

The last two variables, corruption scores and literacy rates deserve a great deal of attention as the social fabric of society depends critically on human infrastructure. A high literacy rate reduces the probability of both bad governance (corrupt rulers) and autocracy. As individual country data reveals except for a few cases (Ethiopia and Comoros), the literacy rate of members of COMESA ranges from 60 to 92 percent. This attribute provides at least a modicum of homogeneity among the population. Members of ECOWAS have by far the lowest literacy rates with more than half of the member countries reporting literacy rates below 50 percent.

Table 2: Summary Profile of Attributes

Attributes	Universe (n=44)	ECOWAS (n=16)	COMESA (n=21)	ECCAS (n=11)
FRACTIONALIZATION:				
<i>Ethnic</i>	0.656	0.732	0.569	0.683
<i>Language</i>	0.640	0.753	0.548	0.657
<i>Religion</i>	0.487	0.420	0.520	0.560
DEMOCRACY:				
<i>Free</i>	0.182	0.313	0.095 (.117)	0.091 (.142)
<i>Partly Free</i>	0.364	0.438	0.524 (.588)	0.273 (.285)
<i>Not Free</i>	0.455	0.188	0.381 (.294)	0.636 (.571)
CORRUPTION RATINGS:				
0.0 - 4.0 (corrupt)	2.60	2.75	2.46	2.37
LITERACY RATE:	52.2	35.4	63.3	60.4

Note: The members in () nets out the double membership of Angola, Burundi, D.R. Congo and Rwanda.

The corruption rating is also disheartening as none of the Sub-Saharan African countries had a rating exceeding “4”, the cut-off point between corrupt and less corrupt. To summarize: The profile of attributes presented by country (Table 1) or as a group summary (Table 2) provides but a few clues to the basis for belonging to one regional group vis-à-vis another. The suitability of membership in a particular group may perhaps be a function of economics rather than social or political variables. This is not surprising in view of the fact that the ultimate objective of regional integration is the creation of an African Economic Union, a structure similar to the EU. Key economic variables such as the growth rate of GDP, the inflation rate, the exchange rate regime and the government budget balance are likely to provide insight not only about membership in a particular group but also about which economic variable should be used as criterion for membership and about the prospects of the future integration of the continent.

The standard in the literature has been to use the European Union criteria. The history of the European Union formation is instructive. Fifty one years ago (1957), the Treaty of Rome was signed marking the beginning of the European Union. The original members were: France, West Germany, Italy, Belgium, Netherlands and Luxembourg. Neither geography, language nor ethnicity dictated membership. The motivating factors were clearly economics. Fifty one years later (2008), membership stands at 27.² Economics, social and political integration that the EU enjoys today is clearly the fruit of concerted efforts by the original members to establish not only criteria for membership but also the **sequence** and **pace** of admission of prospective members.

The success of the experiment led to attempts at duplication. The EU criteria became the standard to evaluate membership in any regional group. The three economic variables that are

² Retrieved July 11, 2008 from http://www.eu2007.de/en/The_Council_Presidency/treaties_of_rome/index.html

commonly used to evaluate membership in a common market are: the inflation rate (π), government deficit to GDP ratio (g) and government debt to GDP ratio (d). The growth rate of per capita GDP (y) is looked at to determine the growth prospects of an economy joining an economic club. The stability of the exchange rate is an additional criterion applied if the club moves further towards a common currency. The Maastricht treaty values for π , g and d are used as guidelines. In the African context this may or may not be appropriate as the level of economic development is quite dispersed within the continent. Nonetheless, I will rely on these values not as the ultimate criteria for membership for the African countries but as a basis for comparing the economic path of a given country within a given regional group.

Except for data on the inflation rate and GDP growth, many countries in Africa are not forthcoming in reporting government budget numbers, budget balance as well as the levels of government debt. These two variables independent of whether or not they are criteria set by the Maastricht treaty are critical for predicting the growth path and the potential progress of an economy.³ In this paper a concerted effort was made to fill as much of the gap in the data as possible on (g) and (d). (Table A.4 in the Appendix gives average values for π , y , g , and d for the 44 African countries computed over the period 1986-2005. These averages convey information on the stability of these variables over time. Table A.5 in the Appendix shows average values over the three-year period 2002-2005). In Table 3, average values of the three variables over the period 1986-2005 are reported for 18 countries where this information was mostly available for every year.

³ Maastricht criteria are a) $\pi \leq$ twice the average of the three lowest inflation rates of member countries or three percentage points of the average if it is greater than 3%; b) the budget deficit must not exceed 3% of GDP and c) total public debt \leq 6% of GDP.

