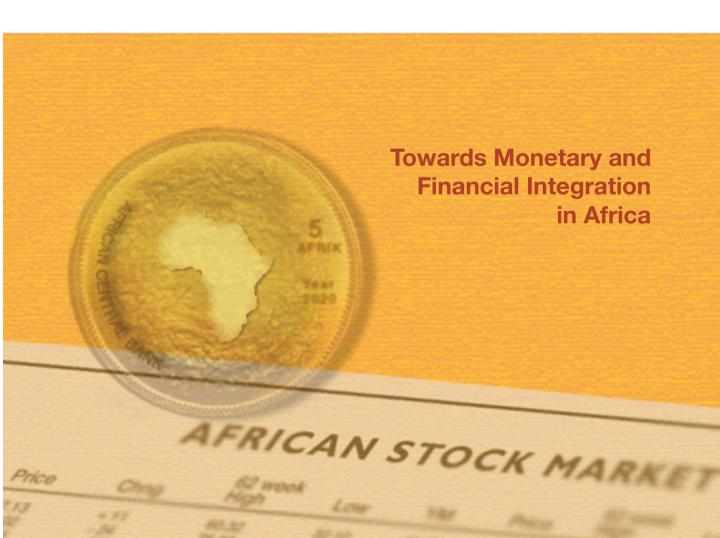




Assessing Regional Integration in Africa







Assessing Regional Integration in Africa 2008

Towards Monetary and Financial Integration in Africa

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Foreword

conomic and political integration has always been a goal for Africa and its people. This is why the Organization of African Unity (OAU) was established in 1964 to promote unity across the continent and prevent Africa from splitting into rival camps at the height of the Cold War. The OAU played a key role in promoting pan-African cooperation and in the emancipation of countries under colonial or racist rule. The Abuja Treaty Establishing the African Economic Community (AEC) in 1994 then laid a new framework and foundation for Africa's integration, with regional economic communities (RECs) as the building blocks.

Since the inception of the Abuja Treaty, Africa has made considerable progress in its attempt to integrate. African RECs have made appreciable strides towards achieving the goals of free trade areas, customs unions and the free movement of people with the introduction of community passports. Other initiatives such as the harmonization of business laws in Africa have helped to enhance the enabling environment for business and investments across borders. There have also been noticeable advances in infrastructure development, thanks to several initiatives and programmes within the framework of AU/NEPAD. Despite these gains, there remain a number of challenges that are constraining the integration agenda.

A continuous appraisal of Africa's integration performance is essential, in order to gain a deeper understanding of the strengths and weakness of the integration efforts, and to help shape the future through lessons learned. It is from this perspective that the African Union Commission and the Economic Commission for Africa publish the report on Assessing Regional Integration in Africa, well known by its ARIA acronym. ARIA is a major publication devoted to in-depth analyses of progress towards fulfilling the objectives of Africa's regional integration in broad and thematic areas, in accordance with the vision of the African Union. The various issues of ARIA have tried to address critical thematic challenges. To this end, the first edition of ARIA, published in May 2004, presented a comprehensive assessment of the status of regional integration in Africa. ARIA-II, published in May 2006, examined and made recommendations on the rationalization of multiple integration groupings in Africa and their attendant overlapping memberships.

ARIA-III, the current publication, is the third of the ARIA series and focuses on the theme of macroeconomic policy convergence, monetary and financial integration in

Africa's Regional Economic Communities. Because it helps increase growth, trade and investments, the pursuit of macroeconomic stability and monetary integration is crucial for Africa's integration efforts. At the core of these efforts are prudent fiscal, monetary, exchange rate and debt policies pursued at the national level and harmonized at the regional and continental levels. A stable macroeconomic environment attracts and encourages investment, which is essential for development. Strengthening and deepening the financial sector, including the establishment of vibrant capital markets, will also facilitate the flow of funds and help anchor macroeconomic policies. Moreover, strong national and regional capital markets also play a catalytic role in attracting foreign direct investment and promoting cross-border investment.

It is for these reasons that the creation of the African Union, with its emphasis on deeper and faster integration, underscored the importance of macroeconomic convergence and monetary integration and the need to establish mechanisms and institutions to facilitate the process.

Many of Africa's RECs have set targets for convergence of macroeconomic policies and for monetary, fiscal and financial integration. Progress and criteria differ among the regional economic communities for historical reasons or because of differences in members' development levels. Against this backdrop, this publication assesses how effectively Africa's regional economic communities — and the continent as a whole — are moving towards macroeconomic policy convergence and monetary and financial integration. In this regard, RECs with established convergence criteria are evaluated based on their achievements, while those without explicit convergence programmes are assessed based on the need for macroeconomic convergence.

RECs, as the building blocks of political and economic integration in Africa, provide the foundation for macroeconomic integration. Any progress on the harmonization of policies at the regional level is a step towards realizing the goals of the African Union. The analyses and findings in this publication point to several areas that need to be addressed to achieve the objectives of the Abuja Treaty and the African Union.

Jean Ping Chairperson

African Union Commission

Abdoulie Janneh
Executive Secretary
Economic Commission for Africa

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Acronyms

AAU Association of African Universities

ACP African, Caribbean and Pacific (group of countries)

ADF African Development Forum AEC African Economic Community

ASARECA Association for Strengthening Agricultural Research in Eastern

and Central Africa

ASEAN Association of South-East Asian Nations

ASECNA Agency for the Safety of Air Navigation in Africa and Madagascar

ASYCUDA Automated System of Customs Data

AU African Union

BLNS Botswana, Lesotho, Namibia and Swaziland

BOT Build, Operate, Transfer

CAMES Conseil Africain et Malgache de l'Enseignement Supérieur

CBI Cross-Border Initiative

CCPL Common Competition Policy and Law

CEMAC Central African Economic and Monetary Community

CEN-SAD Community of Sahel-Saharan States

CEPGL Economic Community of the Great Lakes Countries

CFA Communauté Financière Africaine

CILSS Comité permanent Inter-Etats de la Lutte Contre la Sécheresse au

Sahel

CIMMYT International Maize and Wheat Improvement Centre COMESA Common Market for Eastern and Southern Africa DAMA Demand-Activated Manufacturing Architecture

EABC East African Business Council
EADB East African Development Bank
ECA Economic Commission for Africa

ECCAS Economic Community of Central African States

ECOMOG Economic Community of West African States Monitoring Group

ECOWAS Economic Community of West African States

ECOWATCH ECOWAS Early Warning Observatory
EIA Energy Information Administration

ERA Economic Report on Africa ERM Exchange Rate Mechanism

ETI Ecobank Transnational Incorporated

EU European Union

FDI Foreign Direct Investment

FROM Finance, Rehabilitate, Operate and Maintain

FTA Free Trade Area

G-8 Group of Eight (most industrialized countries)

GATS General Agreement on Trade in Services
GATT General Agreement on Tariffs and Trade

GCE General Certificate of Education

GDP Gross Domestic Product GNP Gross National Product

ICRISAT International Crops Research Institute for Semi-Arid Tropics

ICT Information and Communications Technology

IDEP Institut Africain de Développement Economique et de

Planification

IDS East African Industrial Development Strategy
IGAD Inter-Governmental Authority on Development

IGOs Inter-governmental Organizations

IICBA International Institute for Capacity-Building in Africa

ILO International Labour Organization

IOC Indian Ocean CommissionKBO Kagera Basin OrganizationLCBC Lake Chad Basin CommissionMERCOSUR Common Market of the South

MFN Most-Favoured Nation

MINEDAF Conference of African Ministers of Education
MMSD Mining, Minerals and Sustainable Development

MRU Mano River Union

NAFTA North American Free Trade Agreement

NBA Niger River Basin Authority

NBI Nile Basin Initiative

NEPAD New Partnership for Africa's Development

NGOs Non-governmental Organizations

NICI National Information and Communications Infrastructures

OAG Official Airline Guide

OAU Organization of African Unity
OBC Okavango River Basin Commission

OMVG Organisation pour la Mise en Valeur du Fleuve Gambie OMVS Organisation pour la Mise en Valeur du Fleuve Sénégal

PANAFTEL Pan African Telecommunication Network
PANAFTIS Pan African Trade Information System
PANFACT Pan African Factual Database Management

PANGIS Pan-African Network for a Geological Information System

PICTA Partnership in Information and Communication Technology in

Africa

PPP Private-Public Sector Partnerships

PRIDE Programme Régional Intégré de Développement des Echanges

PSDS Private Sector Development Strategy

PTA Preferential Trade Area of Eastern and Southern African States

RASCOM Regional African Satellite Communication

RBOs River/Lake Basin Organizations **RECs** Regional Economic Communities RIFF Regional Integration Facilitation Forum

SACCAR Southern African Centre for Cooperation in Agricultural Research

and Training

SACU Southern African Customs Union

SADC Southern African Development Community

SADCC Southern African Development Coordination Conference

SAPP Southern African Power Pool

SARPCCO Southern Africa Police Chiefs' Cooperation Organization

SAT Small Aperture Terminal

SATCC Southern Africa Transport and Communications Commission

SAEN Southern Africa Entrepreneurs Network

STD Sexually Transmitted Diseases

TAG Tariff in Africa Group TRAC Trans African Concessions

TRAINS Trade Analysis and Information System TRANSMED Trans-Mediterranean Gas Pipeline

UDEAC Central African Economic and Customs Union **UEMOA** West African Economic and Monetary Union

UMA Arab Maghreb Union

UNCTAD United Nations Conference on Trade and Development

UNDP United Nations Development Programme

UNECA United Nations Economic Commission for Africa **UNHCR** United Nations Higher Commission for Refugees UNICEF United Nations International Children's Fund

United Nations Industrial Development Organization UNIDO

UNISA University of South Africa

UNTACDA United Nations Transport and Communications Decade for

Africa

URTNA Union of National Radio and TV Corporations

WAGP West African Gas Pipeline WAMA West African Monetary Agency WAMI West African Monetary Institute **WEAN** West African Entrepreneurs Network

WEC	World Energy Council
WHO	World Health Organization
WTO	World Trade Organization
ZRA	Zambezi River Authority

Highlights

frican nations are vigorously pursuing an integration agenda in order to participate effectively in the globalization process. African leaders therefore view regional integration as a conduit for achieving sustainable economic growth and development and reducing the level of poverty plaguing the continent. In view of the slow pace of continent-wide integration, they have provided a framework for the implementation of the integration agenda. This framework is enshrined in what is known by integrationists around the continent as the Abuja Treaty, which calls for the creation of a continent-wide African Economic Community (AEC) and lays out six stages for the implementation of the integration agenda. Included in this framework is the creation of a monetary union for the continent.

As the building blocks of the AEC, African regional economic communities (RECs) have or are in the process of establishing monetary unions. Monetary integration contributes significantly to deepening regional integration, especially for RECs aspiring to create common markets. The literature indicates that international trade and economic performance improve when a country enters into monetary cooperation arrangements such as monetary unions.

In line with the creation of monetary unions, several RECs have established macroeconomic frameworks that are underpinned by monetary and financial cooperation as well as the convergence of the economic structures and monetary policies of member States. Following the framework of the European Monetary Union, RECs have established targets for selected key macroeconomic variables that must be met by member States. Many RECs are close to achieving these targets, while others are struggling. However, most of the RECs are yet to achieve their monetary and financial integration objective.

Given the importance of monetary integration and convergence of macroeconomic variables in a regional economic area, the performance of RECs and their respective member States on these issues needs to be assessed to determine and measure the strength of regional integration in Africa. This is why ARIA-III focuses on monetary and financial integration in the various subregions of Africa.

As a follow-up to ARIA II, which focused on the rationalization of the RECs, ARIA-III explores the vast theoretical and empirical literature to gauge the performance

Monetary
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of African RECs in the areas of monetary cooperation and macroeconomic convergence. In this regard, it uses parameters that are broader than the yardstick recommended under the Maastricht framework or the stability pact of the European Union. More importantly, it uses criteria that are consistent with the developmental objectives of the continent. ARIA-III also points out the challenges and constraints that member States face in realizing the goals and objectives of the RECs, and concludes with some policy recommendations.

Why macroeconomic convergence, monetary and financial integration?

The success of regional integration depends critically on member countries pursuing convergent macroeconomic policies. Misalignments of tariffs, inflation rates, exchange rates, debt-to-GDP ratios, rate of money growth and other vital macroeconomic variables between member countries would be disruptive to economic integration. In addition, these misalignments could lead to rent-seeking activities by governments and private individuals that could stifle legitimate investment opportunities. This could contribute to the demise of the economy of a member country, thereby weakening the whole integration process. It is therefore imperative that the process of strengthening regional integration should include guidelines for the convergence of the macroeconomic and trade policies of the entire regional space so as to strengthen the overall regional integration agenda.

It is also essential to strengthen and consolidate Africa's financial markets and institutions, in order to mobilize the financial resources needed to finance integration efforts such as infrastructure projects. These institutions also enhance the payment system and help facilitate trade within and outside the regional communities. In addition to improving the financial markets, efforts must be made to encourage the RECs to establish development banks in their regions, in order to assist member countries in financing infrastructure projects. However, the integration of financial markets in Africa requires the harmonization of national policies and procedures governing these markets and institutions across member countries.

The purpose of monetary cooperation amongst countries within a regional economic community is to establish a common monetary area with a greater measure of monetary stability, in order to facilitate economic integration efforts and foster sustained economic development. In this regard, monetary cooperation could be achieved if member States pursue convergent macroeconomic policies. For macroeconomic convergence to be successful, member States must meet the following minimum conditions:

- Efficient markets for products and factors of production
- Effective and efficient compensatory financing arrangements to make the domestic costs of coping with the ill-effects of economic liberalization bearable. In this regard, there should be an equitable sharing of the costs and benefits of integration among member States, taking into account the effects of macroeconomic exogenous shocks, external financing shocks, terms of trade shocks and adverse weather conditions
- Proper timing and sequencing of convergence variables
- Creation of enabling policies and environments that reduce risks.

The quest for monetary and financial integration of economies has been influenced by history. Since the breakdown of the Bretton Woods agreements in the early 1970s, policymakers have had to grapple with economic instability in international monetary arrangements. The 1980s in particular were characterized by an exceptional misalignment of the major currencies. The decade saw massive capital flight towards the United States and other industrialized countries from the developing world (particularly after debt crises and termination of new loans). Macroeconomic policies improved in the majority of developing countries in the 1990s, but the expected growth benefits failed to materialize, at least to the extent that many observers had forecast. In addition, a series of financial crises severely depressed growth and worsened poverty. The enormous costs of the financial crises in Asia, Argentina and Brazil at the end of the 1990s and the beginning of 2000s drove home the importance of stability.

History tells us that the world has not always been faced with monetary instability. In the 1950s and 1960s, the economies of the most developed capitalist countries (North America, Western Europe, Japan and Australasia) and those of many developing countries performed very well. That period, commonly designated as "the Golden Age", witnessed low unemployment, low inflation and rapidly growing living standards, which were underpinned by the monetary arrangements entered into at the famous meeting in Bretton Woods in 1944, the penultimate year of the Second World War. Insofar as it eliminated the spectre of global economic insecurity that predominated in the 1930s, the meeting was extremely successful.

In the second half of the 1960s and through the 1970s, however, the whole structure of profitable growth began to show signs of weakness. The oil crisis, the Vietnam War, political instability and labour unrest all combined to exert enormous pressure on the existing international monetary arrangement. Following many attempts to safeguard the system, the Bretton Woods agreement was abandoned and the major economies switched to a "regime" of flexible exchange rates. However, the move to flexible exchange rates brought with it persistent misalignments and wild gyrations. Such disorderly behaviour caused serious problems for developing countries in the management of their currencies and external debt, and was often an important factor in major emerging-market crises.

To address the fluctuations in exchange rates and to minimize their vulnerability, some countries, with the support of the IMF, established currency pegs – typically linking their currency to the dollar. Unfortunately, the remedy was in most cases worse than the disease, sparking a number of very serious currency crises, starting with the Asian financial crisis of 1997-98, and culminating with the serious economic recession of Argentina following the collapse of its currency board. Clearly, there are lessons to be learned about currency management from these episodes.

One way of dealing with persistent fluctuations in exchange rates is for a group of countries to adopt a system of fixed exchange rates or to enter into monetary cooperation arrangements. In the extreme case, a monetary union could be established among the countries, but for monetary cooperation to be effective, the literature suggests that the following conditions should be met:

- The economic structures of the member countries should be sufficiently congruent. The importance of this criterion is to ensure that they face the same vulnerability to asymmetric shocks.
- Degrees of incongruence in economic structure can be tolerated if there is
 a high level of wage flexibility amongst the member countries, such that
 asymmetric shocks could be absorbed.
- There should be considerable labour mobility across member States so as to ease the costs of asymmetric shocks.
- Production and exports of member States should be widely diversified.
- Member States should be very open to trade and should trade heavily with each other.

Although monetary union has its costs and benefits, the theoretical and empirical evidence suggests that, if established and sustained, regional currencies among developing-country groupings can bring considerable benefits, similar to those expected from the introduction of the euro. They can reduce the cost of doing business within a region and eliminate exchange rate spreads and commissions in currency trading associated with intraregional trade and investment. Furthermore, a supranational central bank can reduce the influence of populist national politics on monetary policy, but still be accountable to member countries. Unlike dollarization, such an arrangement would also bring benefits in terms of seignoirage.

Although monetary union has its costs and benefits, the theoretical and empirical evidence suggests that, if established and sustained, regional currencies among developing-country groupings can bring considerable benefits, similar to those expected from the introduction of the euro

The European Union experience with monetary union

The European Union (EU) remains one of the most successful examples of integration in the world. Experiences drawn from the Union could be very informative for African RECs aspiring to establish a monetary union. However, the road to European monetary union was not easy; it took over four decades and involved a step-by-step process of block expansion. In reality, European monetary integration can be traced as far back as the Treaty of Rome, where it was acknowledged that the exchange rates of member countries should be regarded as a matter of "common interest". The revaluation of the Dutch guilder and the German mark in 1961 prompted discussions on how the customs union could be extended to the monetary domain. Although a Committee of Central Bank Governors was created in the mid-1960s to coordinate monetary policy in the Union, it was not until 1969 that the European Council reaffirmed its intention to move ahead to full economic and monetary union. This decision was motivated by the instability of the dollar and by fears that a disorderly revaluation of European currencies would endanger the European Economic Community (EEC).

The next step was the formation of a study group of high-level officials chaired by the Prime Minister of Luxembourg, Hon. Pierre Werner, in 1970. The Werner Plan envisaged the creation of a European monetary union by 1980. It suggested that the monetary union should be achieved in stages, with each step leading ever closer to the ideal of fixed intra-European exchange rates. Along the way, the participating member States would also establish patterns of coordination in other fields of economic policymaking in order to facilitate the convergence of national currencies and to reap other cooperative benefits (e.g. through greater intraregional trade).

However, the collapse of Bretton Woods made it difficult to establish the monetary union in 1980 as many of the European economies faced a number of challenges. In the era of floating exchange rates that prevailed just before the collapse, the failure by central banks to support the US dollar affected European economies adversely in two ways. Not only did European exchange rates tend to appreciate against the dollar, thus damaging the competitiveness of European currencies (especially that of Germany), but they did so at different speeds, thus upsetting the pattern of exchange rates within Europe and making currency relationships volatile and unstable.

Part of the solution envisaged by the EEC to address the situation was the creation of the European Monetary System (EMS) in 1979. The EMS, which was in place from 1979 to 1999, was supposed to allow member States to harmonize their monetary policies. However, in the absence of monetary integration, intraregional free flow of trade and investment remained vulnerable to currency rate fluctuations, especially

However, the road to European monetary union was not easy; it took over four decades and involved a stepby-step process of block expansion

modern capital-intensive investments that were generally large-scale and involved long-term uncertainty and risk. The free movement of labour also remained exposed to many hazards, as incomes earned in one currency could not be compared with incomes in another currency within the region.

Launching of the euro

The successful launching of a single currency for the European Union, the euro, has rekindled the desire of regional economic communities to create monetary unions. The introduction of a single currency has provided Europe with an autonomy that would not otherwise exist, because no single European country has the same autonomous capacity to manage demand in an era of floating exchange rates. It is therefore important for countries engaging in monetary integration to ensure that the necessary macroeconomic and fiscal conditions are met.

In drawing lessons from the European experience, it is very important to evaluate the relative performance of the euro since its creation, taking into account several factors, including the following:

- European monetary union has taken a long time, starting with the ERM in the 1970s, and the path has been bumpy, with some countries such as France, United Kingdom and Sweden suffering serious crises in the 1990s. Accordingly, any developing country taking a similar path needs to be careful to avoid costly macroeconomic mistakes.
- Evidence suggests that macroeconomic performance has been modest under the discipline of the euro. The experience of the first seven years demonstrates that membership has its benefits, but that these benefits are not free. Being part of a currency union requires discipline, and the loss of the exchange rate as an instrument for coping with economic shocks can be costly. Within the euro area, some members such as Ireland are thriving while others, especially the southern member States, are struggling and will face painful adjustments in the future. For instance, Ireland and Portugal have experienced marked real exchange appreciation, but with very different consequences for export growth. There has been real deprecation in both Germany and France, but only Germany's exports have flourished.
- It is important to note that differential shocks will occur less frequently in a
 monetary union, because trade between the industrial nations of the EU is
 largely intra-industry trade. However, there is the potential that specialization under integration could increase shocks.

Convergence criteria

The successful transformation into a monetary union requires member States to follow convergent macroeconomic and monetary policies. This is why the Maastricht Treaty of 1991 stipulated that the transition to the final stage of monetary union was conditional on a number of "convergence criteria", and that a country could join the union only if:

- 1. Its inflation rate is no more than 1.5 per cent higher than the average of the three lowest inflation rates among the EU member States
- 2. Its long-term interest rate is no more than 2 per cent higher than the average observed in these three low-inflation countries
- 3. It has joined the exchange rate mechanism of the EMS and has not experienced a devaluation during the two years preceding the entrance into the union
- 4. Its government budget deficit is not higher than 3 per cent of its GDP (if it is, it should be declining continuously and substantially and come close to the 3 per cent norm, or alternatively, the deviation from the reference value (3 per cent) should be exceptional and temporary and remain close to the reference value [Art. 104c (a)]
- 5. Its government debt should not exceed 60 per cent of GDP (if it does, it should "diminish sufficiently and approach the reference value (60 per cent) at a satisfactory pace" (De Grauwe, 2005: 143).

The designers of the treaty clearly thought that the main danger was that fiscal policy might indirectly put pressures on monetary policy. For instance, if a country got into trouble servicing its debt, the central bank might be led to ease monetary policy to lower the treasury's interest costs and prevent a financial crisis.

But the key question is whether the criteria adopted in Europe were the right ones. The evidence suggests strongly that they placed excessive emphasis on inflation. On a theoretical level alone, in an environment of zero inflation (and many European countries have moved close to such a situation), there is likely to be more real wage rigidity, making adjustments to asymmetric sectoral shocks more difficult and leading to higher rates of unemployment. Tensions were particularly evident between the French and the German governments on this issue. In fact, as we have seen earlier, these different perspectives on the way to achieve monetary union pre-date the Maastricht plan, with Germany's traditional emphasis on maintaining low, possibly negligible, rates of inflation, something very much compounded by the impact of German reunification in the early 1990s.

Financial integration

Financial integration involves a process whereby a country's financial markets become linked or integrated with those of other countries or with those of the rest of the world. In fully integrated markets, all forms of barriers are eliminated to enable foreign financial institutions to participate in domestic markets. In such an environment, domestic banking networks, equity and other types of financial markets are linked to their foreign counterparts.

There are several ways in which a country's financial markets could be integrated. It could occur through membership in a regional integration community where formal protocols have been established to link up the financial markets of the community. In this arrangement, the regional integration community would remove or minimize restrictions that impede the flow of capital, and harmonize all financial rules, regulations and taxes between member countries.

Financial integration could also occur through the penetration of foreign financial institutions into domestic markets, in the absence of formal integration agreements. For example, developed countries allow foreign participation in the banking and insurance markets and pension funds, securities trading abroad and direct borrowing by domestic firms in international markets. These activities are possible because domestic laws permit the operation of foreign financial institutions in the domestic markets.

Whether a country chooses to integrate its financial markets formally or informally, it needs to create an enabling environment that would attract foreign participation. To this end, steps that the country could take include the harmonization of rules and regulations governing its domestic financial markets, and the creation of standards and benchmarks similar to those of international markets.

However, for financial integration to be effective in Africa, it needs to be achieved through the regional economic communities. Formal financial integration at the level of the RECs would allow small African economies to increase their financial links with the rest of the world. An African regional economic community could harmonize the standards and regulations governing financial markets in the region, so as to attract foreign participation. Such an effort could lead to the creation of a large financial market that would support Africa's regional integration agenda, particularly in the area of economic development. Indeed, smaller African countries cannot achieve such economic impact by themselves unless they are linked up through the financial markets of the regional economic communities.

The strengthening of African financial markets through integration with world financial markets would also lead to the promotion and strengthening of trade and invest-

ments. The presence of foreign financial institutions in African countries strengthens the ties between the countries involved, since financial services linked to trade and investment flows are facilitated by the same financial institutions.

The benefits of financial integration

The benefits of financial integration include: more opportunities for risk sharing and risk diversification; better allocation of capital for investment; and potential for higher economic growth.

- **Risk sharing:** Financial integration provides an avenue for firms and households to share financial risk, which through financial integration, also leads to specialization in production across the regions. Financial integration promotes portfolio diversification and the sharing of idiosyncratic risk across regions due to the availability of additional financial instruments.
- **Improved capital allocation**: Financial integration results in a better allocation of capital, because an integrated financial market removes all forms of impediments to trading of financial assets and flow of capital, thereby allowing for the efficient allocation of financial resources for investments and production.
- Economic growth: Deeper financial integration leads to stronger economic growth, as financial resources become available for economic activities as a result of financial development. Financial integration also facilitates access to investment opportunities and an increase in competition between domestic and foreign financial institutions. This in turn leads to improved efficiency of financial institutions as financial resources are released for productive activities. In addition, financial integration leads to increased availability of intermediated investment opportunities, and consequently stronger economic growth.

There is ample evidence in the literature that financial integration or financial development leads to stronger economic growth. In any economy, financial institutions help to: (1) lower uncertainty by facilitating the trading, hedging, diversification and pooling of risk; (2) allocate resources efficiently; and (3) mobilize savings. These functions affect economic activity through capital and technology accumulation. It should be pointed out that risk-sharing opportunities make it possible to finance highly risky projects with potentially very high returns, because they enhance financial markets and permit risk-averse investors to hedge against negative shocks. Financial integration also allows project owners with low initial capital to turn to an intermediary that can mobilize savings to cover their initial costs. These avenues indicate a strong link between financial institutions and economic growth.

Africa's experience with monetary cooperation

Africa has been pursuing monetary cooperation for some time now. During and after colonization of the continent, some countries sought monetary cooperation with others. The French and British colonies entered into common monetary arrangements, which were not based on common economic drivers, but were created purely for administrative convenience and seigniorage considerations. Monetary cooperation between countries within the British colonies was through currency boards. The colonies earned their seigniorage revenues from interest payments on investment of the reserves in British Government securities. The French colonies of Africa used the franc, which was also pegged to the French franc. Unlike the currencies used in British colonies, the franc was backed by a "convertibility guarantee" of the French Treasury. In addition, the governments of the colonies were restricted by how much they could lend.

The British and the French monetary cooperation arrangements were not the same. The British currency boards were rooted in English central banking and therefore performed functions similar to those of the Bank of England. As expected, the French currency boards followed the guidelines and principles of French central banking. Hence, like the Banque de France, the currency boards in the colonies lent significantly to the local banking system, as the currencies were backed by the French Treasury.

Post-colonial independence saw the monetary arrangements in English-speaking African countries dismantled, replaced by sovereign currencies. However, the franc-based monetary unions in West and Central Africa continued to function for many years after the countries attained their independence. The exceptions are the Democratic Republic of Congo and Guinea, which issued their respective currencies after independence.

Presently, the monetary cooperation arrangements of the RECs are aimed at establishing a common monetary area with a greater measure of monetary stability, in order to facilitate economic integration and development among member States. As a result, some of the RECs are taking measures to eventually create a monetary union, including the following:

- Liberalizing the exchange rates of the member States to facilitate trade and capital movements within the region
- Harmonizing the economic, fiscal and monetary policies of the member States, in order to reduce currency misalignment, and establishing a consultative and coordinating machinery

- Achieving convertibility within the region of member States' national currencies
- Mobilizing financial resources for trade expansion and development projects and programmes
- Reducing the cost of exchanging currencies in intra-REC trade and improving the transparency of prices, so as to promote intra-REC trade and investment flows
- Improving price stability and allocation of resources within the region
- Developing a coordinated management strategy that will promote national actions towards monetary and fiscal policy harmonization.

As indicated earlier, the RECs are carrying out these programmes to eventually create a monetary union and a common market within which goods, services, capital and persons would move freely.

Progress on monetary cooperation arrangements in Africa

In recent years, some RECs have produced blueprints for the establishment of monetary unions. For example, ECOWAS is working hard to have a common currency. It hopes to start with a common currency zone for Nigeria, Ghana, Gambia, Guinea and Sierra Leone, which would be merged with the UEMOA franc zone at a latter date to create an ECOWAS currency. SADC, COMESA and EAC all have plans to establish common currencies.

Part of the programme of the RECs includes guidelines for macroeconomic surveillance that member States have to respect for key macroeconomic variables. Accordingly, most of the RECs have put in place a multilateral surveillance mechanism to ensure coherence and convergence of macroeconomic policies through compliance by member States.

The convergence criteria established by the RECs include agreed targets for macroeconomic variables such as budgetary balance, inflation and public debt and are divided into primary and secondary criteria. Although the principles are the same, the criteria vary somewhat from REC to REC.

The RECs have established statutory organs with responsibilities for carrying out and monitoring the macroeconomic convergence activities in the RECs. Despite the challenges, some RECs have succeeded in enhancing monetary cooperation, promoting discipline and setting up regional payment systems and clearing houses within the communities.

Although there has been considerable progress, the RECs face significant challenges, which they are addressing through measures that include capacity-building and technical assistance to member countries, harmonization of statistics and seminars and workshops to sensitize member States. Furthermore, although all the member States of the RECs have committed to macroeconomic stability, most lack effective legal enforcement mechanisms to ensure that the objectives of macroeconomic convergence are met.

The assessment shows that although there are some successes, African countries are experiencing enormous difficulties in achieving the desired macroeconomic convergence criteria set by their regional economic communities. Whereas some Members States, particularly those that belong to monetary unions (CEMAC and UEMOA), have done well in maintaining relatively low single-digit inflation, most countries are posting double-digit inflation and consequently struggling to achieve their desired inflation targets. Similarly, most of the countries have not been able to achieve the desired fiscal targets, partly due to negative external shocks, large budget deficits, lack of reliable statistics and poor growth performance.

This raises the issue of the relevance of the convergence criteria. For the coordination of macroeconomic policies in the RECs to succeed, African countries should have a clear sense of their own development objectives and strategies and be fully committed to these goals. Member States should muster the political will to mainstream regional monetary and macroeconomic objectives into their national development strategies.

To sum up, monetary arrangements between African countries provide a unique opportunity to regain some of the macroeconomic autonomy ("policy space") that was lost during the debt crisis of the 1980s. One step forward would be for national authorities to be more responsible in macroeconomic policy-making, and set their own priorities for exchange rates, fiscal policy and interest rates. However, experience from the European countries and the broader international system shows that such policies of coordination engender many risks. Policymakers need to be fully aware of those risks and the possible costs of mistakes before embarking on a project of monetary coordination.

African countries will have to follow a different trajectory. Neither the experience of the EMS nor the Maastricht criteria (which stress macroeconomic convergence in inflation, interest rates, budgetary policies) for achieving monetary union are appropriate. A more pro-growth macroeconomic framework needs to be designed and implemented. This can be achieved only through greater macroeconomic coordination between African countries. But there is a whole set of preconditions that need to be met, including the consolidation of the fiscal tax base. As a way of gaining revenue, independent monetary policy is at present too valuable a mechanism for most governments to contemplate its liquidation. A second priority is to accelerate the degree of trade integration by removing barriers to trade between partners. A greater synchronization of economic cycles is required, and the most immediate way to achieve this is through trade integration. There are good reasons to doubt official statistics pertaining to intra-African trade flows; if informal trade flows are counted, the true degree of integration is much higher than is commonly thought. Nevertheless, far more progress needs to be made in dismantling both procedural and structural trade barriers. In the European case, the initial customs union was achieved ahead of schedule in the 1960s. Similar progress is required in Africa before moving to the next step of macroeconomic policy coordination.

It is also important to note that although economists have undoubtedly made progress in their understanding of the costs and benefits of monetary union, a consensus view on this issue is still far off. Nevertheless, the theoretical and empirical evidence reviewed here suggests that, if established and sustained, regional currencies among developing country groupings can bring considerable benefits and reduce business transaction costs within a region.

Developments on regional financial institutions in **Africa**

Strong financial markets play an important role in supporting economic development, because developed financial markets and institutions enhance the exchange of goods and services, the mobilization of resources (both domestic and international), the efficient allocation of factors of production, and the diversification of risk. The economic literature shows strong evidence of a positive relationship between developed financial markets and economic growth.

A well-functioning economy needs a financial system that moves funds from people who save to people seeking productive investment opportunities. In other words, a sound financial system acts as a conduit for sustainable economic growth. Economic theory indicates that the main role of financial markets and institutions is to minimize the costs of information and transactions. Consequently, saving rates, investment decisions, technological innovation and long-run growth rates depend crucially on the level of financial development.

Experience from the European Community shows that its financial integration was undertaken in a gradual manner and was implemented through a coordinated process of legislation among the member countries. The goal was to create a legislative framework that would allow greater integration of financial markets, without giving up the public-policy interests of each Member State with regard to rules, market stability and consumer protection. The creation of a *single market programme*, or a European economic system, was based on the principle of home-country control, regulatory competition and minimum standards harmonization. Under the home-country-control principle, primary supervision was left under the direct control of national authorities. However, national laws were not fully harmonized and home-country rules were accepted to govern the cross-border provision of services. Integration of financial markets in Europe has brought several benefits to the regional market in the form of greater exposure to international competition, improved efficiency in financial intermediation, more efficient capital utilization, the development of the financial industry itself, and better fiscal discipline.

African countries can draw important lessons from their European counterparts. To this end, the financial integration of the markets and institutions of developing countries, including those of Africa, requires the following:

- Clearly defined long-term aims beyond sectoral efficiency, including economic development and global competitiveness;
- Recognition that minimum harmonization of regulatory frameworks and cross-border financial activities requires reform of public administration, particularly regarding tax treatment, banking and insurance legislation, and joint supervision of securities markets; and
- Commitment to a considerable degree of fiscal harmonization and economic coordination, in order to avoid financial crises that would hinder effective financial integration.

Although some forms of financial development have taken place in Africa in recent years, financial market activities remain very shallow, as capital markets are characterized by low capitalization and liquidity. Most financial instruments issued on the financial markets in Africa have very short maturities. Bank financing continues to be concentrated at the short end of the term structure. Consequently, the spread between lending and deposit rates and the ratio of non-performing loans remain high, indicating a weakness in the financial market structure on the continent. Furthermore, only a limited number of financial instruments are issued on the financial markets, making it extremely difficult to hedge against financial market risk.

RECs need to carry out financial integration programmes to complement their monetary integration efforts. The economic literature demonstrates that deeper integration of financial markets strengthens the transmission of monetary shocks as well as monetary policy across the member countries of a monetary union. Weak forms of financial integration have differential effects on monetary policy in the countries

of a monetary union. Similarly, because of the differences it generates in propagation mechanisms, lack of financial integration implies cross-country divergence in response to union-wide shocks. This in turn increases the costs of participation in a monetary union, thus making a clear case for financial integration to match the process of monetary integration.

However, effective financial integration in Africa can only be achieved through the regional economic communities. Formal financial integration at the level of the RECs would allow small African economies to increase their financial links with the rest of the world. An African regional economic community could harmonize standards and regulations governing financial markets in the region and thereby attract foreign participation. Such an effort could lead to the creation of a large financial market that would support Africa's regional integration agenda, particularly in the area of economic development. Smaller African countries cannot achieve such economic impact by themselves unless they are linked up through the financial markets of the regional economic communities.

The strengthening of African financial markets through integration with world financial markets would also lead to the promotion and consolidation of trade and investments. The presence of foreign financial institutions in African countries fosters deeper ties between the countries involved, because these institutions facilitate financial services linked to trade and investment flows.

Recognizing the need for pooling their financial resources, African regional economic communities are starting to establish subregional capital markets to overcome the limitations of the fragmented capital markets in respective African countries. The RECs recognize the need for the integration and consolidation of financial markets as a vehicle for the promotion of economic development on the continent. Furthermore, financial integration would enhance competition, promote efficiency and productivity and facilitate the flow of information. The RECs are pursuing strategies of financial integration through programmes of harmonization of regulatory and legislative frameworks and policies, promotion of cross-border investments and cross-border listing of securities. Overall, regional financial integration is expected to serve as a step towards the establishment of stronger links with financial systems and capital markets in more developed countries. To support their integration and development agenda, some RECs have established institutions to support regional financial cooperation. Regional development banks operate in CEMAC, COMESA, EAC, ECOWAS, UEMOA and UMA.

The role and functions played by the financial institutions include: collecting of deposits and granting of loans to individuals and enterprises; transmission of stock exchange orders and management of interactions between financial institutions

through the central bank; financial intermediation on short-term and long-term considerations, and receipt of public funds.

The Maghreb Bank for Investment and External Trade has been established to operate in the Arab Maghreb Union (UMA) zone. The Bank supports the economic integration agenda of the UMA region by financing agricultural and industrial projects in which the member States have a common interest. It also provides finance to facilitate trade, to undertake projects at national and regional level, and to assist poorer members in each region. It also aims to mobilize investments for other bankable projects and promote trade and related payment arrangements. UMA is also in the process of establishing a foreign investment bank for Maghreb countries. In SADC, the South African Development Bank serves the interests of all community members.

Established in 1984, the COMESA Clearing House provides foreign exchange support for the facilitation of intra-COMESA trade. The clearing house has been restructured in a number of areas, including: (i) transferring the clearing function to commercial banks, (ii) transforming the clearing house into a regional SWIFT centre and a hub for electronic money transfer among regional commercial banks, (iii) putting the new clearing house in charge of providing regional export guarantees against political risk. The PTA Reinsurance Company (ZEP-RE), which became operational in 1991, provides insurance coverage and re-insurance to investors in the region. The COMESA PTA Bank provides financing for trade and projects at national and regional level in the form of credit, credit guarantees and minority equity participation in joint ventures. The Bank also supplements the activities of national development agencies of member States through joint financing operations and the financing of development projects. Since its inception, the Bank has financed the manufacturing, agribusiness, tourism, mining, infrastructure and energy sectors of the REC.

In the ECOWAS region, the ECOWAS Fund for Cooperation, Compensation and Development (EFCCD), formed in 1975, serves as a source of finance for the compensation of revenue loss accompanying regional trade liberalization. The EFCCD is also responsible for the promotion of balanced regional economic development and providing support to less developed member States of the community. EFCCD has been reconstituted as the ECOWAS Bank for Investment and Development (EBID). The two subsidiaries of EBID are the ECOWAS Regional Development Fund (ERDF) and the ECOWAS Regional Investment Bank (ERIB), focusing respectively on public and private sector financing. The ECOWAS Bank Group (Ecobank) has also been established to strengthen regional financial cooperation. Ecobank, a parent holding company, has subsidiaries in twelve countries across West and Central Africa. Ecobank was established to provide commercial banking and other financial services to individuals and private and public sector organizations.

The ERDF is the major shareholder of Ecobank. The Ecobank Foundation, a philanthropic arm of the bank, is also involved in supporting scientific, cultural and humanitarian causes across the region.

In order to promote the creation of regional financial institutions, the RECs are making attempts to deregulate the financial environment through the convertibility of national currencies and the liberalization of capital markets; exchange rate controls and national banking laws. With respect to international standards, member States are making efforts to eliminate controls on capital transfer and capital repatriation.

Macro economic convergence: Empirical evidence from African countries

This study provides empirical evidence on the progress and prospects of the African integration process by assessing the level and rate of convergence of the macroeconomic and financial components in Africa. The macroeconomic component of integration relates to three complementary dimensions of convergence. First, it is assumed that true integration cannot take place unless economies of participating countries in an integration area deal with economic shocks harmoniously. As a result, assessing the presence of synchronous shock treatments and business cycles can provide useful evidence of the potential for deeper integration in a given REC. Second, for the economies in a given integration area to deal with economic shocks in a coordinated manner, macroeconomic policies among the countries involved need to be harmonized. Therefore, analysing the presence or absence of harmony and coordination in the macroeconomic policies of the economies trying to integrate is an important element in assessing the state of integration in African RECs. Third, the countries participating in the integration efforts should work towards the convergence of their per capita incomes.

The empirical results are discussed in great detail in Chapter V of this report. The empirical analysis employs sophisticated econometric methods using time-series data of macroeconomic stability indicators for selected RECs in Africa, namely: SADC, COMESA, ECOWAS, CEMAC and UEMOA.

The empirical analysis of these monetary and fiscal policy indicators shows strong evidence of the convergence of macroeconomic stability indicators (in particular, inflation and fiscal balance) for various RECs (SADC, COMESA, ECOWA, CEMAC and UEMO) in recent years. Although the analysis is limited to specific policy outcomes, it provides a positive indication that policy coordination in the

True integration cannot take place unless economies of participating countries in an integration area deal with economic shocks harmoniously

RECs is achieving the desired macroeconomic outcomes. This would provide the necessary foundation for moving the RECs through the various phases of integration towards monetary unions.

Unless there is a major structural shift, it will take decades for most REC economies to converge and thus attain one of the expected outcomes of regional integration initiatives in Africa

The empirical analysis also shows that greater macroeconomic coordination between African countries is required to achieve expected growth benefits. In this regard, the income convergence analysis indicates very little evidence that the countries in the various RECs are converging their per capita incomes, except those in UEMOA. However, more stringent testing based on economic growth theories shows very slow pace of convergence of the per capita incomes. Consequently, unless there is a major structural shift, it will take decades for most REC economies to converge and thus attain one of the expected outcomes of regional integration initiatives in Africa. There is the need for poor countries in the continent to be able to attain levels of development that overcome the disparities in per capita incomes. Clearly, as shown by the analysis to this point, the integration policies would have to address the lack or slow pace of convergence in per capita incomes. Although there appear to be positive developments in macroeconomic convergence for a number of RECs, member countries need to address the challenges posed by divergent macroeconomic policies, rules and regulations across RECs.

Overall, Africa has made significant strides in creating common regional economic spaces. Common policies are emerging in the areas of transport, telecommunications, water and energy. There is a growing trend in intra-REC trade, although much still needs to be done to promote greater intraregional trade and attenuate the constraints to regional international competitiveness. This will require closer amalgamation of trade and integration policies across RECs, in order to create more unified economic and market spaces, and actions to boost greater economic and production linkages anchored around the transformation of Africa's natural resource heritage in a mutually complementary and reinforcing manner.

The way forward

Monetary cooperation

Most of the participating countries of the RECs are not able to attain the conditions of macroeconomic convergence. The assessment carried out in the report indicates that most African countries have great difficulty in achieving the desired macroeconomic convergence criteria set by the regional economic communities. The analysis shows that most African countries are registering double-digit inflation and therefore are not able to achieve the desired inflation targets or the desired fiscal targets.

Among the reasons given for the poor performance of the countries are negative external shocks, large budget deficits, lack of reliable statistics and poor growth performance.

Africa's ability to achieve monetary union remains very difficult. This raises the question of the appropriateness of the convergence criteria for Africa. As argued in the report, a macroeconomic convergence mechanism is needed because the success of regional integration hinges critically on member countries pursuing convergent macroeconomic policies. Misalignments of key macroeconomic variables could hamper the regional integration process. It is therefore imperative that the process of strengthening regional integration should include guidelines for the convergence of macroeconomic and trade polices of the entire regional space so as to strengthen the overall regional integration agenda. It is therefore important that the macroeconomic convergence criteria established by the member States should:

- Ensure that member States create an environment with economic conditions that are favourable for the achievement of the set targets participate
- Ensure that the convergence targets are met at all times and that convergence is sustainable
- Ensure that the convergence criteria are coherent and holistic, drawing on the development objectives of the RECs and member States
- Ensure that implementation of the criteria is simple, transparent and consistent with broad, national and regional objectives
- Ensure that the convergence criteria are all satisfied on the basis of current data.

However, for the coordination of macroeconomic policies in the RECs to succeed, African countries should have a clear sense of their own development objectives and strategies and be fully committed to these goals. Member States should muster the political will to mainstream regional monetary and macroeconomic objectives into their national development strategies.

Financial cooperation

Africa needs to strengthen its financial markets and institutions in order to mobilize the financial resources needed to finance its integration projects. These institutions are important vehicles for the payment systems and help facilitate trade within and outside the regional communities. There is also the need to encourage the RECs to establish development banks in their regions that would support member countries in financing infrastructure projects.

A macroeconomic convergence mechanism is needed because the success of regional integration hinges critically on member countries pursuing convergent macroeconomic policies

Stronger financial markets contribute significantly to economic growth by promoting domestic savings and increasing the quantity and quality of investments Stronger financial markets contribute significantly to economic growth by promoting domestic savings and increasing the quantity and quality of investments. The markets also act as vehicles for wealth generation, as individuals are able to invest in additional financial instruments according to their risk preferences and liquidity needs, and help boost the national savings rate. Firms also use the financial markets to raise capital at lower cost. In countries that have advanced markets, firms use the markets more than the banks for financing and therefore reduce the risk of a credit crunch. Hence, sound functioning financial markets influence economic growth by boosting savings amongst individuals and financing the activities of firms.

Financial markets also ensure the efficient allocation of resources, with poor-performing firms generally under the threat of a takeover. Such perceived threat provides an incentive for management of the poor-performing firm to try to maximize the value of the firm and fend off any attempts by another group of investors to take control of the firm. In this regard, financial markets foster corporate discipline and ensure the efficient allocation of productive assets and the efficient use of managerial resources.

African stock markets are small and illiquid, with infrastructure bottlenecks and weak regulatory institutions. Despite the challenges they face, the markets have financed a number of companies, thereby contributing to economic growth. It is therefore imperative that the RECs and national policymakers design policies that would support the deepening of the markets in Africa. Some of the suggestions proposed in the literature include:

- Need to promote a stable macroeconomic environment: A stable macroeconomic environment is needed for the development and strengthening of the stock market in Africa. Sound macroeconomic environments and sufficiently high income levels, including GDP per capita, domestic savings and domestic investments, are key factors for the promotion and development of financial markets.
- **Need to increase automation**: By increasing the level of automation, financial markets in Africa would be more efficient, and their trading activities and liquidity would benefit accordingly.
- Demutualization of exchanges: All financial markets would have to be demutualized. This means that the legal status, structure and governance of stock exchanges would be changed from non-profit to profit-making ventures.
- Integration of African financial markets: In order to overcome the challenges of fragmented markets, African financial markets need to be fully integrated. Merging stock exchanges (the extreme form of integration) would increase the volume of trade. An integrated regional stock exchange

in Africa will be a powerful source and driver of capital flows to Africa. A prerequisite for a successful integration of the markets is that trading laws, accounting standards, legislations, rules, listings, trading days, settlement and reporting standards would all have to be harmonized.

- Need to promote institutional investors: It is important that institutional investors are encouraged to participate in the financial markets in Africa, because they are effective in promoting efficient market practices and financial innovation. As well, this group of investors encourages greater transparency and integrity in both primary and secondary markets, seeks lower transaction costs, and promotes efficient trading and settlement facilities.
- **Need to have sound regulation and supervision**: Regulation and supervision are typically aimed at preventing exploitation by some investors. Protecting the rights of investors helps eliminate the problem of information asymmetry.
- **Need to encourage foreign participation**: Private capital flows such as foreign direct investments, remittances and portfolio investments are crucial for the development of financial markets in Africa. Capital account restrictions need to be removed to attract cross-border investments. However, capital account liberalization should be preceded by trade liberalization and domestic financial liberalization, to minimize financial market risks.

It is important that institutional investors are encouraged to participate in the financial markets in Africa, because they are effective in promoting efficient market practices and financial innovation

Introduction

egional integration is now widely accepted as indispensable for expanding economic opportunities in Africa. Bigger markets permit better exploitation of economies of scale, while factor mobility across borders and the coordination and harmonization of monetary and fiscal policies would facilitate faster economic growth and greater welfare for participating countries. African countries consider regional integration the most direct route to fast, broad-based development and an effective way to overcome the limitations of small internal markets. They also perceive regional integration as a rallying platform for establishing African unity. The OAU Charter and the Constitutive Act establishing the African Union define the anchoring ideals of African unity (OAU 1963; AU, 2000), while the Lagos Plan of Action and the Abuja Treaty establishing the African Economic Community (OAU 1980, 1991) spell out the economic, political and institutional mechanisms for attaining this goal. The treaties establishing regional economic groupings before and since independence, while reflecting the rich geographic and economic diversity of the continent, have pan-African dimensions.

Accordingly, African leaders have firmly committed themselves to accelerating regional cooperation and integration. Underlying this commitment is a belief that most African countries cannot achieve rapid economic growth and development in a reasonable time without first overcoming the constraints of small populations and economies. Of the 53 African countries, 38 (about three quarters) have populations of 15 million or less, while one third have populations of 3 million or less. Moreover, of the 46 least developed countries in the world, 31 are in Africa. Thus, the contribution of regional cooperation and integration to the promotion of intragroup trade, growth, development and social and political cohesion is unquestionable. Removal of border controls, harmonization of macroeconomic, sectoral and institutional policies and actions, liberalization of trade, free movement of people and capital are expected to result in more efficient use of resources as well as in productivity and income gains. Participating countries are expected to fare better with integration than without it. The productivity gains arising from economies of scale and cost-saving arrangements are also likely to strengthen internal as well as external competitiveness of products and firms. Economic gains in turn are likely to facilitate the process of political and social cohesion and unity.

African countries consider regional integration the most direct route to fast, broad-based development and an effective way to overcome the limitations of small internal markets

The launching of the African Union and the adoption of the New Partnership for Africa's Development (NEPAD), together with the keen interest of African countries to become effective members of World Trade Organization (WTO), all attest to the continent's drive to achieve economic and political integration and avoid global marginalization. It is an embodiment of Africa's will to accelerate its transformation as a continent of predominantly least developed and developing individual economies to a strong united bloc of nations built around the regional economic communities. The RECs were expected to evolve into free trade areas, customs unions and, through horizontal coordination and harmonization, to culminate in a common market and economic union embracing the entire continent.

Accordingly, the ultimate objective pursued by most RECs is to establish regional monetary unions and full economic communities. Several of them have therefore adopted formal frameworks to guide the transition process and to foster the harmonization and progressive convergence of national economic structures and macroeconomic policies. Following the experience of the European Monetary Union, a centrepiece of such harmonization frameworks is the definition of a set of macroeconomic policy convergence criteria that must be met by member States within more or less tight deadlines.

Harmonization of macroeconomic policies is one of the foundations of successful economic integration, for very compelling reasons. Inflationary pressures generated by budget deficits and excessive monetary expansion can undermine trade liberalization, leading to increased tariffs and/or tightening of non-tariff barriers (NTBs). Macroeconomic instability is also one of the prime factors that inhibit economic growth in developing countries. Lack of fiscal discipline and inadequate monetary instruments and policies contribute to macroeconomic instability and low economic growth.

Furthermore, the heavy burden of external debt and largely unsustainable debt service obligations, together with continued difficulties in the external economy, stifle the growth potential of African countries, limiting their ability to address persistent structural weaknesses. Most members of RECs are experiencing budgetary problems, albeit to different degrees. Although progress has been made with certain poorer countries benefiting from debt relief and cancellation initiatives, the overall debt burdens are onerous. Consequently, the fiscal environment tends to be characterized by large debt and high cost of debt servicing, low generation of revenue and high budget deficits.

Financial markets are largely underdeveloped in Africa. There are many currencies in circulation and the exchange rate regimes are not harmonized. Some countries have a fixed exchange regime while others have a flexible one. Some financial markets are deregulated while others remain heavily controlled. The ratio of banks to the

population is very low in many cases, indicating narrowness of the modern financial market that impairs the efficacy of monetary policy.

For all these reasons, macroeconomic stability, monetary and financial integration are crucial for successful regional cooperation and integration. Both processes make decisive contributions to the creation of a conducive environment for economic growth, promotion of trade and boosting of investor confidence, hence the importance of pursuing prudent fiscal, monetary, exchange rate and debt policies at the national level and of harmonizing these policies at the subregional and regional levels. Arguably, these policies should be situated within the socio-political, technological and international development setting of the countries, and indeed of the continent at large. When these policies are conceived in a wider economic space, possibilities for enhanced economic gains and growth are likely to be optimized and resources more efficiently used. The strengthening and deepening of the financial sector, including the establishment of vibrant capital markets, will also greatly facilitate the flow of funds and help anchor macroeconomic policies. Moreover, strong national and subregional capital markets would play a catalytic role in attracting FDI and promoting cross-border investment flows.

To this end, most RECs have made provisions in their treaties and protocols for macroeconomic policy harmonization as an important ingredient in achieving their integration-cum-developmental objectives in trade and other sectors. Indeed, Chapter VII of the Abuja Treaty establishing the African Economic Community is also devoted to the issues of money, finance and payment systems. Article 44 of the Abuja Treaty states that "member States shall, within a time-table to be determined by the Assembly, harmonize their monetary, financial and payments policies, in order to boost intra-community trade in goods and services, to further the objectives of the community and to enhance monetary and financial cooperation among member States."

Accordingly, some RECs have introduced convergence criteria to make the economies of their members move in lockstep toward the goal of policy harmonization for the ultimate establishment of a monetary union. The criteria established to measure the convergence of the real and financial variables in the member countries include the budget deficit ratio, inflation rate, central bank financial or liquidity ratio, level of exchange rate variation and movements, tax revenue ratio, public sector wage/tax revenue ratio and public investment/GDP ratio. The convergence policies also provide for financial integration to allow the REC members to develop and harmonize their money and capital markets, in order to ease payment systems and provide credible sources for medium- and long-term securities to stimulate investments. Both monetary and fiscal policies of RECs must be properly articulated and implemented in a coordinated, predictable manner, because of their overarching importance for macroeconomic stability, domestic resource mobilization and economic growth.

The experience of the European Monetary Union has led many scholars to regard macroeconomic policy convergence as a key component of transition towards deep forms of integration

The experience of the European Monetary Union has led many scholars to regard macroeconomic policy convergence as a key component of transition towards deep forms of integration. The theoretical underpinning of policy convergence essentially comes from the analysis of policymaking in an integrated region (De Grauwe, 2000). A simple example would suffice to clarify the argument. Suppose that countries A and B achieve some form of monetary integration (i.e. a system of fixed exchange rates or a currency union) so that they implement a common monetary policy. Assume that policymakers in country A are conservative, preferring low-inflation equilibrium to one with high inflation in the inflation-unemployment trade-off. Policymakers in country B are liberal and prefer the equilibrium with low unemployment (and hence high inflation). After controlling for shock asymmetries, the two countries would tend to have different policy preferences or objectives. Country A will push for a conservative stance, while B opts for a liberal one. The resulting policy conflict has two implications. First, there will be a political-economic problem of aggregation of heterogeneous preferences. Second, the preferred monetary policies under autarchy will likely differ from the actual common monetary policy under integration. Thus, for one of the two members of the union – or maybe even for both – there will be the temptation to abandon the initiative, unless some kind of compensation mechanism is engineered.

The problem can be further complicated. For instance, economic integration is expected to produce macroeconomic stability in the form of low inflation. However, if the participation of a country such as B (with a preference for a high-inflation equilibrium) shifts the common monetary policy in favour of high inflation, then the anti-inflation gains would be smaller and a country like A would be worse off than under autarchy. Similarly, countries with large fiscal deficits, being more likely to use inflationary finance, are likely to make the common monetary policy less conservative.

Following the above analysis, Chapter II provides a brief "progress report" on the developments in Africa's regional integration. Chapters III and IV focus on the theoretical foundations of monetary and financial integration, drawing on the experiences of other regional economic groupings around the world. Chapter V provides empirical evidence of macroeconomic convergence in African RECs. Successes and failures of monetary and financial integration in Africa are documented in Chapters VI and VII respectively. Chapter VIII outlines the "way forward".

Developments in Africa's Regional Integration



2.1 Introduction

here is no doubt that integration remains a key strategy for Africa to transform itself from a continent of mainly least developed and developing countries to a strong united bloc of developed nations and a global force. The need for integration in Africa is unquestionable and indeed strategic in terms of promoting and protecting Africa's interests. It is imperative to widen the region's economic space so as to generate economies of scale for production and trade and to maximize the welfare functions. This is basically why the numerous regional economic communities (RECs) have been created, and why African political leaders have held at heart the goals of both the Abuja Treaty establishing the African Economic Community and the Constitutive Act of the African Union.

The case for strengthening Africa's integration is even much more pressing now than ever because of new pressures for more multilateral trade liberalization superimposed on Africa's weak initial conditions. The world is experiencing major and irreversible mega trends in trade and technology driven by rapid technological advances and globalization. These developments, coupled with the widespread use of information and communications technology, are extending the global reach of economic agents. Weaker economies are bound to suffer the most if they do not adjust, as integration is a major instrument for even richer countries. The EU is now a full-fledged internal market buoyed by the euro.

Africa has been pursuing integration programmes for a very long time. From the 1960s to the present, many integration groupings have emerged and faded away. Examples of earlier groupings are the African Common Market comprising Algeria, Egypt, Ghana, Guinea, Mali and Morocco in 1962; the Equatorial Customs Union composed of Cameroon, Central African Republic, Chad, Congo and Gabon in 1962, which eventually led to the present Central African Economic and Monetary Community; and the former East African Community (EAC) comprising Kenya, Tanzania and Uganda in 1967, which until its demise, was the most developed of all the integration experiences in Africa. New groupings have since emerged, reflecting the continued belief by African countries in the virtue and importance of economic cooperation and integration.

The need for integration in Africa is unquestionable and indeed strategic in terms of promoting and protecting Africa's interests

In June 1991, the OAU Heads of State and Government signed the Abuja Treaty promulgating the African Economic Community (AEC). The AEC Treaty came into effect in May 1994 when it was ratified by a number of countries (See box on phases of the AEC). ¹

Box 2.1

Phases of the AEC

Founded through the Abuja Treaty signed in 1991 and entered into force in 1994, the AEC was envisioned to be created in six stages:

- Creation of regional blocs in regions where such do not yet exist (to be completed in 1999)
- 2. Strengthening of intra-REC integration and inter-REC harmonization (to be completed in 2007)
- Establishing of a free trade area and customs union in each regional bloc (to be completed in 2017)
- Establishing of a continent-wide customs union and thus also a free trade area (to be completed in 2019)
- Establishing of a continent-wide African Common Market or ACM (to be completed in 2023)
- 6. Establishing of a continent-wide economic and monetary union (and thus also a currency union) and pan-African Parliament (to be completed in 2028)
- 7. End of all transition periods by 2034 at the latest.

