### A Political and Economic Assessment of the Feasibility and Desirability of an East African Monetary Union

ΒY

Tom Kimani Mburu

A Dissertation submitted to the Faculty of Claremont Graduate University in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Graduate Faculty of Economics.

Claremont, California 2006

Approved by:

Thomas D. Willie

Thomas D. Willett

UMI Number: 3197900

Copyright 2006 by Mburu, Tom Kimani

All rights reserved.

### INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.



### UMI Microform 3197900

Copyright 2006 by ProQuest Information and Learning Company. All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

> ProQuest Information and Learning Company 300 North Zeeb Road P.O. Box 1346 Ann Arbor, MI 48106-1346

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

© Copyright by Tom Kimani Mburu 2006 All rights Reserved

*,* 

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

•

We, the undersigned, certify that we have read this dissertation of Tom Kimani Mburu and approve it as adequate in scope and quality for the degree of Doctor of Philosophy.

**Dissertation Committee:** 

D. G. liles

Thomas D. Willett, Chair

Arthur T. Denzau, Member

James A. Lehman, Member

### Abstract of the Dissertation

## A Political and Economic Assessment of the Feasibility and Desirability of an East African Monetary Union

#### By

#### Tom Kimani Mburu

#### **Claremont Graduate University: 2006**

This dissertation assesses the political and economic feasibility and desirability of an East African (EA) monetary union. A wide range of indices for optimum currency area (OCA) are developed for Kenya, Tanzania, Uganda, Rwanda, and Burundi, and a comparison made to see how these countries fit the OCA criteria relative to existing monetary unions in Africa and Europe. The overall evidence is that the EA countries are not a feasible monetary area. Intraregional trade between them is low as is the degree of factor mobility. There seems to be insufficient evidence of long-term macroeconomic convergence among the East African countries. A measure developed by Morrison (1982) is used to evaluate the degree of fiscal discipline. It shows that the countries are susceptible to internal political pressures that often make them fail to exercise control over expenditures. On the exchange rate variability criterion, the evidence was more favorable, but the estimated cross-correlations of a two-year real GDP growth that takes into account lags in recognition of shocks, implementation, and effects of policy response were either low or negative between the EA countries, implying that it would be costly to adopt common policy responses.

Politically, the EA countries lack comparable political institutional structures as in the CFA franc zones and the CMA to sustain a monetary union among the sovereign states. The political systems are heterogeneous, challenging the eventual formation of a political federation. Measures of the strength of governments that include Relative Political Capacity (RPC) and veto power show little evidence of EA governments being strong enough to assure the responsible fiscal policies necessary for a well functioning monetary union.

### DEDICATION

Oh God of the impossible, where no hope I could see, you granted me the faith to believe that all is possible with you. This far I have come not by my power or might, but by the power of your Holy Spirit. I give unto you all the glory, honor and praise. Amen.

### <u>ACKNOWLEDGEMENTS</u>

Great thanks go to members of my dissertation committee, Professor Willett, Professor Denzau, and Professor Lehman, for your invaluable guidance. Without your wide knowledge on the subject matter, a lot of the ideas in this dissertation would not have transpired. Professor Willett, you have been a pillar in my struggles to successfully complete my studies. Without your faith in me and your moral and financial support I would not have been able to reach this far.

Special thanks go to my sponsors, the United States Department of State for awarding me the Fulbright Scholarship, the Economics Department at the Claremont Graduate University for tuition fellowship, and my employer, the Department of Economics at Kenyatta University for granting me study leave.

Robert and Barbara Eagleton, I sincerely thank you for adopting me into your family as a son while in America. Your parental love and care, and spiritual guidance, enabled me to remain focused on my goal as well as appreciate more the love of our Father in Heaven. Professor Mary Poplin, you have been my mentor and a great supporter of my dream.

My wife Esther, and my children Samuel, David and Faith, you have persevered years of loneliness while I worked towards attaining this doctorate. I humbly acknowledge the greatest role you have played in my life to make this dream a reality.

Finally, I extend my appreciation to my fellow students, and especially Khalfan al Barwani, Iman, and Chan Lee for their friendship, and constructive criticisms and ideas that have helped shape this dissertation to what it is.

vii

### TABLE OF CONTENT

Acknowledgements vii
CHAPTER ONE: Introduction1
CHAPTER TWO: An Overview of the Basic Economics of OCA Theory and a
Selective Review of Empirical Literature11
2.1 Costs and Benefits Analysis of OCA11
2.2 Other OCA Criteria
2.2.1 Fiscal Integration
2.2.2 Similarity of Inflation rates
2.2.3 Industrial Structures
2.2.4 Degree of Financial Integration19
2.2.5 Real Exchange Rate Variability
2.2.6 Nature, source and Timing of Shocks
2.3 The Endogeneity of OCA
2.4 A Selective Review of Empirical Studies of OCA
CHAPTER THREE: Political Economy of the Choice of Exchange Rate Regime
3.2 A Synopsis on the Political Economy of Currency Choices
CHAPTER FOUR: The Background of East African Community61
4.1 The Political History of East African Countries after Independence
4.1.1 Uganda
4.1.2 United Republic of Tanzania64
4.1.3 Kenya

4.1.4 Rwanda70
4.1.5 Burundi
4.2 Social and Economic Backgrounds of the Economies
4.3 The East African Community
4.3.1 History of Regional Integration in the East African Region
4.3.2 The Creation and Demise of the "Old" East African Community (1967-
1977) 89
4.3.3 The Revival of the East African Community
CHAPTER FIVE: East African Countries and the Optimality Criteria for OCA99
5.1 The Optimum Currency Area Criteria99
5.1.1 Degree of Openness100
5.1.2 Factor Mobility105
5.1.3 Macroeconomic Convergence Criteria
5.1.4 Degree of Fiscal Discipline
5.1.5 Intra-Industry Trade Intensity
5.1.6 Exchange Rate Variability
5.1.7 Synchronicity of Business Cycles and Shocks
CHAPTER SIX: Summary and Conclusion158
Appendix
Reference

### LIST OF TABLES

Table 4.1: Macroeconomic indicators    77
Table 4.2: Sectorial contribution to GDP (%) and to Total Employment (%)78
Table 5.1: East African Community Trade Pattern, 1995-2003
Table 5.2: Regional Trade Patterns, 1995-2003
Table 5.3: Direction of Intra-EAC Trade, 1995-2003
Table 5.4: EAC Macroeconomic Convergence Criteria: 1998-2003
Table 5.4: EAC Macroeconomic Convergence Criteria: 1998-2003
Table 5.5: Fiscal Indicators (as % of GDP), 1972-2002 117
Table 5.6: C-Ratio for Degree of Fiscal Discipline for EAC Countries, 1997-2003
Table 5.7: C-Ratios for degree of Fiscal Discipline in Africa, 1970-2003
Table 5.8: C-Ratio for Degree of Fiscal Discipline in Euro Area       124
Table 5.9: Grubel-Lloyd Index for Bilateral Trade in Manufactures for EAC
Countries, 1999-2003
Table 5.10: Variability of Real Exchange Rate Shocks for WAEMU and
Table 5.11: Correlations and Standard Deviations of RER Shocks for East Africa
Countries
Table 5.12a: Correlation of Real GDP Growth 1970-2003, Between EAC
Countries 145
Table 5.12b: Correlation of EAC Business Cycles (HP Filtered)
Table 5.13: Correlation of Real GDP Growth and Business Cycles 1970-2003,
Between WAEMU Countries

Table 5.14: Correlation of Real GDP Growth and Business Cycles 19	70-2003,
Between CAEMU Countries	152
Table A1: Test for Equality of Variances Between EA RER Shocks	166
Table A1c: Test for Equality of Variances Between EA RER Shocks	excluding
Burundi	167

### LIST OF FIGURES

Figure 5.1: C-Ratio for Kenya, 1972-2003126
Figure 5.2a: Business Cycle (HP Filtered) of EAC Countries, 1970-2003143
Figure 5.2b: Two-Year Real GDP Growth, 1970-2003144
Figure 5.3: Business Cycle (HP Filtered): 5-Year Rolling Window Correlation,
Between Kenya and Other EAC Countries, 1970-2003148
Figure 5.4: Business Cycle (HP Filtered): 10-Year Rolling Window Correlation,
Between Kenya and Other EAC Countries, 1970-2003148
Figure 5.5: Two-Year RGDP Growth: 5-Year Rolling Window Correlation,
Between Kenya and Other EAC Countries, 1970-2003149
Figure 5.6: Two-Year RGDP Growth: 10-Year Rolling Window Correlation,
Between Kenya and Other EAC Countries, 1970-2003149
Figure 5.7: Two-Year RGDP Growth: 10-Year Rolling Window Correlation,
Between Cote d' Ivoire and Other WAEMU Countries, 1970-2003154
Figure 5.8: Two-Year RGDP Growth: 10-Year Rolling Window Correlation,
Between Cameroon and Other CAEMC Countries, 1970-2003154

Figure B1: Business Cycle (HP Filtered) of WAEMU Countries, 1970-2003	
	.168
Figure B2: Business Cycle (HP Filtered) of CAEMC Countries, 1970-2003	
	.169

### **CHAPTER ONE: Introduction**

January 1, 1999 was an historical day as 11 member countries of the European Union (EU) implemented the euro as their common currency. The realization of a common currency in Europe has generated debates on the economic and political feasibility of having monetary integration in other parts of the world. Several studies have investigated the possibility of countries in Latin America and North America pursuing a common currency path by adopting the U.S. dollar as their currency or merging two or more national moneys into one (Cohen, 2003; Schuldt, 2003; Dean, 2003; Courchene and Harris, 2003; Salvatore, 2003 and Willett, 2003b). There have also been debates on the feasibility of regional monetary unions in the Central, West, East, and South African sub-regions (Bayoumi and Ostry, 1995; Mkenda, 2001; Sparks, 2002; Dupasquier and Osakwe, 2003; Grandes, 2003; Buigut and Valev, 2004; and Masson and Pattillo, 2005). Prospects of a currency union among Asian countries have also been investigated by Kwan (1998), Lee, Park and Shin (2002), and others.

At the present there are three common monetary arrangements in operation in Africa: the Common Monetary Area (CMA) of Southern Africa, the Central African Economic and Monetary Union (CAEMC), and the West African Economic and Monetary Union (WAEMU).<sup>1</sup> Plans are underway for the formation

1

<sup>&</sup>lt;sup>1</sup> Members of the CMA include South Africa, Namibia, Swaziland, and Lesotho. The CAEMC comprises Cameroon, Congo, Equatorial Guinea, Gabon, Chad, and Central African Republic. The WAEMU has eight members namely Côte d' Ivoire, Guinea-Bissau, Benin, Burkina Faso, Mali, Togo, Niger, and Senegal. The CAEMC and the WAEMU form the CFA (Communaute Financiere Africaine) franc zone for French-speaking countries in West and Central Africa (see Dupasquier and Osakwe, 2003).

of another monetary union in West Africa comprising five Anglophone countries namely Nigeria, Ghana, Gambia, Sierra Leone, and Guinea, which will be merged with the West African CFA franc zone a few years later, resulting in a single currency in the Economic Community of West African States (ECOWAS), Dupasquier and Osakwe (2003).

In a major development in East Africa, the Heads of State of Kenya, Uganda and Tanzania signed a treaty on November 30th, 1999 in Arusha, Tanzania, re-establishing the East African Community (EAC), which had collapsed in 1977. Under the EAC treaty officially implemented in January 2001, the member countries would establish a customs union as the entry point to the community, and then move to establish a common market,<sup>2</sup> subsequently a monetary union, and ultimately a political federation of the East African states. The protocol establishing the East African Customs Union was signed by the Heads of State of the three countries on March 2, 2004, and commenced operations on January 1, 2005. Plans are underway for the three countries to form a political federation by 2013, within which time elections for a new federal president and federal parliament are expected to take place (*Daily Nation*, April 15, 2005). It is not clear, however, what powers the federal president and parliament would have over the sovereign states.

In an effort to boost trade and minimize transaction costs of using foreign currencies among member countries to trade, there are plans to establish a monetary union before the launching of the political federation in 2010. Article 82

 $<sup>^{2}</sup>$  Customs Union differs from a Common Market because, while the former only allows free movement of goods within the region with a common external tariff, the latter goes further to allow free movement of labor and capital between member countries.

paragraph 1a of the Treaty states that the Partner States will "co-operate in monetary and financial matters and maintain the convertibility of their currencies as a basis for the establishment of a monetary union" (EAC Secretariat, 2001). Further, Article 82 paragraph 2a states that the Partner States shall, in order to implement the provision of paragraph 1 of the Article "maintain the existing convertibility of their currencies to promote the use of national currencies in the settlement of payments for all transactions among the Partner States thereby economizing on the use of foreign currencies" (EAC Secretariat, 2001). Both Rwanda and Burundi have expressed interest in joining the EAC. The process of admitting Rwanda into the EAC is expected to be concluded in November 2005.

Several studies have assessed the feasibility of a common monetary arrangement in East Africa (Bayuomi and Ostry, 1995; Mkenda, 2001; Buigut and Valev, 2004; and Masson and Pattillo, 2005). The studies differ, however, in terms of methodology and focus. Bayoumi and Ostry (1995), for instance, focus on the size and correlation of real output disturbances and the level of intraregional trade across Sub-Saharan African countries to investigate the possibilities for closer regional monetary arrangements in the region in the future. They find that the real output disturbances, estimated as residuals from a regression of real output per capita growth rate on its first and second lags, have low correlations among the Sub-Saharan African countries, including Kenya, Uganda, Tanzania, Rwanda and Burundi. Coupled with an extremely low level of intra-regional trade, this casts doubt on the desirability of monetary union within Africa. Buigut and Valev (2004), using a vector Autoregression (VAR) model to attempt to identify supply and demand shocks for the five East African countries, also find no evidence of the shocks of the five countries converging, hence leading them to conclude based on the symmetry of shocks criterion that the East African countries are not a feasible monetary area at the moment.

Masson and Pattillo (2005), taking into account differences in fiscal distortions and calibrating a model of economic benefits and costs of the East African Community, find that only Kenya with its highest government financing need among the East African Community member countries would benefit from abandoning independent monetary policies and participating in a monetary union. The average government spending as a percentage of GDP for Kenya was 28.01% from 1995-2005, compared to 14.91% in Tanzania, and 17.03% in Uganda. Consequently, Tanzania and Uganda are expected to suffer net loss of less than 1% of GDP by participating in a monetary union. Masson and Pattillo conclude that the symmetry of gains from the East African Community monetary union might pose similar challenges as those that led to the collapse of the old East African Community.

On the other hand, Mkenda, applying the Generalized Purchasing Power Parity (G-PPP) approach and various indices that are calculated based on the OCA theory concludes that Kenya, Uganda, and Tanzania are a feasible monetary area based on the G-PPP approach, although the other OCA criteria give an inconclusive verdict.

One weakness of all these studies is that they each considered a limited range of economic criteria for OCAs, from which they draw strong conclusions on the viability of a monetary union. Furthermore, they ignore political considerations. Several economists have argued that political factors also need to be considered since country characteristics alone fail to wholly explain the choice of exchange rate regime (Cohen, 2003; Dellas and Tavlas, 2003; Schuldt, 2003; and Willett, 2004). For instance, these authors argue that the choice of exchange rate regimes is often influenced by domestic distributional politics of organized interest groups. Biases of perception of who gains and who loses, and the weight of influence in the political process of gainers and losers are likely to determine the pace of trade liberalization to be undertaken and whether a country joins a currency union or not. Cohen and several other economists have argued that the formation of the European Monetary Union (EMU) was not purely based on economic considerations, but also on political factors. Willett (2004) argues that economic policy decisions are made through a political process, and political considerations dominate OCA theory when it comes to the formation of currency unions.

While not downplaying the significant role of OCA theory in explaining the choices with respect to degree of exchange rate flexibility, this dissertation investigates how various political factors and institutional structures specific to each member countries are likely to influence decisions for the formation and the sustainability of the monetary union. In addition, a wide range of OCA criteria indices are developed for each of the East African countries, namely Kenya,

Tanzania, Uganda, Rwanda, and Burundi. Among these preconditions are the degree of openness of the economy (McKinnon, 1963), labor mobility and wage flexibility (Mundell, 1961), real exchange rate (RER) variability (Vaubel, 1978), synchronicity of business cycles and shocks across the potential union members, macroeconomic convergence, and degree of fiscal discipline, just to mention a few. A comparison is then made to access how the East African countries fit the OCA criteria relative to other existing common monetary arrangements such as the Common Monetary Area (CMA) of Southern Africa, the CFA franc zones in West and Central Africa, and the Euro Area. It is argued that caution should be used in drawing conclusions about the CFA franc zones because of the role played by France as an external guarantor of the currency's convertibility and as the provider of bilateral aid.

One contribution of this research to the OCA literature is the application of a measure developed by Morrison (1982) to proxy the degree of fiscal discipline among the East African countries. The most interesting thing about the measure is its ability to capture periods when countries have failed to exercise fiscal discipline owing to some political pressures emanating from election cycles, and civil conflicts. The significance of analyzing the degree of fiscal discipline among countries wishing to form a monetary union is borne out of fact that failure by the countries to exercise fiscal discipline could generate excessive fiscal deficits, putting pressure on the monetary union's central bank to create additional money to finance these deficits.

In this dissertation, an argument is put forward against the use of correlations of a one-year real GDP growth to try to capture the medium-term synchronization of business cycles and shocks. The one-year real GDP correlations might only be capturing the short term synchronization of business cycles and shocks. For automatic stabilizations we need short-term business cycles of partner countries to be out of phase with each other, as this would help to dampen each other's cycles. This is roughly the same for risk sharing. On the other hand, discretionary policy adjustment would be used if synchronization of business cycles is medium-term. There often exist lags in recognition of shocks, implementation and effects of policy responses (effects of monetary policy changes may take one to two years). One-year real GDP growth correlations present too short a time horizon for effective policy responses. We propose the use of at least a two-year real GDP growth correlation to capture medium-term synchronization of business cycles that would allow time for discretionary policy responses to be effective. In this case a high positive correlation would imply that the cycles are common to all the partner countries, and that they would not have a great need to adopt independent monetary and exchange rate policies on these grounds.

Another query that this dissertation considers is whether despite countries failing to satisfy the OCA criteria a priori they could do so ex-post as trade linkages between them increases (endogenous OCA theory). From a theoretical point of view, increased trade linkages might result in either tighter or looser correlations of national business cycles. For example, where closer trade ties result in countries specializing in goods in which they have comparative advantage, the countries would experience more idiosyncratic business cycles as they become sensitive to industry-specific shocks, making it costly to give up monetary independence. However, the business cycles may become symmetric across countries when countries trade more if intra-industry trade accounts for most trade (Frankel and Rose, 1998). Given the problem of insufficient data we have not empirically estimated the impact of different forms of trade increases (intra-industry versus inter-industry) on business cycle co-movement. Instead, we have used the Grubel-Llyod (1975) measure to compute an index of intraindustry trade intensity in manufactures for the East African countries.

The degree of similarity of the external shocks of the East African countries is analyzed using the real exchange rate variability approach developed by Vaubel (1978). The RER shocks of the five East African countries vis-à-vis a common numeraire from a group of countries maintaining a common currency in the CMA, the CFA franc zone, the Euro Area, and the USA are empirically estimated. The cross-correlations of the RER shocks between the East African countries are computed as well as the individual countries RER shocks variances compared. High positive correlations are interpreted to mean that the countries are affected by similar shocks. Statistical test are conducted to test the hypothesis of equality of variances between the RER shocks of the five countries. If the bilateral variances are similar, the countries would be considered to be viable for a regional money based on this criterion.

8

Among the key political questions that this study addresses is whether governments of East Africa have the political capacity to extract resources from their population and pursue their political and long-term economic goals while preserving political stability. Governments in authority need resources to put in place reliable military forces and maintain a coalition of supporters that grants stability to their rule (Organski, 1997). When political elites' authority is threatened, they often disregard long-term economic goals and stability that are a prerequisite for the successful formation and sustainability of a monetary union, and seek to achieve their primary objective of staying in power (Kugler and Arbetman, 1997). This study applies the concept of relative political capacity (RPC) to measure the ability of a government to extract resources from a population given their level of economic development.

The study also considers the distribution politics of special interest groups, the existence of institutional structures to sustain a monetary union, the political costs of giving up national currencies and adopting a common currency, and veto players who have the power to block needed economic policy adjustments.

The overall finding of this dissertation is that the East African countries are yet to address several political and economic divergences if they are to be a viable monetary area.

The rest of the study is organized as follows. Chapter two focuses on the economics of OCA theory, and selected empirical literatures. Political economy of the choice of exchange rate regimes as it applies to the EAC member countries is discussed in chapter three. Chapter four provides some background information about the EAC, including economic, social, and political history of the member countries. Chapter five describes data and statistical findings. OCA criteria indices that we use to assess the feasibility of EAC monetary union are developed in this chapter. We then compare how EAC countries fit OCA criteria relative to such other existing monetary union in Africa as the CFA franc zones in West and Central Africa, and the Common Monetary Area (CMA) of Southern Africa. Experiences of these monetary unions as well as the European Monetary Union (EMU) are analyzed to see if there are useful lessons for East Africa. The final chapter summarizes our main findings and discusses the implications of our results on the prospects of an East African monetary union.

# CHAPTER TWO: An Overview of the Basic Economics of OCA Theory and a Selective Review of Empirical Literature

The theory of optimum currency areas provides properties or criteria for determining whether countries or group of countries are best suited to form a monetary union, or should maintain a flexible exchange rate regime. The basic idea of the theory is that there is no one best exchange regime for all countries, and that all regimes have both costs and benefits that vary across countries, based on the factors identified by OCA theory (Willett, 2003b). Unequivocally, the theory is relevant for explaining the choices with respect to the degree of exchange rate flexibility.

In the early sections of this chapter we review several OCA criteria and how they influence the cost-benefit ratio of different exchange rate regimes. A review of the empirical literature then follows.

### 2.1 Costs and Benefits Analysis of OCA

Adopting a single currency instead of an independent less rigid currency has its own micro benefits and macroeconomic costs that need to be balanced. On the one hand, a single currency confers benefits of reducing volatility in the real exchange rate, thus reducing uncertainties and contributing to better allocation of resources initially used for foreign exchange reserves and to hedge against the risk of sharp exchange rate adjustments.<sup>3</sup> Also, a single currency helps to save on transaction costs associated with multiple exchanges, further fostering trade, investment and cross-area foreign direct investment (Mongelli, 2002). For countries with poor track records on monetary policy and high inflation, attaching their currencies to those of low inflation-prone countries with credible monetary policy provides a nominal anchor that allow for efficient adjustments when shocks are of a nominal nature (Corbo, 2003). A credibly fixed exchange rate will provide a clear commitment that can be monitored by private agents consequently eliminating speculative attacks that have been blamed to cause currency and financial crisis in Asia and many other regions of the world.<sup>4</sup>

In a world of high degree of capital mobility, intermediate exchange rate regimes that are neither fully fixed nor completely flexible often tend to be highly crisis-prone. As observed in much work on currency and financial crises, many of the victims of severe speculative attacks were maintaining some kind of pegged exchange rate regime. Because of those crises, views have emerged in support of the two-corner solutions of either fully fixed or completely free float, as viable choices in a world of high capital mobility. Yet, as will be observed later, free floats are likely to be excessively volatile and uncertain for small countries that trade extensively internationally. Furthermore, as Willett (2003a) points out, not all types of intermediate regimes need be unstable in the presence of exchange

12

<sup>&</sup>lt;sup>3</sup> The union member countries pool reserves together and give the role of reserve management to a supranational monetary authority. Pooling of reserves help to reduce the amount of reserves each country would have held independently.

<sup>&</sup>lt;sup>4</sup> For more information on the Asian Crisis see Willett, Nitithanprapas, E., Nitithanprapas, I., and Sunil, R. (2003). "The Asian Crises Reexamined," presented at the Asian Economic Panel Meetings, Seoul, Korea held 9-10 October 2003.

rate and domestic macroeconomic policies that are mutually determined in a consistent manner. He proposes that limits on the degree of sterilization of exchange market intervention over the medium or longer run be placed to maintain consistency between exchange rate and monetary policies necessary to avoid currency crises. Where exchange rate policy is set by independent central banks other than the finance ministry, such a design of domestic institutional framework for economic policymaking would be a key factor in avoiding currency crises with intermediate exchange rate regimes. However, the reason why such policy prescriptions are not adopted is largely political.

As Willett (2004) argues, intermediate exchange rate regimes may be subject to time asymmetry pressures that generate incentives for political business cycles. Political players often tend to have a short time horizon, and they are likely to promote policies that have more favorable benefit-cost ratios in the short run than in the long run. This explains why pegged exchange rate regimes have gained popularity despite their failure in the longer run. To circumvent the problem of political manipulation, one possible solution might be to irrevocably fix the exchange rate by joining a monetary union, so long as preconditions for OCA are met. This will help to facilitate quick reforms in the economy by minimizing and ultimately removing politically motivated rigidities. Furthermore, without a domestic currency to manipulate and sustain large inconsistencies between the internal and external balances, there would be no possibility of a sharp depreciation, and sudden capital outflows motivated by fears of devaluation (Berg and Borensztein, 2003). Relative to the single currencies, any other forms of fixed exchange rate regime like currency boards have an exit option and are not fully protected from the effects of financial contagion as the 1995 Argentinean tequila crises, and the 1997 attack on the Hong Kong dollar experiences show (Corbo, 2003; Berg and Borensztein, 2003).<sup>5</sup>

On the macroeconomic cost side, joining a monetary union leads to the loss of monetary and exchange rate policy instruments that could be used to restore equilibrium in the economy, in the event of asymmetric disturbances. The costs are exaggerated especially if nominal prices and wages are rigid, and factors are less mobile. In his pioneering article on the theory of OCAs published in 1961, Robert Mundell argued that an essential ingredient of a common currency is a higher degree of factor mobility (capital and labor), and nominal wage and price flexibility. To demonstrate his argument he assumes a simple model consisting of two countries (A and B), which are initially in full-employment and balance-of-payments equilibrium. He then considers how an asymmetric shock that shifts demand from B to A, causing unemployment in country B and inflationary pressure in country A, can be offset.

In the presence of factor immobility between the two countries and rigidities in domestic money wages and prices, a depreciation by country B or an appreciation by country A would correct the external imbalance and also relieve unemployment in country B and restrain inflation in country A. However, if the countries in question are tied by a fixed exchange rate and factors remain

<sup>&</sup>lt;sup>5</sup> Argentina and Hong Kong suffered from contagion episode that resulted in both sharp increases in interest rates and recessions (Berg and Borensztein, 2003).

immobile and money wages and prices remain rigid, the adjustment to asymmetric shocks would require that country A accepts higher inflation so that the level of unemployment in country B can be brought down. Thus, the opportunity cost of bringing down unemployment in country B will be an acceleration of the inflation in country A and the opportunity cost of maintaining stable prices in country A will be the rise in the unemployment rates of country B. If, however, factors of production are mobile across national boundaries then a flexible exchange system becomes unnecessary, and the high unemployment in country B is offset by labor and capital moving to the surplus country A until equilibrium is restored in both countries. Alternatively, should nominal prices and wages be flexible between and within countries A and B, wage claims in country B would be reduced cushioning the economy from unemployment and the opposite would be valid for country A. Hence, the cost-benefit ratio of adopting a common currency is more favorable, the more flexible the nominal wages and prices are, and the higher the factor mobility.

Although Mundell set the solid theoretical basis for OCA, of course, critiques of his model soon emerged. One may criticize the means of adjustment. Due to trade union's restrictive bargaining wages are rigid downward. Another problem that arises is it is costly for workers to migrate within as well as between nations even with legally and administratively unrestricted cross-border labor mobility. According to Buiter (2000), for labor mobility to mimic the effect of nominal exchange rate flexibility as a potential cyclical stabilization instrument, it would have to be reversible and significant at cyclical frequencies, something

hard to observe happening. Another criticism can be that Mundell implicitly assumed downward sloping and a stable Phillips curve in the long run. This idea of the Philips curve went under strong criticism in the late 1960s and 1970s. It was later argued that there is no trade-off between inflation and unemployment, at least in the long run. McKinnon (2001) notes that the whole model is full of neo-Keynesian beliefs about successful elimination of shocks by national monetary and fiscal policies-what Buiter (2000, p.245) called the "fine tuning fallacy". Buiter observes that failure to distinguish between short-term nominal rigidities and long-term real rigidities has led to the incorrect conclusion that nominal depreciation becomes a real depreciation, not only in the short run, while nominal rigidities persist, but even in the long run.

The cost-benefit ratio of fixed exchange rates can also be looked at by considering the degree of openness and economic size of a country. The effectiveness of exchange rate adjustments to restore balance of payment equilibrium is lower in small and highly open economies. As McKinnon (1963) puts it, small highly open economies have larger tradable relative to non-tradable sectors such that any nominal exchange rates variations is without any impact on the terms of trade and real wages. Depreciation results in a rise in domestic prices and production costs, neutralizing the real exchange rate effect pursued to improve competitiveness. Alternatively, improvement in the trade balance can be enhanced without requiring a big decline in domestic real income, if a country's marginal propensity to import is high (Willett, 2003b).

The usefulness of an independent currency is also determined by the amount of seigniorage profits it generates. Seigniorage is the profit earned by central banks that result from the difference between the face value of coins and currency notes put into circulation and the cost of producing them. It represents a benefit to the central bank that comes from its authority to create money. Seigniorage can be used as an alternative source of revenue for a government outside what can be raised via taxation or borrowing from financial markets, to finance unexpected emergencies (Cohen, 2003). However, the importance of this source of revenue can be undermined by the presence of substantial international currency substitution produced by a low degree of usefulness of the domestic currency.<sup>6</sup> In this context, it is less costly for the economy to replace its currency with another (dollarization) or merge it with those of other union partners to form a new currency. Furthermore, with high international currency substitution, flexible exchange rates are likely to be more volatile, reducing further the value of domestic currency (Willett, 2003b). Thus, the benefit-cost ratio of a single currency will be higher, the smaller and more open an economy is, and the higher is the international currency substitution.

Kenen (1969) emphasized national product diversification as another nonexchange means of mitigating the repercussions of shocks on the economy of a country as a whole. He argued that countries with more diversified production and export structures are more likely to endure small costs from forsaking nominal exchange rate changes and find a single currency with their neighbors

<sup>&</sup>lt;sup>6</sup> In periods of macroeconomic and political uncertainty, domestic currencies tend to lose their function as either store of value, unit of account or medium of exchange, hence, leading to their partial replacement by a foreign currency.

beneficial because shocks focused on one or more particular sectors of the economy would offset each other in the aggregate (law of large numbers).

### 2.2 Other OCA Criteria

Over time, a diverse range of criteria has been developed and at present they are double digits but only a few of them have been included in empirical studies on OCA owing to some criteria not being necessarily mutually independent or easy to measure (Willett, 2004). They include fiscal integration, similarity of inflation rates, industrial structures, financial integration, real exchange rate variability, the nature, source, and timing of potential shocks, and political factors. We highlight each of these factors below.

### 2.2.1 Fiscal Integration<sup>7</sup>

If a currency union has a supra-national fiscal authority that has access to the financial markets on terms that are superior to those enjoyed by the national fiscal authorities of the member countries; it would facilitate macroeconomic adjustment through fiscal transfer to a country adversely affected by asymmetric shock without requiring much adjustment in nominal exchange rates (Buiter, 2000; Mongelli, 2002).

#### 2.2.2 Similarity of Inflation rates

Similarities of inflation rates over time between countries would be an indication that the countries have similarities in economic structures, economic

<sup>&</sup>lt;sup>7</sup> A detailed analysis of this criterion is presented in section 5.1.4 of chapter five of this dissertation.

policies, and social preferences, hence reducing the need for nominal exchange rate adjustment since terms of trade would remain fairly stable (Mongelli, 2002). Divergent inflation can, on the other hand, be a key adjustment mechanism in a common currency area if productivity growth differs between the traded and non-traded goods among countries, leading to persistence in differences in national inflation rates of non-traded goods and services (the so-called Balassa-Samuelson effect).<sup>8</sup>

### 2.2.3 Industrial Structures

Countries that share common industrial structures are less likely to experience asymmetric industrial specific shocks and would tend to exhibit high covariation in economic activities. They are less likely to use their exchange rates as an adjustment tool and hence are better candidates for a currency union. As shall be observed in chapter four, Kenya, Uganda, Tanzania, Rwanda and Burundi depend heavily on agricultural products-especially coffee for their export earnings. Thus, a foreign shock such as the fluctuation of the international market of coffee will affect the five countries in a similar way.