**Table 3: Criteria for Membership in an Economic Club
(Averages for 1986-2005 and 2002-2005)**

Country	g^a		π		y	
	1986-2005	2002-2005	1986-2005	2002-2005	1986-2005	2002-2005
Benin	-0.19	-0.4	4.69	3.2	0.23	0.30
Burkina Faso	-4.09	-4.1	2.53	9.6	1.93	2.78
Central African Republic	-0.46	-0.5	2.70	8.8	-1.58	-2.73
Congo, Dem. Rep.	-5.25	0.6	1,892.84	7.3	-4.60	2.44
Cote d'Ivoire	-0.25	-1.0	4.13	2.2	-1.38	-1.66
Egypt, Arab Rep.	-2.62	-4.7	10.63	14.1	2.11	1.87
Ethiopia	-7.93	-7.9	4.41	5.7	1.53	2.56
Ghana	-4.27	-3.5	27.15	16.8	1.96	2.98
Kenya	-0.82	0.0	11.01	10.9	0.24	0.90
Madagascar	-2.15	-1.7	15.82	27.7	-0.69	-1.07
Mali	-3.12	-2.8	3.70	9.9	1.84	1.86
Mauritius	-1.66	-3.1	7.19	3.9	4.45	2.88
Namibia	-3.45	-3.9	9.55	2.7	1.02	3.95
Seychelles	-6.49	0.6	2.93	8.4	2.18	-2.11
Sierra Leone	-7.39	-5.5	43.63	11.2	-0.72	8.08
Swaziland	-2.59	-2.6	11.30	7.4	1.91	1.11
Uganda	-1.89	-2.3	41.62	19.7	2.58	2.48
Zambia	-0.70	-0.8	54.70	280.1	-0.50	2.85

Note:^a For some countries data were not available for each year in computing the average.

To contrast the long term performance with recent performance the 2000-2005 averages for π , y , and g are also reported in Table 3.

Focusing on the inflation path over the recent period, three countries: Benin, Cote d'Ivoire and Namibia record the lowest rates in the sample. The average of the lowest three is 3.76 percent. The Maastricht criterion is twice this average or 7.5 percent. Based on this figure four countries: Congo D.R., Ethiopia, Mauritius and Swaziland have met the π criterion, putting the total of countries at 7 or 40 percent of the sample countries shown in Table 3.

The second criterion (*g*) requires a deficit to GDP not in excess of 3%. From the 2000-2005 averages for this variable, 11 countries did meet it. Only one country, Ethiopia had a deficit to GDP ratio more than twice the criterion. Comparing these findings with the historical path, a great deal of improvement in countries outlook may be ascertained. Except for some trouble spots, Zambia ($\pi=280\%$), Madagascar ($\pi=27.7\%$), Uganda ($\pi=19.7\%$) and Egypt ($\pi=14.1\%$) the recent years have seen a great deal of improvements especially for Congo D.R. a reduction in the inflation rate from 1,892 percent to 7.3 percent.

Data on government debt (*d*) to GDP (1999) reported in appendix table although incomplete points to trouble spots: Sierra Leone with ratio of government debt to GDP equals to 247.7 percent, Burundi 162.6 percent and Zambia 160 percent. A fuller picture clearly awaits information on this variable.

4. Prospects for a Single Economic Club

Regional economic integration usually follows a specific pattern. Most often it starts with a “single” objective opening the home market to foreign trade. This takes the shape of a free trade area where all or some restrictions on the flow of goods are eliminated. This objective is usually paired with others if the experiment succeeds. If it did not the arrangement is left to “wither” away. Success is measured by the trade creation surplus the arrangement has yielded. A successful free trade area “morphosis” into a common market supplemented with a currency union, ultimately giving rise to an economic union. The sequencing is almost universal. Few if any group of countries begin the process by establishing an economic union with a single currency, free movement of goods, capital and labor and with full citizenship rights for all members. Given this “sequencing”

strategy one would not or should not expect African countries to jump the integration wagon and go directly for an all inclusive African economic union.

Several researchers in the field of development as well as African scholars are currently participating in evaluating African countries membership in the three regional groups. Their research has utilized the same EU criteria in evaluating economic integration in Africa. To make a judgment about potential benefits of membership in a common market, or a free trade area, the Gravity model prediction is commonly used. Trade diversion/trade creation are tested by supplementing the Gravity equation with a dummy variable = 1, if a country belonged to a regional group (i.e. COMESA); = 0, otherwise. If integration has proceeded further through the creation of a currency union (CU), the Gravity equation also tests for the effect on trade by using a dummy = 1 for CU countries and =0 for the control group. Time series, cross section and panel data have been used in the estimation.

As mentioned in the beginning of the paper, the empirical analysis typically focus on one regional group (ECOWAS, CFA (Masson and Paltillo, 2001), COMESA (Carmignami (2003) and Harvey et. al (2001) among others). The findings of these studies answer the question about the link between membership in a given regional group and the “likely benefits” from membership. The comprehensive study by Harvey et. al (2001) lists two conditions for success: the presence of a large and stable anchor country and that regional integration be a part of an “overreaching” strategy of global integration. The authors, hence, proceeded to divide COMESA members into subgroup by identifying an anchor country and the countries to be placed in the “subgroup” based on the Maastricht criteria.