Currently, there are multiple regional blocs in Africa known as regional economic communities, many of which have overlapping memberships. The RECs, which are also the building blocks of the AEC, consist primarily of trade blocs, but also embrace political, economic and security cooperation. Several of these "building blocks" also include sub-groups with customs, monetary and economic union aspirations of their own. The main RECs and their corresponding sub-groupings are as follows:

¹ The AEC has since been ratified by all countries of the African Union (Morocco withdrew from the OAU and is therefore not a member of the African Union).

Main RECs recognized by the African Union as pillars of the AEC	Sub-groups
Community of Sahel-Saharan States (CEN-SAD)	
Common Market for Eastern and Southern Africa (COMESA)	
East African Community (EAC)	
Economic Community of Central African States (ECCAS/CEEAC)	Economic and Monetary Community of Central Africa (CEMAC)
Economic Community of West African States (ECOWAS)	West African Economic and Monetary Union (UEMOA), West African Monetary Zone (WAMZ)
Intergovernmental Authority on Development (IGAD)	
Southern African Development Community (SADC)	Southern African Customs Union (SACU)
Arab Maghreb Union (AMU/UMA)	

^{*} In order to address the issue of multiplicity of RECs and overlapping memberships, the AU Summit held in Banjul in July 2006 decided to put a moratorium on the recognition of new RECs. The problems associated with multiple memberships of RECs are discussed extensively in ARIA II: Rationalizing Regional Economic Communities. UNECA. 2006.

In addition, the Mano River Union (MRU), the Indian Ocean Commission (IOC) and the Economic Community of the Great Lakes Countries (CEPGL) are subregional groupings engaged in promoting regional integration among their member States.

Within the various integration groupings, the development of trade has been a major objective pursued through programmes aimed at achieving a free trade area, a customs union and a common market. But outcomes of decades of experimentation with integration in Africa have on balance remained modest. For instance, African trade statistics continue to paint a generally modest picture of intra-REC and intra-African trade. The countries generally lack a strong industrial capacity to produce diversified manufactured goods for trade within regional markets. Many of the multiple national currencies in Africa lack convertibility and efforts towards monetary, financial and physical integration have not been very promising. The cost of doing business in the continent is generally high, due in part to infrastructure gaps, duplicative border procedures and cumbersome paper requirements. Paperless trade still remains a distant objective. The free movement of people and the right of establishment have progressed in some RECs, but remain a paper objective in many other African subregions.

Given Africa's overall weak economic stature, it can, however, be argued demonstrably that the continent has made notable progress towards regional integration.² The political keenness to make progress is visible, even if the political rhetoric on Africa's

² ARIA I, published by ECA in May 2004, provides a comprehensive picture of progress in Africa's regional integration. Three years on, much of the analysis on progress remains valid and relevant.

There is indeed a strong desire to rationalize the RECs, as evidenced by the Summit's decree not to recognize more RECs than the eight currently recognized as the main pillars of the African Union

integration is not always accompanied by commensurate actions. Nonetheless, there is a stark realization by African political leaders that much remains to be done to achieve the goals of the AEC. The Assembly of the African Union, meeting at its ninth ordinary session in Accra, Ghana, from 1 to 3 July 2007, adopted the "Accra Declaration" aimed at accelerating the economic and political integration of the African continent, including the formation of a Union Government for Africa, the ultimate objective of the African Union being to create the United States of Africa.

The Summit agreed on a roadmap of studies to identify the contents of the Union Government concept and its relations with national governments. The studies are also expected to identify the jurisdictions and impact of the Union Government on the sovereignty of member States, and the relationship that should exist between the Union Government and the regional economic communities. This time around, there is indeed a strong desire to rationalize the RECs, as evidenced by the Summit's decree not to recognize more RECs than the eight currently recognized as the main pillars of the African Union. There is also a desire to curtail the deadline for creating the African Common Market. Under the Abuja Treaty, the Common Market was targeted for 2027. The roadmap for the Union Government would review this time frame to shorten it, and also consider additional sources of financing for the activities of the Union. Under the auspices of the African Union Commission, work has already started in earnest to fulfil the requirements of the Accra Declaration on the establishment of the Union Government.

These recent developments reflect a greater sense of urgency in advancing the integration process and an acknowledgement that the stakes are extremely high, considering the galloping momentum of globalization. Africa's regional economic communities are thus faced with the greatest challenge yet to rationalize, coalesce and consolidate even faster than ever before⁴.

The remainder of this chapter provides highlights of progress achieved and challenges remaining in Africa's regional integration, indicating examples of key milestones and efforts by the RECs to achieve the objectives of the AEC in major areas of the integration process, such as the establishment of free trade areas, customs

³ Assembly/AU/Decl.2(IX)

To this end, during a meeting of the fifth session of the Committee on Trade, Regional Cooperation and Integration in October 2007, the African Union Commission reported on a study carried out to review the six stages of integration as contained in Article 6 of the Abuja Treaty, and to develop a minimum integration programme (MIP) to be implemented by the RECs with a view to achieving accelerated and deeper African integration. The meeting was informed that two approaches had been undertaken with a view to accelerating the integration process and the rationalization of the RECs, namely the revision of Article 6 of the Abuja Treaty and the definition of a minimum integration programme. The meeting made a number of recommendations, including the following: (i) the eight RECs should be streamlined in order to enhance the rationalization process; (ii) the problem of overlapping memberships should be addressed urgently; (iii) some key provisions of the Abuja Treaty (including Article 6) should be revisited to make them compatible with the Constitutive Act and the Sirte Declaration; (iv) customs union policies at the continental level should be rationalized; and (v) protocols should be ratified and implemented effectively.

unions, physical connectivity and sectoral cooperation in transport, energy, water and ICT. As the main thrust of this report is on macroeconomic policy convergence and monetary and financial integration, discussions on these aspects of integration are addressed elaborately in other chapters.

2.2 Thematic progress and challenges

2.2.1 Trade and market integration

The ultimate goal of the AEC is to create an African common market. An area where RECs have been observed to be most active is trade and market integration. In the economic literature, market integration is said to exist when product flows between countries are on the same terms and conditions as within countries. In an integrated market, prices of identical products are the same across countries/geographical jurisdictions,⁵ any deviations being attributable to transportation transaction costs. In a REC, this means that supply and/or demand changes in one country affect the price and/or volume of transactions in other member States of the REC.

In all RECs, market and trade integration is being advanced through a series of measures such as:

- Removal of tariff barriers to intra-REC trade
- Removal of non-tariff barriers
- Development and enactment of common trade policies.

The effective implementation of these and other measures will lead in the long run to the achievement of zero tariffs for intra-REC trade and, conditional on convergence of RECs, a common external tariff for the continent.

The Constitutive Act of the African Union makes it clear that the primary goal of the Union is to establish an African Economic Community and assigns to RECs the primary responsibility for making that happen. An intermediate step in this effort is the transition of RECs into customs unions⁶. Significant progress has been made on this issue. The East African Community (EAC) became a customs union on January 1, 2005 with the introduction of the EAC Customs Union Protocol⁷. SADC hopes to establish a customs union by 2010. This will be a significant achievement for SADC, whose success will depend greatly on the compatibility of the planned

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⁵ This is commonly known as the law of one price (LOOP).

⁶ This process is likely to result in a substantial reduction in the number of RECs, as countries belonging to more than one REC must choose which customs union to join.

⁷ A customs union is the entry point into the EAC.

NTBs have an extensive scope as they impede intraregional trade and serve the cause of protectionism customs union with the already existing Southern African Customs Union (SACU). COMESA plans to become a customs union in 2008. This means that by 2010, practically all countries in Southern Africa will belong to a customs union and those countries that currently belong to more than one REC will have to decide which customs union to join. ECOWAS is working to resolve a possible conflict with the already existing customs union in West Africa - the West African Economic and Monetary Union (WAEMU/UEMOA) - by adopting that Union's tariff bands so that a customs union could be in place by 2008.

The table below summarizes the status of efforts aimed at establishing free trade areas and customs unions in the eight RECs of the African Union.

	Regional blocs - pillars of the African Economic Community (AEC)												
Milestone	UMA	CENSAD	ECOWAS	ECCAS	COMESA	EAC	IGAD	SADC					
Free trade area	Stalled	Stalled	Progressing	Proposed for 2007	Progressing	Fully in force	Stalled	Proposed for 2008					
Customs union	Stalled	Stalled	Proposed for 2008	Proposed for 2011	Proposed for 2008	Fully in force	Stalled	Proposed for 2010					

2.2.2 Non-tariff barriers

Some studies suggest that non-tariff barriers (NTBs) are a growing concern in Africa. Customs officials, police roadblocks and constant harassment by immigration officials hamper free trade. But these are not simply cases of extortion; they also reflect the slow implementation of regional integration agreements to remove tariff and non-tariff barriers to trade. If left unattended, these will negatively affect the benefits of greater market openness. NTBs have an extensive scope as they impede intraregional trade and serve the cause of protectionism.

In countries such as Nigeria, efforts to protect domestic infant and/or strategic sectors and industries by imposing blanket restrictions on the importation of certain goods adversely affected the expansion of intra-West African trade⁸. There is anecdotal evidence – especially from the SADC region – that countries have attempted to substitute NTBs for reduced tariff barriers. Regulations that could constrain intra-REC trade have been introduced without prior notification of other members of the REC. Nonetheless, significant progress in the elimination of NTBs in specific areas of concern has been identified.

There are two elements to this Nigerian policy. One element is due to conflicts in interpretation of ECOWAS rules of origin protocols. Nigeria was concerned that some ECOWAS countries, notably Benin, were serving as re-export centres into Nigeria. The other element is purely an attempt to protect domestic jobs and industries.

2.2.3 Trends in intra-African trade

In the following discussion, we examine the percentage growth of trade among member countries within a given REC. Tables 2.1 and 2.2 below provide indices on intra-REC and intra-intergovernmental organizations (IGOs) exports and imports, respectively. The implications of these results are mixed, ranging from very small to moderate improvements in intra-REC and intra-IGO trade in the years 2000-2005. For example, on average, all the RECs and IGOs registered positive growth in exports to community members, with CEMAC, CEPGL, COMESA and CENSAD showing an average increase of 40 per cent or more. UEMOA, IGAD, SADC, ECOWAS, UMA and IOC registered growth in exports to the community in the range of 20-40 per cent.

Table 2.1Intra-REC indices of export trends (base year = 2000)

2000	2001	2002	2003	2004	2005	Average Growth
100.00	121.88	139.34	152.07	181.15	206.98	150.24
100.00	100.20	132.67	140.09	171.83	212.30	142.85
100.00	106.73	127.42	142.86	187.62	214.37	146.50
100.00	115.74	124.40	146.12	173.44	205.13	144.14
100.00	111.67	115.25	118.78	126.05	144.02	119.30
100.00	106.63	104.26	103.66	124.93	142.74	113.70
100.00	81.93	114.31	109.74	157.13	196.99	126.68
100.00	128.63	125.56	150.77	142.58	167.00	135.76
100.00	126.66	99.43	169.01	146.22	150.14	131.91
100.00	82.34	89.36	104.65	108.18	123.60	101.35
100.00	89.31	100.26	128.02	150.35	173.06	123.50
100.00	104.66	115.74	145.30	166.50	187.71	136.65
100.00	103.89	109.88	122.29	125.61	172.31	122.33
	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00	100.00 121.88 100.00 100.20 100.00 106.73 100.00 115.74 100.00 116.63 100.00 81.93 100.00 126.66 100.00 82.34 100.00 89.31 100.00 104.66	100.00 121.88 139.34 100.00 100.20 132.67 100.00 106.73 127.42 100.00 115.74 124.40 100.00 111.67 115.25 100.00 106.63 104.26 100.00 81.93 114.31 100.00 126.66 99.43 100.00 82.34 89.36 100.00 89.31 100.26 100.00 104.66 115.74	100.00 121.88 139.34 152.07 100.00 100.20 132.67 140.09 100.00 106.73 127.42 142.86 100.00 115.74 124.40 146.12 100.00 111.67 115.25 118.78 100.00 106.63 104.26 103.66 100.00 81.93 114.31 109.74 100.00 128.63 125.56 150.77 100.00 126.66 99.43 169.01 100.00 82.34 89.36 104.65 100.00 89.31 100.26 128.02 100.00 104.66 115.74 145.30	100.00 121.88 139.34 152.07 181.15 100.00 100.20 132.67 140.09 171.83 100.00 106.73 127.42 142.86 187.62 100.00 115.74 124.40 146.12 173.44 100.00 111.67 115.25 118.78 126.05 100.00 106.63 104.26 103.66 124.93 100.00 81.93 114.31 109.74 157.13 100.00 128.63 125.56 150.77 142.58 100.00 126.66 99.43 169.01 146.22 100.00 82.34 89.36 104.65 108.18 100.00 89.31 100.26 128.02 150.35 100.00 104.66 115.74 145.30 166.50	100.00 121.88 139.34 152.07 181.15 206.98 100.00 100.20 132.67 140.09 171.83 212.30 100.00 106.73 127.42 142.86 187.62 214.37 100.00 115.74 124.40 146.12 173.44 205.13 100.00 111.67 115.25 118.78 126.05 144.02 100.00 106.63 104.26 103.66 124.93 142.74 100.00 81.93 114.31 109.74 157.13 196.99 100.00 128.63 125.56 150.77 142.58 167.00 100.00 126.66 99.43 169.01 146.22 150.14 100.00 82.34 89.36 104.65 108.18 123.60 100.00 89.31 100.26 128.02 150.35 173.06 100.00 104.66 115.74 145.30 166.50 187.71

Source: UNECA

On average, all the RECs and IGOs registered positive growth in exports to community members, with CEMAC, CEPGL, COMESA and CENSAD showing an average increase of 40 per cent or more

Table 2.2Intra-REC indices of import trends (base year = 2000)

				/			
REC	2000	2001	2002	2003	2004	2005	Average Growth
CEMAC	100.00	119.18	113.58	152.78	170.35	194.64	141.75
CENSAD	100.00	118.63	115.70	159.09	178.36	218.93	148.45
CEPGL	100.00	106.72	127.45	142.81	187.56	214.30	146.47
COMESA	100.00	122.51	126.13	159.99	201.26	238.71	158.10
EAC	100.00	97.51	103.46	146.24	195.29	223.13	144.27
ECCAS	100.00	105.67	92.05	105.65	121.29	138.59	110.54
ECOWAS	100.00	105.67	92.05	105.65	121.29	138.59	110.54
IGAD	100.00	120.01	119.49	151.44	162.64	197.74	141.89
IOC	100.00	125.80	174.38	207.73	306.20	314.71	204.80
MRU	100.00	87.49	94.95	113.27	124.86	142.67	110.54
SADC	100.00	98.38	108.13	118.43	175.48	201.75	133.69
UEMOA	100.00	108.53	122.68	141.13	170.11	190.99	138.91
UMA	100.00	102.82	112.09	124.61	127.03	174.27	123.47

Source: UNECA

The trends in intra-REC imports are presented in table 2.2, which shows growth in intra-REC imports in all the RECs, with the largest increase registered by COMESA, CENSAD, IGAD, CEMAC and IOC. Overall, there appear to be some encouraging signs of growth in intra-REC export/import trade in most RECs.

Table 2.3 presents the overall direction of trade between 2000 and 2005. As can be observed, in spite of the positive growth trends in intra-REC trade, the pattern of REC exports continues to be strongly influenced by historical links with the outside world. In the majority of the RECs, over 80 per cent of exports are still destined for markets outside Africa, with the European Union and the United States of America accounting for over 50 per cent of this total. Rising demand for commodities, growth within OECD, reduction in average tariffs resulting from the successful conclusion of the Uruguay Round of trade negotiations, the United States of America's African Growth and Opportunities Act (AGOA), and the European Union's "Everything But Arms" (EBA) initiative are important factors explaining Africa's dependence on external trade.

China's emergence as the world's fourth-largest economy is also an important variable in this outcome. Sino-Africa trade grew from \$US12 million in 1956 to \$US817 million in 1979 and to \$US39.7 billion in 2005. China, now the world's second-biggest consumer of oil after the United States of America, currently imports 25 per

In spite of the positive growth trends in intra-REC trade, the pattern of REC exports continues to be strongly influenced by historical links with the outside world

cent of its oil from Africa, and in 2006, China scrapped tariffs on 190 commodities from 25 African countries (Nwuke, 2006).

Table 2.3Overall direction of trade (average percentage of exports and imports between 2000 and 2005)

RECs	INT RE		AFF	T OF RICA DA)	(inclu	SIA uding ina)	CHINA		EUROPEAN UNION (EU)		JAPAN		USA		REST OF THE WORLD (ROW)		WO	RLD
	Ехр.	Imp.	Ехр.	Imp.	Ехр.	Imp.	Ехр.	lmp.	Ехр.	Imp.	Ехр.	Imp.	Ехр.	Imp.	Ехр.	Imp.	Ехр.	Imp.
CEMAC	0.9	5.2	2.7	8.9	23.1	6.9	11.6	2.8	36.1	52.4	0.8	1.9	28.9	13.1	7.4	11.6	100	100
CENSAD	12.2	13.0	4.5	6.4	18.9	16.4	6.0	6.1	35.5	39.1	1.9	2.7	8.7	4.9	18.3	17.5	100	100
CEPGL	2.7	1.6	4.7	35.5	17.6	8.3	3.9	3.7	39.8	33.5	6.0	2.4	7.0	4.1	22.2	14.7	100	100
COMESA	8.7	11.1	8.6	17.2	12.6	16.8	6.0	6.2	41.5	26.3	3.0	3.1	8.1	4.7	17.5	20.8	100	100
EAC	12.6	18.7	7.2	9.9	17.3	15.2	3.6	5.1	30.4	24.5	2.0	4.5	3.7	4.8	26.8	22.5	100	100
ECCCAS	0.7	3.8	2.2	14.0	18.8	9.1	10.1	3.1	42.5	50.6	0.8	2.1	23.6	10.7	11.5	9.7	100	100
ECOWAS	13.9	15.8	5.5	5.2	20.7	17.3	4.2	6.8	40.4	40.7	1.7	2.9	7.3	4.3	10.0	13.7	100	100
IGAD	21.5	15.2	5.8	3.6	18.0	21.9	11.8	8.3	19.9	19.7	3.9	3.7	2.8	5.0	28.2	30.9	100	100
IOC	3.0	3.6	1.8	15.1	7.3	21.4	0.8	6.4	63.8	32.9	3.4	2.8	16.6	3.0	4.1	21.1	100	100
MRU	0.4	1.3	3.9	9.4	7.8	25.2	1.4	5.6	68.7	38.7	0.2	7.3	6.5	4.5	12.4	13.6	100	100
SADC	19.9	33.1	2.3	2.6	12.2	14.2	6.3	3.8	40.7	25.2	4.3	2.9	9.4	5.4	11.2	16.7	100	100
UEMOA	11.5	14.9	18.6	13.7	30.8	12.9	6.8	4.9	25.2	40.3	2.0	1.8	3.0	3.0	9.0	13.3	100	100
UMA	2.5	3.1	4.5	1.7	3.0	9.0	1.0	3.9	70.4	60.3	2.8	2.4	5.1	3.9	13.1	19.6	100	100
Average	8.5	10.8	5.6	11.0	16.0	15.0	5.6	5.1	42.7	37.2	2.5	3.1	10.1	5.5	14.8	17.4	100	100

Source: ECA, compiled from IMF DOT 2006, China included in Asia, but separated as a memorandum.

Despite persistent efforts of trade liberalization by RECs, Africa's trade within itself has been constantly poor compared with the internal trade of other regions such as Europe and Asia. According to WTO 2006 international trade statistics, intra-African trade as a percentage of total exports was only 9.8 per cent and 8.9 per cent in 2000 and 2005 respectively, compared with 72.7 per cent in 2001 and 73.2 per cent in 2005 for Europe's export trade, and 66.8 per cent and 66.7 per cent respectively, among the 25 countries of the European Union. Africa's intra-export trade can further be contrasted with that of South and Central America and Asia. Asia's intra-export trade as a percentage of total exports was 51.2 per cent in 2005, while South and Central America's was 24.3 per cent. No regional integration scheme has yet been successful in elevating intra-African trade beyond a negligible portion of total trade. Notwithstanding geographical proximity, African countries trade more with the European Union (EU) than with other economies outside Africa.

Furthermore, African exports remain heavily concentrated in a few primary commodities, in particular fuels and mining products (see table 2.4). Of the top 20 products exported by the region in the period 2000-2005, the great majority are fuels, fuel products and mineral products. A few are basic agricultural commodities (sugar, cotton, cocoa and coffee) and a very small number are manufactured products.

Table 2.4African merchandise exports

	Total	Merchan	dise		s and Mir Products	ning	Manufact	ured Pro	ducts	Agricultural Products			
From Africa	Value in billion \$		are %)	Value in billion \$	in (%)		Value in billion \$	Share (%)		Value in billion \$		are %)	
	2005	2000	2005	2005	2000	2005	2005	2000	2005	2005	2000	2005	
To World	297.7	100%	100%	194.2	100%	100%	63.0	100%	100%	32.3	100%	100%	
To Europe	127.8	50.3%	42.9%	74.2	45.7%	38.2%	34.5	60.1%		15.2	50.0%	47.2%	
To North America	60.2	17.3%	20.2%	52.9	24.7%	27.2%	5.1	8.6%	8.1%	2.0%	5.0%	6.3%	
To Asia	48.6	16.4%	16.3%	33.4	18.3%	17.2%	7.7	9.8%		5.0%	18.2%	15.3%	
To Africa	26.5	9.8%	8.9%	9.4	5.1%	4.8%	11.4	16.2%		5.5%	18.7%	17.1%	

Source: ECA, compiled from WTO 2006

2.2.4 Fundamental challenges and related policy recommendations

Intra-African trade remains low because of the obstacles it faces. The literature suggests that a narrow production and manufacturing base and infrastructure inadequacies constitute important obstacles to trade expansion. Most African countries continue to trade in a narrow band of natural resource-based products. In some cases, one commodity accounts for over a third or even half of a country's total merchandise exports. The corollary is a continued heavy dependence on imports from outside the continent, particularly in manufactured goods, to satisfy consumer demands in the subregional/regional markets.

To deal with this challenge, RECs and their constituent member States need to push harder than ever for a fully integrated common market with the removal of all tariff and non-tariff barriers and the free circulation of all factors of production, including capital, labour and investments. A fully operational common market could provide an incentive for economies-of-scale production. Furthermore, the RECs should consciously promote the multinational exploitation of and investments in natural resource endowments to take advantage of economies of scale and the rational and optimal use of such resources. The establishment of multinational production and investment charters geared towards this objective would be a useful catalyst. This would also help

to promote dependence on community/domestic inputs and the subregional/regional markets in support of the development and integration process in the REC. Indeed, a fair share of the "Aid-for-Trade" Initiative should be dedicated to building this multinational production capacity for the use and transformation of primary commodities into higher value-added activities.

It is a well-known fact that infrastructure deficiencies undermine the capacity to trade and grow economically. Several meetings and documents continue to point out that lack of adequate and quality infrastructure in roads, railways, electricity and other forms of energy, water, ICT and plant and equipment technology severely hampers the production and sale of goods. When goods cannot easily cross borders in Africa because of poor transport networks, intra-African trade suffers. But Africa is making some progress in its infrastructure development, though much still remains to be done in terms of inter-State links to facilitate the movement of goods across Africa. Domestically, there is also a great need for linking production centres (e.g. rural farming communities) to both urban and subregional/regional markets. It is argued that improving infrastructure not only domestically but also internationally can raise the profitability of investment in adjacent countries, because it would create a wider market and improve opportunities for exports. The state of infrastructure is further discussed in this chapter under "physical integration".

Strong manufacturing capacities built on inter-country linkages in the use and transformation of raw material inputs and good infrastructure networks among countries are necessary to boost intra-African trade. The development of these capacities should be paramount in Africa's investment priorities. However, there are other obstacles to intra-African trade, but they can easily be fixed with a strong political will to implement the right sets of policies. The stark reality in Africa is that many countries rely heavily on trade taxes as a source of government revenue. In some countries, such taxes represent over 50 per cent of total public revenues. Thus, any trade liberalization initiative pursued by them has a significant impact on national fiscal accounts. Evidence in intra-African trade flows suggests that gains from trade liberalization normally accrue to countries that are more industrially developed and are obviously in a better position to capture the bulk of the additional opportunities with their exports. In some RECs, this imbalance has given rise to only a half-hearted commitment to trade liberalization schemes by certain countries and delays in the establishment of full free trade areas and customs unions.

The establishment and effective implementation of compensation and equalization schemes can help address the fear of loss of revenue and imbalances in gains from trade. Compensation mechanisms can be funded through the imposition of a small amount of tax (between 0.50 per cent to 1 per cent) on imports from outside Africa. The funds thus generated can serve to mitigate revenue losses from trade liberalization. Part of the funds could also be used to finance development projects (infrastructures

Lack of adequate and quality infrastructure in roads, railways, electricity and other forms of energy, water, ICT and plant and equipment technology severely hampers the production and sale of goods

etc.) in the least developed countries of the RECs, in order to enhance their supply and trade capacity and thus their ability to take advantage of the opportunities offered by trade liberalization. Alternative sources of government revenue such as value-added taxes are other means of reducing dependence on trade taxes.

As one of the immediate priorities of the proposed Union Government, the creation of the African common market needs to be hastened, with the aim of promoting intra-African trade as a whole. As a first step, RECs should consider establishing free trade areas (FTA) between and among themselves (e.g. FTA between COMESA and SADC) in order to generate a wider economic and trading environment and address overlapping economic and trade interests and potentials. Overlapping FTAs and customs unions (e.g. ECOWAS and UEMOA, CEMAC and ECCAS) should quickly coalesce into a common market applying the same trade instruments and a harmonized common external tariff.

Establishing a common external tariff has often been a difficult process. Disagreements on common external tariffs contribute to protracted delays in establishing customs unions. This explains some of the repeated postponements that have characterized customs union target dates in some RECs. This issue can be addressed in part by organizing a regional conference on common external tariffs, under the leadership of the African Union, to examine the challenges in this area and propose a common set of principles and a framework for application at the subregional level, taking into consideration the overriding need to establish the African common market as part of the accelerated programme of the Union Government.

These challenges and associated remedial measures are by no means exhaustive. Nonetheless, supply-side and infrastructure bottlenecks combine with disjointed and fragmented pockets of economic and market spaces to create production, market and resource allocation inefficiencies in Africa, slow the potential for scale production, and perpetuate the region's low level of trade interaction. The minimum that can be done is to confront these challenges with the seriousness and the resources they deserve.

2.2.5 Free movement of people

Progress in the area of free movement of people remains modest, largely because unemployment remains very high in Africa and there are fears that such liberalization will bring about asymmetric benefits. However, some RECs are progressing in this area in spite of the constraints. For instance, apart from the abolition of visa and entry requirements and the provision of the right of residence and establishment in any Member State, ECOWAS has gone a step further to promote a sense of common citizenship by issuing an ECOWAS passport. However, countries are expected to

Supply-side and infrastructure bottlenecks combine with disjointed and fragmented pockets of economic and market spaces to create production, market and resource allocation inefficiencies in Africa, slow the potential for scale production, and perpetuate the region's low level of trade interaction

realign their national passports to the ECOWAS format. So far, Senegal and Benin are the only countries to have done so. EAC also allows visa-free entry of citizens from its member States under its free movement programme.

In SADC, half of the member States have signed the Protocol on the Facilitation of Movement of Persons adopted to ease movement of people within the region through a universal visa arrangement; the harmonization of immigration laws, regulations and procedures; and the introduction of regionally uniform machine-readable passports and visas. However, the protocol is yet to come into effect, because it is still short of the two-thirds majority required for ratification. When it does come into effect, the protocol should facilitate visa-free entry into the territory of SADC by citizens of its Members States for a maximum of 90 days, which is renewable, for both permanent and temporary residence by individuals (or families). But the slow rate of progress with respect to the free movement of persons and the right of residence has real costs. For example, it is slowing down the integration of tourism markets, even though the SADC region has seen growth in the establishment of multi-destination tourism packages. COMESA countries have similar arrangements. Abolition of entry visas by countries on a bilateral basis seems to be the practice, rather than a strict enforcement of a multilateral agreement. In other RECs like ECCAS, the free movement of people continues to remain a paper objective.

The issue of the free movement of people in Africa often unleashes strong passions and leads to criticisms against government policies on visas, immigration and nationality laws. Expectations appear to be high for the dismantling of restrictions on the freedom of movement and for rapid progress towards the establishment of common citizenship and common passports. The demand for a common African identity – and indeed citizenship – has been expressed in such forums as the African Development Forum organized by ECA on Africa's integration. Similarly, the Chairperson of the African Union has been a strong advocate for the establishment of a common African passport. Indeed, RECs need to address the issue of the free movement of people by abolishing visa requirements for their member States' nationals, and to tackle the broader issue associated with community citizenship and the right of establishment more forcefully.

2.3 Physical integration

Enhanced physical integration is critical for economic integration. Trade infrastructure in much of Africa is in a very poor state and needs to be rehabilitated and upgraded, in order to improve trade on a cost-effective platform and maximize regional competitiveness. Three areas are critical: transport; information and telecommunications technology; energy and water.

The issue of the free movement of people in Africa often unleashes strong passions and leads to criticisms against government policies on visas, immigration and nationality laws

2.3.1 Transport

Transport is critical for the attainment of the MDGs and the objectives of Africa's regional integration. It is particularly important to strengthen Africa's competitiveness in regional and global markets by reducing the high cost of doing business in the continent, exacerbated by deficiencies in transport infrastructure. While the transport-induced cost of doing business is generally a huge challenge for most of Africa, it is a graver problem for Africa's 15 landlocked countries, which have to depend on their coastal neighbours to facilitate their international trade by sea. Limited and often poor access to the ports and other trade barriers combine to aggravate the landlocked circumstances of these countries. This is partly why the Almaty Programme of Action was initiated in 2003 to provide a framework for mobilizing global support to address the special needs of landlocked countries.

In the context of Africa's regional integration process, RECs and their countries have also been engaged in various programmes, such as the multi-stakeholder corridor initiatives, to improve and expand national, subregional and regional transport infrastructure and related services. At the continental level, RECs and countries participating in the SSATP have, for instance, set up the RECs Coordination Committee for the coordination of transport activities and the exchange of experiences and best practices. In the ensuing sections, we highlight the status, key issues and prospects related to the different modes of transport infrastructure in Africa.

Road transport

In road transport, most of the RECs have adopted subregional road network initiatives partly financed by their own resources.

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Box 2.2

UEMOA Community Infrastructure and Road Strategy and Action Plan

UEMOA adopted the Community Infrastructure and Road Strategy and Action Plan in September 2001. The strategy has four general objectives:

- Ensure convergence of national policies and regional coordination of road sector actions;
- Improve competitiveness of UEMOA member States' economies through the free movement of goods and services and the reduction of road transport costs
- Reduce poverty
- Reduce the social costs of road insecurity.
- The Community Infrastructure and Road Action Plan (PACITR) includes the following major components:
- Inter-State road infrastructure: The road infrastructure component comprises road investments and support actions. The community road network adopted by the Council of Ministers is 20,933 kms with two priority areas: road linking the capital cities of UEMOA member States; alternative road links between capital cities and interconnections to other African countries. The plan covers 10 years with a 5-year priority programme involving periodic maintenance and rehabilitation of asphalted roads, development and asphalting of missing road links and engineering works. The initial cost of the road infrastructure component is estimated at CFAF 1,237 billion (2001) and will cover 13,300 km of road and the 5-year priority programme will cost CFAF 637 billion and cover 8, 610 km of road.
- Rural transport-border secondary roads programme that aims to implement a trans-border rural road pilot programme. It is estimated at CFAF 3.75 billion (2001) over three years and covers 750 km of road.
- Facilitation of inter-State road transportation and transit aimed at harmonizing procedures and regulations, establishing juxtaposed checkpoints at the borders and setting up an observatory of abnormal practices on inter-State roads to monitor bad road practices and correct them permanently.
- Road safety:
- Management, monitoring and evaluation of the community action programme.
- The total cost of the programme is estimated at CFAF 1,253.5 billion, of which CFAF 281 billion has been secured
 and CFAF 972.5 is still to be mobilized. The priority programme represents about CFAF 654 billion for five years with
 CFAF 373 billion to be mobilized.
- A steering committee was put in place as an implementing framework to manage, coordinate, monitor and evaluate the programme; it has a technical secretariat.

Progress on the implementation of PACITR:

The 5-year programme is progressing normally and many projects are being implemented. Concerning the Ghana-Burkina-Mali link, the rehabilitation and transit facilitation measures are in progress on the Bamako-Ouagadougou-Accra and Niamey-Ouagadougou-Accra corridors. Surveys have started on the following corridors: Tema-Ouagadougou-Bamako, Bamako-Ouagadougou and Lome-Ouagadougou. On the Mali-Senegal link, construction and rehabilitation works are being undertaken, and a checkpoint is being built and equipped at the border between the two countries.

RECs are focusing on coordination, harmonization and integration of transport infrastructure networks and services and on regional road transport and transit facilitation on the corridors. ECOWAS, for example, is focused on harmonizing rules and regulations relating to technical specifications for road and travel facilitation

Measures to further integrate transport infrastructure and services across the REC and to harmonize road user charges continue to be a priority across national boundaries. ECOWAS has also renewed efforts to complete the West African Highway network and regional connectivity and prepare a road infrastructure recovery programme for member States emerging from war (Guinea-Bissau, Liberia and Sierra Leone), because their links are considered weak segments of the regional road network.

The regional road transport and transit facilitation programme in West Africa is carried out jointly by ECOWAS and UEMOA and entails the establishment of joint border posts, elimination of abnormal practices, and HIV/AIDS mitigation campaigns on the major corridors. ECOWAS is implementing the project on the Abidjan-Lagos corridor, while UEMOA is handling the Tema-Ouagadougou-Bamako and Lome-Ouagadougou-Niamey corridor initiatives.

In SADC, the road network is physically integrated, except for Angola and the Democratic Republic of Congo. Measures to further integrate transport infrastructure and services across the REC and to harmonize road user charges continue to be a priority. Significant progress has been made with the evaluation of corridor facilitation effectiveness for the Beira corridor, Walvis Bay, North-South and the Dar-es-Salaam-Kapiri-Mposhi corridors. Efforts to improve corridor performance are also being envisaged, and a transit facilitation project has been developed to address delays at border posts.

An example of the importance of transport infrastructure is the Lobito corridor, which provides a strategic outlet to the sea for much of the Democratic Republic of Congo and Zambia. This corridor has fallen short of its potential because it is in disrepair and requires significant rehabilitation. Within the context of NEPAD, Angola has formulated a strategy for the rehabilitation of infrastructure along the corridor and for other corridors within the country. The strategy encompasses the rehabilitation of the railway lines, roads and ports. The corridors relating to the Milange-Mocuba road in Mozambique as well as the Santa Clara-to-Lubango road in Angola are being rehabilitated.

SADC has adopted the SADC driver's license among several proposals to harmonize the way in which drivers are trained, examined and licensed across the region. A number of SADC countries, including Angola, Botswana, Lesotho, Malawi, Mauritius, Namibia, South Africa, Swaziland and Zambia, now issue the drivers license.

COMESA has also developed trade and transport facilitation instruments, including the one-stop border post in Malaba in the northern corridor at the Kenya-Uganda border and in Chirundu of the Zambia-Zimbabwe border in the north/ south corridor; harmonization of road carrier licensing; harmonization of customs documentation; and a common regional instrument to develop and maintain road safety. The COMESA Yellow Card scheme is also expanding. Currently, 13 countries – Burundi, Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Kenya, Malawi, Rwanda, Sudan, Tanzania, Uganda, Zambia and Zimbabwe – are participating in this scheme.

Rail transport

Much of the progress in this area has taken place in the SADC region, where several railway development schemes have been commissioned through concessions. These include the Bulawayo-Beitbridge line, the Ressano-Garcia line, Malawi Railways (now Central East African Railways), Zambia Railways (now Railway Systems of Zambia) and the Sena line in Mozambique. Several railway operations are therefore currently outside direct governmental involvement, and hence require strengthened regulatory regimes, including safety oversight. In East Africa, both Kenya and Uganda have already commissioned their two networks. A single contractor is now operating the two railways as a coordinated network. The concession arrangements for the Ethiopia–Djibouti railways are under way. In West Africa, an agreement has been reached between Nigeria and Niger to extend the Nigerian railway system to Niger. When completed, it will deepen market and trade integration between the two countries and open up other countries of the Sahel region.

Air transport

There is renewed effort to fully implement the Yamoussoukro Decision (YD) on air transport liberalization in Africa and a willingness to work together. For example, the Council of Ministers of COMESA and EAC have approved competition regulations and are implementing guidelines and provisions to enable EAC, SADC and COMESA communities to implement YD as a joint programme. RECs are also collaborating in the Cooperative Development of Operational Safety and Continued Airworthiness Programme (COSCAP) and establishing the subregional Upper Air Space Control Centres. In SADC, studies are under way on the Upper Air Space Control Centre Project. Meanwhile, inadequate capacity for passengers, freight, safety and security continue to constitute major bottlenecks, although further relaxation of air traffic agreements on a bilateral basis between selected countries has brought some relief to customers.

At the continental level, in order to ensure successful air transport liberalization in Africa, the third conference of African ministers in charge of air transport held in May 2007 in Addis Ababa, Ethiopia, approved the creation of an executing agency in line with Article 9 of the Yamoussoukro Decision to be run by AFCAC. It is worth noting that the principal role of the executing agency is to supervise and manage Africa's liberalized air transport industry.

Meanwhile. inadequate capacity for passengers, freight, safety and security continue to constitute major bottlenecks. although further relaxation of air traffic agreements on a bilateral basis between selected countries has brought some relief to customers

The African Union is addressing the harmonization of competition rules, the dispute settlement mechanism and the evaluation criteria of the Yamoussoukro Decision. Once adopted and implemented, these measures will contribute to improvements in the implementation of the air transport liberalization scheme in Africa.

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Maritime and inland waterways transport

Maritime transport plays a vital role in intra-African and international trade. The RECs are currently focusing on port regulation, operations, security and port concession processes. However, the inland waterways remain a weak link in Africa's transport systems, even though they offer a good possibility for enhancing the transport links within the continent.

Multimodal transport development: From plan to implementation — the case of Central Africa

Central Africa is a subregion where transport interconnections are scarce and transport operations and procedures very cumbersome. Following the assessment of the transport situation, a transport master plan has been drawn up with the following objectives:

- To endow the subregion in the long term with transport systems in all
 modes so that infrastructure and services cease to be an impediment to the
 free movement of persons and goods, and that they are able to support trade
 and development and economic integration between countries
- In the medium term, the master plan is to make it possible for the subregion to have a platform for negotiations, in order to mobilize investments in the area of transport infrastructure development
- In the short run, the plan aims to facilitate movement on a paved road from one capital city to another by 2010.

The Central Africa Transport Master Plan was adopted by the ministers in charge of transport and endorsed by the Heads of State of the ECCAS member countries in January 2004. Considering the number of projects contained in the Plan, ECA undertook an exercise to prioritize them. The Central African Ministers in charge of Transport and Public Works endorsed the results of this prioritization exercise in June 2007. Preparations are under way for a donors' conference to consider the first phase of the priority projects.

2.3.2 Energy

Africa has an abundance of energy resources in the form of oil, natural resources, coal, hydroelectricity, biomass and other renewable-energy sources, but they are unevenly distributed within regions and are often at great distances from demand centres. The continent's commercial energy resources are still underdeveloped. Furthermore, it has poorly developed commercial energy infrastructure, such as gas pipelines and electricity transmission and distribution networks, to deliver commercial energy services to consumers in a reliable and cost-effective manner. The realization of the potential for energy interchange within Africa is thus of key importance in guaranteeing the supply of sufficient commercial energy in a sustainable manner and ensuring the efficient utilization of Africa's energy resources.

The search for abundant and cheap energy in Africa should focus on rationalizing the territorial distribution of existing albeit unevenly allocated energy resources by increasing regional cooperation in the expansion of existing networks of electricity transmission lines and gas pipelines. The regional economic communities provide the framework for cooperative approaches to the development of such energy infrastructure and the creation of larger and more efficient energy markets. Thus, most of the RECs are striving to promote subregional cooperation and integration through energy pooling and cross-border energy flows as a means of minimizing the cost of supply arising from the economies of scale of large subregional supply systems, while enhancing reliability and security of supply.

Current status of regional cooperation and integration in the energy sector

Regional energy cooperation and integration has achieved some notable outcomes, particularly in the following areas:

- Joint development and/or utilization of hydropower generating facilities;
- Establishment of regional power pools and interconnection of electricity grids;
- Energy pooling through the development of cross-border gas pipeline projects;
- Development of cross-border energy infrastructure through expansion of oil pipelines; and
- Promotion of cooperation on cross-cutting issues such as capacity building, energy information systems management and sharing of experiences and best practices.

Africa has an abundance of energy resources in the form of oil. natural resources, coal, hydroelectricity, biomass and other renewable-energy sources, but they are unevenly distributed within regions and are often at great distances from demand centres

Joint development and/or utilization of hydropower generating facilities

Most of the RECs have among their objectives the promotion of regional cooperation in the development of hydropower resources. There are examples of hydropower generating facilities that have been developed jointly by two or more countries, including:

- (a) The 666 MW Kariba South Power Station in the SADC subregion between Zambia and Zimbabwe;
- (b) The 40 MW Ruzizi II hydroelectric station in the Great Lakes subregion between Burundi, Rwanda and the Democratic Republic of Congo (DRC);
- (c) The 65 MW Nangbeto hydroelectric station of the Communauté Electrique du Benin (CEB) in the West Africa subregion between Benin and Togo; and
- (d) The 200 MW Manantali hydroelectric project of the Senegal River Basin Development Organization (OMVS) in the West Africa region between Mali, Mauritania and Senegal.

The 96 MW Adjarala hydroelectric project, developed jointly by Benin and Togo is under construction, while the African Development Bank is financing studies for the development of the Sambangalou and Kaleta hydropower projects and an integrated regional electricity grid by Gambia, Guinea, Guinea Bissau and Senegal within the River Gambia Development Organization (*Organisation de Mise en Valeur du Fleuve Gambie - OMVG*)). Five power utilities within the Southern African Power Pool (SAPP) are considering the development of the 3,500 MW Inga III hydropower scheme within the West African Power Corridor (WESTCOR) Project.

Other hydropower generating facilities have been participating in electricity exchange between two or more countries under bilateral agreements. They play a key role in initiating cross-border electricity trade at the subregional level. In this regard, the following examples are worth mentioning:

- Uganda's Owen Falls hydroelectric dam has been supplying electricity to Kenya and Tanzania in East Africa;
- Ghana's Akosombo hydroelectric dam has been supplying electricity to Togo and Benin through CEB and to Côte d'Ivoire in West Africa;
- Mozambique's Cahora Bassa hydroelectric dam is supplying electricity to South Africa and Zimbabwe in Southern Africa; and
- The Democratic Republic of Congo's Inga hydropower facilities have been supplying electricity for decades to the Republic of Congo in Central

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Africa and have started more recently to supply other countries in Southern Africa.

Establishment of subregional power pools and interconnection of electricity grids

Most of the RECs have established subregional power pools and interconnection of the electricity grids of their member States as a means of promoting cross-border electricity trade and fostering regional economic integration. In this regard, SADC pioneered the establishment of subregional power pools when 12 of its member States decided to create the Southern African Power Pool (SAPP) in August 1995. It provides a framework for regional electricity trading and coordination. SAPP has thus been serving as a model for the establishment of free trade zones for energy in other parts of Africa.

Following SAAP, three other subregional power pools have been created: the West African Power Pool (WAPP), established by the Economic Community of West African States (ECOWAS) in September 2000, the Central African Power Pool, known under its French acronym PEAC (*Pool Energétique d'Afrique Centrale*), established by the Economic Community of Central African States (ECCAS) in April 2003, and the East African Power Pool (EAPP), established by the Common Market for Eastern and Southern Africa (COMESA) in February 2005.

Interconnection of national electricity grids contributes considerably to the development of an integrated power system and the operationalization of a power pool within a given subregion. In SADC, completion of the 400 kV Matimba–Insukamini power line linking South Africa to Zimbabwe in October 1995 was of utmost importance in operationalizing SAPP. In ECOWAS, the interconnection between Nigeria and Benin and that between Benin, Togo, Ghana and Côte d'Ivoire are considered the most important links in the expansion of power transmission facilities within the West African Power Pool (WAPP).

In EAC, the Kenya-Tanzania-Zambia interconnection will improve cross-border electricity trade within EAPP and facilitate energy exchange between a major exporter (Zambia) and a major consumer (Kenya). In addition, this project could help operationalize interregional electricity trade between EAPP and SAPP member countries, particularly after completion of the Ethiopia-Kenya interconnection, which is at an advanced stage of preparation, and the planned Ethiopia-Sudan-Egypt interconnection. In North Africa, the Egypt-Libya-Tunisia-Algeria-Morocco (ELTAM) interconnection will make it possible to exchange electricity among the five North African countries and Europe through the Morocco-Spain interconnection once the link between Libya and Tunisia satisfies UCTE technical standards and rules.

Interconnection of national electricity grids contributes considerably to the development of an integrated power system and the operationalization of a power pool within a given subregion

Energy pooling through the development of cross-border gas pipeline projects

Regional cooperation and integration in the development and utilization of natural gas has long been limited to the North Africa region, due to a lack of gas pipeline infrastructure in sub-Saharan Africa. In North Africa, gas pipeline infrastructure was first developed to export Algerian gas to European markets through the Trans-Mediterranean gas pipeline (Transmed) linking Algeria to Italy via Tunisia, and the Maghreb-Europe gas pipeline (Gazoduc Maghreb-Europe – GME) linking Algeria with the Iberian Peninsula via Morocco.

Projects for developing sub-Saharan Africa's natural gas resources through cross-border gas pipelines include: the West African Gas Pipeline (WAGP) project designed to supply the countries of Ghana, Togo and Benin with Nigerian gas and completed by the end of 2006, and the Mozambique-South Africa Gas Pipeline designed to transport natural gas from Temane and Pande fields in Mozambique to Secunda in South Africa and completed and made operational in May 2004.

Developing cross-border energy infrastructure through expansion of oil pipelines

The existing pipelines in the Southern Africa region, including the Tanzania-Zambia (Tazama) pipeline transporting crude oil from Der es Salaam in Tanzania to Zambia's Indeni Refinery in Ndola, and Petrozim Pipeline aimed at transporting Zimbabwe's imports of petroleum products from Beira in Mozambique to Msasa, near Harare, cannot be considered as participating in cross-border energy trade, because transit countries do not benefit from petroleum supply en route.

New oil pipeline projects that are being constructed in other regions would contribute to promoting cross-border energy trade. In the East Africa region, for example, the extension of the Mombasa-Nairobi-Eldoret petroleum products pipeline to Kampala in Uganda will result in reduced cost of petroleum supply for Uganda and the landlocked countries of Burundi, Rwanda, north-western Tanzania and the eastern part of the Democratic Republic of Congo (DRC). Construction of the 320-km pipeline was projected to commence in July 2002 and be completed by 2005.

However, there have been long delays in the implementation of the project, but new developments can be noted as the contract for developing and operating the pipeline was awarded to Tamoil East Africa Limited, the subregional arm of the Libyan oil company Tamoil by end of 2006. In Central Africa, the Chad Petroleum Development and Pipeline Project is to develop the oil fields at Doha in southern Chad

New oil pipeline projects that are being constructed in other regions would contribute to promoting crossborder energy trade and construct a 1,070 km pipeline to offshore oil-loading facilities on Cameroon's Atlantic coast in Kribi. The pipeline has been in operation since 2003.

Contribution of other regional organizations

African Energy Commission (AFREC)

The African Energy Commission (AFREC) was established in July 2001 when the Lusaka OAU Summit adopted the Convention of the African Energy Commission. The AFREC will and must play a vital role in developing and optimizing Africa's vast energy resources. According to its Convention, AFREC shall have, among others things, the following functions:

- (a) To map out energy development policies, strategies and plans based on subregional, regional and continental development priorities and recommend their implementation; and
- (b) To design, create and update a continental energy database and facilitate rapid dissemination of information and exchange of information among member States, as well as among RECs.

Nile Basin Initiative (NBI)

The Nile Basin Initiative (NBI), launched in February 1999, is a regional partnership within which the ten countries of the Nile Basin have united in common pursuit of the long-term development and management of Nile waters. The Initiative has developed an agreed basin-wide framework and is guided by the countries' shared vision "to achieve sustainable socio-economic development through the equitable utilization of, and benefit from, the common Nile Basin water resources". The Initiative is also developing a Nile Basin Regional Power Trade Project. For example, the Eastern Nile Power Programme funded by AfDB seeks to link the electricity grids of Ethiopia, Sudan and Egypt. The Initiative is working closely with the East African Power Pool (EAPP).

Union of Producers, Conveyors and Distributors of Electrical Power in Africa (UPDEA)

The Union of Producers, Conveyors and Distributors of Electrical Energy in Africa (UPDEA), was created in 1970 and is a Pan-African organization. It is a non-profit and non-governmental institution. UPDEA is also involved in:

(a) Promoting cooperation between African power utilities and manufacturers of electrical materials;

AFREC will and must play a vital role in developing and optimizing Africa's vast energy resources

- (b) Promoting power networks and their interconnections in the framework of setting up subregional power pools; and
- (c) Operating a database featuring the African power sector.

African Forum for Utility Regulators (AFUR)

The African Forum for Utility Regulators (AFUR) was established in Nairobi, Kenya in September 2000 as an informal arrangement to facilitate the exchange of information and experiences between African regulators, and to support capacity-building efforts in the region. At its meeting held in Pretoria, South Africa in November 2002, AFUR became a formal association of African regulators with a constitution setting out its objectives and providing for its functioning. The stated mission of AFUR is to facilitate the development of effective utility regulation in support of Africa's infrastructure development as provided for in NEPAD. Indeed, one of AFUR's objectives is to "provide support as regulators to African initiatives, such as NEPAD, by ensuring that sound regulatory systems, practices and processes are in place in support of economic growth and social development".

Conclusion

2.3.3

Promoting regional cooperation and integration in the area of cross-border energy trade would help minimize the cost of energy supply arising from the economies of scale of large regional supply systems, while enhancing reliability and security of supply. In the process of regional sector integration, the RECs can provide the appropriate framework for cooperative approaches for the growth of energy infrastructure and the creation of larger markets, thereby promoting inter-country energy exchange.

2.4 Water

Water is a critical resource and the joint management of Africa's rivers and lakes and associated waterways is an important area of integration. Accordingly, many of the RECs are actively assessing regional water resources (surface and groundwater) to enable strategic planning for the utilization of the resources. They are also mobilizing resources for the implementation of the regional water infrastructure. SADC, for example, has made substantial progress in this area. In 2005, it promoted the establishment of joint river basin management arrangements and the implementation of its Protocol on Shared Watercourses by harmonizing its provisions with national water laws, policies and strategies in member States.

Water is a critical resource and the joint management of Africa's rivers and lakes and associated waterways is an important area of integration

A number of river basin organizations (RBOs) have been established and old ones reinvigorated. The Lake Chad Basin Authority for example has been resuscitated. In 2005, countries in the Nile Basin area set up the Nile Basin Authority. The Niger Basin Development Authority has also been reinvigorated. The river basin authorities are increasingly seen as instruments for advancing the regional integration agenda and for poverty reduction. More attention is being focused on joint socio-economic projects for the affected communities in each basin, including water for food security (irrigation), navigation, hydropower, electricity generation and tourism.

A number of development partners are assisting the RECs in developing these projects. Given the prevalence of droughts and floods in Africa, mitigating measures such as Hydrological Cycle Observing Systems (HYCOS) are being developed to address disasters as and when they arise.

Development of a reliable, modern regional telecommunications infrastructure is critical for regional integration

2.5 Information and communications technologies (ICTs)

Regional integration is necessary to overcome the limitations of Africa's small and fragmented economies and to afford the continent a greater voice in the management of international economic processes. Increased regional integration and economic cooperation is important for ensuring sustainable development in Africa and assuring a greater share in the global economy. Mechanisms for integration, such as establishing vertical and horizontal economic links, are desirable for facilitating larger free trade zones and joint development projects.

2.5.1 Telecommunications

Development of a reliable, modern regional telecommunications infrastructure is critical for regional integration. Progress is also being made in increasing telecommunications traffic in Africa. In West Africa, where direct microwave links have been established to connect regional capital cities, plans are afoot by telecommunications providers to charge a common tariff wherein all calls made within networks in countries in the zone will be treated as local calls⁹. One institution – the West African Telecommunications Regulatory Association (WATRA) based in Abuja, Nigeria – has already been established. The Telecommunication Regulators Association of Southern Africa (SATRA) has also been established to support regional investment, market integration and inter-operability.

⁹ The Punch (Nigeria), "West African telecoms regulators plan common tariff", 3 April 2006.

Overall, there has been good progress in telecommunications infrastructure network connectivity and the implementation of the regulatory framework across the RECs

In SADC, the communications, postal and meteorology sector finalized and adopted the guidelines for developing a communications numbering plan in 2004/2005. It has also developed and adopted model legislative provisions to facilitate e-commerce in the region, and established a fully functional Meteorology Association of Southern Africa (MASA). Associated policies and legislative and regulatory guidelines for the transformation of the postal sector and the development of a regional service delivery monitoring system have also been developed. In addition, significant strides have been made with the provision of telecommunications transmission links based on private sector participation. This has provided a backbone for ICT regional infrastructure.

In ECOWAS, a roadmap for the implementation of a single liberalized telecommunications community by 2007 has been adopted and plans are under way to implement effective GSM roaming in the subregion by December 2006.

Overall, there has been good progress in telecommunications infrastructure network connectivity and the implementation of the regulatory framework across the RECs. This is an exemplary showcase of protocol implementation in the RECs. Of course, much remains to be done to harmonize telecommunications policies and legal and regulatory frameworks for the establishment of a telecommunications community.

In view of their inherent multiplier effects, information and communications technologies (ICTs) play an important catalytic role in the development of all the other sectors and in regional integration as a whole. Their role in speeding up and expanding regional cooperation and integration has increasingly gained considerable attention. A regional approach to ICT development and building of the information society can allow for greater harmonization of national efforts in strategy and policy formulation and implementation. ICTs will have a substantial impact on regional cooperation and integration, provided suitable policies, programmes and mechanisms are established.

ICTs are the foundation to improved intra- and inter-institutional communication among regional cooperation institutions, thereby promoting trade, financial cooperation and efficiency in key sectors such as agriculture, health and education. Member States that have been implementing reforms in the ICT sector to improve operational efficiency and to attract private investment into the sector are at different stages of harmonizing their policy and regulatory frameworks in order to create an integrated ICT market and promote regional connectivity.

2.5.2 Current status of regional cooperation and integration in the ICT sector

The Regional Information and Communication Infrastructure (RICI) is the ECA response to the harmonization of national strategies at the subregional level by RECSs. A RICI plan addresses regional communications policies and financing and regulatory issues in a way that provides a framework for the development of information and communication infrastructure whilst strengthening capacity and also building a critical mass to facilitate regional economic integration through ICTs. The development of a reliable, modern, regional ICT infrastructure is critical for regional integration.

ECA has been supporting several RECs, including COMESA, EAC, ECOWAS, SADC, UEMOA, and the Arab Maghreb Union (AMU) in the development of RICI initiatives.

In various subregions, regulatory integration has witnessed the creation and strengthening of regulators' associations, thereby facilitating cross-border inter-operability, regional investment and market integration and enlargement. Regulatory associations now exist in West Africa - West African Telecommunications Regulatory Association (WATRA), Southern Africa – Communications Regulatory Authority of Southern Africa (CRASA), and in COMESA - the Association of Regulators for Information and Communications for Eastern and Southern Africa (ARICEA).

In September 2006, Celtel International, the leading pan-African mobile telecommunications company, made history by breaking boundaries and offering its customers in Kenya, Tanzania and Uganda (EAC) the opportunity to move freely across geographical borders without roaming call surcharges and without having to pay to receive incoming calls. This initiative, *One Network*, the world's first borderless mobile network, was expanded in June 2007 to include the Republic of Congo, Gabon and the Democratic Republic of Congo. Through this initiative, traditional roaming charges were completely removed and customers were offered the same services abroad that they could access in their home country, such as airtime credit transfer (for prepaid customers), voicemail and customer service in their local languages.

East African Community (EAC) - e-government strategy

The EAC subregion in 2006 developed an e-government strategy as an action roadmap in strategic areas supported by an enabling legal environment, secure information infrastructure and adequate human resources. The framework proposed a The development of a reliable, modern, regional ICT infrastructure is critical for regional integration

ICTs in general, and electronic commerce in particular, to promote intra-West African trade and attract foreign direct investment review and adaptation of legislation at national and EAC level to ensure inter-operability, competitiveness and fewer legal obstacles for online services and included the following strategic areas: customs and immigration control, e-parliament, e-health, e-banking, e-procurement, e-commerce and e-tourism and meteorological and tidal information.

Economic Community of West African States (ECOWAS) - regional integration through e-commerce

Despite efforts geared towards trade liberalization within the framework of both ECOWAS and UEMOA, intra-West African trade remains insignificant, due partly to lack of market information, poor communication facilities and cumbersome trading processes and procedures. One of the objectives of regional integration in West Africa is to dismantle tariff and non-tariff barriers with a view to boosting intraregional trade. This can be achieved through the deployment and use of ICTs in general, and electronic commerce in particular, to promote intra-West African trade and attract foreign direct investment (FDI). This has resulted in the ongoing programme to promote regional integration through e-commerce. This activity will entail the creation of a harmonized legal framework for ICT and e-commerce.

Central African subregion

Activities are currently under way for the development of a regional strategy on the information and knowledge society for the two RECs, Central African Monetary and Economic Community (CEMAC) and the Communauté Economique des Etats d'Afrique Centrale (CEEAC). The objective of e-CEMAC 2010 is to encourage the use of ICTs in the subregion to enhance regional integration, socio-economic development and poverty reduction. It proposes new concrete initiatives and subregional projects that promote subregional connectivity and active participation in the knowledge economy.

Arab Maghreb Union (AMU)

Activities are ongoing towards the development of an on-line platform for e-commerce to facilitate and promote trade and partnerships among North African countries by using ICTs as an enabler and facilitator for ease of access to information and knowledge. Trade among North African countries is now less than 6 per cent of the total trade of the region and represents one of the lowest regional rates in the world.

Southern African Development Community (SADC)

In August 2001, the SADC Heads of State signed a SADC Information and Communication Technology Declaration, which identified priority areas of action as being the regulatory environment for ICTs and infrastructure for ICT development. The Declaration also urged member States to accord priority to ICT for national and regional social and economic development and proposed a policy to build an information economy in the SADC subregion to avoid increasing exclusion from the global economy.

A SADC ICT strategy is currently under development as part of ECA support to SADC. The e-strategy will address convergence issues, harmonization of ICT indicators, connectivity and access to ICT services among and within member States; and promote ICT usage for regional economic integration. In addition, significant strides have been made with the provision of telecommunications transmission links based on private sector participation.

Overall, there has been measurable progress in telecommunications infrastructure network connectivity and in the implementation of harmonized policy, legal and regulatory frameworks across the RECs. Regional coordination will enable the continent to overcome its limited market size, reach a critical mass and ensure economies of scale. The need to attract huge investments in developing the information society will be satisfied through regional coordination of resource mobilization. In addition, developing a common approach can improve prospects for mainstreaming developed applications (e-commerce, e-government, e-health, e-education) into other regional initiatives and strategies. RECs should continue to play a leading role in regional consultations and in the development of regional e-strategies that are not only linked to national e-strategies, but address regional communications policy, financing and regulatory issues in a way that promotes harmonization.