### 2.2.4 Degree of Financial Integration

A high degree of financial integration among a group of countries can reduce the need for exchange rate adjustments, especially in the event of temporary adverse disturbances through capital inflows-for example, by

<sup>&</sup>lt;sup>8</sup> Buiter (2000).argues that profitability of export and import-competing activities can be influenced by changes in relative unit labor costs since labor services are predominantly non-traded.

borrowing from surplus areas or de-cumulating net foreign assets that can be reverted when the shock is over (Mongelli, 2002). In addition, members of the union can share risks through cross-country ownership of assets. Residents of a country can diversify their income sources internationally by holding claims to dividends, interest and rental revenue in other countries, and that this diversification of income can allow the smoothing of both temporary and permanent shocks as long as long as output is imperfectly correlated (Mongelli, 2002). Greater financial integration also implies fewer opportunities of arbitrage and smaller interest differentials, hence, fostering a more efficient allocation of resources. Similarity in financial institutions and markets would also make it less costly to transition to a single currency area since they would be easily governed by similar rules and regulation, hence, minimizing possibilities of future financial crises.

### 2.2.5 Real Exchange Rate Variability

Vaubel (1978) argues that "real exchange-rate changes are a comprehensive and operational criterion of the comparative costs, or even of the comparative desirability, of monetary unification for groups of countries or regions" (p.319). For instance, Vaubel notes that the larger the factor mobility, the smaller the changes in real exchange rate would tend to be, given that labor from high unemployment areas will migrate to other regions within the union, hence reducing the pressure to depreciate the nominal exchange rate in an attempt to reduce real wages in these areas. In addition, Vaubel argues that

countries whose external transactions are highly diversified will experience only small real exchange rate changes, since the law of large numbers reduces the probability and size of changes in each country's terms of trade. Another argument is that the net effect which a shift in export demand will have on balance of payments and thus on real exchange rates will be smaller, if the countries are closely integrated fiscally. The government budget acts as an automatic stabilizer not only of real income but also of real exchange rate. With regards to macroeconomic efficiency of nominal exchange rate changes, Vaubel points out that *"the openness of an economy is, if at all, negatively correlated with the stock of exchange-rate illusion available for real adjustment through nominal exchange-rate changes"* (p.321). As a result, the more open the potential member economies are vis-à-vis each other, the smaller the observed real exchange-rate changes will tend to be.

Bayoumi and Eichengreen (1998) have likewise argued that as more OCA criteria among the countries are fulfilled, the exchange rate variability among the considered countries should be lower. A similar kind of argument is made by Enders and Hurn (1994) when they test for the existence of a long run relationship between the bilateral real exchange rates of countries using the General Purchasing Power Parity (G-PPP) approach. According to Enders and Hurn, real exchange rates are endogenously determined by fundamental macroeconomic variables that might include incomes, terms of trade, government consumption, and so on.<sup>9</sup> For countries to qualify for a successful

<sup>&</sup>lt;sup>9</sup> The list of fundamental variables is attributed to Mkenda (2001) as an example of what fundamental variables might entail. Yiheyis, Zelealem (2000) specifies real exchange rate as a function of the budget

currency area, they should experience convergence and similar shocks to their fundamentals. Furthermore, the fundamental variables in the countries forming an OCA should move together, and be sufficiently interrelated so that the real exchange rates exhibit common stochastic trends. Therefore, the theory advocates that the real exchange rates within a currency area should be co-integrated.<sup>10</sup>

### 2.2.6 Nature, Source and Timing of Shocks

As earlier noted, countries would prefer their own separate currencies if, given some macroeconomic shock, the economic costs of altering the exchange rate is lower than those of adjustment through changes in wage and price levels, or through factor mobility (labor and capital). The case for a separate currency is especially strong if the impact of a shock is asymmetric between countries. Alternatively, should the impact be symmetric on all possible members of a union, the exchange rate changes needed for adjustment would be the same for all. As such, there would be no need for separate currencies. However, caution needs to be taken to identify the different types of macroeconomic shocks, their sizes, cross-country correlation, and the speed of domestic adjustment to restore equilibrium, as this is important for policy purposes.

Distinction can be made between temporary and permanent shocks. The temporary shocks have transitory effects. For example, an unanticipated fall in aggregate demand only temporarily affects output by decreasing it from steady-

deficit aggregate net capital flows as a percentage of GDP, terms of trade, the degree of openness of the economy, and the rate of devaluation.

<sup>&</sup>lt;sup>10</sup>A critique on the G-PPP and exchange rate variability is given in the empirical literature section.

state levels (Bayoumi and Eichengreen, 1994). Shocks of this kind can be corrected by counter-cyclical changes in fiscal and/or monetary policy, or by borrowing. However, in the event that the domestic policy itself is the source of the disturbance, it could be welfare-enhancing to form a monetary union with a group of countries that are less prone to such pressures. An alternative argument is that temporary asymmetric shock would enhance the attractiveness of a currency union (Willett, 2003b). The reason is because it can act as an automatic stabilizer; countries that were out of phase cyclically would help to dampen each other's cycles.

Permanent shocks, on the other hand, entail a permanent decline in competitive position and the level of output, and require major long-term restructuring of the economy. If the internal adjustment mechanisms are inefficient owing to rigidities in prices and wages and factor immobility, it could be costly to achieve internal macroeconomic adjustments (Willett, 2003b). In this case it would be more costly for countries facing asymmetric and permanent shocks to give up their exchange rate and monetary policy independence. Since the two types of shocks have different policy implications, any mistake of treating permanent shocks as though they were temporary and delaying reforms through monetary cushioning may only serve to make reforms more costly.

Another distinction is between global, regional, and country-specific shocks (Lee, Park and Shin, 2002). According to Lee, Park and Shin, it is more desirable for countries with greater common regional shocks to form a common currency arrangement. Otherwise, should the high correlation of shocks between

23

countries be as a result of world common shocks, forming a currency union solely based on a regional context could be misleading, and more globalized arrangement would be desirable. In case the shocks are country-specific then an analysis of the structural characteristics of the country may give us good clues to patterns of shocks. As Willett (2003b) argues, export earnings of countries whose major exports are agricultural products or raw materials are likely to be highly volatile and thus are likely to have greater need for both higher holdings of international reserves and the use of exchange rate adjustments. Similarly, countries with a tendency toward high inflation and with extremely weak domestic political institutions are likely to have a strong need for exchange rate adjustments, since efforts at fixed rates to promote domestic discipline will fail if there is no considerable domestic support for stabilization.

A decision on the type of exchange regime also depends on whether shocks are foreign or domestically generated. A country that is prone to domestically generated shocks that lead to instability in domestic prices would prefer to fix its exchange rate with a low inflation country so as to speed up its own price stability and improve policy credibility. That is, the low-inflation country's currency acts as a nominal anchor. Failure to adopt a credible fixed rate might further exacerbate inflation expectations and worsening price instability and unemployment problems. On the other hand, nominal exchange rate changes may insulate the domestic economy from price shocks originating from abroad. For instance, a foreign price increase can be offset by an appreciation of the exchange rate. Finally, Bayoumi and Eichengreen (1994) propose an assessment on the suitability of countries' participation in monetary union based on the size of shocks, their cross-country correlation, and the speed of domestic adjustment. If the correlation of disturbances across a pair of countries is significantly positive, the countries will favor the same policy responses and it would be less costly to abandon policy autonomy for monetary unification. Where the size of disturbance is negligible and negatively correlated, the costs from forsaking policy autonomy will be minor because output and unemployment and other relevant variables will barely be disturbed from their equilibrium levels. Moreover, there would be no need to resort to an independent policy option if market mechanisms adjust rapidly to restore equilibrium after large asymmetric shocks displace macroeconomic variables from normal levels.

## 2.3 The Endogeneity of OCA

The exogeneity of the criteria discussed above has been contested by Frankel and Rose (1998). They argue that though some countries may fail to comply with OCA criteria *ex ante* they may do so *ex post* once the currency zone is established. From a theoretical perspective, entry into a currency union may raise international trade linkages, which could result in either tighter or looser correlations of national business cycles. Where closer trade ties result in countries specializing in production of those goods and services for which they have comparative advantage, the countries would experience more idiosyncratic national business cycles as they become less diversified and more sensitive to

industry-specific shocks. However, if intra-industry trade accounts for most trade, the business cycles will become symmetric across countries.

Frankel and Rose use an instrumental variables (IV) method, with the instrumental variables for trade intensity drawn from gravity model of bilateral trade. Their empirical results from a panel of thirty years data for twenty industrialized countries show a strong positive relationship between the degree of bilateral trade intensity and the cross-country correlation of business cycle activity. However, their study is critiqued for failing to control for variables other than bilateral trade intensity. This has led to an overestimation of the impact of trade intensity on the cross-country correlation of business cycle.

Shin and Wang (2004) go a step further and investigate the channels through which increased trade might affect business cycles co-movements in twelve Asian countries. They analyze four possible channels that include: inter-industry trade, intra-industry trade, demand spillovers, and policy (both fiscal and monetary) coordination channels. Using panel regression with fixed effects they find that, despite the coefficient estimates for trade intensity having the correct sign, they are statistically insignificant, while those for intra-industry trade are, in most cases, statistically significant at a 10 percent level and robust across different specifications. Their results, unlike those of Frankel and Rose indicate that intra-industry trade, rather than inter-industry trade or trade intensity, is the channel through which synchronization of cross-country business cycles occurs.

## 2.4 A Selective Review of Empirical Studies of OCA

A number of empirical studies have been done to assess whether specific groups of countries form an optimum currency area by analyzing and comparing a variety of OCA criteria. For instance, Bayoumi and Eichengreen (1997) develop a procedure to estimate to what degree the exchange rate variability between European countries may be explained by the OCA criteria. The theoretical argument of the approach is that the lower the volatility of exchange rates between countries, the more amenable to join a monetary union. They analyze annual data on bilateral exchange rate based on nominal exchange rates for 21 industrial countries. The OCA criteria they focus on include: asymmetric disturbances of output, trade linkages based on bilateral trade, dissimilarity of the composition of the exports of two countries, and relative economic size. Each independent variable is averaged over the sample period. The empirical results give correctly signed coefficients that are statistically significant at a one percent confidence level. After establishing the stability of the estimated regression, they use it to forecast the dependent variable in 1987, 1991 and 1995, which is referred to as the OCA index, vis-à-vis Germany.<sup>11</sup> Using the index they divide European countries into three groups: those exhibiting a high level of readiness for EMU, those with a tendency to converge to EMU, and those having little or no evidence of convergence. United Kingdom, Denmark, Finland, Norway and France comprise a group of countries with little convergence, while Austria, Belgium, and the Netherlands are prime candidates for EMU.

<sup>&</sup>lt;sup>11</sup> Other countries bilateral rates against Germany need to converge (be closer to zero) since Germany is viewed as the core EMU member.

Mkenda (2001) uses the Generalized Purchasing Power Parity (G-PPP) method developed by Enders and Hurn (1994), and various criteria suggested by the theory of Optimum Currency Areas to investigate whether the East African Community (EAC), comprising of Kenya, Tanzania, and Uganda, constitutes an optimum currency area. The OCA criteria used include: degree of product diversification that she proxies using the Hefindahl index computed from data on manufacturing industries (from UNIDO's International yearbook of Industrial Statistics); degree of openness as measured by share of intra-regional trade in each of the countries' GDP, and also, by the share of total trade to GDP; cyclical covariation in economic activity, is measured by the correlation among the three countries with respect to growth of output, money, nominal and real interest rates; similarity of the industry structure, which is analyzed by looking at the percentage contribution of industries to value added; and similarity in inflation, which she analyzes by looking at the average rates of inflation in the three countries between 1981 and 1997, dividing the period into a pre-IMF/World Bank-supported adjustment reform period (1981-1991), and a reform period (1991-1997).

Based on the OCA criteria, Mkenda reaches an inconclusive verdict on the feasibility of EAC as an optimum currency area. On the one hand, the EAC countries could form a currency union since the inflation rates of the three countries tend to converge owing to similarity of economic policies in the reform period between 1991 and 1997. In addition, the three countries' industrial structures are similar in that the agriculture sector is the largest export earner,

accounting for 47.3 percent of total exports in Kenya, 59.2 percent in Tanzania, and 70.2 percent in Uganda, on average, in the period 1992-1996. The major agricultural export commodities are coffee and tea, implying that the three countries would be affected in the same way should a shock occur in the world market price of one of the crops. On the other hand, the EAC countries could not form an optimum currency area due to the limited degree of openness toward each other. Moreover, there exist low correlations of output and money growth suggesting that the three countries' economic activities do not move together. But, it is worth noting that the different money growth would disappear with a currency union.

According to the G-PPP approach used in the study, if n countries comprise a currency area, there exists a long run equilibrium relationship between n-1 bilateral real exchange rates. The task then is to test for the existence of a long-run relationship (co-integration) between the n-1 bilateral real exchange rates (RER). The intuition behind testing for co-integration among different RER is based on the fact that countries within an optimum currency area will tend to have real fundamental variables that determine bilateral real exchange rates moving together in similar ways, on average, even though they have non stationary time series characteristics. Thus, with the fundamental variables being sufficiently interrelated, the bilateral real exchange rates would exhibit common stochastic trends. In other words, we would expect at least one linear combination of the various bilateral real exchange rates that is stationary. Mkenda tests for co-integration between the bilateral real exchange rates (RER) with respect to Kenya, Uganda and Tanzania and concludes that the three countries form an OCA on this criterion since their bilateral real exchange rates are co-integrated.

The G-PPP approach has been used by also Grandes (2003) on a sample period spanning from 1990 to 2001, to investigate whether the Common Market Area (CMA) in South Africa plus Botswana constitute an optimal currency area. The empirical evidence shows that CMA and Botswana form an OCA on this criterion since the bilateral real exchange rates with respect to South Africa in Namibia, Swaziland, Lesotho and Botswana are co-integrated. This, he concludes, indicates that the underlying economic shocks or policy responses to them do not spark divergent relative price effects.

Grandes then investigates what the costs and benefits of CMA are for its members. In this second step, he uses a panel data model to provide an explanation of how a variety of factors that signal both advantages and disadvantages of joining a monetary union influence the smoothness of the operation of the common currency area- measured through the degree of relative price correlation. He uses the intra-annual linear correlation coefficients of prices of each possible pair of countries as the dependent variable-instead of the standard deviation of the RER used by Bayoumi and Eichengreen (1997 and 1998).<sup>12</sup> Given a fixed exchange rate regime and low bilateral trade intensities in the CMA countries, Grandes argues that the correlation coefficients of prices would be a more accurate measure to compute the degree of deviation from G-

<sup>&</sup>lt;sup>12</sup> Monthly data on CPIs are used to compute the annual correlation coefficients of prices of each possible pair of countries.

PPP.<sup>13</sup> The set of factors he uses are derived from OCA theory and they include: 1) the degree of openness; 2) diversification of production and exports of goods and services; 3) shock asymmetry; 4) capital mobility and the composition of gross capital inflows; and 5) an interactive variable of openness and the degree of diversification. The empirical results show that, on the one hand, the more open and more similarly diversified the economies are, the higher the degree of relative price correlation, hence, higher benefits from joining a monetary union. On the other hand, the less synchronized business cycles are, and the more dissimilar the kinds of capita inflows are, the higher the cost they will have to bear provided internal capital mobility is low. Finally, more benefits would accrue from a monetary union the more diversified the economy is towards the tradable sector (higher degree of openness).

One critique of the G-PPP approach is that it seems to emphasis the importance of variability of real exchange rates over all other OCA criteria. This is evidenced by the fact that groups of countries that have failed to satisfy certain OCA criteria, but whose bilateral real exchange rates have varied quite similarly, have been concluded to comprise an optimum currency area. Mkenda (2001) is not an exception since the three EAC countries have limited degree of openness with each other and low correlations of output although their bilateral real exchange rates are co-integrated.<sup>14</sup> The approach also seems to imply that RER co-movement combines the net influence of several of the traditional OCA

<sup>&</sup>lt;sup>13</sup> Currencies of other members of CMA are pegged to the South African rand at par. Botswana is linked to the rand through a currency basket where the rand weighs around 60 to 70 per cent (Grandes, 2003; and Bayoumi and Ostry, 1995).

<sup>&</sup>lt;sup>14</sup> See also studies by Laabas and Limam (2002) and Grandes (2003).

criteria, an argument similarly shared by Vaubel (1978). However, this kind of argument has been criticized by Willett (2003b), who argues that "Vaubel did not convincingly demonstrate that real exchange rate variability captured all relevant considerations or that it necessarily weighted optimally those that it does capture" (p.160). He concludes, therefore, that exchange rate variability has become an addition to the other OCA criteria, not a replacement for them.

Another critique of the G-PPP approach is that it fails to take into account the possibility of the currency union increasing trade linkages, which might result in either tighter or loser correlations of national business cycles (endogeneity of OCA criteria). If a currency union leads to increased inter-industry trade instead of intra-industry trade, the countries would experience more idiosyncratic business cycles, leading to deviations from G-PPP. Thus, it is important to investigate how national business cycle co-movements among EAC countries respond to increased trade linkages.

The study by Mkenda uses the degree of correlation among countries with respect to growth of output to measure the covariation in economic activity. However, such an approach has, according to Bayoumi and Eichengreen (1994), a limitation of failing to "distinguish between disturbances emanating from different sources, such as impulses to demand related to the conduct of monetary and fiscal policies as against shifts in supply associated with the shocks to the real economy" (p.2). As earlier observed, distinction between these disturbances is important for policy reasons. Demand shocks often tend to have transitory effects while the supply shocks have permanent effects on the level of

output. Bayoumi and Eichengreen use structural vector-autoregression (VAR) techniques developed by Blanchard and Quah (1989) to regress output growth and inflation upon their own lagged values to decompose output and inflation into underlying aggregate demand and supply disturbances and responses across Europe, the Americas, and East Asia. An assessment is then made on the suitability of countries' participation in monetary union based on three criteria related to these disturbances, namely: the size of shocks, their cross-country correlation, and the speed of domestic adjustment. The empirical results suggest three regional groupings that could be potential candidates for monetary unification: Germany and her Northern European neighbors; Japan, Korea, and Taiwan; and Hong Kong, Indonesia, Malaysia, Singapore, and possibly Thailand. No such groupings are apparent in the Americas. Each of these groups is characterized by relatively small disturbances, which are highly correlated across countries, and rapid speeds of adjustment to equilibrium levels.

Bayoumi and Ostry (1995) used similar technique to decompose disturbances across Sub-Saharan African countries. The results from the vector-autoregressions failed to satisfy the expected "over-identification restrictions" on price responses used by Bayoumi and Eichengreen (1994) to confirm the validity of their decomposition.<sup>15</sup> They attribute this failure to the poor nature of the underlying data. An attempt was made to use another estimation technique to measure real output disturbances. Taking the change in the logarithm of real GDP per capita (as a measure of growth of real GDP per capita), they regressed

<sup>&</sup>lt;sup>15</sup> Over-identifying restrictions require that positive demand shocks should raise prices, but positive supply shocks should lower them (see Bayoumi and Eichengreen, 1994, p.12).

it on its own first and second lags, and took the residuals from this regression to represent the underlying real output disturbances. The correlations were calculated over the period 1963-88 or 1963-89. The study did not, however, identify the sources of these disturbances owing to the size of the cross-country data set. In the case of the East African countries which comprise only five countries, it would be interesting to investigate how various factors proposed by Bayoumi and Ostry, which include domestic economic policies, external shocks, political instability, civil unrest, and droughts affect the real output disturbances. In the period 1963-1987, Kenya and Burundi had a correlation of disturbances of 0.62. The correlation of disturbances between Kenya and Tanzania was 0.23, while between Kenya and Uganda it was 0.09. The correlation between Tanzania and Uganda was, however, negative 0.18.

The EAC countries started adopting IMF/World Bank-supported structural adjustment reforms in the 1990s, which might partly explain the low correlation of output disturbances across them before the reform period. Bayoumi and Ostry, however, attributed the low correlation of disturbances across Sub-Saharan African countries to first, high specialization in production of a limited number of primary goods, which makes their economic fortune susceptible to fluctuations in the markets for the particular products they produce. Second, owing to the poor quality of the underlying data, the estimated size of disturbances could be raised, hence, lowering measured correlations compared to their true values. Finally, to the extent that those domestic factors such as political conditions differ across

countries, this may reduce the observed correlations below those that might be expected given the underlying structure of the existing economies.

Although Bayoumi and Ostry focus on size and correlation of real output disturbances and intra-regional trade across Sub-Saharan African countries, they fail to look at the linkages between trade and business cycles co-movements among the various sub-regions of Sub-Saharan Africa. Our study addresses this issue in the case of an expanded EAC comprising Kenya, Uganda, Tanzania, Burundi and Rwanda.

All the studies reviewed above only consider the macroeconomic fundamentals and fail to factor in political considerations. In the next chapter we look at the political economy of the choice of exchange rate regimes.

## CHAPTER THREE: Political Economy of the Choice of Exchange Rate Regime

Willett (2004) develops a framework to analyze the positive political economic issues of currency choices. Whereas the normative economic issue presented by OCA theory focuses on what countries should do in currency choices, the positive political economy concentrates on what countries are likely to do. Willett argues that economic policy decisions are made through a political process, and political considerations dominate OCA theory when it comes to the formation of currency unions.

At the initial stage of the formation of a monetary union the domestic distributional politics of organized interest groups will come into play. From a political perspective, individuals often tend to remain rationally ignorant other than invest their time and other resources in obtaining and sorting out information about public issues in order to make more informed voting decisions. Each individual realizes that the probability of his vote affecting the outcome is close to zero irrespective of the amount of information he obtains.<sup>16</sup> Biases of perception of who gains and who loses, and the weight of influence in the political process of gainers and losers are likely to determine the pace of trade liberalization to be undertaken and whether a country joins a currency union or not. Owing to rational ignorance and free rider problems associated with large but unorganized groups, the small organized groups are often much more politically influential.

<sup>&</sup>lt;sup>16</sup> See Johnson (1991), *Public Choice: An Introduction to the New Political Economy*. Bristlecone Books, Mayfield Publishing Company.

For instance, a small well-organized group of producers of tradable goods and international investors are likely to influence a government's decision in favor of a more predictable exchange rate regime, more than a large group of domestic goods producers and consumers, who though they would benefit from a domestically stable economy, are less organized to influence government's policy decisions (Cohen, 2003). Already there is a private sector apex body, the East African Business Council (EABC), which fosters private sector interests in the integration process of the East Africa states. The body has observer status in all the organs of the EAC. In order to expand the market for their products, the industrialists want the talks on a single currency completed and Rwanda and Burundi included into the EAC (*The Standard*, November 24, 2004).

To facilitate increased benefits from a single currency, it would be necessary to reduce or eliminate barriers to trade between partner states, and adopt a common external tariff towards non-member countries. However, this might not be an easy matter given that benefits and costs of free trade often tend to be unevenly distributed between the possible member countries and groups within them. In the case of the East African Community, Kenya is more industrially developed than Uganda and Tanzania, and exports more than it imports from them. Should a blanket zero-tariff be adopted without safeguards, Kenya's manufacturing sectors would put great pressure on the domestic producers in Tanzania and Uganda, leading to the collapse of many of them. It would be to the best interest of domestic producers of exports and import substituting goods from Uganda and Tanzania to influence their governments to

negotiate for deals that protect their underdeveloped industries from the stiff competition from Kenyan exports. Under the East African Community Custom Union protocol that came into effect on 1 January 2005, it was agreed that the goods from Uganda and Tanzania enter Kenya duty-free while the two countries can impose tariffs on a reducing level on selected imports from Kenya for a period of five years. It is expected that the three countries would have attained a level-playing field in terms of industrialization by that time. Whereas a small well organized group of producers of tradables in these countries would benefit, a large group of domestic consumers would lose. A high common external tariff could negatively impact the domestic consumers' freedom of choice, since the lower priced regional goods would replace the higher-quality but now higherpriced imports from outside the region. This would especially be the case in Uganda where the average external tariff rate will increase, while it declines in Kenya and Tanzania (Masson and Pattilo, 2005). In chapter four it is argued that one of the factors that led to the collapse of the old EAC was the failure to address the issue of asymmetry of gains from trade between the partner states. Whether the revived EAC progresses towards a monetary union depends on how successful the custom union will be.

Cohen (2003) identifies three direct political benefits of a strictly national currency that are likely to be compromised by the creation of a common currency, which include: a symbol of national identity; seigniorage as the "revenue of last resort"-could be used to mobilize resources in the event of sudden crises; and finally, a means to insulate the nation from foreign influence

or constraint in formulating and implementing policy. In chapter four it is argued that the East African shilling, which was the common currency for Kenya, Uganda and Tanzania until 1966, was abandoned because the states felt that with the absence of one federal development plan, it was impossible for separate states to have powers to implement a national development plan without having separate national currencies. Furthermore, the partner states had divergent political and economic ideology, which meant that each country adopted divergent macroeconomic policies. As for the revived EAC, the partner countries have pledged to maintain currency convertibility and coordinate their macroeconomic policies, while working toward macroeconomic convergence as a basis for the establishment of a single currency. However, conflicts might exist between achieving economic and monetary integration on the one hand, and maximizing political gains through politically motivated rigidities on the other.

Regional integration schemes often tend to generate immediate economic costs while economic benefits accrue in the long run, are uncertain, and in most cases unevenly shared among partner states (Nyaribabu, 2003). As governments lower internal tariffs, they lose revenues in the short run, but hope that such loses would be reversed as increased regional trade spurs production and widens the tax base in the long run. Another source of revenue loss includes the loss of seigniorage following the adoption of a single currency. According to Willett (2004), political players often tend to have a short time horizon, and they are likely to promote policies that have more favorable benefit-cost ratios in the short run than in the long run.

Governments in power are known to sometimes generate political business cycles during electioneering period, through expansionary fiscal policies that are usually financed by borrowing from the central bank. In most of these countries the financial markets are underdeveloped, and the tax systems are highly inefficient. Furthermore, the countries heavily rely on external loans and grants, which have become unpredictable owing to stringent conditions set by the donor community. Many of the conditions have been known to conflict with the political agendas of the governments in power, and have been resisted, leading to suspension of aid. For instance, Nyerere of Tanzania rebuffed International Monetary Fund (IMF) demands to liberalize the economy as a prerequisite for financial aid. In the case of Kenya, the country suffered a suspension of quick disbursement funds by the donor community in 1992, and a further suspension by the IMF of Enhanced Structural Adjustment Facility (ESAF) loan in 1997. As for Uganda, the Government is currently under pressure to introduce political reforms that would guarantee that the incumbent president relinquishes power after his current term in office is over, and multiparty democracy introduced. Already some donor countries have threatened to withdraw aid to Uganda unless these conditions are met. The uncertainties surrounding the sources of financing public deficits, and the constraints that would arise following the relinquishing of monetary authority by partner countries to an independent central bank of East Africa, explain why progress towards attaining a monetary union is likely to be challenging.

Another factor that needs to be considered is whether there exists an institutional structure to sustain a monetary union among sovereign states. Cohen (2003) argues that one of the following two factors is necessary for the sustainability of a monetary union among sovereign states. First, the existence of a locally powerful state "hegemony"-with willingness and ability to influence others to uphold terms agreed upon and keep the union operational. The second calls for a sufficiently broad constellation of institutional linkages between all the countries involved, making the loss of policy autonomy seem basically acceptable to each partner. He observes that South Africa, being the powerful state in the CMA, has played a major role of sustaining the monetary arrangement by compensating Namibia and Lesotho for loss of seigniorage resulting from having the rand as legal tender. France role as the external guarantor of currency convertibility and provider of bilateral aid has helped to sustain the CFA franc zones of western and central Africa.

In the old East African Community, Kenya's economic dominance in the region led to arrogance, as demonstrated by its failure to ratify the agreement that would have ensured that other partner states were compensated for trade imbalances generated by the common market system. <sup>17</sup> This generated much resentment from the other member states, leading to the discontinuation of the East African common currency. Over time, however, Kenya has suffered economic decline while Tanzania's and Uganda's economies have significantly

<sup>&</sup>lt;sup>17</sup> Refer to section 4.3.1 of chapter four for more explanation.

improved.<sup>18</sup> As a result, there seems not to be any locally powerful state within the EAC, which implies that the partner states can negotiate as equals without looking down on each other. The question that arises is how the East African monetary union can be sustained without a dominant state to enforce terms agreed upon. In the old East African Community, the sustainability of the common currency partly depended on how successfully a political federation could be realized. The proponents of the East African Federation argued that economic planning under one federal government would remedy the trade and industrial imbalances. It has been argued elsewhere by Bayoumi and Masson (1995) that fiscal policy in a federal system can facilitate income transfers from richer to poorer countries or regions of a monetary union, which can be used to finance investment needed to promote their development. The living standards would converge as the productivity levels of residents of the poorer regions are raised toward the national average. If a political federation of East Africa would have conferred such benefits, why was it not realized? Kenya preferred the status quo while the other partner states, especially Tanzania complained that delays in the realization of the federation continued to put it at a greater trade disadvantage against the other two partner states.

In the Third Extraordinary Summit of EAC held in Dar es Salaam, Tanzania on 29<sup>th</sup>-30<sup>th</sup> May 2005, the three Heads of State reaffirmed their commitment to an East African federation. A decision had been made in an earlier Special Summit meeting held in Nairobi, Kenya on August 28, 2004, to

<sup>&</sup>lt;sup>18</sup> Table 4.1 in section 4.2 of chapter 4 shows the macroeconomic performance of the East African countries.

establish a Committee to examine ways to fast-track the formation of the East African federation. The Heads of state endorsed a proposal put forward by the Committee in a meeting held in Arusha on November 26, 2004.

The Committee on fast-tracking East African federation proposed January 2010 as the date for launching of the federation, with a two-year transition period (2010-2012) when the presidency would rotate between the sitting presidents. A preliminary draft constitution of the federation is expected to be ready by December 2007 for debate and approval in 2008, in a constitutional forum of members of the East African Legislative Assembly and representatives from Parliaments of the partner states. A referendum on the constitution would then be held in September 2009. During the transition period, a Federal Electoral Commission would be put in place, and Federal constituencies marked out. Finally, the elections for a new federal president and federal parliament are expected to take place between January and March 2013 (*Daily Nation*, April 15, 2005). It is, however, not clear what the powers of the federal president and the federal parliament would be over the countries of EAC. A proposal was also made for the monetary policy committees to immediately start working towards ensuring the realization for a single currency for East Africa by December, 2009.

In their joint communiqué, issued on May 30, 2005, the Heads of State noted that the principle of political federation was warmly welcomed by the peoples of East Africa who needed it sooner rather than later. This view is supported by a poll conducted by Steadman Research Services and Gallup International on EAC federation from December 27 to 31, 2004, which revealed that a majority of East Africans support the federation. Nevertheless, they did not want to have a common president (*Sunday Vision*, January 9, 2005). The proposed roadmap for fast tracking of the East African Federation has, however, been opposed by Tanzanian members of parliament, who warn that speeding up the process would compromise the country's sovereignty (*Guardian*, April 27, 2005).<sup>19</sup>

The Heads of State emphasized the importance of effective and informed participation at all stages of the formation of the federation, by all key stakeholders including the general public, parliaments, civil society, academia, religious institutions and political parties, for it to be strong. In this regard, the Council of Ministers was directed to form national consultative mechanisms and collect views from the people and report back to the Summit the outcome of the consultations in twelve months. It was also agreed that Ministers solely responsible for East African Community affairs, resident in the capitals, be appointed as a means of accelerating the regional integration process towards East African political federation.

The importance of giving enough time to effectively consolidate the customs union which has been operational with effect from January 1, 2005 was emphasized, so as to lay a strong foundation for fast tracking the other stages of integration and ultimately establishing a political federation.

Analyzing critically the current political conditions in the nations of East Africa, it can be argued that they do not seem to support the vision of political

<sup>&</sup>lt;sup>19</sup> Bilal Abdul-Aziz "MPs reject roadmap to EA federation" The *Guardian*, April 27, 2005, IPP Media, Tanzania.

federation. Whereas Kenya and Tanzania are multi-party democracies, Uganda is a no-party state. Since the National Resistant Army (NRA) led by Yoweri Museveni took over power in Uganda through a protracted guerilla struggle in 1986, political parties have been restricted. Although political parties are allowed to exist, parliamentary candidates are only allowed to run for elections as individuals but not as representatives of a party. This, however, is expected to change following the overwhelming support in favor of the restoration of multiparty politics, in a national referendum held in July 2005. The catch though, is the recent unanimous decision by parliament to drop the constitutional limit on presidential terms, opening ways for President Yoweri Museveni to become a president-for-life.

On the other hand, Kenya is in a new constitutional-making process, which has been surrounded by considerable antagonism between the various stakeholders. The bone of contention centers on a recently published Draft Constitution that is an alteration of a people-driven draft popularly known as the 'Bomas Draft', which had advocated the reduction of the president's powers and the creation of the post of executive prime minister. The published Draft Constitution supports the retention of the executive powers by an elected president who appoints a non-executive prime minister. The Official Opposition Party, several pressure groups, and a faction of the ruling coalition, the Liberal Democratic Party (LDP), are against the amended Draft Constitution, while the opposing view is supported by the President's faction of the ruling coalition, the National Alliance of Kenya (NAK).<sup>20</sup> Kenyans will be voting either "yes" or "no" on the Draft Constitution in a national referendum to be held on November 21, 2005. No matter which side wins in the referendum, Kenyans are already politically polarized.