In light of Harvey et. al recommendations, I proceed in this section to sort out the African Universe (the building block for global integration), not in terms of criteria but rather in terms of

the “collective good” --- gains from membership. Using trade data for 1986, 1996 and 2005, I divide the African Universe on the basis of goods movements. The criterion being who trades most with whom. Table 4 traces the development of “within” group trade identifying the largest traders, the benchmark being US\$100 million. Figures 1a through e show trade vales and partners for the three years, the criterion being a bilateral flow $\geq 10\%$ of a country intra-Universe trade. The data in the Table and the plots in the Figure reveal a pattern of trade that is instructive in searching for a group anchor and or dividing the African continent into sub-regional groups.

**Table 4: Intra-Trade: African Universe
Total Exports US\$ Million (Top Traders)**

Country	1986		1996		2005	
	US\$ Million	% as of total exports:-	US\$ Million	% as of total exports:-	US\$ Million	% as of total exports:-
CMR	117.7	8%	146.7	3%	251.0	2%
CIV	401.0	27%	896.7	20%	2,068.4	20%
EGY ⁺⁺					566.4	6%
ETH ⁺⁺					147.1	1%
GHA*			111.5	3%	197.8	2%
KEN	274.8	19%	799.2	18%	1,294.1	13%
MUS ⁺⁺					156.4	2%
MWI*			265.0	6%		
NGA	208.9	14%	1,215.6	28%	3,228.4	32%
SEN	101.8	7%	164.0	4%	480.2	5%
SDN ⁺⁺					141.2	1%
TZA*			100.4	2%	226.6	2%
TOG ⁺⁺					245.3	2%
UGA ⁺⁺					225.8	2%
ZMB*			130.1	3%	308.4	3%
Subtotal	1,104.2	75%	3,829.2	87%	9,537.1	94%
All other countries	371.4	25%	582.5	13%	590.8	6%
Total exports	1,475.6		4,411.7		10,127.9	

Notes: Criterion is exports \geq US\$ 100 Million; * Additional countries that exceeded the benchmark of $>$ US \$100 in exports in 1996; ⁺⁺ Additional countries that exceeded the benchmark of $>$ US \$100 in exports in 2005.

First of all Nigeria (NGA), Cote d'Ivoire (CIV), and Kenya (KEN) are by far the largest traders with intra country trade consistently in excess of 10 percent of their total trade. The percentage distribution of bilateral trade reinforces this finding. In addition it spotlight two other countries, Cameroon (CMR) and Senegal (SEN) where the flow of bilateral trade is concentrated in two or three countries. Of interest to the Club model formulation are three findings: The lack of significant bilateral trade between countries in the African Universe. As shown in Table 4, only three countries: CIV, KEN, and NGA had consistent intra-country trade flows. Second, Nigeria is the dominant country judging from the value of bilateral trade. Its largest trading partners being CIV, GHA, and SEN. In the case of Kenya, the largest trading partner is UGA followed by Egypt, while for CIV the partner is BFA and MLI for Senegal.

Placing these findings in the context of current regional arrangement it is clear that trade was not the primary criterion for regional subgroups. This is most pronounced for ECCAS where bilateral trade within ECCAS countries is negligible. To sum up: if one were to carve a group of countries out of the African Universe sample on the basis of economic variables, the first group, not unlike the group of the treaty of Rome will be made up of six (6) West African countries: Burkina Faso, Cote d'Ivoire, Ghana. Mali. Nigeria and Senegal. The membership can be expanded, in a second phase, to include Cameron, Kenya and Uganda. As shown in Table 5.

The group of six do have significant trade among themselves. The inflation rate (except for Ghana and Nigeria) as well as the level of deficit to GDP are within the limits set by Maastricht. Almost all countries (except Cote D'Ivoire) have decent growth rate of per capita GDP, an indication of potential growth of intra-region trade.