2.6 Conclusion

This chapter has demonstrated that Africa has made some strides in creating common regional economic spaces. Common policies are emerging in the areas of transport, water and energy. There is a growing trend in intra-REC trade, though overall intra-African trade has hovered around 10-13 per cent and has remained consistently below 15 per cent of the region's total trade over the last two decades. Much still needs to be done to promote greater intra-regional trade and attenuate the constraints to regional international competitiveness. This will require closer amalgamation of trade and integration policies across RECs to create a more unified economic and market space, and actions to boost economic and production linkages

There is a growing trend in intra-REC trade, though overall intra-African trade has hovered around 10-13 per cent and has remained consistently below 15 per cent of the region's total trade over the last two decades

anchored around the transformation of Africa's natural resource heritage in a mutually complementary and reinforcing manner.

RECs need to focus
on strengthening
their own capacity,
improving
macroeconomic
policy coordination,
and establishing a
dispute settlement
mechanism to
ensure policy
credibility and
resolve thorny
rules-of-origin

conflicts

Countries also need to address the low level of implementation of REC resolutions and decisions, which has impeded the integration process as a whole. RECs need to focus on strengthening their own capacity, improving macroeconomic policy coordination, and establishing a dispute settlement mechanism to ensure policy credibility and resolve thorny rules-of-origin conflicts.

References

African Development Bank (ADB), "Africa in the Global Trading System: African Development Report 2004", AfDB: Abidjan

ECOWAS/Sahel and West Africa Club, 2005. "Medium and Long-Term Regional Development Perspectives in West Africa" Proceedings of a Symposium held to mark the 30th Anniversary of ECOWAS

_____ Annual Report 2005. Abuja, Nigeria

Nwuke, K. 2006. "Africa's Recent "Development Plans and the Increasing Role of China in Africa". Paper presented at the IPPR Conference on China and Africa Trafalgar House, London, England, June 28, 2006

Stevens, H. 2004, Transport Policy in the European Union. London: Palgrave-Macmillan

Swann, D. 2000. *The Economics of Europe: From Common Market to European Union.* New Edition. London: Penguin Books

United Nations Economic Commission for Africa (ECA), 2006. Assessing Regional Integration in Africa (ARIA II): Rationalizing Regional Economic Communities. ECA: Addis Ababa, Ethiopia

_____ 2003. Assessing Regional Integration in Africa I. ECA: Addis Ababa, Ethiopia

Web references

SADC Review at www.sadcreview.com

www.ecowas.int

www.eachq.int

www.african-union.org

Theoretical Perspectives of Monetary Integration



3.1 Introduction

Instability in international monetary arrangements has been a fact of life for policy-makers since the breakdown of the Bretton Woods agreements in the early 1970s. The 1980s in particular were characterized by an exceptional misalignment of the major currencies. The decade saw massive capital flight towards the United States and other industrialized countries from the developing world, particularly after the debt crises and the cutting-off of new loans. Macroeconomic policies improved in the majority of developing countries in the 1990s, but the expected growth benefits failed to materialize, at least to the extent that many observers had forecast. In addition, a series of financial crises severely depressed growth and worsened poverty (World Bank, 2005:95). The enormous costs of the financial crises in Asia, and in Argentina and Brazil in Latin America at the end of the 1990s/beginning of 2000s drove home the importance of stability.

Yet it is important to remember that things have not always been this way. In the 1950s and 1960s, the economies of the most developed capitalist countries (North America, Western Europe, Japan and Australasia), as well as a great deal of developing countries, enjoyed an unprecedented boom, commonly designated as "the Golden Age". It was characterized by low unemployment, low inflation and rapidly growing living standards, and one of its cornerstones were the monetary arrangements outlined at the famous meeting in Bretton Woods in 1944, the penultimate year of the Second World War. In so far as it eliminated the spectre of global economic insecurity that predominated in the 1930s, it was extremely successful. As Table 3.3.1 illustrates, the mean average growth rate for both output and trade reached historically unprecedented levels, with more than three times higher than the pre-war level for output and fifteen times more for trade. Pointedly, the coefficient of variation, which reflects the dispersion around the mean in the performance of these variables, also declined significantly during the Bretton Woods period.

The enormous costs of the financial crises in Asia, and in Argentina and Brazil in Latin America at the end of the 1990s/beginning of 2000s drove home the importance of stability

Table 3.1

Growth and Volatility of World Output and Trade. 1870-1990

	Output		Trade	
	Mean average growth rate (%)	Coefficient of variation	Mean average growth rate (%)	Coefficient of variation
Pre-War				
1870-1913	2.8	0.75	3.6	0.71
Interwar				
1924-29	3.7	0.22	5.7	0.39
1929-37	1.3	4.53	0.5	16.65
Post-war				
1950-1973	4.7	0.34	7.5	0.56
1973-1990	3.1	0.53	4.5	1.09

Source: Kitson and Michie, 1995: 9

In the second half of the 1960s and through the 1970s, however, the whole structure of profitable growth threatened to fall apart (Glyn, 2006:1). The oil crisis, the Vietnam War, political instability, and labour unrest all created deep fissures in the existing international monetary arrangement. After a few fitful attempts to rescue the system, the Bretton Woods agreement was abandoned and the major economies switched to a "regime" (if, because of the decentralized nature of decision-making, it can be called such) of flexible exchange rates. But fluctuations in exchange rates have subsequently been extremely high.

Despite a significant convergence of inflation rates and trends in unit labour costs during the past decade, the G-3 exchange rates have continued to show persistent misalignments and large gyrations. Such disorderly behaviour has caused serious problems for developing countries in the management of their currencies and external debt, and has often been an important factor in major emerging-market crises. However, these problems have generally been ignored by the major industrial countries, which for the most part, have geared their monetary policy to domestic objectives, notably combating inflation (UNCTAD, 2001:115).

Subsequently, although for the median developing country the volatility of the real exchange rate (as measured by the standard deviation of the real exchange rate) declined from the record highs of the 1980s, the decline was limited to middle-income countries, and over the 1990s, developing countries as a group exhibited much more volatile real exchange rates than industrial countries. As the World Bank (2005:99) notes, "high real exchange rate volatility and frequent exchange rate collapses suggest that over the 1990s progress in achieving robust nominal exchange rate arrangements was limited."

With the support of the IMF, some countries attempted to minimize their vulnerability and establish currency pegs – typically linking their currency to the dollar. The remedy, unfortunately, was often worse than the disease, sparking a number of very serious currency crises, starting with the Asian financial crisis of 1997-1998, and culminating in the severe economic recession of Argentina following the collapse of its currency board. Clearly, there are some salutary lessons to be learned about currency management from these episodes. More generally, and contrary to the proponents of moving towards international monetary arrangements based on flexible exchange rates, these have not been conducive to higher rates of economic growth.

Globally, the growth of income per capita declined from an annual average of 3.3 per cent in the 1960s, to less than half that in the decades subsequent to the disintegration of the Bretton Woods system - only 1.3 per cent in the 1980s and 1.4 per cent in the 1990s. For sub-Saharan Africa, there has been some recovery in growth rates in the first years of the new millennium, but per capita income growth is still way below the 2.4 per cent achieved in the 1960s (table 3.3.2).¹

Despite the empirical evidence and the relatively poor growth performance subsequent to the dismantling of Bretton Woods, the consensus opinion is that, even if the major industrialized nations have the necessary political will, the clock cannot be turned back at this stage. The enormous growth of cross-border capital flows since the 1970s, and which accelerated especially in the 1990s, is incongruous with such ambitious arrangements for monetary stability. Similarly, the United States of America has declined as the guarantor of stability within the international system. At the end of the Second World War, the United States accounted for half of world manufacturing output, half of world shipping, one third of world exports and 61 per cent of total world reserves of gold. With the recovery of Western Europe and Japan in the 1950s and 1960s, the rapid rise of the East Asian newly industrialized countries in the 1970s, and the dramatic entrance of China into the global economy in the 1990s, that pre-eminent position has now been eroded.

Despite the intentions of the policymakers who designed Bretton Woods, the position occupied by the United States under the Bretton Woods system was *de facto* very similar to that played by the United Kingdom under the classical gold standard (Panic, 1995:48). For better or worse, it is now clear that in economic - if not in military – terms, we live in a multipolar world.

¹ The apparently discrepant trends in the South Asia, East Asia and Pacific subregions are basically due to the dramatic improvement in performance of the two giants, India and China.

Table 3.2
Regional Average Per Capita Income Growth Rates, 1961-2003

	1961-70	1971-80	1981-90	1991-2000	2001-2003
High income OECD	4.2	2.6	2.5	1.9	1.0
Sub-Saharan Africa	2.4	0.9	-1.1	-0.3	1.2
Latin America & Caribbean	2.5	3.1	-0.8	1.7	-1.1
East Asia & Pacific	2.5	4.5	5.8	6.8	6.2
South Asia	1.9	0.6	3.3	3.3	3.7
European Monetary Union	4.9	2.8	2.1	1.7	0.7
World	3.3	2.0	1.3	1.4	0.8

Source: Calculated from World Development Indicators 2005.

Notwithstanding the impossibility of returning to a Bretton Woods world of fixed (but adjustable) exchange rates, there is little doubt that monetary instability and uncertainty have a pernicious impact on economic performance. In the words of Mundell (2002:45-46),

"The period since floating began has proved to be one of the most unstable periods in monetary history. For the developing countries, the last three decades have been characterized by high inflation, exchange rate instability and low growth. A substantial part of the blame for this situation must lie with the deterioration in the global international environment and especially the lapse in discipline due to the absence of an international monetary system."

Because of the dominance of the major industrial economies in shaping international monetary arrangements, developing countries have generally been bystanders to these shifts in international monetary policies. Yet, they have been affected by these changes. On the contrary, the costs of this instability have been proportionately higher for developing countries compared with larger developed countries. Despite Africa's well-documented low and declining share of world trade and the continent's marginal financial integration with the rest of the world, based on a share of GDP, the average African country is far more open to trade than the average developed country (Mold, 2006).

African countries are consequently more vulnerable to volatile shifts in their terms of trade than comparable developed countries, and in spite of recent initiatives to reduce the debt burden, African countries are also vulnerable to shifts in exchange rates due to the need to repay foreign borrowings in hard currency. Simultaneously, African countries have set themselves the goal of achieving deep regional integration. This is a political project, motivated by deeply felt pan-Africanism. But it also has an

Because of the dominance of the major industrial economies in shaping international monetary arrangements, developing countries have generally been bystanders to these shifts in international monetary policies

underlying economic logic, which says that by maximizing exchange and economic ties on a regional level, it may be possible to promote development and reduce vulnerability to external volatility. This is reflected by efforts in Africa and elsewhere in the developing world to promote regional integration (box 1).

Box 3.1Existing regional monetary and financial cooperation among developing countries

At present there are few regional financial and monetary arrangements among developing countries. Such arrangements as do exist range from agreements to pool foreign exchange reserves, such as the Andean Reserve Fund and the Arab Monetary Fund, to currency pegging (Rand Monetary Area) and a regional currency (Eastern Caribbean Monetary Union). The Communauté financière africaine (CFA) also has a common currency, but is unique in that it involves an agreement between its members and a major European country on cooperation in monetary and exchange-rate policy.

The Andean Reserve Fund was established in 1976 by the members of the Andean Community – Bolivia, Colombia, Ecuador, Peru and Venezuela – and has a subscribed capital of \$2 billion. The Fund provides financial support to its members in the form of loans or guarantees for balance-of-payments support, short-term (liquidity) loans, emergency loans, loans to support public external debt restructuring and export credit. Conditionality for drawing on these facilities is softer than that of the IMF. The Fund also aims to contribute to the harmonization of the exchange-rate, monetary and financial policies of member countries. It is thus intended to promote economic and financial stability in the region and to further the integration process in Latin America.

The Arab Monetary Fund was established in 1976 with a structure similar to that of the IMF and comprises all members of the League of Arab States (except the Comoros). It has a subscribed capital of 326,500 Arab accounting dinars, equivalent to about \$1.3 billion. The Fund is aimed at promoting exchange-rate stability among Arab currencies and at rendering them mutually convertible; it also provides financial support for members that encounter balance-of-payments problems. It is intended to serve as an instrument to enhance monetary policy cooperation among members and to coordinate their policies in dealing with international financial and economic problems. Its final aim is to promote the establishment of a common currency.

In the *Rand Monetary Area*, Lesotho and Swaziland, both economically closely integrated with South Africa, peg their currencies to the South African rand without formally engaging in coordination of monetary policy.

The Eastern Caribbean Monetary Union is an arrangement for a common currency among the members of the Organization of Eastern Caribbean States, a group of small island developing countries. The currency is pegged to the dollar, but in contrast to France with respect to the CFA (see below), the United States does not play an active role in the pegging arrangement.

Source: Adapted from UNCTAD, 2001

This chapter of the report deals with the policy options open to African countries to minimize this instability and provide an optimum macroeconomic environment

At present there are few regional financial and monetary arrangements among developing countries In August 2003, the Association of African Central Bank Governors announced that it would work for a single currency and common central bank by 2121 for growth and development, focusing on what might be considered the bedrock of regional integration – an eventual monetary union. In August 2003, the Association of African Central Bank Governors announced that it would work for a single currency and common central bank by 2121. This chapter discusses the kind of theoretical blueprint that underlies this ambitious project. Some of the questions to be asked in this chapter include:

- What are the costs and benefits of monetary union for African countries?
- Does monetary integration lead to greater trade between countries, or is it greater trade that facilitates monetary integration?
- How would such monetary integration be achieved in practice? What macroeconomic criteria would need to be established, and what would be the institutional requirements?
- What would be a realistic timeframe for implementation?
- Should monetary union be linked to a major currency (for instance, the euro), or should there be an attempt to establish a separate currency (ies)?

In attempting to answer these questions, we will look at both the theory of customs unions and the historical record of monetary integration in Europe – clearly the most advanced case of monetary union that currently exists. Before embarking on this, however, it is necessary to consider the broader arguments concerning the type of exchange rate regime that a country should ideally adopt.

3.2 Fixed versus floating exchange rates

"As little as two years ago, a lot of important people had no doubts about the question Free markets + Sound Money = Prosperity. Unfortunately, life isn't that simple, and that's what we've found out in the last couple of years" (Krugman, 1996:136).

During the turbulent years of the 1970s, a remarkable volte face occurred in conventional thinking on exchange rates. In the 1950s and 1960s, as guardian of monetary stability, the IMF argued fervently in favour of fixed exchange rates. By the end of the 1970s, the same institution became a passionate advocate for flexible exchange rates. As Mundell (2002:50) has noted: "The IMF stresses ad nauseum the superiority of flexible exchange rates as a mechanism of adjustment, with the same intensity that, before 1971, they defended fixed exchange rates. To say that there are two views on the subject is the understatement of the century!"

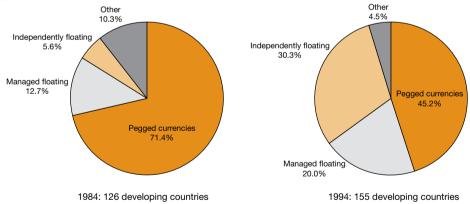
The intellectual vacillations on this issue were to some extent the product of very changed circumstances. In the period subsequent to the collapse of the Bretton Woods agreement, and facilitated by the combination of technological advances and economic liberalization commonly called "globalization", the world witnessed a massive increase in capital flows between countries. Foreign exchange trading also accelerated at a pace that would have been difficult to envisage during the Bretton Woods period. In such circumstances, any international regime of fixed exchange rates would have soon become unviable. Through the international financial institutions, developing countries were persuaded to adopt flexible exchange rate regimes.

Nevertheless, this view was tempered by the mid-1990s, with an explicit support in the case of developing countries for targeted or "pegged" exchange rates, but not without some unintended and extremely negative consequences for the countries involved (e.g. Argentina). According to some estimates, almost two thirds of emerging-market economies were using intermediate exchange rate regimes in 1991, but by 1999 this proportion had fallen to 42 per cent, and the proportion using hard pegs or some variant of floating rates had risen to 58 per cent (UNCTAD, 2001:109)

Through the international financial institutions, developing countries were persuaded to adopt flexible exchange rate regimes

Figure 3.1

Exchange Rate Arrangements in Developing Countries, 1984, 1994 and 2004 (per cent of total)



Source: Eichengreen, 1996:138 and IMF – International Financial Statistics (add figures for 2004)

Yet in the face of the currency crises experienced from the mid-1990s onwards by countries with pegged exchange rates, orthodox policy advice again shifted – this time away from "intermediate solutions" to "corner solutions", i.e. either monetary union or flexible exchange rates. This brief overview suggests that the debate on the most appropriate exchange rate regime for developing countries is far from settled.

For this reason, it is important to fully understand the different theoretical arguments for both flexible and fixed rates.

3.2.1 Flexible exchange rates (FER)

Allowing the exchange rate of an economy to float has some great advantages in terms of increased flexibility vis-à-vis the potential constraints of a fixed exchange rate.

Advantages

- Flexible exchange rates give a country the autonomy to adopt an exchange rate policy appropriate to its developmental objectives. As economies grow, relative prices change. For developing countries, such price shifts can be large. It is thus an important advantage to be able to adjust the exchange rate appropriately.
- The international reserves of a country are secured. Under fixed exchange rate regimes, the loss of reserves has often been enormously costly for the countries concerned. This problem is eliminated under a true regime of flexible exchange rates, providing the government (or central bank, in the case of an independent institution) is prepared to let the currency automatically adjust to external shocks. It should be noted, however, that this is not the case for "dirty" floats, whereby the country in question may have some underlying target for the exchange rate.
- Finally, and perhaps most importantly, flexible exchange rates allow a country to compensate for inflation differentials (the PPP condition) and external shocks. For smaller developing countries particularly, with relatively high exposure to international trade and external shocks (as is typically the case of African countries), this can be an important advantage over fixed rates.

More generally, floating exchange rate proponents argue that flexible exchange rates allow greater economic integration. In theory, flexible exchange rates bring about continuous balance of payments equilibrium in the world economy. Fiscal and monetary expansions thus work to depreciate the exchange rate (and thereby reduce real incomes). During the period of structural adjustment, the core of IMF analysis focussed on excess demand and incorrect relative prices (in particular, the exchange rate).

Flexible exchange rates were thus seen as a way of correcting these imbalances. This also explains to a large extent the support for flexible exchange rates from monetary economists like Milton Friedman in the 1970s (see Mundell, 1999), who see flexible exchange rates as a way of imposing a certain discipline on governments against

More generally, floating exchange rate proponents argue that flexible exchange rates allow greater economic integration

expansionary (or inflationary) policies. Based on this perspective, flexible exchange rates also protect countries from imported inflation.

Disadvantages

In practice, however, flexible exchange rates are not ideal for greater economic integration of the global economy. According to Stewart (1983), flexible exchange rates do not lead to an increased level of autonomy. On the contrary, flexible exchange rates create "deflationary bias" in macroeconomic policy at the global level, whereby no country is able to maintain output and employment at optimum levels because of the constraints of the external balance. "Deflationary bias theory" suggests that it is foolhardy for an individual country to go against world-wide deflation. Under flexible exchange rates, then, if countries wish to maintain the external balance of their economies, fiscal policy becomes relatively "impotent", and countries are forced to rely more on interest rates.

There is another important dimension to the "deflationary bias" in macroeconomic policy. According to the traditional interpretation of Mundell's framework for analysing macroeconomic policy, fiscal policy is normally assigned to achieving internal balance or reducing inflation, while exchange rate policy is assigned to the trade balance or the current account, and monetary policy is assigned to foreign exchange reserves or the capital account. As Bradford (2005:2) points out, the deflationary bias implicit in this assignment is clear. Contractionary fiscal policy is necessary to bring down aggregate demand-driven inflation.

Contractionary monetary policy is necessary to keep the domestic interest rate higher than the world interest rate to attract foreign capital. Exchange rate devaluations, which restrict imports even though exports expand, are necessary to shrink the trade deficit. Bradford suggests that:

"While these policies are effective means of achieving financial stability, the entire set of macropolicy tools are essentially used up to avoid excessive inflation and external imbalances, leaving no tool remaining to assign to economic growth and employment generation."

In addition, a floating exchange rate regime may be particularly unsuitable for developing countries and transition economies, as well as for smaller industrial economies for a number of reasons. First, these countries tend to be far more dependent on

² The French socialist government's experience in 1981-82 serves as an example of this – despite an attempt to reflate the economy with an ambitious policy of fiscal expansion, the external imbalance that arose undermined the whole policy, resulting in its reversal.

³ This situation led one British Prime Minister (Edward Heath 1970-74) to speak of the danger of "one-clubbed golf", i.e. an excessive reliance on interest rate policy only.

foreign trade than the large industrial countries like the United States, the EU or Japan, so that the impact of exchange rate movements on their domestic economic conditions – including prices, production and employment – is far larger. Second, they have higher rates of indebtedness, a larger proportion of which is denominated in foreign currencies. Large fluctuations thus cause extreme problems with debt servicing (UNCTAD, 2001). In short, flexible exchange rates can engender excessively high levels of volatility, importing uncertainty and instability from foreign trade markets.

3.2.2 Fixed exchange rates

While many countries afflicted by financial crisis in the past decade have subsequently adopted floating rates, the increased volatility associated with such regimes has become a source of concern. As a result, there now appears to be a greater interest among developing countries and transition economies in hard pegs and, in a closely integrated global financial system, the existence of many independent currencies is increasingly being called into question (UNCTAD, 2001: 109). In this context, what are the arguments that can be made in favour of fixed exchange rates?

Advantages

• If the exchange rates are fixed in a careful way, uncertainty is reduced and international trade flourishes. As we have seen in the introduction, this was indeed the experience under the Bretton Woods agreement for the first decade and a half of its operation. Under such a system, monetary discipline is inevitable. If, for example, a government attempts an excessively ambitious fiscal expansion, imports are likely to rise, threatening both foreign reserves and, eventually, the exchange rate itself. Fixed exchange rates can thus act as a powerful incentive for fiscal discipline.

Disadvantages

- The principal difficulty is that the wrong choice of parities may actually create more uncertainty instead of less. In a dynamic world economy, relative prices are constantly shifting. Any regime of fixed exchange rates would thus need to take into account such underlying shifts. Otherwise, a country may eventually find itself in a situation where its exchange rate is either overvalued or undervalued, with negative repercussions on growth.
- A key disadvantage is that under fixed exchange rates governments loose a
 key monetary and exchange rate instrument and fiscal policy becomes correspondingly more powerful, but at the expense of monetary policy.

Finally, without the possibility of shifts in the exchange rate to accommodate external changes, there is the possibility of greater vulnerability to asymmetric shocks.

The first point here is worth elaborating. It is well established that an economy that is fully committed to the free movement of capital (or finds itself unable to control capital movements effectively) cannot both fix its exchange rate (at a given value or within a narrow band) and simultaneously pursue an independent monetary policy. Eventually, such a country would be forced to abandon one of these objectives.

This was precisely the dilemma in which the Asian countries affected by the currency crises of 1997-98 found themselves. Faced with the destabilizing impact of large-scale capital flows, and not wishing to relinquish control over their domestic economies, the Asian countries and others concerned opted for re-imposing capital controls.4

In the previous section, we noted that one of the dangers of adopting flexible exchange rates was the risk of engendering a "deflationary bias" in macroeconomic policy. But it should be stressed that deflationary bias is not peculiar to flexible exchange rate regimes. In a fixed exchange rate regime too, if market pressures generate an exchange rate equilibrium above or below the fixed nominal rate, this must eventually be addressed by the central bank. And if the expectations of currency holders shift toward a de facto depreciated level for the exchange rate, the central bank would have to sell dollars to take local currency out of circulation and restore the market-determined rate to the fixed nominal rate.

This reduction in the money supply causes interest rates to rise and leads to declines in output or income from what they would have been under a floating rate regime. Macroeconomic policy under a fixed rate regime thus tends to dampen the rate of economic growth and restrict the capability of monetary policy to stimulate growth. This is the price that must be paid in real-economy terms for the financial stability achieved both in the exchange rate and in the price level. Monetary policy autonomy is lost and the priorities of real-economy objectives are made secondary to financial objectives because of the deflationary pressure on monetary policy of a fixed exchange rate regime (Bradford, 2005:4).

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Despite its vociferous opposition to capital controls in the past, in post-mortems of the Asian crisis, the IMF in fact conceded that under the circumstances the re-imposition of certain kinds of capital controls was perhaps the lesser of evils. As Director of the IMF Research Department, Kenneth S. Rogoff (2002) acknowledged that: "There seems to be a good case for keeping an open mind on the issue of capital controls and debt, especially when debating ways to better immunize the global financial system against crises in the twenty-first century.'

Table 3.3
Assignment of Policy Tools to Policy Goals under Floating Exchange Rate (*) and Fixed Exchange Rate (#) Regimes

	Price stability	Current account balance	Capital account balance	Economic growth
Fiscal policy	*	#	or	#
Exchange rate	#	# *	#	
Capital controls				
Moneary policy			*	

Source: Bradford, 2005:3

As a consequence, in the tradeoff between assignment to the current account and economic growth, fiscal policy tends to be assigned to external balance rather than internal growth

In short, the dilemmas for policymakers can be appreciated by looking at table 3.3. The point of departure here is an appreciation of Tinbergen's famous dictum that for economic policy to work, there needs to be at least as many policy instruments as there are policy goals (Tinbergen, 1956). In floating rate regimes, the capital account is assumed to be fully open, i.e. monetary policy has to be assigned to the capital account. Thus, the three macropolicy tools (fiscal, exchange rate and monetary) are assigned to three targets. Growth is, in effect, crowded out of the economic policy choices.

In fixed exchange rate regimes, on the other hand, the independence of monetary policy autonomy is foregone. In addition, the capital account is assumed to be fully open and thus capital controls are removed as an instrument of macropolicy. As a consequence, in the trade-off between assignment to the current account and economic growth, fiscal policy tends to be assigned to external balance rather than internal growth. The exchange rate becomes an anchor for achieving internal price stability with spillover effects on the external balance.

Under both scenarios then, growth and employment take a back seat to financial and exchange rate stability. How real a concern should such a deflationary bias be for African policymakers? More will be said on this in later chapters of this report. However, it is worth stressing that a number of studies exist that do indeed point in the direction of a deflationary bias in existing national policies. In their study of the Ghanaian economy, for instance, Epstein and Heintz (2006) critique the current "financial programming approach" that has been adopted by the government under the tutelage of the IMF. This model has been incorporated into the Poverty Reduction Strategy Papers (PRSP) as well as the HIPC processes. It stresses macro-stability and particularly price stability and a stable exchange rate over the medium term. Yet as Epstein and Heintz (2006:11) note:

"A key and troubling implication of this programming approach is that there is no clear set of conditions under which expansionary monetary policies are called for, even in a situation of slow growth and high unemployment. Even if both targets are met, programming does not call for expansionary monetary policy. This is largely because there is no explicit operational target for economic growth, employment creation, or poverty reduction. The bias of financial programming is therefore highly contractionary."

Epstein and Heintz use a vector auto regression (VAR) model of the Ghanaian economy to simulate the scope for a more expansive monetary policy, and conclude that a more expansionary policy would be both feasible and have positive impacts on economic growth without significant negative impacts on inflation. Moreover, their results indicate that interest rate increases can have stagflationary costs, and that increases in GDP growth appear to have minimal effect on inflation. Hence, "having a narrow focus on controlling inflation by raising interest rates and moderating economic growth in order to contain inflation is not a sensible strategy, especially in light of the significant costs in terms of forgone income and employment in a poor country such as Ghana."

3.2.3 "Intermediate" regimes

As mentioned earlier, since the crises of the mid-1990s, and especially since the Argentinean crisis of 2001, the policy options open to developing countries are now often portrayed in terms of polar extremes: floating or permanent pegging (monetary union). With the breakdown of the Bretton Woods system, large countries like the United States and Japan, for whom the importance of international transactions was still limited, opted to float. For those countries, the uncertainties of a fluctuating exchange rate, while not pleasant, were tolerable. But, as Eichengreen (1996:137) has pointed out: "for smaller, more open economies, especially developing countries with thin financial markets, floating exchange rates were even more volatile and disruptive"

Two basic routes are open to developing countries. One option is to move further in the direction of hardening the exchange rate peg. A few countries in the 1980s and 1990s, namely, Hong Kong, Bermuda, the Cayman Islands, and more recently, Argentina and Estonia, did so by establishing currency boards. The problem with currency boards is that monetary authorities are constrained even more tightly than under the nineteenth-century gold standard from engaging in lender-of-last-resort intervention. As Grabel (2000:9) notes:

"Currency boards epitomize the credibility advantages of rule-based financial policy: in all cases where currency boards have existed, they have operThe problem with currency boards is that monetary authorities are constrained even more tightly than under the nineteenth-century gold standard from engaging in lender-of-last-resort intervention

ated in accordance with a strict set of simple, transparent rules. Hence, they possess even less scope for discretion than do independent central bank".

Currency boards are thus attractive only for countries with special circumstances: typically they are very small; their banks are closely tied to institutions overseas and hence can expect foreign support; they possess exceptionally underdeveloped financial markets, or they have particularly lurid histories of inflation (Eichengreen, 1996: 139).

The subsequent scale of the macroeconomic disaster for Argentina shows just how dangerous a policy of currency pegging can be. As confidence in the ability of the Argentinean authorities to maintain the peg collapsed in 2001, Argentina's GDP fell by more than 12 per cent, industrial activity by 18 per cent, and construction by 36 per cent (Garnier, 2003). Some analysts have compared the scale of the economic decline to that of the Great Depression (Palma, 2004). The Argentinean experience provides a salutary lesson in the dangers of a mistaken exchange rate policy.⁵

Events like that experienced by Argentina have led some analysts to challenge the sustainability of all intermediate solutions. Eichengreen (1996: 139), for example, argued that:

"What is clear is that informally pegged or pegged-but-adjustable exchange rates are no longer a feasible option. In most cases, the only alternative to monetary union has become more freely floating rates"

Not all analysts agree with this advice, however. UNCTAD (2001: Chapter V), for instance, argues that an important negative implication of mainstream advice to avoid "intermediate solutions" is that developing countries with similar foreign trade structures and market orientation might end up at opposite ends of the spectrum in terms of exchange rates - some with floating rates and others with fixed exchange rates against the dollar. Given the misalignments and fluctuations that characterize the currency markets, this could be very prejudicial to the long-term prospects for regional integration between such countries.6

The subsequent scale of the macroeconomic disaster for Argentina shows just how dangerous a policy of currency pegging can be

Whether the Argentinean authorities alone were to blame for this is a moot point. Grabel (2000), for example, notes the extent to which the policy of pegging the Argentinean peso to the dollar was supported by the international financial institutions and, in particular, the IMF. The IMF itself has conceded that the policy was mistaken in this case. As one Fund document notes,

[&]quot;While the decision to establish and maintain the currency board arrangement was the authorities' and commanded broad popular support, the Fund could have questioned more forcefully the appropriateness of the arrangement and of the associated policy mix... At the very least, the Fund should have insisted on greater prudence regarding the public debt dynamics during the boom years, since the currency board regime ruled out both discretionary monetary policy for stabilization purposes and money financing of the deficit when the government ran into funding difficulties." (IMF, 2003:66).

UNCTAD (2001:110) cites the case of the bilateral tensions that arose between Brazil and Argentina while the peso was pegged to the dollar.

One final dimension that needs considering when evaluating the pros and cons of flexible exchange rates is the political economy. Macroeconomic policy measures are not politically neutral. Indeed, some policies that may appear to be based on particular grounds, in reality, have a different underlying motivation. For example, in the face of increased need to service international debt, the shift towards open trade regimes in Africa was ostensibly made in order to achieve an improved balance of payments and export performance. But proponents of these policies, however justifiable on their own merits, must have been aware that these same policies make domestic demand management increasingly difficult. In effect, it took away an important macroeconomic tool (fiscal policy) from national policymakers. As we shall see in the following sections, regional integration is one potential way of regaining some of that autonomy.

3.3 From exchange rate regime to monetary union: the theory of the optimal currency areas

3.3.1 The classic view of Mundell

Opting for a system of fixed exchange rates or a monetary union is one thing, and deciding which countries can join is another. The classic framework for the evaluation of the feasibility of monetary union is that presented by Mundell (1961). In this section, we will look at the key elements of this theory, as well as more recent contributions to the theory. It is notable that Mundell's own views shifted over time and that subsequent to the collapse of the Bretton Woods system, Mundell himself became more enthusiastic about the prospects for regional monetary union than his own theory seemed to suggest.

There were basically three Mundell (1961) criteria for monetary union:

- Member countries should have similar economic structures. The importance of this criterion was to ensure that they face similar vulnerability to asymmetric shocks. For instance, if one country is a major oil exporter and another is a net importer of oil (as would be the case of Nigeria and Burkina Faso for example), shifts in the price of oil would have a very different impact on the two economies and might make regional integration between the two countries untenable.
- 2. There should be a large degree of wage flexibility amongst the member countries, such that asymmetric shocks could be assimilated. On this point, most studies concur that African countries display very high levels of wage

In the face of increased need to service international debt, the shift towards open trade regimes in Africa was ostensibly made in order to achieve an improved balance of payments and export performance

- flexibility, as witnessed by the large-scale wage reductions during the period of structural adjustment.
- 3. There should be a high degree of labour mobility across State borders. On this score, with perhaps the exception of Southern Africa, labour mobility is rather low, suggesting rigidities in reaction to asymmetric external shocks.

Kenan (1963) expanded on Mundell's work and concluded that countries whose production and exports are widely diversified and that have a similar structure can form an optimum currency area. However, as we are aware, African countries rarely fulfil this last criterion. Their economies are typically undiversified and, depending on the kind of commodities that they export, their economic structures are often quite different. McKinnon (1969) added another criterion by stressing that only countries that are very open to trade and that trade heavily with each other can form an optimum currency area. Again, African countries, with low levels of intra-African trade, rarely fulfil this criterion (UNECA, 2003).

Two additional criteria often included in this list are: the "*Transfer criterion*", which reflects the ability of countries to compensate other members of the monetary union for any asymmetric shocks, and the "*Homogeneity of Preferences criterion*", which notes that countries with similar preference structures are less likely to be affected by asymmetric shocks. Needless to say, from a theoretical perspective, the resulting policy advice hardly represents a resounding endorsement of monetary integration for developing countries in general, and for African countries in particular.

More recently, Mackinnon (2004:705-6) has argued that it is not in the interest of a country to participate in either a common-currency regime or a common monetary standard if its own public finances are too weak. If the government needs to retain control over its currency in order to extract more monetary seigniorage from the financial system – possibly through inflation – than a common-currency regime would permit, then a fixed exchange rate regime is not feasible or advisable. Again, this condition currently militates against African countries forming a monetary union, and suggests that they first need to strengthen their public finances before engaging in a policy of monetary union.

The sum of this is that the classic theory of monetary integration, as presented by Mundell (1961), and expanded upon by Kenan (1963), is not particularly optimistic about the prospects of African countries entering into a monetary union. Some authors, such as Drabek (2005), suggest that African policymakers are guilty of "putting the cart before the horse", and should not be currently focusing on such an objective, but rather exploring ways of deepening existing integration:

Countries whose production and exports are widely diversified and that have a similar structure can form an optimum currency area

"These efforts represent a considerable jump in what I would call a natural sequence of regional integration arrangements. The latter, the 'natural' sequence, would involve arrangements that start from free trade areas before members of these areas proceed to coordinate other policies such as external trade policies, elimination of barriers to movement of labour and capital or coordination of monetary policies" (Drabeck, 2005:158).

3.3.2 Mundell revisited: counter arguments

Fortunately, this is not the whole story. From the 1970s onwards, Mundell began stressing the benefits rather than the costs of monetary union, particularly with regard to the ability of a monetary union to allow countries to share the costs of external shocks. He also became more sceptical about the benefits of flexible exchange rates, which frequently do not reflect macroeconomic fundamentals. This shift in views has been denominated *Mundell II* by de Grauwe and Kouretas (2004). Mundell modified his views based on two basic arguments. Firstly, he argued that a monetary union is a more efficient way to organize an insurance system to cope with asymmetric shocks than in a system of national money with exchange rate uncertainty. It will facilitate the flows of capital between members that soften the blow of adjustment to an external shock. Under circumstances of separate moneys and an exchange rate that can vary, such flows will be less likely to occur.

A second reason for the change in stance by Mundell is that there is a lot of evidence that exchange rate movements are often disconnected from underlying fundamentals like inflation differentials or output growth. Exchange rates are often driven by psychological factors and the herd mentality, leading to greater volatility, not less. In such circumstances, exchange rate movements are likely to be a source of asymmetric shocks themselves. *Mundell II* thus deemed that giving up this instrument was not such a sacrifice, and the corresponding advantages may outweigh the disadvantages.

What seems to have changed Mundell's views in particular was the sharp rise in the mobility of capital during the intervening period. In a world of free mobility of capital, the exchange rate ceases to be a stabilizing force. Instead, according to *Mundell II*, the exchange rate becomes a target of destabilizing speculative movements and thus itself becomes a source of large asymmetric shocks. As a case in point, as late as 1983, the five major central banks (of the United States, Germany, Japan, Britain

Exchange rates are often driven by psychological factors and the herd mentality, leading to greater volatility, not less

⁷ See Mundell's (1999) Nobel Prize acceptance speech. Mackinnon (2004:691) notes that Mundell's views of the issue were very much coloured by his underlying conceptual approach to macroeconomics: "Underpinning [Mundell's Keynesian mindset] was the assumption of stationary expectations. As a modelling strategy, he assumed that people behaved as if the current domestic price level, interest rate and exchange rate (even when the exchange rate was floating) would hold indefinitely...he presumed that agents in the private sector did not try to anticipate future movements in the price level, interest rates, the exchange rate, or in government policy itself".

It is sometimes argued that, in order to allow exports to increase at the same rate, these countries will have to make their exports more competitive by depreciating their currencies

and Switzerland) could between them muster \$139 billion; by 1992 the balance of power had been reversed, and their combined reserves stood at \$278 billion compared with \$623 billion of daily trading activity. In 2001, they had \$653 billion of reserves (\$404 billion in Japan) compared with a daily turnover of \$1.2 trillion. The markets could overwhelm the central banks if they chose (Hutton, 2002: 410).

There is also an interesting dynamic dimension to these theoretical perspectives. Some authors, such as Eichengreen (1992) and Krugman (1993), have argued that even a successful monetary and economic union may become less of an optimum currency area over time as its regions naturally become more specialized in what they produce. As McKinnon (2004:705) notes: Eichengreen and Krugman are essentially claiming that an economic entity might fail to meet the criteria to be an optimum currency area ex *post*, even if it had satisfied them *ex ante*. But according to the European Commission, differential shocks will occur *less* frequently in a monetary union.

The reasoning is that trade between the industrial nations of the EU is to a large degree intra-industry trade. It is based on the existence of economies of scale and imperfect competition as well as the need for product differentiation. This leads to countries selling to each other similar categories of products (e.g. Germany and France each selling each other cars). Under such circumstances, demand shocks will affect members of the monetary union in a fairly symmetric way.

The alternative view presented by Krugman is that trade and monetary integration will lead to an increasing concentration of production, according to comparative advantage, scale economies and distance costs. Over time, therefore, the rather perverse outcome of deeper integration is that it will exacerbate asymmetric shocks. Which of these views is right is of fundamental importance for African countries considering joining in a monetary union.

On whether differences in growth rates matter, De Grauwe (2005:32-35) argues that countries do not need to worry about the possibility that monetary union will constrain the growth of fast-growing countries, which generally import more. It is sometimes argued that, in order to allow exports to increase at the same rate, these countries will have to make their exports more competitive by depreciating their currencies. This becomes impossible under monetary union. However, De Grauwe argues that there is very little empirical support for such a view.

Moreover, differences in growth rates will induce capital flows from slower-growing members of the monetary union towards the faster ones. These flows will allow the faster-growing countries to finance current account deficits without any need to devalue the currency. Differences in inflation rates should also not be an excessive

cause of concern. The Balassa-Samuelson effect dictates that countries with high rates of productivity growth will experience higher rates of inflation.

There are other reasons to take a more optimistic view of monetary union. Firstly, there are the purely economic benefits of monetary unions, in terms of lower transaction costs, positive scale effects, and reduced uncertainty. From the point of view of providing an additional incentive to interregional trade, Rose's (2000) econometric work suggests a massive *three-fold increase* in trade between members of a monetary union. Using cross-section data and controlling for other variables that affect trade flows (e.g. income, distance, trade restrictions, language), Rose (2000:14) found that pairs of countries with a monetary union have, on average, trade flows that are over three times as much as countries with different currencies.⁸

If correct, such an argument would provide a powerful incentive for monetary union in Africa. Although some of the evidence is ambiguous on this point (Mold, 2006, Masson, 2006), it is commonly argued that "Africa undertrades", and that what trade does take place is excessively concentrated on developed country markets. A common currency could potentially do much to increase intraregional trade.

Beyond the trade impact and the conventional objectives of delivering on lower inflation and higher economic growth, there are two principal additional reasons for the enthusiasm for African monetary union (Masson and Patillo, 2004; Siddiqi, 2006):

- 1. It is clear that the successful launch of the euro has stimulated interest in monetary unions in other regions. But Masson and Patillo issue a warning on this point: "in Africa, fiscal problems are much more severe and the credibility of monetary institutions is more fragile. If the process of creating appropriate institutions was so difficult for a set of rich countries with highly competent bureaucracies that have cooperated closely for more than 50 years, then, realistically, the challenge for African countries must be considered enormous" (Masson and Patillo, 2004: 10).
- 2. Second, African monetary union has been motivated by the desire to counteract perceived economic and political weakness. For example, regional

African monetary
union has been
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desire to counteract
perceived
economic and
political weakness

⁸ Rose himself admits he is mystified by what is generating these large results: "Why does sharing a currency have such a big effect on trade? The short answer is: I don't know. A common currency represents a serious government commitment to long-term integration. This commitment could, in turn induce the private sector to engage in greater international trade. Perhaps hedging exchange rate risk is much more difficult than commonly believed. Alternatively, a common currency could induce greater financial integration, which then leads to stronger trade in goods and services." Other authors have suggested that Rose's results are biased upwards. Certainly, this would seem to be plausible – nobody has suggested, for instance, that the introduction of the single currency has led to a three-fold increase in trade between member States. Baldwin (2006) suggests a much more plausible increase of around 5-10 per cent due to the introduction of the euro. One of the reasons for this upward bias is that most of the monetary unions in the Rose study involve very small countries (mostly in the Caribbean) (De Grauwe, 2005:81). But his figures are also probably biased upwards because the EU countries included in the study had already achieved very high levels of intraregional integration prior to the introduction of the single currency.

Africa's own experience with monetary integration, while not being an unmitigated success, has also had some encouraging dimensions

groupings could help Africa in negotiating favourable trading arrangements, either globally (in the World Trade Organization context) or bilaterally (with the European Union and the United States). Again, however, Masson and Patillo offer a warning: "While the objective of regional integration seems well founded, it is unclear whether forming a monetary union would contribute greatly to it. A currency that is ill managed and subject to continual depreciation is not likely to stimulate pride in the region or give the member countries any clout on the world stage."

To these points, it should be added that Africa's own experience with monetary integration, while not being an unmitigated success, has also had some encouraging dimensions (box 1): For example, according to Clement (1996:1): "Since its creation almost 50 years ago, the CFA franc zone has on balance served its members well... these countries benefited from a long period of remarkably low inflation and — until the mid-1980s — sustained economic growth." The fact that the CFA franc zone has subsequently run into difficulties suggests that although the arrangement had some problems, there are also some important lessons to be learned regarding the way in which monetary integration can be pursued, even among poor primary exporting economies with relatively undifferentiated economic structures.

Box 3.2 The Communauté financière africaine – Africa's main experience with monetary union

The creation of the Communauté financière africaine dates back to 1948, but the agreements governing the current operation of the CFA zone were signed in 1973. There are two regional groups, each with its own central bank: the Economic and Monetary Union of West Africa, and the Central African Economic and Monetary Community. The 14 countries involved have a common currency, the CFA franc, that is not traded on the foreign exchange markets but is convertible with the French franc at a fixed parity. There is free capital mobility within the CFA zone, and between these countries and France, and the foreign exchange reserves of its members are pooled.

According to Masson and Patillo (2004:12), "in terms of macroeconomic performance, while the CFA franc zone has unambiguously delivered lower inflation than other currency regimes in Africa, the evidence on growth is mixed—depending on the period under consideration. However, the success and endurance of the zone is also partially due to the special circumstances of French support, particularly the French Treasury's guarantee of convertibility embodied in the operations account."

The French Treasury guarantees the convertibility of the CFA franc into French francs at a fixed parity and assumes the role of lender of last resort. On the other hand, the arrangement includes a mechanism that limits the independence of the two regional central banks, and the French Treasury can influence monetary policy in the CFA zone as well as the determination of the parity with the French franc. Each of the two central banks has an operations account with the French Treasury into which they have to deposit 65 per cent of their foreign exchange reserves, but which also provides an overdraft facility (at market-related interest) that is, in principle, unlimited.

On the other hand, in their operations, the central banks have to observe two rules that are designed to check the supply of CFA francs: (i) their sight liabilities are required to have a foreign exchange cover of at least 20 per cent, and (ii) their lending to each member government is limited to 20 per cent of that government's revenue of the previous year. Moreover, France has seats on the boards of both central banks. It appears that membership in the CFA has helped to keep inflation in the CFA countries considerably below the average of other African countries; between 1975 and 1985, per capita income also grew faster.

However, the system came under increasing strain after 1985 due to external shocks and weakening macroeconomic fundamentals. The CFA countries suffered from severe terms-of-trade losses as world market prices for some of their major export commodities (cocoa, coffee, cotton and oil) dropped sharply and the French franc appreciated markedly against the dollar following the Plaza Accord of 1985. Consequently, the nominal effective exchange rate of the CFA franc rose by almost 7 per cent annually between 1986 and 1993. CFA countries' exports lost competitiveness in world markets as domestic costs could not be reined in; the combined current account and fiscal deficit of the CFA zone increased by 6.5 per cent of GDP, and the 20 per cent limit of monetization of government debt was substantially exceeded by several countries.

In 1994, it was decided to adjust the parity of the CFA franc with the French franc, from 50 CFA francs to 100 CFA francs for one French franc (see also TDR 1995, chap. 1, box 1; Clément, 1996). This was the first – and so far only – devaluation since 1948, but it demonstrated the vulnerability of the arrangement, especially in the absence of a mechanism that would allow for a gradual adjustment of the nominal exchange rate in the light of macroeconomic and balance-of-payments developments. The probability that these developments diverge between commodity-dependent developing countries and the developed country whose currency serves as an anchor is relatively high, given the difference in their exposure to external shocks.

Comparative macroeconomic performance of CFA franc countries with rest of SSA, 1975-93

	Average		
	1975-85	1986-93	
	Annual percentage change		
Real GDP growth			
- CFA	4.6	-0.2	
- Non-CFA	1.4	2.8	
Real per capita GDP growth			
- CFA	1.7	-3.1	
- Non-CFA	-1.3	-0.1	
Inflation			
- CFA	11.8	1.0	
- Non-CFA	17.8	53.5	
	As percentage of GDP		
Overall fiscal balance			
- CFA	-5.0	-7.2	
- Non-CFA	-6.1	-5.1	
External current account balance (including grants)			
- CFA	-6.5	-5.0	
- Non-CFA	-1.9	-0.9	
External Debt			
- CFA	38.2	82.3	
- Non-CFA	25.2	53.9	

Source: Clement, 1996:2.

Membership in the CFA has helped to keep inflation in the CFA countries considerably below the average of other African countries Although there is no doubt that economists have made progress in their understanding of the costs and benefits of monetary union, it is equally true that a consensus view on these issues is still far off

The stability and proper alignment of exchange rates of the CFA countries vis-à-vis their trade partners and competitors exert a major influence on their overall economic performance. First, trade in these countries accounts for a very high share of GDP. Second, intra-CFA trade is limited, accounting, on average, for only 8 per cent of its members' total trade. Third, because of structural differences, CFA and EU countries do not constitute an optimal currency area. Even though half of the total trade of CFA countries is with the EU, their export and import structures are very different and the CFA countries face competition from third parties in commodity exports both to the EU and elsewhere. Thus, while bringing a certain amount of monetary discipline and protection against speculative attacks, a policy of locking into the French franc (and, hence, subsequently into the euro) and floating it against other currencies poses problems for trade and international competitiveness.

Sources: Taken from Masson and Patillo (2004), UNCTAD (2001), Clement (1996).

Finally, the political dimension to these questions should not be underestimated. Monetary union is not simply a technical question. Countries may choose to fix their exchange rates with one another on the basis of any number of considerations, ranging from domestic economic welfare, to national prestige, to international leverage. Similarly, currency arrangements between countries can collapse for reasons equally as diverse as those for which they are created. National governments may choose to pull their currencies out of a monetary union as an assertion of pride, independence, or economic self-interest.

Moreover, the reasons for joining or leaving a monetary union need not be the same or even similar. Countries may join for economic reasons and leave for political reasons, or the reverse. Finally, different countries do not need to have the same reasons for joining or leaving the same monetary union. It may offer economic advantages to one participant, offer domestic political advantages for another, and enhance the international prestige of a third (Jones, 2002:3).

To sum up, although there is no doubt that economists have made progress in their understanding of the costs and benefits of monetary union, it is equally true that a consensus view on these issues is still far off (de Grauwe and Kouretas, 2004:680). Nevertheless, the theoretical and empirical evidence reviewed here suggests that, if established and sustained, regional currencies among developing country groupings can bring considerable benefits, similar to those expected from the introduction of the euro. They can reduce the costs of doing business within a region and eliminate exchange rate spreads and commissions in currency trading associated with intraregional trade and investment.

Furthermore, a supranational central bank can reduce the influence of populist national politics on monetary policy, while nevertheless being accountable to

⁹ This lack of consensus was also made dramatically clear when the United Kingdom Chancellor, Gordon Brown, published a report of more than 2,000 pages on the pros and cons of his country's entry into the euro area (de Grauwe and Kouretas, 2004:680).

member countries. Unlike dollarization, such an arrangement would also bring benefits in terms of seignoirage (UNCTAD, 2001: 124).

3.4 European Union experience with monetary union

3.4.1 A brief history

The European Union experience provides a guide to both the positive steps to take and the mistakes to be avoided in the construction of a monetary union. The road to European monetary union was not easy – it took over four decades to realise, and involved a step-by-step process of block expansion (Siddiqi, 2006:32). In reality, European monetary integration can be traced back as far as the Treaty of Rome, where it was acknowledged that the exchange rates of member countries should be regarded as a matter of "common interest". The revaluation of the Dutch guilder and the German mark in 1961 prompted discussion of how the customs union could be extended to the monetary domain.

By the mid-1960s, this had led to the creation of the *Committee of Central Bank Governors* (Eichengreen, 1996:153). But the key date was in 1969, when the European Council reaffirmed its intention of moving ahead to full economic and monetary union. This was motivated "in part by the incipient instability of the dollar and by fears that a disorderly revaluation of European currencies would endanger the EEC" (Eichengreen, 1996: 153). This led in 1970 to the formation of a study group of high-level officials chaired by the Prime Minister of Luxembourg, Pierre Werner.

The Werner Plan envisaged the creation of a European monetary union by 1980. This was to be achieved in stages, with each step bringing the fluctuations in intra-European exchange rates ever closer to the ideal of being irrevocably fixed. Along the way, the participating member States would also begin to establish patterns of coordination in other fields of economic policymaking in order to facilitate the convergence of national currencies and to reap other cooperative advantages (e.g. through greater intra-regional trade).

It is important to stress that international monetary conditions were seemingly propitious to monetary union in 1970, with the prevailing Bretton Woods arrangements providing currency stability, and a relatively small and homogenous set of six EU members. These countries broadly shared a similar Keynesian outlook on macroeconomic management. Nevertheless, "the project fell apart even before it could begin. The closure of the gold window in 1971, the oil price shock in 1973, and the sharp

The European
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monetary union

global recession of 1975, made a mockery of European attempts to narrow the fluctuations of their bilateral exchange rates" (Jones, 2002: 5).

The collapse of Bretton Woods caused some very significant problems for European economies. The structures that had been in created in 1957 did not offer an effective vehicle for any pan-European economic policy, but it was obvious that an era of floating exchange rates coupled with failure to support the dollar was hitting European countries in two ways. Not only did European exchange rates tend to appreciate against the dollar, thus damaging competitiveness (especially for Germany), but they did so at different rates, thus upsetting the pattern of exchange rates within Europe, not least by making currency relationships volatile and unstable (Hutton, 2002: 370).

The first response of Europe to the collapse of the Bretton Woods system in the early 1970s consisted of "snake" and "snake-in-the-tunnel" arrangements that were designed to stabilize the intra-European exchange rates within relatively narrow bands in an environment of extreme volatility. This was followed by the creation of the EMS in 1979 with the participation of the members of the European Economic Community (EEC), and eventually by the introduction of the euro and the establishment of the European Monetary Union (EMU) in 1999. Thus it took some 30 years to go from soft pegs to hard pegs (UNCTAD, 2001: 118).

Jones (2002:6-7) stresses the considerable diversity that existed among the European countries prior to embarking on the project of monetary union. On the one hand, France was more vulnerable to currency instability within the Bretton Woods system than Germany (having been obliged, like the United Kingdom, to devalue its currency on several occasions). Italy reflected an important economic dualism between the dynamic, prosperous regions of the north and the much poorer regions of the south.

Finally, although all countries embraced Keynesian demand management techniques, the ways in which macroeconomic policy was actually designed and implemented differed very significantly from one country to another. Thus the French directed their economy through credit rationing, while the Belgians and Dutch resorted more to indicative planning and concerted wage bargaining, and the Germans had an historical proclivity to stress "increasingly rigid notions of absolute price stability".

During 1979-1999, the European Monetary System (EMS) became the forum for the harmonization of monetary policies of the member economies. Progress was indeed difficult. In the absence of monetary integration, intraregional free flow of trade and investment, remained exposed to currency rate fluctuations, especially for investment, as modern capital-intensive investments generally large-scale, involve long-term uncertainty and risk. Free movement of labour also remains exposed

In the absence of monetary integration, intraregional free flow of trade and investment, remained exposed to currency rate fluctuations. especially for investment. as modern capital-intensive investments generally largescale, involve longterm uncertainty and risk

to many hazards as incomes earned in one currency may not be comparable with incomes earned in another currency within the region (Dutta, 2002).

Jones (2002:6) notes that during this period, two competing perspectives of monetary integration coalesced: one called "monetarist", advocating irrevocably fixed exchange rates as an instrument for the promotion of economic convergence, and the other called "economist", insisting on economic convergence as a precondition for irrevocably fixed exchange rates. Member countries were split into two camps: the French, Italians and Belgians advocating the monetarist view, and the Germans and Dutch preferring the economist argument.

In April 1987, Tommaso Padoa-Schioppa, a senior Bank of Italy official, warned in a report that the complete freedom of capital movements envisaged by the Single European Act would threaten the capacity of the EMS to continue, and over the next year pressed the case for a single European currency as the only effective response. Jacques Delors, then the President of the European Commission, understood that France had only two realistic options: either to opt for floating rates, in which case European integration would be irrevocably damaged and the Bundesbank's position would remain unchallenged; or to opt for full monetary integration. And what was true for France was true for Europe (Hutton, 2005: 375). 10

The events leading to the 1992–1993 EMS crisis provide useful lessons on how regional currency arrangements, even with supporting institutions, can break down when exchange rates are inconsistent with underlying inflation and interest rates (UNCTAD, 2005: 120). The problem with the European system was that it forced countries to have the same monetary policy and placed control of that policy in German hands. During the 1980s, this was not a problem, because all of the countries shared the same goals. Sooner or later, however, a crisis was bound to come. When Germany reunified, the massive costs of supporting and rebuilding the East meant a huge fiscal expansion. To prevent that expansion from causing inflation, Germany adopted very tight monetary policies. The problem was that other European countries were forced to match the monetary tightening without the fiscal expansion, which meant a severe recession that spread across the whole continent, eventually touching Germany itself (Krugman, 1996:138).

The last pretensions of French leadership were shattered when, after Britain and Italy were forced out of the EMS in 1992, France succumbed to overwhelming foreign exchange speculation the following year. Shadowing high German interest rates following reunification had created a deepening French recession. "The tight bands that the EMS had operated were relaxed to allow France to remain a titular member revolv-

The events leading to the 1992–1993
EMS crisis provide useful lessons on how regional currency arrangements, even with supporting institutions, can break down when exchange rates are inconsistent with underlying inflation and interest rates

¹⁰ According to Krugman (1996:138), prior to the crises of 1992/1993, "the Europeans looked at the success of the European Monetary System between 1982 and 1990 and saw it as a fundamental endorsement of sound money, rather than realizing that it was a temporary success based on special circumstances."

ing around the German sun" (Hutton, 2002: 385). One hundred sixty billion French francs (about \$32 billion) were reportedly spent on the currency's defence in the week ending 23 September 1992 (Eichengreen, 1996: 173)

The relative success of the launching of the euro has rekindled interest in monetary union among developing countries

The speculation that forced the sterling out of the EMS in 1992 was mountainous, reaching \$20 billion on "Black Wednesday" alone (Hutton, 2005: 410). The Swedish situation also bore a strong basic resemblance to its British counterpart: a severe recession brought on by the need to match German interest rates, with the Swedish currency clearly overvalued by normal standards, especially given the devaluations by the United Kingdom and Finland. Indeed, there was a speculative attack on the Swedish crown just after the United Kingdom crisis, which was beaten back only by pushing short-term interest rates up to 500 per cent (Krugman, 1996: 139). Reserve losses incurred in the six days preceding the devaluation are reported to have amounted to \$26 billion, or more than 10 per cent of Sweden's GNP (Eichengreen, 1996: 174).

Thus, without capital controls, the EMS had to resort to fiercely conservative economic policies in order to maintain itself. Essentially, members had to shadow German interest rates, inflation and budgetary policy if they were to have a chance of staying within the grid. It was this experience that convinced France that it had to opt for a single European currency even before German reunification made the case politically as well as economically pressing. In 1993, its third financial crisis – after 1969 and 1981-1983 when the franc was again hit by an irresistible wave of speculation, marked the moment when France became completely convinced. In a world in which neither floating nor fixed exchange rates offered sovereignty, the only course was to establish a single European currency (Hutton, 2002: 410).

3.4.2 Launching of the euro

The relative success of the launching of the euro has rekindled interest in monetary union among developing countries. Defenders of the single currency have argued that the establishment of the euro has provided Europe with an autonomy that would not otherwise exist. In the words of Hutton (2002:411): "the brutal reality is that no single European country by itself in an era of floating exchange rates has the same autonomous capacity to manage demand. That can only be regained at the European level."

As we saw earlier, the standard advice on monetary integration is that no developing country should embark on such a project – the necessary macroeconomic and fiscal conditions simply do not exist. While it is true that the European experience does not completely negate such advice, the history of European monetary integra-

tion does suggest a more nuanced interpretation of the facts, and consequently a more sophisticated and less dogmatic reading of economic theory.