Tanzania is the only country in the region for now with little political crisis. Already the ruling party has selected its candidate to vie for the presidency once the incumbent President completes his final term in office in 2005.

The scenarios in both Kenya and Uganda set a bad precedent for the formation of a political federation. The politicians have already demonstrated that they have a short time horizon, promoting their narrow political agenda in order to remain in power, at the expense of the common good of their nation. As such, it might not be viable for these countries to enter into a political federation unless the political institutions in their countries are harmonized. For instance, there is a need to harmonize the Executive, the Legislative, and the Judiciary, so as to facilitate transition into a federation.

Guillaume and Stasavage (2000) focus on three groups of African countries that have participated in rule-based regional monetary agreements: the CFA Zone (Central African Monetary Union and the West African Monetary Union), the East African Currency Board, and the Rand Monetary Area. They argue that monetary unions can provide an effective means of enhancing the credibility of monetary policies where national political institutions are characterized by an absence of checks and balances. Checks and balances

<sup>&</sup>lt;sup>20</sup> A detailed analysis of the political history of East African countries after independence is covered in section 4.1 of chapter 4 of this dissertation.

include features such as the executive and legislative majorities made up of multiple parties having heterogeneous preferences and the ability to veto legislations. Adopting a model developed by Keefer and Stasavage (1999) they use two variables to proxy for the degree of check and balances: the degree of political party fractionalization, and an index of constraints on the executive. Using a 0-1 scale, high fractionalization in the lower house of a country's parliament (tending toward 1.0) implies that there will be a greater tendency for coalition governments to form, making it more costly to renege on policy rules because multiple decision makers must agree to such a change. An index of constraints on the executive is a subjective indicator of the extent to which the executive in a country is constrained by a separate legislature with veto power and the country's constitution, and it ranges from (1) to (7). Where there is no constraint on the executive's action the index takes the lowest value (1), and tends towards (7) where other players have effective authority equal to or greater than the executive in most areas of activity. Gullaume and Stasavage find that all African countries have had on average an increasing tendency toward low party fractionalization and low levels of executive constraints, where levels of fractionalization approaching zero reflect the emergency of single-party states. They also provide evidence that even in the absence of domestic checks and balances, countries that participated in monetary unions were able to pursue credible monetary policies. They also find that the fear of losing benefits in parallel regional agreements in areas such as trade or security or the technical and financial assistance of developed countries is an important deterrent to exit.

Furthermore, the success of the monetary unions in promoting credibility depends on the design of monetary rules, and the willingness of member countries to oppose attempts to break the monetary rules.

The study by Guillaume and Stasavage (2000), however, covers the period 1960-72 when Kenya, Uganda, and Tanzania had a common monetary arrangement, the East African Currency Board that collapsed in 1966. Our study examines how political constraints in the five East African countries have evolved over the period 1965-2001, and the role that veto players could play in the formation and sustainability of a monetary union.

A monetary union is likely to face a high degree of uncertainty where executives of partner states have all the power to determine the outcome of policies. This raises the possibility of the monetary union to be operated at the whim of the executives whose individual preferences might change or may be replaced by executives with vastly different preferences. For instance, the decisions of the old EAC were heavily influenced by the East African Authority consisting of the three presidents and not the committee of East African Ministers at the Community's headquarters. Following the forceful takeover of power in Uganda by Dictator Idi Amin in 1971, the President of Tanzania refused to recognize the new regime in Uganda and considered its participation in the EAC illegal. As a result, the supreme body of the EAC could not meet anymore from 1971, eventually leading to the collapse of the EAC. After attaining independence, the countries of EAC followed divergent political and economic paths, making it difficult to sustain a common monetary arrangement that had existed since 1919.

As the number of political actors with independent veto power and heterogeneous preferences to the executive increases in each country, it could increase the stability of a monetary union by hindering significant departures from the status quo. The decision to join or exit a monetary union would require a certain number of individuals or collective actors to agree to the proposed change.

This study uses a political constraint variable developed by Heinisz (2000) to assess the degree of political constraint in each of the five East African countries. The political constraint variable (POLCONV\_2002) measures the extent to which a given political actor is constrained in the choice of future policies. It is calculated as one minus the expected range of policies for which a change in the status quo can be agreed upon by all political actors with veto power. In the event that political discretion is in the hands of one political actor (executive), the political constraint variable equal 0. The variable tends to 1 if there exist opposition parties in the legislative house with independent veto power and ideological differences.

Table 3.1 shows the indices for political constraints of the five East African countries.

	1965	1966-1990	1993	1997	2001
Kenya	0	0	0.43	0.75	0.46
Tanzania	0	0	0	0.72	0.11
Uganda	0.43	0	0	0.73	0.34
Rwanda	0	0	0	0	0
Burundi	0.25	0	0	0	0

Table 3.1: Index for Political Constraints (POLCONV 2002) for EA Countries, 1965-2001

Political Constraint = (1- political discretion)

Source: Henisz, W. J. (2000), "The Institutional Environment for Economic Growth." *Economics and Politics* 12 (1): 1-31.

It can be observed from the table 3.1 that during the early years after attaining independence, the entire political discretion was vested on the executives of Kenya and Tanzania, with some degree of political constraint evidenced in Uganda. This implies that the continuation of the East African Currency Board after independence, and the formation of the old EAC heavily depended on the executives branches of these countries. The political constraints on the executive in Uganda were removed in 1966 following the suspension of the 1962 constitution by President Milton Obote.

Following the introduction of multiparty politics in Kenya and Tanzania in 1992 and 1995, respectively, the number of veto players with heterogeneous preferences increased, reducing the political discretion of the executives. The index of political constraint for Kenya and Tanzania increased to 0.43 and 0.72 in 1993 and 1995, respectively. As for Uganda, despite the country having a noparty system of government, political constraints on the executive increased following the promulgation of the constitution in 1995, which limited the president to two five-year terms, and gave parliament and the judiciary significant amount of independence and power. The first presidential election under the new constitution was held in 1996. The independence of Uganda's parliament is, however, questionable given that it is heavily dominated by the National Resistant Movement (NRM). This facilitated the removal of the constitutional limit on the presidential terms by the parliament in 2005. In the case of Rwanda and Burundi, the executives have veto power over final policy decisions. This implies that they would determine whether their countries join a monetary union or not.

The success of a monetary union depends at least in part on the political capacity of the governments of member states to maintain political stability domestically, while pursuing policies that encourage long-term macroeconomic convergence. Kugler and Arbetman (1997) point out that "the primary concern of a government is to "stay in power for as long as possible while maintaining stability, and the secondary goal is to sustain long-term economic growth" (p. 14). In the event that the authority of a government is threatened through domestic or external conflicts, the governing elites would seek to gain political dominance while disregarding long-term economic goals and stability. Therefore, in order to achieve the primary objective, governments in power need to obtain resources that could be used to put in place reliable military forces and maintain a coalition of supporters that grants stability to their rule (Organski, 1997). Political capacity measures the ability of a government to reach and extract resources from a population given their level of economic development. Efficient governments are able to meet or exceed their expected extractive levels, and pursue their political and economic goals while preserving political stability.

We use the concept of relative political capacity (RPC) to measure the ability of the East African governments to extract resources from their population

given their level of economic development. The RPC has two components: the relative political reach (RPR), which focuses on the human resources and measures the extent of government influence on the population; and the relative political extraction (RPE), which reflects efforts by the government to mobilize material resources available in the society (Kugler and Arbetman, 1997). The government's inability to influence the population is captured by the existence of informal or black market labor force. The black market is an indicator of how much activity is outside the control of the government. In the East African case, over 80% of the workforce is in agriculture, which is the mainstay of the economies. A large proportion of the agricultural activities are small scale or subsistence farming. Another characteristic of these economies is the increasing size of the informal sectors consisting of small or micro businesses that are the result of individual or family self-employment. The black market activities are guite prevalent at the borders. A set of surveys that were done in the 1994/95 and 1995/96 estimated the unofficial cross-border trade between Kenya and Uganda at 49% of official trade, followed by Tanzania and Uganda trade at 45 percent of official trade, and Tanzania and Kenya at about 12 percent.<sup>21</sup> This makes it difficult for governments to monitor and charge direct taxes. The costs of reaching the population might be high, making it difficult to address the problems of tax evasion. Thus, the larger the informal sector, the weaker would be the government.

Originally, the measure of relative political capacity was based on making a comparison between the actual levels of extraction to the predicted values

<sup>&</sup>lt;sup>21</sup> See references in Mkenda (2001).

while taking into account inter-country differences in the economic potential. In other words, the RPC was computed as follows:

Relative Political Capacity (RPC) = 
$$\frac{Actual Extraction}{Predicted Extraction}$$

The RPC data is collected from the Claremont Graduate University's School of Politics and Economics (SPE) database. The data has been constructed using an economic model that controls for the level of development of a country as well as its particular mix of resources. The model used is represented by the following equation:<sup>22</sup>

 $tax/GDP = \alpha_0 + \alpha_1(time) + \alpha_2(exports) + \alpha_3(mining)$  $+ \alpha_4(RGDPCH) + \alpha_5(OECD) + \varepsilon$ 

Where:

Tax/GDP (tax ratio) = (total government revenues - total non-tax revenues -

social security)/GDP

Exports = gross domestic product from exports divided by total GDP

Mining = gross domestic product from mining divided by total GDP

Time = 1960 - 2004

<sup>&</sup>lt;sup>22</sup> The list of countries that are included in the sample

Algeria, Angola, Argentina, Australia, Austria, Bahamas, Bahrain, Bangladesh, Barbados, Belgium, Belize, Benin, Bolivia, Botswana, Brazil, Burkina Faso, Burundi, Cameroon, Canada, Central African Republic, Chad, Chile, China, Colombia, Congo, Costa Rica, Cyprus, Denmark, Dominican Republic, Ecuador, Egypt, Elsalvador, Ethiopia, Fiji, Finland, France, Gabon, Gambia, Germany, Ghana, Greece, Guatemala, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran, Ireland, Israel, Italy, Ivory Coast, Jamaica, Japan, Jordan, Kenya, Korea South, Kuwait, Lesotho, Luxembourg, Madagascar, Malawi, Malaysia, Mali, Malta, Mauritania, Mauritius, Mexico, Morocco, Myanmar, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Rwanda, Saudi Arabia, Senegal, Sierra Leone, Singapore, Somalia, South Africa, Spain, Sri Lanka, Sudan, Suriname, Swaziland, Sweden, Switzerland, Syria, Tanzania, Thailand, Togo, Trinidad Tobago, Tunisia, Turkey; Uganda, UK, Uruguay, USA, Venezuela, Zaire, Zambia, and Zimbabwe.

RGDPCH = real GDP per capita in constant dollars OECD = dummy variable. OECD =1, others = 0

The model characterizes developed and developing countries by the differences in their economic structure. The level of productivity of the economy is accounted for by GDP per capita. Countries at low levels of development, as is the case of East African countries, tend to be characterized by large subsistence economy because agriculture is the mainstay of the economies. Overtime as the economy develops, the contribution of the manufacturing sector to the economy increases, and that of the agricultural sector diminishes. Therefore, more taxes are expected to be extracted, the larger the GDP per capita. The dummy variable for OECD is added to allow for the differences between the most developed and the developing countries.

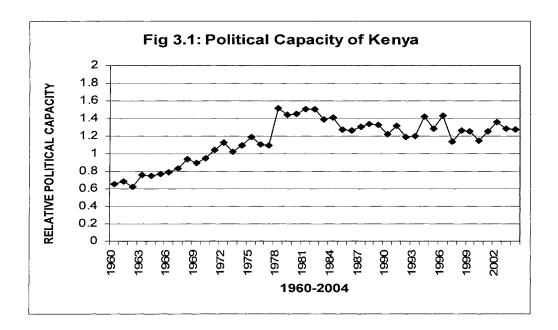
Kugler and Arbetman argue that for developing countries, the countries choices on the expenditure side are limited, and as a result, only controls for the input side of revenues are needed. This is contrary to the developed countries case where controls for expenditures are important to account for differences in allocation of expenditures, since policy choices are not constrained by inadequate resources.<sup>23</sup> The extractive capabilities of countries should be based on resources extracted from the population rather than revenues obtained from sources that do not exert pressure on the population. Exports, mineral production and oil income provide the government with easy revenue sources that do not

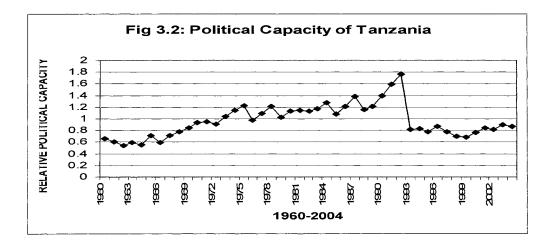
<sup>&</sup>lt;sup>23</sup> In a model presented in Kugler and Arbetman (1997) the differences in allocation of expenditures between the developed countries is captured by adding the ratio of health expenditure to GDP into the equation.

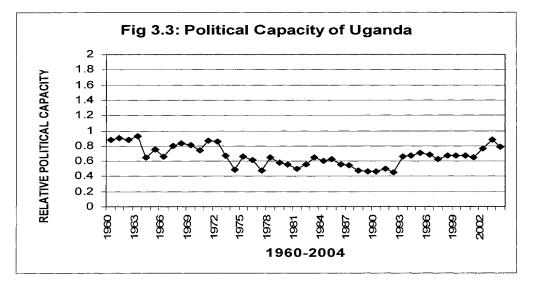
require political pressure to be exerted on the population. These revenue sources are controlled for when determining extractive capacities from the population.

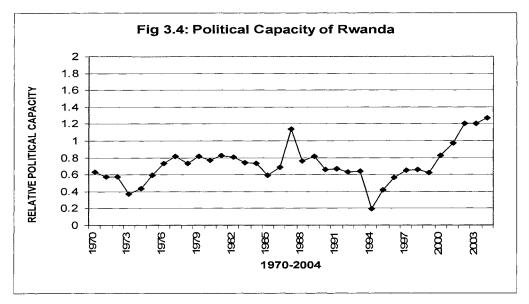
The actual extraction is quantified by the actual tax ratio, while the predicted extraction is derived from the estimated equation. The relative political capacity compares the performance of nations at similar levels of development. An index greater than one indicates a political performance that is above the average society with similar levels of economic development. For instance, an index of 2 indicates a political performance twice that of the average society with an identical level of economic development. A value of one indicates an average political performance. That is, given the resource base, a society extracts the average taxes from its population.

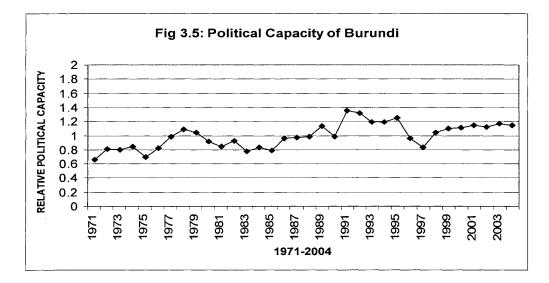
Figures 3.1-3.5 show the relative political extraction for the individual five East African countries over the period 1960-2004.











It can be observed from the figures that during the early years after attaining independence, the East African countries political capacity were below the average society with similar levels of economic development. This could be explained by the lack of well established mechanisms to reach the populations. Kugler and Arbetman have argued that it is easier for the government to gain additional capacity at the initial stages of development by reaching relatively unorganized portions of a population. This may perhaps explain the gradual increase in the capacity of Kenya and Tanzania between the mid 1960s and the late 1970s. The performance of Kenya and Tanzania remained above the average after 1974, but Tanzania's performance deteriorated below average after 1992.

In Uganda's case, political performance during the entire period was, on average, 0.6 that of the average society with similar levels of development. The country had suffered civil strife in the 1970s and early 1980s, leading to the flight of refugees to neighboring countries. After Dictator Idi Amin took over power in 1971 and expelled Asians from the country in 1972, the political capacity index declined from 0.86 in 1972 to 0.48 in 1974. At the time of Uganda's war with Tanzania in 1979, the country had about half the political capacity of Tanzania, which had an average capacity. The difference in political capacities between these two countries may have contributed to Uganda losing the war. Successive governments that came to power after the dethroning of Idi Amin lacked the political capacity to sustain their hold on power. The political capacity has remained far below that of average society with similar level of economic development, long after the present government took over power in 1986. The low extractions from the resource base were supplemented by foreign grants, explaining the ability of the present government to advance its policy goals while maintaining political stability.<sup>24</sup>

Rwanda had a political capacity that was below that of the average society during the entire period apart from 1987 and after 2001. During the civil war of the early 1990s that culminated with the massacre of at least 800,000 people in 1994, the government only managed to extract 0.20 of the average. However, the present government that took power in 1994 was able to gradually improve its ability to extract resources from the population and maintain political stability and advance its economic goals.<sup>25</sup>

Burundi had a mixed performance with the political capacity averaging about 0.89 of what is expected between 1971 and 1990, compared to about 1.14 after 1990. The decline in the performance between 1996 and 1997 to below

<sup>&</sup>lt;sup>24</sup> Section 5.1.4 of chapter five shows that more than 30% of Uganda's budget was financed by foreign grants in the 1990s. <sup>25</sup> A detailed exploring of the exploration of the explor

 $<sup>^{25}</sup>$  A detailed analysis of the economic performance of the countries of East Africa is given in chapter four, and chapter five.

average could be attributed to sanctions imposed on Burundi in August 1996 by the neighboring countries in a bid to force a return to democratic government following a *coup d'état*.

Political stability in the region is a prerequisite for the success of regional integration as the experience of the old EAC showed. The regional integration of East Africa has helped to negotiate for peace in Burundi, and other neighboring countries. The future of regional integration depends on the ability of the governments to extract resources from the populations that could be channeled towards supporting a joint peacekeeping force for the region, as well as fund their joint programs. For these nations to be able to support regional integration, they have first to establish authority in their own domains. Based on the analysis conducted above, we could conclude that countries of East Africa have a long way to go before they could effectively extract resources from the population at a level that is above average.

## 3.2 A Synopsis on the Political Economy of Currency Choices

The overall conclusion of this chapter is that the countries of East Africa do not enjoy the political condition necessary to form a successful monetary union. They lack comparable political institutional structures as in the CFA franc zones and the CMA to sustain a monetary union among the sovereign states. The political systems are heterogeneous, challenging the eventual formation of a political federation. It is not clear what powers the federal president and parliament would have over the sovereign states. Since the primary objective of

many governments is to maintain political dominance, it is unlikely that any individual government of East Africa would give up their sovereignty to a supranational entity. Another concern is the extent of a political federation that would be necessary to sustain a monetary union. The experiences of the 1960s seem to suggest that the political federation that would be considered acceptable by the countries of East Africa is one that guarantees reasonable distribution of benefits and costs of political and economic integration through some form of fiscal transfers. However, measures of the strength of governments that include relative political capacity and veto power show little evidence of East African governments being strong enough to assure responsible fiscal policies necessary for a well functioning monetary union, nor does it seem likely that effective regional integration to provide the necessary economic discipline could be created and enforced.

# CHAPTER FOUR: The Background of the East African Community

This chapter provides some background information about the EAC, including economic, social, and political history of the member countries. The original EAC comprises of Kenya, Uganda, and Tanzania, but Rwanda and Burundi may become members should their applications be approved. In the first section of the chapter we focus on the political history of the countries after independence. Section 4.2 concentrates on the social and economic aspects of the countries. Finally, section 4.3 explains the intricacies of the former EAC, and the recently revived one.

# 4.1 The Political History of East African Countries after Independence

This section gives a chronological account of political history of the five countries after independence. While Kenya, Uganda and Tanzania share a common history of being former colonies of United Kingdom (UK), Rwanda and Burundi are former colonies of Belgium.

# 4.1.1 Uganda

Uganda attained independence on 9 October 1962 with Milton Obote as the executive Prime Minister.<sup>26</sup> In November 1963, Kabaka Frederick Mutesa

<sup>&</sup>lt;sup>26</sup> The political history of Uganda is drawn from the World Fact Book, and EnterUganda.com website at <u>http://www.enteruganda.com/about/history.php</u>

was elected by Parliament as ceremonial head of state.<sup>27</sup> The United People's Congress (UPC) of Milton Obote had formed an alliance with Kabaka Yekka (KY) party and defeated the Democratic Party (DP) in the self-government elections in April 1962.<sup>28</sup> However, the alliance between KY and UPC was later to collapse following a major rift between Obote and Mutesa. On 15 April 1966 Obote introduced the infamous 'Pigion Hole' Constitution after suspending the 1962 constitution, and abolished all the kingdoms, driving Kabaka Mutesa (the Buganda monarch) into exile to Britain, where he stayed until his death on 29 November 1969. By 1969, Obote had banned political parties. On 25 January 1971 Idi Amin, an army commander, overthrew Obote's government, and ruled until 1979. By all accounts, during Amin's eight years in power, thousands of people were killed. Asians, many of whom were entrepreneurs and controlled a major proportion of the country's economic activities were expelled, and Uganda experienced both political and economic turmoil. In 1979 Amin was overthrown following the invasion of Uganda by Tanzanian forces allied with anti-Amin forces under the Uganda National Liberation Front (UNLF). This invasion was purportedly in retaliation for Amin's earlier intrusion into Tanzania. Professor Yusuf Lule became the president of Uganda, but his presidency lasted only 68

<sup>&</sup>lt;sup>27</sup> Before colonialism, Uganda was made up of kingdoms each with a King who exercised power through chiefs and clan leaders. One of the Kingdoms was called the Buganda Kingdom, which was ruled by a semi-divine king (Kabaka).

<sup>&</sup>lt;sup>28</sup> Historically, Uganda's politics was centered on competition among Catholics and Protestants, which was a reflection of the global rivalry between France and England for economic dominance. The British promoted Protestantism and marginalized Catholics, leading to the formation of the Democratic Party in 1956 as an outlet to challenge a political order that was against them. Before the self-government election of April 1962 there had been an earlier countrywide election that had been held in 1961, and Benedicto Kiwanuka of the DP became the first Chief Minister of Uganda. Following the defeat by the DP, the UPC made an alliance with the KY in order to defeat DP in the forthcoming self-government elections of April 1962.

days and Godfrey Lukonga Binaisa succeeded him as President. In December 1980, elections that were widely believed to have been rigged were held, and Obote became the President of Uganda for the second time from 1980-1985. The once-thriving nation had suffered economic debacle, with an inflation rate of more than 200 per cent and a high level of unemployment. Obote's regime was marked with guerilla warfare and human rights abuses, plunging the country into further political and economic chaos. The period of disorder continued even after Obote was toppled in July 1985 by elements of his own army led by General Tito Okello and Brigadier Bazillio Okello.

January 1986, however, marked a new political dispensation for Uganda as the National Resistance Army (NRA) led by Yoweri Kaguta Museveni, through a protracted guerilla struggle started in February 1981, overthrew the government of the Uganda National Liberation Army (UNLA). In his quest to restore the rule of law and peace, and re-build the nation, Museveni, unlike his predecessors, involved all ethnic groups in his government as well as most of the main political parties. The government in Uganda is that of the Movement (formerly National Resistant Movement) or no-party with Museveni as the executive President. The constitution of Uganda was promulgated in 1995, and election for the president was held in 1996 under universal adult suffrage.

In June 2000 the country held a referendum on the system of government and voted to keep the no-party system of government. The president won a landslide victory over the runner up Colonel (retired) Doctor Kiiza Besigye, in an election held on 12 March 2001. Under the leadership of Museveni, the country has continued to experience peace and stability in most parts except along the northern border area near Sudan, where an Ugandan rebel group, the Lord's Resistance Army (LRA) led by John Kony, has been attacking civilians.

Major economic reforms have been introduced that have helped to boost economic performance of the country by restoring macroeconomic stability, encouraging agricultural production, and attracting foreign investors. Museveni's major challenge, though, is how he will foster the transition of the political system of Uganda from a no-party system into a multi-party one. Already there are campaigns by the cabinet to amend the constitution to give Museveni the opportunity to run for a third five-year term in the next election to be held in 2006, a move that is likely to threaten the country's peace and stability, and its progress towards nurturing democracy. However, the move is being resisted by the political pressure group, the Popular Resistance Against a Life President (PRALP).

#### 4.1.2 United Republic of Tanzania

The United Republic of Tanzania came into being in 1964 after Tanganyika and Zanzibar merged.<sup>29</sup> Tanganyika (mainland Tanzania) had attained independence on 9 December 1961, and had become a republic exactly one year later with Mwalimu Julius Nyerere as its first president. Zanzibar attained independence from UK on 10 December 1963, but a revolution took place on 12 January 1964 that saw the Afro-Shirazi Party (ASP) led by Abeid

<sup>&</sup>lt;sup>29</sup> The political history of Tanzania has been compiled from McHenry Dean, *Limited Choices: The Political Struggle for Socialism in Tanzania*. London: Lynne Rienner Publishers, 1994; and from BBC Timeline, 25 July 2001. A brief chronology of events in Tanzania's history from 1498 (in World History Archives)

Amani Karume ascending to power. Julius Nyerere became the first president of the United Republic of Tanzania, with Abeid Amani Karume, the vice president. 1967 saw Nyerere issue the Arusha Declaration that committed the state to *Ujamaa*, or "socialism and self-reliance." The African socialism emphasized by Nyerere was based on labor-intensive agricultural development with rural dwellers being relocated into new socialist villages with collective production and income distribution. He discouraged private and foreign investment and nationalized banks, major agricultural processing centers, primary industries, and export-trading companies.

In February 1977, the Tanganyika African National Union (TANU) and Zanzibar's Afro-Shirazi Party (ASP) merged to become the Chama Cha Mapinduzi (Party of Revolution), which was proclaimed the only legal party. The Interim constitution was replaced by the Permanent Constitution of Tanzania on 25 April 1977. Zanzibar's President Aboud Jumbe resigned in early 1984 and Ali Hassan Mwinyi was elected the president of Zanzibar in April 1984.<sup>30</sup> Nyerere voluntarily retired as president, and Mwinyi was elected president of Tanzania on 27 October 1985. During his tenure, Nyerere had rebuffed International Monetary Fund (IMF) demands to liberalize the economy as a prerequisite for financial aid. Given the dilapidated state of the economy, Mwinyi entered into an agreement in August 1986 with the IMF and the World Bank on a structural adjustment program. However, his commitment to economic reforms waned during his second term, resulting in suspension of IMF aid prior to 1995. In 1992, the constitution was amended to allow multiparty politics. Tanzania's first multi-party

<sup>&</sup>lt;sup>30</sup> Abedi Karume, Zanzibar's Revolutionary Council Chairman was assassinated on 7 April 1972.

elections were held in 1995, and Benjamin Mkapa was elected the president. Mkapa renewed commitment to market reforms and secured more aid from lender agencies. The next multiparty election was held on 29 October 2000 and Benjamin Mkapa was reelected president for another five-year term. During his tenure, Tanzania has made significant progress towards economic reforms, making Tanzania achieve an economic growth of about 6 per cent per year from 2000 to 2003, outpacing neighboring countries.

#### 4.1.3 Kenya

Kenya got its independence from the British rule on 12 December 1963 with Jomo Kenyatta as the prime minister. A year later Kenya became a republic with Kenyatta as the first president and Jaramogi Oginga Odinga, the vicepresident. The campaign for independence from the British rule had begun in 1944 with the formation of the first national African organization, the Kenya African Union (KAU). Kenyatta became the leader of KAU in 1947. From 1952 until 1959 a guerrilla group known as "Mau Mau" fought a resistance war against white domination of the political systems and land ownership, leading to a state of emergency being declared. Kenyatta and other leaders were arrested and charged with management of the "Mau Mau" and jailed from 1953 to 1959. The state of emergency ended in 1960, and Britain announced plans to prepare Kenya for majority African rule. A constitutional conference was convened at Lancaster House in London to map out the future of Kenya. Political parties were legalized, and Kenya African National Union (KANU) was formed by Tom Mboya and Oginga Odinga. After being released from detention in 1961, Kenyatta joined KANU in August and became its leader. A coalition of small ethnic groups that feared dominance by larger ones formed a rival party, the Kenya African Democratic Union (KADU), to promote a federal form of government to counter the centralized power model of KANU.<sup>31</sup> In the general elections held in 1963, KANU led by Kenyatta won against KADU that was led by Ronald Ngala. However, KADU dissolved itself voluntarily in 1964 to join KANU, rendering Kenya a one-party state. In 1966 due to ideological differences, Oginga Odinga resigned as the vice-president and left KANU to form a new opposition party, the Kenya People's Union (KPU).<sup>32</sup> The party was, however, banned and Odinga detained following the assassination of government minister Tom Mboya in July 1969 that sparked ethnic unrest.<sup>33</sup> Freedom of expression was suppressed and no new opposition parties were formed after 1969, making KANU the sole political party.

Upon Kenyatta's death on 22 August 1978, Daniel arap Moi became president. In June 1982 Kenya became a one-party state by law. Two months later, the army suppressed an air force coup attempt that had been engineered by Senior Private Hezekiah Ochuka of the air force. Throughout the 1980's human rights abuses increased and political activities were suppressed. Those opposed to the regime were imprisoned without trial and senior leaders of the party who were perceived to be disloyal to the president expelled.

<sup>&</sup>lt;sup>31</sup> The KADU advocated for the sub-division of the country into sub-regions which would have their own form of administration and governor.

<sup>&</sup>lt;sup>32</sup> Oginga Odinga was an advocate of African socialism while Kenyatta advocated capitalism.

<sup>&</sup>lt;sup>33</sup> Odinga and Tom Mboya were both from Luo ethnic group. Mboya was assassinated by a Kikuyu leading to Luos demonstrating against Kenyatta.

The early 1990's marked a new beginning in Kenya's political arena as a group of lawyers, clergy and politicians opposed to single party rule demanded multi-party democracy. The government faced increasing international criticism over its human rights abuses that led to indefinite suspension of aid and support to Kenya pending the acceleration of both economic and political reforms. The combined domestic and international pressures for political reform resulted in December 1991 in the National Assembly endorsing appropriate amendments to the constitution to permit a multi-party political system. The former vice-president in Moi's government, Mwai Kibaki, resigned as Minister of Health in December 1991 to form the Democratic Party of Kenya (DP). In 1992 new political parties were registered, and approximately 2,000 people were killed in tribal clashes in western Kenya. A fractious opposition gave Moi and KANU victory in the first multi-party elections held in December 1992. Moi was elected to a fourth term as president, winning 36.35 percent of the votes, and KANU won 100 of the 188 seats in the National Assembly. Votes were cast predominantly in accordance with ethnic affiliation. The government continued to use the state machinery to advance its own party political agenda and divide the opposition in order to remain in control.

By the time of the 1997 elections, the opposition remained divided, giving Moi an extra five-year term as president in an election marred by widespread political violence and allegations of massive rigging. The main opponents facing Moi were Mwai Kibaki and Raila Odinga, son of Oginga Odinga. Given that he was serving his second and final term in a multi-party democracy, Moi appointed Kenyatta's son Uhuru, a political novice, to parliament in October 2001 and to a cabinet post in November to prepare him to take over as the party's presidential candidate in the 2002 elections. This, however, resulted in a major rebellion by KANU politicians who were against Moi's choice of Uhuru. Meanwhile, following two major defeats in the 1992 and 1997 elections, the opposition parties together with the dissenting group that later decamped from KANU formed a multiethnic alliance, the National Alliance Rainbow Coalition (NARC), and unanimously endorsed Mwai Kibaki as the united opposition presidential candidate. In December 2002 elections, Kibaki won a landslide victory over Uhuru Kenyatta and assumed the presidency following a campaign centered on an anticorruption platform, ending Moi's 24-year rule and KANU's four decades in power.

The major challenge that the Kibaki government has been facing since ascending to power is wrangles within the ruling coalition following failure by Kibaki to honor the memorandum of understanding made between his faction of the National Alliance of Kenya (NAK), and the faction comprising of the dissenting group from KANU, the Liberal Democratic Party (LDP) led by Raila Odinga.<sup>34</sup> The major difference between the two groups has robbed the government of its ability to use its numbers in the Legislative House to pass government-sponsored bills, forcing the President to form a government of national unity by co-opting into his government members of parliament of other parties not in the coalition, some from KANU who are sympathetic to his government, and demoting those from the LDP. Though this has seemed to work

<sup>&</sup>lt;sup>34</sup> The memorandum of understanding stipulated that on forming the government, the position of prime minister would be created and the leader of LDP Raila Odinga would be appointed the prime minister. Also the cabinet positions would be shared equally between NAK and LDP, among other agreements.

for some time, a rift has now emerged within his faction of NAK, further complicating matters. The other challenge has been the rapidly declining credibility of his government on its commitment to honor the pre-election pledges of creating 500,000 jobs per year, giving Kenyans a new constitution that correctly reflect their wishes, curbing insecurity, and more seriously, fighting corruption. Presently, there are issues both domestically and internationally regarding various corruption scandals touching on key government ministries that have raised the question of how committed the government is in fighting corruption. This has led to some bilateral donor countries cutting their financial support to Kenya with others threatening to do the same unless the government shows full commitment in its war against corruption.