Figure 1a: Countries with percent of total trade $\geq 10\%$

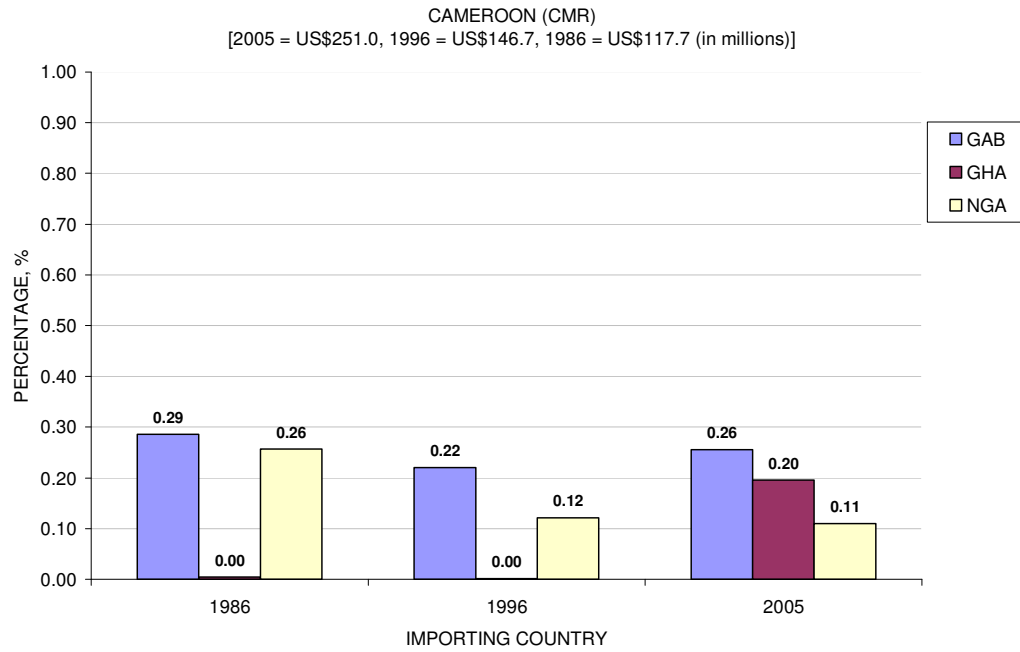


Figure 1b: Countries with percent of total trade $\geq 10\%$

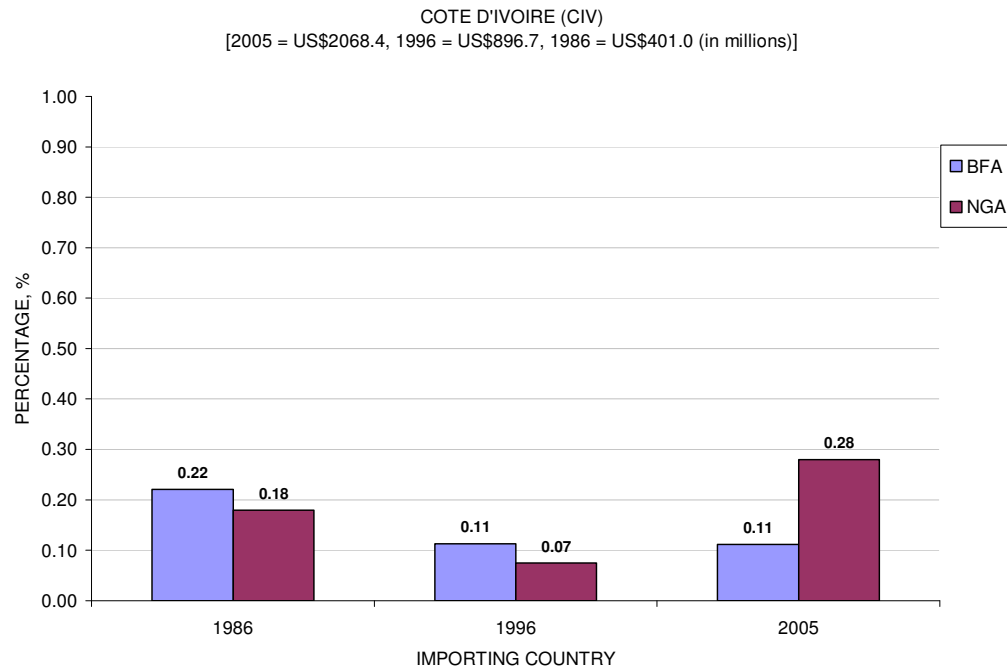