Prior to the introduction of the euro, some analysts were very sceptical, if not openly critical. Feldstein (1997), one of the more outspoken critics, argued that:

"The economic consequences of EMU, if it does come to pass, are also likely to be negative. Imposing a single interest rate and an inflexible exchange rate on countries that are characterised by different economic shocks, inflexible wages, low labour mobility and separate national fiscal systems without significant cross-border cyclical transfers will raise the overall level of cyclical unemployment among the EMU members. The shift from national monetary policies dominated by the Bundesbank within the European Monetary system to a European Central Bank governed by majority voting with a determined exchange rate policy will almost certainly raise the average level of future inflation. The emphasis on common economic and social policies will reduce the scope for the experimentation and competition that would otherwise lead to reduction in the current extremely high levels of structural unemployment."

Has such a negative prognosis been borne out by subsequent events? There are good reasons for thinking that critics of the European project of monetary integration have exaggerated the weaknesses of the European economy vis-à-vis its perceived strengths (Todd, 2002; Hutton, 2002). On unemployment, for example, it has been pointed out that European definitions of unemployment tend to give much higher figures than their American counterparts.

Some analysts have suggested that the relatively high growth rates registered by the United States economy in the late 1990s was in part the product of an erroneous evaluation of the ITC sector boom. The overvaluation of the dollar and the collapse of the high-tech boom, which had boosted exports of ITC equipment, took their toll on United States exports, which lost one fifth of their market share between 2000 and 2003 (see Glyn, 2006: Chapter 6). It has also been pointed out that the higher growth rates registered in the United States depended to a large extent on an expanding labour force (due to higher rates of immigration) compared to the stagnant demographics of Western Europe and Japan (Todd, 2002). The subsequent fall of the dollar vis-à-vis the euro may in part reflect a re-evaluation of the long-term performance of the United States economy, as well as a more positive interpretation of the perspectives for the euro area.

Several points need to be borne in mind in any evaluation of the relative performance of the euro since its introduction:

There are good reasons for thinking that critics of the European project of monetary integration have exaggerated the weaknesses of the European economy vis-à-vis its perceived strengths

Being part of a currency union requires discipline, and the loss of the exchange rate as an instrument for coping with economic shocks can be costly

- (a) As we have just seen, European monetary union has taken a long time, starting with the ERM in the 1970s. There were serious crises in the 1990s for countries like France, the United Kingdom and Sweden. The path to the euro has certainly not been smooth, which suggests that any developing country taking a similar path needs to be careful to avoid costly macroeconomic mistakes.
- (b) Early evidence suggests that macroeconomic performance has not improved under the discipline of the euro. The experience of the first seven years demonstrates that membership has its benefits, but that these benefits are not free (Aherne and Pisani-Ferry, 2006). Being part of a currency union requires discipline, and the loss of the exchange rate as an instrument for coping with economic shocks can be costly. Within the euro area, some members such as Ireland are thriving; others, especially among the southern member States, are struggling and face painful adjustments in the future. For instance, Ireland and Portugal have experienced marked real exchange appreciation, but with very different consequences for export growth. There has been real depreciation in both Germany and France, but only Germany's exports have flourished.
- (c) As noted in section 3, a dichotomy exists between the European Commission and analysts like Krugman on the differential impacts of shocks on monetary unions. According to the European Commission, differential shocks will occur less frequently in a monetary union, because trade between the industrial nations of the EU is to a large degree intra-industry trade. According to Krugman, specialization under integration will increase shocks.

In any evaluation of the experience of the euro, three additional dimensions to the process need assessment:

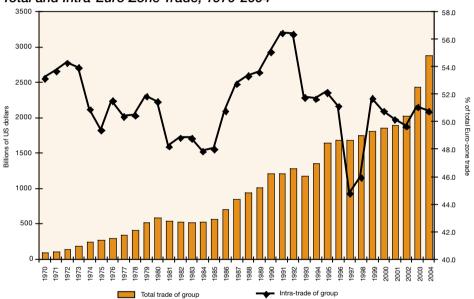
- (a) Even though structural funds pre-date the establishment of the euro, have they been instrumental in providing compensation and a cushion for asymmetric shocks?
- (b) Has the independent central bank, the ECB, acted consistently with the objectives of a monetary policy for the euro zone?
- (c) Finally, considering a possible "deflationary bias" in the EU Stability Pact, has the convergence criteria been necessarily the right ones for promoting growth and employment creation in the euro zone.

These questions are clearly complicated, and space constraints here do not allow an exhaustive evaluation of all these issues. Moreover, bearing in mind that convergence has proven to be a long-term phenomenon, it needs to be stressed that the seven years that have passed since the full implementation of the euro do not give enough

time for a full assessment. However, some basic observations can be made. Firstly, contrary to the propositions of Rose (2002) and others, there is little evidence that the euro has increased the intensity of intra-European trade (figure 1).¹¹

Secondly, despite the strictness of the budgetary criteria and the anti-inflationary stance of the ECB, there is some evidence that the implementation of the euro gave rise to inflationary pressures, particularly in the service sectors, with very high one-off increases (as much as 30 per cent in some sectors) in price levels, as producers took advantage of the introduction of the single currency to increase their prices.

Figure 3.2
Total and Intra-Euro Zone Trade, 1970-2004



Source: UNCTAD Statistical Yearbook 2005

Thirdly, budgetary targets for the EU Growth and Stability Pact foundered in 2004 on German and French deficits, which remained stubbornly high as growth in the euro zone stagnated. Persistent budget deficits are telling signs of lack of business confidence in the prospects for profitable investment (Glyn, 2006: 36). This experience would suggest that the convergence criteria have been excessively focused on stability rather than on promoting growth. Given their key role in setting the goal

Persistent budget deficits are telling signs of lack of business confidence in the prospects for profitable investment

¹¹ Using a panel data analysis, Micco et. al. (2003) claim to have found evidence of such an effect of European Monetary Union on trade, with an increase in bilateral trade of 5 to 10 per cent between 1992 and 2002 (much smaller of course than the anticipated "Rose" effect). However, their analysis clearly does not capture the full impact of the creation of the euro, because this was only implemented in 1999.

posts for membership in the European single currency, the convergence criteria that were adopted in Maastricht in 1991 need to be examined closely.

The Maastricht criteria have become something of a model for African countries

3.5 Convergence criteria

The Maastricht Treaty of 1991 stipulated that the transition to the final stage of monetary union was conditional on a number of "convergence criteria", and that a country could join the union only if:

- 1. Its inflation rate is not more than 1.5 per cent higher than the average of the three lowest inflation rates among the EU member States;
- 2. Its long-term interest rate is not more than 2 per cent higher than the average observed in these three low-inflation countries;
- 3. It has joined the exchange rate mechanism of the EMS and has not experienced a devaluation during the two years preceding the entrance into the union;
- 4. Its government budget deficit is not higher than 3 per cent of its GDP (if it is, it should be declining continuously and substantially and come close to the 3 per cent norm, or alternatively, the deviation from the reference value (3 per cent) should be exceptional and temporary and remain close to the reference value (Art. 104c (a); and
- 5. Its government debt should not exceed 60 per cent of GDP (if it does, it should diminish sufficiently and approach the reference value (60 per cent) at a satisfactory pace. (De Grauwe, 2005: 143).

The designers of the treaty clearly thought that the main danger was that fiscal policy may indirectly put pressures on monetary policy. For instance, if a country got into trouble servicing its debt, the central bank might be led to ease monetary policy to lower the treasury's interest costs and prevent a financial crisis. The Stability and Growth Pact was aimed at minimizing that danger in Europe (Masson and Patillo, 2004:6).

The Maastricht criteria have become something of a model for African countries. Thus, for instance, when in April 2000, in Accra, Ghana, the leaders of five West African countries declared their intention to establish a monetary union by January 2003, the extent to which the criteria were influenced by the Maastricht plan was self-evident. The leaders committed themselves to lowering central bank financing of budget deficits to 10 per cent of the previous years' government revenue, reducing budget deficits to 4 per cent of GDP, and fixing a target for inflation no higher than 5 per cent per annum (Siddiqi, 2006).

But the key question is whether the criteria adopted in Europe were the right ones, because of their excessive emphasis on inflation. On a theoretical level alone, in an environment of zero inflation (and many European countries have moved close to such a situation), there is likely to be more real wage rigidity, making adjustments to asymmetric sectoral shocks more difficult and leading to higher rates of unemployment. Tensions were particularly evident between the French and German governments on this issue, with Germany insisting on maintaining low, possibly negligible rates of inflation, something compounded by the impact of its reunification in the early 1990s.

In any case, as we saw earlier, the Maastricht Plan did not start off auspiciously. During the late spring and summer of 1992, the larger Treaty on European Union ran into ratification with a popular veto in Denmark and a close referendum in France. Moreover, these troubles coincided with a new and deep European recession, rising unemployment and worsening public finances. This combination of factors spilled over into currency markets, first rocking and then shattering the exchange rate mechanism at the core of the EMS. In the autumn of 1993, the Heads of State and Government announced that the bands for currency fluctuations would have to be widened from +/- 2 per cent to +/- 15 per cent. The mood regarding the possibilities of achieving monetary union was generally pessimistic.

It is also important to note that the Maastricht criteria stress macroeconomic convergence (inflation, interest rates, budgetary policies), whereas the theory stresses microeconomic conditions for a successful monetary union. As a consequence, in the absence of the exchange rate instrument and a centralized European budget, national budgets are the only available instruments for member States to confront asymmetric shocks. As de Grauwe (2005:238) has noted: "It is clear that the Pact has been guided more by the fear of unsustainable debts and deficits than by the need for flexibility."

Thus, the general thrust of these convergence criteria was deflationary – many countries were required to cut budget deficits, to reduce public debt and to bring down inflation and interest rates to meet the criteria. The relatively poor economic performance of many of the EU economies during the 1990s may, to some degree, be attributable to the efforts expended to meet those criteria. From 1992 to 1999, national income in the euro zone countries grew by an annual average of 1.7 per cent, compared with the average for the United Kingdom (which had abandoned the disciplines of the stability pact in 1992) of 2.5 per cent.

Over the same period, the unemployment rate fell substantially in the United Kingdom (and also in the United States and Canada), but tended to rise in the euro zone countries – notably in France, Germany and Italy (Ireland being the main exception as its unemployment rate fell dramatically) (Arestis and Sawyer, 2003:253).

On a theoretical level alone, in an environment of zero inflation (and many European countries have moved close to such a situation). there is likely to be more real wage rigidity, making adjustments to asymmetric sectoral shocks more difficult and leading to higher rates of unemp<mark>loyment</mark>

Clearly, one of the key lessons from the European experience has been the need to build up institutions to promote regional integration and monetary union Paradoxically, however, this earlier negative experience served to strengthen the resolve of European leaders with regard to the establishment of the euro. Despite the popular malaise that grew out of the recession of the early 1990s and the repeated currency crises of 1992, 1993 and 1995, the Heads of State and Government continued to pursue European monetary union. Moreover, "they responded to each setback with a consolidation of the Maastricht Plan and a redoubling of their efforts to achieve it. In this way, they were able to convince both their own electorates and international capital markets that EMU would come about." (Jones, 2002:10).

The subsequent economic performance of the euro has also been questioned. De Grauwe's (2005:240) verdict is perhaps the most damming on this point:

"We conclude that the Stability and Growth Pact has gone too far in imposing rules on national budgets...the flaws of the Stability and Growth Pact...led to serious problems in 2002-4, when major euro zone countries were hit by an economic downturn. This led to an increase of the budget deficits of France, Germany, Italy and Portugal. In the name of the Pact, the European Commission insisted that these countries should return to budget balance even in the midst of a declining business cycle. A number of countries, in particular, France and Germany, refused to submit their economy to such deflationary policies... The result was very predictable. The Commission had to yield to the unwillingness of these countries to subject their policies and their commitments towards the increasing number of unemployed to the rule of the mythical number 3. In November 2003 the Council of Ministers abrogated the procedure that the European Commission had started. For all practical purposes the Pact had become a dead letter."

3.6 Challenges for Africa

What does all this imply for Africa? Clearly, one of the key lessons from the European experience has been the need to build up institutions to promote regional integration and monetary union (UNECA, 2006). According to Masson and Patillo (2004:11):

"In Africa,...the institutional challenges are much greater. Existing national central banks generally are not independent and countries with their own currencies have often suffered periods of high inflation because the central banks were forced to finance public deficits or other quasi-fiscal activities. A critical question for Africa is whether the creation of a regional central bank can be a vehicle for solving credibility problems that

bedevil existing central banks. If so, establishing a central bank that is more independent and exerts greater discipline over fiscal policies than national central banks do may enable it to become an 'agency of restraint'...However, history tells us that such an agency of restraint requires other institutional buttresses and does not emerge directly from monetary union alone" (Masson and Patillo, 2004: 11).¹²

What this literature reveals is a fundamental mistrust in the workings of State institutions and an attempt to depoliticize policymaking. It is important, however, for African countries to ask themselves whether such an objective is desirable or even achievable. There is a tendency to push back the arguments and blame "institutions" for not having properly implemented policy. But, as UNCTAD (2001:114) notes: "the experience of major industrial countries with floating rates suggests that floating rates suggests that volatility, gryrations and misalignments in exchange rates cannot simply be attributed to lack of credible institutions. Rather, they are systematic features of currency markets dominated by short-term arbitrage flows."

In the case of African countries, they lack a major reserve-currency country within the region. As UNCTAD (2005:110) has noted: "Can [developing] countries be expected to solve their exchange rate problems unilaterally when the magnitude, direction and terms and conditions of capital flows are greatly influenced by policies in major reserve-currency countries, and when international currency and financial markets are dominated by speculative and herd behaviour?" However, a dissenting opinion on this was provided by Robert Mundell, who in a speech delivered in 2002 at UNECA, gave a broad outline on how Africa could achieve monetary union (box 3).

It is important, however, for African countries to ask themselves whether such an objective is desirable or even achievable

¹² Not all analysts share this assessment of the importance of "independent" central banks. See Grabel (2000).

Box 3.3

Mundell's Blueprint for Monetary Integration in Africa

Would Africa be better off with currency integration or even a common currency? A good case could be made for that. I argued three decades ago that Africa would be better off with a common currency and an African Central Bank. I have not changed my mind today.

- The first point to recognize is that a common currency means that every country will have more or less the same inflation rate, measuring inflation by a common price index. This does not by itself ensure monetary stability. In theory, an African Central Bank (ACB) could be as much a source of inflation and instability as the national central banks are today. Who controls the ACB and how it is managed are matters of the utmost importance. One of the most important issues that have to be decided is the monetary goal of the ACB. It can be an exchange rate goal or an inflation target. Unless there is agreement on the basic goal of the monetary authority, monetary union cannot proceed. One option would be to adopt a common currency basket. The fact that 14 countries are now tied to the euro could be an inducement for use of the euro as an anchor throughout Africa. The risk is that the euro might fluctuate considerably against the dollar. Africa could probably accept a depreciation of the euro against the dollar but not a strong appreciation. Because of the rising indebtedness and large current account deficit of the United States, there is a good chance of strong diversification out of the dollar and a strong appreciation of the euro. If, for example, it were thought that the dollar had reached the peak of its cycle against the euro, a case could be made for Africa to choose the dollar, the most important currency of the twentieth century. How would you choose between those two? Well, it seems to me that the issue is partly political. How does Africa see itself? Can it gain more by an alliance with Europe or the United States? What is the future of trade and lending relations with Europe compared to that with the United States? It would be better if Africa did not have to make this choice. My belief is that the best common anchor in the long run would be the Special Drawing Right (SDR), which has a chance of becoming the global unit of account.
- A second step would be defining the price (or exchange rate) index that is to be stabilized. National inflation rates differ in a common currency area because goods and services have different weights in the national index. Europe faced this problem by devising what it calls the Harmonized Index of Consumer Prices (HICP) as the measure of EMU's inflation
- 3. A third step is to define what the African currency is going to be. By analogy with the euro, it could be called an "afro." Or it could be named after an animal, such as a lion or eagle. But what unit would measure the value of the "afro"? It could be set equal to the SDR or "intor" or to some other unit, even gold. Whatever it is called, it would have to be easily understood and definite.
- A fourth step is to lock exchange rates. National central banks could initially fix their own currencies to the "afro", buying and selling it as needed to keep the exchange rate locked. No other actions would be needed or desired. The currency board system of adjustment would come into play.
- A fifth step is for the ACB to make monetary policy for the region as a whole. Essentially, this means buying assets to provide for the increase in the money supply required to fulfil the stabilization targets set for the central banks. In the early stages of the monetary union, there would be a strong argument for using an outside anchor (e.g., the euro, the dollar or the SDR) while experience is being built up in the new bank and to maintain confidence in the early transition.
- A sixth step is to devise a mechanism for sharing the profits or seigniorage of the ACB. Probably, this would be related to the equity shares in the bank, as in the European Central Bank. The equity shares are closely related to size as measured by GDP.
- A seventh step, which would amount to the final stage of the monetary union process, would be replacement of the national currencies by the new currency.

In theory, an African Central Bank (ACB) could be as much a source of inflation and instability as the national central banks are today How large should the "African" currency area be? Would both the Francophone and Anglophone countries fit into the same house? Does Africa mean sub-Saharan Africa? Another consideration is the role of power centres. Countries that aspire to be regional or world leaders try to centralize international political activity at their own political capitals. Each independent currency area tends to be linked to a power centre. Are power centres an issue in Africa? Where are they now and what can we expect in the future? Is there an expectation or hope that the new African Union will be the vehicle for a future African government that will settle on some location as a power centre, and will that also be the financial centre?

.....With improved economic organization in Africa, the road might be clear for a muchneeded "Marshall Plan." Monetary stability is not everything, but without it, the rest is nothing. Monetary integration can produce better organization in the economic sphere and be a catalyst for integration in the political sphere. The new African Union opens the door to some exciting new possibilities and may find in monetary integration the wedge it needs to introduce some degree of political centralization in Africa.

Source: UNECA, 2002

Contrary to the opinion expressed by Mundell, Masson and Patillo (2004:7) argue that African countries should achieve monetary integration by using the basic building blocks which already exist – in particular, the CFA (see annex I):

"An expansion (and transformation) of the CFA franc zone would allow countries joining it to achieve stability with the euro, while at the same time benefiting from the considerable credibility associated with the CFA franc. It would be natural to envision the EU assuming France's role of guaranteeing the currency peg. However, France's EU partners have shown no enthusiasm for doing so, especially since an enlarged CFA might have more serious budgetary and monetary consequences for Europe than is the case at present. The question for African countries would then arise of whether to continue to anchor the CFA franc to the euro, and if so, how. The alternatives would be a joint float, a currency board with a peg to the euro, or "euroisation," that is, the outright adoption by African countries of the euro as their currency If the former, the currency would then rely solely on the discipline and independence of the central bank, operating a credible domestic monetary anchor. If the latter, countries would abandon any possibility of monetary independence vis-à-vis Europe, and doing so would likely revive perceptions of colonial dependence."

On the dangers of "intermediate" regimes, Masson and Patillo (2004:7) suggest that the dilemmas confronting African policymakers have perhaps been exaggerated. "Recently, a great deal of attention has been paid to the hypothesis that countries need to choose between very hard pegs (at least a monetary union) or flexible exchange rates: the intermediate regimes are not sustainable. The main argument relates to the trend toward capital account liberalization, which makes the mainte-

Recently, a great deal of attention has been paid to the hypothesis that countries need to choose between very hard pegs (at least a monetary union) or flexible exchange rates: the intermediate regimes are not sustainable

nance of anything but perfectly credible pegs difficult. We consider that this factor is unlikely to dictate the choice of regime for most African countries, which continue not to be well integrated with international capital markets. If true, this would leave open the full range of possible regimes, including adjustable pegs."

Monetary
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3.7 Conclusion

As Bradford (2005:1) notes, recent economic policy experience in developing countries has led many to conclude either that there is no "policy space" for economic policy alternatives and/or that mainstream economic policy practice is highly deflationary. The lack of choice would seem to weaken democratic processes in developing countries, limiting the role of public discussion, debate and decision in economic policymaking. Similarly, the perceived priority of financial stability over real-economy objectives of economic growth and greater employment creates a sense that there are biases in the globalization process and in its governing international financial institutions.

Monetary arrangements between African countries provide a unique opportunity to some of the macroeconomic autonomy "policy space" that was lost in the 1980s during the debt crisis. Assuming that national authorities adopt a responsible approach to macroeconomic policymaking by setting their own priorities in terms of exchange rates, fiscal policy and interest rates would surely be a step forward. However, it is clear from our brief historical overview of the European experience and the broader international system that such policies of coordination engender many risks. Policymakers need to be fully aware of those risks and the possible costs of mistakes before embarking on a project of monetary coordination.

The arguments in favour of greater coordination made by Mundell suggest that the way forward requires a more ambitious agenda. African countries need to be involved in this process if the right pro-growth financial architecture is going to emerge. For Africa, neither the experience of the EMS nor the Maastricht criteria for achieving monetary union are appropriate. Considering the evidence of what Michael Stewart (1983) called a "deflationary bias" in the current international financial architecture, a more pro-growth macroeconomic framework needs to be designed and implemented.

Greater macroeconomic coordination between African countries is required to achieve this goal, provided a certain number of preconditions are met, including the consolidation of the fiscal tax base. As a way of gaining revenue, independent monetary policy is at present too valuable a mechanism for most governments to contemplate its liquidation. A second priority is to accelerate the degree of trade

integration by removing barriers to trade between partners. A greater sychronization of economic cycles is required, and the most immediate way to achieve this is through trade integration.

There are good reasons to doubt official statistics pertaining to intra-African trade flows and to believe that if informal trade flows are counted, the true degree of integration is much higher than is commonly thought. Nevertheless, far more progress needs to be made in dismantling both procedural and structural trade barriers. In the European case, the initial customs union was achieved ahead of schedule in the 1960s. Similar progress is required in Africa before moving to the next step of macroeconomic policy coordination.

There are good reasons to doubt official statistics pertaining to intra-African trade flows and to believe that if informal trade flows are counted, the true degree of integration is much higher than is commonly thought

References

Ahearne, Alan and Jean Pisani-Ferry (2006), "The Euro- Only for the Agile", Bruegel Policy Brief, Issue 2006/01, February

Artesis, Philip and Malcolm Sawyer (2003), "European integration and the 'euro project'" in Jonathan Michie (ed.), "The Handbook of Globalisation", Edgar Elgar, Cheltenham, UK, pp.252-260

Bowles, P. and G. White (1994), Central Bank Independence: A Political Economy Approach', Journal of Development Studies

Bradford, Colin I. (2005), Prioritizing Economic Growth: Enhancing Macroeconomic Policy Choice, UNCTAD G24 Discussion Paper, April.

Brownbridge, M. and C. Kirkpatrick (2000), 'Financial Regulation in developing countries', Journal of Development Studies, 37(1):1-24

Clément, Jean A. P, Mueller, Johannes, Cossé, Stéphane, Le Dem, Jean (1996), 'Aftermath of the CFA Franc Devaluation', IMF Occasional Paper No. 138 May

de Caravalho, C. (1995-6), 'The Independence of central banks : A critical assessment of the arguments', Journal of Post-Keynesian Economics (18 (2) : 159-75

de Grauwe, Paul (2005), Economics of Monetary Union (Sixth Edition), Oxford University Press

de Grauwe, Paul and Georgios P. Kouretas (2004) "Editorial" Journal of Common Market Studies, Volume 42, Number 4, pp. 679-87

Dutta, M (2002), "EU and The Euro Revolution: The Theory of Optimum Currency Area Revisited", October 22, 2002 The Bologna Centre: University Of Bologna, Jhu-Sais/Bologna, Bologna, Italy, Invited Lecture: World Gold Council Series

Eichengreen, Barry (1996) "Globalising Capital: A History of the International Monetary System"

Epstein, Gerald and James Heintz (2006), "Monetary Policy and Financial Sector Reform for Employment Creation and Poverty Reduction in Ghana", Country Study No. 2, June, published by the International Poverty Centre, UNDP.

Feldstein, Martin (1997), "The Political economy of the European economic Monetary Union: Political Sources of an economic liability", The Journal of Economic Perspectives, Fall, Volume 11, Issue 4, pp.23-43

Glyn, Andrew (2006), "Capitalism Unleashed. Finance, Globalization and Welfare", Oxford University Press

Grabel, I, (2000), 'The Political economy of "policy credibility": the new classical macroeconomics and the remaking of emerging economies', Cambridge Journal of Economics, 24(1):1-19.

Hutton, Will (2002), The World we're in", Abacus, London

International Monetary Fund (IMF), (2003), "Lessons from the Crisis in Argentina", Policy Development and Review Department, October, http://www.imf.org/external/np/pdr/lessons/100803.pdf

Jones, Erik (2002), "The Politics of Economic and Monetary Union – Integration and Idiosyncrasy", Oxford, Rowman and Littlefield Publishers, Inc.

Joshi, V. (2001), 'Capital controls and the national advantage: India in the 1990s and beyond', Oxford Development Studies 29(3)

Kaminsky G. and C. Reinhart (1999), "The Twin Crises: The Causes of Banking and Balance of Payments Problems", American Economic Review 89: 473-500

Krugman, Paul (1996), Pop Internationalism, The MIT Press, Cambridge, Massachusetts, Chapter 9- Challenging Conventional Wisdom

Levine, R. (1997), 'Financial development and economic growth: Views and agenda', Journal of Economic Literature 35: 688-726

Masson, Paul and Catherine Patillo (2004), "A Single Currency for Africa?" Finance and Development, December 2004, pp. 9-15

Masson, Paul and Patillo (2004), "The Monetary Geography of Africa"

McKinnon, Ronald I. (2004), "Optimum Currency Areas and Key Currencies: Mundel I versus Mundell II", Journal of Common Market Studies, Volume 42, No. 4, pp. 689-715.

Melitz, J. (1995), "The Current Impasse on Research in Optimum Currency Areas" European Economic Review 39, 492-500

Michie, Jonathan and John Grieve Smith (eds) (1995), "Managing the Global Economy", Oxford University Press

Mold, Andrew (2006), "Tackling the Commodity Price Problem - New proposals and revisiting old solutions" in Mareike Meyn, *African Development Yearbook 2006*, Institute for World Economics and International Management (IWIM), University of Bremen

Mundell, Robert (2002), Views in "Defining Priorities for Regional Integration in Africa", UNECA, 2002

Neumeyer, P. (1998), "Currencies and the Allocation of Risk: The Welfare Effects of a Monetary

Panic, Mica (1995), "The Bretton Woods System: Concept and Practice", in Michie, Jonathan and John Grieve Smith (eds) (1995), "Managing the Global Economy", Oxford University Press

Rogoff, Kenneth S. (2002), 'Rethinking Capital Controls: When should we keep an open mind?", *Finance and Development*, Volume 39, Number 4, December 2002, http://www.imf.org/external/pubs/ft/2002/12/rogoff.htm

Rose, Andrew (2000), "One money, one market: Estimating the Effect of Common Currencies on Trade", Economic Policy, No. 30, pp.9-45

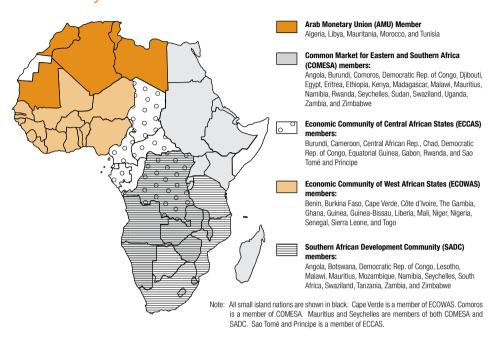
Rose, Andrew and E. van Wincoop (2001), "National Money as a Barrier to Trade: The Real Case for Monetary Union", American Economic Review, Vol. 91, No. 2, pp. 386-90.

Siddiqi, Moin (2006), "A Single African currency in our time?", African Business, May, pp. 28-35.

UNCTAD Trade and Development Report 2001 – Chapter V. Exchange Rate Regimes and the Scope for Regional Cooperation

World Bank (2005), "Economic Growth in the 1990s – Learning from a Decade of Reform", Chapter 4.

Annex I: The "Patchwork Quilt Approach" to Monetary Union in Africa



Source: Masson and Patillo,,2004:10.

Annex II: A Primer on Beta and Sigma Convergence

The Solow model predicts that "among countries with the same steady state, poor countries should grow faster on average than rich countries". What does this imply in practical terms? One way of understanding this is through "beta" and "sigma" convergence.

Beta convergence:

- Absolute income convergence is the tendency of poor countries to grow faster than rich ones.
- Conditional income convergence is the tendency of poor countries to grow faster than rich ones, once allowance is made for differences in their steady states.

Sigma convergence:

- Income dispersion (e.g. the standard deviation of the logarithm of per capita income across countries) tends to fall over time.

Convergence of the first kind (poor countries growing faster) tends to generate convergence of the second kind (reduced dispersion), but this can be offset by new disturbances that increase dispersion. A simple numerical example will help to clarify these concepts:

Example 1:

	Group R	<u>Group P</u>
• Time 0	\$10,000	\$2,000
• Time T	\$ 5,000	\$4,000

- Conclusion 1: the rate of growth for group R is negative: -50 per cent; the rate of growth for group P is positive: 100 per cent. There is beta convergence.
- <u>Conclusion 2</u>: the difference between groups R and P has shrunk over time from \$8,000 as of time 0 to \$1,000 as of time T (the standard deviation fell from \$5,657 to \$707). There is sigma convergence.

Example 2:

		<u>Group R</u>	<u>Group P</u>
•	Time 0	\$ 5,000	\$ 4,000
•	Time T	\$10,000	\$ 2,000

- Conclusion 1: the rate of growth of real GDP for group R is positive (100 per cent between time periods 0 and T); the rate of growth for group P is negative (-50 per cent between time periods 0 and T). There is a **lack of beta convergence** in this example.
- Conclusion 2: the difference in income per head increases from \$1,000 as of time 0 to \$8,000 as of time T (and the standard deviation increases from \$707 to \$5,657 between time periods 0 and T). There is a lack of sigma **convergence** in this example.

In conclusion, it is not possible for the income gap between groups R and P to narrow if the initially poor P does not grow faster than the initially rich R. In other words, beta convergence is a necessary condition for sigma convergence.

Example 3:

		<u>Group R</u>	Group P
•	Time 0	\$10,000	\$ 5,000
•	Time T	\$ 5,000	\$10,000

- <u>Conclusion 1</u>: the rate of growth of real GDP per head for group P is positive (100 per cent); the rate of growth for group R is negative (-50 per cent). Therefore, we have beta convergence in this example.
- Conclusion 2: the difference has not changed: it was \$5,000 as of time 0 and it still is \$5,000 as of time T (the standard deviation stayed the same at \$3,536 between time periods 0 and T). There is no sigma convergence.

The conclusion here is that beta convergence is not a sufficient condition for sigma convergence. In other words, P growing faster than R is not enough to guarantee a fall in the standard deviation of GDP per head in the cross-section.

t is worth noting that the empirical evidence for **absolute** β -convergence between sets of countries is scant, because the structural parameters between countries within a given set are often different:

- Different technologies (cf. the specification of the production function)
- Demographic processes (n)
- Technological parameters (φ)

- Savings rates (s) and,
- Last but not least, factors determining the human capital stock: schooling parameters, investment in R&D and factors encouraging entrepreneurship and the awareness of the population for science and technology (Mussen, 2005).

Theoretical Perspectives of Financial Development and Financial Integration



4.1 Introduction

he economic literature posits that a well-functioning economy needs a financial system that moves funds from people who save to people who have productive investment opportunities. In other words, a sound financial system acts as a conduit for sustainable economic growth. The link between financial development and growth was first demonstrated in the literature by Walter Bagehot (1873) and John Hicks (1969), who pointed out that industrialization of England was possible because of the use of the financial system to mobilize productive financial capital.

The argument made by Bagehot, Hicks and also by Schumpeter (1912) was that well-functioning financial institutions such as banks enhance technological innovation by supporting entrepreneurs with the best chances of successfully introducing innovative products and production processes. Levine (1997) provides a review of the literature that clearly shows that the development of financial markets and institutions plays an important role in the growth process of a country and in predicting the future rates of economic growth, capital accumulation, technological change and economic development.

Economic theory indicates that the main role of financial markets and institutions is to minimize the costs of information and transactions. Consequently, savings rates, investment decisions, technological innovation, and long-run growth rates depend crucially on the level of financial development. In the next section, we summarize the views in the literature on how the financial system supports economic growth. The section also focuses on the role of financial systems in economic growth and examines the links between growth and the functions of the financial system. These functions include facilitating the trading of risk, allocating capital, monitoring managers, mobilizing savings, and easing the trading of goods, services and financial contracts.

A sound financial system acts as a conduit for sustainable economic growth

¹ The section draws heavily on Levine (1997).

4.2 The functional roles of the financial system

Financial markets and institutions minimize the costs of acquisition of information and transactions. In the classical perfect world of Arrow-Debreu state-contingent-claim framework, there is no need for financial markets and institutions, because there is full information and transactions costs are absent. Hence, resources do not have to be spent to assess risks embedded in projects and behaviours of managers, and there is no need for a mechanism to reduce transaction costs. It is only when the assumptions of the Arrow-Debreu framework are relaxed and fiction introduced that the role of financial systems becomes very important. In a bid to minimize transaction and information costs, Merton and Bodie (1995) demonstrate that financial markets and institutions emerge to facilitate the allocation of resources across space and time, in an uncertain environment.

Following Levine (1997), the chapter presents five functional roles of financial markets and institutions: management of liquidity risk; information acquisition and resource allocation; monitoring of investment projects; mobilization of savings; and the facilitation of the exchange of goods and services. These functions affect economic growth through capital accumulation and technological innovation. The impact of capital accumulation either alters the savings rate or reallocates savings among different capital-producing technologies. With regards to technological innovation, the financial system affects steady-state growth by altering the rate of technological innovation. In the following sections, we look at how market frictions motivate the emergence of financial contracts, markets and intermediaries and their contributions to economic growth.

4.2.1 Management of liquidity risk

The complexity of economic structures gives rise to information and transaction costs. Financial markets and institutions emerge to minimize the risks associated with these costs through the trading, hedging and pooling of risk. Risk could be divided into: liquidity and idiosyncratic risk.

The literature defines liquidity as the ease and speed at which an asset is converted into purchasing power (or currency) at agreed prices. By this definition, real estate is less liquid than equities, and equities in developed economies are more liquid than those traded in less developed economies. Liquidity risk therefore emerges because of uncertainties associated with converting assets into a medium of exchange. Informational asymmetries and transaction costs impact negatively on liquidity and consequently raise liquidity risk. That is why the liquidity risk of a less developed country is higher than that of a G-8 country. Financial markets and institutions therefore

evolve to mitigate the frictions associated with liquidity risk. Levine (1997) suggests that liquid capital markets are therefore markets where financial instruments are traded relatively easily and uncertainty about the timing and settlement of trades is limited.

The relation between liquidity and economic development emerges because even though some economic projects may have high returns, they require long gestation periods and therefore demand capital commitments for a longer time period than what savers are prepared to commit. Financial markets and institutions therefore emerge to provide the liquidity to savers for long-term investments. It has been argued by Hicks (1969) that it was the capacity of capital markets to manage liquidity risk that spurred the industrial revolution in England. Hicks points out that most of the products produced during the first decade of the industrial revolution were invented much earlier, through technological innovations. However, the inventions needed a large capital infusion that had to be committed for a long period. He contends that the catalyst responsible for growth in eighteenth-century England was capital market liquidity.

The emergence of well-functioning liquid capital markets in the eighteenth century allowed the English to hold assets such as equity, bond or demand deposits as savings. The capital markets then converted the liquid financial instruments into long-term capital investments (or loans) to support the production processes. Bencivenga, Smith and Starr (1966) suggest that the industrial revolution would not have occurred had there not been improvements in the capital markets that allowed manufacturers to obtain long-term loans.

The theoretical explanation for the link between liquidity risk management (or financial markets) and growth has been well explained in the literature. Diamond and Dybvig (1983) present a model of the link between liquidity and growth where the economic environment is hit by shocks after savers make a choice between two investment projects: an illiquid, high-return project and a liquid, low-return project. In the absence of financial markets in such a risky environment, capital funds are only committed to liquid, low-return projects.

However, the emergence of stock markets allows equity holders to freely sell their shares, giving investors access to capital. Hence, financial markets and institutions reduce liquidity risk through banking intermediation and the trading of equities. As the costs of transactions in the stock market fall, there is more investment in illiquid, high-return projects and consequently higher growth.

In the same vein, financial intermediaries enhance liquidity and reduce liquidity risk by offering liquid deposits to savers and undertaking a mix of liquid, low-return investments and illiquid, high-return investments to satisfy demand. By receiving

Financial markets
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deposits from savers and investing in a mix of liquid and illiquid assets, banks provide insurance to savers against liquidity risk while facilitating long-run investments in high-return projects. Thus, by eliminating liquidity risk, banks foster investments in high-return, illiquid projects and by so doing accelerate growth.

As pointed out, financial markets and institutions facilitate the minimization of liquidity risk and the diversification of risk, factors which contribute to economic growth through the lending channel. In addition, risk diversification enhances technological change and economic growth. Innovators in the economy are constantly in search of new and profitable technological advances. However, research into innovations that would advance technological changes is a very risky proposition. King and Levine (1993) suggest that financial markets and institutions allow economic agents to diversify risk by supporting investment in a portfolio of innovative projects. By so doing, financial systems facilitate risk diversification and in the process accelerate technological change and economic growth.

4.2.2 Information acquisition and resource allocation

Without financial markets and institutions, savers are not prepared to commit their savings to investors who are engaging in long-term risky projects, because it is difficult and costly to monitor and evaluate such projects. In addition, savers may not have the time, capacity or means to collect and process information on a wide array of enterprises, managers and economic conditions. Savers therefore withhold their savings and do not invest in projects for which they have very little or reliable information.

Financial systems therefore emerge to minimize the costs of acquiring information on projects and to monitor and evaluate their performance (see Diamond 1984). Levine (1997) demonstrates the role of the banks in acquiring information with this example. Consider a situation where there is a fixed cost to acquire information about a production technology. In the absence of intermediaries, each investor must pay the fixed cost. This information cost structure creates an avenue for a group of individuals to form (or join or use) financial intermediaries to economize on the costs of acquiring and processing information about investments. The emergence of the intermediaries therefore minimizes of the cost of acquiring information about risky investment projects and improves the allocation of resources.

The capacity of financial intermediaries to gather and process information has significant growth implications. As argued by Greenwood and Jovanovic (1990), many firms and entrepreneurs are searching for capital to support their investment projects. Hence, financial markets and institutions that are better at screening viable firms and managers will induce a more efficient allocation of scarce financial capital

and resources and consequently faster growth.² In addition to identifying the best production technologies through the acquisition of information, financial intermediaries also boost the rate of technological innovation by identifying entrepreneurs with the best chances of successfully introducing new goods and production processes.

Stock markets may also play an influential role in the acquisition and dissemination of information about investment projects. The size and liquidity of stock markets create an incentive for economic agents to acquire information about firms. Groosman and Stiglitz (1980) explain that larger and more liquid markets allow agents with private information to profit from the information. Stock markets reduce resources that economic agents must spend to acquire information. Generally, stock markets aggregate and disseminate information through the publication of prices of financial instruments.

As economic theory suggests, asset prices contain all pertinent information and therefore agents do not have to undertake the costly process of evaluating firms, managers and market conditions. This public-good aspect or public disclosure by the stock markets means that economic participants would direct resources that would otherwise be used for acquiring information to other productive activities. Thus, stock markets stimulate the acquisition of information and as a consequence substantially improve the allocation of resources. By facilitating the acquisition of information for projects and the efficient allocation of resources, stock markets influence substantially long-run economic growth.

4.2.3 Monitoring of investment projects

Another role of financial markets and institutions is to reduce the cost of acquiring information and monitoring investment projects. In general, business owners design financial contracts to ensure that their firms are managed in their best interests. At the same time, creditors such as banks, equity and bond holders create financial arrangements to force owners and managers to run firms in accordance with the interests of the creditors. Financial contracts are very important because they ensure that the flow of mobilized savings (or capital) to profitable investments is not impeded. They also ensure that markets and institutions improve monitoring and corporate control of investment projects, the accumulation of capital and the efficient allocation of resources to ensure long-run growth.

Stock markets reduce resources that economic agents must spend to acquire information

As pointed out in Levine (1997), Bagehot (1873) explains the economic success of England in the mid-1800s by pointing out that England's financial system at the time was very good at identifying and funding profitable projects than most countries.

Financial intermediaries reduce information costs even further because they can mobilize the savings of many individuals and lend these resources to project owners

To understand the linkage between monitoring of projects and growth, let us consider an investment environment where it is costly for outside investors in a project to verify its returns. This creates the need for the development of financial markets and institutions, because the inside owners have incentives to misrepresent project returns to the outsiders, and the cost of verification prevents the outside owner from monitoring the project. Under this condition, outsiders would not be prepared to invest in the project, since they cannot ascertain the true return on the project due the cost of verification.

Hence, verification costs impede investment decisions and reduce economic efficiency. They also imply that outsiders constrain firms from borrowing to expand investment because higher leverage means greater risk of default and higher verification expenditures by lenders. To address the issue, a financial institution would lend to the inside owners of the project if they post a collateral and allow for the monitoring of the project.

Financial intermediaries reduce information costs even further because they can mobilize the savings of many individuals and lend these resources to project owners. As a result, financial intermediaries are able to economize on aggregate monitoring costs because a borrower is monitored only by the intermediary and not by all individual savers. In addition, financial markets and institutions facilitate the efficient separation of ownership from management of the firm.

Furthermore, with time, financial intermediaries and firms cultivate strong relationships that further reduce the cost of information acquisition. Fewer information asymmetries can in turn ease external funding constraints and facilitate better resource allocation. Financial markets and institutions therefore improve corporate control and promote faster capital accumulation and contribute to economic growth by improving the allocation of capital.

4.2.4 **Mobilization of savings**

Financial markets and institutions function to mobilize savings for investments. Without access to capital, many production processes would be constrained to economically inefficient scales. Furthermore, through the mobilization of capital, financial markets and institutions create small denomination instruments that provide opportunities for households to hold diversified portfolios, invest in firms, and increase their asset liquidity. Sirri and Tufano (1995) suggest that, without pooling, households would have to buy and sell entire firms. Hence, by mobilizing financial capital, households are able to enhance their risk diversification and liquidity, and promote the productive sector of the economy through the efficient allocation of resources.

Mobilization of savings is very costly. There are transaction costs associated with collecting savings from different individuals, and informational asymmetries have to be overcome so that economic agents are comfortable parting with their savings. As pointed out in Carosso (1970), in the mid-1880s, some American investment banks used their European connections to raise capital abroad for investment in the United States.

Other investment banks used the ties with major banks and industrialists in the United States to mobilize capital, while others placed advertisements in newspapers, used pamphlets and travelled from state to state, selling securities to individual households. Carosso's example shows that the mobilization of resources entails a range of transaction costs, including the non-monetary cost of assuring savers of the soundness of their investments. De Long (1991) points out that, in addition to other transaction costs, financial institutions have to spend resources to establish stellar reputations so that savers feel comfortable about entrusting their savings to them.

Financial markets and institutions also mitigate the high transaction and information costs associated with the mobilization of financial capital from savers. Mobilization involves multiple bilateral financial contracts or arrangements between productive capital-raising units and savers. To minimize the transaction and information costs, financial institutions pool the multiple bilateral contracts together, ensuring that investors entrust them with their wealth to invest in hundreds of firms. Financial systems that are more effective at pooling the savings of households affect economic development, since better savings mobilization improves resource allocation and consequently boosts technological innovation. Thus, by effectively mobilizing resources for projects, financial markets and institutions play a crucial role in promoting the use of better technologies, thereby encouraging growth.

4.2.5 Facilitation of the exchange of goods and services

In addition to mobilizing savings and thereby expanding production technologies, financial markets and institutions minimize transaction costs and promote specialization, technological innovation and growth. The financial system promotes specialization and productivity movements because its activities lead to lower transaction costs, thereby facilitating the exchange of technology in the market and allowing creative individuals to specialize in innovations that strengthen economic growth.

Greenwood and Smith (1997) demonstrate the links between exchange, specialization and innovation when they argue that more specialization requires more transactions and because each transaction is costly, financial arrangements that lower transaction costs facilitate greater specialization and consequently promote productivity

To minimize the transaction and information costs, financial institutions pool the multiple bilateral contracts together, ensuring that investors entrust them with their wealth to invest in hundreds of firms

gains. These productivity gains in turn spur financial market development, implying that economic development can spur the development of financial markets.

The linkage between financial markets with specialization and growth is evident through technological advancement. As pointed out earlier, lower transaction costs of financial contracts tends to stimulate the invention of new and better and costeffective production technologies. Thus, the development of financial markets and institutions is crucial for the promotion of economic growth, provided the proper economic environment is created.

Thus, the development of financial markets and institutions is crucial for the promotion of economic growth, provided the proper economic environment is created

4.3 Financial structure and growth

In the previous section, the relationship between finance and sustainable economic growth was discussed. In this section, we examine if the financial structure (that is, the degree to which the financial system of countries is intermediary- or marketbased) matters for long-run economic growth, concentrating on the relative merits of intermediary versus market-based financial systems. The literature has debated this issue for a long time, beginning with reference to Germany and the United Kingdom in the late nineteenth and early twentieth centuries. Gerschenkron (1962) and Goldsmith (1969) indicate that the intermediary-based system in Germany permitted a closer relationship between intermediaries and firms than was possible in the market-based system in the United Kingdom. The United States is a financial-market-based economy, while Japan, like Germany, is a dominant intermediary-based system. Porter (1992), in explaining the economic performance of Japan, claims that close relationships between intermediaries and firms increase the availability of capital to borrowing firms and thereby boost economic growth.

There are four competing views in the literature to explain the relationship between financial structure and growth: the intermediary-based view, the market-based view, the financial services view, and the law and finance view. The first two views suggest that financial markets and intermediaries are substitute sources of financial services, while the last two suggest that financial markets and intermediaries are complements in the provision of financial services.

The intermediary-based view suggests that intermediaries have the capacity to identify good projects, mobilize resources, monitor managers and manage risk. It is further suggested that financial intermediaries are very effective at financing projects that are characterized by substantial asymmetric information (e.g., adverse selection and moral hazard), because they have built the capacity to separate "good" borrowers from "bad" ones. Intermediary-based systems are noted to be effective at supporting economic growth of countries at the early stages of economic development than market-based financial systems.

The market-based view emphasizes the role of markets in diversifying and managing risks. In environments where the financial markets are developed, some firms at a certain point of their life cycle rely mostly on market financing, such as equity or bond financing. Allen and Gale (1999 and 2000) argue that industries that are faced with continuous technological advances (and where information is scarce and diversity of opinion persists) should turn to financial markets (bond and stock markets) for their capital needs. Market-based systems are seen as encouraging long-run economic growth.

The financial services view points out that financial intermediaries do provide complementary services to those provided by markets, insisting on the importance of the overall level and quality of financial services rather than the channels through which those services are provided. It focuses on the creation of an environment conducive to better-functioning intermediaries and markets.

The law and finance view, which is an extension of the financial services view, stresses that the distinction between intermediary- and market-based systems is of secondary importance. What matters most is the legal environment and the enforcement of contracts. Proponents of this view suggest that the legal system plays a crucial role in determining the growth-stimulating nature of financial services.

Empirical investigations of these views of financial structure and long-run economic growth are inconclusive. Levine (2000) and Demirguc-Kunt and Levine (2001) find that the distinction between intermediary- and market-based systems is not as important as a country's legal system and the quality of its financial services in explaining economic growth, while Tadesse (2001) takes the opposite view. He argues that for countries with underdeveloped financial sectors, intermediary-based systems outperform market-based systems, while the opposite is the case for countries with developed financial sectors. In contrast, Levine and Zervos (1998) argue that higher stock market liquidity, irrespective of the development of intermediaries, leads to higher growth.

On balance, the literature suggests that financial structure - the mixture of financial markets and intermediaries - is not important in explaining differential growth rates across countries. Countries do not grow faster and firms' access to finance is not systematically easier in either market- or intermediary-based systems. Germany and Japan - major intermediary-based systems - and the United States and the United Kingdom - the foremost market-based systems - have had similar growth rates over time.

This implies that what a country needs is a sound legal system that effectively protects the rights of investors and enforces contracts efficiently. Accordingly, countries developing their financial markets should focus on legal, regulatory and other policy reforms that encourage the proper functioning of both markets and intermediaries, rather than the degree to which their national financial system is market-based or intermediary-based.

The rest of this section focuses on the relationship between financial structure and growth, examining the relationships between financial intermediaries and markets and how they facilitate savings mobilization, information acquisition and risk management, and also examines the financial services view and the law and finance view and how either of them promotes economic growth.

Services of financial intermediaries 4.3.1

Mobilization of savings

Financial intermediaries play an important part in mobilizing savings in the economy. Through their activities, intermediaries lower transaction costs associated with savings mobilization and mitigate the ill effects of moral hazards and adverse selection that make savers reluctant to relinquish control over their savings. By alleviating asymmetric information problems and reducing transactions costs, financial intermediaries facilitate savings mobilization and thereby increase economic growth. Dolar and Meh (2002) suggest that financial intermediaries influence long-run growth because by mobilizing savings, they encourage capital formation and increase the national savings rate. Furthermore, by exploiting economies of scale and consequently reducing costs per unit of transaction as the size of a transaction increases, financial intermediaries improve the allocation of savings.

Information acquisition

Since borrowers hold private information about the quality of their projects ex ante (adverse selection), the screening of projects by intermediaries is crucial to provide agents with incentives to accurately report whether the project is bad or good. In the absence of screening, "bad" borrowers would pretend to be "good" and this could lead to underinvestment in good projects, since lenders cannot verify the true type of borrowers. Stiglitz and Weiss (1981) and Boyd and Prescott (1986), in their independent contributions to credit rationing theories, argue that because it is costly to screen projects, it is optimal to delegate the acquisition of information to intermediaries to avoid the duplication of costly information acquisition and resource wastage.

Financial intermediaries also have to verify and monitor the "true" realization of projects, as borrowers tend to keep information on their projects private (moral hazard). This verification is carried out by intermediaries as an incentive to get borrowers to truthfully report the outcome of their projects. Without the monitoring by intermediaries, lenders would receive lower returns. Townsend (1979) demonstrates that since it is costly to assess the actual state (costly state verification) of a project, it is more efficient to have the intermediary do the assessment on behalf of lenders. Diamond (1984) also shows that the costs of monitoring decline as the intermediary deals with an increasing number of borrowers. In other words, financial intermediaries exploit economies of scale in the monitoring of firms, improving the assessment of investment opportunities (screening) and the exertion of corporate control once those investments have been financed. Through this action, the intermediary improves capital formation and allocation, which in turn boosts economic growth.

Standard risk diversification requires that individuals, at a given point in time, diversify their portfolio of assets in order to minimize financial losses

Risk management

One of the functions of financial intermediaries is to facilitate risk sharing and ultimately reduce transaction costs. Standard risk diversification requires that individuals, at a given point in time, diversify their portfolio of assets in order to minimize financial losses. Financial intermediaries, by taking advantage of economies of scale, reduce the costs of holding a diversified portfolio of assets.

In addition, Allen and Gale (1997) and Levine (2000) note that intermediaries also facilitate *inter-temporal smoothing* of risks that cannot be diversified at a given point in time, such as oil-price shocks and other macroeconomic shocks, by averaging those shocks over time in a way that decreases their adverse effects. Under the framework of inter-temporal risk smoothing, investors enter into financial contracts such that they receive lower returns than what the market offers in good times in return for higher returns relative to the ones offered by markets in bad times, such as during recessions. Financial intermediaries are well suited to provide inter-temporal risk sharing, because it requires the accumulation of large reserves in safe assets.

To illustrate the inter-temporal risk-sharing activity, we could consider the sharp increase in oil prices in the early 1970s as "bad times," and the stock market boom in the 1980s as "good times." Dolar and Meh (2002) suggest that in the former case, given that claims on intermediaries were constant in value, households in Japan and Germany (both intermediary-based systems) did not experience a decline in wealth like those in the United States and the United Kingdom, and as a result they did not face substantial fluctuations in their consumption.

Financial intermediaries emerge to provide long-term investments by pooling savings, which can be made liquid whenever needed This implies that intermediary-based financial systems were able to smooth the oilprice shock rather than pass it on to households. On the other hand, during the stock market boom of the 1980s, households in the United States and the United Kingdom (that have most of their wealth in stock markets) obtained higher returns and used those returns to finance a higher consumption profile. German and Japanese households did not profit from the market boom because their savings were mostly in intermediaries, where they received fixed returns.

Financial intermediaries also mitigate liquidity risk. Many high-return investments require a long-term commitment of capital, but risk-averse agents are generally hesitant to relinquish their savings for long periods. Financial intermediaries emerge to provide long-term investments by pooling savings, which can be made liquid whenever needed. Financial intermediaries use part of the mobilized savings to support long-term capital projects and invest the balance in short-term assets to satisfy clients with liquidity needs. Kose and Lang (1990) further argue that intermediaries, particularly banks, are more effective at providing external finance to new firms that require staged financing, because they can commit to make additional funding available to investors as the project advances. Thus, by facilitating the operation of high-return investment projects, financial intermediaries improve the allocation of capital and thereby enhance economic growth.

4.3.2 Services of financial markets

Like financial intermediaries, financial markets also provide financial services by influencing savings mobilization, information acquisition, corporate control and risk management, activities that all have a positive impact on economic growth.

Savings mobilization and allocation

Well-developed financial markets also facilitate savings mobilization. As noted in the previous sections, transaction costs and asymmetric information (adverse selection and moral hazard) make the mobilization of savings very costly. Contributing to transaction costs is the fact that, in the presence of asymmetric information, risk-averse agents are reluctant to entrust their savings to others. Financial markets provide a vehicle for savers and give investors access to capital. In order to attract savers as well as investors, it is important for well-functioning markets to efficiently disclose their relevant information procedures, contracting systems and accounting standards. The laws in most market-based systems, such as the United States and the United Kingdom, require publicly listed firms to fully disclose their activities.

This implies that a great deal of information is revealed, thereby reducing the difficulties associated with savings mobilization. Financial markets also facilitate the mobilization of savings by providing the environment for "market makers" (multiperiod players) to build up their reputation. Diamond (1991) suggests that reputation forces market makers (dealers) to manage the savings of agents properly.

Furthermore, Chemmanur and Fulghieri (1994) argue that reputation provides individuals with incentives to entrust their savings to market makers, and thereby encourages savings mobilization. As pointed out by Levine (2000), financial markets that are more effective at pooling or mobilizing savings from several agents can have strong positive effects on economic development by boosting capital formation and improving resource allocation.

Financial markets ensure that only innovative projects for which enough information is available receive fi<mark>nan</mark>cing

Information acquisition

Sound financial markets promote the collection and processing of information. Since individuals or firms have the potential to receive high returns from the trading of information in well-functioning markets, they devote greater resources to researching innovative projects. Allen and Gale (2000) note that new technologies are hard to assess, either because little information is available about their potential returns, or because the analysis of the information requires the assistance of experts. Investors who can potentially finance these new technologies have different opinions on the outcomes. Financial markets ensure that only innovative projects for which enough information is available receive financing. Consequently, the development of new technologies and improved information about firms enhance resource allocation substantially, with corresponding implications for long-run economic growth.

Holmstrom and Tirole (1993) also argue that sound financial markets assist with corporate control after funding has taken place, because the market induces better corporate control by facilitating mergers and acquisitions of companies. The market also structures compensation such that managerial remuneration is conditioned on firms' performance. In other words, proper-functioning markets facilitate takeovers so that outsiders can buy poorly managed firms, fire managers, and transform those firms into productive enterprises. The markets also exercise corporate control by tying managerial compensation to the stock price of the company, thereby ensuring that the interests of managers are aligned with those of firm owners.

Risk management

Financial markets also facilitate the diversification of risk, including liquidity risk, because they allow for cross-sectional risk sharing among individuals holding a

portfolio of assets. Cross-sectional risk sharing requires the availability of numerous financial instruments, which are generally available in market-based systems.

Financial markets can reduce liquidity risk with positive impacts on long-run growth because, in general, most high-return projects are long-term investments that require the commitment of long-term funds. Savers, however, are often reluctant to give up control of their wealth for extended periods. Financial markets circumvent the challenge by allowing savers to convert their securities (equities in firms) readily into liquidity whenever they so desire. At the same time, capital raised through security issues allows firms to have continuous access to capital. By boosting long-term and high-return investments, financial markets allow for an efficient allocation of capital and thereby increase economic growth.

In well-functioning markets. information is instantly revealed to the public, providing less incentive for free riders and other individual investors to acquire information

4.3.3 Which financial structure is better?

The previous sections examined the operations of financial intermediaries and markets, particularly in facilitating the mobilization of savings, information acquisition and risk management. The relative contributions of intermediaries and financial markets in promoting long-run economic growth were not thoroughly examined. The next section examines whether intermediary- and market-based systems are substitutes in the provision of financial services that stimulate economic growth.

Intermediary-based argument

As pointed out earlier, financial intermediaries facilitate the mobilization of savings, acquire and disseminate costly information, and facilitate risk management. These financial services are crucial for the efficient allocation of capital to firms, thereby encouraging long-run economic growth.

The ability of intermediaries to promote economic development stems from their capacity to gather information on lenders and monitor their activities. In wellfunctioning markets, information is instantly revealed to the public, providing less incentive for free riders and other individual investors to acquire information. As a result, competitive financial markets may be characterized by underinvestment in information. Consequently, Boot, Greenbaum and other and Thakor (1993) suggest that well-developed markets could have a negative impact on the identification of innovative projects and thereby impede efficient resource allocation. Financial intermediaries have better incentives to gather information and monitor firms and can efficiently internalize the fixed cost of doing so. The free-rider problem is less severe in intermediary-based systems, since banks can make investments without revealing their actions instantaneously in public markets.

Advocates of the intermediary-based system stress that liquid financial markets can create an environment in which individual investors behave as if they were myopic. Because individual investors are able to readily sell their shares in liquid markets, they have fewer incentives to monitor managers thoroughly. This implies that greater market development may hinder corporate control and economic performance. Another view is that financial markets are not able to provide corporate control because insiders have better information about the firms than outsiders. This informational asymmetry has the tendency to moderate the potential effectiveness of takeovers, given that well-informed insiders will more likely outbid less-informed outsiders.

Proponents of the intermediary-based view argue that although markets can potentially provide products for diversifying risk, they are unable to diversify aggregate shocks because they are incomplete. Due to problems of adverse selection and moral hazard, contracts for the delivery of financial services are contingent only on states whose occurrence can be verified to the satisfaction of all counterparties. Allen and Gale (1997) stress that the incompleteness of markets gives rise to the development of institutions such as financial intermediaries that fill in the blanks of "missing markets." Dolar and Meh (2002) also suggest that, over time, financial intermediaries are better at providing risk-improving services than market-oriented systems, particularly in cases involving inter-temporal risk sharing, where intermediaries accumulate reserves in safe assets and are able to average out aggregate risks over time.

Rajan and Zingales (1999) further argue that intermediaries have advantages over financial markets in most institutional environments, noting that even in countries with weak legal and accounting systems, powerful intermediaries can still make firms reveal information and pay back their debts, thereby facilitating expansion and long-run growth.

Market-based argument

Proponents of the market-based system essentially counter the intermediary-based system argument by focusing on the problems caused by powerful banks. In the process of financing firms, financial intermediaries get access to vital information that is not available to other lenders. Intermediaries can potentially use such inside information to extract rents from firms. They also have enormous power over a firm's future profits during the process of financing new investments or debt renegotiations. Rajan (1992) argues that powerful intermediaries can obtain a disproportionately large share of the profits, so that firms will have fewer incentives to undertake high-risk and profitable projects.