## 4.1.4 Rwanda

Rwanda attained independence from Belgium on 1 July 1962 with Grègoire Kayibanda as the first president.<sup>35</sup> Three years earlier, the majority ethnic group, the Hutus, had rebelled against the colonial power and the Tutsi elite, killing thousands and forcing many Tutsis to flee to neighboring countries. The Hutu political party *Mouvement Dèmocratique Rèpublicain* (MDR), under the leadership of Kayibanda, had toppled the monarchy in 1961, and Kayibanda ruled the independent country until 1973. During his reign, massacre of Tutsis continued, this time in response to failed military attacks by exiled Tutsis. The army chief of staff, General Juvènal Habyarimana, toppled Kayibanda in 1973.

<sup>&</sup>lt;sup>35</sup> The political history of Rwanda is compiled from Institute of Security Studies (ISS) website at <u>http://www.iss.co.za/AF/profiles/Rwanda/Politics.html</u> and BBC Timeline: Rwanda.

Habyarimana formed a political party, the National Revolutionary Movement for Development (MRND), and officially instituted a one-party state in 1975. The party was, however, controlled by the president and his presidential guards, together with a small group of people close to him called the akazu (little house). Hutus from his home area were heavily favored in public service and military jobs, while the Tutsis continued to be excluded. Following the successful takeover of Uganda in 1986 by the National Resistance Army of Yoweri Museveni assisted by Rwanda exiles, the exiled Tutsis formed a guerilla movement, the Rwandan Partriotic Front (RPF). With backing from the Ugandan government, the RPF guerillas invaded Rwanda from Uganda in October 1990, but French troops were called into assist Habyarimana, and prevented the capture of Kigali by the RPF. A cease fire was signed on 29 March 1991, and following pressure from Western aid donors, Habyarimana conceded the principle of multiparty democracy. Further negotiations ensued. and Habyarimana and the RPF signed a peace accord in Arusha, Tanzania, in August 1993, that allowed for the return of refugees and a coalition Hutu-RPF government. United Nations troops were deployed in Kigali to oversee the implementation of the accord. The political will to hasten the setting up of a new power-sharing government stalled, while the Rwandan army intensified training of civilian militias with plans to massacre the Tutsi population. On 6 April 1994 Habyarimana and the president of Burundi, Cyprien Ntaryamira were killed when Habyarimana's plane crushed as it was preparing to land at Kigali airport. The two presidents had attended a regional summit in Arusha. This event sparked off the genocide that caused the death of at least 800,000 Tutsis and moderate Hutus in 100 days. The RPF captured Kigali in July 1994, but approximately 2 million Hutu refugees fled to neighboring Burundi, Tanzania, Uganda, and the Democratic Republic of Congo (formerly known as Zaire), many fearing Tutsi retribution. The RPF has been in power ever since, and it officially heads a multiparty government. The president was Pasteur Bizimungu, but following a major shake-up in government from October 1999 to March 2000 that saw the departure of the parliamentary speaker, the prime minister, and three other cabinet ministers, he was succeeded by the vice-president and minister of defense, Paul Kagame, on 22 April 2000. A new constitution was adopted on 26 May 2003, and presidential and legislative elections held in August and September 2003. Kagame was reelected president in the country's first presidential elections since independence. One major challenge that Kagame's government faces is the Hutu extremist insurgency across the Democratic Republic of Congo border. There is also hostility between Rwanda and its former ally, Uganda, following major disagreement between the two countries' armies in the civil war in The Democratic Republic of Congo.

# 4.1.5 Burundi

Finally, Burundi attained independence from Belgium as a monarchy under King Mwambutsa IV on 1 July 1962.<sup>36</sup> Ethnic violence began later leading to thousands of Hutus fleeing to Rwanda. Legislative elections were held in 1965

<sup>&</sup>lt;sup>36</sup> The political history of Burundi is compiled from Institute of Security Studies (ISS) website at <u>http://www.iss.co.za/AF/profiles/Burundi/Politics.html</u> and BBC Timeline: Burundi.

in which Hutu candidates won a majority in parliament (23 of the 33 seats), but King Mwambutsa refused to appoint a Hutu prime minister and appointed Leopold Biha, a Tutsi, as prime minister instead. Mwambutsa was deposed by his son, Ntare V in July 1966. Ntare appointed the Secretary of Defense Michel Micombero, prime minister, but in November 1966 Micombero toppled Ntare, and declared himself president. As president, Micombero became an advocate of African socialism and received support from China. He imposed a staunch regime of law and order, sharply repressing Hutu militarism. In 1976, Lieutenant-Colonel Jean-Baptiste Bagaza toppled Micombero as president in a military coup. A new constitution making Burundi a one-party state was adopted in 1981. While Bagaza was in Quebec for a Francophone summit, he was deposed in a bloodless coup led by Major Pierre Buyoya in September 1987. The government of Buyoya worked towards democratization of Burundi by adopting, in a referendum held in March 1992, a new constitution that provided for a multiparty system. The country's first presidential election under the new constitution was held on 1 June 1993, and Melchior Ndadaye, a Hutu, won the election against Pierre Buyoya to become Burundi's first Hutu president in July. On 21 October 1993 Ndadaye was assassinated during a military coup attempt. Since then, more than 200,000 people, mostly civilians, have perished in ethnic violence between Hutu and Tutsi factions. Hundreds of thousands have become refugees in neighboring countries. Cyprien Ntaryamira, a Hutu, was appointed by parliament as president, but he was killed in a plane crash together with his Rwandan counterpart on 6 April 1994, triggering more ethnic violence. The

parliament speaker Sylvestre Ntibantunganya was appointed president, but in 1996 Pierre Buyoya staged a second coup, deposing Ntibantunganya and suspending the constitution.

The international community condemned Buyoya's coup, and sanctions were imposed in August 1996 by Burundi's neighbors in a bid to force a return to democratic government, and the opening of talks with rebel groups. Buyoya and parliament agreed on a transitional constitution in 1998 under which Buyoya was formally sworn in as president. After several peace talks held in Arusha, Tanzania under the auspices of former Tanzanian President Nyerere, and then by former South African President Nelson Mandela, a deal was brokered between Buyoya and rebel factions to allow for a three-year transitional government to come into being on 1 November 2001. Buyoya became the first president of the transitional government with Domitien Ndavizeye, a Hutu, as his vice president. However, since 30 April 2003, Ndayizeye is the president after being sworn in as president for the second half of the three-year transitional government. A provisional constitution was approved by the parliament on 20 October 2004, which extended the transition, set ethnic quotas for government positions, and tentatively scheduled elections for 2005.<sup>37</sup> In a referendum held on 28 February 2005, the country overwhelmingly voted in favor of the draft constitution that produces an ethnically balanced government to end its civil war.

To conclude this section on the political history of the five countries, it can be noted that each country has had its own share of challenges ranging from

<sup>&</sup>lt;sup>37</sup> The constitution divides power in government and parliament, giving the Tutsi ethnic minority 40 percent of seats and 60 percent to Hutu majority.

political instability, civil unrest, and autocracy. Though both Uganda and Rwanda have had a long history of political instability and civil unrest as well as rundown economies, they have now been turned around into both politically and economically stable states with fast growing economies. Other countries such as Kenya and Tanzania have been politically stable and have had presidents who ruled for more than 20 years, yet during their terms in office the economies were on the verge of collapse. In the case of Kenya, it was in part a result of high level corruption that made doing business expensive, and failure to adopt appropriate economic reforms as prescribed by the IMF\World Bank. As for Tanzania, one major reason was the failure of the socialist development strategy adopted by Nyerere. Burundi has been the most politically unstable country in the region.

#### 4.2 Social and Economic Backgrounds of the Economies

Having considered the political status of each country, it would be worthwhile to analyze each country's social and economic characteristics as well as economic performance over time, given different political environments. Table 4.1 provides selected macroeconomic indicators on the five countries, and Table 4.2 gives the contribution to GDP and to total employment of various sectors of the economy.

Table 4.2 confirms that these countries are diverse in their economic structures. For Burundi, Tanzania, Uganda, and Rwanda, the greatest share of GDP is from agriculture, averaging 52, 46, 44, and 41 percent, respectively, over the period 1990 to 2003. Conversely, in Kenya, the average share of agriculture

to GDP is only 25 percent, while the service sector generates the bulk of GDP, accounting for 57 percent, on average. Whereas over 80 percent of the workforce of the other countries is in agriculture, a major source of employment in Kenya is the service sector, accounting for 62 percent of total employment. Tourism is Kenya's most important service industry and generates the country's second largest foreign exchange earnings after agriculture. Given its labor-intensive nature, its expansion generates more employment opportunities than an equivalent expansion in other sectors of the economy. Tourism in Kenya is mainly based on natural attractions which include wildlife in its natural habitats as well as idyllic beaches. The industry has, however, suffered greatly following two terrorist attacks in Kenya, one on the American embassy in Nairobi in August 1998, and another on a beach hotel near Mombasa in November 2002, leading to several Western countries urging their citizens not to travel to the country because of the risk of terrorist attacks.

Considering the industry sector, Kenya is the most industrially developed country in East Africa with industry accounting, on average, for 18 percent of GDP a year, from 1990 to 2003, and employing 19.6 percent of the total workforce in 2002. Manufacturing contributed, on average, 12 percent of GDP a year during the same period. The country boasts a comparatively wide range of manufacturing industries that include food processing, refined petroleum and petrochemicals, cements, and small-scale consumer goods (plastic, furniture, textiles, soap, cigarettes, flour).

 Table 4.1: Macroeconomic indicators

	inaloutor	<u> </u>				·	
	1970-79	1980-89	1990-99	2000	2001	2002	2003
KENYA							
GDP at market prices (constant 1995 US \$bn)	4.07	6.55	9.01	9.9	10	10.1	10.23
Real GDP growth (annual %)	7	4	2	-0.16	1	1	1
GDP per Capita, PPP (current international \$)	na	702	973	1005	1020	1018	1035
Inflation, consumer prices (annual %)	11	12	17	10	6	2	10
Official exchange rate (LCU per US\$)	7	14	49	76	79	79	76
M2 (annual %)	20	12	22	6	2	12	12
Foreign Direct Investment, net inflows (% of GDP)	1	0.42	0.27	1	0.45	0.41	na
Total Debt Service (% of GNI)	4	9	9	5	4	4	na
Gross Domestic Savings (% of GDP)	20	16	14	6	5	10	11
Budget Deficit (% of GDP)*	-5	-5	-2	1	-2	-3	-3
Unemployment, total (% of GNI)		1- <u> </u>	1 - <u>-</u> d 21% in 199	L	-2	-3	-3
Population, total (million)	13.6	19.6	26.4	30.1	30.7	31.3	31.9
Poverty headcount, national (% of population)		·	994 and 52%		50.7	51.5	51.9
	42 % 01 pu		994 and 52%	11 1997		1	
		-					
GDP at market prices (constant 1995 US \$bn)	na	na	5.3	6.46	6.85	7.29	7.69
Real GDP growth (annual %)	na	na	3	6	6	6	6
GDP per Capita, PPP (current international \$)	na	na	454	521	552	579	611
Inflation, consumer prices (annual %)	11	30	23	6	5	5	4
Official exchange rate (LCU per US\$)	8	41	480	800	876	967	1038
M2 (annual %) Foreign Direct Investment, net inflows (% of	22	24	27	15	17	25	17
GDP)	na	na	2	5	4	3	na
Total Debt Service (% of GNI)	na	na	4	2	2	2	na
Gross Domestic Savings (% of GDP)	na	na	1	9	8	10	8
Budget Deficit (% of GDP)*	-6	-7	-2	-2	-1	-0.4	na
Unemployment, total (% of GNI)	3.5% of GNI in 1991						
Population, total (million)	15.7	21.5	29.2	33.7	34.5	35.1	35.9
Poverty headcount, national (% of population)	na	na	na	na	na	na	na
UGANDA					1		
GDP at market prices (constant 1995 US \$bn)	na	3.38	5.59	7.88	8.28	8.83	9.26
Real GDP growth (annual %)	na	3	7	6	5	7	5
GDP per Capita, PPP (current international \$)	na	642	948	1293	1352	1413	1471
Inflation, consumer prices (annual %)	na	111	16	3	2	-0.32	8
Official exchange rate (LCU per US\$)	0.075	40	1026	1644	1756	1798	1964
M2 (annual %)	26	92	36	18	9	25	18
Foreign Direct Investment, net inflows (% of GDP)	0.01	0	2	3	3	3	na
Total Debt Service (% of GNI)	1	4	3	1	1	1	na
Gross Domestic Savings (% of GDP)	10	2	4	8	8	6	8
Budget Deficit (% of GDP)*	-5	-3	-3	-7	-2	-4	-4
Unemployment, total (% of GNI)	2% of GNI	in 1989 and	7% in 1997				
Population, total (million)	11.1	14.5	20	23.3	23.93	24.6	25.28
Poverty headcount, national (% of population)							

	1970-79	1980-89	1990-99	2000	2001	2002	2003
RWANDA							
GDP at market prices (constant 1995 US \$bn)	1.14	1.89	1.71	2.06	2.2	2.41	2.48
Real GDP growth (annual %)	5	3	2	6	7	9	3
GDP per Capita, PPP (current international \$)	473	860	922	1093	1166	1224	1268
Inflation, consumer prices (annual %)	12	5	9	4	3	2	7
Official exchange rate (LCU per US\$)	93	89	215	393	443	476	538
M2 (annual %) Foreign Direct Investment, net inflows (% of GDP)	21 0.61	8	0.19	16 0.46	0.27	13 0.15	15 na
Total Debt Service (% of GNI)	0.49	0.86	1.15	1.95	1.1	1.27	na
Gross Domestic Savings (% of GDP)	6	5	-5	1	3	1	1
Budget Deficit (% of GDP)*	-13	-17	-8	-1	-5	-2	na
Unemployment, total (% of GNI)	na	na	na	na	na	na	na
Population, total (million)	4.33	5.97	6.76	7.71	7.93	8.16	8.25
Poverty headcount, national (% of population)	51.2% of population in 1993			<u>,,                                   </u>	and the state of t		
BURUNDI							
GDP at market prices (constant 1995 US \$bn)	0.63	0.91	1.05	0.95	0.98	1.01	1
Real GDP growth (annual %)	4	4	-1	-1	3	4	-1
GDP per Capita, PPP (current international \$)	325	560	667	603	621	635	627
Inflation, consumer prices (annual %)	12	7	14	24	9	-6	16
Official exchange rate (LCU per US\$)	86	114	297	721	830	931	1083
M2 (annual %)	20	12	14	4	16	30	24
Foreign Direct Investment, net inflows (% of GDP)	0.054	0.26	0.05	1.72	0	0	na
Total Debt Service (% of GNI)	1	2	4	3	3	3	na
Gross Domestic Savings (% of GDP)	3.3	3.14	-2.88	-5.65	-4.85	-4.47	-0.16
Budget Deficit (% of GDP)*	0.37	-0.16	-4	-4	-0.01	-1	-5
Unemployment, total (% of GNI)	14% of GNI in 1991		····-				
Population, total (million)	3.7	4.69	6.08	6.81	6.94	7.07	7.21
Poverty headcount, national (% of population)	na	na	na	na	na	na	na

Table 4.1: Macroeconomic indicators Contd

Note: na-not available; bn-billion; LCU-local currency unit.

Budget Deficit as % of GDP is computed from *International Financial Statistics* (from 1972-2003). <u>Source</u>: World Development (2004), *World Development Indicators*, CD-ROM.

Table 4.2: Sectorial contribution to GDP	' (%) and to Total Employment (%)
--	-----------------------------------

		1 · · · / .					
	KENYA 1990-2003	TANZANIA 1990-2003	UGANDA 1990-2003	RWANDA 1990-2003	BURUNDI 1990-2003		
Agriculture value added	25	46	44	41	52		
Employment	18.5 (in 2002)	84.2 (in 1991)	89.6 (in 1994)	91.7 (in 1990)	na		
Industry Value added	18	16	17	20	19		
Employment	19.6 (in 2002)	4.1 (in 1991)	6.3 (in 1991)	3.4 (in 1990)	na		
Manufacturing Value added	12	8	8	13	12 (until 1999)		
Services value added	57	38	39	39	30		
Employment	62 (in 2002)	11.7 (in 1991)	4.1 (in 1991)	4.9 (in 1990)	na		

Source: World Development (2004), World Development Indicators, CD-ROM.

Uganda's manufacturing industry has undergone bad times, especially during the Amin regime. Following the abandonment and chaotic confiscation of manufacturing industries belonging mostly to the Asians who were expelled in 1972, the share of manufacturing to GDP declined from an average of 8 percent prior to 1973, to 6 percent between 1973 and 1979. A historically low level of contribution of 2 percent was recorded in 1981. In the late 1980s, the government began to return some nationalized manufacturing firms to the private sector in order to encourage private investment. The government also provided funds for rehabilitation of government-operated corporations. These measures together with other major reforms improved the contribution from manufacturing is based on the processing of agricultural commodities including cotton, coffee, sugar, and food crops. Uganda also produces textiles, tobacco, beverages and construction materials.

A look at the economic trends of the countries shows that Rwandan economy has been the fastest growing in the region since 1995. The real annual GDP growth averaged 7.7 percent from 1998 to 2002, but slowed to an estimated 3.2 percent in 2003. Prior to 1995 the country had suffered a steep economic decline following the civil war that began in 1990 that culminated in genocide in 1994, and a subsequent flight of refugees to neighboring countries. The real annual GDP growth dropped to negative 8 percent in 1993, and negative 50 percent in 1994. In the period preceding the war and after 1972, during the reign of Habyarimana, the real annual GDP growth averaged 5 percent, up from 3 percent from 1962 to 1972. Since coming to power in 1994, the Rwandan Patriotic Front (RPF) has restored peace throughout the country and ensured the return of most subsistence farmers to their fields. With the support of international donors, substantial progress has been made in stabilizing and rehabilitating the economy. Inflation has been brought under control, averaging 5 percent a year from 1995 to 2003 compared to 11 percent from 1990 to 1994, and 10 percent from 1973 to 1989. The budget deficit as a percentage of GDP averaged negative 3.28 percent a year from 1995 to 2002 compared to negative 4.60 percent from 1990 to 1994, and negative 15 from 1973 to 1989. However, the savings and investment rates are still low.

Uganda, like Rwanda, has been able to turn around an economy that was rundown by the autocratic regimes of the 1970s and 1980s, into a stable and fast-growing economy thereafter. This has been made possible through IMF-backed economic reforms that were started in 1987 with the principle objective of restoring producer incentives through appropriate pricing policies, improving capacity utilization of industries, increasing efficiency in government and the parastatal sector, and attaining both external and domestic macroeconomic stability through exchange rate reforms, and fiscal and monetary discipline. <sup>38</sup> Average real GDP growth in the 1990s was 7 percent a year, up from 3 percent in the period 1983 to 1989, reaching 5 percent in 2003. Inflation has steadily been reduced from a high of 200 per cent in 1987 to a single digit since 1995, reaching 8 percent in 2003. The budget deficit as a percentage of GDP has been

<sup>&</sup>lt;sup>38</sup> Information on Uganda's economy is compiled from Empowerment for African Sustainable Development (EASD) website at <u>http://www.easd.org.za/Soe/Uganda/CHAP2.html#2.3</u>

brought under control from an average of negative 5 percent a year from 1972 to 1979, to negative 3 percent in the 1990s, and negative 4 percent in 2003. The macroeconomic and political stability of the country has also led to increased savings and investment rates. Gross domestic savings as a percentage of GDP averaged 8 percent a year from 2000 to 2003, up from 4 percent and 2 percent a year in the 1990s and 1980s, respectively. As a result of an improved economy, the number of people living in poverty declined from 55 percent of the population in 1993 to 44 percent in 1997.

Burundi, on the other hand, has exhibited the worst economic performance in the region since 1993, following a war triggered by the assassination of the country's first democratically elected President Melchior Ndadaye, and economic sanctions imposed from 1996 to 1999 by neighboring countries. Real GDP growth averaged negative 1 percent a year from 1993 to 2003, inflation averaged 15 percent, and the budget deficit as a percentage of GDP averaged negative 4.28 percent until 2002. Net foreign direct investment and gross domestic savings as a percentage of GDP have been the lowest in the region owing to political instability problems. Gross domestic savings as a percentage of GDP have been the lowest in 1997, averaging negative 3.14 percent a year from 1990 to 2003. The economy is largely subsistence-based, with coffee and tea exports accounting for 90 percent of foreign exchange earnings. This makes the economy vulnerable to adverse weather conditions as well as fluctuations in the international prices of these

primary export products. The industrial sector consists mainly of agricultural processors.

As for Kenya, the country experienced moderately high growth rates during the 1960s and 1970s, with real GDP growth averaging 7 percent a year in the 1970s. The economic performance has been, however, far below the country's potential during the last two decades, with the real GDP growth averaging 4 percent a year in the 1980s, but declining to 2 percent a year in the 1990s. The real GDP growth rate in 2003 was 1.27 percent. The sharp deterioration in economic performance worsened the poverty situation, with the number of people living in poverty rising from 42 percent of the population in 1994 to 52 percent in 1997. The decline in economic performance since 1980 has been accompanied by decreasing levels of savings and investment rates. Net foreign direct investment as a percentage of GDP declined from an average of 1 percent a year in the 1970s to 0.27 percent a year in the 1990s. Domestic savings as a percentage of GDP declined from an average of 20 percent a year in the 1970s to 16 percent and 14 percent a year in the 1980s and 1990s, respectively. In 2001 it was 5 percent, rising thereafter to 10 percent and 11 percent in 2002 and 2003, respectively. The unsatisfactory economic performance has been due to the slow pace of structural reform, failure to sustain prudent macroeconomic policies, poor infrastructure, and governance problems such as corruption and inefficiency in the government and parastatal sectors.

Finally, Tanzania agreed to pursue an economic recovery program (ERP) in 1986 to alleviate an economic crisis that had emanated from, among other

factors, failure of the development policy of Ujamaa and Self-reliance adopted in 1967, which put emphasis on improvement of the agricultural sector. Although the sector contributed a large share of export earnings, it suffered major declines in world primary products export prices. The policy emphasis was, however, shifted from agriculture to the manufacturing sector, when Tanzania adopted the basic industry strategy (BIS) in 1974 that emphasized import substitution and simultaneous expansion of heavy producer and consumer goods industries (Tax, 2000). With the decline in export earnings from the few primary products, and a manufacturing sector that was heavily import-dependent but internationally uncompetitive, the country suffered a major shortage of foreign exchange to continue acquiring the necessary inputs for agriculture and manufacturing sector. This, according to Tax, led to a decline in production in agriculture and capacity utilization in industrial sector, intensifying economic crisis in the 1980s. The economic reforms introduced in 1986 entailed exchange rate adjustments, price decontrols, public sector reforms, and trade liberalization (Mkenda, 2001). Following these reforms, the economy grew at 6 per cent a year from 2000 to 2003, up from 3 percent, on average, in 1990s. Inflation has been at a single digit level since 1999. The budget deficit as a percentage of GDP remained below 5 percentage of GDP starting from 1987. Recent banking reforms have helped increase private sector growth and investment.

#### 4.3 The East African Community

The EAC is the regional integration organization for the Republics of Kenya, Uganda, and the United Republic of Tanzania, with a combined area of 1.8 million square kilometers and a joint population of approximately 93 million. They share a common history, language (Kiswahili), culture and infrastructure. In 2003, the countries combined GDP was about \$27 billion with Kenya having about \$10 billion, while Tanzania and Uganda had \$8 billion and \$9 billion, respectively.<sup>39</sup> The probable admission of Rwanda and Burundi into the EAC is expected to increase the total GDP by over \$3 billion, and the total population by over 15 million people.<sup>40</sup>

In 1999, the East African Heads of State signed a treaty reviving and extending the scope of the old EAC that had collapsed in 1977, with the objectives of deepening cooperation among the Partner States through policies and programs in economic, political, social and cultural fields, research and technology, defense, security and legal and judicial affairs, for their mutual benefits (EAC, 2001). To achieve these objectives, the treaty establishing the new EAC envisaged the establishment of a customs union first, then a common market, a monetary union, and ultimately a political federation.

This section of the chapter is divided into three subsections. In subsection 4.3.1 we give a historical background of regional integration in the East African region beginning from the First World War period. In addition, we examine the operations of the East African Currency Board and the Common Market system.

<sup>&</sup>lt;sup>39</sup> The GDP is at market price with 1995 as the base (see table 4.1).

<sup>&</sup>lt;sup>40</sup> Rwanda's GDP in 2003 was about \$2.5 billion with a population of approximately 8 million, while Burundi had a GDP of \$1 billion and a population of about 7 million.

The formation and the reasons for the collapse of the old EAC are explained in subsection 4.3.2. Finally, we look at the re-established EAC, its achievements and possible challenges.

# 4.3.1 History of Regional Integration in the East African Region

Prior to the re-establishment of the EAC in 1999, the three East African countries had enjoyed a long history of co-operation under successive regional integration arrangements entered into between 1917 and 1977. These included the Customs Union between Kenya and Uganda in 1917 that was joined by mainland Tanzania (then Tanganyika) in 1927; the East African High Commission (1948-1961); the East African Common Services Organization (1961-1967); and the East African Community (1967-1977) (EAC, 2001).

The East African High Commission (EAHC), a body consisting of the governors of Kenya, Uganda, and Tanzania, official advisers as well as a Central Legislative Assembly had been formed to provide a legal basis to enforce laws relating to common services in the three colonies. Services in the three colonies had been amalgamated to form the East African Post and Telegraphs, the East African Airways, the East African Railways and Harbors, and the East African Common Market.

However, following recommendations of the Raisman Commission that had been established in 1960-1961 to conduct a study on the functioning of the East African Common Market and Common Services, the EAHC was replaced by the East African Common Services Organization (EACSO) (Nassali, 2000). Mainland Tanzania had attained independence in 1961, and the other two countries were to attain independence before long, rendering the EAHC politically unacceptable. Unlike the EAHC that had all major decisions of East African cooperation being made by one central authority based in London, the EACSO placed decision making in the hands of East Africans. Under the EASCO charter, a shared and centralized administration was to provide services, including transportation, communication, tax collection, scientific research, social services and university education. In addition, a common currency, a common appellate court, and a common market were to be created. A Distributive Pool Fund was put in place as an independent source of revenue for the activities of the EASCO, and the Central Legislative Assembly established to enact on behalf of the partner countries legislations over the common services.

The common market in which goods and labor circulated freely remained in operation even after all the three countries had gained independence. However, since the colonial era, the common market system had created significant trade and industrial imbalances against Uganda and particularly Tanzania, in favor of Kenya. In the Declaration of June 1963, East African leaders proposed the formation of a political federation of East Africa by the end of 1963 for purposes of unity and for remedying the trade and industrial imbalances, through economic planning under one federal government in East Africa (Nassali, 2000).<sup>41</sup> However, the indefinite delays in the realization of the

<sup>&</sup>lt;sup>41</sup> See also "Towards an East African Federation: Debate, Rationale and Declaration of June 1963" on website *Kituo Cha Katiba: East African Centre for Constitutional Development*, Makerere University Faculty of Law at <u>http://www.kituochakatiba.co.ug/eac2.htm</u>

federation led to bitter complaints by Tanzania in particular, about the growing trade imbalances with Uganda on the one hand and Kenya on the other.

This led in January 1965 to the Kampala Tripartite Agreement on addressing imbalances of the existing common market system. The Agreement recommended six ways of rectifying trade imbalances between the three countries: a) increased production in a deficit country by firms which operated in two or more countries; b) partial re-allocation of some existing major industries in Kenya to Uganda and Tanzania through establishment of "branch" factories; c) the allocation of selected major new industries to the three countries; d) the allocation of a quota system to exports from a more industrially advanced Partner state; e) increased sales from one country in deficit to a country in surplus; and f) early agreement within the East African Common Market on a system of inducements and allocation of industry in order to secure the equitable distribution of industrial development as between the three countries.<sup>42</sup> No exchange rate adjustments were recommended since the countries had a common currency. Unfortunately, Kenya refused to ratify the agreement insisting, among other things, that one single currency be maintained in East Africa, a condition that was unacceptable to the other partners (Nyirabu, 2003).

The three countries had a common monetary system, the East African Currency Board that was established in December 1919 to provide for and control the supply of currency. Initially, the Currency Board operated in mainland Tanzania, Kenya, and Uganda. Zanzibar adopted the currency in 1936. The common monetary system also operated in British Somaliland and the Aden  $\frac{1}{4^2}$  ibid

Protectorate, but they withdrew from it after some time. The Board was empowered to issue its own currency that was fully backed by the pound sterling, for circulation in its area of operations. The East African shilling became the common currency since 1920, replacing the Indian rupee. The Secretary of State fixed the rate of exchange between the East African shilling and the pound sterling. However, the Board ceased functioning in 1966, after Kenya, Uganda, and Tanzania created their own central banks.

The non-ratification of the Kampala Agreement is said to have marked the end of the prospects of a federation, leading to Tanzania, with the concurrence of Uganda, announcing the discontinuation of the East African Common Currency. The President of Tanzania in his address to the Central Legislative Assembly in August 1965 argued that a common currency in the absence of one federal development plan made it impossible for separate states to have powers to implement a national development plan, and so the need for the establishment of separate national currencies.<sup>43</sup> Despite introducing separate currencies, the three states agreed to maintain currency convertibility at par so that the operations of the Common Market would not be adversely affected. However, the parity of currencies became difficult to maintain owing to divergence in political and economic philosophies of the three-partner countries. For instance, Kenya under President Kenyatta pursued capitalism and social interventions, while Tanzania under President Nyerere pursued socialism. Following the Arusha Declaration of

<sup>&</sup>lt;sup>43</sup> "Dissolution of the East African Monetary Union" on website *Kituo Cha Katiba: East African Centre for Constitutional Development*, Makerere University Faculty of Law at <u>http://www.kituochakatiba.co.ug/eac3.htm</u>

1967 that committed Tanzania to socialism, banks in Tanzania were nationalized as well as exchange controls imposed temporarily against Kenya and Uganda to restrict capital flight, leading to suspension of free circulation and redemption of Tanzanian notes in other states (Mkenda, 2001). Besides, Uganda imposed exchange controls against Kenya and Tanzania, and banned the export and import of Ugandan currency following the announcement of a nationalization policy that led to a heavy outflow of capital from the country in 1970 (Mkenda, 2001). However, the convertibility of the currencies was completely severed after a military government of Idi Amin came to power in Uganda in 1971.

# 4.3.2 The Creation and Demise of the "Old" East African Community (1967-

In 1966, the Phillip Commission was established. Its task was to come up with an integration system that addressed the shortcomings of the EACSO, namely inter-territorial imbalances in trade, inequitable fiscal redistribution, currency system disharmony, absence of political goodwill, and constitutional impediments (Kamanga, 2001). The Commission's report became the basis for the 1967 Treaty that established the East African Community (EAC). The EAC took over the joint services institutions belonging to the EACSO, dividing the various services between the East African Community Corporations, and the General Fund Services. Services such as the Railways, Posts and Telecommunications, Airways, Cargo Handling Services belonged to the East African Community Corporation, while a far broader category of services, ranging

from research and training institutions belonged to the General Services (Kamanga, 2001). The organs of the Community comprised the East African Authority Committee of East African Ministers, Secretariat, East African Legislative Assembly, and Ministerial Councils. The Committee of Ministers selected from each country permanently resided at the headquarters in Arusha, and served as an advisory body to the Authority comprising the respective Heads of States.

Following the perceived imbalances in the distribution of benefits of economic integration in the previous integration arrangements, the EAC promoted a restricted trade by imposing a transfer tax system for short-term goals, but with a longer-term objective of moving to free trade within a common market arrangement (Nyirabu, 2003). The less developed members imposed a tariff on imports from a country with which they had trade deficit to protect their industries (Goldstein and Ndung'u, 2001). Also, under the Treaty, the East African Development Bank (EADB) was established so as to promote industrial development as a means of redistributing the gains from the common market. Each state was required to contribute equally to the Bank's capital share, and the Bank was to ensure that Tanzania and Uganda each got 38.75 percent of its investments, against 22.5 percent in Kenya (Goldstein and Ndung'u, 2001). However, several problems emerged leading to the collapse of EAC in 1977, and the closure by Tanzania of its border with Kenya.

To begin with, the problems of the EAC can be traced back to the colonial period. The integration schemes initiated during the colonial period favored

Kenya, which was managed as the center of regional British colonial power. The relatively well developed infrastructure in Kenya led to the setting up of industries there to supply the other territories. With Kenya exhibiting a head start in all spheres of economic development, while Tanzania and Uganda trailed behind, there was need to address the issue of disproportionate benefits from trade. However, measures developed to redistribute the gains from the common market through industrial development failed to yield satisfactory results. As Goldstein and Ndung'u (2001) put it, under a risk-adverse clause in its statutes, the East African Development Bank could only finance 'viable' projects, most of which were in Kenya, especially during the 1971-1973 period. Furthermore, despite having regulations to encourage industries in Uganda and Tanzania, location advantages attracted investors to Kenya.