Figure 1c: Countries with percent of total trade $\geq 10\%$

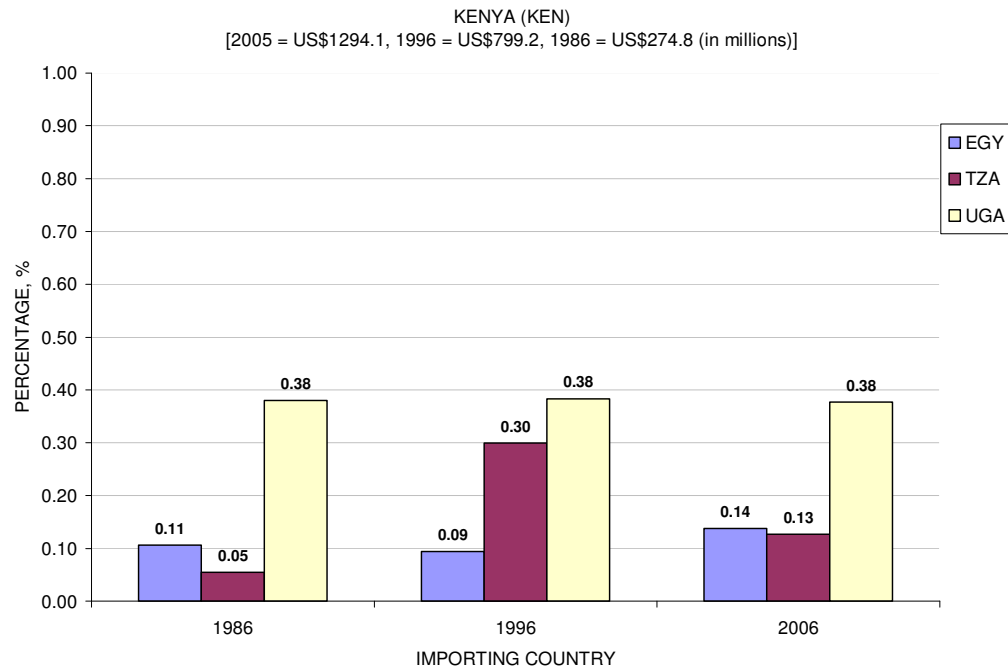


Figure 1d: Countries with percent of total trade $\geq 10\%$

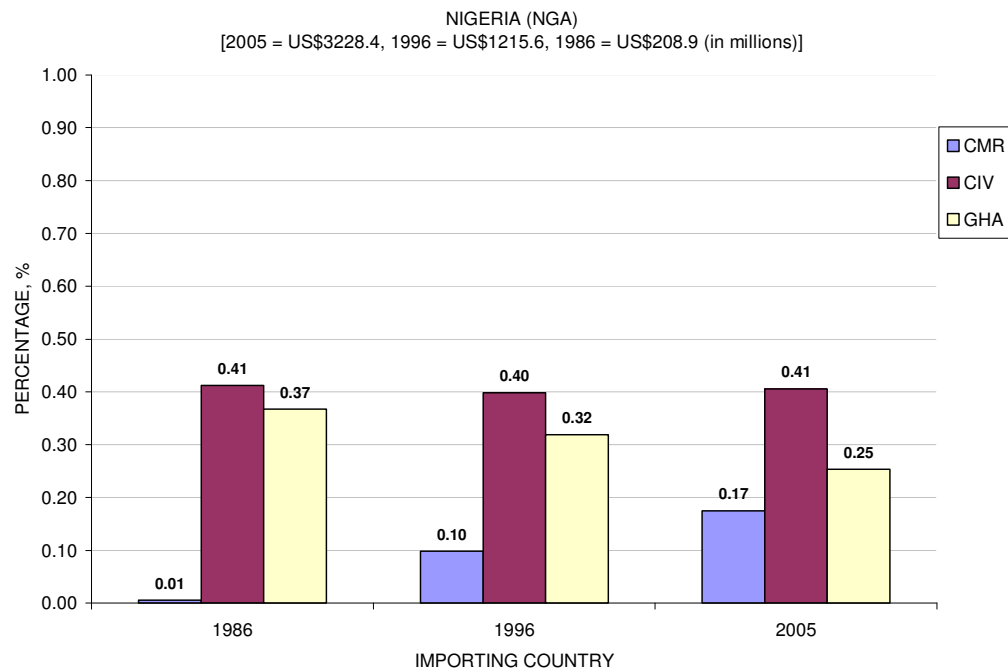
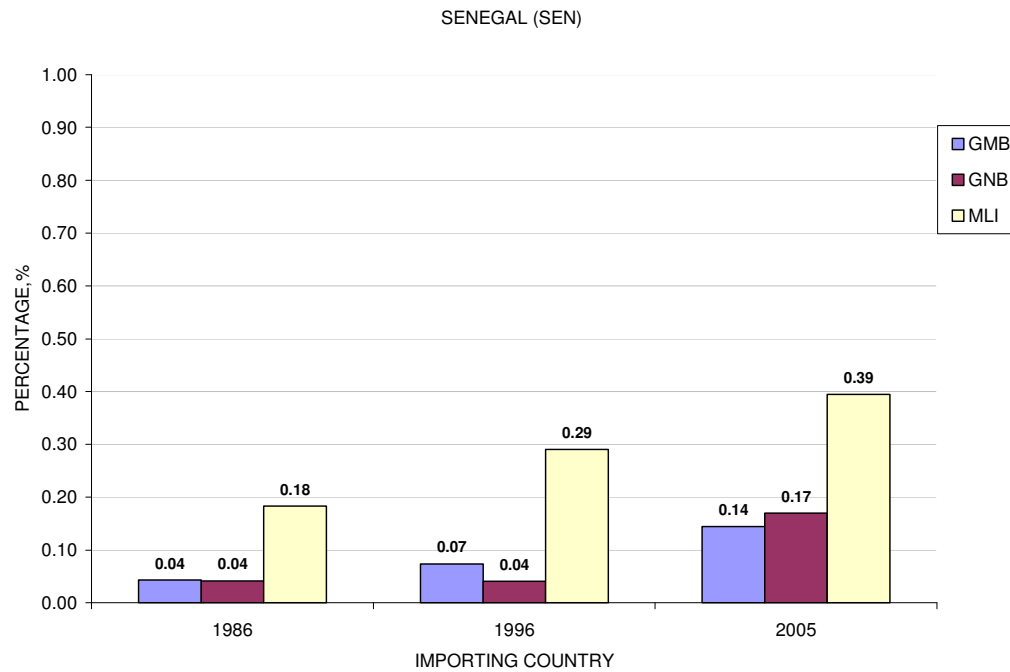