Due to problems of adverse selection and moral hazard, contracts for the delivery of financial services are contingent only on states whose occurrence can be verified to the satisfaction of all counterparties

Generally. intermediated financing requires delegation of the decision regarding the financing of a project to a relatively small number of decision-makers

The preference of intermediaries when negotiating with firms on financial debt contract is to choose low-risk projects that have a high probability of success. The drawback, however, is that low-risk projects are generally low-return investments. Hence, intermediary-based systems have the potential of curtailing technological innovation and long-run economic growth. Weinstein and Yafeh (1998), studying the Japanese environment, find that while close relationships between intermediaries and firms increase the availability of capital to borrowing firms, they may not necessarily lead to profitability or growth. They observe that the cost of capital for firms with close intermediary ties is higher than that of their peers, which suggests that intermediaries appropriate most of the benefits from these relationships. Compared to financial market-based systems, clients of intermediaries grow at a slow rate, such that intermediaries discourage firms from investing in risky but profitable projects.

Another argument made by Hellwig (1998) against intermediary based-systems is that powerful intermediaries have the potential of colluding with managers against outsiders, which in turn impedes competition, corporate control, the creation of new firms and long-run economic growth. Wenger and Kaserer (1998) have also found that some intermediaries misrepresent the balance sheets of firms to the public, thereby encouraging some firm managers to underreport their balance sheets. Such activities do not enhance or promote economic activities.

Allen and Gale (1999) also point to a deficiency of the intermediary based-system by arguing that, despite the efficiency of intermediaries in eliminating the duplication of information gathering and processing, they can have less success in dealing with uncertainty, innovation and new ideas. The wide array of possibilities and the lack of pertinent information mean that there is often substantial diversity of opinions on the future of the projects seeking financing. Generally, intermediated financing requires delegation of the decision regarding the financing of a project to a relatively small number of decision-makers. The delegation is very effective when there is no disagreement, resulting in substantial cost savings.

However, when diversity of opinion persists, then there is a challenge. Although managers do everything they possibly can to choose projects they believe are worthwhile (i.e., apart from the principal-agent problem), diversity of opinion suggests that some of the providers of funds would disagree with those decisions. Investors may have fewer incentives to supply funds if the likelihood of disagreement is very high, resulting in underfunding of new technologies. This would not occur in financial markets-based systems, where coalitions of investors with similar views can join together to finance projects. Financial markets are therefore very effective in financing industries that are new, or where there is little information and a diversity of opinions on the future outcome of the projects.

Another comparative advantage that market-based systems have over intermediary-systems is the capacity to provide cross-sectional risk sharing (i.e., diversification of risk at a given point in time). As pointed out in the previous sections, markets are well suited to achieve cross-sectional risk sharing because of the enormous variety of financial products available. All these factors help support the market-based system in boosting economic growth.

However, Arestis, Demetriades and Luintel (2001) find that intermediary-based financial systems may promote growth more than market-based financial systems. They studied the systems in Germany, the United States, Japan, the United Kingdom and France and found that while stock markets in these countries may contribute to long-run output growth, the influence of the stock market is much smaller than that of banks. Demirguc-Kunt and Levine (1996) studied 44 countries and concluded that countries with a well-developed stock market also have well-developed banks and non-bank financial intermediaries, implying that markets and intermediaries are complements in providing growth-promoting financial services.

The issue of market- versus intermediary-based systems is of less relevance

Financial services argument

In the previous sections, we examined the merits and demerits of the financial markets and intermediaries systems, noting that these systems reduce transaction and information costs, in addition to the key financial functions they perform: savings mobilization, information acquisition and risk management. Proponents of the financial services view focus on these functions and emphasize the important role of a well-functioning financial system (both financial markets and intermediaries) in providing these services. They argue that the central question is the overall quantity and quality of financial services, and not the specific organization of the financial system (market- or intermediary-based). In other words, the issue of market- versus intermediary-based systems is of less relevance.

Boyd and Smith (1996) suggest that financial markets and intermediaries perform more or less the same functions, but in different ways and possibly with different degrees of success. Allen and Gale (1999) support this position by arguing that financial markets mitigate the adverse effects of powerful intermediaries by encouraging competition for corporate control and by creating alternative ways of funding investment opportunities.

Rajan (1992) also demonstrates that intermediaries and markets have a comparative advantage at dealing with different types of information, and intermediaries can benefit from higher returns to mitigate the effects of asymmetric information. Demirguc-Kunt and Levine (1996) show that stronger securities markets tend to encourage the use of bank finance in developing countries, implying that interme-

diary-based and financial markets systems are complementary to one another in the development process.

Financial
integration is the
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which a country's
financial markets
become more
closely integrated
with those in other
countries or with
those in the rest of
the world

Law and finance argument

Proponents of the law and finance view (also called the legal-based view) argue that creating an appropriate environment with strong legal systems to protect the rights of investors (both equity and debt investors) and enforce investment codes will foster growth. In other words, an enabling environment that includes well-functioning legal and regulatory systems to support financial development predicts economic performance better than any measure of financial structure per se. Chakraborty and Ray (2001) have shown that it is entirely possible for two countries to have distinctly different financial systems but enjoy similar growth rates over time (as in the case of Germany and the United States). This supports Levine's (2000) and Demirguc-Kunt and Levine's (2001) empirical findings that the specific type of financial system is not important in explaining differential growth rates across nations. They emphasize that a country's characteristics and the quality of its financial services are more important for long-term economic growth than the specific type of its financial system.

4.4 Financial integration

Financial integration is the process through which a country's financial markets become more closely integrated with those in other countries or with those in the rest of the world. This requires the elimination of some or all restrictions on foreign financial institutions from some (or all) countries to operate or offer cross-border financial services in others, as well as the establishment of links between banking, equity and other types of financial markets.

There are a number ways to integrate financial markets, including formal partnerships among countries that are party to a regional integration agreement (RIA). Integration in this sense may involve eliminating restrictions on cross-border financial operations by firms from countries in the same RIA, as well as harmonizing rules, taxes and regulations between the member countries.

Financial integration could also arise even in the absence of explicit agreements. Such forms of integration as entry of foreign banks into domestic markets, foreign participation in insurance markets and pension funds, securities trading abroad and direct borrowing by domestic firms in international markets, could exist in the absence of formal agreements. In most developing countries, this type of integration

has occurred with the penetration of international financial institutions from the developed world.

It should be noted that the two different forms of integration are in some ways related. Formal financial integration arrangements do require harmonizing certain regulations that govern the financial markets of all participating countries. Similarly, in order to integrate de facto with the financial markets of the world, a country may have to redefine its own regulatory set-up and converge toward international standards, thus becoming more attractive to foreign financial institutions, even without the need for an explicit agreement.

The two forms of financial integration present here should be seen as complements rather than substitutes for one another. Formal financial integration at the regional level has the potential of increasing the financial links between the participating countries and the rest of the world. For instance, a group of small countries could decide to harmonize their standards and regulations to attract foreign participation from financial institutions within the region and from the rest of the world. However, the same effort made by each country individually would likely be less effective because of the small size of individual markets and the need to establish multiple operations under different regulatory regimes.

Developing countries bound by an RIA may stand to benefit from deeper integration (or links) with world financial markets. Foreign banks that have established subsidiaries or branches in developing countries have helped to strengthen financial ties between the countries involved and to facilitate financial services linked to trade and investment flows by using the same financial institution at both ends of the deal.

In the past, finance and trade were treated in international agreements as two distinct areas. However, in recent years, provisions governing "trade in financial services" have increasingly been incorporated into trading agreements. These new trading arrangements have evolved as a result of the accelerating pace of cross-border mergers and acquisitions in the financial sector, and the development of sophisticated financial markets and institutions. Rules on trade in financial services clearly define the degree of market access and the national treatment granted by signatory countries in the areas of banking, securities and insurance.

In general, since the beginning of their integration into the trading system, financial services have been treated as distinct from other types of services. It should be noted that the services offered by the financial system are different from those offered by tourism or air transport and countries must therefore be careful when liberalizing their financial services industry.

Formal financial integration at the regional level has the potential of increasing the financial links between the participating countries and the rest of the world

Box 4.1

Measuring financial integration

Various measures exist in the literature for assessing the level of financial integration in a region. However, a common approach is measuring the current level of financial integration in different financial markets such as the money, bond, credit and equity markets, or examining the impediments or barriers to the intermediation (banking) process in the different countries making up the regional economic community.

A common indicator for assessing financial integration is one based on the disparity in prices or returns on assets in various countries in the economic community. This is based on the "law of one price," which suggests that financial assets with the same risk should have the same expected return, regardless of the locale in which they are issued or of their owners. This implies that financial instruments in the same risk class and originating in countries in a financially integrated community should generate identical cash flows and trade at the same price. Hence, markets are integrated if the stochastic discount factor - the rate at which cash flows are discounted - is equal across markets.

Based on the "law of one price," the cross-sectional dispersion of interest rate spreads or asset return differentials can be used as an indicator of financial integration, with narrower spreads indicating stronger integration. The level of financial integration could also be determined by analysing the volatilities or variations in asset prices or yields between countries. Another measure of financial integration is the level of foreign penetration in domestic financial markets. The statistics used to capture this measure include the number of foreign financial institutions, cross-listing of foreign firms on domestic stock markets, the holdings of foreign denominated assets by domestic investors, etc.

There are several advantages of integrating financial systems, including the exploitation of economies of scale, particularly for small and medium-sized firms. Integration could also remove certain forms of credit constraints faced by investors, because financial markets and institutions can handle credit risk better. The law of large numbers guarantees less exposure to credit risk as the number of clients increases. Hence, the integration into larger markets or even the formation of larger markets is beneficial to both firms and financial markets and institutions.

Additional advantages linked more specifically to formal financial integration agreements include the gaining of regulatory independence and avoidance of regulatory arbitrage. However, this may be difficult to achieve in less developed countries, because when the financial system is small and there are direct links between regulators and banks, supervision is usually not guided by independent policies. Formal integration can reduce this risk, as it increases the number of participants and interests governing the financial system. Furthermore, in an integrated system, regulatory principles are driven by supranational principles that are likely to be less influenced by domestic interests.

For the integration process to be successful, policies, rules and standards governing regulations, accounting and auditing have to be harmonized in all participating countries. This is crucial to guarantee transparency and comparability across finan-

Integration could also remove certain forms of credit constraints faced by investors, because financial markets and institutions can handle credit risk better

cial sectors. Equally important is the harmonization of the criteria for the valuation of bank asset risks. Differences in risk valuations can lead to totally different ways of accounting for the capital required to protect against shocks and regulatory arbitrage. Ideally, financial markets and institutions in all countries participating in an integration arrangement should adhere to similar financial regulations. Such harmonization not only leads to cross-border integration between member countries, but also attracts foreign players, possibly improving the stability of the financial system.

In addition, financial markets can become better integrated if information is shared across countries. Such integration can be strengthened further by harmonizing the rules that govern credit information and collateral registries, and by allowing for the sharing of information between countries. Any policy that facilitates information sharing across countries or increases its efficiency at any level relevant to financial markets can help promote cross-border trading of financial services.

Financial integration
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consumption

4.4.1 Benefits of financial integration

The benefits of financial integration include: more opportunities for risk sharing and risk diversification; better allocation of capital among investment opportunities; and potential for higher economic growth.

Risk sharing: Financial integration does provide an avenue for firms and households to share financial risk and by so doing smooth out consumption. Through the sharing of risk, financial integration also leads to specialization in production across the regions. Furthermore, financial integration promotes portfolio diversification and the sharing of idiosyncratic risk across regions due to the availability of additional financial instruments.

Improved capital allocation: Financial integration also results in a better allocation of capital, because an integrated financial market removes all forms of impediments to trading of financial assets and flow of capital, allowing for the efficient allocation of financial resources for investments and production.

Economic growth: The deepening of financial integration also results in the promotion of economic growth, as financial resources become available for economic activities as a result of financial development. Gianetti et al. (2002) demonstrate that financial integration facilitates access to investment opportunities and an increase in competition between domestic and foreign financial institutions. This in turn leads to improved efficiency of financial institutions as financial resources are released for productive activities. In addition, financial integration leads to increased availability of intermediated investment opportunities, and consequently higher economic growth.

Recent data show that Europe has the highest degree of intraregional financial integration There is ample evidence in the literature that financial integration or financial development leads to higher economic growth. Levine (1997) argues that the function of financial institutions in an economy results in, among other things: (a) lower uncertainty by facilitating the trading, hedging, diversification and pooling of risk; (b) efficient allocation of resources; and (c) savings mobilization. The impact of these functions on economic activity is through capital and technological accumulation.

Levine points out that risk-sharing opportunities make it possible to finance highly risky projects with potentially very high returns, as the availability of risk-sharing opportunities enhances financial markets and permits risk-averse investors to hedge against negative shocks. Financial integration also allows project owners with low initial capital to turn to an intermediary that can mobilize savings so as to cover the initial costs. These avenues indicate a strong link between financial institutions and economic growth.

4.5 Financial integration and the role of foreign banks in domestic financial systems

Countries that are signatories to financial integration arrangements allow for some form of penetration into their markets by foreign financial institutions. The presence of the foreign banks may help make their domestic counterparts very competitive.

In the 1990s, there were massive flows of FDI worldwide. In that decade, FDI flows to emerging markets grew from \$19.3 billion to \$142.6 billion, with FDI in financial services from OECD countries accounting for nearly 25 per cent of total FDI flows. At the same time, Latin America and Central Europe were the major recipients of international capital flows to the banking sector.

The participation of foreign banks in Africa is very low. Recent data show that Europe has the highest degree of intraregional financial integration, with around 16 per cent, followed by Africa and the Middle East (7.7 per cent), while Latin America has the lowest (0.6 per cent). Between regions, the major recipient of foreign participation has been Latin America, where OECD countries, Europe, the United States and Canada own 46.5 per cent, 28.2 per cent and 18 per cent, respectively, of total assets of the regional banking system, while European banks account for the greatest share of foreign banks in Africa.

4.5.1 What determines foreign bank location in domestic markets?

The location of foreign banks across the world is influenced by many factors, including the profitability of the investment, the development of the financial system of the country they seek to penetrate, and the need to follow similar strategies as their competitors and maintain their market share. Galindo, Micco and Serra (2002) argue that foreign bank participation in domestic markets is enhanced by trade integration, the flow of foreign direct investment and the strength of the legal system prevailing in the domestic countries.

The theoretical underpinning for the relationship between economic integration and foreign banking penetrations is that international banks follow their customers (multinational firms) around the world, in order to provide them with financial services and exploit informational advantages derived from long-term bank-client relationships. With regards to trade, firms can also rely on international banks to minimize the costs of international transactions by using the same bank for any type of bilateral payments. Galindo, Micco and Serra (2002), using a gravity model and bilateral data from 176 countries, find that a 1-per-cent increase in trade raises foreign bank participation by 0.7 per cent, implying that trade integration is a significant determinant for the expansion of banks abroad.

Large multinational firms established abroad as a result of the flow of FDI prefer to deal with known banks. International banks following these firms can also derive informational benefits from such associations. Banks also locate abroad because the multinational firms need to have access to capital denominated in local currency, to avoid a currency misalignment between revenues and costs. In such a case, the foreign bank may decide to locate in the foreign country and move intermediate funds from the local market towards international firms. For reasons of portfolio risk diversification, foreign local banks also have incentives to operate in other retail banking activities. Galindo, Micco and Serra (2002) find that a 1-per-cent increase in FDI flow increases foreign bank participation by 1.3 per cent.

The sound legal environment of the host country also increases foreign bank participation. Strong legal codes and the safeguarding of property rights tend to minimize learning costs in the investment process, and can also reduce operational costs, given that certain economies of scale can be exploited at the international level. La Porta, Lopez-de-Silanes and Shleifer (1997, 1998) argue that banks are more willing to locate in foreign countries with which they share similar legal codes, because the rights of creditors and shareholders would be protected and the regulatory environment would be similar to that of the bank's country of origin. Similarities in regulations also reduce costly adaptation to new environments.

The theoretical underpinning for the relationship between economic integration and foreign banking penetrations is that international banks follow their customers (multinational firms) around the world, in order to provide them with financial services and exploit informational advantages derived from longterm bank-client relationships

The fragmented evidence available suggests that the effects of internationalizing the banking system are positive, since banking systems increase their competitiveness and efficiency, in particular when foreign banks come from a more developed country

Galindo, Micco and Serra (2002) demonstrate the strong relationship between sharing of legal origin and cross-border banking. They report that countries receive an average of \$17 billion from countries with whom they share legal codes, and only \$12 billion from countries with different legal origins. The results imply that foreign participation in country pairs that share legal codes is 26 per cent greater than when codes differ.

The same studies by Galindo, Micco and Serra (2002) indicate that if the host countries have prudential regulation and supervision practices similar to those of source countries, there is greater investment in banking. They observe that, on average, host countries worldwide receive nearly \$21 billion from source countries with similar prudential regulations, versus less than \$10 billion from countries with different standards. The results suggest that when supervisory practices are similar, foreign participation is increased by nearly 19 per cent. This finding also suggests that harmonizing regulations across countries can increase financial market integration even at the regional level by increasing the participation of external and national players in several markets simultaneously.

4.5.2 Impact of foreign banks in domestic markets

Financial liberalization makes a financial system function better, in turn fostering growth by improving system efficiency and, under certain conditions, increasing the availability of funds. In particular, the financial liberalization process in recent decades has allowed foreign banks to freely participate in local markets (figure 5.3).

Overall empirical evidence on the impact of foreign banks on domestic markets is scant. However, the fragmented evidence available suggests that the effects of internationalizing the banking system are positive, since banking systems increase their competitiveness and efficiency, in particular when foreign banks come from a more developed country. However, there is some controversy as to whether credit volatility is reduced by foreign banks. On the one hand, some authors claim that foreign banks are able to stabilize credit because they have access to external funds and, due to their reputation (brand name), they are able to stabilize local deposits.

In addition, foreign bank entry may generate competitive pressure that leads to measures that guarantee future stability through more aggressive provisioning standards and higher capital ratios (Crystal, Dages and Goldberg, 2001). On the other hand, some economists claim that foreign banks are more sensitive to shocks in the host economy because they can substitute local assets with alternative investments abroad that are not easily available for local banks.

4.5.3 Foreign banks, efficiency and regulatory standards

Most foreign banks that seek to penetrate other markets tend to be better at resource allocation and overall efficiency. These banks are also linked with increased competition and the diffusion of new technologies. Furthermore, foreign institutions improve the quality and availability of financial services by bringing in new and better skills, management techniques, training procedures and technology. Levine (1996) argues that the presence of foreign banks seems to lead to the development of better rating agencies, accounting standards and credit bureaus that acquire and process information, as well as better bank supervision and a more adequate legal framework. Foreign banks tend to follow sound prudential practices adopted in their home country.

It should be noted that for foreign banks from developed countries, these practices are usually more stringent than those of developing countries. In such cases, the increased security inspired by international banks leads domestic banks as well as supervisors to adopt international standards in order to ease competitive pressures coming from depositors searching for the safest institutions. The presence of foreign institutions also boosts competition and improves the operation of the domestic market (local banks), which in turn leads to improvement in resource allocation and faster economic growth. In addition, international competition reduces interest rate margins and local banks' profitability.

4.5.4 Foreign banks and the stability of domestic markets

Some critics wonder whether the presence of foreign banks plays a role in stabilizing domestic credit and deposits. Some argue that foreign banks, due to their access to foreign liquidity, are less dependent on erratic local deposits, and therefore can stabilize credit in the host country. Moreover, the good reputation of many foreign banks allows "depositor-flight-to-quality" to occur within the domestic market during financial turmoil, stabilizing both deposits and credit.

Others argue that foreign banks decrease their exposure to the country when domestic conditions deteriorate, thus increasing credit volatility. Moreover, these banks can transmit shocks from their home countries, strengthening the contagion during financial crises. Changes in a foreign bank's claims at home or in other countries can spill over to the host country. In some regions of the world, most foreign banks come from developed countries. Hence, a contraction in those countries would affect the domestic market not only through a contraction of external demand, but

Foreign institutions improve the quality and availability of financial services by bringing in new and better skills, management techniques, training procedures and technology

also through a reduction in local credit, amplifying the domestic business cycle even more.

Empirical evidence about the impact of foreign banks on the amount of credit to small businesses in developing countries is scarce and inconclusive

The validity of the two views is an empirical matter. Galindo, Micco and Serra (2002) studied individual bank credit behaviours after a change in deposits or in business opportunities (measured as the change in external demand), and found that all bank credit reacts to changes in deposits, but this reaction is smaller for foreign banks. However, foreign bank credit is 20 per cent less sensitive to changes in domestic deposits than domestic bank credit. With respect to bank reaction to business opportunities, after a contraction in external demand, all banks reduce their loans, but this reduction in credit is 50 per cent smaller for domestic banks. The results suggest that foreign banks would increase credit volatility if shocks were mainly changes in business opportunities in the host country, but would reduce it if the main source of credit volatility was the domestic supply of deposits. Which view dominates remains an empirical question.

4.5.5 Foreign banks and market segmentation

As argued in previous sections, foreign bank penetration has potential benefits. However, some researchers argue that increased foreign bank penetration in developing countries could reduce access to credit for some segments of the market, particularly small and medium-sized firms that depend heavily on bank financing.

In general, foreign banks are large and complex financial institutions that find it difficult to lend to small and medium-sized firms for which they have little information. Small businesses tend to have exclusive dealings with a single bank with which they have developed an "informal relationship" that reduces asymmetric information. Large foreign banks are likely to have difficulties developing these types of relationships. While large foreign banks are unlikely to replicate the lending method of small domestic banks, they can introduce new technological innovations that foster credit to small and medium-sized firms.

Empirical evidence about the impact of foreign banks on the amount of credit to small businesses in developing countries is scarce and inconclusive. In an analysis of the behaviour of foreign banks in a number of countries, Clarke, Cull, Pería, and Sánchez (2002) found that foreign banks generally lend less to small businesses than domestic banks. They also found that in a country with a developed financial sector, lending to small businesses by medium-sized and large foreign banks was stronger than lending by domestic banks. They suggest that the better institutional environments in countries with developed financial markets allowed large foreign banks to use scoring methodologies, enabling them to increase their lending to smaller firms.

4.6 Lessons from the European Union

Financial integration in the European Community was undertaken in a gradual manner and was implemented through a coordinated process of legislation among the member countries. The goal was to create a legislative framework that would allow for greater integration of financial markets, without giving up the public-policy interests of each Member State with regard to rules, market stability and consumer protection. The creation of a *single market programme*, or a European economic system, was based on the principle of home-country control, regulatory competition and minimum standards harmonization. Under the home-country-control principle, primary supervision was left under the direct control of national authorities.

However, national laws were not fully harmonized and home-country rules were accepted to govern the cross-border provision of services. Integration of financial markets in Europe has brought several benefits to the regional market in the form of greater exposure to international competition, improved efficiency in financial intermediation, more efficient capital utilization, the development of the financial industry itself, and better fiscal discipline.

The liberalization of financial services in Europe was achieved through the creation of what is known as the "single passport," which allowed the provision of financial services through trading or investment in host countries without further authorization beyond that of the home country. However, this programme created heterogeneous integration across sectors and countries. While the wholesale banking sector deepened its integration process, retail banking remained fragmented and strongly localized. Securities markets experienced deeper integration, whereas the insurance subsectors were limited because of legal barriers.

How can developing countries benefit from the European experience? Most developing countries face a number of development challenges. To begin with, the level of economic development is significantly lower in some developing countries than in Europe. Also, some developing countries have divergent economic policies and the financial systems in the countries are much shallower. Following the European experience, financial integration of the markets and institutions in developing countries, including Africa, requires that there be:

- Clearly defined long-term aims beyond sectoral efficiency, including economic development and global competitiveness
- Recognition that minimum harmonization of regulatory frameworks and cross-border financial activities requires reform of public administration, particularly regarding tax treatment, banking and insurance legislation, and joint supervision of securities markets

The liberalization of financial services in Europe was achieved through the creation of what is known as the "single passport," which allowed the provision of financial services through trading or investment in host countries without further authorization beyond that of the home country

Commitment to a considerable degree of fiscal harmonization and economic coordination, in order to avoid financial crises that would hinder effective financial integration.

Africa needs both the intermediaries and the financial markets to support its development agenda

Clearly, countries in Africa have substantial obstacles to overcome before implementing an orderly process of financial integration as carried out in Europe. First, there is the lack of political cohesion necessary to follow through on protocols and develop the parallel legislative programmes that need to accompany financial integration. Second, the heterogeneity of national regulatory systems and chronic fiscal imbalances could delay any form of financial integration. Third, the lack of recognition of foreign regulations, as well as the frequent submission to interest group pressures do not augur well for the integration process. Fourth is the currency misalignment on the continent.

4.7 Conclusion

Africa needs both the intermediaries and the financial markets to support its development agenda. Both market- and intermediary-based systems have their own comparative advantages. Financial markets are better at financing new technologies and projects where there is little agreement on the management of firms, while intermediaries have developed expertise to distinguish between bad and good projects, making them very effective at mitigating moral hazard and adverse-selection problems between lenders and borrowers.

However, the quantity and quality of financial services are very important. African countries should therefore focus their attention on legal, regulatory and other policy reforms that encourage the proper functioning of both financial markets and intermediaries to support their long-term development agenda.

While there are obvious advantages to be derived from the integration of the financial markets, proper balance needs to be struck on how foreign financial institutions are allowed to operate in national markets. Foreign banking increases efficiency of domestic banks and reduces the instability of domestic banking operations following deposit shocks from foreign banks. However, when idiosyncratic business opportunity shocks hit, foreign banks tend to move out in search of better opportunities in other countries. Evidence is inconclusive regarding foreign bank presence and lending to small and medium-sized enterprises. On balance, however, evidence is supportive of foreign bank participation in domestic markets through formal financial integration agreements.

References

Allen, F. and D. Gale (1995), "A Welfare Comparison of Intermediaries and Financial Markets in Germany and the US." European Economic Review, 39(2), 179-209. (1997). "Financial Markets, Intermediaries, and Intertemporal Smoothing." Journal of Political Economy 105(3): 523-46. (1999). "Diversity of Opinion and Financing of New Technologies." Journal of Financial Intermediation 8: 68-89. _ (2000). Comparing Financial Systems. Cambridge, Massachusetts: MIT Press. Arrow, K. J. (1964). "The Role of Securities in the Optimal Allocation of Risk Bearing." Review of Economic Studies, 2 91–96. Arestis, P., P. Demetriades, and K. Luintel. 2001. "Financial Development and Economic Growth: The Role of the Stock Markets." Journal of Money, Credit, and Banking 331: 16-41. Bagehot, W. Lombard Street. Homewood, Il: Richard D. Irwin, [1873] 1962 Edition. Bencivenga, V. and B. Smith (1991). "Financial Intermediation and Endogenous Growth," *Review of Economic Studies*. 58(2), 195–209. (1992). "Deficits, Inflation, and the Banking System in Developing Countries: The Optimal Degree of Financial Repression," Oxford Economic Papers, 44(4), 767–90. (1993). "Some Consequences of Credit Rationing in an Endogenous Growth Model," Journal of Economic Dynamic Control, 17(1/2), pp. 97–122. Bencivenga, V., B. Smith, and R. Starr (1995). "Transactions costs, Technological Choice, and Endogenous Growth," *Journal of Economic Theory*, 67(1), 153–77.

Boot, .A. S. Greenbaum, and A.Thakor (1993). "Reputation and Discretion in

Financial Contracting." American Economic Review 83: 1165-83.

Boyd, J. and E. Prescott. (1986). "Financial Intermediary-Coalitions." Journal of Economic Theory 38: 211-32.

Carosso, V. (1970). Investment Banking in America. Cambridge, MA: Harvard University Press.

Chakraborty, S. and T. Ray (2001). Bank Finance versus Market Finance: A Growth-Theoretic Analysis. University of Oregon. Manuscript.

Chemmanur, T.J. and P. Fulghieri. (1994). "Reputation, Renegotiation, and the Choice between Bank Loans and Publicly Traded Debt." Review of Financial Studies 7(3): 475-506.

Clarke, G., R. Cull, M. Pería, and S. Sánchez. (2002). Bank Lending to Small Businesses in Latin America: Does Bank Origin Matter? World Bank Domestic Finance Working Paper no. 2760, Washington, DC.

Crystal, J., G. Dages, and L. Goldberg (2001). Does Foreign Ownership Contribute to Sounder Banks in Emerging Markets? The Latin American Experience. Staff Reports 137, Federal Reserve Bank of New York.

De Long, B. (1991). "Did J. P. Morgan's Men Add Value? An Economist's Perspective on Financial Capitalism," in *Inside the Business Enterprise: Historical Perspectives* on the use of Information. Editor P. Temin. Chicago: University of Chicago Press, 205-36.

De Long, B. et al. (1989). "The Size and Incidence of the Losses from Noise Trading," J. Finance, 44(3), 681–96.

Demirguc-Kunt, A. and R. Levine (1996a). "Stock Market Development and Financial Intermediaries: Stylized Facts," World Bank Economic Review, 10(2), 291–322.

(1996b). "Stock Markets, Corporate Finance, and Economic Growth: An Overview," World Bank Economic Review, 10(2), 223–40.

(2001). Financial Structure and Economic Growth: A Cross-Country Comparison of Banks, Markets, and Development. Cambridge, Massachusetts: MIT Press.

Demirguc-Kunt, A. and V. Maksimovic (1996a). "Stock Market Development and Financing Choices of Firms," World Bank Economic Review, 10(2), pp. 341–70.

Diamond, D. (1984). "Financial Intermediation and Delegated Monitoring," *Review* of Economic Studies, 51(3), pp. 393-414.

Diamond, D. and P. Dybvig (1983). "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy*, 91(3), 401–19.

Diamond, D.W. (1991). "Monitoring and Reputation: The Choice between Bank Loans and Directly Placed Debt." *Journal of Political Economy* 99(4): 689-721.

Dolar V. and C. Meh (2002). Financial Structure and Economic Growth: A Non-Technical Survey. Bank of Canada Working Paper Number 2002-24.

Galindo, A., A. Micco, and C. Serra. (2002). *Determinants of Cross-Border Banking Activity: The Role of Economic and Legal Relationships*. Inter-American Development Bank, Washington, DC. Mimeo.

Gerschenkron, A. (1962). *Economic Backwardness in Historical Perspective*. Cambridge, MA:Harvard University Press.

Goldsmith, R.W. (1969). Financial Structure and Development. New Haven, CT: Yale University Press.

Greenwood, J. and B Jovanovic (1990). "Financial Development, Growth, and the Distribution of Income," *Journal of Political Economy*, 98(5,Pt.1), pp. 1076–1107.

Greenwood, J and B. Smith (1997). "Financial Markets in Development, and the Development of Financial Markets," *Journal of Economics Dynamics and Control*, 21(1), 145–81.

Grossman, G. and E. Helpman (1991). "Quality Ladders in the Theory of Growth," *Review of Economics Studies*, 58(1), pp. 43–61.

Grossman, S. and M. Miller (1988). "Liquidity and Market Structure," *Journal of Finance*, 43(3), 617–33.

Grossman, S. and J. Stiglitz (1980). "On the Impossibility of Informationally Efficient Markets," *American Economic Review*, 70(3), pp. 393–408.

Hellwig, M. 1998. On the Economics and Politics of Corporate Finance and Corporate Control. University of Mannheim Working Paper.

Hicks, J. A Theory of Economic History. Oxford: Clarendon Press, 1969.

Holmstrom, B. and J. Tirole (1993). "Market Liquidity and Performance Monitoring." *Journal of Political Economy* 101(4): 678-709.

King, R. and R. Levine (1993a). "Financial Intermediation and Economic Development," in Financial Intermediation in the Construction of Europe. Editors: Colin Mayer and Xavier Vives. London: Centre for Economic Policy Research, 156–89.

(1993b). "Finance and Growth: Schumpeter Might Be Right," Quarterly Journal of Economics, 108(3), pp. 717–37.

(1993c). "Finance, Entrepreneurship, and Growth: Theory and Evidence," Journal of Monetary Economics, 32(3), 513-42.

La Porta, R., F. Lopez-de-Silanes, and A. Shleifer (1997). "Legal Determinants of External Finance." Journal of Finance 52.

(1998). "Law and Finance." *Journal of Political Economy* 106.

Levine, R. 1991. "Stock Markets, Growth, and Tax Policy." The Journal of Finance 46(4):1445-65.

(1997), "Financial Development and Economic Growth: Views and Agenda", Journal of Economic Literature, 35, 688-726.

(2000). Bank-Based or Market-Based Financial Systems: Which is Better? Carlson School of Management, University of Minnesota Working Paper.

Levine, R. and S. Zervos (1998). "Stock Markets, Banks, and Economic Growth." *The American Economic Review* 88(3): 537-58.

Merton, R. and Z. Bodie (1995). "A Conceptual Framework for Analyzing the Financial Environment," in The Global Financial System: A Functional Perspective. Editors: Crane et al. Boston, MA: Harvard Business School Press.

Rajan, R.G. (1992). "Insiders and Outsiders: The Choice Between Informed and Arms Length Debt." *Journal of Finance* 47(4): 1367-1400.

Rajan, R.G. and L. Zingales (1999). Financial Systems, Industrial Structure, and Growth. University of Chicago. Manuscript.

Schumpeter, J. The Theory of Economic Development. Leipzig: Dunker & Humblot, 1912; translated by R Opie. Cambridge, MA: Harvard U. Press, 1934.

Sirri, E. and P. Tufano (1995). "The Economics of Pooling," in *The Global Financial* System: A functional Perspective. Editors: D. Crane et al. Boston, MA: Harvard Business School Press, 81–128.

Stiglitz, J.E. and A. Weiss (1981). "Credit Rationing in Markets with Imperfect Information." *American Economic Review* 71(3) 393-410.

Tadesse, S. (2001). "Financial Architecture and Economic Performance: International Evidence." University of South California. *Manuscript*.

Thadder, E. (1995). "Long-Term Contracts, Short-Term Investment and Monitoring." Review of Economic Studies 62(4): 557-75.

Townsend, R.M. 1979. "Optimal Contracts and Competitive Markets with Costly State Verification." *Journal of Economic Theory* 212: 265-93.

Weinstein, D.E. and Y. Yafeh (1998). "On the Costs of a Bank-Centered Financial System: Evidence from the Changing Main Bank Relations in Japan." *Journal of Financial Economics* 532: 635-72.

Wenger, E. and C. Kaserer (1998). "The German System of Corporate Governance: A Model Which Should Not Be Imitated." in *Competition and Convergence in Financial Markets: The German and Anglo-American Models*. New York: North-Holland Press.

Empirical Evidence on Macroeconomic Convergence in African RECs



5.1 Introduction

his chapter provides empirical evidence on the progress and prospects of the African integration process by assessing the level and rate of convergence of the macroeconomic and financial components in Africa. The macroeconomic component of integration relates to three complementary dimensions of convergence.

First, it is anticipated that true integration cannot take place unless economies of participating countries in an integration area deal with economic shocks harmoniously. As a result, assessing the presence of shock evenness and synchronicity of business cycles can provide useful evidence of the potential for deeper integration in a given REC.

Second, for the economies in a given integration area to deal with economic shocks in a coordinated manner, the macroeconomic policies of the principal countries involved need to be harmonized. Therefore, analysing the presence or absence of harmony and coordination in the macroeconomic policies of the economies trying to integrate is an important element in assessing the state of integration in African RECs.

Third, and possibly one of the most important objectives of integration attempts in Africa, is to work towards the convergence of per capita incomes among the economies of participating countries. Consequently, a major emphasis of this chapter will be to assess whether there is evidence of convergence of per capita incomes across the integrating countries in each of the RECs under study.

The results from various formal tests¹ that are applied to test for income and macroeconomic convergence for selected African RECs are discussed.

It is anticipated that true integration cannot take place unless economies of participating countries in an integration area deal with economic shocks harmoniously

¹ See Appendix 1 for the overall econometric methodology of conducting the various tests.

5.2 Convergence in monetary and fiscal policy in African RFCs

The following section investigates the results from the analysis of the convergence of macroeconomic stability indicators for various RECs. Evidence of macroeconomic convergence in the selected indicators could be a sign that policy coordination in the RECs is achieving the desired macroeconomic outcomes. This would provide the necessary foundation for moving the REC through the various phases of integration towards monetary union, as argued in optimal currency area theories. In this study, the results of monetary and fiscal policy outcomes are captured by inflation and fiscal balance as a proportion of GDP.

The macroeconomic variables used as criteria are, therefore, inflation for monetary policy and fiscal balance for fiscal policy. The methodological framework and discussions in this paper draw heavily on a series of studies undertaken by Ben Hammouda et al (2007a, 2007b) and the references therein. Details of the empirical discussion as well as the econometric methodologies employed to investigate the convergence of the variables are described in Appendix A. Basically, the methods employed in this analysis have three main purposes. First, the series on inflation and fiscal balance are tested for convergence by analysing and testing the changes in the dispersion (standard deviation) of the variables over time (usually known as the sigma convergence test in the econometric literature). Second, the robustness of the convergence, if any, is tested using standard econometric tests (known as the unit root test).

This test is useful in assessing whether a particular country or a group of countries in a REC are converging to the regional mean. Third, standard econometric tests of cointegration are used to examine the existence of any long-run co-movement of the variables under consideration across countries within a REC.

Finally, it is worth noting that the analysis focuses on selected RECs in Africa, namely: SADC, COMESA, ECOWAS, CEMAC and UEMOA, influenced to a large extent by the availability of data on these RECs for a relatively longer period of time.

5.2.1 **Monetary policy**

In investigating macroeconomic convergence in the different RECs, inflation is used to analyse convergence in monetary policy. Monetary policy is the central bank process of managing money supply to achieve specific goals, such as constraining inflation, maintaining a stable exchange rate, achieving full employment or economic growth. The summary of the empirical results on the convergence of monetary policy is as follows:

SADC

Figure 5.1 shows the plots of the standard deviation of inflation over time within SADC, COMESA and ECOWAS countries. As shown in the figure, the variability of inflation among SADC countries has generally decreased over time. The SADC region saw a rapid and very volatile rise in inflation in the 1990s, registering well over 60 per cent of dispersion around 1993. Thereafter, a sharp and almost consistent decline in the dispersion in inflation was observed, reaching its lowest point of 5 per cent in the fourth quarter of 1997. The variability of inflation from that reference period to the second quarter of 2004 was relatively low and stable. This shows a tendency among SADC countries to have convergence in macroeconomic policy, particularly in monetary policy, during the specified period of time.

Further statistical tests on the robustness of inflation convergence in SADC countries confirmed that there is a tendency of monetary policy convergence among SADC countries over time. While a country-by-country analysis shows more than half of the countries in the REC (Madagascar, Malawi, Namibia, Swaziland, Tanzania and Zambia) converging to the regional inflation mean, a pooled analysis using all countries in the REC, on the other hand, shows that SADC countries as a group tend to converge to the regional average.

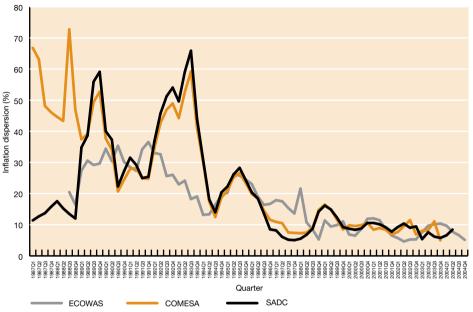
SADC countries therefore show some evidence of convergence in inflation, an indication of possible coordination with the desired results in monetary policies. Indeed, further analysis carried out to establish whether there is co-movement in the inflation rates of SADC member countries that included six countries – Botswana, Lesotho, Mauritius, South Africa, Tanzania and Zambia – also showed the existence of a partial convergence of monetary policies in SADC countries.

COMESA

As shown in figure 5.1, the tendency of convergence in the inflation values within COMESA indicates the realization of some convergence in monetary policies. The standard deviation across COMESA declined to around 5 per cent in 2003 from a high of 67 per cent in 1987. Although the variability of inflation within COMESA was highly volatile from 1987 to 1995, it was relatively low and stable in the ensuing years.

Figure 5.1
Dispersion (standard deviation) of inflation in SADC, COMESA and ECOWAS countries

The tendency of monetary convergence within COMESA is supported by further tests on the robustness of standard deviation of inflation, which show that the differences in inflation within the COMESA region have been diminishing over time



The tendency of monetary convergence within COMESA is supported by further tests on the robustness of standard deviation of inflation, which show that the differences in inflation within the COMESA region have been diminishing over time. However, on an individual-country basis, only a few countries – Egypt, Kenya, Malawi, Namibia, Swaziland and Zambia – support the convergence in monetary policy to the regional mean.

It is also important to note the striking resemblance of the movements in inflation in SADC and COMESA countries since the late 1980s. This close similarity, however, may be partly attributed to the large number of countries that belong to both RECs, thereby influencing the overall movement of inflation in each REC.

ECOWAS

The plot of dispersion in the inflation series (1988Q3-2004Q4) among ECOWAS countries is shown in figure 5.1. It indicates that the movements of inflation in ECOWAS have been more or less similar to those of SADC and COMESA countries, in that a generally decreasing variation in inflation is observed over time. The standard deviation of inflation in ECOWAS was more volatile from 1988 to 1998, reaching a maximum point of 37 per cent. However, since the late 1990s, inflation

in the region has decreased significantly and has remained relatively stable, fluctuating only within the range of 5 per cent to 12 per cent.

The test of robustness (sigma test) supports the tendency of a monetary policy convergence within ECOWAS countries. On the basis of the results of the individual countries, most of the countries in ECOWAS also reflect the tendency to converge toward the regional mean. Using a pooled analysis, the evidence also shows that most of the countries in ECOWAS are converging to the regional inflation mean. However, the co-movement of inflation among ECOWAS countries has not been that strong.

CEMAC

Figure 5.2 shows plots of the standard deviation of inflation over time for CEMAC and UEMOA countries. In the CEMAC region, it is interesting to note that the dispersion in inflation is relatively low and stable, as compared with the other RECs under study. The variability of inflation within CEMAC countries was in the range of 1.40 per cent to 16 per cent during that period of time. On the basis of this analysis, CEMAC appears to have realized a high level of inflation convergence among its RECs, possibly leading to strong convergence in monetary policy.

The tendency of convergence in monetary policy within CEMAC is also strongly supported by the test of robustness (the sigma test for convergence), which implies that the differences in inflation within CEMAC are decreasing over time. Furthermore, results based on the analysis of aggregate as well as individual country-level data also provided evidence of monetary policy convergence within CEMAC countries.

UEMOA

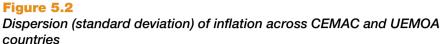
Movements in the standard deviation of inflation within UEMOA countries are depicted in figure 5.2. As in the other RECs under study, the dispersion of inflation within UEMOA was highly volatile and unstable in the earlier periods of the study. The variability in inflation was relatively low as compared to SADC and COMESA, but was comparable to that of ECOWAS. Since the late 1990s, the variability in inflation within UEMOA has decreased remarkably, fluctuating only within the range of 1.4 per cent to about 5.1 per cent.

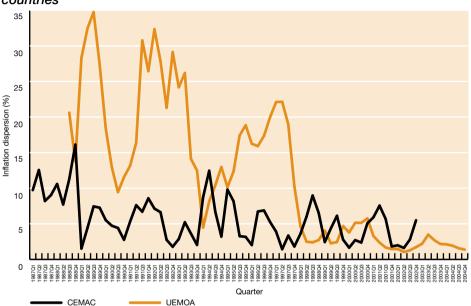
This observation serves as clear evidence of monetary policy convergence within UEMOA countries. Furthermore, this evidence is supported by the sigma test of robustness. Results from both pooled panel data and tests on individual countries

The test of robustness (sigma test) supports the tendency of a monetary policy convergence within ECOWAS countries

also confirm that there is monetary convergence in UEMOA countries toward the regional mean. However, results on the co-movement of inflation across countries within the REC were found inconclusive.

Fiscal policy refers
to government
policy that sets
the level of public
expenditure
and how that
expenditure is
funded





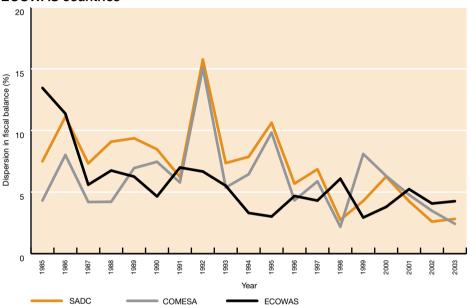
5.2.2 Fiscal policy

Another key component in the analysis of macroeconomic convergence is the convergence of fiscal policies of countries within different RECs. Fiscal policy refers to government policy that sets the level of public expenditure and how that expenditure is funded. Fiscal balance is therefore used as a key indicator to capture the progress made toward harmonizing fiscal policies within the different RECs. In doing so, and as in the section above, a number of statistical/econometric tests (including dispersion analysis, sigma tests of robustness, individual country and group convergence to the regional average, and long-run co-movement) are applied to investigate the variation, movement and robustness of the fiscal balance variable. Technical details of the methodology employed and further details of the analysis are provided in Appendix A.

Figures 5.3 and 5.4 present the plots of standard deviation of fiscal balance over the periods 1985 to 2003 for SADC, COMESA, ECOWAS, CEMAC and UEMOA. As a starting point, it is evident that the overall variability in fiscal balance within

each REC was not too wide, thus indicating much faster convergence in fiscal policy within the regions.

Figure 5.3
Dispersion (standard deviation) of fiscal balance in SADC, COMESA and ECOWAS countries

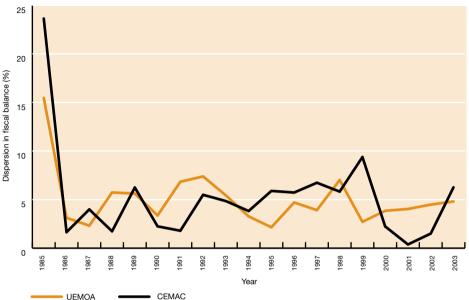


In ECOWAS,
CEMAC and
UEMOA countries,
dispersion of fiscal
balance remained
very low, ranging
from 4 per cent to 6
per cent during the
period studied

As shown in figures 5.3 and 5.4, in ECOWAS, CEMAC and UEMOA countries, dispersion of fiscal balance remained very low, ranging from 4 per cent to 6 per cent during the period studied. This is a significant achievement for fiscal policy convergence in these regions. By comparison, SADC and COMESA observed relatively volatile and high variation of fiscal balance over the same period. However, the dispersion in fiscal balance in SADC and COMESA regions decreased sharply toward the end of the period, reaching its lowest point of around 3 per cent at the end of 2003.

Figure 5.4
Dispersion (standard deviation) of fiscal balance in CEMAC and UEMOA countries

Putting the specific characteristics of countries aside, the hypothesis that poor economies tend to grow at a faster rate than rich countries can be considered a starting point in determining whether countries that have come together in an integration initiative are moving towards their objective



5.2.3 Convergence of per capita incomes in African RECs

Putting the specific characteristics of countries aside, the hypothesis that poor economies tend to grow at a faster rate than rich countries can be considered a starting point in determining whether countries that have come together in an integration initiative are moving towards their objective. The empirics investigating this hypothesis have surged since the re-emergence of the literature trying to explain why different countries grow at different rates, using different growth models. A dichotomy in the empirical literature on tests of income convergence among different economies is apparent. Two broad strands are unmistakable, that is, sigma and beta convergence, although the two tests are always applied to the same samples.

Put simply, the sigma convergence literature investigates the dispersion trend of per capita incomes for a group of countries. The idea is to see from the per capita incomes data whether, in a statistical sense, there is evidence that poor countries are growing faster than the rich countries. Beta convergence, on the other hand, is more rooted in economic theory, an area where neoclassical growth theories have been fighting with endogenous growth theories to explain why economies tend to grow at different rates. Technical details of the methodology employed and further details of the analysis are provided in Appendix A.

We begin our assessment with the results showing the presence or absence of income SADC, COMESA, ECOWAS, CEMAC and convergence in various RECs: UEMOA. The robustness of the empirical tests varies, influenced to a large extent, in the case of African countries, by availability of data. In that respect, the discussion and results related to income convergence begin with the most basic form of test of convergence², to the more theory-based tests that would allow estimation of the period it would take for convergence to occur³.

Annual growth rates versus initial income

One simple approach of assessing the presence of income convergence is to examine the growth behaviour over time relative to initial income of the countries in the RECs under study. This is done by plotting initial per capita income (that is, per capita income at a given base period) against annual growth rates of the countries in the REC. Then, as a rule, if there was convergence in income, one would expect to confirm that the countries with low initial per capita income are growing faster than the countries with higher initial per capita income. If this is true, then one would expect to show a clear possibility of fitting a negatively sloped line into a scatter plot of the group of countries.

The plots of the average annual growth rates against the log of initial per capita incomes of the respective REC countries are presented in figures A.1 to A.5 of Appendix A. For SADC countries, the negative slope or the inverse relationship between growth in per capita income and initial income is somewhat hard to establish with certainty. However, there seems to be a tendency for some poor countries to grow faster than the rich ones.

Looking closely at figure A.1, it is evident that some countries with initially low per capita incomes, such as Mozambique, Lesotho and Swaziland, are growing faster than Angola, Namibia, South Africa, Zambia and Zimbabwe, whose incomes were initially high. Malawi is also growing faster than the Democratic Republic of Congo, Madagascar and Zambia, whose initial incomes were higher. Botswana and Mauritius are the exceptions. These two countries happen to have started with high incomes in 1980 (but lower than South Africa) and have sustained higher economic growth than the other countries in SADC.

Figure A.2 shows the plot of the log of the 1981 per capita income of COMESA countries against their average annual growth in 1981-2003. Again, the negatively sloped line is not very obvious. For most countries, the differences in growth are

The simpler techniques are essentially the sigma test for convergence and are not based on growth theories per se, but are conducted on available per capita income data of the countries in question.

This requires one to start from the growth equation instead of initial per capita income, and then factor in endowments in the form of capital and labour for rate of convergence.

not large. Countries like Burundi, Comoros, Ethiopia, Kenya, Madagascar, Malawi, Rwanda and Zambia concentrate in the same area of low-income growth. The Democratic Republic of Congo is even showing an average annual growth of below zero. The countries with initial low per capita income are not growing any faster than those whose per capita income was initially high, such as Angola, Egypt, Namibia, Mauritius and Seychelles.

However, the economic growth in Angola, Namibia, Seychelles and Zimbabwe has slowed down. Only countries like Sudan and Swaziland are growing significantly higher than Angola, Namibia, Seychelles and Zimbabwe, whose per capita income was initially high. Egypt and Mauritius may be seen as an exception, starting with higher per capita income, but sustaining higher growth than the rest of the COMESA countries. Hence, the results of relative faster convergence in COMESA may be due to low-income growth in most of its member countries.

In ECOWAS, there is also a tendency for several countries like Benin, Burkina Faso, Gambia, Ghana, Mali, Nigeria, Senegal and Togo to grow at almost similar rates (figure A.3), although Benin, Gambia, Senegal, Nigeria and Togo have higher initial per capita income levels than the others. It may be observed that income growth in Côte d'Ivoire, which was the richest in ECOWAS in terms of initial per capita income in 1980, has slowed down. Moreover, Liberia and Sierra Leone, which have relatively high initial incomes, have also slowed down in growth and are now below zero. Cape Verde is one country in ECOWAS that has had relatively high income and has been able to sustain it over time. Limited per capita income convergence is therefore apparent.

Figure A.4 plots the relationship between the initial per capita incomes in 1985 and the average annual growth in 1985-2003 of the CEMAC countries. In the plot, if Equatorial Guinea is excluded, a negative sloping line may fit the data points. If there was convergence, Chad and Gabon would be the main drivers. Chad, which was originally poorest in 1985, grew faster than Cameroon, Congo and Gabon, whose initial incomes were relatively higher. Gabon, which was the richest in 1985, had slower income growth.

It may also be observed that Cameroon had slightly higher growth than Congo, whose income was higher in 1985. Box 5.1 shows the results of a test carried out for the entire Central African region, which suggests that convergence of per capita growth rates in Central Africa is hard to achieve.

Box 5.1

Convergence of per capita income in Central Africa

Econometric analysis of the convergence of per capita income

Different definitions of convergence exist in the literature. Probably the simplest one holds that there is convergence if the standard deviation of per capita income across countries in a region decreases over time (sigma convergence). For the Central African region (specify which countries are included), the linear temporal trend of the standard deviation is positive rather than negative, thus indicating divergence across countries.

As discussed by Carmignani (2006 and 2007), a more rigorous statistical definition states that there is convergence if the difference between the GDP of two countries evolves towards a stationary process. Stationarity in fact implies that the difference between the GDP of the two countries at time (t) is less than the difference observed over a period (t-1). Based on this definition, the test of convergence can be performed as a unit root test on the random variable defined as the difference between the GDP of two countries. If the null hypothesis that there is a unit root in the process can be rejected, then it is concluded that the GDP of the two countries converges.

When more than two countries are considered, then the unit root test can be performed on the difference between the GDP of the generic country x in the group and the average GDP of the group. The rejection of the null hypothesis in this case means that country x converges towards the regional average. From a methodological perspective, the unit root test can be conducted separately for each country in the group, or jointly for all countries. Given that for many Central African countries, GDP time series includes only a limited number of observations, stacking all countries together in a panel will strengthen the power of the test. The null hypothesis of the panel unit root test can then be formulated to account for heterogeneity across countries (see Li et al. 2003).

The panel unit root test of per capita convergence of national GDPs to the regional average is applied to three groups of central African countries: (i) all the countries of the subregion (Cameroon, Gabon, Equatorial Guinea, Chad, Central African Republic, Congo and Democratic Republic of Congo), (ii) all CEMAC countries and (iii) CEMAC countries without Equatorial Guinea. The underlying reason for the creation of the third group is that Sao Tome and Principe and Equatorial Guinea are both countries where the number of observations on GDP per head is significantly lower than in the other countries.

The test results are very clear: there is no convergence towards the subregional average. Various versions of the test are applied to the three groups (one version differing from the other in the formulation of the null hypothesis and/or in the computation of the test statistic) and results are very consistent throughout: a unit root is always detected, with the exception of one version of the test (out of a total of five) applied to the group of all countries in the subregion.

So, the conclusion is that overall, the per capita GDP of the countries of Central Africa does not show any significant long-run tendency to converge towards the subregional average. This conclusion, which is perfectly in line with the observation on the dynamics of the standard deviation, suggests that the cross-country distribution of GDP per capita in Central Africa becomes more and more unequal over time.

Source: CEA-BSR/AC (2007): Convergence économique en Afrique Centrale, non recurrent publication.

The per capita GDP of the countries of Central Africa does not show any significant longrun tendency to converge towards the subregional average

By looking at the dispersion of income within each REC. one can make an observation whether the disparity of income among the member countries tends to fall over time

Interestingly, the countries in UEMOA are more compact in terms of their economic growth and income (figure A.5). There is an apparent convergence in income in this REC where countries with low initial per capita incomes are growing faster than those with high initial per capita incomes. A negative sloping line may pass through Burkina Faso, Mali, Togo and Côte d'Ivoire. All other countries in UEMOA are growing faster than Côte d'Ivoire, which had the highest initial per capita income in 1980.

Finally, the results in figures A.1-A.5 are not conclusive on overall convergence among all RECs under consideration. Therefore, it is necessary to undertake more rigorous tests that will help determine the presence or absence of convergence based on some statistical models. Such tests may include the sigma test, the unit root test and the cointegration test. Both the sigma test and the unit root test determine whether the countries in each REC are converging towards a regional mean, while the cointegration test will determine whether there is co-movement of income or other variables within each REC.

Furthermore, the test of absolute and conditional convergence will also be discussed toward the end of this section. The remainder of the section presents the results of more robust tests of per capita income convergence in the various RECs. The technical details employed for these tests are outlined in the Appendix.

Dispersion of per capita income in RECs

Alternatively, by looking at the dispersion of income within each REC, one can make an observation whether the disparity of income among the member countries tends to fall over time. Here, the dispersion is measured by the income deviation (standard deviation) of each country from the regional mean or average. If there were convergence within each REC, the expectation would be that the standard deviation or the dispersion of the per capita incomes would be reducing over time. Table 5.1 shows the computed standard deviations of per capita incomes in each REC from 1980 to 2003. Moreover, a plot of these sets of standard deviations against time is shown in figure 5.5.

More formally, a regression of income standard deviation with time trend was estimated for each REC. The results are presented in appendix A.

As shown in table 5.1 and figure 5.5, and contrary to the expectations of income convergence, income disparity among SADC countries is increasing rather than decreasing over time. This implies that no convergence is occurring among SADC countries in terms of their income distribution. In 1980, SADC per capita standard deviation was \$US976, but this standard deviation increased to \$US1, 287 and \$US1,425 in 2000 and 2003, respectively, which is a clear sign of divergence in income. Figure 5.5 provides the visual for this divergence in income from 1985 up to 2003. The sigma test of convergence through the regression of the standard deviation with time (Appendix A) also confirmed that there is divergence in per capita income in the group.

Table 5.1Standard deviation of per capita income (in constant US\$, 2000=100) among RECs.

RECs	1980	1985	1990	1995	2000	2003
SADC	975.9	932.9	1042.4	1116.8	1286.9	1425.1
COMESA	-	1082.9	1372.7	1514.0	1904.9	1777.7
ECOWAS	219.7	217.3	210.8	244.9	286.9	299.2
CEMAC	1895.4	1786.7	1622.5	1644.0	1563.6	1531.9
UEMOA	253.8	208.5	179.4	160.2	173.7	159.6

Source: Ben Hammouda, H., S. Karingi, A. Njuguna, and M. Sadni-Jallab (2007).

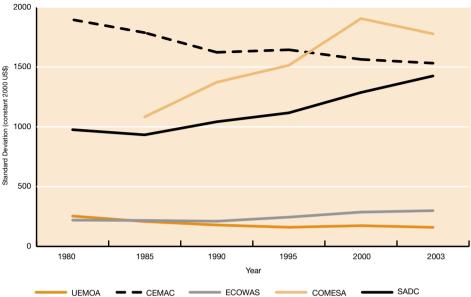
As in SADC, the income disparity among countries in COMESA remains high and is increasing. In 1985, the per capita income standard deviation among COMESA countries was \$US1, 083, rising to \$US1, 778 in 2003 (see also figure 5.5). Again, the income distribution in COMESA countries has widened over time. The disparity of income in COMESA was the highest among African RECs under study in 2003. Hence, the empirical evidence in COMESA is clearly in favour of divergence in per capita income rather than convergence. The sigma test also confirmed this result with the positive and highly significant coefficient of time trend (see appendix A).

The income distribution in ECOWAS countries is relatively narrower than that of SADC and COMESA, as indicated by its smaller per capita income standard deviation (table 5.1). The average income disparity in ECOWAS started to decline in 1985 and 1990, but started trending upward in 1995 through 2003. The sigma test on ECOWAS income dispersion also showed a significant positive trend, which implies some divergence rather than convergence in income (see Appendix A).