Next, the pursuit of divergent and conflicting political and economic ideology by the partner states was bound to make it difficult to reach quick and amicable decisions. The ideological differences between the states exposed them to asymmetric internal shocks that required conflicting and divergent socioeconomic policies, hence forcing them to abandon the common currency. With the introduction of individual currencies came the increase in transaction costs of exchanging one currency for another, after each state suspended the free circulation of currencies from other states. This complicated inter-state financial transfers, leading to further decline in intra-regional trade, hence undermining the foundations of the common market system (Kamanga, 2001). The collapse of the EAC has also been attributed to the rising animosity among the leaders of the three countries, especially following the forceful takeover of power in Uganda by Idi Amin in 1971. Tanzania refused to recognize the new regime in Uganda and considered its participation in the EAC illegal. Furthermore, there were tensions between Kenya and Uganda following Amin's territorial claims against Kenya in 1976. As a result, the supreme body could not be able to meet anymore, from 1971. Indeed the relationship between Uganda and Tanzania worsened, resulting to war between them within one year of the break-up of the Community.

Another aspect of the Community that hindered its smooth operations was lack of autonomy of the institution from interferences by individual partner states. Unlike the East African High Commission that had all major decisions of the cooperation being made by one central authority based in London and then executed by the colonies, the decisions of the EAC were heavily influenced by the East African Authority and not the committee of East African Ministers at the Community's headquarters. Furthermore, each member state had veto power as provided in the 1967 Treaty of East African Co-operation. Thus, any decisions of the Community could be deferred for failure of the three states unanimously reaching an agreement.

The collapse of the EAC was also a result of the failure by its architects, the founding fathers of these nations, to involve the private sector and the civil society in the formation and the running of the Community. As a result, its existence depended on the whim of the three leaders (Nyirabu, 2003). Finally,

the failure by the member states to pay their dues to the Community marked the end of the East African Community in June 1977. The Community was officially dissolved in 1983.

#### 4.3.3 The Revival of the East African Community

After the collapse of the EAC, Dr. Victor Umbricht, a Swiss diplomat was nominated by the World Bank and accepted by the three states as their mediator in arriving at a permanent and equitable division of the assets and liabilities of the EAC. The mediation started in November 1977, but it was not until 1984 that the heads of state of the partner countries signed the East African Mediation Agreement for the division of assets and liabilities, and agreed to explore and identify areas for future cooperation. This led to the 1993 Agreement for the Establishment of the Permanent Tripartite Commission for East African Cooperation. It was from this agreement that the Secretariat of the Tripartite Commission was launched as the executive arm of the commission on 14 March 1996, at its headquarters in Arusha, Tanzania. On 29 April 1997, the heads of state of the three countries directed the Permanent Tripartite Commission to start the process of upgrading the agreement establishing the Commission for East African Co-operation into a Treaty. Following a wide participation of the public as well as successful negotiations among the member states, the Treaty establishing the East African Community was signed on 30 November 1999, and the community officially launched on 15 January 2001.

The institutions of the EAC comprise the Summit, the Council of Ministers, the Co-ordination Committees, the Sectoral Committees, the East African Court of Justice, the East African Legislative Assembly, and the Secretariat. The Summit is the highest organ comprising heads of State of the three countries, whose role is to give direction towards the realization of the objectives of the community. The Council comprises ministers from the partner states, and is the main decision-making institution. The Co-ordination Committee comprising the permanent secretaries reports to the Council, and is responsible for regional cooperation as well as the co-ordination of the activities of the Sectorial Committees. The role of each Sectorial Committee is to prepare comprehensive programs, set priorities and monitor their implementation in its sector. The East African Court of Justice is responsible for ensuring that the interpretation and implementation of community law is in line with the Treaty. Unlike the defunct East African Court of Appeal which handled only appeals from national courts. the East African Court of Justice is an international court with a different composition. The East Africa Legislative Assembly consists of twenty-seven elected members, and five ex-officio members who include the Minister responsible for regional co-operation from each country, the Secretary General, and the Counsel to the Community. Finally, the Secretariat is the executive organ of the Community, and is responsible for ensuring that regulations and directives adopted by the Council are properly implemented. The East Africa Legislative Assembly and the Secretariat, however, lack the political power to ensure that the member states implement and adhere to terms agreed upon.

The East African Community operates on the basis of a five-year Development Strategy that spells out policy guidelines and priority programs, as well as implementation schedules. The first EAC Development Strategy was launched on 29 April 1997 by the Heads of State of member countries and covered 4 years, 1997-2000. The first strategy formed the basis for the establishment of the Community in 1999. Among some of the key policies that were earmarked for action within the period 1997-2000 include: Harmonization of fiscal and monetary policies among the member countries; easing of cross border movements of goods and persons; free movement of capital; development of infrastructure; enhancement of technological and human resources development; and strengthening of institutions of co-operation.

Several achievements were made during the period. The East African passports and temporary passes were introduced to facilitate easy movement of people within the Community. A defense liaison office was set up at the Secretariat and the memorandum of understanding for co-operation in defense and foreign policy signed. The partner states achieved full convertibility of their currencies and initiated the holding of pre-budget and post-budget consultations by Finance Ministers, including reading of budget statements on the same day and time. Despite the reasonable progress made in its implementation, the strategy was characterized by institutional inertia<sup>44</sup>, slow decision-making processes at national levels, time lags between changes made and change of attitudes and modalities of operation on the ground, inappropriate sequencing of

<sup>&</sup>lt;sup>44</sup> Failure to take into consideration country specific conditions led to delays in the implementation of various policy and program actions within the stipulated time frame. Excessively optimistic time frame was often set for various policy actions

certain activities, and delays in implementation due to resource constraints. It also raised challenges in managing the distribution of benefits and costs of integration, given the difference in the levels of development of partner countries.

The Second EAC Development Strategy 2001-2005 is based on the lessons learned during the implementation of the first development strategy and sets out the priority programs to be implemented during that period. The primary focus of the strategy is the establishment of a customs union and a common market while laying the foundations for a strong and globally competitive productive base. The supply capacity of productive sectors consisting of agriculture, industry, tourism and natural resources is to be enhanced through appropriate investments in infrastructure, supportive services, science and technology and human resource development.

Remarkable progress has been made in liberalizing intra-regional trade by removing a number of non-tariff barriers on cross-border trade and establishing a customs union. The East African Community Customs Union commenced operations on 1 January 2005 following the signing of the protocol establishing it in March 2004. The member countries agreed to apply the principle of asymmetry in the elimination of internal tariff so as to avoid the shortcomings associated with the earlier integration initiatives. Under the program, the goods from Uganda and Tanzania enter Kenya duty-free while the two countries impose tariffs on reducing level on selected imports from Kenya for a period of five years. Uganda imposes a uniform tariff of 10 percent on imports from Kenya, which will reduce progressively by 2 percent each year until 2009. Kenyan exports to

Tanzania attract duties of 5, 10, 15, and 25 percent and will reduce progressively to zero in 2009. Those Kenyan exports to Tanzania that attract a 2 and 3 percent customs tariff will be zero rated in 2007 and 2008, respectively.

The partner countries agreed to impose a common external tariff (CET) that will apply uniformly on goods imported into EAC. The CET rates are zero percent for raw materials, 10 percent for intermediate goods and 25 percent for finished goods. A common external tariff rate of 25 percent is higher than a 15 percent tariff rate previously charged by Uganda, but lower than the 35 percent charged by Kenya. Tanzania also faces a decline in external tariff rates. A study conducted by Castro, Kraus and de la Rocha (2004) shows that the implementation of Customs Union would lead to a modest decline in tariff revenues of the three countries. In the first five years of its implementation, Kenya would suffer a 16 percent decline of pre-Customs Union customs revenue, while Tanzania and Uganda would experience a decline of 4.2 percent and 2.9 percent, respectively. With a contribution of customs revenue to total tax revenue of about 10 percent for the three countries, the loss from implementation of the Customs Union would be roughly 1 percent of total EAC tax revenue during the first five years. In case of regional trade flows, the study estimates that there would be almost no expansion of regional trade during the first five years because of the temporary tariffs on selected imports from Kenya. However, modest increases in regional trade flows are expected, after the temporary tariffs are eliminated and the top CET rate is reduced to 20 percent.

As a basis for the establishment of a monetary union, the second development strategy stresses the need for the partner countries to continue maintaining currency convertibility and coordinating macroeconomic policies with specific emphasis on exchange rate, interest rate, monetary, and fiscal policies, while working toward macroeconomic convergence. Targets have been set for macroeconomic convergence in the following economic parameters: real GDP growth rate of at least 7%; inflation of less than 5%; fiscal deficit of less than 5%; domestic savings as a percentage of GDP of at least 20%; undertake debt reduction initiatives and maintaining the fiscal burden to servicing the external obligations to less than 15%; maintaining reserves at least 6 months equivalent of normal imports; and lower ratio of current account deficit. Furthermore, complete financial sector reform is expected to be undertaken to guarantee efficiency in their operation consistent with promotion of savings and investment.

Whether the countries of East Africa qualify to form a monetary union depends on both political and economic factors, as determined by the theory of OCA. In the next chapter we analyze whether an expanded EAC consisting of Kenya, Uganda, Tanzania, Rwanda, and Burundi satisfies the preconditions for an optimum currency area.

# CHAPTER FIVE: East African Countries and the Optimality Criteria for OCA

The Optimum Currency Area theory identifies several preconditions that countries forming a monetary union must satisfy to become an optimum currency area. In chapter two, we provided a theoretical explanation of several of these preconditions. In chapter five, we develop indices based on the OCA theory and test to what degree an expanded EAC comprising Kenya, Tanzania, Uganda, Rwanda, and Burundi forms an OCA. We then compare how the EAC regional trade bloc fits OCA criteria relative to such other existing monetary unions as the CFA franc zones in West and Central Africa, and the Common Monetary Area (CMA) of Southern Africa. Finally, we analyze experiences of these monetary unions as well as the European Monetary Union (EMU) to see if there are useful lessons for East Africa.

#### 5.1 The Optimum Currency Area Criteria

The following OCA criteria indices are constructed to test whether Kenya, Uganda, Tanzania, Rwanda and Burundi are an optimum currency area: (1) the degree of openness; (2) factor mobility; (3) macroeconomic convergence; (4) degree of fiscal discipline; (5) intra-industry trade intensity; (6) exchange rate variability; and (7) synchronicity of business cycles and shocks.

### 5.1.1 Degree of Openness

The more open an economy is, the larger the benefits of joining a currency union will be, ceteris paribus (McKinnon, 1963). Nominal exchange rate becomes an ineffective instrument to restore equilibrium in the event of a real shock, since the tradable sector is much larger than the non-tradable sector. Any change in the nominal exchange will be transmitted to prices and wages, which implies that real exchange rates will remain unaffected. The degree of openness is traditionally measured by the ratio of total trade of goods and services to Gross Domestic Product (GDP). Tables 5.1 and 5.2 give the openness measures for the East African countries and other regional arrangements in Africa and Europe.

Kenya has the highest degree of openness relative to all the other East African countries, while Burundi is the least open economy. We compute the overall degree of openness for different regions as the percentage of the sum of the total trade (exports and imports) of the member countries to the sum of their gross domestic product. A comparison of the degree of openness between the EAC and the existing monetary unions in Africa and Europe shows that the EAC is, on average, less open than the WAEMU of West Africa, the CAEMC of Central Africa, the CMA of South Africa, and the Euro Area.<sup>45</sup> The degree of openness for the EAC averaged 48%, from 1995-2003, while for the WAEMU, the CAEMC, and the Euro Area it averaged 64%, 72%, and 65%, respectively.

<sup>&</sup>lt;sup>45</sup> The CMA has not been included in table 5.2 because of lack of sufficient data to compute intra-regional trade shares. However, the average degree of openness for South Africa, Namibia, Lesotho and Swaziland is 52%, 100%, 135% and 176%, respectively.

Openness (total trade as a percentage of GDP)				GDP)		
	1995	1997	2001	2002	2003	Average
Kenya	71%	64%	62%	55%	54%	61%
Tanzania	59%	43%	41%	42%	46%	44%
Uganda	33%	34%	36%	38%	39%	35%
Rwanda	31%	33%	34%	33%	36%	32%
Burundi	40%	24%	25%	29%	25%	28%
All EAC	55%	48%	48%	46%	47%	48%
Intra-EAC ex	ports (%	of total ex	ports) fro	m		
Kenya	29.3%	29.7%	19.8%	20.8%	20.7%	24.8%
Tanzania	13.0%	6.8%	6.1%	5.6%	5.3%	7.9%
Uganda	1.1%	2.3%	15.6%	18.6%	21.7%	9.2%
Rwanda	0.8%	3.5%	0.8%	1.5%	1.0%	1.5%
Burundi	7.1%	7.6%	15.2%	24.0%	32.5%	14.1%
All EAC	19.5%	18.9%	15.7%	16.0%	17.1%	17.8%
Intra-EAC Import (% of total imports) to						
Kenya	1.1%	0.8%	2.9%	3.0%	3.2%	1.8%
Tanzania	11.7%	5.3%	8.2%	6.8%	8.5%	8.0%
Uganda	36.1%	38.8%	28.7%	31.3%	26.9%	35.1%
Rwanda	28.5%	22.6%	25.0%	29.3%	31.7%	26.2%
Burundi	13.6%	0.6%	14.3%	31.9%	6.6%	12.3%
All EAC	10.6%	8.8%	8.5%	9.4%	9.5%	9.6%
Intra-EAC ex	ports (% e	of GDP) fr	om			
Kenya	6.4%	5.8%	3.7%	3.6%	3.7%	4.8%
Tanzania	1.4%	0.5%	0.6%	0.5%	0.8%	0.8%
Uganda	0.1%	0.2%	1.2%	1.5%	1.7%	0.7%
Rwanda	0.05%	0.2%	0.06%	0.1%	0.1%	0.1%
Burundi	1.4%	0.05%	0.9%	1.7%	0.5%	0.8%
All EAC	2.9%	2.4%	1.9%	2%	2.2%	2.3%
Intra-EAC Im	port (% G	DP) to				
Kenya	0.4%	0.3%	1.0%	0.9%	0.9%	0.6%
Tanzania	4.5%	1.3%	1.2%	1.0%	1.2%	1.9%
Uganda	5.3%	5.0%	4.9%	5.5%	5.6%	5.4%
Rwanda	7.2%	4.0%	4.1%	5.6%	6.9%	5.0%
Burundi	1.8%	1.1%	3.3%	5.7%	8.5%	3.1%
All EAC	3.2%	2.0%	2.1%	2.2%	2.4%	2.3%

 Table 5.1: East African Community Trade Pattern, 1995-2003

The degree of openness for all EAC is the sum of total trade of the countries as a percentage of the sum of their GDP.

Source: Openness data are taken from World Bank (2004), *World Development Indicators*, CD-ROM. Intra-EAC trades are computed from IMF (2004), *Direction of Trade Statistics*, CD-ROM.

Regional Arrangement	Openness	Intraregio as % of Te	nal Trade otal
	average	Exports	Imports
EAC	48%	17.8%	9.6%
WAEMU	64%	12.3%	8.7%
Benin	44%	4.7%	10.9%
Burkina Faso	35%	10.1%	26.6%
Cote d' Ivoire	75%	12.4%	1.0%
Guinea-Bissau	66%	0.7%	13.4%
Mali	63%	2.2%	21.7%
Niger	41%	6.3%	16.8%
Senegal	69%	15.4%	3.0%
Тодо	77%	17.3%	9.4%
CAEMC*	72%	1.4%	1.7%
Cameroon	51%	4.5%	0.5%
Central African Rep.	38%	1.1%	13.1%
Chad	52%	2.6%	10.2%
Congo, Republic	133%	0.3%	
Gabon	92%	0.3%	2.6%
Euro Area	65%	49.9%	49.5%
Austria	91%	55.5%	64.3%
Belgium	151%	62.6%	59.3%
Finland	69%	32.3%	34.1%
France	50%	47.3%	52.1%
Germany	59%	42.7%	41.1%
Greece	50%	37.9%	50.6%
Ireland	161%	37.8%	19.8%
Italy	51%	45.5%	49.6%
Luxembourg	250%	73.8%	78.8%
Netherlands	118%	60.2%	38.9%
Portugal	69%	65.0%	67.3%
Spain	55%	59.7%	57.0%

Table 5.2: Regional Trade Patterns, 1995-2003

\*Excludes Equatorial Guinea owing to insufficient data problem. The average of Euro Area intraregional trade is computed from 1997-2003, but openness is averaged from 1995-2002. Source: Data for openness are taken from World Bank (2004), *World Development Indicators*, CD-ROM. Intra-regional trades are computed from IMF (2004), *Direction of Trade Statistics*, CD-ROM.

Gains from a common currency are expected to be greater if the partner countries trade more among each other. Table 5.1 gives the share of intra-EAC commodity exports (imports) in the total exports (imports) of each country. The table also gives the share of intra-EAC commodity trade in each country's GDP.

Exports (as a percentage of total)							
Export from	Partner	1995	1997	2001	2002	2003	Average
Kenya	Tanzania	11.83	12.18	4.22	4.01	4.24	7.68
	Uganda	15.18	14.28	12.36	13.17	12.58	14.13
	Rwanda	1.87	3.02	2.83	2.94	3.12	2.55
	Burundi	0.42	0.23	0.41	0.66	0.79	0.41
Tanzania	Kenya	3.39	4.07	4.96	3.73	4.65	4.12
	Uganda	1.21	1.19	0.73	0.58	1.02	1.37
	Rwanda	5.24	1.01	0.37	0.41	0.51	1.67
	Burundi	0.83	0.14	0.87	0.74	1.74	0.82
Uganda	Kenya	0.56	1.21	13.1	13.23	14.74	6.57
- 5	Tanzania	0.31	0.82	1.48	1.24	1.1	0.96
	Rwanda	0.2	0.23	0	2.77	3.91	1.16
	Burundi	0	0	1.06	1.35	1.9	0.52
Rwanda	Kenya	0.05	2.28	0.14	0.13	0.16	0.36
	Tanzania	0.03	0.54	0.06	0.03	0.03	0.11
	Uganda	0	0	0.26	0.85	0.32	0.23
	Burundi	0.74	0.71	0.36	0.51	0.44	0.81
Burundi	Kenya	5.21	6.86	6.86	18.7	0.08	6.02
	Tanzania	4.34	0	0.13	0.13	0.08	1.71
	Uganda	0.9	0	2.1	0.94	2	0.7
	Rwanda	1.91	0.44	5.71	10.06	5.7	4.4
Imports (as a p	percentage of	total)					
Imports to	Partner	1995	1997	2001	2002	2003	Average
Kenya	Tanzania	0.8	0.45	1.1	1.04	1.14	0.84
	Uganda	0.1	0.25	1.69	1.80	2.08	0.9
	Rwanda	0	0.09	0.01	0.01	0.01	0.01
					0 47	0	0.07
	Burundi	0.18	0	0.08	0.17		0.07
Tanzania	Burundi Kenya	0.18 12.65	0 6.34	0.08 5.4	0.17 5.44	4.97	7.57
Tanzania	Kenya Uganda	12.65 0.1	6.34 0.38	5.4 0.64	5.44 0.15	4.97 0.28	7.57 0.28
Tanzania	Kenya	12.65 0.1 0	6.34 0.38 0.05	5.4 0.64 0	5.44 0.15 0	4.97 0.28 0	7.57 0.28 0.01
Tanzania	Kenya Uganda	12.65 0.1	6.34 0.38	5.4 0.64	5.44 0.15	4.97 0.28	7.57 0.28
Tanzania Uganda	Kenya Uganda Rwanda Burundi Kenya	12.65 0.1 0 0.26 34.95	6.34 0.38 0.05	5.4 0.64 0 0.01 28.01	5.44 0.15 0 0 30.42	4.97 0.28 0 0 26.05	7.57 0.28 0.01 0.06 34.02
	Kenya Uganda Rwanda Burundi Kenya Tanzania	12.65 0.1 0 0.26	6.34 0.38 0.05 0.01	5.4 0.64 0 0.01 28.01 0.66	5.44 0.15 0 0	4.97 0.28 0 0	7.57 0.28 0.01 0.06
	Kenya Uganda Rwanda Burundi Kenya	12.65 0.1 0 0.26 34.95	6.34 0.38 0.05 0.01 37.75	5.4 0.64 0 0.01 28.01	5.44 0.15 0 0 30.42	4.97 0.28 0 0 26.05	7.57 0.28 0.01 0.06 34.02
	Kenya Uganda Rwanda Burundi Kenya Tanzania	12.65 0.1 0 0.26 34.95 1.06	6.34 0.38 0.05 0.01 37.75 1	5.4 0.64 0 0.01 28.01 0.66	5.44 0.15 0 0 30.42 0.73	4.97 0.28 0 0 26.05 0.79	7.57 0.28 0.01 0.06 34.02 0.98 0.03 0.02
	Kenya Uganda Rwanda Burundi Kenya Tanzania Rwanda Burundi Kenya	12.65 0.1 0 0.26 34.95 1.06 0 0.12 13.22	6.34 0.38 0.05 0.01 37.75 1 0 0 0 19.87	5.4 0.64 0 0.01 28.01 0.66 0.03 0 23.04	5.44 0.15 0 30.42 0.73 0.13 0.01 22.3	4.97 0.28 0 26.05 0.79 0.04 0 23.28	7.57 0.28 0.01 0.06 34.02 0.98 0.03 0.02 19.16
Uganda	Kenya Uganda Rwanda Burundi Kenya Tanzania Rwanda Burundi Kenya Tanzania	12.65 0.1 0 0.26 34.95 1.06 0 0.12 13.22 14.12	6.34 0.38 0.05 0.01 37.75 1 0 0 19.87 2.11	5.4 0.64 0 0.01 28.01 0.66 0.03 0 23.04 1.13	5.44 0.15 0 0 30.42 0.73 0.13 0.01 22.3 1.36	4.97 0.28 0 26.05 0.79 0.04 0 23.28 1.42	7.57 0.28 0.01 0.06 34.02 0.98 0.03 0.02 19.16 4.39
Uganda	Kenya Uganda Rwanda Burundi Kenya Tanzania Rwanda Burundi Kenya Tanzania Uganda	12.65 0.1 0 0.26 34.95 1.06 0 0.12 13.22 14.12 0.41	6.34 0.38 0.05 0.01 37.75 1 0 0 19.87 2.11 0.46	5.4 0.64 0 0.01 28.01 0.66 0.03 0 23.04 1.13 0	5.44 0.15 0 0 30.42 0.73 0.13 0.01 22.3 1.36 4.53	4.97 0.28 0 26.05 0.79 0.04 0 23.28 1.42 6.31	7.57 0.28 0.01 0.06 34.02 0.98 0.03 0.02 19.16 4.39 1.92
Uganda Rwanda	Kenya Uganda Rwanda Burundi Kenya Tanzania Rwanda Burundi Kenya Tanzania Uganda Burundi	12.65 0.1 0 0.26 34.95 1.06 0 0.12 13.22 14.12 0.41 0.77	6.34 0.38 0.05 0.01 37.75 1 0 0 19.87 2.11 0.46 0.13	5.4 0.64 0 0.01 28.01 0.66 0.03 0 23.04 1.13 0 0.87	5.44 0.15 0 0 30.42 0.73 0.13 0.01 22.3 1.36 4.53 1.1	4.97 0.28 0 26.05 0.79 0.04 0 23.28 1.42 6.31 0.65	7.57 0.28 0.01 0.06 34.02 0.98 0.03 0.02 19.16 4.39 1.92 0.68
Uganda	Kenya Uganda Rwanda Burundi Kenya Tanzania Burundi Kenya Tanzania Uganda Burundi Kenya	12.65 0.1 0 0.26 34.95 1.06 0 0.12 13.22 14.12 0.41 0.77 4.12	6.34 0.38 0.05 0.01 37.75 1 0 0 19.87 2.11 0.46 0.13 4.32	5.4 0.64 0 0.01 28.01 0.66 0.03 0 23.04 1.13 0 0.87 6.73	5.44 0.15 0 0 30.42 0.73 0.13 0.01 22.3 1.36 4.53 1.1 12.07	4.97 0.28 0 26.05 0.79 0.04 0 23.28 1.42 6.31 0.65 14.36	7.57 0.28 0.01 0.06 34.02 0.98 0.03 0.02 19.16 4.39 1.92 0.68 6.83
Uganda Rwanda	Kenya Uganda Rwanda Burundi Kenya Tanzania Rwanda Burundi Kenya Tanzania Uganda Burundi Kenya Tanzania	12.65 0.1 0 0.26 34.95 1.06 0 0.12 13.22 14.12 0.41 0.77 4.12 2.72	6.34 0.38 0.05 0.01 37.75 1 0 0 19.87 2.11 0.46 0.13 4.32 2.49	5.4 0.64 0 0.01 28.01 0.66 0.03 0 23.04 1.13 0 0.87 6.73 8.09	5.44 0.15 0 0 30.42 0.73 0.13 0.01 22.3 1.36 4.53 1.1 12.07 10.34	4.97 0.28 0 26.05 0.79 0.04 0 23.28 1.42 6.31 0.65 14.36 11.73	7.57 0.28 0.01 0.06 34.02 0.98 0.03 0.02 19.16 4.39 1.92 0.68 6.83 5.89
Uganda Rwanda	Kenya Uganda Rwanda Burundi Kenya Tanzania Burundi Kenya Tanzania Uganda Burundi Kenya	12.65 0.1 0 0.26 34.95 1.06 0 0.12 13.22 14.12 0.41 0.77 4.12	6.34 0.38 0.05 0.01 37.75 1 0 0 19.87 2.11 0.46 0.13 4.32	5.4 0.64 0 0.01 28.01 0.66 0.03 0 23.04 1.13 0 0.87 6.73	5.44 0.15 0 0 30.42 0.73 0.13 0.01 22.3 1.36 4.53 1.1 12.07	4.97 0.28 0 26.05 0.79 0.04 0 23.28 1.42 6.31 0.65 14.36	7.57 0.28 0.01 0.06 34.02 0.98 0.03 0.02 19.16 4.39 1.92 0.68 6.83

Table 5.3: Direction of Intra-EAC Trade, 1995-2003

Source: IMF (2004), Direction of Trade Statistics, CD-ROM.

From table 5.1, it can be observed that Kenya is the dominant trading partner among the East African countries, exporting more to the others than it imports. In contrast, Uganda and Rwanda are the major importers of commodities from the region, accounting for an average of 5.4% and 5.0% of their GDP, respectively, in the period 1995-2003. Kenya's dominance in trade could be attributed to its comparatively wider range of highly developed manufacturing industries. In table 5.3, we disaggregate trade flows of each country with each of the East African countries. The table reveals that Kenya's trade is dominated by its exports to Uganda. Another observation is that Kenya's exports to Tanzania have been steadily declining, while Tanzania's exports to Kenya have increased.

A comparison of the degree of intra-regional trades shows that the intra-EAC trade flows are relatively higher than those of the WAEMU and the CAEMC, but much lower than Euro Area's intra-regional trade (see table 5.2). The share of exports to the EAC is about 18%, compared to 12% in the WAEMU, and 50% in the Euro Area. The intra-regional trade flows for the EAC, the WAEMU, and the CAEMC are rather low, implying that the transactions costs saving benefits of having a common regional currency are small.

The recent establishment and commencement of operation of the East African Customs Union is expected to modestly increase intra-EAC trade flows after the present temporary tariffs on selected imports from Kenya are eliminated, and the Common External Tariff rate is reduced to 20 percent (Castro, Kraus and de la Rocha, 2004). Furthermore, according to endogenous OCA theory, monetary union could be expected to increase regional trade. However, how much of the increase in regional trade flows of the existing monetary unions can be explained by purely monetary union effects is hard to distinguish from other aspects of regional integration (Masson and Pattillo, 2005). Therefore, it might be difficult to argue in favor of EAC monetary union based on the expected increase in regional trade flows.

The question that arises is whether the experiences of the already existing monetary unions of the WAEMU and the CAEMC suggest that countries need not have a lot of intra-group trade for a currency union to be viable. Based on the argument put forward by Masson and Pattillo (2005), it can be argued that the existence of the CFA zone can be attributed to France's role as an external guarantor of the currency's convertibility and as provider of bilateral aid. In the case of the CMA of Southern Africa, it has been argued that the role played by South Africa has helped sustain the common monetary arrangement, despite the bilateral trade between the member countries being low. Thus, it can be argued that other factors other than the economic factors might explain the continued existence of the CFA zone and the CMA.

#### 5.1.2 Factor Mobility

Prior to the establishment of the old EAC in 1967, Kenya, Tanzania and Uganda adopted a common market and common service system that allowed for free movement of persons, services, labor and capital. As the old EAC was established and the member countries adopted conflicting political and economic ideology, exchange controls were imposed to restrict capital flight following nationalization policies in Uganda and Tanzania. Tanzania closed its border with Kenya immediately after the collapse of the old EAC in 1977. Despite the reestablishment of the EAC in 1999, labor and capital mobility among member countries is still restricted. Also, labor market regulation and institutions are not very similar. As a result, it is clear that factor mobility cannot be relied upon as an alternative adjustment mechanism to the exchange rate in the event of an asymmetric shock among member states.

Plans are, however, underway for the partner states to prepare and adopt a protocol on the free movement of persons, labor, services, right of establishment and residence. This is expected to facilitate easy border crossing, common standards for travel documents, common employment policies, training facilities for people from partner states and enhance employers' and workers' organizations. As stipulated in the current EAC Development Strategy 2001-2005, partner states would review and standardize labor laws and regulations related to labor standards, and harmonize liberalization of labor markets to allow smooth movement of labor by the time partner states are at a common market stage of integration. In addition, procedures and charges for work permits and fees for granting residence permits would be harmonized. The furthest time frame given for these actions to be taken by the relevant authorities of the partner states was June 2004. However, the implementations of these actions have lagged behind schedule.

Removal of official restrictions on cross-border labor flows need not imply that labor would naturally migrate between the partner states, owing to social,

cultural and economic costs involved in migrating. For instance, despite the formation of the European Union and the removal of formal barriers to migration between the member countries, the degree of labor mobility between them has not increased much, and continues to be lower than in the U.S. owing to cultural and linguistic differences existing between the Member States (Eichengreen, 1992).

In the East African case, despite the partner states sharing a common language, their low level of economic development would be a hindrance to increased degree of labor mobility. The slow pace at which jobs are generated in the formal sectors as well as the freezing of employment and retrenchment in the already bloated civil services, have rendered many citizens within these nations jobless or underemployed. An alternative to formal sector employment has been the informal sector consisting of small or micro businesses that are the result of individual or family self-employment. However, undercapitalization and lack of skills problems have often led to failure of most of these businesses shortly after their formation. Therefore, whether a worker migrates from within and between nations depends on the probability of succeeding in business or getting formal employment, as well as the costs of transitioning into a new environment. These costs would vary depending on the political and economic situations of the nations in question.

As for the movement of capital within the community, the Central Banks, Ministries of Finance, and Capital Market Authorities of the Partner States have been charged with the responsibility of harmonizing capital market policies;

establishing an East African Stock Exchange; fully liberalizing the capital accounts in all partner states, especially Kenya and Tanzania; cross-listing of companies on national Stock Exchanges; and establishing mechanisms for monitoring and managing foreign exchange flows associated with liberalized capital accounts. So far the implementation of free movement of capital is behind schedule. However, despite the formal removal of barriers to capital flows between the East African member countries, it might not naturally flow between them. According to Eichengreen (1992), unlike in the U.S. where capital would flow from one state to another to finance a balance of payment imbalance owing to lack of risk of currency devaluation, capital flow will be discouraged where there is a possibility of a sovereign member nation of a monetary union seceding from the monetary union, reestablishing a national currency, and devaluing. In the early years of the early East African integration, the common currency was abandoned and individual national currencies introduced. following disagreements on several issues between the three member countries. Given the experiences of the past, caution should be taken when decisions to invest in other member states are made. Another key factor that is likely to influence the movement of capital is the political stability of the member states.

## 5.1.3 Macroeconomic Convergence Criteria

As a basis for the establishment of a monetary union, the partner countries of the EAC agreed on particular macroeconomic convergence criteria: high economic growth, reduction in inflation rates, increased fiscal discipline, building up of reserves, increased domestic savings, debt reduction, and a lower ratio of current account deficits (EAC Development Strategy 2001-2005). Reasonable convergence in inflation rates and fiscal discipline is important at the formation of a monetary union, but there need not be any agreement as to how precise growth rate and saving rates should be. In fact the Maastricht convergence criterion on interest rates for the participation in EMU is more relevant than growth or domestic savings. The reserve requirements should not be a relevant criterion since after the formation of a monetary union member states need not hold reserves internally, and neither do they need reserves should the common currency be externally flexible.

As pointed out by Masson and Pattillo (2005), "while written down on paper, it does not seem---that the EAC and government officials in the three countries are actually aware of or committed to, these convergence goals" (p.133). In table 5.4, we analyze the extent to which the countries of East Africa have progressed towards satisfying the set targets, over the period 1998-2003.<sup>46</sup>

<sup>&</sup>lt;sup>46</sup> The period 1998-2003 is selected because the partner states pledged in the first EAC Development Strategy 1997-2000 to coordinate macroeconomic policies while working toward macroeconomic convergence.