Figure 1e: Countries with percent of total trade $\geq 10\%$



**Table 5: Key Variables for A Regional Block
(2005)**

Group	Country Code	Bilateral Trade (exports + imports)	Inflation (π)	Government Deficit to GDP Ratio (g)	Growth rate per capita GDP (y)	Democracy	Corruption
		US\$ Million	%	%	%	Index	Score
Burkina Faso	BFA	1,489.7	3.3	-3.7	7.09	PF	3.4
Cote d'Ivoire	CIV	13,123.9	3.9	-1.5	1.18	NF	...
Ghana	GHA	8,150.7	15.0	...	5.90	F	3.5
Mali	MLI	48,791.2	2.4	-2.5	6.08	F	2.9
Nigeria	NGA	24,652.7	25.0	...	7.20	PF	1.9
Senegal	SEN	5,393.0	2.3	...	5.60	F	3.2
<i>Add</i>							
Cameroon	CMR	6,153.4	4.7	...	2.04	NF	2.2
Kenya	KEN	10,462.9	7.2	1.5	5.72	PF	2.1
Uganda	UGA	2,452.7	7.8	-0.1	6.69	PF	2.5

5. Conclusion

The paper explained the prospects for an all inclusive African Economic Union. In doing so, it has taken a closer look at current integration efforts in the continent. The analysis evaluated the application of the EU criteria for membership. Because of data limitation, particularly for the government budget balance and government debt, it was difficult to trace the budget posture for many countries in the sample. As it was emphasized earlier in the paper, this deficiency needs to be addressed so that a better picture emerges as to the behavior of the public sector.

The data compiled covered the period 1986 to 2006. This exercise was deemed desirable to get a clearer picture on the economic path of the African countries. Judging from the data, it was difficult to come up with either unchallenged conclusions about the prospects for deeper integration of the continent or about the existing groupings. As the data reported in Table 5 indicate, a significant volume of bilateral trade does not exist between members of the “African Universe”. Only nine (9) out of forty four (44) countries have decent levels of intra-countries trade, although at least six of these countries meet the inflation criterion. This one variable however, is not sufficient for building a mediating structure. Most importantly, as shown in the last two columns of the table, governance as indicated by the democracy index and corruption scores put a damper on any prediction about the future path of the African countries.

Rather than focusing on such values as the inflation rate, trade, budget deficits and so on, criteria suitable for democratic regimes with good governance (see Bissessar paper “Does Corruption Persist In Sub-Saharan Africa?”) criteria applicable to members of the European Union, for Africa the first task should be to address the governance issue. In conjunction with this, efforts should be made to raise the literacy rates in the African continent.

Finally, a word about an anchor country. Harvey et. al, recommended an anchor country as the corner stone for the formation of a regional group. This recommendation may or may not be a “good” one in the sense that some countries especially in the Middle East and perhaps Africa may be weary of a dominant country for fear that it might impose on them rules of behavior that may not be acceptable to their constituents. My evaluation of the prospects for all inclusive African economic union, although not altogether optimistic, nonetheless it dose provide food for thought.

REFERENCES

- Alesina, Alberto; Arnaud Devleeschauer; William Easterly; Sergio Kurlat and Romain Wacziarg (2003). “Fractionalization.” *Journal of Economic Growth*, 8(2): 1381-4338.
- Berglas, Eitan (1976). “On the Theory of Clubs.” *The American Economic Review*, Papers and Proceedings of the Eighty-eighth Annual Meeting of the American Economic Association, 66(2):116-121.
- Buchanan, James M. (1965). “An Economic Theory of Clubs.” *Economica, New Series*, 32(125): 1-14.
- Carmignani, Fabrizio (2006). “The Road to Regional Integration in Africa: Macroeconomic Convergence and Performance in COMESA.” *Journal of African Economies*, 15(2): 212-250.
- Musila, Jacob Wanjala (2005). “The Intensity of Trade Creation and Trade Diversion in COMESA, ECCAS and ECOWAS: A Comparative Analysis.” *Journal of African Economies*, 14 (1): 117-141.
- Ott, Attiat, F.; Anna Belova and Hamza Al-Salem (2003). “The Political Economy of Club Formation.” *The Middle East Business and Economic Review*, 15(1): 26-51.
- Ott, Attiat, F. and Kamal Desi (1998). “Land Reform: Restitution and Valuation in the Republic of Estonia.” *Assessment Journal*, September/October 42-55.
- Sandler, Todd and John T. Tschirhart (1980). “The Economic Theory of Clubs: An Evaluative Survey.” *Journal of Economic Literature*, 18(4): 1481-1521.
- Sterbenz, Frederic P. and Todd Sandler (1992). “Sharing Among Clubs: A Club of Clubs Theory.” *Oxford Economic Papers*; 44: 1-19.