The empirical evidence in COMESA is clearly in favour of divergence in per capita income rather than convergence

Figure 5.5
Plot of standard deviation of per capita income among African RECs





In 1980, CEMAC countries had the highest income disparity amongst the African RECs under study (figure 5.5). Although this disparity showed some downward trend over the periods that followed, it has still remained very wide relative to other RECs. In 1980, the CEMAC per capita income standard deviation was \$US1,895, but it fell to \$US1,532 in 2003, an indication that income disparity declines somewhat over time (table 5.1). However, based on the sigma test, the decline in income convergence among CEMAC countries is not statistically significant (see Appendix A).

In contrast to other African RECs, as shown by the plot of income dispersion, UEMOA countries have a very strong tendency for income convergence. Figure 5.5 shows that the income disparity in UEMOA was the lowest among the African RECs and continues to decline over time. From 1980 to 2003, the per capita standard deviation of UEMOA countries fell by almost 60 per cent, from \$US254 to \$US160. The result of the sigma test also showed a tendency toward income convergence among UEMOA countries.

Overall, the above results suggest that income per capita convergence is not that evident in SADC, COMESA and ECOWAS countries. A limited convergence was, however, observed in CEMAC, while stronger evidence in favour of convergence was observed in UEMOA

Convergence toward regional mean income

This section describes the results of yet another test of convergence called the unit root test. Unit root tests for per capita income could provide useful results on whether convergence is taking place in a given subregion. These tests can be carried out through a pooled dataset representing all the countries involved in a REC or at individual country level. Table A.4 in Appendix A shows individual country unit root tests for per capita income. Unit root tests⁴ results for SADC, COMESA, ECOWAS, CEMAC and UEMOA are also provided in tables A.22 to A.27. When the test is carried out for the whole group, the important thing to remember is that it simply tries to confirm whether the group as a whole is converging or not.

Convergence of individual countries toward regional mean

The main purpose of this analysis is to determine whether the "difference" between the incomes of a particular country and the regional mean tend to diminish (or die) over time. A statistically significant decline in this difference implies that the particular country's income tends to converge toward the regional mean over time. Details of the test are presented in Appendix A.

Overall, according to the country-by-country test of income convergence, the incomes of almost all countries do not tend to converge toward the REC mean income. For ECOWAS and UEMOA countries, only Togo showed a significance convergence toward its regional mean income (see table A.4 in appendix A). For CEMAC countries, only Cameroon and the Republic of Congo supported the presence of income convergence toward the regional mean.

Convergence using pooled observations (group convergence)

The results of the pooled analysis of per capita income convergence show that the countries as a group (each REC) are not converging (see tables A.23 to A.27 in Appendix A). This is also consistent with the other finding that the per capita incomes in SADC, COMESA and ECOWAS countries have been diverging rather than converging over time.

According to the country-by-country test of income convergence, the incomes of almost all countries do not tend to converge toward the REC mean income

⁴ The **equation** $\delta_{it} = \delta_{it-1} + \epsilon_{it}$ is explained in the Appendix, where δ_{it} is defined as a time varying difference between a particular country's economic variable (in this case income) at a given time t and the particular reference value of the REC at the same time. The null hypothesis that is tested using either the pool or

the individual country test is $H_0: \phi = 1$.

Convergence and co-movements of incomes

Another notion of convergence holds that if there are two or more series (in this case countries) sharing a long-run equilibrium or persistent co-movement,⁵ this means that economic variables may wander from each other in the short run but then maintain a common path called equilibrium, and their deviation from this equilibrium has no tendency to grow steadily over time. This subsection describes the results of the test of the presence for co-movements in incomes among the countries in each REC. Technical details of the test are presented in Appendix A.

The results of the test⁶ for co-movements of macroeconomic variables among SADC countries are shown in tables A.23 and A.24. In the case of SADC countries, the analysis was divided into SACU and non-SACU countries, respectively, because of data problems. The SACU countries in this analysis include Botswana, Lesotho, Namibia and Swaziland. According to the results in tables A.23, the test indicates no co-movement of per capita incomes in SACU countries. However, for the non-SACU countries - Angola, Democratic Republic of Congo, Madagascar, Mauritius, Mozambique, Zambia and Zimbabwe – there appears to be some evidence of partial convergence, meaning that only some countries are converging within the REC.

Similarly, ECOWAS countries were divided into two groups: UEMOA and non-UEMOA countries and both sets of countries showed partial convergence.

In CEMAC, only four countries were included in the analysis: Central African Republic, Chad, Republic of Congo and Gabon. The test for co-movement in this REC indicated that there is partial convergence of per capita incomes (see table A.25).

Results for UEMOA are presented in table A.26. Consistent with earlier findings, all countries in UEMOA show that per capita income convergence is taking place within the REC.

Absolute and conditional beta convergence

The convergence tests presented in the preceding subsections are based purely on the behaviour exhibited by the sample data, with no sound economic theory being

In econometric theory, a long-run equilibrium relationship is defined as a systematic co-movement among economic variables that an economic system exhibits in the long run. This equilibrium relates to the stationarity of the short-run discrepancy or error representing the shocks that are constantly occurring and affecting the economic variables. This means that if there is the equilibrium relationship between two variables, the deviations from the equilibrium relationship must have no tendency to grow systematically over time. In theory, such relationship describes a cointegrating relationship (see Banerjee et al. 1993).

Please take note that test for cointegration (co-movement) is sensitive to the number of lags selected (see Enders 1995).

considered. In the literature, the traditional test of income convergence has been the "beta convergence" test and later on the "conditional convergence" test (see Mankiw et at. 1992 and Islam 1995, for example). Islam (1995)⁷ is a useful example on an application for testing for convergence among countries that can be used in a regional integration context as in our RECs. The results of whether partial convergence of per capita incomes it taking place and if so how long it would take for full convergence to occur based on the economic growth model⁸ are discussed here and shown in tables A.20 and A.22.

A textbook analytical discussion of both absolute and conditional convergence can be found in Barro and Sala-i-Martin (1995). The simplest way to distinguish and interpret the absolute and conditional convergence results is the following. Absolute convergence presupposes that all the economies in a given group will be moving to one steady to state. The key test is therefore to establish whether the countries in a given REC are all moving towards this unique and joint steady state.

Conditional convergence on the other hand assumes that each country has a unique steady state and the formal test that is carried out essentially aims to establish whether in a given group of countries, each is converging toward its individual steady state⁹. It should be noted here that evidence of conditional convergence does not imply convergence across countries. Different steady states imply that even if a country is converging faster than another to its own steady state, the absolute difference between the income levels of the two countries does not necessarily decrease over time. If absolute convergence is found, then the difference between incomes across countries is decreasing over time.

Table A.20 in Appendix A shows the estimated results for the absolute and conditional beta convergence coefficients among the various African RECs. The results in table A.21 indicate the estimated length of time to eliminate half (50 per cent) of the initial income gap and how long it will take to close those income gaps. Due to lack of sufficient observations, beta convergence was not estimated for CEMAC and UEMOA.

The regression results for beta convergence indicate some evidence of income convergence among the 14 SADC countries. The results on absolute convergence rates

Absolute convergence presupposes that all the economies in a given group will be moving to one steady to state

Islam (1985) demonstrates empirically that a panel data approach to growth empirics can deal with the weaknesses that studies such as Mankiw, Romer and Weil (1992) were pointing to with respect to the use of the neoclassical Solow model for measuring rates of per capita income convergence.

Both absolute and conditional models of convergence were estimated using the fixed-effect panel data model with four observations for each country, representing the five-year non-overlapping average from 1981 to

The empirical literature seems to suggest that absolute convergence may not exist, and that one can only talk about conditional convergence. But some authors point to the evidence of absolute convergence especially in what has come to be known as "convergence clubs". Absolute convergence can therefore be found in sub-sets of countries in a larger grouping.

The income convergence analysis shows that there is very little evidence of convergence among countries in the various RECs, except in UEMOA

imply that it will take four years to eliminate half of the initial income gap among the SADC countries, but it will take at least 24 years to close these income gaps altogether (table A.21). On the other hand, results from conditional convergence also imply four years to do away with half of initial income gap among SADC countries and at least 27 years to catch up completely.

An interesting result with SADC countries is that the rate of convergence obtained under the conditional income convergence criteria is close to the absolute rate of convergence. This means that it would take roughly the same time for SADC countries to converge toward a unique steady state or for each of the economies to converge toward its own steady state.

The results from the analysis also show some evidence of income convergence for 17 (out of 20) COMESA countries included in the study. Djibouti, Eritrea and Uganda are not included in the study due to insufficient data. The estimated results for COMESA countries show a slightly higher rate of convergence than in the 14 countries in SADC. For both absolute and conditional convergence, the results imply that it will take three years to eliminate half of the initial income gap among the member countries, but that it will take at least 21 years for the entire income gap to disappear.

As in SADC and COMESA countries, the results show some evidence of convergence for ECOWAS countries. The rate of conditional convergence for ECOWAS is much lower than that of SADC and COMESA. These results would mean that it will take seven years to cut the initial income gap among the members of ECOWAS in half and at least 43 years to close the gap in income altogether.

In conclusion, the income convergence analysis shows that there is very little evidence of convergence among countries in the various RECs, except in UEMOA. However, with more stringent testing based on economic growth theories, a very slow pace of convergence of per capita incomes could be seen. At that rate, unless there was a major structural shift, it will take more than half a century for most REC economies to converge and thus attain one of the expected outcomes of regional integration initiatives in Africa.

Appendix A: Measuring Macroeconomic Convergence

a. Absolute and conditional convergence

The prediction of convergence across countries has been used as the main test of the validity of the neoclassical growth model. Moreover, estimates of the speed of convergence across economies were thought to provide information on the key parameters of growth theory, including the share of capital in the production function. However, the direct test of the so-called "beta convergence", where poor countries with little capital will grow faster than rich ones with large capital stocks, failed to support the presence of convergence and was therefore seen as evidence against the neoclassical model (see Sala-i-Martin 1996 for exposition).

Sala-i-Martin (1996) argued, however, that the neoclassical model prediction of convergence depends on the main assumption that "the only difference across countries lies in their initial levels of capital". In reality, however, economies may differ in their levels of technology, their propensities to save, or their population growth rates. If different economies have different technological and behavioural parameters, then they will have different steady states.

Therefore, an appropriate test of convergence is that of "conditional beta convergence" instead of "absolute beta convergence", since the prediction that poor economies should grow faster than rich ones only holds if all economies converge to the same steady state. Conditional beta convergence allows testing of convergence among countries with different steady states. One way of performing this test is to hold constant the steady state of each economy by introducing a vector of other explanatory variables in the equation (Barro and Sala-i-Martin 1992; and Mankiw et al. 1992).

Suppose that *absolute* convergence holds for a group of countries i = 1, 2,..., N, a standard growth equation is given as (Barro & Sala-i-Matin, 1995):

$$\log (y_{i}) = a + (1 - b)\log(y_{i,t-1}) + v_{it}$$
 (A.1)

where y_i is the income of the country, a and b are constants, with 0 < b < 1, v_{it} is a disturbance term and t is time index. The condition b > 0 implies absolute convergence since the annual growth rate, $\log{(y_{it}/y_{it-1})}$, is inversely related to $\log{(y_{it-1})}$.

If the various economies have different steady-state positions, a vector of explanatory variables is added to the equation (3.1). The conventional growth-model equation, which uses panel data, is given as (e.g. Islam 1995)¹¹:

If different economies have different technological and behavioural parameters, then they will have different steady states

$$\log(y_i) = \eta_i + \beta \log(y_{i,t-1}) + \sum_{j=1}^k \pi_j \log(x_t^j) + \xi_t + u_t$$
 (A.2)

where y_{i} = per capita income

$$\beta = e^{-\lambda}$$
, $\lambda = \text{rate of convergence}$, $\tau = \text{period}$

$$x_{i}^{j}$$
 = control/explanatory variables, j = 1, 2,...k

$$\eta_i$$
 = country-specific effect

$$\xi_t$$
 = period-specific constant

$$u_{it}$$
 = disturbance term

The group of countries is said to be experiencing conditional growth convergence if the condition, $0 < \beta < 1$, holds.

b. Sigma convergence

An alternative measure of income convergence is the so-called "sigma convergence" rate or " σ -convergence". Sigma convergence states that the dispersion of real per capita income across a group of economies tends to fall over time. In other words, a group of economies are said to converge in the sense of sigma σ (standard deviation) if $\sigma_{t+T} < \sigma_t$, where σ_t is the time t standard deviation of $\log(y_{t,t})$ across i.

The concept of β -convergence and σ -convergence are not related. Barro and Sala-i-Martin (1995) showed that even if absolute convergence holds, the dispersion of per capita income does not necessarily tend to decline over time. The reason why the two concepts of convergence may not always show up together is that they capture two different aspects of the world. σ -convergence relates to whether or not the cross-country distribution of world income shrinks over time, while β -convergence relates to the mobility of different individual economies within the given distribution of world income (see Sala-i-Martin 1996).

A formal test of sigma convergence to see whether income dispersion declines over time is to regress σ with the time trend. Convergence in per capita income holds if the coefficient of time is significantly negative.

Specifically, define the standard deviation of x across countries in the region at time t as σ_t . Then one way to assess convergence is to see whether σ decreases over time. A formal test involves estimating the regression:

The reason why the two concepts of convergence may not always show up together is that they capture two different aspects of the world

$$\sigma_{t} = \alpha + \varphi T_{t} + \varepsilon_{t} \tag{A.3}$$

where T is a time trend, ε is a disturbance, and α and ϕ are the parameters to be estimated. Convergence requires the estimated ϕ to be significantly negative. Equation (a.1) can be estimated using OLS. Henceforth, this methodology to test convergence will be referred to as the **sigma test or sigma convergence**.

C. Stochastic convergence and common trends

The definition of stochastic convergence is based on the concepts of unit roots and cointegration in time series econometrics. This notion of convergence was introduced by Bernard and Darlauf (1995) in their study of income convergence in a stochastic environment. In general, stochastic convergence tests determine whether the long-run forecasts of output differences tend to zero over time. If the output differences series is a mean zero stationary process then this definition of convergence will be satisfied. In order for countries i and j to converge, their outputs must be cointegrated with cointegrating vector [1, -1].

Bernard and Darlauf suggest that if countries do not converge in the strict sense of the above definition, they might still respond to the same long-run driving processes, which means that they may face the same permanent shocks with different long-run weights. Countries i = 1, 2,..., N contains a single common trend if the long-term forecasts of output are proportional at a fixed time. In other words, countries i and j have a common trend if their output series are cointegrated with cointegrating vector $[1, -\alpha]$.

The Johansen multivariate tests of cointegration may be used to test for stochastic convergence, assuming the output vector process has a finite-vector autoregressive representation as:

$$\Delta Y_{t} = \Pi_{0} + \Pi Y_{t-1} + \Pi_{1} \Delta Y_{t-1} + \dots + \Pi_{n} \Delta Y_{t-n} + \varepsilon_{t} \quad (A.4)$$

where Y_t = vector of a macroeconomic variable (for example: per capita income)

 Π = matrix of coefficients

 ε = disturbance term

In equation (2.3), the main interest is the rank of Π , which is related to the number of cointegrating vectors. If the rank $(\Pi) = N$, then Y_t is a stationary process. If the rank (Π) is 0 < r < N, there are r cointegrating vectors for the individual series in Y_t and thus the group of countries is being driven by (N-r) common shocks. If the rank $(\Pi) = 0$, there are N stochastic trends and the long-run output levels are

In general. stochastic convergence tests determine whether the long-run forecasts of output differences tend to zero over time

not related across countries. For individual output series to converge, there must be (N-1) cointegrating vectors of the form (1, -1) or one common long-run trend.

d. Absolute and conditional beta convergence

The first notion of convergence considered in this study is beta convergence as discussed above. This study adopts the procedure described in Caselli et al. (1996) in estimating the relationship described in equation (2.2). Caselli et al. used a generalized method of moments (GMM) to address simultaneously the problems of correlated individual effects and endogenous explanatory variables that result in inconsistent estimates, which characterized many growth studies.

Following Caselli et al., the differenced version of equation (2.2) was estimated, thereby eliminating the country-specific effects. Both the levels and the first differences of the dependent variables and the explanatory variables are used as instruments described in Yasar et al. (2005). For each REC, a panel data was used consisting of four observations for each country, representing the 5-year non-overlapping average the 1981-2000 period. Using the set-up of 5-year spans is believed to be less influenced by business cycle fluctuations and less likely to be serially correlated than they would be in annual data (Islam 1995). Moreover, the time-specific effects may also be minimal and perhaps irrelevant.

For the estimation of conditional convergence, this study limits its explanatory variables to the ones included in the standard growth model, that is, x_1 is savings (as a proportion of GDP) and x_2 is the sum of population growth rate (n), rate of labour-augmenting technological progress (g) and the rate of depreciation of physical capital (δ). As in most studies of growth convergence, g + δ is assumed to be equal to 0.05. The restricted version of the model is also used, where the coefficient of savings is theoretically equal and where it registers a sign opposite to that of the growth rates variable.

For each REC, a panel data was used consisting of four observations for each country, representing the 5-year non-overlapping average the 1981-2000 period

Table A.1 Sigma convergence test results for macroeconomic variables

Series	SADC	COMESA	ECOWAS	CEMAC	UEMOA
1. Inflation (Quarterly)					
Coeff. of time	-0.429*** (5.445)	-0.759*** (-12.723)	-0.422*** (-13.710)	-0.067*** (-4.420)	-0.410*** (-10.178)
R-squared	0.304	0.710	0.746	0.211	0.618
DW	0.250	0.586	0.567	1.261	0.534
2. Fiscal Balance (Annual)					
Coeff. of time	-0.372*** (-3.437)	-0.121 (0.976)	-0.328*** (-3.898)	-0.234 (-1.117)	-0.179 (-1.490)
R-squared	0.410	0.053	0.472	0.068	0.115
DW	2.295	2.168	1.019	1.493	1.618

^{**}Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent

Table A.2 Unit root tests for SADC individual country series deviation from regional mean

Country	Elliot-Rothenberg-Stock DF-GLS Test-Statisticsa						
	Inflation (Quarterly	r: 1987Q1-2004Q2)	Fiscal Balanceb (Annual:1985-20				
	Intercept	Trend and Intercept	Intercept	Trend and Intercept			
Angola	-	-	-2.538**	-			
Botswana	-0.960	-1.279	-1.383	-			
Congo, D.R.	-	-	-	-			
Lesotho	-1.019	-0.991	-4.310***	-			
Madagascar	-2.617***	-2.974*	-1.421	-			
Malawi	-3.140***	-3.351**	-3.260***	-			
Mauritius	-1.487	-2.653	-1.984**	-			
Mozambique	-	-	-2.078**	-			
Namibia	-3.623***	-3.676**	-2.642**	-			
South Africa	-1.128	-1.234	-2.524**	-			
Swaziland	-2.235**	-2.429	-	-			
Tanzania	-0.509	-4.746***	-1.993**	-			
Zambia	-2.176**	-2.511	-3.308***	-			
Zimbabwe	-	-	-3.434***	-			

a Automatic selection of lag length based on Schwarz Information Criterion.

b Test critical values were calculated for 20 observations and may not be accurate for this particular series.

⁽⁻⁾ means insufficient data.
***Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent. See MacKinnon (1996) for asymptotic critical values.

Table A.3: Unit root tests for COMESA individual country series deviation from regional mean

Country	Elliot	Elliot-Rothenberg-Stock DF-GLS Test-Statisticsa					
	Inflation (Quarterly	/ 1987Q1-2003Q4)	Fiscal Balanceb (Annual:1985-2003				
	Intercept	Trend and Intercept	Intercept	Trend and Intercept			
Angola	-	-	-2.613**	-			
Burundi	-1.196	-2.379	-3.189***	-			
Comoros	-	-	-5.245***	-			
DRC	-	-	-	-			
Egypt	-3.135***	-3.201**	-	-			
Ethiopia	-0.667	-2.386	-2.749***	-			
Kenya	-2.579**	-3.496**	-3.063***	-			
Madagascar	-1.476	-2.275	-1.726*	-			
Malawi	-2.532**	-3.262**	-3.404***	-			
Mauritius	-1.536	-3.504**	-2.064**	-			
Namibia	-3.003***	-3.937***	-2.974***	-			
Rwanda	-1.576	-3.524**	-	-			
Seychelles	-0.262	-2.567	-	-			
Sudan	-	-	-	-			
Swaziland	-1.901**	-3.756***	-	-			
Uganda	-0.084	-0.774	-2.808***				
Zambia	-2.113**	-2.419	-3.212***	-			
Zimbabwe	-	-	-2.336**	-			

a Automatic selection of lag length based on Schwarz Information Criterion.

b Test critical values were calculated for 20 observations and may not be accurate for this particular series.

⁽⁻⁾ means insufficient data.
***Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent. See MacKinnon (1996) for asymptotic critical values.

Table A.4 Unit root tests for ECOWAS individual country series deviation from regional

Country		Elliot-Rothenberg-Stock DF-GLS Test-Statisticsa							
		Per Capita Income (Annual: 1980-2003)		Inflation (Quarterly:1988Q3- 2004Q4)		Fiscal Balanceb (Annual:1985-2002)			
	Intercept	Trend and Intercept	Intercept	Trend and Intercept	Intercept	Trend and Intercept			
Benin	-0.189	-	-	-	-	-			
Burkina Faso	-0.921	-	-2.646**	-4.393***	-	-			
Cape Verde	1.816	-	-1.085	-1.935	-3.29***	-			
Côte d'Ivoire	-0.789	-	-2.151**	-3.543**	-1.86*	-			
Gambia	-1.693*	-	-1.831*	-2.473	-1.03	-			
Ghana	-1.495	-	-4.179***	-4.256***	-1.99**	-			
Guinea-Bissau	-1.188	-	-1.623*	-3.973***	4.120***	-			
Guinea	-	-	-	-	-	-			
Liberia	-0.682	-	-	-	-	-			
Mali	-0.424	-	-1.861*	-2.421	-3.96***	-			
Niger	-0.968	-	-2.010**	-4.239***	-3.68***	-			
Nigeria	-1.750*	-	-2.762***	-3.224**	-	-			
Senegal	-1.608*	-	-1.096	-4.622***	-5.06***	-			
Sierra Leone	-0.118	-	-1.882*	-2.306	-2.37**	-			
Togo	-2.079**	-	-1.420	-2.412	-2.61**	-			

a Automatic selection of lag length based on Schwarz Information Criterion.

Table A.5

Unit root tests for CEMAC individual country series deviation from regional mean

Country	Elliot-Rothenberg-Stock DF-GLS Test-Statisticsa					
	Inflation (Quarterly: 1984Q2-2002Q4)		Fiscal Balanceb (Annual:1985-2003)			
	Intercept	Trend and Intercept	Intercept	Trend and Intercept		
Cameroon	-3.405***	-4.668***	-4.320***	-		
CAR	-2.301**	-3.444**	-	-		
Chad	-2.813***	-3.432**	-	-		
Congo, Rep	-	-	-2.932***	-		
Eq. Guinea	-	-	-	-		
Gabon	-5.326***	-4.839***	-3.177***	-		

^aAutomatic selection of lag length based on Schwarz Information Criterion.

b Test critical values were calculated for 20 observations and may not be accurate for this particular series. (-) means insufficient data.

^{***}Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent. See MacKinnon (1996) for asymptotic critical values.

^bTest critical values were calculated for 20 observations and may not be accurate for this particular series.

⁽⁻⁾ means insufficient data.

***Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent. See MacKinnon (1996) for asymptotic critical values.

Table A.6 Unit root tests for UEMOA individual country series deviation from regional mean

Country	Elliot-Rothenberg-Stock DF-GLS Test-Statisticsa					
	Inflation (Quarterly: 1988Q3-2004Q4)		Fiscal Balanceb (Annual:1985-2003			
	Intercept Trend + Intercept		Intercept	Trend + Intercept		
Benin	-	-	-	-		
Burkina Faso	-2.281**	-3.986***	-	-		
Côte d'Ivoire	-2.036**	-2.969*	-3.188***	-		
Guinea Bissau	-1.489	-3.787***	-3.978***	-		
Mali	-2.087**	-3.835***	-2.659**	-		
Niger	-0.868	-3.074*	-4.037***	-		
Senegal	-1.810*	-3.249***	-3.921***	-		
Togo	-2.811***	-3.914***	-2.670**	-		

aAutomatic selection of lag length based on Schwarz Information Criterion.

Table A.7 Unit root test results on pooled observations (series deviation from regional mean)

Series	Im, Pesaran and Shin W-Stat (Ind'I unit root process) a						
	SADC	COMESA	ECOWAS	CEMAC	UEMOA		
1. Inflation							
Intercept	-2.498***	-5.668***	-3.253***	-7.090***	-3.113***		
	(0.006)	(0.000)	(0.000)	(0.000)	(0.001)		
Intercept + Trend	-4.616***	-5.005***	-5.938***	-7.381***	-5.693***		
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		
2. Fiscal Balance							
Intercept	-4.260***	-4.921***	-6.410***	-10.192***	-6.547***		
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		
Intercept + Trend	-3.746***	-6.219***	-4.930***	-8.335***	-8.054***		
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		

aAutomatic selection of lag length based on Schwarz Information Criterion. Values in the parentheses are probabilities.

bTest critical values were calculated for 20 observations and may not be accurate for this particular series.

⁽⁻⁾ means insufficient data.

^{***}Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent. See MacKinnon (1996) for asymptotic critical values.

^{***}Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent

Table A.8 Cointegration tests of macroeconomic variables in SADC countries

Unit root test on actual values

Country	Elliot-Rothenberg-Stock DF-GLS Test-Statisticsa				
	Inflation (Quarterly: 1987Q1-2004Q2)		Fiscal Balanceb (Annual:1985-20		
	Intercept	Trend and Intercept	Intercept	Trend and Intercept	
Angola	-	-	-2.604**	-	
Botswana	-1.286	-1.732	-1.560	-	
Congo, D.R.	-	-	-	-	
Lesotho	-1.437	-1.283	-2.792***	-	
Madagascar	-2.122**	-2.191	-2.283**	-	
Malawi	-3.331***	-3.490**	-3.563***	-	
Mauritius	-1.327	-1.821	-1.680*	-	
Mozambique	-	-	-2.080**	-	
Namibia	-4.246***	-4.160***	-2.051**	-	
South Africa	0.642	-2.444	-1.654*	-	
Swaziland	-3.504***	-3.997***	-	-	
Tanzania	-1.075	-2.515	-2.299**	-	
Zambia	-2.056	-2.434	-3.712***	-	
Zimbabwe	-	-	-3.706***	-	

aAutomatic selection of lag length based on Schwarz Information Criterion.

bTest critical values were calculated for 20 observations and may not be accurate for this particular series.

See MacKinnon (1996) for asymptotic critical values.

⁽⁻⁾ means insufficient data.
***Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent

COMESA

Table A.9

Cointegration analysis of inflation in SADC countries

Included observations: 67 after adjustments Trend assumption: Linear deterministic trend

Series: BOTSWANA LESOTHO MAURITIUS SER01 TANZANIA ZAMBIA

Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.467772	125.5677	95.75366	0.0001
At most 1 *	0.391108	83.31191	69.81889	0.0029
At most 2 *	0.319774	50.07220	47.85613	0.0305
At most 3	0.225815	24.25512	29.79707	0.1899
At most 4	0.095763	7.106877	15.49471	0.5652
At most 5	0.005394	0.362394	3.841466	0.5472

Trace test indicates three cointegrating eqn(s) at the 0.05 level

Table A.10

Cointegration analysis on fiscal balance of SADC countries

Included observations: 17 after adjustments Trend assumption: Linear deterministic trend Series: BOTSWANA MAURITIUS S_AFRICA Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.554320	21.82771	29.79707	0.3082
At most 1	0.273232	8.089105	15.49471	0.4559
At most 2	0.145024	2.663597	3.841466	0.1027

Trace test indicates no cointegration at the 0.05 level

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

Table A.11

Cointegration tests of macroeconomic variables in COMESA countries

a. Unit root tests on actual values

Elliot-Rothenberg-Stock DF-GLS Test-Statisticsa				
Inflation (Quarterly	1987Q1-2003Q4)	Fiscal Balanceb (Annual: 1985-200		
Intercept	Trend and Intercept	Intercept	Trend and Intercept	
-	-	-2.602**	-	
-1.197	-1.589	-3.357***	-	
-	-	-4.745***	-	
-4.611***	-4.665***	-	-	
0.159	-2.14	-	-	
-2.217**	-2.517	-3.025***	-	
-2.909***	-3.127**	-2.806***	-	
-2.066**	-2.143	-2.283**	-	
-3.309***	-3.486**	-3.686***	-	
-1.305	-1.866	-1.684*	-	
-4.175***	-3.203**	-2.054**	-	
-3.406***	-3.525**	-	-	
-3.118***	-2.493	-	-	
-	-	-	-	
-3.606***	-4.001***	-	-	
-0.054	-0.840	-4.171***		
-2.040**	-2.411**	-3.529***	-	
-	-	-2.992***	-	
	Inflation (Quarterly Intercept	Inflation (Quarterly 1987Q1-2003Q4) Intercept Trend and Intercept	Inflation (Quarterly 1987Q1-2003Q4) Fiscal Balanceb (Antercept) Intercept Trend and Intercept Intercept - - -2.602** -1.197 -1.589 -3.357*** - - -4.745*** -4.611**** -4.665*** - -0.159 -2.14 - -2.217** -2.517 -3.025*** -2.909*** -3.127** -2.806*** -2.066** -2.143 -2.283** -3.309*** -3.486** -3.686*** -1.305 -1.866 -1.684* -4.175*** -3.203** -2.054** -3.406*** -3.525** - -3.606*** -4.001*** - -0.054 -0.840 -4.171*** -2.040** -2.411** -3.529***	

a Automatic selection of lag length (maxlag=4 (annual series);=11(quarterly series) based on Schwarz Information Criterion.

b Test critical values were calculated for 20 observations and may not be accurate for this particular series.

⁽⁻⁾ means insufficient data.

^{***}Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent

Cointegration analysis of inflation in COMESA countries

Included observation	ns: 66 after adjustr	ments				
Trend assumption: linear deterministic trend						
Series: BURUNDI E	GYPT MAURITIUS	UGANDA				
Lags interval (in first	Lags interval (in first differences): 1 to 1					
Unrestricted Coin	tegration Rank To	est (Trace)				
Hypothesized		Trace	0.05			
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**		
None *	0.415465	66.92641	47.85613	0.0003		
At most 1 *	0.240070	31.48844	29.79707	0.0316		
At most 2	0.115791	13.36950	15.49471	0.1019		
At most 3 *	0.076428	5.247421	3.841466	0.0220		
T						

Trace test indicates two cointegrating eqn(s) at the 0.05 level

Note: The test is not possible for fiscal balance as all the series rejected the presence of unit root.

Table A.13

Cointegration tests of macroeconomic variables for ECOWAS countries

a. Unit root tests on actual values

Country	Elliot-Rothenberg-Stock DF-GLS Test-Statisticsa			
	Inflation (Quarterly	/:1988Q3-2004Q4)	Fiscal Balanceb (A	Annual:1985-2002)
	Intercept	Trend and Intercept	Intercept	Trend and Intercept
Benin	-		-	-
Burkina Faso	-3.886***		-	-
Cape Verde	-1.185		-3.40***	-
Côte d'Ivoire	-3.526***		-1.41	-
Gambia the	-2.034**		-2.09**	-
Ghana	-3.856***		-2.11**	-
Guinea-Bissau	-1.395		-4.09***	-
Guinea	-		-	-
Liberia	-		-	-
Mali	-2.913***		-1.86*	-
Niger	-3.012***		-3.34***	-
Nigeria	-2.219**		-	-
Senegal	-2.853***		-4.02***	-
Sierra Leone	-1.804*		-2.13**	-
Togo	-1.864*		-2.274**	-

a Automatic selection of lag length based on Schwarz Information Criterion.

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

bTest critical values were calculated for 20 observations and may not be accurate for this particular series.

⁽⁻⁾ means insufficient data.

^{***}Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent. See MacKinnon (1996) for asymptotic critical values.

Cointegration analysis of inflation in ECOWAS countries

Included observations: 63 after adjustments Trend assumption: linear deterministic trend

Series: CAPE VERDE GUINEABISSAU SIERRA LEONE TOGO

Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.353902	55.22179	47.85613	0.0087
At most 1	0.270783	27.70317	29.79707	0.0856
At most 2	0.093787	7.808803	15.49471	0.4861
At most 3	0.025147	1.604498	3.841466	0.2053

Trace test indicates one cointegrating eqn(s) at the 0.05 level

Table A.15

Cointegration analysis of fiscal balance in ECOWAS countries

Included observations: 17 after adjustments Trend assumption: linear deterministic trend

Series: CIV MALI

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.471591	12.71034	15.49471	0.1259
At most 1	0.103971	1.866303	3.841466	0.1719

Trace test indicates no cointegration at the 0.05 level

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

Cointegration results for CEMAC countries

a. Unit root test on actual values

Country	Elliot-Rothenberg-Stock DF-GLS test-statisticsa			
	Inflation (Quarterly: 1984Q2- 2002Q4)	Fiscal Balanceb (Annual:1985-2003)		
	Intercept	Intercept		
Cameroon	-2.311**	-2.180**		
CAR	-3.624***	-		
Chad	-1.759*	-		
Congo	-	-2.802***		
Gabon	-3.718***	-3.330***		

a Automatic selection of lag length based on Schwarz Information Criterion.

Note: No cointegration test for inflation and fiscal balance series. The presence of unit root is rejected in all countries except Chad (based on 5 per cent critical value).

Table A.17

Cointegration tests on macroeconomic variables for UEMOA countries

a. Unit root test on actual values

Country	Elliot	-Rothenberg-Stock	CDF-GLS Test-Statisticsa		
	Inflation (Quarterly: 1984Q2-2002Q4)		Fiscal Balanceb (Annual:1985-200		
	Intercept Trend and Intercept		Intercept	Trend and Intercept	
Benin	-	-	-	-	
Burkina Faso	-3.887***	-3.897***	-	-	
Côte d'Ivoire	-3.526***	-3.558**	-1.408	-	
Guinea Bissau	-1.395	-4.572***	-4.090***	-	
Mali	-2.913***	-3.268**	-1.858*	-	
Niger	-3.012***	-3.236**	-3.316***	-	
Senegal	-2.853***	-2.998*	-4.020***	-	
Togo	-1.870*	-1.974	-2.275**	-	

a Automatic selection of lag length based on Schwarz Information Criterion.

bTest critical values were calculated for 20 observations and may not be accurate for this particular series.

⁽⁻⁾ means insufficient data.

^{***}Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent. See MacKinnon (1996) for asymptotic critical values.

bTest critical values were calculated for 20 observations and may not be accurate for this particular series.

⁽⁻⁾ means insufficient data.

^{***}Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent. See MacKinnon (1996) for asymptotic critical values.

Cointegration analysis of inflation series in UEMOA countries

Included observations: 63 after adjustments Trend assumption: linear deterministic trend

Series: GUINEA-B TOGO

Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.192736	17.43531	15.49471	0.0252
At most 1 *	0.060724	3.946693	3.841466	0.0470

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

Table A.19

Cointegration analysis of fiscal balance series in UEMOA countries

Included observations: 17 after adjustments Trend assumption: linear deterministic trend

Series: CIV MALI

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.473307	12.74771	15.49471	0.1244
At most 1	0.103026	1.848381	3.841466	0.1740

Trace test indicates no cointegration at the 0.05 level

^{*} denotes rejection of the hypothesis at the 0.05 level

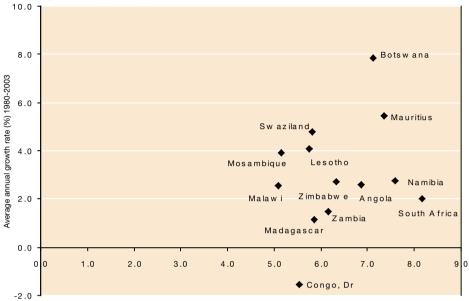
^{**}MacKinnon-Haug-Michelis (1999) p-values

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

Plots of average annual growth rates against Log of Initial Per Capita Income Figure A.1

Convergence of per capita income across SADC countries, 1980-2003



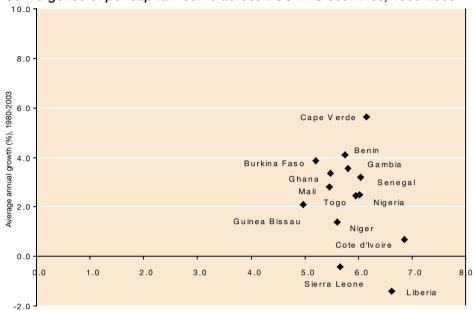
Log of 1980 per capita income

Figure A.2
Convergence of per capita income across COMESA countries, 1981-2003



Log of 1981 per capita income

Figure A.3 Convergence of per capita income across ECOWAS countries, 1980-2003



Log of 1980 per capita income

Figure A.4 Convergence of per capita income across CEMAC countries, 1985-2003

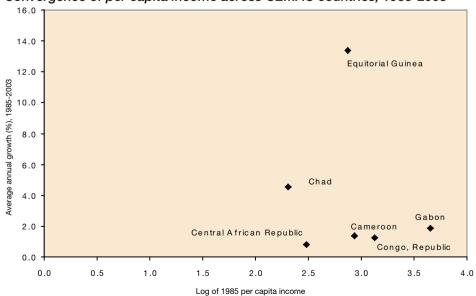


Figure A.5 Convergence of per capita income across UEMOA countries, 1980-2003

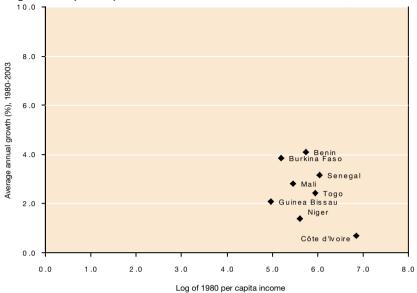


Table A.20

Estimated results for income convergence among African RECS

Estimated Equations	SADC	COMESA	ECOWAS
A. Absolute convergence			
β	0.391***	0.341**	
	(2.89)	(2.39)	
Implied λ	0.188	0.216	
R^2	0.35	0.25	
B. Conditional convergence (Unres	tricted)		
β	0.424**	0.278*	0.701***
	(2.78)	(1.81)	(2.80)
$\pi_{_1}$	0.128	0.066	0.304**
	(1.12)	(0.58)	(2.36)
$\pi_{_2}$	0.148	0.275	0.088
	(0.82)	(1.53)	(0.46)
Implied λ	0.172	0.256	0.071
R^2	0.47	0.55	0.61
B. Conditional convergence (Restri	cted)		
β	0.421**	0.326*	0.585*
	(2.63)	(1.78)	(2.05)
$\pi_{_1}$ - $\pi_{_2}$	0.032	-0.050	0.229
	(0.41)	(-0.53)	(1.59)
Implied λ	0.173	0.224	0.107
R^2	0.35	0.27	0.42
Wald-test for restrictions (p-value)	0.29	0.19	0.06
No. of countries included	14	17	15
No. of observations	56	68	60

Note: Values in parentheses are t-statistics. (--) means estimates are not economically plausible.

Table A.21

Estimated length of time (years) for absolute and conditional convergence.

Gap/Period	SADC	COMESA	ECOWAS		
a. Absolute					
50 per cent	4	3			
99 per cent	24	21			
b. Conditional (restricted)					
50 per cent	4	3	7		
99 per cent	27	21	43		

Source: Authors' calculations.

^{***}Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent.

Table A.22 Sigma test results for per capita income variables

	SADC	COMESA	ECOWAS	CEMAC	UEMOA
1. Per capita income	(Annual)				
Coeff. of time (t-value)	56.53 (0.94)	47.25*** (11.27)	10.13* (1.85)	-8.79 (-1.16)	-1.93* (-1.65)
R-squared	0.98	0.98	0.98	0.53	0.95
DW	1.97	1.79	1.38	1.82	1.91

^{***}Significant at 1 per cent; **significant at 5 per cent; *significant at 10 per cent

Source: Authors' calculations.

Cointegration analysis on per capita incomes.

Table A.23

Cointegration results for per capita incomes for SACU countries in SADC

Sample	(adjusted):	1982 2003
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Included observations: 22 after adjustments Trend assumption: linear deterministic trend

Series: BOTSWANA LESOTHO NAMIBIA SWAZILAND

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.615491	45.02579	47.85613	0.0900
At most 1	0.503526	23.99843	29.79707	0.2005
At most 2	0.304201	8.593487	15.49471	0.4043
At most 3	0.027533	0.614220	3.841466	0.4332

Trace test indicates no cointegration at the 0.05 level

Unrestricted Cointegration Rank Test (maximum Eigenvalue)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.615491	21.02736	27.58434	0.2746
At most 1	0.503526	15.40495	21.13162	0.2615
At most 2	0.304201	7.979267	14.26460	0.3808
At most 3	0.027533	0.614220	3.841466	0.4332

Max-eigenvalue test indicates no cointegration at the 0.05 level

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

Cointegration results for per capita incomes for non-SACU countries in SADC

Sample (adjusted): 1982 2003

Included observations: 22 after adjustments

Trend assumption: linear deterministic trend

Series: ANGOLA DRC MADAGASCAR MAURITIUS MOZAMBIQUE ZAMBIA ZIMBABWE.

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999605	372.9000	125.6154	0.0000
At most 1 *	0.987230	200.4701	95.75366	0.0000
At most 2 *	0.859424	104.5354	69.81889	0.0000
At most 3 *	0.767418	61.37130	47.85613	0.0017
At most 4	0.495655	29.28405	29.79707	0.0572
At most 5	0.440905	14.22516	15.49471	0.0770
At most 6	0.063085	1.433578	3.841466	0.2312

Trace test indicates four cointegrating eqn(s) at the 0.05 level

Unrestricted Cointegration Rank Test (maximum Eigenvalue)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999605	172.4299	46.23142	0.0000
At most 1 *	0.987230	95.93474	40.07757	0.0000
At most 2 *	0.859424	43.16410	33.87687	0.0030
At most 3 *	0.767418	32.08725	27.58434	0.0123
At most 4	0.495655	15.05889	21.13162	0.2848
At most 5	0.440905	12.79158	14.26460	0.0843
At most 6	0.063085	1.433578	3.841466	0.2312

Max-eigenvalue test indicates four cointegrating eqn(s) at the 0.05 level

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

Cointegration results for per capita incomes for CEMAC countries

Sample (adjusted): 1982 2003

Included observations: 22 after adjustments
Trend assumption: linear deterministic trend

Series: CENTRAL-AFRICAN-REPUBLIC CHAD CONGO GABON

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	
None *	0.831461	80.38502	47.85613	0.0000	
At most 1 *	0.685324	41.21210	29.79707	0.0016	
At most 2 *	0.430591	15.77547	15.49471	0.0454	
At most 3	0.142651	3.386020	3.841466	0.0657	

Trace test indicates three cointegrating eqn(s) at the 0.05 level

Unrestricted Cointegration Rank Test (maximum Eigenvalue)

Hypothesized		Max-Eigen	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	
None *	0.831461	39.17293	27.58434	0.0011	
At most 1 *	0.685324	25.43663	21.13162	0.0116	
At most 2	0.430591	12.38945	14.26460	0.0969	
At most 3	0.142651	3.386020	3.841466	0.0657	

Max-eigenvalue test indicates two cointegrating eqn(s) at the 0.05 level

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

Cointegration results for per capita incomes for UEMOA countries in **ECOWAS**

Sample (adjusted): 1981 2003

Included observations: 23 after adjustments Trend assumption: linear deterministic trend

Series: BENIN BURKINA CIV GUINEAB MALI NIGER SENEGAL TOGO

Lags interval (in first differences):

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.964887	227.1531	159.5297	0.0000
At most 1 *	0.919343	150.1218	125.6154	0.0007
At most 2	0.681521	92.21814	95.75366	0.0854
At most 3	0.643296	65.90156	69.81889	0.0987
At most 4	0.559100	42.19201	47.85613	0.1534
At most 5	0.408370	23.35645	29.79707	0.2290
At most 6	0.350540	11.28434	15.49471	0.1946
At most 7	0.057302	1.357225	3.841466	0.2440

Trace test indicates two cointegrating eqn(s) at the 0.05 level

Unrestricted Cointegration Rank Test (maximum Eigenvalue)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.964887	77.03137	52.36261	0.0000
At most 1 *	0.919343	57.90363	46.23142	0.0019
At most 2	0.681521	26.31658	40.07757	0.6808
At most 3	0.643296	23.70955	33.87687	0.4769
At most 4	0.559100	18.83556	27.58434	0.4273
At most 5	0.408370	12.07211	21.13162	0.5405
At most 6	0.350540	9.927119	14.26460	0.2168
At most 7	0.057302	1.357225	3.841466	0.2440

Max-eigenvalue test indicates two cointegrating eqn(s) at the 0.05 level

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

Cointegration results for per capita incomes for non-UEMOA countries in **ECOWAS**

Sample (adjusted): 1982 2003

Included observations: 22 after adjustments Trend assumption: Linear deterministic trend

Series: CAPE ERDE GAMBIA GHANA LIBERIA SIERRA-LEONE

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.880785	106.8239	69.81889	0.0000
At most 1 *	0.810073	60.03376	47.85613	0.0024
At most 2	0.507118	23.48927	29.79707	0.2229
At most 3	0.286009	7.924574	15.49471	0.4735
At most 4	0.023053	0.513098	3.841466	0.4738

Trace test indicates two cointegrating eqn(s) at the 0.05 level

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.880785	46.79016	33.87687	0.0009
At most 1 *	0.810073	36.54450	27.58434	0.0027
At most 2	0.507118	15.56469	21.13162	0.2513
At most 3	0.286009	7.411476	14.26460	0.4417
At most 4	0.023053	0.513098	3.841466	0.4738

Max-eigenvalue test indicates two cointegrating eqn(s) at the 0.05 level

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

^{*} denotes rejection of the hypothesis at the 0.05 level

^{**}MacKinnon-Haug-Michelis (1999) p-values

References

Baldwin, R. (2003), "Openness and Growth: What's the Empirical Relationship?", National Bureau of Economic Research WP No. 9578.

Barro, R. and X. Sala-i-Martin (1991), "Convergence Across States and Regions", Brookings Papers on Economic Activity, Vol. 1991, No. 1, pp107-182

Barro, R. and X. Sala-i-Martin (1995), Economic Growth, McGraw-Hill, Inc.

Baumol, W. (1986), "Productivity Growth, Convergence and Welfare: What the Long-run Data Show", *American Economic Review* 76(5), pp. 1072-1085.

Ben-David, D. (1993), "Equalizing exchange: Trade liberalization and income convergence", Quarterly Journal of Economics 108(3), pp. 653-679.

Ben-David, D. (1996), "Trade and convergence among countries", Journal of International Economics 40, pp. 279-298

Ben-David, D. and A. Kimhi (2004), "Trade and the rate of income convergence", Journal of International Trade and Economic Development 13(4), pp. 419-441.

Ben Hammouda, H., S. Karingi, A. Njuguna, and M. Sadni-Jallab (2006), "Africa's (mis)fortunes in global trade and the continent's diversification regimes", Journal of World Investment and Trade 7(4), 587-616.

Ben Hammouda, H., S. Karingi, A. Njuguna, and M. Sadni-Jallab (2007a), Why Doesn't Regional Integration Improve Income Convergence in Africa?, Paper prepared for the African Economic Conference, 15-17 November 2007, United Nations Conference Centre, Addis Ababa, Ethiopia.

Ben Hammouda, H., S. Karingi, A. Njuguna, and M. Sadni-Jallab (2007b), Does Macroeconomic convergence Lead to Growth? The Case of Africa, African Trade Policy Centre, Economic Commission for Africa.

Ben Hammouda H., and Osakwe P. (2006), Financing Development in Africa: Trends, Issues and Challenges, ATPC Working paper Number 48, African Trade Policy Centre, Economic Commission for Africa.

Ben Hammouda, H., S. Karingi, A. Njuguna and M. Sadni-Jallab (2006), Diversification: Towards a new paradigm for Africa's development, Africa Trade Policy Centre Work in Progress No. 35, Economic Commission for Africa.

Bernard, A. and S. Darlauf (1995), "Convergence in international output", Journal of Applied Econometrics 10(2), pp. 97-108

Bunyaratavej, K. and E. Hahn (2005), "An integrative approach to measuring economic convergence: The case of the European Union", Global Economy Journal 5(2), pp

Camarero, M., R. Flores and C. Tamarit (2006), "Monetary union and productivity differences in Mersocur countries", *Journal of Policy Modelling* 28, pp.53-66.

Caselli, F., G. Esquivel, and F. Lefort (1996), "Reopening the convergence debate: A new look at cross-country growth empirics", Journal of Economic Growth, pp.

Darlauf, S. (1995), "On the convergence and divergence of growth rates", *The Eco*nomic Journal 106(437), pp. 1016-1018.

Delong, J. B. (1988), "Productivity Growth, convergence, and Welfare: Comment", American Economic Review 78(5), pp.1138-1154

Dowrick, S. and D-T. Nguyen (1989), "OECD comparative economic growth 1950-85: Catch-up and convergence", American Economic Review 79(5), pp. 1010-1030.

Economic Commission for Africa (2006), Assessing Regional Integration in Africa II: Rationalizing Regional Economic Communities, Addis Ababa, Ethiopia.

Economic Commission for Africa (2007), Economic Report on Africa Accelerating Africa's Development through Diversification, Addis Ababa, Ethiopia.

Ghura, D. and M. Hadjimichael (1996), "Growth in Sub-Saharan Africa", IMF Staff Papers 43 (3), pp. 605-634.

Heng, T. and T. Siang (1999), "A neoclassical analysis of the ASEAN and East Asian Growth Experience", ASEAN Economic Bulletin 16, pp. 149-165.

Henrekson, M., J. Torstensson and R. Torstensson (1997), "Growth effects of European integration", European Economic Review 41, pp. 1537-1557.

Holmes, M. J. (2005) "New evidence on Long-run output convergence among Latin American countries", Journal of Applied Economics 8(2), pp. 299-319

Islam N. 1995, 'Growth Empirics: A panel data approach', Quarterly Journal of Economics 110, 1127-170.

Mankiw, G., D. Romer and D. Weil (1992), "A contribution to the empirics of economic growth", Quarterly Journal of Economics 107, pp. 407-437.

McCoskey, S. (2002) "Convergence in Sub-Saharan Africa: A nonstationary panel data approach", Applied Economics 34, pp. 819-829.

Milanovic, B. (2006), "Economic integration and income Convergence: Not such a strong link?", The Review of Economics and Statistics 88(4), pp. 659-670.

Njuguna, A. (1999), Growth and Convergence in a Disequilibrium Solow-Swan Model: The Case of ASEAN 1960-1995, Unpublished PhD thesis, University of New England, Australia.

Njuguna, A. and A. Rambaldi (2001), A Multi-Country Disequilibrium Solow-Swan Growth Model with an Application to the ASEAN Experience, Paper prepared for the Econometric Society Australasian Standing Committee (ESASC) Inaugural Intensive Workshop for Young Scholars, Waikato Management School, New Zealand, 9-10 July 2001.

Okko, P. (2003), Regional growth and convergence via integration – the case of the large EU, Paper presented in the 43rd European Congress of the Regional Science Association in Jyvaskyla, Finland, August 27-30, 2003.

Pardo, I. (2005) "Growth, convergence, and social cohesion in the European Union", International Advances in Economic Research (11), pp. 459-467

Rivera-Batiz, R. and P. Romer (1991), "Economic integration and endogenous growth", Quarterly Journal of Economics 56, pp. 531-555.

Rodriguez and Rodrik (1999), Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence, National Bureau of Economic Research WP 7081

Sala-i-Martin, X. (1996), "The classical Approach to Convergence Analysis", *The* Economic Journal 106(437), pp. 1019-1036

Sachs, J. and A. Warner (1997), "Sources of slow growth in African economies", *Journal of African Economies* 6(3), pp. 335-376.

Sato, K. and Z. Zhang (2006), "Real output co-movements in East Asia: Any evidence for a monetary union?, *The World Economy* 29(12), pp. 1671-1689.

Slaughter, M. (2001), "Trade liberalization and per capita income: A difference-indifferences analysis", Journal of International Economics 55(1), pp. 203-228.

Sohn, C-H. and H. Lee (2006), "How FTAs affect income levels of member countries", The World Economy 29(12), pp. 1737-1757.

Yasar, M., C. Nelson and R. Rejesus (2006), "The dynamics of exports and productivity at the Plant level: A panel data error correction model (ECM) approach", in Panel Data Econometrics: Theoretical Contributions and Empirical Applications, B. Baltagi (ed.), Elsevier, Amsterdam.

Monetary Integration in Africa



6.1 Introduction

egional economic cooperation in Africa dates as far back as the beginning of the last century. The cooperation primarily focussed on the facilitation of international trade and payments, as well as infrastructure. In the process of deepening cooperation, African countries have formed a number of regional economic communities with overlapping memberships. However, the presence of these groupings is yet to translate into a substantial increase in trade within the continent. While the share of African countries' exports to other African countries grew from about 4 per cent in the 1980s to 12 per cent in the first half of the 2000s, this growth is very low compared to other regional groupings outside the continent. More efforts are needed to promote trade within the various regional economic communities. In addition, there has been very little manufacturing or intra-industry trade, with petroleum, cotton, livestock, maize and cocoa accounting for most of the trade within the continent.

Among the prescriptions that policymakers could choose to promote and address the challenges impeding the flow of goods and services within the continent is the creation of a stable macroeconomic environment. This could be achieved if member countries of the RECs commit to follow economic programmes that include the effective management of inflation and public finance stability, so that the actions of investors and entrepreneurs can translate into sustainable economic growth and development. This is why most of the RECs are pursing macroeconomic convergence programmes to support regional integration initiatives, particularly in the area of trade and monetary cooperation.

Africa has had a chequered experience of monetary and financial cooperation, dating back to the pre- and post-colonial eras. This chapter will focus on the current monetary cooperation arrangements being pursued by the African regional economic communities, preceded by a brief historical background of Africa's experience with monetary and financial integration.

Africa has had a chequered experience of monetary and financial cooperation, dating back to the preand post-colonial eras

6.2 Africa's experience with monetary cooperation

Monetary cooperation between different countries in Africa has been going on for a long time. During the colonial period, French and British colonies had in place common monetary arrangements. At the time, these arrangements were established to facilitate the administration of the colonies and the collection of seigniorage, rather than to promote exchange rate management and fiscal policy.

In the British colonies, the monetary arrangement involved a currency board with the colonial currency pegged to and backed by the pound sterling. However, the British colonial administration received its seigniorage revenues through interest earned on investment of the reserves in British Government securities. In the case of the French colonies, the colonial franc was pegged to the French franc and backed by a convertibility guarantee of the French Treasury.

The British and the French monetary cooperation arrangements were not the same. The British currency boards were rooted in English central banking and therefore performed functions similar to those of the Bank of England. The French currency boards in the colonies followed the guidelines and principles of French central banking. Hence, like the Banque de France, the French currency boards lent significantly to the local banking system as the currencies were backed by the French Treasury.

During the colonial period, a number of monetary arrangements existed in the Eastern and Southern Africa regions. In East Africa, a common currency area was established in 1919 for Kenya, Uganda and Tanganyika (now Tanzania) with the creation of the East African Currency Board (EACB). Tanganyika joined in 1920 after it became a British territory and the same year EACB was given the responsibility of issuing the legal currency for Kenya, Uganda and Tanganyika. In 1936, Zanzibar joined the common currency area. During the Second World War, the East African shilling was used as legal tender in Somaliland as well as in parts of Ethiopia and Eritrea, and in 1951 Aden was included in the currency area.

As part of its functions, EACB issued the East African shilling as a local currency in exchange for the pound sterling at a fixed rate of 20 shillings per pound sterling. EACB also issued limited loans to participating governments, even though Tanganyika and Uganda did not benefit much from this credit facility.

Between 1960 and 1965, important changes took place at EACB. In 1960, the Board's operational centre was moved from London to Nairobi and appointees of the participating countries replaced the members of the Board who had been nomi-

nated by the British Government. In the following years, activities of the Board were expanded and modernized. The Board strengthened its role as a central bank by introducing new policies and methods for credit, banking and other currency operations.

Following the independence of participating countries, the East African monetary arrangement became a subject for consideration. Studies were commissioned to salvage the East African Monetary Union¹. But the political decision by member countries led to the disintegration of the East African currency system. The Finance Ministers of Kenya, Tanzania and Uganda announced in 1965 that separate currencies and national central banks would be created for each country. Consequently, in 1966/67, the functions of EABC were terminated in all three countries following the issuance of national currencies by Tanzania (in June 1966), Uganda (in August 1966) and Kenya (in September 1966). In 1969, the East African shilling ceased to be legal tender.

A monetary system similar to that of East Africa was established for the Federation of Southern Rhodesia (now Zimbabwe), Northern Rhodesia (now Zambia) and Nyasaland (now Malawi). A Southern Rhodesia Currency Board (SRCB) was established in 1938 by a colonial Act. The functions of SRCB included:

- The issuance of local currency in exchange for pound sterling at a fixed rate of one-to-one
- The management of the pound sterling reserves that were placed in a "currency fund" which was invested either in British government securities or held in liquid form in England
- Limited investment in bonds and stocks issued by the three participating governments.

A currency board replaced SRCB in 1954. Two years later in 1956, the Bank of Rhodesia and Nyasaland was created by the federal parliament. It played the role of a central bank by:

- Regulating the monetary system of the federation
- Exercising the sole right to issue notes and coins
- Exchanging local currency to pound sterling at a fixed rate of one to one
- Maintaining 25 per cent in gold as a means of safeguarding the external value of the local currency
- Fixing the minimum cash reserve, liquidity ratios and rate of discount/rediscount as a means of controlling bank credit expansion.

Following the independence of participating countries, the East African monetary arrangement became a subject for consideration

A study by Mr. Blumenthal (a German banker) in 1962 recommended the continuation of the East African currency area with a supranational central bank replacing the EACB and with each country establishing its own central bank. Another study by the IMF made a similar recommendation.

Most of the British colonies abandoned monetary cooperation when they gained their independence

The Federation of Rhodesia and Nyasaland dissolved in 1963 and was followed by the closure of the Bank of Rhodesia in 1964. The assets and liabilities of the Bank were distributed among the central banks of the three countries. As in the case of the EAC, the Federation failed for political and economic reasons. Member countries felt that there was unequal distribution of benefits from the federal arrangement. Southern Rhodesia was considered to be deriving more fiscal, industrial and commercial gains to the detriment of Northern Rhodesia and Nyasaland, which were relatively underdeveloped and did not make as much use of the monetary system and its facility. This led to the decision by the three governments to create their own central banks that would enable them to exercise their autonomy on monetary and fiscal matters.

South Africa, Basutoland (Lesotho), Bechuanaland (Botswana) and Swaziland had their own currencies during colonial time. But after 1881, the pound sterling became the standard currency in these countries and remained in use until 1961.

The Reserve Bank of South Africa was established in 1921. It started issuing its own currency (the South African pound) in 1923, which was accepted as legal tender in the other countries. There was no exchange control in these countries. In 1961, the rand was introduced as the currency of South Africa and was used in Lesotho and Swaziland under a customs union agreement.

In 1974, the Rand Monetary Agreement (RMA) was signed and the rand became the only legal tender in the RMA zone, which included Botswana, Lesotho, South Africa and Swaziland. However, Botswana pulled out from RMA in 1975.