Real GDP growth target ≥7%	1998	1999	2000	2001	2002	2003
Kenya	2	2	-0.2	1	1	1
Tanzania	4	4	6	6	6	6
Uganda	5	8	6	5	7	5
Rwanda	9	8	6	7	9	3
Burundi	5	-1	-1	3	4	-1
Inflation Rate target ≤5%	Status generative and status		an a			
Kenya	7	6	10	6	2	10
Tanzania	13	8	6	5	5	4
Uganda	-0.2	6	3	2	-0.3	8
Rwanda	6	-2	4	3	2	7
Burundi	13	3	24	9	-6	16
Budget deficit/GDP ratio			a familia a ann a an an a strainne.	and the second		
target ≤5%	1998	1999	2000	2001	2002	2003
Kenya	-1	-1	1	-2	-3	-3
Tanzania	-1	0.4	2	-1	-0.4	na
Uganda	-1	-1	-8	-2	-4	-4
Rwanda	-7	-7	-1	-5	-2	na
Burundi	-5	-6	-4	0	-1	-5
Domestic Savings as % of		1		1		
GDP target ≥20%	1998	1999	2000	2001	2002	2003
Kenya	9	10	6	5	10	11
Tanzania	-1	3	9	8	10	8
Uganda	5	7	8	8	6	8
Rwanda	-3	0.2	1	3	1	1
Burundi	-3	-0.5	-6	-5	-4	-0.2
Total Reserves in Months of						
Imports target ≥6 months	1998	1999	2000	2001	2002	2003
Kenya	2.39	2.72	2.73	3.06	3.22	4.07
Tanzania	2.89	3.95	5.24	5.81	7.93	8.79
Uganda	4.45	5.83	6.16	7	6.29	6.59
Rwanda	4.62	4.56	5.06	5.43	6.33	5.23
Burundi	4.78	4.75	2.74	1.33	4.42	4.17

 Table 5.4: EAC Macroeconomic Convergence Criteria: 1998-2003

Source: World Bank (2004), World Development Indicators, CD-ROM; Budget deficit/GDP ratio is computed from IMF (2004), International Financial Statistics, CD-ROM.

Prior to 2001, countries of East Africa fell far below the benchmark set in the EAC Development Strategy 2001-2005. In 1999 and 2000 Kenya, Tanzania and Burundi achieved one target each, while Uganda and Rwanda achieved two. Considering the year 2002, it can be noted that Uganda, Rwanda and Tanzania

performed reasonably well on GDP growth, inflation, foreign reserves, and budget deficits. Kenya performed poorly on GDP growth and foreign reserves. Kenya's dismal performance has been attributed to the slow pace of reform, failure to sustain prudent macroeconomic policies, and governance problems such as corruption that led to suspension of foreign aid in the 1990s. Overall, there seems to have been substantial progress in lowering levels and differences of inflation rates from the beginning of the millennium, but in 2003 they widened a lot.<sup>47</sup> This is a source of concern given that the countries had made progress in 2002. Budget deficits looked reasonably manageable although in 2003 they worsened every where.

Long-term nominal convergence is an approximate reflection of similarity of basic macroeconomic policies and their results, and a probable assurance that the single monetary policy would be successful and that the single currency would be stable and strong (Lavrač, 2004). There seems to be insufficient evidence of long-term macroeconomic convergence among the East African countries, hence, casting doubt on the formation of a monetary union any time soon. Furthermore, the restructuring of the economy might be structural in nature, requiring a long time to accomplish.

The East African macroeconomic convergence criteria are less stringent than the Maastricht convergence criteria for participation in EMU, and do not change in time like some of the reference values of the Maastricht criteria. For instance, a member state of the EU is to have an annual rate of inflation that

<sup>&</sup>lt;sup>47</sup> In table 4.1 of chapter four it can be observed that the inflation rates of Kenya, Uganda, and Tanzania differed a lot and were double digits in the 1970s, the 1980s and the 1990s.

does not exceed by more than 1.5% points that of, at most, the three best performing member states in terms of price stability. Considering that the level of inflation in the three countries with the lowest level of inflation is changing in time, the reference value of the Maastricht criterion on inflation also changes in time. The other Maastricht convergence criteria are as follows:<sup>48</sup>

- (1) Long-term (government bond) interest rates averaged over the previous 12 months should not exceed by more than 2% points those of, at most, the three best performing member states in terms of price stability;
- (2) A member state should have respected the normal fluctuation margins provided for by the Exchange Rate Mechanism (ERM) of the European Monetary System for at least two years without severe tensions and without devaluing its currency against any other member's currency on its own initiative;
- (3) States must have budget deficits not exceeding 3% of GDP per annum, or it should have declined substantially and continuously and have reached a level close to the reference value, or the excess over the reference value should be temporary and exceptional; and
- (4) Total public sector debt should not exceed 60% of GDP or, if it does, it should be sufficiently diminishing and approaching the reference value at a satisfactory pace.

<sup>&</sup>lt;sup>48</sup> The Maastricht convergence criteria for participation in EMU are compiled from "A Factsheet - March 1999 : The IMF and the European Economic and Monetary Union" on website IMF at <u>http://www.imf.org/external/np/exr/facts/emu.htm</u>

The last two are fiscal, while the other three are monetary convergence criteria. The Maastricht convergence criteria are meant only for the EU member countries before their entry in the EMU. Evaluation of the fulfillment of the Maastricht convergence criteria is carried out by the European Commission and the European Central Bank, and is based on prescribed methodologies and officially harmonized data.<sup>49</sup> According to Lavrač (2004), harmonization of national monetary policies is important only until the inclusion in the EMU, since after joining the EMU only single monetary policy is operating, which should take care of inflation and interest rate of the Euro area and of the exchange rate of the euro externally.

On the contrary, fiscal policy remains in the hands of the member states even after their inclusion in EMU, which implies that it could exert pressure on the operation of the single currency if no fiscal discipline is exercised. Rules and limitations to the national fiscal policies of the EMU member countries are stipulated in the Stability and Growth Pact (SGP) adopted in 1997. The principle concern of the SGP is enforcing fiscal discipline as a permanent feature of EMU. The following are the three elements contained in the SGP:<sup>50</sup> (i) *a political commitment* by the Commission, the Member States, and the Council to the full and timely implementation of the budget surveillance process; (ii) *preventive elements* which through regular surveillance aim at preventing budget deficits

<sup>&</sup>lt;sup>49</sup> For more detailed analysis of the methodological aspects of the Maastricht convergence criteria, see reference in Lavrač (2004).

<sup>&</sup>lt;sup>50</sup> Compiled from "The Stability and Growth Pact," on website *Economic and Financial Affairs* at <u>http://europa.eu.int/comm/economy\_finance/about/activities/sgp/sgp\_en.htm</u>.

going above the 3% reference value. All member states are expected to prepare stabilization programs where they explain how they aim at fulfilling the SGP requirements. Countries with significant slippage from the targets can be issued recommendations by the Council, which constitute an early-warning mechanism; and (iii) *dissuasive elements* which in the event of the 3% reference value being breached, require Member States to take immediate corrective action and, if necessary, allow for the imposition of sanctions.

At the moment, some of the EMU member countries have serious problems with meeting the SGP requirements. France and Germany have run "excessive" deficits under the pact definition for some years, yet the EU Council has not applied sanctions against them. The enforcement effects of the SGP have been seriously questioned. The pact has been criticized as being insufficiently flexible and needing to be applied over the economic cycle rather than in any one year.

#### 5.1.4 Degree of Fiscal Discipline

According to Eichengreen (1992), discretionary fiscal policy can substitute for monetary-cum-exchange-rate policy in a monetary union to abet domestic spending in the event of a temporary decline in demand. Capital would flow in to finance the budget deficits as long as the sovereign borrower is expected to pay the money back. However, a government's ability to run budget deficits and borrow externally is constrained by the degree of factor mobility. If capital and labor are freely mobile within a currency union, the amount of taxes that a government could levy in the future to service the accumulated debt would be eroded by mobile factors of production fleeing to lower-tax jurisdictions. The capital markets cognition of this constraint on the government's capacity to tax in the future to service the accumulated debt would be unwilling to finance government's budget deficits (Bayoumi and Eichengreen, 1994). Thus, according to Eichengeen, fiscal policy may consequently prove to be an imperfect substitute for the surrendered monetary instrument, from the stand point of stabilization. However, as pointed out by Mundell (1961), the high factor mobility would reduce the cost of adjustment to balance of payment disequilibrium, hence substituting for both fiscal as well as monetary policies.

Considering the EAC countries, the degree of mobility of labor and capital is low, and is not expected to increase much even with the removal of official restrictions on cross-border flow of the factors, as pointed out earlier in section 5.1.2. Thus, the governments of these nations would be able to continue imposing distortionary taxes on their domestic residents to finance their fiscal deficits. So long as the degree of capital mobility is not high, domestic interest rates will rise as a result of increased public spending.

One question that arises with regard to fiscal discipline is whether economic and monetary integration in the EAC would induce excessive deficit spending. With increased international capital mobility as a result of increased economic integration, deficit financing that drives up the rate of interest in one country will drive up interest rates in another country as investors shift from lower to higher yield assets (Eichengreen, 1992). As a result, the country imposes a

negative fiscal spillover to the foreign residents, who end up bearing some additional distortionary tax that is levied by the government of their country to pay for the higher interest charges on outstanding debt. Masson (2004) argues that excessive public spending can be an impediment to the success of a monetary union, since pressure would be put on the monetary union's central bank to create additional money to finance the deficits, hence, producing excessive inflation, which exerts negative externalities to other member countries. Thus, as long as the member states can anticipate a bailout from the monetary union's central bank, they will have a strong incentive to spend and borrow excessively (Eichengreen, 1992).

According to Masson and Pattillo (2005), differences in government spending propensities are potentially quite important in Africa in determining net gains and losses from potential monetary unions. Their study looks at the economic benefits and costs of proposed monetary unions in western, eastern, central, and southern Africa, as well as the proposal for a single African currency reveals that Kenya has the least fiscal discipline among the three current members of the EAC countries. This is evidenced by the country's high actual government spending as a percentage of GDP, which from 1995-2000 was averaged at 28.01 percent, compared to 14.91 percent of that of Tanzania, and 17.03 percent in the case of Uganda.

Masson and Pattillo calibrate a model of the economic benefits and costs of a monetary union using data on the broadest set of African countries available. The implication of the model is that the net gains from joining a monetary union depend on differences in fiscal policy distortions, on the negative effect of inflation surprises in one country on neighboring countries' output operating through the strength of trade linkages, and on the correlation of shocks. The study reveals that only Kenya with its highest government financing need among the EAC member countries would benefit from abandoning independent monetary policies and participating in a monetary union. On the other hand, both Tanzania and Uganda are expected to suffer net losses of well under 1 percent of GDP. Masson and Pattillo add that the asymmetry of gains from the EAC monetary union might pose similar challenges to those that led to the collapse of the old EAC. Thus, among the crucial factors that a country joining a monetary union would need to consider is the degree of fiscal discipline of other possible members.

An assessment of the fiscal deficits of the five East African countries is in order before we focus our attention on measuring the degree of fiscal discipline. Table 5.5 shows the size of government expenditures and revenues as a percentage of GDP, and the size and volatility of fiscal deficits over time. The table shows that Tanzania had a relatively more unstable deficit as a percentage of GDP than the other East African countries in the 1970s and the 1980s, with standard deviations measuring 3.1 and 3.0, respectively, during the two periods. Moreover, the country's deficits as a percentage of GDP were the largest in both periods, averaging 6% and 7%, respectively.

	1972-79	1980-89	1990-99	2000	2002
KENYA					
Overall budget deficit	-5	-5	-2	1	-3
Deficit (Std. Deviation)	1.6	2.1	2.3	-	-
Expenditure	25	29	29	23	24
Revenue	20	23	24	23	21
Revenue& grant	21	24	26	24	21
TANZANIA					
Overall budget deficit	-6	-7	-2	-2	-0.4
Deficit (Std. Deviation)	3.1	3	2.3	-	-
Expenditure	27	24	14	16	15
Revenue	19	15	11	11	11
Revenue& grant	21	17	14	15	15
UGANDA					
Overall budget deficit	-5	-3	-3	-7	-4
Deficit (Std. Deviation)	3	0.8	2	-	-
Expenditure	14	8	15	19	23
Revenue	8	5	8	11	12
Revenue& grant	8	5	13	17	18
RWANDA		-			
Overall budget deficit	-2	-4	-4	-1	-2
Deficit (Std. Deviation)	0.3	1.3	2.9	-	-
Expenditure	11	18	21	19	23
Revenue	9	13	9	10	12
Revenue& grant	9	15	15	19	21
BURUNDI					
Overall budget deficit	0.37	-0.16	-4	-4	-1
Deficit (Std. Deviation)	0.5	1.5	2	-	-
Expenditure	13	15	26	27	33
Revenue	9	13	9	10	21
Revenue& grant	13	15	22	22	32

Table 5.5: Fiscal Indicators (as % of GDP), 1972-2002

Note: expenditure excludes lending minus repayments.

Source: computed from IMF (2004), International Financial Statistics, CD-ROM.

However, following the economic reforms of the 1990s, the deficits were brought under control, averaging 2% of GDP. Kenya and Uganda had similar deficits in the 1970s, although Uganda's deficits were more volatile. Burundi experienced a budget surplus in the 1970s and relatively low deficits in the 1980s, although it loosened control over its deficits in the 1990s. The deficits increased from 0.2% in the 1980s to an average of 4% of GDP in the 1990s. Rwanda also had an average deficit of 4% of GDP in the 1990s, which was relatively more volatile. These high deficits could be attributed to the civil wars in both countries.

Generally, when grants are included in the deficits, the countries appear to have exercised control over their deficits. A closer look at the revenues, however, shows that over 30 % of the budgets of Uganda, Rwanda and Burundi were financed by grants. External loans and grants have become unpredictable owing to stringent conditions set by the donor community, making revenues highly volatile and states more deficits prone. By excluding grants, the budget deficits surpass the reference value of 5% of GDP. For instance, the deficits of Uganda averaged 7% of GDP in the 1990s, up from 3% with grants included. Burundi's deficits averaged about 17% of GDP during the same period when grants are excluded. Kenya had on average the highest revenue as a percentage of GDP in the entire period. Accompanying these large revenues were the relatively large expenditures of the 1980s and 1990s.

Having analyzed the deficits of the countries of East Africa, and observed the extent of these deficits, we can now investigate the trend in fiscal discipline of the East African countries over time.

# Measuring the Degree of Fiscal Discipline

A crude measure developed by Morrison (1982) is used to proxy for the degree of government control over expenditures in the period 1970-2003. According to Morrison, the causes of fiscal deficits in the developing countries are structural in nature, meaning that they are not changeable in the short run.

He identifies the following five structural factors as being responsible for aggravating the fiscal deficits in developing countries: (i) Government control over expenditure; (ii) Instability of government revenues; (iii) Level of economic development; (iv) Growth of government revenues; and (v) Extent of government participation in the economy. <sup>51</sup>

Morrison argues that governments would find it more difficult to manage fiscal balances when there are large revenue fluctuations than when revenues are slow but stable. A significant increase in revenue may tempt governments to increase expenditures, which may be difficult to cut in times of revenue shortfalls. Many types of recurrent expenditures are difficult to reduce. Inflation, wage pressures and development planning commitments have a significant impact on the growth of expenditures. Governments may likely not be able to build up a reserve for a future revenue shortfall year in years of upward revenue fluctuations, because the pressure to pay overdue and long-promised expenditures, such as "catch-up" wage increases, overdue expenditures for repairs and maintenance deplete the extra revenues. It is these reasons that make governments with large revenue fluctuations experience larger budget deficits than governments with more stable revenues.

Government revenue instability may be due to instability in export earnings. Most developing countries, including the EAC countries, rely heavily on exports of primary products, whose prices are volatile in the world market. An upward fluctuation in world prices of these products would lead to increases in

<sup>&</sup>lt;sup>51</sup> See Morrison, Thomas (1982). Structural Determinants of Government Budget Deficit in Developing Countries, *World Development*, Vol. 10, No.6, pp. 467-73.

export revenues. More foreign currency would be available for financing imports. Given that tax systems in many developing countries depend rather heavily on indirect taxes and, in particular on international trade taxes, increases in both exports and imports would mean an increase in foreign trade taxes.<sup>52</sup> However, such windfall gains are usually temporary in nature, but induce governments to increase recurrent expenditures, which are virtually impossible to reduce in revenue shortfall years (Cuddington, 1989). For instance, Kenya experienced temporary booms in world coffee and tea prices in 1976-1977, due principally to a frost in Brazil. Export earnings and net foreign assets (NFA) also rose. These windfall gains were passed on to farmers without any sterilization policy taken by the government, despite the Central Bank and IMF advocating for such a stance. This led to increases in investments and imports. The government benefited through higher tax returns (especially from commodity taxes), which accelerated the break down in government control over expenditures, as pressure for spending mounted from line-ministries and employees. This persisted until 1983, long after the boom (Cuddington, 1989).

We compute a yearly index for the instability of government revenues and instability of government expenditures using the normalized coefficient of variations defined as:

$$I_{rt} = \frac{SD_{rt}}{M_{rt}}$$
(1)

<sup>&</sup>lt;sup>52</sup> For instance, in 1999 the taxes on international trade accounted for 17%, 15% and 25% of Burundi's, Kenya's and Uganda's total revenues, respectively.

$$I_{et} = \frac{SD_{et}}{M_{et}}$$
(2)

where l<sub>rt</sub> and l<sub>et</sub> represent the index of revenue instability and expenditure instability at year t, given as a ratio of their standard deviations at year t, computed from quarterly data, and the mean values of revenues and expenditures over the same period.<sup>53</sup> Real revenues and expenditures are used to compute these indices. These values are computed by dividing the nominal revenues and expenditures by the consumer price index (CPI). The index for degree of government control over expenditure (C) is then computed as the ratio of instability of government expenditures, equation 2, to instability of government revenues, equation 1. Hence, the index is given by:

$$C_t = \frac{I_{et}}{I_{rt}} \tag{3}$$

This index is based on the following rationale. A government exercising control over expenditures through sound financial management will probably be able to determine a steady growth in expenditures that results in surpluses in years of upward fluctuations in revenue, which cushion somewhat the deficits in revenue shortfall years. The C-Ratio is likely to be significantly less than unity in years when sound financial management is exercised. However, there may be periods

<sup>53</sup> 
$$SD_{rt} = \sqrt{\sum_{Qti=1}^{i=4} \frac{(R_{Qti} - M_{rt})^2}{4}}$$
  
where R<sub>Qti</sub> is the revenue in the ith quarter of year t.  
 $M_{rt} = \sum_{Qti=1}^{i=4} \frac{R_{Qti}}{4}$ 

where M<sub>rt</sub> is the average revenue of year t.

in which a government exercises less control over expenditure. During such a period, the government is likely to have a high propensity to spend in highrevenue years and then must attempt reductions when the shortfall years arrive. The government is referred to as a "revenue follower" during such a period. The C-Ratio will probably be close to but less than unity, since expenditures will generally not decline as much as revenues in shortfall years. Lastly, a government may be so susceptible to political pressures and possess such poor forecasting and budgeting capability that changes in expenditures bear little relation to changes in revenues. For such a period the C-Ratio may exceed unity.

The C-Ratios for Kenya are computed from the period 1972-2003, while those for Tanzania, Uganda, and Burundi are computed for the period after 1997, owing to lack of quarterly data for the period preceding 1997.<sup>54</sup> Table 5.6 shows the C-Ratios for Kenya, Tanzania, Uganda, and Burundi, for the period 1997-2003. So as to compare the degree of fiscal discipline for countries of the East African Community with those of members of other regional arrangements, we compute the C-Ratios using annual data, for sub-periods 1970-79, 1980-89, 1990-1999, and 2000-2003.

<sup>&</sup>lt;sup>54</sup> No quarterly data for revenues and expenditures were available for Rwanda.

	1997	1998	1999	2000	2001	2002	2003
Kenya	0.90	1.87	0.57	2.92	1.78	0.85	1.52
Tanzania	3.86	1.85	1.98	1.19	2.22	0.96	1.27
Uganda	NA	NA	3.06	1.55	NA	NA	NA
Burundi	1.10	3.14	0.81	2.16	1.90	3.62	1.33

Table 5.6: C-Ratio for Degree of Fiscal Discipline for EAC Countries, 1997-2003

Source: computed from IMF (2004), International financial Statistics, CD-ROM.

# Table 5.7: C-Ratios for degree of Fiscal Discipline in Africa, 1970-2003<sup>55</sup>

<b>Regional Arrangement</b>		1970-1979	1980-1989	1990-1999	2000-2003
	Kenya	0.96	1.4	0.64	5.53
	Tanzania	1.31	1.07	1.29	na
EAC	Uganda	na	0.63 <sup>1/</sup>	0.69	1.39
	Rwanda	0.87	1.52	0.84	0.61
	Burundi	na	na	1.40 <sup>2/</sup>	2.39
СМА	South Africa4/	1.07	0.94	0.65	0.96
	Burkina Faso	1.17 <sup>3/</sup>	3.55	1.23	0.71
WAEMU	Mali	na	na	0.75	0.66
	Тодо	na	1.17	0.52	na

<sup>17</sup>Calculated from 1981 to 1989 <sup>27</sup>Calculated from 1992 to1999 <sup>37</sup>Calculated from 1973 to 1979

<sup>4/</sup>Calculated using total revenue and grant since no data was available for revenue excluding grant.

Source: computed from IMF (2004), International financial Statistics, CD-ROM.

Table 5.8: C-Ratio for D	egree of this	ai Discipiii		
<b>Regional Arrangement</b>		1970-1979	1980-1989	1990-1998
	Austria	1.24	1.18	1.19 <sup>5/</sup>
	Belgium	1.18	0.53	0.53
	Finland	1.55 <sup>6/</sup>	0.82	0.86
	France	1.17 <sup>6/</sup>	1.09	1.39 <sup>7/</sup>
	Germany	1.45	0.73	1.03
Euro Area	Greece	1.09	1.57	0.82
	Ireland	1.3	0.72	0.76
	Italy	1.14	0.92	1.8
	Luxembourg	1.18	0.73	0.98 <sup>7/</sup>
	Portugal	1.27	0.87	0.75
	Spain	1.21	0.76	0.96

Table 5.8: C-Ratio for Dec	gree of Fiscal Discipline in Euro Area

<sup>5/</sup>Calculated from 1990-1996

<sup>6/</sup>Calculated from 1972-1979

<sup>7/</sup>Calculated from 1990-1997

Source: computed from IMF (2004), International financial Statistics, CD-ROM.

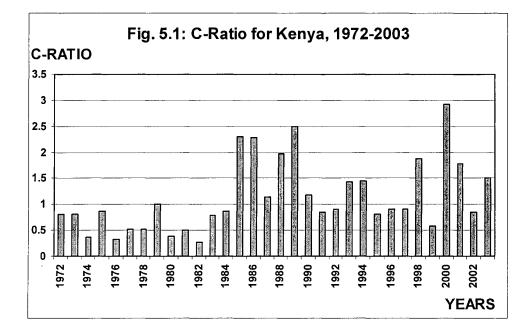
<sup>&</sup>lt;sup>55</sup> The C-Ratios in tables 5.7 and 5.8 are computed using annual data.

The C-Ratios for countries in other regional arrangements and the Euro Area are presented in tables 5.7 and 5.8. From the table 5.6, it can be observed that the EAC countries have on average not exercised fiscal restraint. The average C-Ratio for Kenya, Tanzania, and Burundi, over the period 1997-2003, was 1.49, 1.75, and 2.01, respectively. Considering the C-Ratios that were computed using the annual data (see table 5.7, it can be observed that Tanzania exercised no fiscal restraint in the 1970s and the 1990s, while Kenya exercised control, but not in the 1980s and after the1990s. Uganda exercised fiscal control in the 1980s and 1990s, but not in the 2000s. This could be attributed to the referendum held in 2000 on the system of government, and the political business cycles generated by the elections of 2001 in which the incumbent president faced a major challenge from Dr. Kizza Besigye, a former ally and personal doctor during the 1980-85 guerrilla war. Whereas Rwanda maintained control over its expenditures in the 1990s and 2000s, Burundi failed to exercise control during the same period.

Political instability in Burundi might, to a certain extent, explain why the country performed relatively poorly in exercising fiscal discipline. In the Tanzanian case, the country had a large public sector following its initial experiment with socialism. The state was extensively involved in economic activities through state owned enterprises, which turned out to be inefficient in almost all areas of their operations, hence leading to a huge burden on the government budget. The increased burden on government finance pressured the government to seek market-oriented reforms as well as public sector reforms.

The 1990's were marked by major political reforms. The first multiparty elections were held in 1995, and Benjamin Mkapa was elected the new president.

It is during his first term in office that most of the major structural reforms were implemented. However, the impact of these reforms could be expected to be felt in the long-run rather than in the short-run owing to the structural nature of the public sectors. Looking at the C-Ratio for Tanzania between 1997 and 1999, it can be observed to have exceeded unity. This result could be explained by the political business cycle generated by the elections, given that the president would seek another term in office in the second multiparty elections that were held in 2000.



In figure 5.1 we present the C-Ratio for Kenya, over the period 1972-2003.

It can be observed from the figure that the C-Ratio was, on average, below unity before 1985. This can be interpreted to mean that the government exercised control over its expenditures. However, after 1984 the C-ratio exceeded unity, reaching 2.0, on average, between 1985 and 1989. According to Gurushri (1994), the inability to control expenditure increases in the 1980s was partly due to how the composition of expenditure was structured, and a general lack of discipline in expenditure allocation and execution. The structural components caused either downward inflexibility in expenditures or an upward pressure. Downward inflexibility characterized, for example, the civil service wage bill, which accounted for 6% of GDP during the 1980s. The period 1985 to 1989 was marked by major events among which were: the severe drought of 1984/85, implementation of a new education system, the hosting of the All-Africa Games in August 1987, the general election of March 1988, and the two major national celebrations at the end of 1988.

In the late 1980s, the government embarked on IMF/World Banksponsored Structural Adjustment Programs (SAPs). The new economic approach advocated measures in "budget rationalization" aimed at channeling public expenditures to priority sectors only, and particularly those with immediate returns. It was envisaged that the new approach would limit fiscal deficits to manageable levels and limit the development of other imbalances in the economy. Between 1990 and 1997 the C-ratio averaged 1.05, implying that the government was a "revenue follower".

During this period, a multiparty political system was introduced, and the first multiparty elections held in 1992, and the second in 1997. It is worth noting that the periods immediately following the elections had C-ratios exceeding unity. The C-ratios in 1993 and 1997 were about 1.4 and 1.9, respectively. The upward

expenditure pressure came from the growing demands of teacher salaries and interest payments, particularly on domestic debt of the central government and the parastatals. Following the suspension of quick disbursement funds by the donor community prior to the 1992 elections, and a further suspension by the IMF of Enhanced Structural Adjustment Facility (ESAF) loans in 1997, the government was forced to rely heavily on domestic borrowing to finance its deficits. Whereas before the 1990s the governing party had no opposition, the introduction of the multiparty politics brought with it the need for the governing party to use government machineries to weaken the opposition, and reward its political supporters, to strengthen its power base.

The degree of fiscal discipline deteriorated between 1998 and 2003, with the C-ratio averaging 1.59. The president was serving his final constitutional term that was to end in 2002, and so there was no incentive to control expenditures. In fact the C-ratio reached its highest value of 2.92 in the year 2000. The ratio was more than unity in the two preceding years to the general election held in 2002. It can, therefore, be argued that politics played a dominant role in the 1990s, in determining the degree of expenditure control.

A look at other regional arrangements shows a relatively high degree of expenditure control in the Euro Area (see table 5.8). This is especially the case in the 1980s and 1990s. However, France, Italy, and Austria, were the only countries among the listed Euro countries that failed to exercise fiscal restraint in the 1990s. In the case of Austria the C-Ratios were greater than unity in all sub-periods. Greece was the only "revenue follower" in the 1970s, although its

degree of expenditures control worsened in the 1980s. In the African region, South Africa is the only country among the countries under review that exercised control over its expenditures throughout the entire period (see table 5.7). Since the country had C-Ratios that were close to unity, it could be classified as a "revenue follower". This could explain why South Africa has been the anchor country in the CMA. Burkina Faso of WAEMU exercised no fiscal restraint in the 1970s, 1980s, and 1990s. <sup>56</sup> Mali exercised fiscal control in the 1990s and the 2000s, while Togo exercised control in the 1990, but not in the 1980s.

The sort of domestic and external constraints highlighted above call for coordinated efforts by the East African countries in reducing fiscal deficits, by exercising fiscal discipline before forming a monetary union. Formal restraints on fiscal policies will be required to effectively put in force the upper limits on budget deficits as well as the debt ratio of individual member countries. However, given the differences that exist in the political environment of the East African countries, the challenge to agree and implement a common and disciplined fiscal policy is enormous.

Another possible measure is for the countries to introduce internal reforms that will improve their revenue collection. In contrast to the situation in developed countries where nominal revenues often more than keep pace with price increases, in developing countries they often lag substantially behind. The contrast arises both because of low nominal income elasticities of tax systems and long lags in tax collection in less developed countries. When inflation is high,

<sup>&</sup>lt;sup>56</sup> No sufficient data was available to compute the C-Ratios for all the countries of WAEMU and CAEMU. The missing data in the case of Mali and Togo only allows us to analyze the 1990s, and early 2000s.

the real value of revenue would fall, worsening the deficits. There is a need for countries of East Africa to identify other sources of revenues that are less vulnerable to external shocks. This might, however, be a challenge given that most economic activities are undertaken in the informal sector, which is difficult to monitor and charge direct taxes. The costs of enforcing tax regulations might be high, making it difficult to address the problems of tax evasion. Furthermore, as pointed out by Morrison (1982), factors causing fiscal deficits might be structural in nature, hence requiring more time before they can be changed.

## 5.1.5 Intra-Industry Trade Intensity

As pointed out by Frankel and Rose (1998), entry into a currency union raises international trade linkages that could result in either tighter or looser correlations of national business cycles. In the event that inter-industry trade accounts for most trade, the countries would experience more idiosyncratic national business cycles as they become less diversified and more sensitive to industry-specific shocks. However, the business cycles will become symmetric across countries where bilateral trade among the member countries is dominated by trade in broad product group of the same industry (intra-industry trade).

With the reestablishment of the EAC in 1999, trade patterns between the member countries are predicted to shift as the principle of comparative advantage alters inter-industry and intra-industry trade flows. We investigate how intra-industry trade and inter-industry trade in manufactures have evolved since the reestablishment of the EAC.

(IIT) intensity. The constructed index is defined in equation (1) as

$$GL_{ijt} = 1 - \frac{\left|X_{ijt} - M_{ijt}\right|}{X_{ijt} + M_{ijt}}$$
(1)

where GL<sub>ijt</sub> is the Grubel-Lioyd measure of IIT at period t between countries i and j. X<sub>ijt</sub> and M<sub>ijt</sub> denote exports and imports, respectively, of manufactures at period t from country i to country j. The index reaches its maximum of 1 when exports equal imports and its minimum of 0 when either exports or imports equal zero. A value of 1 indicates 100% intra-industry trade and 0 indicates 100% inter-industry trade.

The source of industry-level trade data is the UN COMTRADE statistics. We use the Standard International Trade Classification (SITC) revision 1 system. The SITC revision 1 system defines manufactures as the summation of items classified in SITC groups 5 through 8 less non-ferrous metals (commodity code 68). Imports of a partner country are used to tabulate data on the exports. For instance, Kenya's exports to Tanzania are represented by Tanzania's imports from Kenya. Given that import data are subject to tariffs and other forms of trade measures, they are widely believed to be more reliable than export data. The G-L indices are presented in Table 5.9 for each pair of EAC countries.<sup>57</sup>

<sup>&</sup>lt;sup>57</sup> We exclude Rwanda and Burundi owing to lack of sufficient data for industry-level trade with the other countries.

Partner Countries	1999	2000	2001	2002	2003
Kenya & Tanzania	0.0780	0.2254	0.1725	0.1992	0.2154
Kenya & Uganda	na	0.0161	0.0077	0.0298	na
Tanzania & Uganda	na	na	0.4921	na	na

 Table 5.9: Grubel-Lloyd Index for Bilateral Trade in Manufactures for

 EAC Countries, 1999-2003

Grubel-Lloyd index tends to approach 1.0 in the case of intra-industry, and zero for inter-industry trade.

Manufactures are SITC 5+6+7+8-68

Source: Computed by author based on data from UN COMTRADE Statistics database.