APPENDIX

Table A.1: Country Listings, Codes and Capital Cities and Membership in a Currency Union

Country/Regional Group	World Bank Code	Capital	Membership
COMESA			
1. Angola	AGO	Luanda	
2. Burundi	BDI	Bujumbura	CU
3. Comoros	COM	Moroni	
4. D.R. Congo	ZAR	Kinshasa	
5. Djibouti	DJI	Djibouti	
6. Egypt*	EGY	Cairo	
7. Eritrea	ERI	Asmara	
8. Ethiopia	ETH	Addis Ababa	
9. Kenya	KEN	Nairobi	
10. Madagascar	MDG	Antananarivo	
11. Malawi	MWI	Lilongwe	
12. Mauritius	MUS	Port Louis	
13. Namibia	NAM	Windhoek	
14. Rwanda	RWA	Kigali	
15. Seychelles	SYC	Victoria	
16. Sudan	SDN	Khartoum	
17. Swaziland	SWZ	Mbabane	
18. Tanzania ⁺	TZA	Dodoma	
19. Uganda	UGA	Kampala	
20. Zambia	ZMB	Lusaka	
21. Zimbabwe	ZWE	Harare	CU
ECCAS			
1. Angola	AGO	Luanda	
2. Burundi	BDI	Bujumbura	CU
3. Cameroon	CMR	Yaounde	CU
4. Central African Republic	CAF	Bangui	CU
5. Chad	TCD	N'Djamena	CU
6. Congo	COG	Brazzaville	CU
7. D.R. Congo	ZAR	Kinshasa	CU
8. Equatorial Guinea	GNQ	Malabo	CU
9. Gabon	GAB	Libreville	
10. Rwanda	RWA	Kigali	
11. Sao Tome and Principe	STP	Sao Tome	
ECOWAS			
1. Benin	BEN	Porto-Novo	CU
2. Burkina Faso	BFA	Ouagadougou	CU
3. Cape Verde	CPV	Praia	
4. Cote D'Ivoire	CIV	Yamoussoukro	CU
5. The Gambia	GMB	Banjul	
6. Ghana	GHA	Accra	
7. Guinea	GIN	Conakry	
8. Guinea-Bissau	GNB	Bissau	CU
9. Liberia	LBR	Monrovia	
10. Mali	MLI	Bamako	CU
11. Mauritania ⁺⁺	MRT	Nouakchott	
12. Niger	NER	Niamey	CU
13. Nigeria	NGA	Abuja	
14. Senegal	SEN	Dakar	CU
15. Sierra Leone	SLE	Freetown	
16. Togo	TOG	Lome	CU

* North Africa/Middle East nation, ⁺ Withdrew in 2000 and ⁺⁺ Withdrew in 1999

Table A.2: Countries in Africa: By Geographic Locations

North Africa	South Africa	Central Africa	Horn Africa	East Africa	West Africa	Indian Ocean Islands (includes Reunion)
Algeria Egypt Libya Morocco Tunisia Western Sahara*	Angola Botswana Lesotho Malawi Mozambique Namibia South Africa Swaziland Zambia Zimbabwe	Burundi Cameroon Central African Republic Chad Congo Congo D.R. Equatorial Guinea Gabon Rwanda Sao Tome & Principe	Djibouti Eritrea Ethiopia Somalia Sudan	Kenya Tanzania Uganda	Benin Ghana Niger Burkina Faso Guinea Nigeria Cape Verde Guinea Bissau Senegal Chad Liberia Sierra Leone Cote d'Ivoire Mali Togo Gambia Mauritania Western Sahara	Comoro Islands Madagascar Mauritius Seychelles

Table A.3: Number of Ethnic Groups in Sub-Saharan Africa

Total Number of countries = 44
 Number of Groups = 335
 Groups per Country = 7.61
 Maximum Number of Groups = 13
 Minimum Number of Groups = 2
 Average Population Share of Largest Group = 0.44

**Table A.4: Selected Value of Variables Used as Criteria for Membership
(n = 44, 1986-2005)**

Country		GDP per capita growth (annual %)	Inflation, GDP deflator (annual %)	Central government debt, total (% of GDP)	Cash surplus/deficit (% of GDP)
Country		avg 86-05	avg 86-05	avg 86-05	avg 86-05
1	Angola	1.30	631.57	...	...
2	Benin	0.23	4.69	...	-0.19
3	Burkina Faso	1.93	2.53	...	-4.09
4	Burundi	-1.83	9.34	127.61	-4.75
5	Cameroon	-1.54	3.38	81.63	-1.76
6	Cape Verde	2.67	3.72	...	...
7	Central African Republic	-1.58	2.70	...	-0.46
8	Chad	2.13	5.29	...	...
9	Comoros	-0.58	3.96	...	...
10	Congo, Dem. Rep.	-4.60	1,892.84	180.18	-5.25
11	Congo, Rep.	-0.96	5.81	0.21	-0.03
12	Cote d'Ivoire	-1.38	4.13	125.59	-0.25
13	Djibouti	-2.54	3.29	...	...
14	Egypt, Arab Rep.	2.11	10.63	37.39	-2.62
15	Equatorial Guinea	15.00	10.77	...	...
16	Eritrea	2.03	11.27	...	...
17	Ethiopia	1.53	4.41	...	-7.93
18	Gabon	-0.73	5.14	...	...
19	Gambia, The	0.04	10.85	...	0.13
20	Ghana	1.96	27.15	...	-4.27
21	Guinea	1.04	15.47	...	-3.32
22	Guinea-Bissau	-0.95	38.05	...	...
23	Kenya	0.24	11.01	52.72	-0.82
24	Liberia	-3.57	194.09	...	...