Lesotho and Swaziland – which became independent in 1966 and 1968, respectively, felt that the RMA deprived them of instruments of monetary control. This feeling became more compelling in 1985 when the rand was faced with severe depreciation vis-à-vis major currencies. Consequently, the RMA was amended in 1986, giving Lesotho and Swaziland more autonomy.

6.2.1 **Monetary cooperation after independence**

Most of the British colonies abandoned monetary cooperation when they gained their independence. Some of the French colonies continued to maintain the colonial system of monetary cooperation after independence. These are the monetary unions in West and Central Africa. The franc-based currencies in these unions have only been devalued once against the French franc (by 50 per cent in January 1994).

Post-independence saw most of the African countries setting up their own central banks which issued national currencies in large part to assert the sovereignty of the countries after independence. This meant that the currency board arrangements that were put in place during the colonial era were abolished and replaced with national central banks. It must be noted that in West Africa, Sierra Leone and the Gambia continued to operate their own currency board-type arrangements for a few more years after independence until 1971 when Gambia left the sterling peg. The East African Currency Board, which covered Tanzania, Uganda and Kenya, also retained its common currency until 1966 when it was replaced with sovereign currencies because of fiscal imbalance and dissatisfaction with the distribution of benefits within the East African Community.

It must be noted that the franc-based currency unions or the currency boards that operated in Africa appear to be very different from the arrangements of the European Monetary Union system. Both the currency boards and monetary unions operated on a fixed peg, which is different from the floating exchange rate of the euro. A notable exception is the South African rand zone, where Lesotho, Namibia, Swaziland and, for a time, Botswana have their currencies pegged at par with the South African rand. Under this arrangement, the member countries of the zone allow the rand to circulate alongside their currencies and receive a payment in lieu of seigniorage. The sharing of seigniorage and the flexibility of the peg vis-à-vis the outside world makes the rand zone very similar to the euro zone.

Challenges of monetary policies in postindependence Africa

With the abandonment of currency boards and the creation of sovereign central banks, the conduct of monetary policy varied from one independent African country to another. Most of the policies followed in post-independent Africa were weak, with a few exceptions. Honohan and O'Connell (1997) indicate that post-independence monetary policy in Africa took sharply different routes in different countries. Some countries pursued policies that rationed and controlled goods and services, while others embarked on massive government expenditure at the expense of uncontrollable inflation. Chamley and Honohan (1993) show that, by and large, the increased government expenditure was financed either through financial repression or through inflation quasi-tax.

The negative consequence of financial repression and high inflation was felt in the 1980s, and to rectify the appalling situation, African governments, on the advice of the Bretton Woods institutions, removed the controls and reduced central bankfinanced government expenditures. These moves were meant to institute a marketoriented monetary policy.

Hanohan and Lane (2000) point out that market-oriented central banking did not last for long as African governments relied on the monetary system for resources.

The sharing of seigniorage and the flexibility of the peg vis-à-vis the outside world makes the rand zone very similar to the euro zone

These governments borrowed heavily from the banking system, resulting in high nominal interest rates and persistent and substantial excess returns.

6.2.3 Challenges of the CFA zone

Before the mid-1980s, the franc zone countries enjoyed solid economic performance Although the franc-based monetary unions were established in West and Central Africa for political expediency, they are built on a solid institutional foundation. Hanohan and Lane argue that the underlying economic philosophy of the franc zone was based on open and competitive market principles. The multinational central banks governing the zone are independent of the member countries and have stringent rules for monetary financing of fiscal deficits. Consequently, the inflation rates in the zone are the lowest in Africa. In addition, the zone has open and liberalized capital accounts and encourages the operations of foreign-owned banks. Despite the sound framework of single currency, freedom of capital movements and multinational central banks, the CFA zone suffered severe crises in the 1980s.

Before the mid-1980s, the franc zone countries enjoyed solid economic performance. The fixed exchange rate with France reduced any macroeconomic uncertainty and encouraged external investment. The growth rates of the economies in the zone were high and CFA franc notes were used by trans-boundary traders in preference to unstable and inconvertible local currencies in neighbouring countries such as Ghana and Nigeria. The banking system of the zone functioned better than those of neighbouring countries and consequently attracted significant deposits of flight capital from those countries.

However, economic prosperity of the zone did not last forever. In the mid-1980s, the banking system in the zone collapsed due in part to the rigidities of its institutional mechanisms. Political pressures from governments forced the banks to lend to state-owned enterprises, regional and political groupings, governments' own suppliers.

Consequently, in the early 1990s, almost all of the economies in the zone went into deep recession. At the same time, parallel markets in the zone opened up as capital movements were blocked and international payments had become extremely difficult. Furthermore, a majority of the banks failed and depositors of the remaining banks had difficulty accessing their funds for years. Banks that continued to exist started to discriminate against their deposit and lending customers. The environment also provided limited operations of inter-bank markets. The central banks also faced difficulties in covering their operating expenses, because of the loans they had made to the failed banks. Hence, the CFA came under heavy pressure, leading market participants to anticipate a devaluation of the currency.

The part played by the banks in the crises cannot be overlooked. Most of the banks operating at the time were jointly owned by the national governments and one of

four major French-based banks, with key senior management being French nationals seconded from the parent banks in France. Hanohan and Lane (2000) argue that the objective of the French shareholders of the banks was nothing more than profit maximization. They were more concerned about protecting the commercial interests of their French customers in Africa. Although the banks were supposed to be autonomous, the structure of the ownership and control by government functionaries made it easier for commercially doubtful lending to take place.

Furthermore, the banks were not constrained by loanable resources. Despite the difficulties in mobilizing deposits, they were able to lend through the funds secured from the two regional central banks. Although the central banks were restricted from lending to governments, they were free to refinance loans through the banking system, effectively providing the banks with loanable resources. The interest of the central banks to preserve the quality of their own balance sheets (in order to ensure adequate revenue to meet their substantial operational expenses) was not sufficient to limit their lending to the banks. The statutory arrangements were understood by parties to provide the central bank with a government guarantee for lending to banks. Although independent, the central banks acted as the agents of the fiscal authorities, refinancing politically directed or government-inspired bank loans that could never be repaid.

The challenges of monetary policy in the CFA zone clearly demonstrate that rulebased monetary and banking arrangements do not guarantee sound monetary policy. The rules in the franc zone at the time appeared very rigid and perhaps induced banking practices that violated sound banking principles. However, Hanohan and Lane (2000) suggest that three rules were in place to guarantee favourable outcomes and appeared to immunize the zone against the consequences of mistaken policies in other areas.

First, the exchange rate rule was used as a tool for macroeconomic stability. However, the rule could not cope with the pro-cyclical public sector wage policy and the policy of raising official purchasing prices of cash crops, particularly coffee and cocoa. This made labour in the formal sector uncompetitive, and the crop credits provided by the banks for the purchasing of crops at unrealistic prices were not being repaid. The inability of the banking system to find a satisfactory mechanism to fund merchants' working capital also contributed to the failure of the system.

Second, the rule that the banking sector could not lend to the government more than a fraction of its annual revenue needs acted as a safeguard against inflationary pressures. However, the rule was circumvented by indirect borrowing through public enterprises and other associated bodies and through the payment of government arrears to its suppliers. The consequence was an increasing degree of illiquidity in the system as payments discipline collapsed.

The challenges of monetary policy in the CFA zone clearly demonstrate that rule-based monetary and banking arrangements do not guarantee sound monetary policy

It should be noted that the franc zone worked very well for two decades and offered protection against macroeconomic instability before the crisis Third, the rule that each national government was responsible for the debts of any insolvent bank to the central bank delegated bank regulation to national authorities. While this rule was aimed at preventing central banks from lending to unsound banks, it failed to inspire national responsibility. This led to massive bank insolvency, amounting to at least 10 per cent of zone-wide GDP. External shocks and the recession only exacerbated the poor lending decisions and consequent insolvency of the banks.

It should be noted that the franc zone worked very well for two decades and offered protection against macroeconomic instability before the crisis. It was just a few months before the crisis that it was discovered that institutional structures and mechanical rules could not withstand political interference and pressures and the volatility of the external environment. The lessons learned here suggest that there is a strong need to have consistent macroeconomic and financial fundamentals to support a fixed exchange rate system, irrespective of other institutional rules. In other words, mechanical application of automatic rules is no guarantee for a well-functioning banking system.

Although the rules governing the franc-zone were put in place to guard against monetary instability, they have not been robust enough to alleviate the impact of fiscal mismanagement. In fact, the exchange rate peg has exacerbated the real economic effects of imprudent fiscal and financial policy. That is why Collier (1991) suggests that institutional arrangements governing regional central banks have to be adequate to guarantee their role as quasi-external "agencies of restraint" on the national governments. Furthermore, it has to be recognized that monetary unions or rules-based monetary systems such as currency boards have their limitations and must be applied with caution.

6.2.4 Recovery of the CFA zone

To deal with the challenges of the French franc crisis, the CFA franc was devalued in 1994. Since then the region has witnessed several years of recovery and comparatively rapid economic growth, as well as lower-than-expected pass-through of imported inflation into domestic consumer price indexes (CPIs).

The banking crisis in the CFA franc zone was also addressed by introducing new institutional arrangements in the early 1990s, including the centralization of responsibility for bank supervision in the two regional banking control commissions. This centralization provides a new multinational "agency of restraint" to political pressures and interference.

The pegging of the currencies in the zone to the euro instead of the French franc also provides confidence in the monetary arrangements in the zone as it ensures greater nominal and real exchange rate stability on average vis-à-vis trading partners. Since the peg to the euro, the CFA zone has not faced any significant new challenges.

Following the success of EMU and the desire to strengthen the continental integration agenda, most African regional economic communities are pursuing monetary cooperation programmes, in the hope that a common currency would protect African countries from contagious or correlated capital movements and financial crises.

SADC has designed a framework of macroeconomic convergence targets for its members

6.3 Monetary cooperation arrangements of the regional economic communities

This section begins with a review of the current monetary framework of the regional economic communities, followed by an assessment of their monetary cooperation arrangements, focussing on established macroeconomic convergence criteria. It concludes with an assessment of the challenges and constraints in implementing the convergence criteria.

Monetary arrangements of Southern African Development Community (SADC)

SADC has designed a framework of macroeconomic convergence targets for its members. However, monetary cooperation amongst them began in 1980 when the Southern African Development Coordinating Conference (SADCC) of nine member countries was formed to pursue common regional development projects, particularly infrastructure projects, so as to minimize the dependence of member States on the apartheid-based South Africa. After the independence of Namibia and South Africa in the early 1990s, SADCC was transformed in 1992 into the Southern Africa Development Community (SADC), with a focus on regional economic integration and development. Membership also grew from nine to fourteen, until Seychelles pulled out more recently.²

The strategic goals of SADC, as contained in its Regional Indicative Strategic Development Plan (RISDP), are as follows: promoting equitable, self-sustaining economic growth and socio-economic development in the subregion with the view of alleviating poverty; strengthening common cultural, social and political values, as well as

The nine founding members of SADC are Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe. The current members of SADC are the nine founding members and Democratic Republic of Congo, Madagascar, Mauritius, Namibia and South Africa.

Despite the lack of a framework for SADC on macroeconomic convergence, Maruping (2005) indicates that a Memorandum of Understanding (MOU) has been drawn up on the

subject

maintaining democracy, peace, security and stability; and achieving complementarity and sustainable environmental and resource utilization. Despite the lack of a framework for SADC on macroeconomic convergence, Maruping (2005) indicates that a Memorandum of Understanding (MOU) has been drawn up on the subject.

The MOU, which requires the signature of at least two thirds of the membership to become effective, lays down the institutional framework for the monitoring and surveillance mechanisms, macroeconomic indicators and targets, data requirements, and monetary and fiscal policy cooperation parameters for the member countries. The MOU was designed to ensure that member States achieve financial and economic stability, strengthened institutional structures and sound macroeconomic policies.

The drafters of the MOU believe that, without guidance on the targets of macroeconomic variables in the SADC zone, member States would not achieve optimal fiscal balances and would therefore experience high deficits, unsustainably high or rising ratios of public debt to gross domestic product, wide external current account and financial imbalances, and market distortions resulting in high rates of inflation and stifling of growth amongst SADC member countries.

Although there is no legal framework on macroeconomic convergence criteria, a Committee of Central Bank Governors of the member States provides guidance on macroeconomic convergence in the SADC region. The committee asks member States to use the following macroeconomic convergence criteria and benchmarks: inflation rate to reach single digit by 2008, 5 per cent by 2012 and 3 per cent by 2018; ratio of budget deficit to GDP should not exceed 5 per cent by 2008, with 3 per cent as an anchor, and within a 1 per cent band by 2012 through to 2018; and nominal public debt-to-GDP ratio should be less than 60 per cent by 2008 and beyond to 2018.

Table 6.1 Macroeconomic convergence criteria

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Criteria	2008	2012	2018		
Inflation rate (per cent)	Single digit	5 per cent	3 per cent		
Fiscal deficit as per cent of GDP	< 5 per cent		nge of 2 per cent and 4 red at 3 per cent		
Government debt as per cent of GDP	< 60 per cent of GDP	< 60 per cent o	f GDP		

Source: SADC Secretariat

There are several reasons why the SADC Committee of Central Bank Governors is concerned about macroeconomic convergence in the zone. First, SADC is focused on pursuing developmental programmes aimed at promoting sustainable economic growth in the region. In order for the economies in the region to achieve their full potential, an enabling environment that includes sound monetary policy needs to be established. Hence, the central banks have an important role to play in facilitating growth and development in the zone.

Second, SADC is a regional integration area (RIA) made up of countries with unequal economies. The theory of regional integration as an instrument of development, and the experience of RIAs like the European Union, suggest that small economies would eventually converge to the bigger economies when these economies are fully integrated. In other words, regional integration allows lesser-developed member States to "catch up" to the more developed ones.

Third, macroeconomic convergence could be instrumental in driving the process of regional integration. In the EU, macroeconomic convergence is considered important for economic integration and criteria (conditions) have been determined for joining the economic and monetary union. Although monetary integration in SADC is a long-term goal, macroeconomic convergence is an important ingredient for market integration in a RIA.

In addition to various protocols that provide the legal framework for monetary and financial cooperation, SADC tracks progress in harmonization and convergence processes among its member States through the following roadmap and milestones: elimination of exchange rate controls; establishment of a free trade area by 2008; establishment of a customs union by 2010; establishment of a common market by 2012; and establishment of a monetary union by 2016.

There is enormous disparity between the economies of SADC countries, in terms of income levels and distribution; macroeconomic performance, fiscal deficits; public debt-to-GDP ratios; rates of inflation; financial sector development and stability; human resources; and infrastructure development. In addition, there is no strong political commitment to implement and monitor concrete programmes of action to improve the macroeconomic environment in the SADC zone.

Despite the challenges, there are success stories from the Southern African Customs Union (SACU) and Common Monetary Area (CMA), whose members are also in SADC, and where a customs union has been established and de facto monetary integration exists among four of the five members.³ In recent years, SADC has embarked on programmes that would improve efficiency and effectiveness and macroeconomic policy coordination among its member States. These actions have

There is enormous disparity between the economies of SADC countries. in terms of income levels and distribution; macroeconomic performance, fiscal deficits; public debt-to-GDP ratios: rates of inflation: financial sector development and stability; human resources; and infrastructure development

The four countries are Lesotho, Namibia, South Africa and Swaziland. The fifth member of SACU, which is not part of the CMA, is Botswana. Under the CMA, Lesotho, Namibia and Swaziland have their currencies tied to the South African rand.

Some of the poorer economies in the SADC zone, including the Democratic Republic of Congo and Tanzania, have attained the regional inflation targets

contributed to sound policies in the SACU member States and Mauritius, with low rates of inflation and convergence of key macroeconomic variables. Post-conflict economies in SADC are also moving rapidly towards lower levels of inflation, with a notable exception being Zimbabwe, which has the highest level of inflation in the SADC zone as well as poor economic performance.

Some of the poorer economies in the SADC zone, including the Democratic Republic of Congo and Tanzania, have attained the regional inflation targets. Angola, Malawi, Mozambique, Zambia and Zimbabwe are yet to achieve single-digit inflation rates, but some of them could do so by 2008 if the current inflation reduction trends are maintained, except for Zimbabwe, which would have to halt and reverse the trend and make much more marked progress in this regard. SACU member States, Tanzania and Mauritius have already achieved the targets ahead of the 2008 schedule.

For other indicators of convergence, the performance is again mixed. The poorer member States have their current fiscal deficit-to-GDP ratio above the target level. These countries tend to be highly donor-dependent and tend to have high fiscal deficits (excluding grants), which would be unsustainable if donor support were not available. The fiscal imbalance is partly the result of expansionary fiscal policies or serious economic crises and delays in the poor economies receiving Highly Indebted Poor Country (HIPC) debt relief. As a result of the poor fiscal imbalance, most of the economies also show weak current account balances as well as high debt-to-GDP ratios.

Against the background of the macroeconomic targets set up by SADC, an assessment of the macroeconomic performance of the Members States of the community shows mixed results. Table 6.2 reports on the growth performance of member States from 2001 to 2005. The table shows that Angola, Botswana, Democratic Republic of Congo, Mozambique and Tanzania have registered strong growth performances in recent years, growing above 6 per cent in the last few years.

Factors responsible for this strong showing include sound macroeconomic policies; strong world demand for commodities such as diamond (Botswana), oil (Angola) and copper (Democratic Republic of Congo); and relative peace and security (Angola, Democratic Republic of Congo, and Mozambique). The poor-performing economies in the zone are those of Zimbabwe and Seychelles, where growth rates have declined.

Table 6.2 Growth performance in SADC

Country	2001	2002	2003	2004	2005
Angola	3.14	14.49	3.31	11.18	20.61
Botswana	5.18	5.59	6.32	5.92	6.19
Congo, Dem. Rep.	-2.10	3.50	5.70	6.60	6.50
Lesotho	3.21	3.50	3.09	3.15	1.20
Malawi	-4.97	2.86	6.07	7.12	2.55
Mauritius	5.56	2.71	3.19	4.70	4.57
Mozambique	13.10	8.16	7.90	7.49	7.70
Namibia	2.40	6.67	3.48	5.95	3.50
Seychelles	-2.21	1.30	-6.30	-1.99	-2.30
South Africa	2.74	3.69	2.98	4.47	4.87
Swaziland	1.79	2.90	2.40	2.10	1.80
Tanzania	6.24	7.24	7.12	6.69	6.97
Zambia	4.89	3.30	5.12	5.41	5.20
Zimbabwe	-2.70	-4.40	-10.40	-3.80	-6.50
SADC	2.59	4.39	2.86	4.64	4.49

Source: UNECA and World Development Indicators.

Table 6.3 clearly shows that inflation in the SADC region remains very high, averaging around 36 per cent between 2001 and 2005. Zimbabwe experienced extremely high inflation during the period under review, perhaps due to the consequences of the sanctions imposed by Western governments on the country. Angola is also experiencing very high inflation, due to excessive demand for goods and services generated by higher oil and commodity revenues. It must be noted that Lesotho, Mauritius, Namibia, Seychelles, South Africa and Tanzania registered single-digit inflation in recent years due to the pursuance of aggressive monetary policies by their respective monetary authorities. It is very important that member States of SADC should be encouraged to pursue aggressive price stability policies so as to create the enabling environment needed for sustainable economic activities.

Zimbabwe experienced extremely high inflation during the period under review, perhaps due to the consequences of the sanctions imposed by Western governments on the country

Table 6.3
Inflation rates in SADC

Country 2001 2002 2003 2004 2005 Angola 108.48 120.51 102.54 42.71 43.52 Botswana 6.31 -0.05 2.76 6.10 8.73 Congo, Dem. Rep. 383.92 31.93 13.15 6.15 21.51 Lesotho 6.66 8.47 6.00 6.33 3.17 Malawi 25.62 9.25 16.38 12.52 15.45 Mauritius 4.04 6.61 5.93 5.88 4.76 Mozambique 15.98 17.02 8.96 9.04 6.43 Namibia 14.13 11.42 -0.63 2.92 2.00 Seychelles 4.25 5.91 0.98 5.46 3.91 South Africa 7.67 10.51 4.44 5.59 4.75 Swaziland 12.54 12.14 4.88 10.56 10.44 Tanzania 7.17 6.45 5.62 8.07 3.74 Zambia 24.31 19.86 19.81 20.05 19.02 Zimbabwe 237.74 76.57 123.25 411.10 349.87 SADC 49.78 34.97 26.91 27.80 43.36

Source: UNECA and World Development Indicators.

In assessing the net FDI inflow in the SADC subregion, the literature suggests that stable macroeconomic environments encourage such flows. Table 6.3 indicates that the SADC region attracts substantial levels of FDIs, with South Africa and Angola accounting for most in recent years. The economic growth performance of South Africa and Angola is related to the net inflow of FDI, although Angola has registered high inflation in recent years. Democratic Republic of Congo, Mozambique and Tanzania appear to also attract high levels of FDI. Mozambique and Democratic Republic of Congo FDI flows go the development of their extractive industry. Tanzania's attraction of FDIs is due to its stable macroeconomic environment, as attested by its relative low inflation and the sustainable and moderate growth of its economy.

In assessing the net
FDI inflow in the
SADC subregion,
the literature
suggests that stable
macroeconomic
environments
encourage such
flows

Table 6.4 Net foreign direct investments (FDI in millions of US dollars) to SADC

Country	2001	2002	2003	2004	2005
Angola	2,145.47	1,672.09	3,504.70	1,449.23	-1,303.86
Botswana	22.14	403,42	417.99	391.06	278.59
Congo, Dem. Rep.	77.21	136.78	323.13	668.39	402.00
Lesotho	116.99	84.09	115.71	123.49	91.91
Malawi	19.30	5.90	3.9	-0.68	3.00
Mauritius	-27.67	32.07	62.63	13.89	39.15
Mozambique	255.42	347.58	336.70	244.70	107.85
Namibia	na	na	na	na	na
Seychelles	64.74	47.72	58.43	38.01	82.38
South Africa	7,270.34	735.21	783.14	701.42	6,257.33
Swaziland	28.43	88.79	-60.91	70.58	-16.18
Tanzania	467.20	429.80	526.80	469.90	473.40
Zambia	71.70	82.00	172.00	239.00	259.00
Zimbabwe	3,8	25.90	3.80	8.70	102.80
SADC	808.85	314.72	480.62	339.83	521.34

Source: UNECA and World Development Indicators.

6.3.2 Monetary arrangements of Common Market for **Eastern and Southern Africa (COMESA)**

COMESA has embarked on a monetary cooperation arrangement that aims to establish a common monetary zone with strong monetary stability to support its integration and sustained economic growth agenda. Ultimately, COMESA hopes to transform the zone into a monetary union.

The decision to create a monetary union within the Preferential Trade Area of Eastern and Southern African States (PTA) was taken as far back as 1989, even though the Heads of State and Government concretized it only in 1992 with the adoption of a Monetary and Fiscal Policies Harmonization Programme. Based on a gradualist approach, this programme constituted the framework of economic integration in the region and was articulated around four stages spanning a period of more than 30 years:

- Stage 1 (1992-1996): Consolidation of existing instruments of monetary cooperation and implementation of policy measures aimed at achieving macroeconomic convergence.
- Stage 2 (1997-2000): Introduction of limited currency convertibility and an informal exchange rate union.

OMFSA has embarked on a monetary cooperation arrangement that aims to establish a common monetary zone with strong monetary stability to support its integration and sustained economic growth agenda

- Stage 3 (2000-2024): Formal exchange rate union and coordination of economic policies by a common monetary institution.
- Stage 4 (2025 onwards): Full monetary union involving the use of one common currency issued by a common central bank.

The four-stage programme of economic integration adopted by the PTA was endorsed by COMESA, when the PTA was officially transformed into COMESA in 1994. Its implementation was reviewed with the definition of specific criteria to achieve macroeconomic convergence (COMESA, 1995 and Harvey et al. 2001). Since COMESA was conceived as an instrument of a comprehensive programme of cooperation and integration, its activities covered a variety of fields beyond trade and macroeconomic policies, including research in science and technology, peace and security and physical infrastructures development.

The fundamental rationale of macroeconomic and monetary integration in COMESA is to create the conditions for sustained economic development of the subregion. The objective is thus to achieve deep forms of integration and, most notably, to establish a monetary union and a full economic community through the:

- Liberalization of the exchange systems of member States to promote intraregional trade and cross-border capital flows;
- Harmonization of national policies to correct misalignments, strengthen macroeconomic adjustment and performance;
- Achievement of currency convertibility;
- Mobilization of financial resources to expand trade and support development projects (COMESA, 2003); and
- Promotion of intraregional trade and cross-border capital flows in COMESA started with the restructuring of the Clearing House into a Regional Payment and Settlement System (REPSS). The REPSS, which was launched in 2007, is a multilateral system that converts all payments in local currencies to a "settlement currency" based on a fixed daily rate for transfer between countries.

With a view to encouraging sustainable monetary stability in the zone, COMESA promotes monetary harmonization programmes on a consistent basis. Specific convergence targets based on agreed criteria are used to monitor progress by each member State. The criteria address macroeconomic policies, external debt situations and adapted Maastricht criteria. Each criterion has a number of quantitative indicators serving as targets (table 6.4). In a number of cases, efforts are made to coordinate national programmes so as to help meet the targets.

The fundamental rationale of macroeconomic and monetary integration in COMESA is to create the conditions for sustained economic development of the subregion

The revised macroeconomic convergence criteria that were adopted by the seventh meeting of Ministers of Finance held in Lusaka, Zambia on 17 November 2005 contain the following elements:

Table 6.5 Revised convergence criteria in COMESA

Convergence criteria	Stages of implementation					
	Stage 1 (2005-2010)	Stage 2 (2011-2015)	Stage 3 (2016-1018)			
Primary criteria						
Overall budget deficit/GDP ratio (excluding grants)	Not more than 5 per cent	Not exceeding 4 per cent	Not exceeding 3 per cent			
Annual average inflation rate	Not exceeding 5 per cent	Not exceeding 3 per cent	Not exceeding 3 per cent			
Central bank financing of the budget deficit	Minimise towards 0 per cent	Eliminate	Eliminate			
External reserves (in months of imports)	Equal to or more than 4 months of imports of goods and services	Equal to or more than 5 months of imports of goods and services	Equal to or more than 6 months of imports of goods and services			
Secondary criteria						
Stable real exchange rates	To be achieved and maintained	To be achieved and maintained	To be maintained			
Market-based positive real interest rates	To be achieved and maintained	To be achieved and maintained	To be maintained			
Achievement and maintenance of sustainable real growth rate of real GDP	Not less than 7.0 per cent	Not less than 7.0 per cent	Not less than 7.0 per cent			
Debt reduction initiative on domestic and foreign debt; i.e. reduction of total debt as a ratio of GDP	To be kept at a sustainable level	To be kept at a sustainable level	To be sustained			
Total domestic revenue to GDP ratio	Not less than 20 per cent	At least 20 per cent	At least 20 per cent			
Current account deficit (excluding grants) as a per cent of GDP	To be reduced to a sustainable level	To be maintained and sustained	To be maintained and sustained			
Achievement and maintenance of domestic investment rate	At least 20 per cent	At least 20 per cent	At least 20 per cent			
25 Core principles of bank supervision and regulation based on agreed action plan for harmonization of bank supervision for the COMESA region	To be implemented					
Core principles for systematically important payment systems, by modernizing the payment and settlement system	To be adhered to					
Liberalization of capital account		Gradual	Full			

Sources: ECA and COMESA Secretariat.

Progress towards adherence to the convergence targets is very mixed

Primary criteria

On the average, inflation in the COMESA subregion remains very high, exceeding 20 per cent for each year under review

Budget deficit: Fiscal imbalances are generally the result of spending growing faster than revenues. COMESA countries continue to be challenged by their resource needs to reduce poverty as set out in their Poverty Reduction Strategy and their commitment to achieve macroeconomic stability in the context of their limited national resources. Despite these difficulties, most members of COMESA are on the right track. In 2004, the average fiscal deficit-to-GDP ratio (excluding grants) for COMESA was 5.9 per cent. Comoros, Kenya, Seychelles and Swaziland registered a ratio of less than 5 per cent, which is in compliance with COMESA's revised macroeconomic convergence criteria.

These countries managed to achieve fiscal adjustment through revenue-enhancing and expenditure-cutting measures, even though the overall result varied from country to country. Where most countries fared poorly was in the availability of deep financial markets and domestic savings to finance large budget deficits. Data on deficits suggests that fiscal stabilization still has to be achieved in most countries (Democratic Republic of Congo, Eritrea and Zimbabwe).

Inflation: On the average, inflation in the COMESA subregion remains very high, exceeding 20 per cent for each year under review. However, it must be pointed out that inflation has been decreasing since 2001, from 35 per cent in 2001 to 22.40 per cent in 2005. Despite the negative impact of high oil prices on inflation, Burundi, Comoros, Djibouti, Egypt, Ethiopia, Kenya, Mauritius, Namibia, Rwanda, Sudan and Uganda have managed to keep inflation generally in single digits, mainly due to prudent monetary policies. The inflation performance of Zimbabwe needs to improve drastically so as to spur sound economic growth.

Table 6.6 Inflation rates in COMESA

Country	2001	2002	2003	2004	2005
Burundi	5.46	1.77	11.55	8.27	16.67
Comoros	8.63	4.17	5.13	1.77	2.30
Congo, Dem. Rep.	383.92	31.93	13.15	6.15	21.51
Djibouti	1.76	0.63	1.97	3.12	3.11
Egypt, Arab Rep.	1.88	2.37	6.87	11.58	5.37
Eritrea	13.88	15.29	11.94	22.26	14.90
Ethiopia	-4.79	-4.59	12.22	9.62	5.99
Kenya	1.55	-0.87	6.13	10.06	4.28
Madagascar	7.27	15.28	2.76	14.30	18.34
Malawi	25.62	16.38	9.25	12.52	15.45
Mauritius	4.04	6.61	5.93	5.88	4.76
Rwanda	0.16	-0.01	8.70	12.03	7.14
Seychelles	5.46	4.25	5.91	3.91	0.98
Sudan	2.47	8.21	9.17	14.77	12.14
Swaziland	10.56	12.54	12.14	10.44	4.88
Uganda	6.50	-3.85	9.77	6.22	7.82
Zambia	24.31	19.86	19.81	20.05	19.02
Zimbabwe	76.57	123.25	411.10	349.87	237.74
COMESA	34.89	19.26	33.27	28.42	22.40

Excludina the Democratic Republic of Congo and Zimbabwe, which were affected by hyperinflation, the number of countries with single-digit inflation rose significantly between the first and second half of the 1990s

Source: UNECA and World Development Indicators.

On the contrary, countries such as Kenya (11.5 per cent), Madagascar (13.8 per cent), Malawi (11.6 per cent), Rwanda (12 per cent), Zambia (18 per cent) and Zimbabwe (282 per cent) went through double-digit inflation primarily due to higher food prices. Excluding the Democratic Republic of Congo and Zimbabwe, which were affected by hyperinflation, the number of countries with single-digit inflation rose significantly between the first and second half of the 1990s. According to the figures of the 1990s up to 2004, the overall regional dispersion of inflation seemed to be on a decreasing trend. Madagascar, Malawi and Zambia were able to curb inflation relative to the previous sub-period.

In particular, Zambia made a strong correction to its inflationary stance, which had degenerated into hyperinflation between 1992 and 1993. The Democratic Republic of Congo was a conflict-affected country that needed to finance high levels of fiscal spending through an inflation tax, which contributed to hyperinflation in that country. Zimbabwe bucked the regional trend and exhibited ramping inflation coupled with a variety of other problems, including a large budget deficit.

Exchange rate arrangements in COMESA (except for the EAC countries) vary from country to country **External reserves:** On the average, the level of reserves in COMESA could cover three months of imports of goods and services in 2004 as compared to just under three months in 2003. This result was possible because of higher levels of capital flows (official development assistance and debt relief measures). Countries such as Ethiopia, Rwanda, Mauritius and Uganda were able to meet COMESA's requirement by maintaining external reserves that could cover four months of imports of goods and services.

Secondary criteria

Exchange rate policy: The COMESA monetary harmonization programme calls for a progressive dismantling of exchange controls and the introduction of a market-determined exchange rate regime. Accordingly, most COMESA countries have made progress in moving towards market-determined exchange rates. Overvaluation of currencies that characterized the 1980s and early 1990s has been reduced. Different exchange regimes exist in COMESA. Swaziland has its currency pegged to the South African rand, which floats independently. Nine countries have freely floating exchange rate regimes, although it is difficult to confirm that there is no government interference.

Exchange rate arrangements in COMESA (except for the EAC countries) vary from country to country. This heterogeneity reflects the different views by countries about currency exchange regimes. The process of economic integration is ultimately aimed at the formation of currency unions. It implies that countries engaged in the process must move towards a system of fixed – and later irrevocable – parities.

The process of implementation of a system of fixed exchange rates in a REC must be gradual. Flexible exchange rates have the advantage of easing the impact of fiscal adjustment and absorbing exogenous shocks. Pegging the exchange rate is a strategy to lock in the progress achieved on macroeconomic stabilization. Furthermore, the risk that the peg would be a target of speculative attacks is quite limited, since most African countries are not significantly integrated into global financial markets. However, to avoid distortions of the path of domestic development, countries are advised to move to a peg only once some basic conditions have been met:

- (a) Domestic inflation must have been stabilized to a relatively low level, so as to avoid the negative real exchange rate consequences of the inflation gap vis-à-vis the reference country;
- (b) Fiscal stabilization must have been achieved;
- (c) A consistent stock of international reserves must exist; and

(d) The economic institutions and arrangements such as an independent central bank and strong budgetary procedures must have been established. It is also desirable that appropriate instruments for banking supervision and surveillance should have been put in place.

The domestic currency should be pegged to a major international currency (euro, US dollar or yen). The consistency of international trade flows suggests that most African countries ought to peg to the euro, especially if Great Britain joins the EMU. However, to avoid fluctuations among the major currencies generating undesirable appreciations or depreciations of the domestic currency, the peg could be referred to a composite basket.

All countries in each REC should move towards a stable peg against an international reference currency. This will occur at different speeds for different countries, depending on their initial situation and on the time required to achieve the conditions for the sustainability of the peg. The adoption of a bilateral peg against the international reference will de facto produce a system of fixed exchange rates within the REC, and one where parities between members of the REC are determined based on the bilateral exchange rates against the international reference.

Before creating a currency union, it would be desirable to let the fixed exchange rate system work for several years (seven to ten years are advised). The long transition period will also allow RECs and member States to set up the institutional and technical arrangements required by a currency union. Eventually, following the example of the European Monetary System, fluctuation bands (in the range of no more than ±15 per cent around the central parity) could be established to provide a minimum margin for stabilization. Only countries that, for the last three years, have been able to maintain that parity without the need to impose restrictions on the free flow of foreign exchange would be admitted to the currency union.

A hard-peg arrangement against an international currency (or a basket of currencies) should also be adopted by the common central bank as an anchor for regional monetary policy. Countries in the union should be continuously monitored in their adherence to convergence criteria, with sanctions applied to non-complying countries. Mechanisms for flexibility of the type previously discussed should, however, remain in place. Countries that did not initially qualify for participation in the union could be admitted subsequently once they have satisfied the convergence criteria and have maintained a stable parity against the reference international currency for a period of at least three years.

The target for limited currency convertibility among COMESA member countries has not materialized yet throughout the subregion. Swaziland, which belongs to the Common Monetary Area (CMA) or the rand zone, operates on the basis of a lim-

Before creating a currency union, it would be desirable to let the fixed exchange rate system work for several years (seven to ten years are advised)

The policy of convertibility in EAC is so far considered to be a success story, although EAC authorities acknowledge that there are potential risks that could be attributed to increased counterfeiting and losses arising from exchange rate fluctuations

ited currency convertibility arrangement. The same applies to the members of the East African Community (EAC), Kenya, Tanzania and Uganda, which have adopted and implemented a policy making their national currencies fully convertible against one another. The acceptance of each other's currency not only facilitates the flow of trade and investment by reducing transaction costs, but also serves as an important instrument that promotes regional cooperation and economic integration and lays the groundwork for a smooth transition to a single currency.

The policy of convertibility in EAC is so far considered to be a success story, although EAC authorities acknowledge that there are potential risks that could be attributed to increased counterfeiting and losses arising from exchange rate fluctuations. Such risks are, however, deemed inherent in the nature of dealings involving convertible international currencies.

As for the removal of exchange restrictions, many COMESA member countries have accepted Article VIII of IMF and have removed restrictions on their current account. Efforts are also being made to remove restrictions on intra-COMESA trade. By and large, COMESA member States have made significant efforts to liberalize their financial markets.

Interest rate policy: All countries in COMESA have liberalized their interest rates. In some countries, real lending rates are still high and the margin between lending and deposit rates is quite wide, indicating inefficiencies in the financial system.

Growth: Between 2001 and 2005, the COMESA bloc grew at an average rate of about 4 per cent (table 6). This is below the required 7 per cent level of growth to achieve the MDGs, and is also low when compared to other developing countries and emerging economies.

Table 6.7Growth performance in COMESA

Country	2001	2002	2003	2004	2005
Burundi	2.06	4.45	-1.22	4.83	0.91
Comoros	3.33	4.15	2.47	-0.24	4.23
Congo, Dem. Rep.	-2.10	3.50	5.70	6.60	6.50
Eritrea	9.23	0.66	6.09	1.86	0.50
Ethiopia	7.93	-0.01	-3.09	12.30	8.73
Kenya	3.80	0.55	2.98	4.85	5.81
Madagascar	6.02	-12.67	9.79	5.26	4.60
Malawi	-4.97	2.86	6.07	7.12	2.55
Mauritius	5.56	2.71	3.19	4.70	4.57
Rwanda	6.72	9.38	0.95	3.95	5.99
Seychelles	-2.21	1.30	-6.30	-1.99	-2.30
Sudan	6.10	6.40	5.60	5.20	8.00
Swaziland	1.79	2.90	2.40	2.10	1.80
Uganda	4.94	6.34	4.72	5.49	6.57
Zambia	4.89	3.30	5.12	5.41	5.20
Zimbabwe	-2.70	-4.40	-10.40	-3.80	-6.50
Djibouti	2.05	2.62	3.20	3.84	3.20
Egypt, Arab Rep.	3.52	3.19	3.11	4.18	4.94
COMESA	3.07	2.92	2.36	4.44	4.47

Source: UNECA and World Development Indicators.

Except for 2002 and 2003, Ethiopia's economy has been growing at a rate of over 7 per cent each year. The Democratic Republic of Congo has also been experiencing very high growth, perhaps due to increased external demand for its commodities. The strong global demand for oil is contributing to the robustness of Sudan's economy, which is growing above 5 per cent each year. Modest economic growth has been posted by Mauritius, Rwanda and Egypt. Overall, improved macroeconomic stability, higher external demand for commodities, better agricultural production, significant increase in ODA, debt relief measures and improved peace and security account for part of the improved growth performance in the COMESA zone.

Debt reduction: Debt service has been on a decreasing trend at the regional level since the mid-1980s. The average external debt-to-GDP ratio of COMESA fell from 62.4 per cent in 2003 to 55.4 per cent in 2004, because some countries (Ethiopia, Madagascar and Uganda) have reached the HIPC completion point regarding their debt relief. Many countries have also seen their ODA shares increase substantially.

Overall, improved macroeconomic stability, higher external demand for commodities. better agricultural production. significant increase in ODA, debt relief measures and improved peace and security account for part of the improved growth performance in the COMESA zone

Despite these encouraging signals, the MDGs remain underfinanced and most COMESA countries have not made real progress on most of the goals as scheduled

Several COMESA countries participate, or are expected to participate, in the HIPC initiative for debt relief. This is likely to have a significant impact on debt service statistics at both the national and the regional level. As projected by IMF for the period 2001-2003, debt service as a percentage of GDP in countries with debt relief arrangements was expected to be 50 per cent lower than the others. A similar effect was predicted for debt service as a percentage of export earnings. Despite these encouraging signals, the MDGs remain underfinanced and most COMESA countries have not made real progress on most of the goals as scheduled.

Current account deficit (excluding grants): Most COMESA countries are running deficits on their current account, excluding grants. Exports of goods and services as a percentage of GDP increased from 34.9 per cent to 39.5 per cent, while imports of goods and services also increased from 41.2 per cent of GDP to 43.8 per cent.

Domestic investment and savings rates: Average investment performance in COMESA has improved from 13.8 per cent of GDP in 2003 to 16.3 per cent in 2004. This achievement is below the COMESA target ratio of 20 per cent of GDP and varies from country to country. However, most countries registered a performance of less than 20 per cent of GDP, suggesting that COMESA countries need to implement a set of policies to achieve higher investment and growth.

The average COMESA savings rate as a percentage of GDP was 12.6 per cent in 2004 as compared to 7.4 per cent in 2003. Most countries have a performance in savings of less than 10 per cent of GDP, which is not sufficient to finance the level of investment required for rapid and sustained growth. Furthermore, it is important to note that the relatively high interest rates observed above did not improve domestic savings and possibly hurt domestic investment.

Table 6.8 presents the net FDI into the COMESA zone, showing that Egypt and Sudan have been attracting most of the FDI to the zone in recent years. Sudan's FDIs are for the development of its oil industry. Democratic Republic of Congo attracts substantial FDI to its extractive industry. The FDI into Ethiopia are also very substantial. Not surprisingly, the FDIs into Democratic Republic of Congo, Sudan and Ethiopia account for their strong growth performance in recent years. It must be noted that despite the recent stability in Burundi, FDI flow into the country remains very low.

Table 6.8 Net foreign direct investments (FDI in millions of US dollars) to COMESA

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Country	2001	2002	2003	2004	2005
Burundi	0.01	0.01	0.05	0.04	0.58
Comoros	1.12	0.430	1.00	-0.1	1.00
Congo, Dem. Rep.	77.21	136.78	323.13	668.39	402.00
Djibouti	3.35	3.5	14.22	38.54	22.65
Egypt, Arab Rep.	509.90	646.90	237.40	1,253.30	5,375.60
Eritrea	12.10	20.00	22.00	-7.87	11.38
Ethiopia	349.40	255.00	465.00	545.10	265.11
Kenya	5.30	27.62	81.74	46.06	21.21
Madagascar	93.06	8.29	7.44	19.64	28.88
Malawi	19.30	5.90	3.90	-0.68	3.00
Mauritius	-27.68	32.07	62.63	13.89	39.15
Rwanda	4.46	2.61	4.66	7.66	8.03
Seychelles	64.74	47.72	58.43	38.01	82.38
Sudan	574.00	713.18	1,349.19	1,511.07	2,304.64
Swaziland	28.43	88.79	-60.91	70.58	-16.18
Uganda	151.50	184.65	202.19	222.21	257.06
Zambia	71.70	82.00	172.00	239.00	259.00
Zimbabwe	3.80	25.90	3.80	8.7	102.80
AVERAGE	215.12	208.08	339.61	322.25	413.92

Source: UNECA and World Development Indicators.

Monetary arrangements of the Economic Community of West African States (ECOWAS)

Monetary cooperation in the West African subregion began in 1975 with the Economic Community of West African States (ECOWAS) establishing the West African Clearing House (WACH) to provide a multilateral clearing mechanism for trade within the subregion.

The key objectives of the WACH were to promote the use of the currencies of member countries in intra-ECOWAS trade and to encourage the member States to pursue trade liberalization schemes that support and strengthen monetary and economic cooperation in the subregion. Under the operations of the WACH, the use of foreign exchange was substituted for an artificial currency unit, the West African Unit of Account (WAUA). The WAUA was linked to the special IMF drawing right. The WAUA served as the benchmark for determining the relative strength of the currencies in the WACH payment and clearing system. The operations of the WACH required that member States commit to unrestricted conversion of their

The key objectives of the WACH were to promote the use of the currencies of member countries in intra-FCOWAS trade and to encourage the member States to pursue trade liberalization schemes that support and strengthen monetary and economic cooperation in the subregion

national currencies into the WAUA for transactions so as to avoid currency inconvertibility in the subregion.

In its effort to create a common currency in the zone, ECOWAS in 1987 adopted a comprehensive Monetary Cooperation Programme (MCP)

In 1996, the WACH was transformed into the West African Monetary Agency (WAMA), paving the way for a single monetary zone in the subregion and making the multilateral settlement, clearing and payment system more efficient. With the collaboration of the Committee of Central Bank Governors and the WAMA, the ECOWAS traveller's cheque was introduced in 1998 and went into circulation the following year to facilitate intra-community trade and other business transactions. However, it was phased out in the aftermath of less restrictive exchange controls accompanying increased economic liberalization under the structural adjustment programmes in member States.

Despite the good intentions of the leadership of ECOWAS, the WACH had a number of difficulties. Ojo (2003) suggests that these challenges included operational inadequacies; the ineffectiveness of the system as cumbersome documentation requirements by central banks delayed crediting exporters' accounts; the absence of a short-term financing facility; and the absence of trade promotion instruments such as bills of exchange and traveller's cheques. WACH also failed to promote the use of national currencies in intraregional trade.

In its effort to create a common currency in the zone, ECOWAS in 1987 adopted a comprehensive Monetary Cooperation Programme (MCP). The main objective of the MCP is to promote a harmonized monetary system that would support the sustainable growth of the economies in the ECOWAS zone. Through the MCP, the subregion is expected to achieve a common convertible currency that would subsequently be managed by a common central bank.

To achieve the objectives of the MCP, ECOWAS has implemented a number of measures, including exchange rate realignment and harmonization; adoption of an ECOWAS exchange rate mechanism; liberalization of exchange controls and maintenance of fiscal discipline; and adoption of a market-oriented approach to monetary management. Consequently, member States are expected to follow a set of primary and secondary convergence criteria, as presented in table 6.9.

Table 6.9 ECOWAS macroeconomic convergence criteria

Convergence criteria	Priority	Parameter	Target date
Budget deficit	Primary	4 per cent, maximum	2003
Central bank finance of fiscal deficit	Primary	10 per cent, maximum	2003
Inflation rate, annual	Primary	5 per cent, maximum	2003
External reserves	Primary	6-month imports, minimum	2003
Domestic debt	Secondary	Liquidate outstanding and no new	Open
Tax revenue/GDP	Secondary	20 per cent, maximum	Open
Wage bill/Tax revenue	Secondary	35 per cent, maximum	Open
Exchange rate	Secondary	Stabilize real rate	Open
Interest rate	Secondary	Maintain positive real rate	Open
Capital expend./Tax revenue	Secondary	20 per cent, minimum	Open

Source: UNECA and the ECOWAS Secretariat

It should be noted that the maximum budget deficit does not include grants and the maximum central bank financing of the budget deficit is based on the previous year's tax revenue.

The MCP has faced a number of challenges that have delayed its implementation. Member States, perhaps due to the lack of political commitment, have failed to adopt the desired policy frameworks that would lead to convergence. Furthermore, the required monetary harmonization has not been achieved. Consequently, the date for the single monetary zone was shifted three times from 1992 to 1994, to 2000 and again to 2004.

Assessing the performance of the economy of the ECOWAS zone shows that the growth performance was modest, averaging about 4 per cent between 2001 and 2005, which is clearly below the 7 per cent needed to achieve the MDG 1 (table 6.10). Post-conflict Sierra Leone is experiencing high growth due to sound macroeconomic management and strong external demand for its extractive commodities. Strong external demand for crude oil has boosted Nigeria's growth performance, averaging above 6 per cent every year from 2003.

Sound fiscal and monetary management of the Ghanaian economy has yielded great benefits, as witnessed by its average GDP growth of about 5 per cent between 2001 and 2005. The political uncertainty in Côte d'Ivoire appears to be hurting the economy as its real GDP shrunk during 2001-2003. The growth performance of the Gambia and Senegal has also been very strong since 2003, with solid agriculture yields, good macroeconomic policy and tourism accounting for part of the strength in the economies.

Assessing the performance of the economy of the ECOWAS zone shows that the growth performance was modest, averaging about 4 per cent between 2001 and 2005, which is clearly below the 7 per cent needed to achieve the MDG 1

Table 6.10 Growth performance in ECOWAS

2001 2002 2003 2004 2005 Country Benin 5.00 4.50 3.90 3.10 3.90 Burkina Faso 5.90 4.40 6.50 3.90 4.80 Cape Verde 3.80 4.60 6.20 4.50 5.80 The inflation Côte d'Ivoire -0.03 -1.44 -1.561.76 1.80 Gambia, The 5.80 -3.25 6.95 5.00 5.10 Ghana 4.00 4.50 5.20 5.60 5.90 Guinea 4.00 4.20 1.20 2.67 3.33 Guinea-Bissau 0.20 -7.10 0.60 2.20 3.50 9 per cent each Liberia 3.70 5.30 2.90 -31.30 2.60 Mali 12.10 4.15 7.44 2.19 6.08 2005 3.00 4.50 Niger 7.10 5.32 0.00 Nigeria 3.10 1.55 10.69 6.00 6.94 Senegal 4.69 1.12 6.55 6.17 5.13 7.50 Sierra Leone 18.20 27.40 9.20 7.40 2.70 Togo -0.18 4.14 3.00 2.80 **ECOWAS** 5.11 3.70 2.64 3.75 4.82

Source: UNECA and World Development Indicators.

The inflation performance of the ECOWAS region is relatively good, averaging less than 9 per cent each year from 2001 to 2005 (table 6.11). Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, Senegal and Togo, all member States of the CFA zone, registered very low rates of inflation during the years in review. This is due primarily to the peg of the CFA to the euro, which itself accounts for the low and stable inflation of Europe. The central banks of the Gambia, Ghana, Guinea and Nigeria have to work hard to improve the inflation rate in their respective countries, as they all posted double-digit inflation in the years under review.

performance of the ECOWAS region is relatively good, averaging less than year from 2001 to

Table 6.11 Inflation rates in ECOWAS

Country	2001	2002	2003	2004	2005
Benin	3.14	7.70	1.72	0.29	1.80
Burkina Faso	5.19	3.68	2.22	0.91	2.14
Cape Verde	2.70	1.81	1.60	0.87	0.34
Côte d'Ivoire	4.25	5.08	1.31	0.66	3.55
Gambia, The	15.13	16.10	27.29	14.23	4.28
Ghana	35.05	22.69	28.75	14.35	14.96
Guinea	4.79	2.69	12.59	21.39	28.84
Guinea-Bissau	-5.08	3.59	-3.26	2.10	7.63
Liberia	11.61	26.25	8.93	2.86	9.01
Mali	-0.30	16.04	1.28	-0.61	2.45
Niger	3.98	3.00	-0.37	1.59	6.57
Nigeria	10.74	3.88	20.82	19.91	26.85
Senegal	2.54	2.73	0.68	1.88	2.58
Sierra Leone	1.76	-3.63	8.31	15.98	13.08
Togo	3.06	1.49	-3.25	3.40	3.81
ECOWAS	6.57	7.54	7.24	6.65	8.53

The ECOWAS subregion attracts substantial levels of FDIs, with Nigeria taking full advantage to strengthen its oilproducing sector

Source: UNECA and World Development Indicators.

The ECOWAS subregion attracts substantial levels of FDIs, with Nigeria taking full advantage to strengthen its oil-producing sector. Despite the political uncertainty, Côte d'Ivoire attracted high levels of FDIs during the period under review. Surprisingly, inflow of FDIs did not translate into strong growth performance in Côte d'Ivoire. Ghana, Liberia and Mali also received modest levels of FDIs that coincided with their strong economic performance.

Table 6.12Net foreign direct investments (FDIs in millions of US dollars) to the ECOWAS region

Country 2001 2002 2003 2004 2005 Benin 50.91 17.89 48.28 108.18 21.00 Burkina Faso 8.83 15.03 29.12 14,35 19.50 14.78 Cape Verde 9.11 14.81 20.30 54.44 Côte d'Ivoire 272.68 212.63 165.35 282.98 265.72 Gambia. The 35.48 42.83 21.90 56.75 51.93 Ghana 89.30 58.90 136.75 139.27 106.50 Guinea 1.68 30.00 78.97 97.90 102.00 Guinea-Bissau 0.36 4.01 1.73 0.40 10.00 Liberia 8.30 2.80 372.22 206.85 193.96 Mali 243.80 132.26 121.73 101.00 159.02 Niger 22.90 2.40 14.91 26.33 11.93 Nigeria 1,190.63 1,874.04 2,005.39 1,874.03 2,013.37 Senegal 31.94 78.05 52.49 77.03 54.00 Sierra Leone 9.84 10.41 8.62 61.15 58.55 Togo 63.58 53.36 33.73 57.33 2.69 208.31 **AVERAGE** 127.82 177.37 207.92 208.35

Source: UNECA and World Development Indicators.

To support investment and promote financial cooperation in the region, ECOWAS has established a number of regional banks. In 1975, it formed the ECOWAS Fund for Cooperation, Compensation and Development (EFCCD), to serve as a source of finance for the compensation of revenue losses accompanying regional trade liberalization. It is also responsible for the promotion of balanced regional economic development, providing support to less-developed member States of the community. EFCCD has been reconstituted as the ECOWAS Bank for Investment and Development (EBID). The two subsidiaries of EBID are the ECOWAS Regional Development Fund (ERDF) and the ECOWAS Regional Investment Bank (ERIB), which focus on public and private sector financing respectively.

The ECOWAS Bank Group (Ecobank) has also been established to strengthen regional financial cooperation. Ecobank, a parent holding company, has subsidiaries in twelve countries across West and Central Africa. It was established to provide commercial banking and other financial services to individuals and private and public sector organizations. The ERDF is the major shareholder of Ecobank. The Ecobank Foundation, a philanthropic arm of the bank, is also involved in supporting scientific, cultural and humanitarian causes across the region.

To support investment and promote financial cooperation in the region, ECOWAS has established a number of regional banks

Monetary arrangements of East African Community (EAC)

In 1993, Kenya, Tanzania and Uganda, the three original members of the EAC, signed the agreement establishing the Permanent Tripartite Commission for East African Cooperation. In 1996, the East African Cooperation Secretariat was inaugurated in Arusha, Tanzania. The Treaty establishing the East African Community was signed in November 1999 and entered into force in July 2000. In Article 5(2), the Treaty states that "... the Partner States undertake to establish among themselves and in accordance with the provisions of this Treaty, a customs union, a common market, subsequently a monetary union and ultimately a political federation in order to strengthen and regulate the industrial, commercial, infrastructure, cultural, social, political and other relations of the Partner States to the end that there shall be accelerated, harmonious and balanced development and sustained expansion of economic activities, the benefit of which shall be equitably shared".

More specifically, Article 82(1) says that ".... Partner States undertake to cooperate in monetary and fiscal matters in accordance with the approved macroeconomic policies harmonization programmes and convergence framework of the Community in order to establish monetary stability within the Community aimed at facilitating economic integration efforts and the attainment of sustainable economic development of the Community. To this end the Partner States shall:

- Cooperate in monetary and financial matters and maintain the convertibility of their currencies as a basis for the establishment of a monetary union
- Harmonize their macroeconomic policies especially in exchange rate policy, interest rate policy, monetary and fiscal policies
- Remove obstacles to the free movement of goods, services and capital within the Community".

Furthermore, Article 83(2) adds that ".... Member States undertake to:

- Remove all exchange restrictions on imports and exports within the Community
- Maintain free market determined exchange rates and enhance the levels of their international reserves
- Adjust their fiscal policies and net domestic credit to the government to ensure monetary stability and the achievement of sustained economic growth

The Treaty establishing the East African Community was signed in November 1999 and entered into force in July 2000

It has to be noted that EAC membership expanded in July 2007 to include Burundi and Rwanda. The information used in the preparation of this section was obtained before the expansion.

The Kenvan. Tanzanian and Ugandan shillings are freely convertible within the East African subregion

- Liberalize their financial sectors by freeing and deregulating interest rates with a view to achieving positive real interest rates in order to promote savings for investment within the Community and to enhance competition and efficiency in their financial systems
- Harmonize their tax policies with a view to removing tax distortions in order to bring about a more efficient allocation of resources within the Community".

In pursuit of the objectives of the Treaty mentioned above, Partner States agreed on a number of macroeconomic convergence criteria aimed at integrating their economies for a sustainable monetary union as follows:

- Low and stable inflation rate at single digit of less than 5 per cent;
- High and sustainable rate of growth of real GDP at 7 per cent as the minimal annual target;
- Reduce current account deficit-to-GDP ratio to a sustainable level;
- Reduce budget deficit-to-GDP ratio (excluding grants) to less than 5 per cent;
- Raise national savings-to-GDP ratio to at least 20 per cent in the medium term;
- Build gross foreign exchange reserves to a level equivalent to six months of imports in the medium term;
- Maintain low market-determined interest rates;
- Maintain stable market-determined exchange rates;
- Pursue debt reduction initiatives to reduce both domestic and foreign debt; and
- Maintain prudential norms of banking regulation, strict supervision, improved corporate governance and transparency of all financial transactions.

The policy reform programmes adopted by Partner States to achieve the above macroeconomic criteria helped in getting the following results:

Currency convertibility of the shilling of the three Partner States: The Kenyan, Tanzanian and Ugandan shillings are freely convertible within the East African subregion. This has facilitated the flow of trade and investment by reducing transaction costs and has also served as an important instrument for promoting regional cooperation and economic integration. It is paving the way for a smooth transition to a single currency in the subregion in a foreseeable future.

- **Harmonization of macroeconomic policies:** Priority is being given to the harmonization of macroeconomic policies, particularly in exchange rate, interest rate, monetary and fiscal policies. The central banks of the three Partner States meet regularly to harmonize their policies and share experiences and information regarding budget, revenue and other economic policies.
- In the area of growth, the result achieved is mixed: The growth performance of the EAC zone has been modest, recording around 5 per cent each year, from 2001 to 2005 (table 6.13). The economies of Tanzania and Uganda have been growing very strongly since 2001. Kenya's growth in 2002 was very slow, posting a mere 0.55 per cent. However, the Kenyan economy has been robust since 2003.

Table 6.13 Growth performance in the EAC region

Country	2001	2002	2003	2004	2005
Kenya	3.80	0.55	2.98	4.85	5.81
Tanzania	6.24	7.24	7.12	6.69	6.97
Uganda	4.94	6.34	4.72	5.49	6.57
EAC	5.00	4.71	4.94	5.68	6.45

Source: UNECA and World Development Indicators

Inflation: Compared to other parts of Africa, the EAC zone continued to post single-digit inflation throughout the years under review (table 6.14). Inflation rates posted by the member States are also very impressive, indicating that their respective central banks are pursuing very sound monetary polices. It is important for the central banks to continue with their policies so that EAC can achieve its target of keeping inflation below 5 per cent.

Table 6.14 Inflation rates in the FAC region

mination rates in the L	, to region				
Country	2001	2002	2003	2004	2005
Kenya	1.55	-0.87	6.13	10.06	4.28
Tanzania	7.17	6.45	5.62	8.07	3.74
Uganda	6.50	-3.85	9.77	6.22	7.82
EAC	5.07	0.57	7.17	8.12	5.28

Source: UNECA and World Development Indicators

Current account and fiscal deficits: Current account and fiscal deficits (excluding grant) were contained below 5 per cent in 2002 in Kenya and Tanzania, whereas Uganda's twin deficits rose to more than 13 per cent in the same year.

Compared to other parts of Africa, the EAC zone continued to post single-digit inflation throughout the vears under review

Several reasons could be given for the mixed macroeconomic performance of Partner States, including:

- Lack of enforcement, as there is no penalty for defaulting countries;
- Relevance of some variables is questionable;
- Terms such as "sustainable" or "stable" need to be clearly defined, since they are of a general nature and are difficult to measure;
- The computation and definition of the variables need to be harmonized in all three Partner States; and
- There is no clear roadmap (milestone) leading to a single currency.