The table shows that the bilateral trade in manufactures between Kenya and Uganda is strongly inter-industry since the G-L index approaches zero. The interindustry trade intensity between Kenya and Tanzania is on a declining trend as shown by a slight increase G-L index. However, given that the magnitude of the index is still far below 1, we conclude that bilateral trade in manufactures between the two countries is inter-industry. On the other hand, trade in manufactures between Tanzania and Uganda is weakly intra-industry. The implication of the result is that increased trade linkages between the EAC countries will lead to Kenya experiencing more idiosyncratic national business cycles relative to other hand, Tanzania and Uganda will experience symmetric business cycles given the leaning of their bilateral trade towards intra-industry trade.<sup>58</sup>

<sup>&</sup>lt;sup>58</sup> Owing to missing data problem, we could not empirically test how changes in trade patterns influence the nature of business cycle co-movements.

### 5.1.6 Exchange Rate Variability

Vaubel (1978) and Bayoumi and Eichengreen (1998) have pointed out that the real exchange rate (RER) variability of countries that fulfill more OCA criteria will be small.<sup>59</sup> The real exchange rate variability criterion has been considered to be crucial for determining the currency area optimality since it is measurable, and seems to capture other traditional OCA criteria that are not directly and unambiguously measurable. Nevertheless, a major shortcoming of the argument of the comprehensiveness of the real exchange rate criterion is its failure to demonstrate how it gives appropriate weights to those criteria it captures, leading to the conclusion that it is an additional OCA criteria and not a replacement (Willett, 2003b). Therefore, the criterion should be complemented with other ones in order to gain a good assessment of country's suitability for a currency union.

A real exchange rate variability model is adopted to evaluate the viability of a monetary union in East Africa. This study isolates real exchange rate shocks from other factors such as unexpected and seasonal effects that affect changes in RER. If the bilateral variances are similar, the countries would be considered to be viable for regional money, based on this criterion.

#### Methodology and Data

To evaluate the comparative desirability or undesirability of East African currency unification, the real exchange rate changes between the five East African countries are compared with the real exchange-rate changes between

<sup>&</sup>lt;sup>59</sup> A detailed analysis of the exchange rate variability argument is given in chapter two of this dissertation.

groups of countries in Africa maintaining a common monetary arrangement such as a fixed exchange rate or a monetary union. Emphasis is placed on the monetary integrations in Africa as the control group because the countries in those unions have comparable level of development. Therefore, the CFA zone of West Africa (WAEMU) and the Common Monetary Area (CMA) of Southern Africa are considered.

The CMA is a monetary arrangement comprising South Africa, Lesotho, Namibia, and Swaziland, with the latter three countries fixing their exchange rate at parity to the South African rand. The South African Reserve Bank acts as Central Bank for the whole area, while the Central Banks in Namibia, Swaziland, and Lesotho function as currency boards because foreign assets back domestic currency issuance. The rand circulates freely in these countries and it is legal tender in Namibia and Lesotho, which are compensated by South Africa for loss of seigniorage. In contrast, the CFA zone of West Africa is a full monetary union comprising Benin, Burkina Faso, Cote d' Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo, with France providing a guarantee of convertibility of the CFA franc into the euro at a fixed rate parity (Masson and Pattillo, 2005).

For empirical analysis, the variance of the rate of change of real exchange rate vis-à-vis a common numeraire is used to measure real exchange variations within a group of countries. When considering East Africa in comparison with CMA countries, we use South Africa as the common numeraire, and in the case of comparison with WAEMU we use Benin. Thus, the real exchange rate between an East African country and South Africa is defined as:

$$RER_{iS,t} = \frac{E_{iS,t} * P_{S,t}}{P_{i,t}}$$
(1)

Where  $RER_{iS,t}$  is the real exchange rate between country i in East Africa and South Africa at time t.  $P_{S,t}$  is the consumer price index (CPI) of South Africa at time t.  $E_{iS,t}$  is the nominal exchange rate, which is defined as the amount of country i's currency per unit of South African currency, at time t.  $P_{i,t}$  is consumer price index (CPI) of country i at time t.

For a pair of countries within a monetary union, the real exchange rate is defined by their prices, since the nominal exchange rate between them is fixed. Thus, the RER between any CMA countries with South Africa is defined as:

$$RER_{cS,t} = \frac{P_{S,t}}{P_{c,t}}$$
(2)

Where  $P_{c,t}$  is the consumer price index of country c in the CMA at time t.

The percent rate of change of the real exchange rate is computed by taking the first difference of the natural logarithm of RER. Monthly data on consumer price index and nominal exchange rate are obtained from International Financial Statistics of the IMF. The sample period is from 1995M04 to 2004M06.<sup>60</sup> The seasonal effects in the changes in RER are eliminated by running a regression of the changes in RER on seasonal dummies. Thus the estimated equations for each group of countries are defined as:

 $<sup>^{60}</sup>$  Since the monthly CPI data for Lesotho is available starting from 200lM01 to 2004M07, we compute the RER shocks for all the CMA countries based on the available data in each country, but we only compare the variances of the RER shocks of common samples (2001M01 to 2004M07).

$$d\log(RER_{iS,t}) = \sum_{m=1}^{12} a_m D_m + e_{iS,t}$$
(3)

$$d\log(RER_{cS,t}) = \sum_{m=1}^{12} b_m D_m + e_{cS,t}$$
(4)

Where  $D_m$  are the monthly seasonal dummies and  $a_m$  and  $b_m$  are estimated parameters. The regression residuals  $e_{iS,t}$  and  $e_{cS,t}$  are the seasonally adjusted RER changes for countries of East Africa and CMA, respectively. The next step is to derive the RER shocks by eliminating the unexpected components of the seasonally adjusted RER changes. This is done by running regressions of the seasonally adjusted RER changes on their lags until residuals from the autoregressive models are uncorrelated. The residuals from these regressions are the RER shocks and their variances are the conditional RER variance.

Apart from comparing the bilateral RER shocks of East African countries vis-à-vis those of regions of Africa, we also consider the bilateral RER shocks vis-à-vis other regions outside Africa. Given that the European Union is the largest export market for East African countries, accounting for about 40 percent of total exports, on average, in the period 1995 to 2003, we compute the bilateral RER shocks for East African countries with the Euro Area as the common base.<sup>61</sup> The harmonized CPI for the Euro area is used to calculate the RER for the East African countries. The distinction between the various shocks is important because it helps to determine how the exchange rates could be adjusted. For instance, if countries forming a monetary union face similar external shocks, they would only adjust the exchange rate externally in a similar

<sup>&</sup>lt;sup>61</sup> We sum the exports to European Union of the EAC countries, and compute its share to the sum of their exports to the world. We then average these shares from the period 1995-2003.

way for everybody. To test for the similarity of the RER shocks of the East African countries, we compute the correlations between their shocks. In addition, we test the hypothesis of equality of variances between the RER shocks of the East African countries, assuming that the price indices and exchange rate statistics are based on sample observations from large populations of prices and exchange rates that are normally distributed around their means.

#### **Empirical Results and Analysis**

The empirical results from evaluating the RER variability models are presented in tables 5.10 and 5.11. With the exception of Guinea-Bissau, the RER shocks variability for intra-CMA and intra-WAEMU are lower than their counterparts in the East African region. The bilateral RER variability of Guinea-Bissau is more than twice the size of the highest variability of East African RER shocks. On the contrary, the highest intra-CMA bilateral RER shocks variability is about 20 percent lower than the lowest variability of the East African bilateral RER shocks. According to Ogunkola (2002), Guinea-Bissau joined WAEMU in 1997, thus explaining its high RER shocks variability. The variability of the intra-CMA RER shocks is, on average, 0.02, while that of East African countries is 0.05. The average variability for the East African countries when the numeraire country is Benin is 0.04, compared to 0.03 for the WAEMU.

Standard Deviation <sup>62</sup>	CMA	Standard Deviation
0.0170	Swaziland	0.0107
0.0141	Namibia	0.0059
0.1069	Lesotho	0.0366
0.0248		
0.0182		
0.0158		
0.0195		······································
0.0309		0.0177
-	Deviation <sup>62</sup> 0.0170           0.0141           0.1069           0.0248           0.0182           0.0158           0.0195	Deviation <sup>62</sup> 0.0170         Swaziland           0.0141         Namibia           0.1069         Lesotho           0.0248         0.0182           0.0158         0.0195

 Table 5.10: Variability of Real Exchange Rate Shocks for WAEMU and

 CMA Countries

Based on the RER variability approach, the empirical results seem to suggest that Lesotho is less qualified to be a member of the CMA monetary zone. However, given the relative size of the country to the CMA zone, it might be argued that its presence would have insignificant effect on the stability of the CMA. Political factors other than economic ones might explain why the CMA has been sustainable, despite countries such as Lesotho having high exchange rate variability.<sup>63</sup> As for West Africa, the RER variability approach captures the existence of the CFA zone, with Guinea-Bissau being a less qualified member of the monetary union (Ogunkola, 2002).

In the case of the East African region, Burundi is not qualified to be in the same monetary union as Kenya, Uganda, Tanzania and Rwanda based on variability of the bilateral RER shocks. A test of equality of variances between the RER shocks of Burundi, Rwanda, Kenya, Uganda, and Tanzania rejects the hypothesis at 5 percent level of significance (see appendix tables A1a and A1b).

<sup>&</sup>lt;sup>62</sup> The standard deviations for the WAEMU are taken from a study by Ogunkola (2002).

<sup>&</sup>lt;sup>63</sup> Refer to Cohen (2003).

Base Country		BURUNDI	RWANDA	KENYA	UGANDA	TANZANIA	Average Std. Deviation
	BURUNDI	1					
	RWANDA	0.637	1		_		
	KENYA	0.494	0.783	1			
	UGANDA	0.594	0.852	0.791	1		
South Africa of	TANZANIA	0.538	0.848	0.744	0.837	1	
CMA	Std. Deviation	0.0598	0.0451	0.0516	0.0474	0.0472	0.0502
anna a suite anna anna anna anna anna anna anna an	i Baran - Andrew Endowedd ar yw arwenn yw ar	an a	anna Chairtean Aire an teachad	and the second second			
	BURUNDI	1					
	RWANDA	0.303	1				
	KENYA	0.114	0.508	1			
	UGANDA	0.314	0.685	0.589	1		
	TANZANIA	0.139	0.675	0.5	0.682	1	
Benin of WAEMU	Std. Deviation	0.0487	0.0281	0.0355	0.0353	0.0328	0.0361
and the second		en ny sa na analysi ana ang sa na sa		in an			3
	BURUNDI	1					
	RWANDA	0.171	1				
	KENYA	-0.078	-0.105	1			<u> </u>
	UGANDA	0.076	-0.002	0.156	1		ļ
	TANZANIA	-0.089	-0.011	-0.028	0.170	1	<u> </u>
USA	Std. Deviation	0.0462	0.0145	0.028	0.021	0.020	0.026
an a	and the same of the same same states and the		n general and a sign of the second	20. States and the states			1 1 Maria ang ang ang ang ang ang ang ang ang an
	BURUNDI	1					
	RWANDA	0.331	1				
	KENYA	0.096	0.637	1			
	UGANDA	0.276	0.686	0.620	1		
	TANZANIA	0.150	0.699	0.707	0.732	1	
EURO AREA	Std. Deviation	0.0472	0.0254	0.0281	0.0311	0.032	0.0328

Table 5.11: Correlations and Standard Deviations of RER Shocks for East Africa Countries

For the Euro Area the sample is from 1999M01-2004M06, while for the rest is from 1995M05-2004M06. The harmonized CPI is used for the Euro Area.

The high RER shock variability in Burundi can partly be attributed to political instability of the country. However, when Burundi is excluded, we fail to reject at 5 percent level of significance, the hypothesis of equality of variance between the RER shocks of Rwanda, Kenya, Uganda, and Tanzania (see appendix tables A1c and A1d). A similar trend can be observed when we consider the RER shock of East African countries with Euro Area as the common base. However, variances of RER shocks for the four countries are significantly different when U.S. is the base country. This is expected because the countries trade insignificantly with the U.S., exporting and importing less than 10 percent of their total exports, and imports. The results show the need to be cautious when choosing a numeraire. Tendency to use only the U.S dollar may give misleading results in this case.

Apart from the RER shocks of Kenya, Uganda, Tanzania, and Rwanda having insignificant differences in variability, they are substantially positively correlated. This implies that the four countries face similar external shocks, and so need not adjust the exchange rates greatly differently. We therefore conclude that based on the variability of RER criterion that Kenya, Uganda, Tanzania, and Rwanda form a feasible monetary area.

It should, however, be pointed out that the East African countries do not seem to have had major problems with flexible exchange rates. This raises the question as to whether it would be relevant to go to fixed exchange rate.

### 5.1.7 Synchronicity of Business Cycles and Shocks

In this section of the chapter, we focus on testing how symmetric the underlying business cycles and shocks across the East African economies are. As earlier pointed out in chapter two, economies wishing to form a monetary union would find it costly to give up their monetary independence in the event where their business cycles and shocks are idiosyncratic. This could be a problem in the case of East African countries, since they lack efficient internal adjustment mechanisms, owing to rigidities in the economy, and a low degree of factor mobility. However, if the shocks are temporary, countries that are out of phase cyclically would help to dampen each other's cycles. In other words, temporary asymmetric shocks would enhance the attractiveness of a monetary union by acting as an automatic stabilizer.

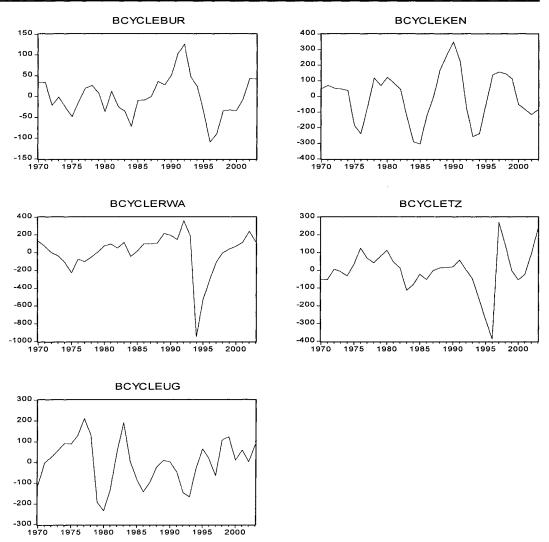
Studies that consider the synchronicity of business cycles and shocks based on 1-year real GDP growth correlations tend to assume that the correlations capture the medium-term synchronization of business cycles and shocks, that countries with negative or insufficiently positive correlations with each other will face divergent monetary policy. The weakness with such an assumption is that the 1-year real GDP growth correlations only capture the short-term synchronization of business cycles and shocks. This is good for automatic stabilization, which requires that the short-term business cycles be out of phase. This is roughly the same for risk sharing. On the other hand, discretionary policy adjustment could only be used effectively if synchronization of business cycles is medium-term. There often exist lags in recognition of

shocks, implementation and effects of policy responses (effects of monetary policy changes may take one to two years). One-year real GDP growth correlations present too short a time horizon for effective policy responses. We propose the use of at least a 2-year real GDP growth correlation to capture medium-term synchronization of business cycles that would allow sufficient time for discretionary policy responses to be effective. In this case a high positive correlation would imply that the cycles are common to all the partner countries, and that they would not have a great need to adopt independent monetary and exchange rate policies on these grounds.

Three methods have been used in our study to isolate the cyclical component of real outputs from the trend. The first approach is to take the first difference of the logarithm of annual real GDP. The second approach is to compute a two-year real GDP growth. In each case the correlations are calculated. The final approach is to use a Hodrick-Prescott (HP) filter. Then a simple correlation of the cyclical components across countries is used as a proxy for business cycle co-movements. The annual data on real GDP for all the countries under review are collected over the period 1970-2003, from the United Nation Statistics data base. The synchronicity of the business cycles of the EAC countries is compared with those of existing monetary unions in Africa.

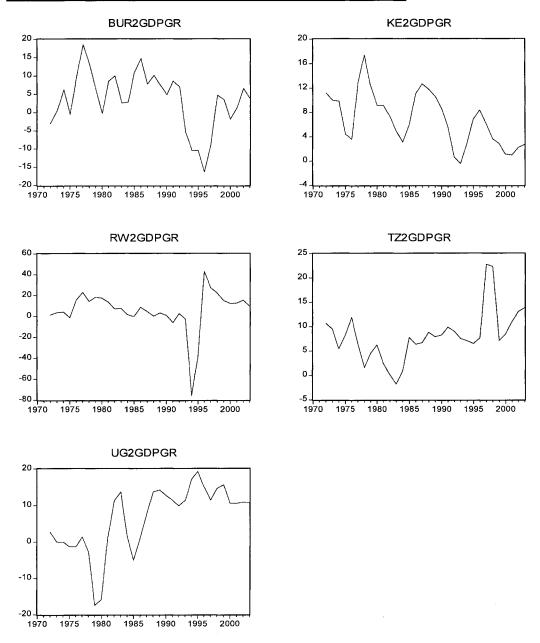
Figures 5.2a and 5.2b show, respectively, the business cycle for Kenya, Tanzania, Uganda, Rwanda, and Burundi, when the cycle for real GDP is identified using the HP filter and when the two-year real GDP growth rate is used. The figures show little synchronicity of the cycles of the EAC countries. For

instance, Uganda suffered major downturns in the late 1970s and early 1980s owing to civil strife. Burundi and Rwanda also suffered civil unrest in the early 1990s, leading to major economic downturns during that period. Kenya experienced a major cyclical peak in the later part of the 1970s owing to a boom in coffee prices, while Tanzania experienced major downturn in the early 1980s.





<sup>&</sup>lt;sup>64</sup> BCYCLEBUR, BCYCLEKEN, BCYCLERWA, BCYCLETZ, and BCYCLEUG represent business cycles of Burundi, Kenya, Rwanda, Tanzania, and Uganda, respectively.



## Figure 5.2b: Two-Year Real GDP Growth, 1970-2003<sup>65</sup>

Tables 5.12a and 5.12b show the pair-wise cross-correlations of the business cycles of the EAC countries that are obtained over the period 1970-2003, using 1-year and 2-year real GDP growth rates, and the HP filter, respectively.

<sup>&</sup>lt;sup>65</sup>BUR2GDPGR, KE2GDPGR, RW2GDPGR, TZ2GDPGR, and UG2GDPGR represent the 2-year real GDP growth for Burundi, Kenya, Rwanda, Tanzania, and Uganda, respectively.

	1-Year Real GDP Growth Correlation						
	BURUNDI	KENYA	RWANDA	TANZANIA	UGANDA		
BURUNDI	1.00						
KENYA	0.27	1.00					
RWANDA	0.12	0.12	1.00				
TANZANIA	-0.15	-0.28	0.11	1.00			
UGANDA	-0.19	-0.26	-0.2	0.09	1.00		
	2-Y	ear Real GD	P Growth Correl	ation			
	BURUNDI	KENYA	RWANDA	TANZANIA	UGANDA		
BURUNDI	1.00						
KENYA	0.36	1.00					
RWANDA	0.25	0.17	1.00				
TANZANIA	-0.22	-0.3	0.18	1.00			
UGANDA	-0.35	-0.41	-0.28	0.24	1.00		

Table 5.12a: Correlations of Real GDP Growth 1970-2003, Between EAC Countries

Source: Computed using data from United Nations Statistics

### Table 5.12b: Correlations of EAC Business Cycles (HP Filtered)

	Business Cycles 1970-2003							
	BURUNDI	KENYA	RWANDA	TANZANIA	UGANDA			
BURUNDI	1.00							
KENYA	0.1	1.00						
RWANDA	0.41	0.25	1.00					
TANZANIA	0.23	0.16	0.43	1.00				
UGANDA	-0.23	-0.04	-0.22	-0.04	1.00			
	BURUNDI	KENYA	RWANDA	TANZANIA	UGANDA			
BURUNDI	1.00							
KENYA	0.60	1.00						
RWANDA	0.43	0.48	1.00					
TANZANIA	0.15	0.22	-0.27	1.00				
UGANDA	-0.09	-0.22	-0.47	-0.12	1.00			
	· · · · ·							
	BURUNDI	KENYA	RWANDA	TANZANIA	UGANDA			
BURUNDI	1.00							
KENYA	-0.18	1.00						
RWANDA	0.44	0.22	1.00					
TANZANIA	0.26	0.17	0.54	1.00				
UGANDA	-0.45	0.28	-0.18	0.01	1.00			

Source: Computed using data from United Nations Statistics

It can be observed from table 5.12a that the cross-correlations increase in magnitude when a 2-year real GDP growth is used instead of the 1-year growth, although the increase is not very substantial, and the signs of the correlations do not change. The cross-correlation for Kenya with Burundi is positive and relatively higher than those between other countries. Uganda experienced an idiosyncratic business cycle that appears to be in synch with Tanzania, but not with those of Burundi, Kenya, and Rwanda. Based on the 2-year growth cycle, we fail to identify a significant positive correlation of the business cycles among the EAC countries, implying that the economies should not adopt common policies.

Considering the cross-correlations of the HP filtered business cycles for the period 1970-2003, we observe a change of the signs of the correlations to positive, between Burundi and Tanzania, and between Kenya and Tanzania (see table 5.13b). The cross-correlation of business cycles between Uganda and Tanzania becomes negative. The results show a significant positive correlation between Rwanda and Burundi, and between Tanzania and Rwanda.

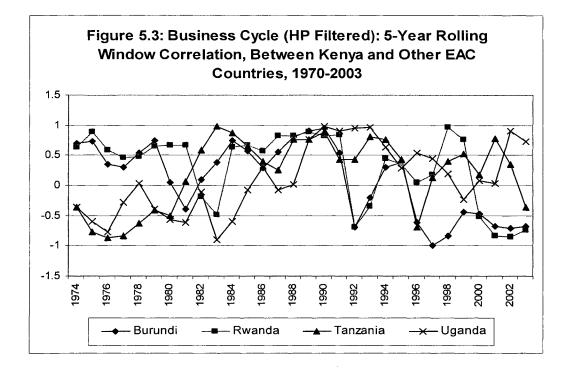
Given that the countries adopted IMF funded structural adjustment programs in the 1990s, we investigate whether adopting similar economic reform programs helped to converge the economies. The cross-correlations between Kenya, Rwanda, and Burundi were significantly positive prior to the 1990s. Tanzania had idiosyncratic business cycles with Rwanda and Uganda during the same period. The implementation of similar economic reforms by Kenya, Uganda, and Tanzania (the original EAC members) led to a positive cross-

correlation of their business cycles, though it is not substantially significant. The cross-correlation of the business cycle between Rwanda and Burundi remained significantly positive. The synchronicity of business cycles between Tanzania and Rwanda significantly increased. The correlation of the business cycles between Kenya and Burundi was lowered in the 1990s.

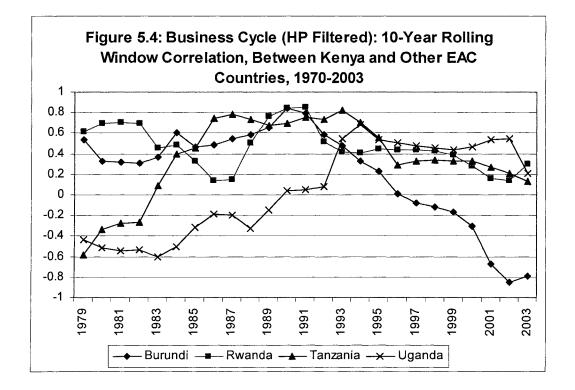
The above measures of cross-correlations are averages for the whole period, and do not reflect the pattern of changes of the synchronicity of business cycles. With a monetarist desire for steady money growth we need stable patterns of business cycles and shocks. According to Artis (2003), the sustainability of convergence of cycles can be tested by computing crosscorrelations over successive intervals of at least five years, a time period of a typical cycle. This gives a five year 'rolling window'. In our study, we compute a 5-year and a 10-year rolling window of cross-correlations for the HP-filtered GDP, and the 2-year GDP growth. Kenya is chosen as the base country because of the size of its economy, and its cross-correlation of business cycles with those of other East African countries, computed.

Figures 5.3, 5.4, 5.5 and 5.6 show the 5-year and the 10-year rolling window for the HP-filtered GDP, and the 2-year GDP growth. The value of the correlation at the end of each five-year period is shown against the last year of the period. For example in the case of the HP-filtered GDP, the value shown against 1974 is the value of the cross-correlation for the period 1970-1974 inclusive. For the 2-year GDP growth, the first observation after computing the

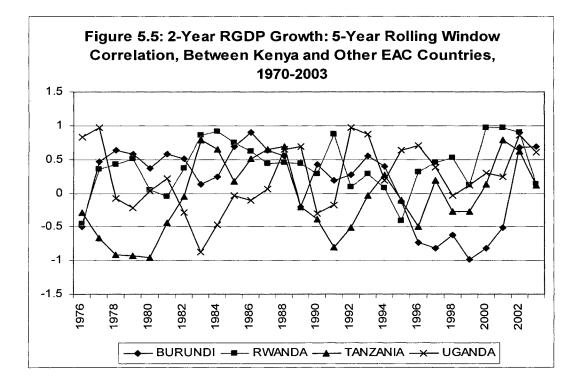
growth rates is in 1972. Therefore the first value shown in figure 5.5 against 1976

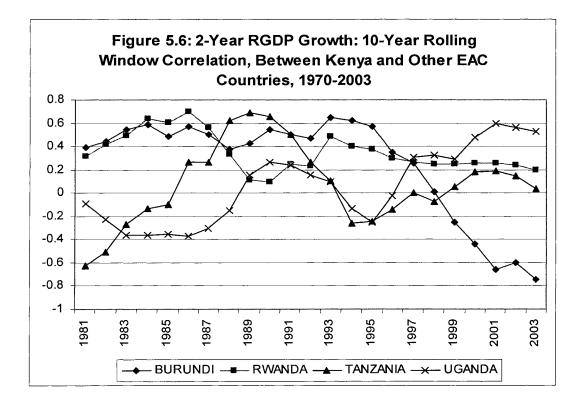


is the value of cross-correlation for the period 1972-1976 inclusive.



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.





Considering the 5-year rolling window in figures 5.3 and 5.5, it can be observed that the cross-correlations vary greatly, with Tanzania and Uganda having negative correlations in the 1970s, while Rwanda and Burundi had positive cross-correlations during the same period.<sup>66</sup> Rwanda maintained a relatively higher cross-correlation with Kenya throughout the entire period, while Burundi's cross-correlation fell in the 1990s. Negative cross-correlations in the 1990s indicate strong idiosyncratic business cycles with Kenya. Uganda's crosscorrelations greatly increased over time, and were relatively higher beginning in the late 1980s.

For the 10-year rolling window, figures 5.4 and 5.6 show a declining trend in the cross-correlations between Kenya and Burundi in the 1990s. Uganda's cross-correlation steadily increased starting from the late 1980s. In the case of the 2-year growth, it can be observed that the cross-correlations between Tanzania and Kenya steadily declined, reaching negative in (the 10 years to) the periods between 1989 and 1998. The cross-correlations between Kenya and other EAC countries are low and sometimes negative, which leads us to conclude based on the synchronicity of business cycle criterion that countries of the EAC do not form a feasible monetary area.

Similar procedures were followed to derive the business cycles for the CFA zone monetary unions of the WAEMU and the CAEMC, and cross-correlations between the member countries were computed.

<sup>&</sup>lt;sup>66</sup> Note that when a cross-correlation is observed in 1982, it is a measure of relationships of the business cycles five years to 1982 (i.e. 1978-1982). Therefore, we interpret every cross-correlation prior to 1985 to represent relationships between two countries business cycles in the 1970s, and those prior to 1995 to represent relationships in the 1980s.

<b>Table 5.13: Correlations</b>		Real GDP (	<b>Growth and Busin</b>	of Real GDP Growth and Business Cycles 1970-2003, Between WAEMU Countries	03, Betw	een WAEI	<b>MU</b> Countrie	S
			Correlation of 1-	Correlation of 1-Year Real GDP Growth	۲			
	BENIN	BURKINA FASO	COTE D' IVOIRE	GUINEA-BISSAU	MALI	NIGER	SENEGAL	TOGO
BENIN	1.00							
BURKINA FASO	0.70	1.00						
COTE D' IVOIRE	-0.34	-0.08	1.00					
GUINEA-BISSAU	0.06	0.24	0.21	1.00				
MALI	-0.14	0.07	0.09	-0.32	1.00			
NIGER	-0.2	-0.02	0.20	-0.14	0.32	1.00		
SENEGAL	0.34	0.22	0.12	0.03	0.06	0.44	1.00	
TOGO	-0.06	0.32	0.26	0.19	0.15	0.02	0.04	1.00
		Corre	Correlation of 2-Year Real GDP Growth	al GDP Growth				の現代を行う
BENIN	1.00							
<b>BURKINA FASO</b>	0.22	1.00						
COTE D' IVOIRE	-0.48	0.12	1.00					
<b>GUINEA-BISSAU</b>	-0.13	-0.14	0.20	1.00				
MALI	-0.33	0.21	0.17	-0.4	1.00			
NIGER	-0.41	-0.01	0.21	-0.12	0.41	1.00		
SENEGAL	0.13	-0.14	0.19	-0.05	0.02	0.38	1.00	
TOGO	-0.25	0.40	0.36	0.13	0.24	0.13	-0.03	1.00
		Correlation	of WAEMU Business	Correlation of WAEMU Business Cycles (HP Filtered)				
BENIN	1.00							
<b>BURKINA FASO</b>	0.27	1.00						
COTE D' IVIORE	-0.41	0.13	1.00					
<b>GUINEA-BISSAU</b>	-0.13	-0.21	-0.01	1.00				
MALI	-0.29	0.36	0.27	-0.29	1.00			
NIGER	0.08	-0.08	-0.15	-0.1	-0.27	1.00		
SENEGAL	0.21	0.13	0.25	-0.17	-0.01	-0.15	1.00	
TOGO	-0.32	0.35	0.51	0.17	0.28	-0.09	0.08	1.00

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

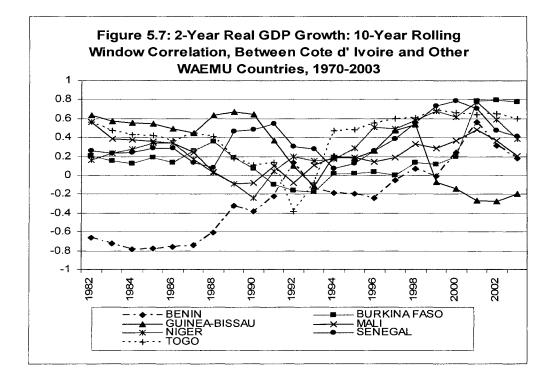
Table 5.14: Correlations of Re	eal GDP Growth	of Real GDP Growth and Business Cycles 1970-2003, Between CAEMC Countries	s 1970-2003, Be	etween CAEMC	Countries	
	Ö	Correlation of 1-Year Real GDP Growth	<b>3DP Growth</b>			
	CAMEROON	CENTRAL AFRICAN REPUBLIC	CHAD	CONGO REPUBLIC	GABON	GUINEA
CAMEROON	1.00					
CENTRAL AFRICAN REPUBLIC	0.12	1.00				
CHAD	-0.09	-0.22	1.00			
CONGO, REPUBLIC	0.50	-0.09	-0.21	1.00		
GABON	0.04	-0.04	0.16	0.12	1.00	
GUINEA	0.11	0.10	0.15	-0.13	0.02	1.00
		Correlation of 2-Year Real GDP Growth	eal GDP Growth			
CAMEROON	1.00					
<b>CENTRAL AFRICAN REPUBLIC</b>	0.19	1.00				
CHAD	-0.19	-0.18	1.00			
CONGO, REPUBLIC	0.61	-0.27	-0.21	1.00		
GABON	-0.08	-0.14	0.38	-0.01	1.00	
GUINEA	0.13	0.09	0.17	-0.11	0.06	1.00
	)	Correlation of Business Cycles (HP Filtered)	ycles (HP Filtered	(1		
CAMEROON	1.00					
<b>CENTRAL AFRICAN REPUBLIC</b>	0.21	1.00				
CHAD	-0.02	-0.31	1.00			
CONGO REPUBLIC	0.66	-0.29	-0.04	1.00		
GABON	-0.14	-0.2	0.49	-0.01	1.00	
GUINEA	0.41	-0.08	0.30	0.27	-0.11	1.00

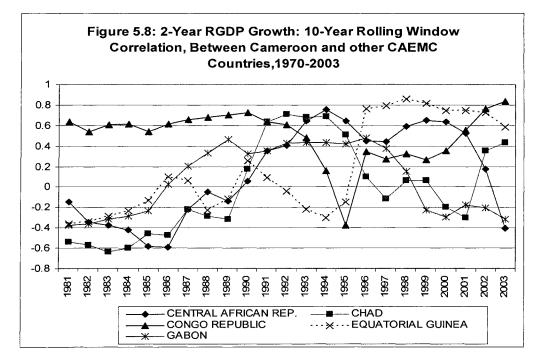
Tables 5.13 and 5.14 show the cross-correlations of GDP growth and HPfiltered business cycles for the WAEMU and the CAEMC, respectively. The sign of several of the cross-correlations change as well as the significance level when the 2-year growth rate was used instead of the 1-year growth. This is not the case with the EAC. For instance, the cross-correlation of GDP growth between the Benin and Burkina Faso decreased from 0.70 to 0.22, while the correlation between Burkina Faso and Togo increased from 0.32 to 0.40. The correlation between Niger and Senegal decreased slightly from 0.44 to 0.38.