Table A.4: continued

Country		GDP per capita growth (annual %)	Inflation, GDP deflator (annual %)	Central government debt, total (% of GDP)	Cash surplus/deficit (% of GDP)
		avg 86-05	avg 86-05	avg 86-05	avg 86-05
25	Madagascar	-0.69	15.82	104.32	-2.15
26	Malawi	-0.31	27.48	...	...
27	Mali	1.84	3.70	...	-3.12
28	Mauritania	0.31	8.77	...	...
29	Mauritius	4.45	7.19	37.92	-1.66
30	Namibia	1.02	9.55	...	-3.45
31	Niger	-0.80	2.90	...	...
32	Nigeria	1.35	26.31	...	...
33	Rwanda	0.91	8.79	48.70	-4.77
34	Sao Tome and Principe	5.35	7.53	...	...
35	Senegal	0.52	3.20	79.97	-1.28
36	Seychelles	2.18	2.93	...	-6.49
37	Sierra Leone	-0.72	43.63	124.75	-7.39
38	Sudan	3.20	49.00	8.26	-0.39
39	Swaziland	1.91	11.30	...	-2.59
40	Tanzania	1.42	16.99	...	...
41	Togo	-0.68	4.02	...	...
42	Uganda	2.58	41.62	49.45	-1.89
43	Zambia	-0.50	54.70	190.70	-0.70
44	Zimbabwe	-1.60	78.80	59.31	-4.41

Table A.5: Selected Values of Key Variables

		GDP per capita growth (annual %)	Inflation, GDP deflator (annual %)	¹ Central government debt, total (% of GDP)	² Cash surplus/deficit (% of GDP)
	Country Name	avg 2002-5	avg 2002-5	YR1999	avg 2002-5
1	Angola	9.16	3.1	156.7	-17.8 ^a
2	Benin	0.30	3.2	..	-0.4
3	Burkina Faso	2.78	9.6	..	-4.1
4	Burundi	-1.25	2.4	162.6	-2.9 ^a
5	Cameroon	1.11	1.5	91.7	
6	Cape Verde	3.04	1.8	..	
7	Central African Republic	-2.73	8.8	..	-0.5
8	Chad	12.08	3.3	..	
9	Comoros	0.51	18.2	..	
10	Congo, Dem. Rep.	2.44	7.3	90.8	-4.9 ^a
11	Congo, Rep.	2.02	2.8	..	0.6
12	Cote d'Ivoire	-1.66	2.2	101.9	-1.0
13	Djibouti	1.33	6.8	57.9	-3.4
14	Egypt, Arab Rep.	1.87	14.1	37.4	-4.7
15	Equatorial Guinea	15.44	16.1	..	
16	Eritrea	-1.89	5.5	..	
17	Ethiopia	2.56	5.7	168.8	-7.9
18	Gabon	-0.08	15.5	..	
19	Gambia, The	0.33	20.2	..	
20	Ghana	2.98	16.8	..	-3.5
21	Guinea	0.97	2.5	..	
22	Guinea-Bissau	-3.22	5.4	..	
23	Kenya	0.90	10.9	52.6	0.0
24	Liberia	-6.83	12.7	..	

Table A.5: continued

		GDP per capita growth (annual %)	Inflation, GDP deflator (annual %)	¹ Central government debt, total (% of GDP)	² Cash surplus/deficit (% of GDP)
	Country Name	avg 2002-5	avg 2002-5	YR1999	avg 2002-5
25	Madagascar	-1.07	27.7	119.4	-1.7
26	Malawi	-0.01	4.8	116.0	-5.7
27	Mali	1.86	9.9	..	-2.8
28	Mauritania	1.38	5.8	..	
29	Mauritius	2.88	3.9	32.5	-3.1
30	Namibia	3.95	2.7	9.0	-3.9
31	Niger	-0.07	17.7	..	
32	Nigeria	3.76	7.0	..	
33	Rwanda	3.00	7.5	60.6	-4.7
34	Sao Tome and Principe	5.35	1.6	..	
35	Senegal	2.02	3.9	83.6	
36	Seychelles	-2.11	8.4	98.8	0.6
37	Sierra Leone	8.08	11.2	247.4	-5.5
38	Sudan	4.44	8.5	8.7	
39	Swaziland	1.11	7.4	20.0	-2.6
40	Tanzania	3.90	0.6	98.6	-0.4
41	Togo	-0.08	5.0	..	
42	Uganda	2.48	19.7	46.4	-2.3
43	Zambia	2.85	280.1	160.9	-0.8
44	Zimbabwe	-6.61		101.0	

Notes:

¹ Values in red are obtained from Harvey et. Al, pp. 23 and 44 for a year other than 1999 for government debt and ² for 1995-99 for government budget deficit.