For the CAEMC, the cross-correlation between Cameroon and Congo Republic as well as between Chad and Gabon greatly increased when the 2-year GDP growth rate was used instead of the 1-year growth. These differences in the size of cross-correlations demonstrate the need to consider a more than 1-year growth rate before drawing conclusions on whether a pair of countries shares long-term synchronous business cycles and shocks. Another observation is that the cross-correlations computed using the HP filtered business cycles seem to lead to similar conclusions as those computed using the 2-year GDP growth rate in both monetary unions. The signs of the majority of the cross-correlations seem to be the same. Overall, however, member countries of the CFA franc zones have low cross-correlations, with some having idiosyncratic business cycles, raising doubt as to the economic feasibility of the monetary union based on the synchronicity of business cycle criterion.

Figures 5.7 and 5.8 show the 10-year rolling window correlations of the 2year GDP growth for WAEMU and CAEMC, respectively. Cote d' lvoire and Cameroon were selected as the base countries for the WAEMU and the CAEMC,

respectively.





The cross-correlations between Cote d' Ivoire and the other members of the monetary union remained on average positive throughout the period, unlike the EAC case. Benin had idiosyncratic business cycles throughout the 1980s, while the cross-correlations with Guinea-Bissau decreased and became negative in the 1990s. The cross-correlation between Cote d' Ivoire and other member countries, apart from Guinea-Bissau, was above 0.4 in (10 years to) 2001 compared to less than 0.3 in the EAC case. Furthermore, the cross-correlations between Cote d' Ivoire and other member countries steadily increased in (the 10 years to) the periods between 1993 and 2001.

Most of the CAEMC member countries had negative correlations with Cameroon in the early periods, with most of the countries experiencing positive correlations in the 1980s. The correlations were, however, relatively variable compared to those of the WAEMU. Most of the countries had correlations that were less than 0.3 in (10 years to) 2001. The comparisons between the three regional groups seem to suggest that WAEMU had more synchronous business cycles.

Regarding the synchronicity of shocks, Buigut and Valev (2004) have used a two variable Vector Autoregression (VAR) model to attempt to identify supply and demand shocks for the five East African countries. They find no evidence of the supply shocks of the five countries converging. The contemporaneous supply shocks among the East African countries were mostly idiosyncratic. Only Kenya and Burundi had positive and significantly correlated contemporaneous supply shocks. However, they found some symmetry of the

shocks when the correlations were based on lagged supply shocks, which seemed to follow trade patterns observed among the East African countries. As for the demand shocks, they found that they were less symmetric than the supply shocks. Their overall finding was that most of the correlations were either low or asymmetric, leading them to conclude that the East African countries are not a feasible monetary area at the moment.

Buigut and Valev also estimate the speed of adjustment of output and prices to supply shocks, and they find that it takes three to four years for the bulk of adjustment of output to supply shocks to occur, and three years for prices to adjust. This illustrates the relevance of computing correlations based on at least a 2-year real GDP growth rate, when analyzing the long-term synchronicity of business cycles and shocks between countries.

One may argue based on endogenous OCA theory that, though the nations of EAC do not satisfy the OCA criterion a priori, they could have symmetric business cycles and shocks ex-post, as improved trade between them is dominated by intra-industry other than inter-industry trade. Given the problem of insufficient data, we could not test this hypothesis. Instead, we used the Grubel-Lloyd (1975) measure to compute an index of intra-industry trade intensity in manufactures for EAC countries.<sup>67</sup> The results showed that bilateral trade in manufactures between Kenya and her neighboring partners was strongly inter-industry, while between Tanzania and Uganda it was weakly intra-industry. The implication of the results is that Kenya could experience more idiosyncratic national business cycles relative to other East African countries as trade linkages

<sup>&</sup>lt;sup>67</sup> Refer to section 5.1.5 of the current chapter.

between them remain strongly intra-industry. On the contrary, Tanzania and Uganda could experience symmetric business cycles as intra-industry trade between them gets better.

## **CHAPTER SIX: Summary and Conclusion**

Studies that test whether the proposed East African monetary union is an optimum monetary area have mostly focused on a very limited range of economic criteria for optimum currency areas, and ignored political considerations. Bayoumi and Ostry (1995), for instance, look at the size and correlations of real output disturbances and level of intra-regional trade across sub-Saharan African countries. The real output disturbances, which were residuals from a regression of real output per capita growth rate on its first and second lags, were found to be lowly correlated among the Sub-Saharan African countries, including Kenya, Uganda, Tanzania, Rwanda and Burundi. In addition, the intra-regional trade among the Sub-Saharan countries is extremely low, bringing to doubt the prospects of closer monetary cooperation within Africa in the future.

Mkenda (2001), applying the Generalized Purchasing Power Parity (G-PPP) approach and various indices that were calculated based on the OCA theory concluded that Kenya, Uganda, and Tanzania were a feasible monetary area based on the G-PPP approach, although the other OCA criteria gave an inconclusive verdict. On the contrary, Buigut and Valev (2004) using a Vector Autoregression (VAR) model to attempt to identify supply and demand shocks for Kenya, Tanzania, Uganda, Rwanda, and Burundi found no evidence of the contemporaneous supply shocks of the five countries converging, hence

concluding based on this criteria that the East African countries were not a feasible monetary area at the moment.

Masson and Pattillo (2005) while taking into account differences in fiscal distortions and calibrating a model of economic benefits and costs of the EAC found that only Kenya with its calculated highest government financing need among the EAC member countries would benefit from abandoning independent monetary policies and participating in a monetary union. Masson and Pattillo therefore concluded that the asymmetry of gains from the EAC monetary union might pose similar challenges that led to the collapse of the old EAC.

In this dissertation, we have assessed the political and economic feasibility and desirability of an East African monetary union. A wide range of OCA criteria indices have been developed for each of the East African countries, namely, Kenya, Tanzania, Uganda, Rwanda, and Burundi. A comparison has then been made to assess how these countries fit the OCA criteria relative to other existing monetary unions such as the Common Monetary Area (CMA) of Southern Africa, the CFA franc zones in West and Central Africa, and the Euro Area. The overall evidence from this dissertation points to the fact that the countries of East Africa are not a feasible monetary area.

The countries trade very little with each other, and are less open to the rest of the world. The degree of labor and capital mobility within the region is low, and is not expected to naturally improve much even with the removal of official restrictions, owing to social, political, and economic costs involved in migrating. Political uncertainties in some of these countries inhibit the free movement of

capital within the region. This implies that factor mobility cannot be relied upon as an alternative adjustment mechanism to the exchange rate in the event of an asymmetric shock among member states. There seems to be insufficient evidence of long-term macroeconomic convergence among the East African countries. Long-term nominal convergence is an approximate reflection of similarity of basic macroeconomic policies and their results, and a probable assurance that the single monetary policy would be stable and strong (Lavrač, 2004).

Generally, the countries appear to have exercised control over their deficits when grants are taken into account. A closer look at the revenues, however, shows that over 30% of the budgets of Uganda, Rwanda, and Burundi have been financed by grants. By excluding grants, the budget deficits surpass the reference value of 5% of GDP. External loans and grants have become unpredictable owing to stringent conditions set by the donor community, making revenues highly volatile and states more deficits prone.

A measure developed by Morrison (1982) to proxy the degree of government control over expenditures has been introduced in section 5.1.4 of chapter 5 of this dissertation to assess how fiscally disciplined the East African countries have been over time. The finding of this dissertation is that the countries of East Africa did not, on average, exercise fiscal control according to this measure. Burundi was more susceptible to political pressure owing to civil war in that country. Kenya exercised little control over its expenditures in the 1980s, and during periods prior to and after the multiparty elections of 1992, 1997, and 2002. Large public sectors following an initial experiment with socialism, as well as the economic reforms adopted in the 1990s, had put pressure on Tanzania's government expenditures. The results of the application of the same measure on the Euro Area countries showed generally, a greater degree of fiscal discipline in the 1980s and 1990s, but not in the 1970s. France, Italy, and to some extent Austria exercised little control over their expenditures in the 1990s. The significance of countries exercising fiscal discipline is borne out of the need to reduce excessive fiscal deficits that could be generated, putting pressure on the monetary union's central bank to create additional money to finance.

Based on the variability of RER criterion, tests were conducted to establish whether the RER shocks of the five East African countries vis-à-vis a common numeraire from a group of countries maintaining a common currency in the CMA, the CFA franc zone, the Euro Area and the USA were similar. The cross-correlations of the RER shocks of all the East African countries apart from Burundi were consistently high and positive, when South Africa, Benin, and the Euro Area were used as a common numeraire. A test of equality of variances of the RER shocks of the four East African countries failed to reject the hypothesis at 5 percent level of significance, which seems to suggest the feasibility of an East African monetary union based on the criterion. However, low correlations were recorded between all the East African countries when the USA was used as the common numeraire. This result is expected because the countries trade insignificantly with the USA, exporting and importing less than 10 percent of their total exports, and imports, whereas the European Union is the largest export market for East African countries, accounting for about 40 percent of total exports. The countries face similar external shocks because they export similar primary goods. The results show the need to be cautious when choosing a numeraire. Tendency to use only the U.S dollar may give misleading results in this case.

Additionally, the viability of the formation of a monetary union is, however, challenged based on the synchronicity of business cycles and shocks criterion. The cross-correlations of a 2-year real GDP growth were either low or negative between the East African countries over an extended period, implying that they could not adopt a common policy response that would be desirable for all the members. The basis for using a 2-year real GDP growth correlation instead of the frequently used 1-year growth is that the 1-year growth correlations do not take into account the lags in the recognition of shocks, implementation and effects of policy responses, which imply that only the short-term synchronization of business cycles and shocks is captured. This makes the 1-year growth correlations only good for the analysis of automatic stabilization. For automatic stabilization we need partner countries to have short-term business cycles that are out of phase. This is roughly the same for risk sharing.

The hope of the synchronicity of business cycles and shocks to increase as trade linkages between the East African countries increases (endogenous OCA theory) is dashed by the fact that bilateral trade in manufactures between Kenya and her trading partners have been estimated to be strongly inter-industry,

while between Tanzania and Uganda is weakly intra-industry. This implies that as long as the pattern of trade remains unaltered, Kenya will experience more idiosyncratic national business cycles relative to other countries, as industryspecific shocks hit the economies. On the other hand, Tanzania and Uganda will experience more symmetric business cycles given the leaning of their bilateral trade towards intra-industry trade.

On the political side, the countries of East Africa lack a political institutional structure to sustain a monetary union among the sovereign states. This is unlike in the case of the CFA franc zones, which have France playing the role of an external guarantor of the currency's convertibility and as the provider of bilateral aid; or the role played by South Africa in the CMA. One possible solution to the problem could be the formation of a political federation of East Africa. As pointed out in this dissertation, the former East African common currency was abandoned because states felt that with the absence of one federal development plan, it was not possible for separate states to have powers to implement a national development plan without having separate national currencies. The countries of Kenya, Uganda, and Tanzania are working towards forming an East African political federation, but the challenge is the heterogeneity of their political systems, and whether citizens of these nations would vote in favor of the political federation in a future referendum. It is not clear what powers the federal president and parliament would have over the sovereign states. But, since the primary objective of many governments is to maintain political dominance, it is unlikely that any individual government of East Africa would give up a great deal of sovereignty to a supranational entity.

What degree of political federation would be necessary to sustain a monetary union is an important issue on which there has to date been little research. The experiences of the 1960s seem to suggest that the political federation that would be considered acceptable by the countries of East Africa is one that guarantees reasonable distribution of benefits and costs of political and economic integration through some form of fiscal transfers. However, measures of the strength of governments that include relative political capacity and veto power show little evidence of East African governments being strong enough to assure responsible fiscal policies necessary for well functioning monetary union.

Another political issue involves the political costs of giving up national currencies. Governments in power are known to sometimes generate political business cycles during election periods through central bank financed expansionary fiscal policies. This source of financing is important especially in the East African case where financial markets and tax systems are underdeveloped and external loans and grant have stringent conditions set by the donor community.

The costs of regional integration schemes often tend to be generated immediately while economic benefits accrue in the long run, are uncertain, and in most cases unevenly shared among partner states. Given that political players often tend to have a short-term horizon, they will often promote policies that have more favorable benefit-cost ratios in the short-run than in the long-run. This explains why the implementation of the East African Customs Union has not been smooth. Without the customs union being successful there is no chance for a monetary union, and though the customs union succeeds it is not a guarantee for a monetary union.

Given the findings of this study, the East African countries are not ready to form monetary union. However, the road toward this union will be influenced by the distributive politics of organized interest groups, with small well organized groups influencing governments' policy decisions. There is already a private sector apex body, the East African Business Council (EABC) that has observer status in all the organs of the EAC that want the talks on a single currency completed and Rwanda and Burundi be included into the EAC.

## Appendix

Table A1: Test for Equality of Variances Between East African (EA) RER Shocks

	df	Value	Probability
	4 (4, 540) (4, 540)	11.35136 2.517767 2.415102	0.0229 0.0405 0.0479
		Mean Abs.	Mean Abs.
Count	Std. Dev.	Mean Diff.	Median Diff.
109	0.051643	0.038448	0.038318
109	0.047239	0.033874	0.033862
109	0.047378	0.035662	0.035658
109	0.045083	0.032310	0.032162
109	0.059804	0.045341	0.045113
		0.037127	0.037023
	109 109 109 109 109	4           (4, 540)           (4, 540)           (4, 540)           (4, 540)           109           0.051643           109           0.047239           109           0.047378           109           0.045083	4         11.35136           (4, 540)         2.517767           (4, 540)         2.415102           Kean Abs.         Mean Abs.           Count         Std. Dev.           109         0.051643         0.038448           109         0.047239         0.033874           109         0.047378         0.035662           109         0.045083         0.032310

## Table A1a: Test for Equality of Variances Between EA RER Shocks Date: 08/29/05 Time: 20:17

South Africa of CMA is the base country

### Table A1b: Test for Equality of Variances Between EA RER Shocks

Sample: 1995M04 2004M06 Included observations: 111						
Method		df	Value	Probability		
Bartlett Levene Brown-Forsythe	<u>_</u>	4 (4, 540) (4, 540)	36.83558 5.646890 5.470105	0.0000 0.0002 0.0003		
Category Statistics						
Variable	Count	Std. Dev.	Mean Abs. Mean Diff.	Mean Abs. Median Diff.		
RERSHOCK BURUNDI RERSHOCK RWANDA	109 109	0.048680 0.028118	0.036593 0.022782	0.036536		
RERSHOCK KENYA RERSHOCK UGANDA RERSHOCK TANZANIA	109 109 109	0.035522 0.035269 0.032836	0.025995 0.028578 0.025297	0.025938 0.028263 0.025225		
All	545	0.036593	0.027849	0.027743		

Bartlett weighted standard deviation: 0.036727

Benin of WAEMU is the base country

# Table A1c: Test for Equality of Variances Between EA RER Shocks excluding Burundi Sample: 1995:05 2004:06

Method		df	Value	Probability
Bartlett		3	2.108368	0.5502
Levene		(3, 432)	0.722217	0.5391
Brown-Forsythe	(3, 432)	0.714481	0.5437	
Category Statistics				
Category Statistics			Mean Abs.	Mean Abs.
Variable	Count	Std. Dev.	Mean Diff.	Median Diff.
Category Statistics Variable RERSHOCK KENYA	Count 109	Std. Dev. 0.051643	Mean Diff. 0.038448	Median Diff. 0.038318
Variable			Mean Diff.	Median Diff.
Variable RERSHOCK KENYA	109	0.051643	Mean Diff. 0.038448	Median Diff. 0.038318
Variable RERSHOCK KENYA RERSHOCK TANZANIA	109 109	0.051643 0.047239	Mean Diff. 0.038448 0.033874	Median Diff. 0.038318 0.033862

Bartlett weighted standard deviation: 0.047895

South Africa is the base country

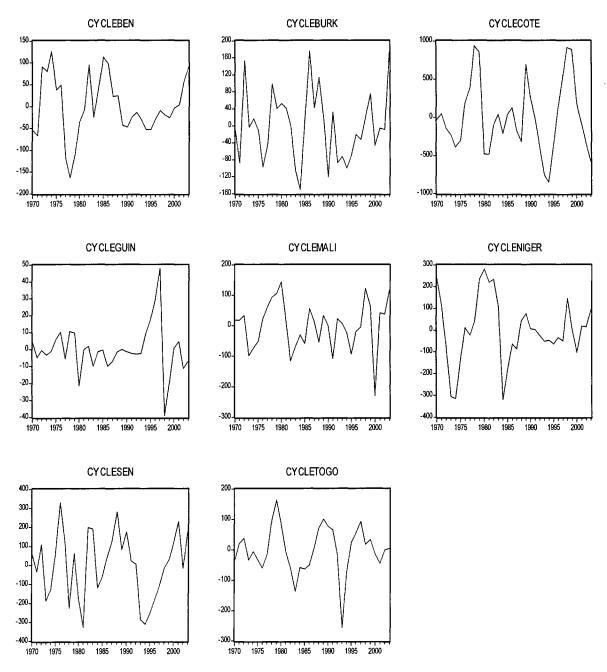
# Table A1d: Test for Equality of Variances Between EA\_RER Shocks excluding Burundi Sample: 1005M04 2004M06

Sample: 1995M04 2004M06 Included observations: 111				
Method		df	Value	Probability
Bartlett		3	7.193931	0.0660
Levene		(3, 432)	1.457616	0.2255
Brown-Forsythe		(3, 432)	1.272394	0.2833
Category Statistics				
			Mean Abs.	Mean Abs.
Variable	Count	Std. Dev.	Mean Diff.	Median Diff.
RERSHOCK RWANDA	109	0.028118	0.022782	0.022752
RERSHOCK KENYA	109	0.035522	0.025995	0.025938
RERSHOCK UGANDA	109	0.035269	0.028578	0.028263
RERSHOCK TANZANIA	109	0.032836	0.025297	0.025225
All	436	0.032957	0.025663	0.025545
Bartlett weighted standard de	viation: 0.0330	70		

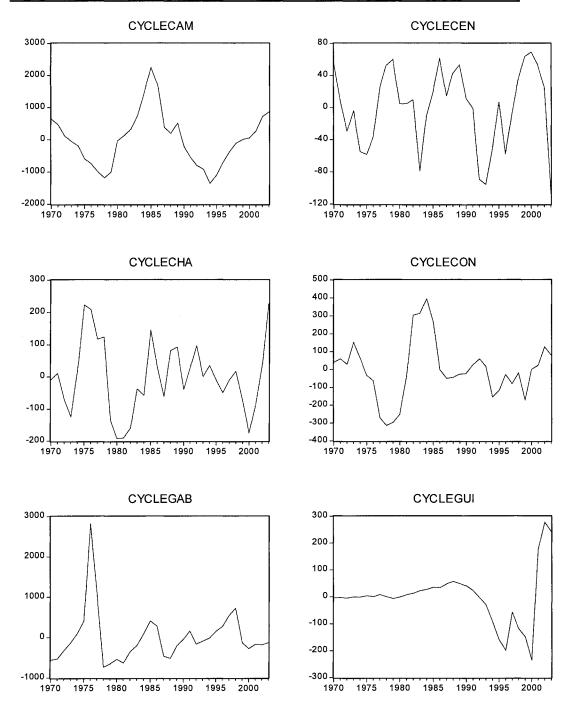
Benin is the base country

٦





<sup>&</sup>lt;sup>68</sup> CYCLEBEN, CYCLEBURK, CYCLECOTE, CYCLEGUIN, CYCLEMALI, CYCLENIGER, CYCLESEN, and CYCLETOGO represent business cycles of Benin, Burkina Faso, Cote d' Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo, respectively.



<sup>&</sup>lt;sup>69</sup> CYCLECAM, CYCLECEN, CYCLECHA, CYCLECON, CYCLEGAB, and CYCLEGUI represent business cycles of Cameroon, Central African Republic, Chad, Congo Republic, Gabon, and Equatorial Guinea, respectively.

## Reference

- Abdul-Aziz, Bilal. "MPs Reject Roadmap to EA Federation," *The Guardian*, April 27, 2005, IPP Media, Tanzania.
- Artis, Michael. Analysis of European and UK Business Cycles and Shock, London: Crown. (2003).
- Bayoumi, Tamim and Eichengreen, Barry. "One Money or Many? Analyzing the Prospects for Monetary Unification in Various Parts of the World," *Princeton Studies in International Finance*, 76 (September 1994).
- Bayoumi, Tamim and Eichengreen, Barry. "Ever Closer to Heaven? An Optimum-Currency-Area Index for European Countries," *European Economic Review*, 41 (1997), pp. 761-770.
- Bayoumi, Tamim and Eichengreen, Barry. "Exchange Rate Volatility and Intervention: Implications of the Optimum Currency Areas," *Journal of International Economics*, 45 (1998), pp. 191-209.
- Bayoumi, Tamim and Ostry. "Macroeconomic Shocks and Trade Flows within Sub-Saharan Africa: Implications for Optimum Currency Arrangements," *IMF Working Paper*, 145 (December 1995).
- Bayoumi, Tamim and Masson, Paul. "Fiscal flows in the United States and Canada: Lessons for Monetary Union in Europe," *European Economic* Review, 39 (1995), pp. 253-274.
- Berg, Andrew and Borensztein, Eduardo. "The Pros and Cons of Full Dollarization," in Dominick Salvatore, James Dean, and Thomas Willett (Eds.), The Dollarization Debate (pp. 72-101). New York: Oxford University Press. (2003).
- Blanchard, Oliver and Quah, Danny. "The Dynamic Effects of Aggregate Demand and Supply Disturbances," *American Economic Review*, 70 (1989), pp. 655-673.
- Buiter, Willem. "Optimal Currency Areas," *Scottish Journal of Political Economy*, 47 (August 2000), pp. 213-250.
- Casto, Lucio, Kraus Christiane and Manuel de la Rocha. "Regional Trade Integration in East Africa: Trade and Revenue Impacts of the Planned East African Community Customs Union." *World Bank Africa Region Working Paper Series*, No 72 (2004).

- Cohen, Benjamin. "Monetary Union: The Political Dimension," In Dominick Salvatore, James Dean, and Thomas Willett (Eds.), The Dollarization Debate (pp. 221-237). New York: Oxford University Press. (2003).
- Corbo, Vittorio. "Is it Time for a Common Currency for the Americas?" In Dominick Salvatore, James Dean, and Thomas Willett (Eds.), The Dollarization Debate (pp. 154-171). New York: Oxford University Press. (2003).
- Courchene, Thomas and Harris, Richard. "North American Currency Integration: A Canadian Perspective," In Dominick Salvatore, James Dean, and Thomas Willett (Eds.), The Dollarization Debate (pp.299-317). New York: Oxford University Press. (2003).
- Cuddington, John. "Commodity Export Booms in Developing Countries," *World Bank Research Observer*, 4 (1989), pp. 143-165.
- Daily Nation, April 15, 2004, The Nation Media Group, Kenya.
- Dean, James. "Should Latin America's Common-Law Marriage to the U.S. Dollar be Legalized? Should Canada's," In Dominick Salvatore, James Dean, and Thomas Willett (Eds.), The Dollarization Debate (pp. 365-386). New York: Oxford University Press. (2003).
- Dellas, Harris and Tavlas, George. "Lessons of the Euro for Dollarization: Analytic and Political Economy Perspectives," In Dominick Salvatore, James Dean, and Thomas Willett (Eds.), The Dollarization Debate (pp. 283-293). New York: Oxford University Press. (2003).
- Dupasquier, Chantal and Osakwe, Patrick. "Welfare Effects of Monetary Union and Flexible Exchange Rate Regimes in the Economic Community of West African States," *Economic Commission for Africa, ESPD Working Paper* Series, 2 (2003).
- East African Community. "EAC Development Strategy 2001-2005," (www.eac.int/strategy.htm).
- East African Community. "EAC Treaty-1999," (www.eac.int/treaty.htm).
- Economic and Financial Affairs. "The Stability and Growth Pact" (<u>http://europa.eu.int/comm/economy\_finance/about/activities/sgp/sgp\_en.h\_tm</u>).
- Eichengreen, Barry. "Should the Maastricht Treaty be Saved?" *Princeton Studies in International Finance*, 74 (1992).

- Empowerment for African Sustainable Development, "History of Uganda's Economy" (<u>www.easd.org.za/soe/Uganda/CHAP2.HTML#2.3</u>).
- Enders, Walter and Hurn, Stan. "Theory and Tests of Generalised Purchasing Power Parity: Common Trends and Real Exchange Rates in the Pacific Rim," *Review of International Economics*, 2 (1994), pp. 179-190.
- Frankel, Jeffrey and Andrew, Rose. "The Endogeneity of the Optimum Currency Area Criteria," *Economic Journal*, 108 (1998), pp. 1009-25.
- Frankel, Jeffrey. "A Proposed Monetary Regime for Small Commodity Exporters: Peg the Export Price (PEP)," International Finance, Blackwell Publishing Ltd (2003), pp. 61-88.
- Goldstein, Andrea, and Ndung'u, Njuguna. "Regional Integration Experience in the Eastern African Region." OECD Development Centre Technical Papers, 171 (2001).
- Grandes, Martin. "Southern Africa's Monetary Area: an Optimal Currency Area? Which Costs? Which Benefits?" Unpublished version July 23 2003.
- Guillaume, Dominique and David, Stasavage. "Improving Policy Credibility: Is There a Case for African Monetary Unions?" *World Development,* 28 (2000), pp.1391-1407.
- Gurushri, Swamy. "Kenya: Patchy, Intermittent Commitment," in Faruqee, Rashid and Ishrat, Husain (Eds.) Adjustment in African Lessons from Country Case Studies, World Bank, Washington, D.C., (1994).
- Hartford. "A brief chronology of events in Tanzania's history from 1498, the time of first European presence" *BBC Timeline*, 25 July 2001, (www.hartford-hwp.com/archives/36/343.html).
- Henisz, Witold J. "The Institutional Environment for Economic Growth." Economics and Politics, 12 (1) (2000), pp. 1-31.
- Imbs, Jean. "Trade, Finance, Specialization and Synchronization," *London Business School and CEPR*, September 2003.
- Institute of Security Studies. "Burundi Political System and History" updated: February 2005 (www.iss.co.za/AF/profiles/Burundi/politics.html).
- Institute of Security Studies. "Rwanda History and Politics" updated: February 2005 (www.iss.co.za/AF/profiles/Rwanda/politics.html).

- International Monetary Fund. "A Factsheet-March 1999: The IMF and the European Economic and Monetary Union" (www.IMF.org/ external/np/exr/facts/emu.htm).
- International Monetary Fund. "International Financial Statistics," CD-ROM, (2004).
- Johnson, David. *Public Choice: An Introduction to the New Political Economy,* Bristlecone Books, Mayfield Publishing Company. (1991).
- Kamanga, Khoti. "Some Constitutional Dimensions of East African Cooperation." Paper prepared for presentation to *Kituo cha Katiba* within the 'State of Constitutional Development in East Africa' project. (2001).
- Kituo Cha Katiba. "Towards an East African Federation: Debate, Rational and Declaration of June 1963" *East African Centre for Constitutional Development*, Makerere University Faculty of Law (www.kituochakatiba.co.ug/eac2.htm).
- Kugler, Jacek and Arbetman, Marina. "Relative Political Capacity: Political Extraction and Political Reach," In Marina Arbetman and Jacek Kugler (Eds.), Political Capacity and Economic Behavior (pp.11-45). Colorado: Westview Press. (1997).
- Laabas, Belkacem and Limam, Imed. "Are GCC Countries Ready for Currency Union?" Arab Planning Institute, Kuwait. (2002).
- Lane, Philip R. "Asymmetric Shocks and Monetary Policy in a Currency Union," *Scandinavian Journal of Economics*, 102 (2000), 585-604.
- Lavrač, Vladimir. "Fulfillment of Maastricht Convergence Criteria and the Acceding Countries," *Ezoneplus Working Paper,* 21 (2004).
- Lee, Jong-Wha, Yug Chul Park, and Kwanho Shin. "A Currency Union in East Asia," Korea University, Seoul, South Korea. (2002).
- Masson, Paul and Pattillo, Catherine. "Monetary Union in West Africa (ECOWAS): Is it Desirable and How could it be Achieved?" *IMF Occasional Paper*, 204 (2001a).
- Masson, Paul and Pattillo, Catherine. "Monetary Union in West Africa: An Agency of Restraint for Fiscal Policy?" *IMF Working Paper* No. 01/34 (2001b).
- Masson, Paul and Pattillo, Catherine. *The Monetary Geography of Africa*, The Washington, D.C.: Brookings Institution Press. (2005).

- McHenry, Dean. *Limited Choices: The Political Struggle for Socialism in Tanzania*. London: Lynne Rienner Publishers. (1994).
- Mckinnon, Ronald I. "Optimum Currency Areas," *American Economic Review*, 53 (1963), pp. 717-25.
- Mkenda, Beatrice, K. "Is East Africa an Optimum Currency Area?" *Göteborg* University Department of Economics Working Paper, 41 (April 2001).
- Mongelli, Francesco. "New" Views on the Optimum Currency Area Theory: What is EMU Telling us?" *European Central Bank Working Paper*, 138 (2002).
- Morrison, Thomas. "Structural Determinants of Government Deficit in Developing Countries," *World Development*, Vol. 10, No. 6 (1982), pp.467-73.
- Mundell, Robert A. "The Theory of Optimum Currency Areas," American Economic Review, 51 (1961), pp. 509-17.
- Nassali, Maria. "The East Africa Community and the Struggle for Constitutionalism: Challenges and Prospects," *Kituo Cha Katiba*, East African Centre for Constitutional Development, Makerere University Faculty of Law. (2000).
- Nyirabu, Mohabe. "Lessons Learnt from Past Experiences of Integration in the East African Community." Report of Workshop on Deepening Integration in the East African Community held from 8-9 September 2003 at the UN Conference Center, Addis Ababa, Ethiopia.
- Organski A. F. K. "Theoretical Link of Political Capacity to Development," In Marina Arbetman and Jacek Kugler (Eds.), Political Capacity and Economic Behavior (pp. 47-64). Colorado: Westview Press. (1997).
- Ogunkola, Olawale. "The Second Monetary Zone in West Africa and the Future of a Single Monetary Zone in Sub-Saharan Africa," presented at the Santiago-Chili International Conference on "Towards Regional Currency Areas" held on 26-27 March, 2002.
- Salvatore, Dominick. "Which Countries in the Americas Should Dollarize?" In Dominick Salvatore, James Dean, and Thomas Willett (Eds.), The Dollarization Debate (pp.196-205). New York: Oxford University Press. (2003).

- Schuldt, Jurgen. "Latin American Official Dollarization: Political Economy Aspects." In Dominick Salvatore, James Dean, and Thomas Willett (Eds.), The Dollarization Debate (pp.238-265). New York: Oxford University Press. (2003).
- Shin, Kwanho, and Wang, Yunjong. "Trade Integration and Business Cycle Synchronization in East Asia," presented at the Asian Economic Panel meeting on 8-9 October 2002, at Columbia University in New York City.
- Tax, Stergomena. "The Social Consequences of Structural Adjustment Reforms in Tanzania," *The Tanzanet Journal*, Vol. 1 (1) (December 2000), pp. 4-18.
- The Standard, November 24, 2004, The Standard Group, Kenya.
- Vaubel, Roland. "Real Exchange-Rate Changes in the European Community: A new Approach to the Determination of Optimum Currency Areas," *Journal of International Economics*, 8 (1978), pp. 319-339.
- Wikipedia, the Free Encyclopedia. "Stability and Growth Pact" (http://en.wikipedia.org/wiki/stability\_and\_growth\_pact).
- Willett, Thomas . "Fear of Floating Needn't Imply Fixed Rates: An OCA Approach to the Operation of Stable Intermediate Currency Regimes." *Open Economies Review*, 14 (2003a), 71-91.

\_\_\_\_\_. "The OCA Approach to Exchange Rate Regimes: A Perspective on Recent Developments." In Dominick Salvatore, JamesDean, and Thomas Willett (Eds.), The Dollarization Debate (pp.154-71). New York: Oxford University Press. (2003b).

- . "Optimum Currency Area and Political Economy Approaches to Exchange Rate Regimes: Towards a Framework for Integration," presented at the University of Victoria Conference on "Britain and Canada and their Large Neighboring Monetary Unions" held 17-18 October 2004.
- Willett, Thomas, Ekniti Nitithanprapas, Isriya Nitithanprapas and Sunil Rongala. "The Asian Crises Reexamined," presented at the Asian Economic Panel Meetings, Seoul, Korea held 9-10 October, 2003.
- World Development. "World Development Indicators database", CD-ROM, (2004).
- Yiheyis, Zelealem. "Fiscal Adjustment to Currency Devaluation in Selected African Countries: An Empirical Analysis," *African Development Review*, 12 (2000), pp. 1-23.