In a bid to improve the subregion's macroeconomic performance, the EAC Ministers of Finance in 2006 approved the terms of reference for a comprehensive study on the EAC monetary union and single currency. Among other things, the study is expected to take into consideration the experiences of other subregions such as the rand zone, the CFA zone, the euro convergence criteria (see box 1), the stability and growth pact of the euro zone and Gordon Brown's five economic tests for the United Kingdom to join the euro zone (box 2).

In a bid to improve the subregion's macroeconomic performance, the EAC Ministers of Finance in 2006 approved the terms of reference for a comprehensive study on the EAC monetary union and single currency

Box 6.1

The Euro Convergence Criteria

The final judgment as to which member States fulfilled the necessary conditions for the adoption of the euro was made by the Council, meeting in the composition of the Heads of State or of Government on 2 May 1998. The assessment of the degree of convergence achieved by the member States was done by reference to the following criteria:

- a. Price stability: the average rate of inflation, observed over a period of one year before the examination, should not exceed by more than 1.5 percentage points that of, at most, the three best-performing member States in terms of price stability;
- b. Government financial position: the deficit should not exceed 3 per cent of the gross domestic product (GDP), unless it has declined substantially and continuously, and reached a level that comes close to 3 per cent. In addition, the public debt should not exceed 60 per cent of GDP, unless it is sufficiently diminishing and approaching 60 per cent at a satisfactory pace;
- Observance of the (normal) fluctuation margins provided for by the Exchange Rate Mechanism of the European Monetary System (EMS), without severe tensions for at least two years; and
- d. Durability of convergence: the average of the long-term interest rate, observed over a period of one year before the examination, should not exceed by more than 2 percentage points that of, at most, the three best-performing member States in terms of price stability.

In addition to these economic criteria, the member States' national legislation, including the statutes of its national central bank, had to be compatible with the Treaty and with the Statute of the ESCB.

Box 6.2

Gordon Brown's Five Economic Tests for Joining the Euro Zone

- Convergence: are business cycles and economic structures sufficiently in step that the United Kingdom can live comfortably with euro-area interest rates?
- Is the economy sufficiently flexible to deal with "asymmetric shocks", that is, changes in the economic environment that affect some countries more than others?
- Will the euro encourage companies, especially foreign ones, to invest, by eliminating the exchange rate risk within the euro zone?
- d. The impact of the euro on the financial services industry; and
- Will the euro boost growth and jobs?

Has the stable macroeconomic environment in the EAC zone translated into FDI flows into the zone? Table 6.15 shows that the zone attracts modest levels of FDI. with Tanzania attracting the most, followed by Uganda. Despite its strong business environment, Kenya does not attract sufficient FDI.

Table 6.15 Net foreign direct investment (FDI in millions of US dollars) to EAC

Country	2001	2002	2003	2004	2005
Kenya	5.30	27.62	81.74	46.06	21.21
Tanzania	467.20	429.80	526.80	469.90	473.40
Uganda	151.50	184.65	202.19	222.22	257.06
AVERAGE	208.00	214.02	270.24	246.06	250.56

Source: UNECA and World Development Indicators.

Monetary arrangements of the Economic and Monetary Union of Central Africa (CEMAC)

CEMAC is one of the oldest subregional groupings in Africa. Member countries are Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea and Gabon. It was established under French colonial rule as a way of forging monetary and economic integration between the member States.

Although the countries are contiguous, the infrastructure network in the region is very poor, making intra-CEMAC trade very difficult and isolating the countries from one another. Indeed, some of the countries have more economic links with Nigeria and Democratic Republic of Congo, both of which are not in the grouping, than with each other.

Although the countries are contiguous, the infrastructure network in the region is very poor, making intra-CEMAC trade very difficult and isolating the countries from one another

It must be noted that while most colonies severed their monetary relationships with the former colonial power after independence, the CFA zone's monetary arrangements remained largely unchanged after independence

The steep history of CEMAC and UEMOA is rooted in French colonial Africa. It began with the formation of the Afrique Occidentale Française (AOF) in 1898, made up of Senegal, Guinea, Côte d'Ivoire, the Sudan (later Mali), Dahomey (later Benin), Upper Volta (later Burkina Faso), Mauritania and Niger. The Afrique Equatoriale Française (AEF) was also created in 1910 and was made up of Chad, Oubangi-Chari (later the Central African Republic), Congo and Gabon. The French part of Cameroon was governed separately by France under a United Nations mandate and remained outside the federation. France's African colonies began to assert their right to self-determination after World War II, and their formal arrangements with France ended with their independence.

Despite the newly gained independence of the French colonies in Africa, the CFA franc created under colonial rule continued to be used. In December 1945, the Colonies Française d'Afrique (CFA) franc was created to maintain the exchange rates for AEF and AOF with the dollar. The acronym CFA was later renamed as the Coopération Financière Africaine in Central Africa and Communauté Financière Africaine in West Africa. It must be noted that while most colonies severed their monetary relationships with the former colonial power after independence, the CFA zone's monetary arrangements remained largely unchanged after independence.

In the mid-1980s, severe domestic policy and exogenous shocks hit the CEMAC area hard. However, the CFA was devalued to mitigate the negative shock and provide stability. Consequently, the area went into a protracted depression that saw per capita income fall by over 17 per cent. Member States reacted to the macroeconomic imbalances by pursuing an "internal adjustment strategy," as an alternative to devaluation. However, as explained in box 4, the strategy failed and forced the countries to devalue the CFA franc in 1994, which allowed the economies in the region to recover.

Box 6.3

The Internal Adjustment Strategy

The CEMAC countries adopted an "internal adjustment strategy" in response to severe external shocks that struck the region in the 1980s. The collapse of crude oil prices as well as other commodity prices in 1986 had a severe negative impact on the economies of the CEMAC member States. In 1986, the terms of trade for CEMAC countries plunged by 40 per cent, remaining depressed until 1993. In a bid to restore competitiveness and promote growth, and to rectify the macroeconomic imbalance, member countries adopted a combination of expenditure-switching and expenditure-reducing policies.

Expenditure-switching policies were needed to alter relative prices and shift demand and resources towards the production of tradable goods, while expenditure-reducing policies - primarily monetary and fiscal in nature - were needed to reduce domestic absorption and increase domestic savings. Expenditure-switching policies are normally carried out through exchange rate depreciation to reduce imports and boost exports. However, the CEMAC countries did not want to devalue and instead embarked on an "internal adjustment strategy," which tried to deflate domestic prices in order to achieve the required depreciation in the real exchange rate. This strategy involved a combination of deflationary macroeconomic policies, internal structural reforms and "second-best" trade policies.

However, the real depreciation that was required was too deep, such that deflation of domestic prices needed to be followed up by some level of nominal devaluation. The consequence of the "internal adjustment strategy" was a severe recession in the CEMAC zone, with the per capita GDP of member States falling by 3.9 per cent between 1985 and 1993, and falling government revenue. Compounding the problem was the withdrawal of external financial support as donors became increasingly dissatisfied with the slow pace of reforms. This led to a fiscal crisis, which in turn caused serious liquidity and solvency problems for the banking system through the accumulation of government and public enterprise arrears.

A substantial increase in non-performing private sector loans caused by the depression also strained the banking system. As the economic crisis deepened and devaluation appeared increasingly inevitable, capital flight from the area accelerated, undermining the financial system further. Significant restrictions on international payments imposed during this period did not help improve the situation. The banking sectors of many of the CEMAC countries were insolvent on the eve of the devaluation.

The Heads of State and Government were left with no option but to devalue the CFA franc in 1994.

The coordination of monetary programmes in the region is carried out by the Central Bank of Central African States (BEAC), which was created in 1972 as a regional central bank. BEAC was charged with the responsibility of issuing currencies and pooling the external reserves of member States. It functions through an operations account with the French Treasury, which is used to manage the fixed parity between the CFA franc and the French franc and is governed by monetary accords between France and BEAC. Some of the accords require BEAC to abide by a set of rules of monetary and fiscal discipline designed to reduce the risk of accumulating large balance of payments deficits that would have to corrected by extensive financing from the operations account. BEAC is also responsible for overseeing macroeconomic and financial stability in the zone.

The coordination of monetary programmes in the region is carried out by the Central Bank of Central African States (BEAC), which was created in 1972 as a regional central bank

In order to preserve the value of the CFA and ensure macroeconomic stability, CEMAC in 2002 adopted a macroeconomic framework, which requires member States to ensure that:

- Inflation does not exceed 3 per cent;
- Total debt as a percentage of GDP is not greater than 70 per cent;
- External debt payment arrears are not negative;
- Domestic debt payment arrears are not negative;
- Budget deficit as a percentage of GDP is not negative;
- Deficit financed by the central bank is less than 20 per cent of the previous year's fiscal revenue;
- Wage bill as a percentage of tax revenue is less than 35 per cent; and
- There are no domestic and external arrears on the current account.

The average growth performance of CEMAC was very modest between 2001 and 2005 (table 6.16). With the exception of 2002 and 2004, growth for the entire zone remained below 5 per cent. The high-performing countries in the zone are Chad and Equatorial Guinea, which posted double-digit GDP growth during the years in review, mainly due to the performance of the oil sector. The growth performance of Central African Republic and Gabon is very weak, with the former posting negative growth rates in 2002 and 2003.

Table 6.16
Growth performance in the CEMAC region

Country	2001	2002	2003	2004	2005
Cameroon	4.51	4.01	4.03	3.70	2.04
Central African Republic	1.50	-0.80	-7.60	1.30	2.20
Chad	10.42	8.38	14.91	29.50	5.57
Congo, Rep.	3.80	4.60	0.80	3.60	9.20
Equatorial Guinea	1.45	17.62	14.70	9.98	na
Gabon	2.50	0.00	2.60	1.40	2.20
CEMAC	4.03	5.63	4.91	8.25	4.24

Source: UNECA and World Development Indicators.

Although the zone as a whole has not been able to keep inflation below 3 per cent, it has managed to post single-digit inflation (table 6.17). In 2001, 2004 and 2005, Chad registered double-digit inflation, partly due to increased pressures for goods and services to support increased activities in the oil sector. The top inflation performers in the zone are Cameroon, Congo, Gabon and Central African Republic.

The average growth performance of CEMAC was very modest between 2001 and 2005

Table 6.17 Inflation rates in the CEMAC region

Country	2001	2002	2003	2004	2005
Cameroon	4.5	2.8	0.6	0.3	1.9
Central African Republic	3.8	2.3	4.2	-2.1	2.9
Chad	12.4	5.2	-1.8	-5.3	7.9
Congo, Rep. of	0.4	3.8	-1.3	3.6	2.8
Equatorial Guinea	8.8	7.6	7.3	4.2	5.0
Gabon	2.1	0.2	2.3	0.4	-0.2
CEMAC	4.4	3.0	1.3	0.6	2.9

Source: UNECA and World Development Indicators.

Table 6.18 reports the net FDI flows into the CEMAC zone between 2001 and 2005. Chad and Equatorial Guinea attracted most of the FDIs mainly for the development of their oil sectors. Despite Cameroon and Gabon being the biggest economies in the zone, they do not attract substantial levels of FDIs.

Table 6.18 Net foreign direct investments (FDIs in millions of US dollars) to the CEMAC region

Country	2001	2002	2003	2004	2005
Cameroon	73.29	601.75	219.75	0.29	18.00
Central African Republic	5.18	5.64	3.27	-12.68	6.00
Chad	459.87	924.06	712.65	478.15	705.00
Congo, Rep. of	77.21	331.15	323.12	-8.52	724.02
Equatorial Guinea	945.02	323.39	1,430.66	1,664.06	1,860.00
Gabon	-89.09	38.97	157.99	319.51	300.00
AVERAGE	245.25	370.83	474.57	406.80	602.17

Source: UNECA and World Development Indicators.

Monetary arrangements of West African Economic and Monetary Union (UEMOA)

UEMOA was established in 1994, and comprises the following countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo. The history of UEMOA dates back to 1962 with the establishment of the West African Monetary Union (UMOA), composed of the French colonies in West Africa. UEMOA was born in 1994 out of a merger between the West African Monetary Union (UMOA) and the West African Economic Community (CEAO).

Chad and Equatorial Guinea attracted most of the FDIs mainly for the development of their oil sectors

The main objectives of UEMOA are:

- To reinforce the competitiveness of the economic and financial activities of member States in the context of an open and rival market and a rationalized and harmonized judicial environment;
- To ensure the convergence of the macroeconomic performance and policies of member States with the institution of a multilateral control procedure;
- To create a common market among member States based on the free movement of people, goods, services and capital and on the right of people exercising an independent or remunerated activity;
- To establish a common external tariff as well as a common commercial policy;
- To institute coordination of national sector-based policies with the implementation of common market actions, especially in the following domains: community-based land reclamation, environment, transport, infrastructure, telecommunications, human resources, energy, industries, mines and crafts; and
- To harmonize the legislations, especially, the fiscal systems of the member countries.

UEMOA is a single monetary zone backed by a convertible currency, the CFA franc, which is issued by the Central Bank of West African States (BCEAO). BCEAO is the common central bank for the eight member States. Besides the issue of the common currency, BCEAO is also responsible for the pooling of foreign exchange reserves; the unrestricted circulation of the common currency and freedom of capital movements within the territory of the member States; the harmonization of monetary and banking legislation; the free and unlimited convertibility of CFA franc into euros at a fixed parity guaranteed by France; the concentration of the Union's foreign currency-denominated assets in the operations account of the French Treasury; and the application of a common regulation against third-party countries.

The credibility and international convertibility of the CFA franc are guaranteed through the euro, to which it is anchored. To ensure convertibility between the CFA franc and the euro, the French Treasury maintains an operations account on behalf of BCEAO. Recently, the need to maintain a common monetary policy called for financial discipline on the part of each country belonging to the Union. Accordingly, UEMOA, with the endorsement of the Heads of State and Government of the member States, has adopted the Convergence, Stability, Growth and Solidarity Pact. The Pact establishes a multilateral surveillance system aimed at ensuring greater economic policy cohesiveness among members and outlines a set of primary and secondary criteria to be satisfied.

The credibility and international convertibility of the CFA franc are guaranteed through the euro, to which it is anchored

Box 6.4

Multilateral surveillance mechanism

UEMOA has recognized that the convergence of member States' economic policies is one of its priorities (see article 65 of the treaty). Therefore, the Union has to avoid excessive budgetary deficits, respect budgetary discipline and harmonize its tax policies, as prescribed by the treaty.

The theoretical process of multilateral surveillance is enshrined in the treaty; if a member State does not meet the requirements of the annual economic policy goal, the treaty stipulates that the UEMOA Commission should provide an explanation to the Council, outlining corrective measures that the Member State should take. Upon approval by the Council of Ministers, the Commission has 30 days to set up a detailed programme for the member State to follow. The programme would need the blessing of the Union, which would also have to assist the member State in raising the resources needed to address the issue.

If the affected member State fails to implement the programme, the Commission can propose negative sanctions against the member State to the Council. These sanctions range from publication of a Council communiqué detailing the situation of the member State (to literally discredit it), to the withdrawal of all Union support and freezing of all intervention of BCEAO in favour of the member State.

The macroeconomic convergence policy of UEMOA consists of the primary and secondary criteria referred to earlier. The primary criteria focus on the budget deficit; the reduction of inflation; the ceiling on total public external debt; and the internal and external arrears. The secondary criteria deal with variables such as the wage billto-tax revenue ratio; public investment; fiscal revenues and current account deficits. The macroeconomic policies of member States are coordinated through the multilateral surveillance mechanism.

A monetary union calls for some coordination of budgetary policies of member countries. Divergent budgetary policies can lead to tensions within the monetary union, especially when they can give rise to competitive capital movements between countries. The convergence provisions in the UEMOA zone are encapsulated in the multilateral surveillance mechanism. In applying these provisions, the Union pursues general as well as specific objectives. Article 4 of its treaty stipulates that the Union is aimed at:

- "Reinforcing the competitiveness of economic and financial activities of member States within the framework of an open and competitive market and a rationalized and harmonized juridical environment"; and
- "Ensuring the convergence of performances and of economic policies by the institution of a multilateral surveillance procedure".

To ensure budgetary discipline as well as macroeconomic stability, UEMOA has imposed the following convergence criteria on its member States:

A monetary union calls for some coordination of budgetary policies of member countries

Primary criteria:

- a ratio of global budgetary deficit to GDP of no more than 4 per cent
- an annual inflation rate of less than 5 per cent
- A budgetary deficit financed by the central bank of no more than 10 per cent of the previous year's fiscal revenues; and
- Some exchange reserves (gross external reserve) representing at least six months of import of goods and services.

Secondary criteria:

- A fiscal revenue/GDP ratio of at least 20 per cent;
- A wage bill/fiscal revenue ratio of no more than 35 per cent;
- Real exchange rate stabilization; and
- Investment on own resources/fiscal revenue of at least 20 per cent.

A review of the current inflation performance of the UEMOA zone indicates that the zone as a whole is meeting its inflation target of less than 3 per cent (table 6.19). With the exception of 2001, most of the member States stayed below the target for most of the period under review. It is remarkable to observe that throughout the period, all member States posted single-digit inflation rates, due to the strong linkage between the CFA franc and the euro, with the countries registering similar low levels of inflation as those in the euro zone. This clearly demonstrates the advantage of a monetary union.

Table 6.19Inflation rates in the UEMOA region

Country	2001	2002	2003	2004	2005
Benin	4.0	2.4	1.5	0.9	2.3
Burkina Faso	4.9	2.3	2.0	-0.4	3.7
Côte d'Ivoire	4.4	3.1	3.3	1.4	3.8
Guinea-Bissau	3.3	3.3	-3.5	0.9	1.8
Mali	5.2	5.0	-1.3	-3.1	3.4
Niger	4.0	2.6	-1.6	0.2	7.9
Senegal	3.0	2.3	0.0	0.5	-0.5
Togo	3.9	3.1	-1.0	0.4	5.1
UEMOA	4.1	2.9	1.3	0.5	2.6

Source: UNECA, BCEAO and UEMOA Commission.

A review of the current inflation performance of the UEMOA zone indicates that the zone as a whole is meeting its inflation target of less than 3 per cent

Table 6.20 reports on the budget deficits of member States as a percentage of their GDP. The minimum primary target is set at zero. The region as a whole has not been very successful in achieving this objective, although it has not deviated too far from the target. The best performers are Mali, Senegal and Togo, which maintained budget surpluses for most of the period under review. Guinea-Bissau is the only member State that had difficulties in meeting the target for each year under review.

Table 6.20 Budget deficit/GDP (percent) in the UEMOA region

Country	2001	2002	2003	2004	2005
Benin	1.0	0.8	-0.2	0.5	1.1
Burkina Faso	-2.7	-2.3	-0.7	-1.5	-1.7
Côte d'Ivoire	1.4	0.2	-2.0	-1.1	-0.6
Guinea-Bissau	-10.6	-4.4	-5.1	-9.1	-9.5
Mali	-0.6	-0.1	1.0	0.1	0.3
Niger	-3.2	-2.6	-2.2	-2.2	-1.7
Senegal	-1.0	1.5	1.5	1.5	0.5
Togo	1.3	0.3	2.6	2.6	0.6
UEMOA	0.2	0.0	-0.5	-0.3	-0.4

Source: UNECA, BCEAO and UEMOA Commission.

One of the primary targets of UEMOA is for each Member State to ensure that its total public debt as a percentage of GDP does not exceed 70 per cent. Table 6.21 shows that the zone has been struggling to achieve this target, although it was successful in 2004 and 2005. Benin, Burkina Faso, Mali and Senegal have performed very well in achieving this target. However, Guinea-Bissau, and to a lesser extent Côte d'Ivoire and Togo, would have to work hard to keep their debt level at less than 70 per cent of GDP.

Table 6.21 Ceiling on total public debt/GDP (per cent) in the UFMOA region

Di GDI	(per cerre) irr	THE OLIVIC	Aicgion	
2001	2002	2003	2004	2005
59.1	49.4	41.1	41.1	45.8
71.4	49.6	48.0	46.2	41.5
118.1	86.1	82.7	84.1	79.3
405.0	399.8	399.8	321.0	264.0
90.0	83.4	71.4	66.5	68.0
96.3	95.1	86.7	75.5	66.4
-	70.6	63.9	50.3	48.0
135.6	111.2	108.1	96.5	94.2
98.3	79.7	73.5	68.9	65.5
	2001 59.1 71.4 118.1 405.0 90.0 96.3 - 135.6	2001 2002 59.1 49.4 71.4 49.6 118.1 86.1 405.0 399.8 90.0 83.4 96.3 95.1 - 70.6 135.6 111.2	2001 2002 2003 59.1 49.4 41.1 71.4 49.6 48.0 118.1 86.1 82.7 405.0 399.8 399.8 90.0 83.4 71.4 96.3 95.1 86.7 - 70.6 63.9 135.6 111.2 108.1	59.1 49.4 41.1 41.1 71.4 49.6 48.0 46.2 118.1 86.1 82.7 84.1 405.0 399.8 399.8 321.0 90.0 83.4 71.4 66.5 96.3 95.1 86.7 75.5 - 70.6 63.9 50.3 135.6 111.2 108.1 96.5

Source: UNECA, BCEAO and UEMOA Commission.

One of the primary targets of UEMOA is for each Member State to ensure that its total public debt as a percentage of GDP does not exceed 70 per cent Table 6.22 shows that had it not been for the poor performance of Côte d'Ivoire, Guinea-Bissau and Togo, the entire zone would have achieved the target of non-accumulation of internal and external arrears. These countries, particularly Côte d'Ivoire and Guinea-Bissau, would have to take corrective measures so as to achieve the target.

As pointed out earlier, UEMOA also maintains secondary convergence criteria

Table 6.22
Internal and external arrears in the UEMOA region

Country	2001	2002	2003	2004	2005
Benin	0.0	0.0	0.0	0.0	0.0
Burkina Faso	0.0	0.0	0.0	0.0	0.0
Côte d'Ivoire	491.2	143.3	614.9	521.5	311.3
Guinea-Bissau	405.0	399.8	399.8	321.0	264.0
Mali	0.0	0.0	0.0	0.0	0.0
Niger	7.3	2.6	0.0	3.2	0.0
Senegal	0.0	0.0	0.0	0.0	0.0
Togo	30.1	60.2	66.5	72.0	0.0
UEMOA	570.4	216.7	706.1	609.7	311.3

Source: UNECA, BCEAO and UEMOA Commission.

As pointed out earlier, UEMOA also maintains secondary convergence criteria. The variables monitored are: wage bills-to-tax revenue; public investment-to-tax revenue; tax revenue-to-GDP; and current account deficit-to-GDP.

Table 6.23 reports on the wage bill of member States as a percentage of tax revenue. The criteria require that member States' wage bills should not exceed 35 per cent of their tax revenue. The table shows that the zone as a whole was slightly above the target each year. Senegal and Mali are the only countries that met the target each year of the review period. With the exception of Guinea-Bissau, the rest of the member States are marginally above the target and therefore would require less effort to bring the variable back to the required target. On the other hand, Guinea-Bissau needs to take serious corrective measures to address its precarious situation.

Table 6.23 Wage bill/tax revenue (percentage) in the UEMOA region

Country	2001	2002	2003	2004	2005
Benin	32.7	31.9	33.5	38.0	36.1
Burkina Faso	46.1	42.8	41.6	37.3	38.3
Côte d'Ivoire	41.4	42.3	45.3	44.0	46.5
Guinea-Bissau	76.9	88.5	85.8	139.0	135.1
Mali	29.1	30.5	30.4	30.9	32.3
Niger	40.3	38.3	37.5	35.2	32.8
Senegal	30.7	31.7	30.1	29.5	30.8
Togo	45.1	44.7	34.8	32.0	34.9
UEMOA	37.8	38.0	38.1	37.4	38.4

Source: UNECA, BCEAO and UEMOA Commission.

In the case of the public investment-to-tax revenue indicator, the requirement for the UEMOA member States is to keep it above 20 per cent. Table 6.24 indicates that, with the exception of 2004 and 2005, the zone as a whole has not met the target. The poor showing of the zone overall is due to Côte d'Ivoire, Guinea-Bissau and Togo not being able to achieve the target. The best performer for the years under review is Burkina Faso, whose public investment each year accounted for at least 30 per cent of its tax revenue. It is worth noting that the performance of Niger and Senegal was very strong in 2004 and 2005.

Table 6.24 Public investment/tax revenue (percentage) in the UEMOA region

Country	2001	2002	2003	2004	2005
Benin	22.4	19.3	23.2	21.5	24.1
Burkina Faso	29.8	36.0	33.1	45.4	36.5
Côte d'Ivoire	7.2	12.4	10.5	9.8	9.6
Guinea-Bissau	17.0	5.8	0.8	15.2	11.2
Mali	22.0	20.5	22.4	22.7	22.5
Niger	19.7	25.5	26.6	35.0	42.0
Senegal	20.5	23.5	24.1	30.0	34.8
Togo	6.5	7.4	7.6	7.5	10.5
UEMOA	15.2	18.6	18.6	21.4	23.0

Source: UNECA, BCEAO and UEMOA Commission.

The best performer for the years under review is Burkina Faso, whose public investment each vear accounted for at least 30 per cent of its tax revenue

In order to minimize
the pressure on the
fixed rate between
the CFA franc and
the French franc,
UEMOA requires
the member States'
current account
deficits to be less
than -5 per cent of
their GDP

In order to ensure that member States derive enough revenue for public expenditure, a secondary requirement UEMOA imposes on each State is that its tax revenue should be greater than 17 per cent of its GDP. Table 6.25 indicates that, with the exception of Senegal, none of the member States was able to achieve this target. The overall average of the zone falls short for each year under review. Perhaps member States need to expand their tax base and improve the efficiency of their tax collection.

Table 6.25
Tax revenue/GDP (percentage) in the UEMOA region

Country	2001	2002	2003	2004	2005
Benin	14.2	14.4	14.9	14.6	15.6
Burkina Faso	11.7	10.6	10.8	11.8	10.6
Côte d'Ivoire	16.8	15.2	14.9	15.2	14.3
Guinea-Bissau	10.1	8.6	9.2	7.6	9.2
Mali	12.9	13.8	14.2	15.4	15.8
Niger	9.5	10.3	11.0	11.6	12.2
Senegal	17.1	18.1	18.2	18.4	18.4
Togo	13.5	11.1	14.6	14.9	12.5
UEMOA	14.9	14.4	14.6	15.0	14.9

Source: UNECA, BCEAO and UEMOA Commission.

In order to minimize the pressure on the fixed rate between the CFA franc and the French franc, UEMOA requires the member States' current account deficits to be less than -5 per cent of their GDP. Table 6.26 shows that, with the exception of 2002, the zone on average met the target in each year under review. Côte d'Ivoire is the only member State that was not able to achieve the target, perhaps due to the political uncertainty that has plagued the region for some time now.

Table 6.26

Current account deficit /GDP (percentage) in the UEMOA region

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Country	2001	2002	2003	2004	2005
Benin	-7.5	-8.3	-9.7	-6.3	-5.3
Burkina Faso	-14.5	-11.8	-12.7	-11.7	12.4
Côte d'Ivoire	-0.9	6.4	2.0	1.8	2.4
Guinea-Bissau	-	-10.4	-8.6	-10.1	-19.9
Mali	-12.4	-6.1	-9.3	-7.0	-7.3
Niger	-9.1	-10.2	-11.6	-11.0	-10.2
Senegal	-6.7	-8.2	-8.6	-8.6	-7.9
Togo	-15.4	-10.0	-9.8	-6.1	-12.5
UEMOA	-6.8	-2.9	-5.5	-4.8	-4.7

Source: UNECA, BCEAO and UEMOA Commission.

Assessing the growth performance of the economies of the UEMOA zone shows that growth has been very modest, averaging around 3.4 per cent between 2001 and 2005, which is clearly below the 7 per cent needed to achieve the MDG 1 (table 6.27). Senegal and Mali are the best-performing economies in the zone, followed by Burkina Faso and Benin. The performance of Côte d'Ivoire was lacklustre, perhaps due to its political uncertainty. Overall, the sound macroeconomic convergence criteria do not appear to have translated into good economic performance.

Table 6.27
Growth performance in UEMOA

Country	2001	2002	2003	2004	2005
Benin	5.00	4.50	3.90	3.10	3.90
Burkina Faso	5.90	4.40	6.50	3.90	4.80
Côte d'Ivoire	-0.03	-1.44	-1.56	1.76	1.80
Guinea-Bissau	0.20	-7.10	0.60	2.20	3.50
Mali	12.10	4.15	7.44	2.19	6.08
Niger	7.10	3.00	5.32	0.00	4.50
Senegal	4.69	1.12	6.55	6.17	5.13
Togo	-0.18	4.14	2.70	3.00	2.80
UEMOA	4.35	1.60	3.93	2.79	4.06

Source: UNECA and World Development Indicators.

The UEMOA zone attracts modest levels of FDI. Table 6.28 indicates that most of the FDI goes to Côte d'Ivoire and Mali. However, the inflow of FDIs into Côte d'Ivoire did not translate into strong growth performance. Mali's FDI appears to be correlated to its modest economic performance. Guinea-Bissau attracts the least FDI in the UEMOA area.

Table 6.28

Net foreign direct investment (FDI in millions of US dollars) to UEMOA

Country	2001	2002	2003	2004	2005
Benin	50.91	17.88	48.28	108.18	21.00
Burkina Faso	8.83	15.03	29.12	14.35	19.50
Côte d'Ivoire	272.68	212.63	165.35	282.98	265.72
Guinea-Bissau	0.40	3.56	4.01	1.73	10.00
Mali	121.73	243.80	132.26	101.00	159.02
Niger	22.90	2.40	14.91	26.33	11.93
Senegal	31.94	78.05	52.49	77.03	54.00
Togo	63.58	53.36	33.73	57.33	2.00
UEMOA	71.62	78.34	60.02	83.62	67.98

Source: UNECA and World Development Indicators.

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In 2000, as part of a process of "fast-tracking" its integration agenda, ECOWAS established a second monetary zone in the region

The analysis shows that the convergence performance in UEMOA falls short of expectations. None of the member States has succeeded in meeting the eight targets set for the convergence pact, the stability and the growth and solidarity objectives. The general impression is that budgetary targets are difficult to achieve. Senegal is the only economy that met five budgetary criteria in 2005, namely the budget deficit-to-GDP ratio, the non-accumulation of internal and external arrears, the public investment-to-tax revenue ratio, the wage bill-to-tax revenue ratio and the tax revenue-to-GDP ratio.

Mali met four; Benin, Niger and Togo met three each, while Burkina Faso met two. Guinea Bissau met one, while Côte d'Ivoire achieved none of the budgetary targets. This poor performance could be due to the weak economic growth in the zone; the fragile public finances reflected by the accumulation of debt arrears; the deterioration of budget balances; and socio-political instability in some member States.

6.3.6 Progress report on the West African Monetary Zone

In 2000, as part of a process of "fast-tracking" its integration agenda, ECOWAS established a second monetary zone in the region. Under the declaration, five non-UEMOA members of the community (Gambia, Ghana, Guinea, Nigeria and Sierra Leone) would form a common currency union by 2003. However, the launch date of the common currency for the non-CFA zone, which was pushed back to 2005, would now be in 2009. Under the ECOWAS programme of monetary union, the two monetary zones (the CFA and non-CFA zones) would be merged into one monetary union under a common currency and a common central bank — designated as the West African Central Bank (WACB) — at a future date. The process towards the establishment of the West African Monetary Zone (WAMZ) gave rise to the West African Monetary Institute (WAMI), which is responsible for preparing the groundwork for the launch of a single West African monetary union.

WAMI, which is based in Ghana, started its operations in March 2001 to prepare member States for monetary union. WAMI has been carrying out a number of technical studies for the establishment of a common central bank and the introduction of a common currency. These studies include the monitoring of the macroeconomic performance and movement towards convergence of member States and harmonization of laws governing financial institutions in the zone. WAMI is also charged with the design of an exchange rate mechanism; a foreign exchange reserve management system; a payment system; and the design and technical preparation of a common currency and common central bank for the zone.

Since the establishment of the WAMZ in 1999, many efforts have been made towards the establishment of a single currency for the zone. The initial phase of the

WAMZ programme (2001-2003) was characterized by generally poor macroeconomic performance, evidenced by the persistence of fiscal instability, high inflation and low levels of foreign exchange reserves accumulation. The dismal performance was due mainly to domestic and subregional factors, rather than developments in the global economy. During the second phase (2004-2005), macroeconomic performance improved markedly over the level in Phase 1, but that was not sufficient to launch the currency.

The Banjul Declaration of 2005, which postponed the introduction of the common currency to 2009, required member countries to meet, in addition to the primary and secondary quantitative convergence criteria, specific qualitative/structural benchmarks. These included the adoption of a common payment and settlement system anchored on the Real-Time Gross Settlement (RTGS) platform; integration of financial/capital markets; harmonization of statistical databases of the WAMZ; implementation of the ECOWAS Common External Tariff (CET) and the ECOWAS Trade Liberalization Scheme (ETLS); and use of WAMZ national currencies to finance intraregional trade on a bilateral basis (as a stop-gap measure), pending the introduction of the common currency in 2009.

Assessment of the status of convergence revealed that, for the first time since the project started in 2001, two countries - the Gambia and Nigeria - met all the four primary convergence criteria in 2006. Even in the countries that failed to meet all four criteria, significant progress was made towards convergence, a clear testimony to the markedly improved macroeconomic environment in the WAMZ, in sharp contrast to the situation in 2003 and 2005. Ghana and Sierra Leone met two criteria each, with Ghana narrowly missing the single-digit inflation criterion, while Guinea met one. Both Ghana and Sierra Leone did not achieve the fiscal benchmarks, partly reflecting their continued and increased reliance on external grants.

Indeed, the appropriate fiscal convergence ratio to be targeted continues to be a subject of debate in the WAMZ. In most of the countries (Ghana, Sierra Leone and the Gambia), donor (HIPC) grants are expected to continue to feature prominently in budgetary operations. Thus, the argument has been made that the exclusion of such grants in the definition of the criteria limits the ability of member countries to observe and sustain them. However, the history of lapses in fiscal management and the vulnerability of member countries to external and internal shocks have made the WAMZ authorities focus more on fiscal consolidation through improved revenue mobilization and efficient management.

Assessment of the status of convergence revealed that, for the first time since the project started in 2001, two countries the Gambia and Nigeria – met all the four primary convergence criteria in 2006

Performance scorecard aggregate Number of criteria met by country

An integrated financial system is a prerequisite for an efficient and effective monetary policy in ECOWAS

		P	rimary Criteri	a		
	2001	2002	2003	2004	2005	2006
The Gambia	2	1	1	3	3	4
Ghana	1	0	2	2	2	2
Guinea	3	2	0	0	2	1
Nigeria	3	3	2	3	3	4
Sierra Leone	3	3	0	2	2	2
		Se	condary Crite	ria		
	2001	2002	2003	2004	2005	2006
The Gambia	2	1	1	3	3	3
Ghana	1	1	2	2	2	3
Guinea	1	2	1	1	1	1
Nigeria	3	2	3	3	3	3
Sierra Leone	1	1	0	1	1	1

Financial sector integration

An integrated financial system is a prerequisite for an efficient and effective monetary policy in ECOWAS. The key strategy for financial sector integration in ECOWAS is predicated on the harmonization of banking regulations in accordance with the Basle Core Principle (BCPs), and the integration of the capital markets. Currently, all the WAMZ countries have adopted the BCPs as the basis for banking supervision. Also, work is currently under way on the integration of the Ghana and Nigeria stock exchanges, driven by the financial grant from the United States Department of Trade (USTDA). Furthermore, the WAMZ Convergence Council, which met in May 2007, gave approval for WAMZ national currencies to be used to finance intraregional trade, pending the introduction of the common currency.

Payments System Integration

The WAMZ has made good progress in harmonizing the payment and settlement system of all its member countries. Two countries (Ghana and Nigeria) have an operational Real-Time Gross Settlement (RTGS) system. Acting on WAMI's request, the African Development Bank has agreed to finance the RTGS infrastructure for The Gambia, Guinea and Sierra Leone, in preparation for the adoption of a common payment system platform in the zone. WAMZ has also adopted a common cheque standard and a common payment system statute will soon be adopted.

Statistical harmonization

Work is ongoing in the area of statistical harmonization in the WAMZ. The Gambia, Guinea and Sierra Leone are working toward improved coverage for the consumer price index to cover both the rural and urban areas. The process of statistical harmonization is being driven by AFRISTAT and the ECOWAS Commission.

Legal instruments

Significant work has been done in this area. The West Africa Central Bank (WACB), the West African Monetary Zone (WAMZ) and the WAMZ Secretariat statutes have been signed by the Authority of Heads of State and Government of the WAMZ and are awaiting ratification and domestication by member States. Statutes for the payment and banking systems of the West African Financial Services Authority (WAFSA) and non-bank regulations have been drafted, but are yet to be signed by the Authority of Heads of State and Government.

Overall, the WAMZ project has regained the needed momentum and progress is rapidly being made towards satisfying the quantitative and structural criteria. The critical success factor remains stronger political support for the project.

Overall, the WAMZ project has regained the needed momentum and progress is rapidly being made towards satisfying the quantitative and structural criteria

Status of Compliance with the Primary Convergence Criteria: 2000 - June 2007

Primary Criteria		Con	sumer Pi	Consumer Price Inflation Rate (End Period)	tion Rate	(End Pe	riod)				Budget	Budget Deficit (excl. grants)/GDP	xcl. grant	s)/GDP		
Target				7	%(~				~4 %			
	2001	2002	2003	2004	2005	2006	2006	2007	2001	2002	2003	2004	2002	2006	2006	2007
						June		June						June		June
The Gambia	8.1	13.0	17.6	8.0	0 .	2.2	0.4	6.4	9.8	9.1	9.7	8.6	7.4	4.5	2.7	-1.7
Ghana	21.3	15.2	23.6	11.8	14.8	10.5	6.6	10.7	13.2	8.3	7.5	8.1	6.9	8.5	11.5	10.9
Guinea		6.1	14.8	27.6	29.7	35.5	39.1	18.3	5.2	8.0	9.5	5.9	0.8	0.1	- 89.	1.3
Nigeria	16.5	12.2	23.8	10.0	11.6	8.5	8.5	6.4	3.2	3.9	2.0	1.2	1.3	-1.6	9.0-	0.7
Sierra Leone		-3.1	11.3	14.4	13.1	9.5	8.3	12.0	16.5	16.5	14.4	11.4	12.3	6.7	9.7	3.4
WAMZ as 6th Economy	15.15	11.59	22.12	11.53	53 13.40 11	11.16	10.00	8.40	4.2	4.5	2.8	2.0	1.5	-0.7	2.0	-0.1
No. of																
Countries meeting Criterion	က	8	0	-	-	ო	4		-	-	-	-	0	8	7	4
Primary	0	Central Bank		Financing of Budget Deficit/Prev. Yr. Tax	g of Budget D	eficit/Pr	ev. Yr. Ta	×		o	ross Res	Gross Reserves (in months of imports)	months c	of imports	·	
Target				7	<10%							♡	6			
)	2001	2002	2003	2004	2005		2006	2007	2001	2002	2003	2004	2002	2006	2006	2007
						-		June						June		June
The Gambia	80.7	22.4	63.1	0.0	0.0	0.0	0.0	0.0	7.2	2.9	4.6	50.	5.2	4.1	4.9	5.5
Ghana	0.0	12.1	0.0	0.0	0.0	0.0	0.0	0.0	4.1	5.6	4.9	4.5	4.0	3.6	3.7	2.8
Guinea	0.0	27.1	16.1	23.1	0.0	0.0	81.6	4.2	4.4	3.4	2.8	1.4	1.1	2.0	0.8	0.8
Nigeria	0.0	0.0	37.6	0.0	0.0	0.0	0.0	0.0	11.3	7.3	9.9	13.6	19.7	23.0	21.9	19.8
Sierra Leone	8.9	0.0	22.0	0.0	0.0	0.0	13.3	11.8	ა. შ	-0.6	2.3	4.2	3.5	4.2	5.2	3.8
WAMZ as 6th	0.0	0.0	30.6	0.0	0.0	0.0	0.0	0.0	8.8	6.2	5.3	9.7	13.2	17.1	20.3	15.6
Economy																
No. of Countries	ď	ď	c	-	u	u	ď	-	5	c	-	Ľ	_	_	_	ď
meeting Criterion	•	,	1	•	,	,	,	+	٠	1	•	,	٠	•	•	,

Primary Criteria			Number	Number of Criteria met by Country	ia met by	/ Country		
Target					4			
	2001	2002	2003	2004	2005	2006 June	2006	2007 June
The Gambia	-	0	-	က	က	က	4	4
Ghana	-	0	2	2	2	2	8	-
Guinea	က	2	0	0	2	7	-	7
Nigeria	က	က	2	က	က	4	4	4
Sierra Leone	က	က	0	2	2	က	2	2
WAMZ as 6th	က	က	0	က	က	က	က	4
Economy								

Status of Secondary Convergence Criteria

		2001	2002	2003	2004	2005	Jun-06	2006	Jun-07
Tax Revenue / GDP=20	The Gambia	13.9	14.1	13.8	18.1	17.8	20.4	18.8	20.7
per cent	Ghana	17.2	17.5	20.2	22.4	21.9	18.3	21.4	20.7
	Guinea	10.3	10.9	9.8	9.9	12.1	12.3	10.9	12.2
	Nigeria	14.7	10.0	11.4	14.8	19.8	16.3	14.9	9.7
	Sierra Leone	14.5	14.0	11.5	11.0	10.4	10.8	11.6	10.6
	WAMZ	14.7	10.7	12.1	15.2	19.4	15.0	15.4	10.4
Wages/Tax Revenue=35	The Gambia	40.7	38.0	33.3	23.1	23.4	22.3	24.2	21.7
per cent	Ghana	52.9	57.2	49.6	46.1	44.8	47.5	44.9	48.0
	Guinea	35.3	34.2	36.7	31.5	23.2	18.9	20.8	25.9
	Nigeria	28.0	47.2	26.9	21.9	17.9	23.2	19.6	26.6
	Sierra Leone	58.1	63.9	59.7	56.0	65.5	64.2	65.3	61.1
	WAMZ	30.8	48.1	30.8	25.6	21.2	25.6	22.7	30.2
Public Invest/Domestic	The Gambia	7.3	5.5	3.2	4.0	6.0	1.6	2.9	2.0
Rev.=20 per cent	Ghana	16.4	13.2	17.2	17.3	16.0	20.3	22.2	20.6
	Guinea	4.8	10.2	12.1	19.0	11.3	10.3	12.2	5.2
	Nigeria	71.1	83.2	55.9	30.6	41.8	41.8	40.8	45.0
	Sierra Leone	7.0	8.6	10.6	7.3	6.6	7.5	8.1	
	WAMZ	31.0	69.5	48.4	28.4	38.2	3.1	38.1	40.9
Real Interest > 0	The Gambia	-0.1	-5.0	-9.6	2.0	3.2	3.5	4.6	-0.4
	Ghana	-6.8	-2.2	-13.9	-2.3	-8.4	-4.1	-4.1	-3.6
	Guinea	7.1	1.3	-8.3	-19.2	-15.0	-20.8	-24.4	-3.6
	Nigeria	-13.1	-8.5	-20.6	-5.6	-8.3	-5.5	-5.3	1.0
	Sierra Leone	1.1	8.1	-5.8	-6.4	-4.0	-1.7	-0.5	-2.3
	WAMZ	-11.4	-7.9	-18.7	-7.2	-10.1	-7.1	-8.6	-3.4
Exchange Rate Stability	The Gambia	13.7	38.2	32.3	4.3	10.0	-0.3	10.4	-14.3
(+=Dep.)	Ghana	5.0	13.2	4.7	2.2	3.1	3.7	4.1	4.7
	Guinea	0.0	0.0	1.3	21.6	55.6	60.8	64.6	40.3
	Nigeria	3.0	10.6	7.7	-3.1	-3.0	-1.4	-0.3	-10.1
	Sierra Leone	23.2	2.2	16.4	10.4	12.6	16.2	13.8	14.2

Source: WAMZ authorities & WAMI staff.

6.3.7 Monetary arrangements of Arab Maghreb Union (UMA)

The Arab Maghreb Union has not formally established a set of convergence criteria for its member States. However, it is currently making efforts to establish one. Among the issues being considered by AMU are:

- Harmonization of private rules and procedures, such as market conventions, self-regulations and contractual arrangements for producing, pricing, delivering and acquiring various payment instruments and services;
- Harmonization of laws and regulations governing the payment system, particularly inter-bank transfers within the community; and
- Harmonization of technical standards, network arrangements for transacting and clearing payment instruments, processing and communicating payment information, transferring funds between institutions, and payment instruments such as debit and credit cards as well as direct debit.

Despite the absence of formal targets, the economic performance of member States in the Union is very good. Inflation in the zone is very low and the growth performance is also very strong. The Union also attracts a great deal of foreign direct investments (FDIs) to support its manufacturing and oil-based industries.

6.4 Comparative analysis

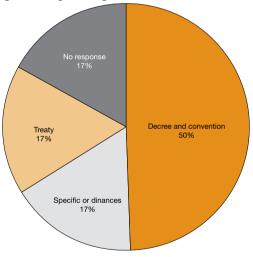
This section attempts to summarize the discussion so far as well as to compare and contrast the performances of the regional economic communities (RECs) and the inter-governmental organizations (IGOs). The analysis presented in Section 3 shows that, out of the fourteen RECs and IGOs, only six have convergence criteria (COMESA, EAC, ECOWAS, SADC) or monetary unions (CEMAC and UEMOA), due perhaps to the historical past of the member States. Table 6.29 shows the countries that participated in monetary and financial integration arrangements during the colonial era.

Despite the absence of formal targets, the economic performance of member States in the Union is very

Table 6.29
Countries involved in monetary and financial arrangements during the colonial era

	Monetary and financial arrangements	Number and list of countries involved
CEMAC	Bank of Senegal	5- Central Africa Republic, Congo, Gabon, Chad, Cameroon, Equatorial Guinea
COMESA	East African Currency Board	5- Uganda, Kenya, Tanzania (Extended to Somaliland and part of Ethiopia at some stage)
EAC	East African Currency Board	5 – Uganda, Kenya, Tanzania (Extended to Somaliand and part of Ethiopia at some stage)
ECOWAS	Bank of Senegal	6- Senegal, Guinea, Côte d'Ivoire, Benin, Togo, Mali
SADC	Common Monetary Area	5- Botswana (initially until 1976), Lesotho, South Africa, Namibia and Swaziland
UEMOA	Bank of Senegal	7- Benin (former Dahomey), Burkina Faso (former Upper Volta), Côte d'Ivoire, Mali, Niger, Senegal, Togo

Figure 6.1
Legal instruments governing arrangements



The legal arrangements supporting the participation by member countries in the arrangements during the colonial period ranged from treaties (SADC), decrees and conventions (CEMAC, ECOWAS and UEMOA) to specific ordinances (EAC) (Figure 6.1). During the colonial era, the main features of the arrangements ranged from currency boards based on the French franc or the pound sterling to free access to member States' capital markets or convertibility of member States' currencies (table 6.30). As noted in section 3, the monetary arrangements in the colonial era were purely to support the administration of the colonies and were not based on economics.

During the colonial era, the main features of the arrangements ranged from currency boards based on the French franc or the pound sterling to free access to member States' capital markets or convertibility of member States' currencies

Table 6.30

Main features of the monetary and financial arrangements

REC	eatures of the arrangement
CEMAC	The imperial decree, which authorizes the Bank of Senegal to handle transactions such as loans, discounts and issuing of currency in French Africa The decree confers to the Bank of Senegal the privilege of issuing currency for the French territories of Western and Equatorial Africa
COMESA	 East African Currency Board- (a) 1 pound sterling = 20 East African shillings (shillings pegged to the pound (b) currency board operated as a central bank The Monetary System of the Federation of Rhodesia and Nyasaland-(a) fixed one-to-one exchange rate with sterling (see COMESA document) The Rand Monetary Area – monetary cooperation under a customs union agreement
EAC	Currency board 2)1 pound sterling = 20 East African shillings (shillings pegged to the pound; Currency board operated as a central bank
ECOWAS	 Single currency for all colonies rather than a currency for each colony in each monetary arrangement Monetary policy determined by the monetary authorities of the colonial governments Currencies indexed to the currencies of colonial governments
SADC	Liberalization of free movement of capital The rand as interregional currency with legal circulation and tender among all member States; Free access to South Africa capital market Reserve Bank of South Africa managing the reserves of all member States
UEMOA	 France is the founder and spearhead of the franc zone The Central Bank of West African States (BCEAO) issues CFA francs for member States CFA franc pegged to French franc at a fixed rate Convertibility of African currencies and transferability of capital within the zone Central banks are grouped in the Franc Zone Monetary Committee.

Source: ECA

Despite their desire to dismantle most of the colonial arrangements, several of the member States of the RECs and IGOs continued the monetary and financial arrangements immediately after their independence. This decision was made in order to promote internal and external stability of the economies within the communities as well as to increase the flow of goods, services and capital, and to increase economic growth. Furthermore, the ultimate objective of these programmes and activities of monetary cooperation is to establish monetary unions (table 6.31).

Despite their desire to dismantle most of the colonial arrangements, several of the member States of the RECs and IGOs continued the monetary and financial arrangements immediately after their independence

Table 6.31 Main objectives of REC monetary cooperation

REC	lain objectives of REC monetary cooperation
CEMAC	To create the conditions for harmonious economic and social development To create a single currency for all member States Ensure internal and external stability of the common currency
COMESA) Macroeconomic stability) Reduction of transaction costs) Free movement of persons
EAC	Attainment of monetary union Application of element of EAC Treaty that defines integration stages
ECOWAS	Creation of a monetary union through the observance of a set of macroeco- nomic convergence criteria and implementation of a set of structural reforms all aimed at ensuring and sustaining macroeconomic stability of member States
SADC	Attainment of macroeconomic convergence in the region Harmonization of taxation policies and related matters Harmonization of monetary policies Convertibility of the regional currencies and elimination of exchange controls for the establishment of a single currency in the region Establishment of SADC Monetary Union
UEMOA	Manage monetary policy of member States; the policy is aimed at promoting economic growth Strengthen the monetary union and economic integration of the Union's member States by increasing the competitiveness of their economies Develop monetary discipline and solidarity Promote commercial transactions and capital investments Create macroeconomic stability

In their bid to promote macroeconomic stability, the RECs and IGOs require their member States to satisfy macroeconomic convergence criteria

Source: ECA

In their bid to promote macroeconomic stability, the RECs and IGOs require their member States to satisfy macroeconomic convergence criteria. Member States accede to protocols or frameworks enshrined in MOUs to satisfy the strict convergence criteria. Most of the guidelines are consistent with those established by the Association of African Central Banks (table 6.32).

Table 6.32Current framework for macroeconomic policy convergence in RECs

REC	Current framework for macroeconomic policy convergence in RECs
COMESA	 Macroeconomic convergence criteria revised in 2005 to align with AACB (Association of African Central Banks) criteria
EAC	Macroeconomic convergence criteria
ECOWAS	Macroeconomic policy convergence in ECOWAS is within the framework of a multilateral surveillance mechanism based on compliance with ten macroeconomic convergence criteria
SADC	Member States signed a MOU on macroeconomic convergence which became an annex to the Finance and Investment Protocol (FIP)
	 There are also a number of MOUs on banking cooperation in SADC, including cooperation and coordination of exchange control, payment, clearing and settle- ment systems, cooperation in respect of SADC regulatory and supervisory matters, harmonization of legal and operational frameworks for SADC central banks. These also became annexes to the FIP
UEMOA	 Circulation of a common currency, CFA franc, issued and managed by a common central bank known as the Central Bank of West African (BCEAO) States Convertibility of the CFA franc is guaranteed through the euro, to which it is anchored To ensure convertibility between the CFA franc and the euro, the French Treasury maintains an operations account on behalf of the BCEAO

Source: ECA

The main features of the framework governing the monetary cooperation arrangement of the RECs and IGOs are convertibility of member countries' currencies and harmonization of macroeconomic policies as well as the establishment of institutional organs. In the case of member countries of CEMAC and UEMOA, the established macroeconomic cooperation framework allows for the free circulation of capital and the use of common currencies (table 6.33).

The main features of the framework governing the monetary cooperation arrangement of the RECs and IGOs are convertibility of member countries' currencies and harmonization of macroeconomic policies as well as the establishment of institutional organs

Figure 6.2 Existence of multilateral surveillance mechanism

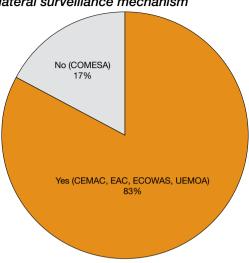


Table 6.33 Main features of monetary cooperation in RECs

REC	Features
CEMAC	 Parity fixed with the French franc, the anchor currency, then with the euro since 1 January 1999 (1 euro= 655.957 FCFA) Unlimited guarantee of convertibility of the FCFA into euro Free movement of capital between the member countries of the franc zone Pooling of the reserves of exchanges of member countries
COMESA	 Started in 1984 with creation of clearing house Travel exchange (traveller's cheques) Creation of PTA Bank Ongoing work on new design of clearing house
EAC	A set of macroeconomic convergence criteria Each country to meet certain targets The currencies of member countries are convertible
ECOWAS	 Adoption of a set of convergence criteria Surveillance of convergence criteria Establishment of four institutional organs for multilateral surveillance, namely the National Coordinating Committee, the Joint Secretariat of ECOWAS and WAMA, the Technical Monitoring Committee and the Convergence Council Adoption of a two-way fast-track approach to monetary integration
SADC	 Harmonization of macroeconomic policies Convergence toward targets: annual inflation rate, deficit/GDP, debt/GDP, current account/GDP

REC	Features
UEMOA	 Circulation of a common currency, CFA franc issued and managed by a common central bank known as the Central Bank of West African States (BCEAO) Pooling of foreign exchange reserves Unrestricted circulation of the common currency and freedom of capital movements within the territory of the member States Harmonization of monetary and banking legislation Free and unlimited convertibility of CFA franc into euro at a pegged parity guaranteed by France
	 6) Concentration of the Union's foreign currency-denominated assets in the operations account of the French Treasury 7) Application of a common regulation against third-party countries 8) The credibility and the international convertibility of the CFA franc are guaranteed through the euro, to which it is anchored 9) To ensure convertibility of between the CFA franc and the euro, the French Treasury maintains an operations account on behalf of the BCEAO

Source: ECA

To ensure that member States adhere to the macroeconomic convergence programmes and activities, most of the RECs and IGOs have put in place a multilateral surveillance mechanism (figure 6.2), to monitor coherence and convergence of the macroeconomic policies of member States (table 6.34).

Table 6.34 Multilateral surveillance mechanism objectives and features

REC	Objectives and features
CEMAC	 To ensure the convergence and coherence of the economic policies of member States To verify the conformance of these economic policies with the common monetary policy
COMESA	Bureau of central bank governors meets every yearMeeting is convened by COMESA and progress reports are submitted
EAC	 Yearly meeting of central bank governors - Presentations made by member countries; assessment of progress and recommendations for collective solutions to problems Objective: To ensure compliance with the economic convergence criteria within the framework of a regional growth and convergence pact
ECOWAS	 Establishment of four institutional organs Submission of a quarterly report on economic performance by member States Formulation of multi-year convergence programmes Production of half-yearly convergence reports for the REC Maintenance of a statistical database
SADC	 According to the MOU on macroeconomic convergence, it is envisaged to establish a Macroeconomic Surveillance and Performance Unit within the Secretariat, and so far, an officer is attached to this Unit
UEMOA	 The Convergence, Stability, Growth and Solidarity Pact is a community instrument aimed at ensuring harmonized multilateral surveillance of macroeconomic policies in UEMOA. It is also aimed at strengthening the convergence of the economies of member States; supporting economic stability; accelerating growth; and deepening solidarity among member States

Source: ECA

The primary and secondary convergence criteria established by the RECs include agreed targets for macroeconomic variables such as budgetary balance, inflation and public debts. Although the principles are the same, there are some variations in the criteria from REC to REC (table 6.35).

Table 6.35 RECs macroeconomic convergence criteria

RECs	Primary criteria	Secondary criteria		
CEMAC	 Budgetary balance must be non-negative Annual inflation rate has to be less than 3 per cent Rate of public debt has to be no more than 70 per cent Non accumulation by the State of internal and external debt in the current period 	 Investment rate versus GDP Ratio of payroll to total budgetary revenues Current account on GDP 		
COMESA	 Ratio of fiscal deficit to GDP, excluding grants Inflation rate Reserve accumulation 	 Use of indirect monetary policy instruments Interest rate policy Achievement of market-determined exchanged rates Growth Savings Investment External current account, excluding grants External debt 		
EAC	 GDP growth rate: A high and sustainab as the minimal annual target by the year Inflation: Maintenance of low and stable less than 5 per cent by the year 2000 Current account deficit (excluding grant a percentage of GDP to sustainable lew Budget deficit (excluding grants) /GDP: per cent by the year 2000 National savings/GDP: raising national sthe medium term Gross foreign exchange reserves in morgross foreign reserves to a level equivaleterm Maintenance of low and stable market-8 Maintenance of low market-determined Pursuit of debt reduction initiatives to reincluding statutory borrowing limits 	8) External debt differentiation between primary and secondary criteria) GDP growth rate: A high and sustainable rate of growth of real GDP, with 7 per cent as the minimal annual target by the year 2000 Inflation: Maintenance of low and stable underlying inflation to single-digit rates of less than 5 per cent by the year 2000 Current account deficit (excluding grants)/GDP: reduction of the current account as a percentage of GDP to sustainable levels Budget deficit (excluding grants) /GDP: Reduction of budget deficit to less than 5 per cent by the year 2000 National savings/GDP: raising national savings-to-GDP ratio to at least 20 per cent in the medium term Gross foreign exchange reserves in months of import of goods and services: Build gross foreign reserves to a level equivalent to six months of imports in the medium term Maintenance of low and stable market-determined exchange rates Maintenance of low market-determined interest rates Pursuit of debt reduction initiatives to reduce both domestic and foreign debt, including statutory borrowing limits Maintenance of prudential norms of banking regulation, effective supervision, im-		

The primary and secondary convergence criteria established by the RECs include agreed targets for macroeconomic variables such as budgetary balance, inflation and public debts The RECs and the IGOs have set up statutory organs with responsibility for carrying out and monitoring the macroeconomic convergence activities in the RECs

RECs	Primary criteria	Secondary criteria
ECOWAS	 Inflation rate = 5 per cent Ratio of budget deficit (excluding grants) to GDP (commitment basis) 4 per cent Ceiling on central bank financing of budget deficit to 10 per cent of previous year's tax revenue Gross reserves not less than 6 months of imports 	 Prohibition of all domestic arrears and liquidation of all existing arrears Tax revenue/GDP ratio ≥20 per cent Salary mass/tax revenue ≤35 per cent Capital expenditure/tax revenue ≥20 per cent Real exchange rate stability Positive real interest rate
SADC	InflationBudget Deficit/GDPDebt/GDPCurrent Account/GDP	 Economic growth External reserves/imports Central bank credits/government Domestic investment/GDP Domestic savings/GDP
UEMOA	 Budget deficit/GDP ≥0 per cent Average annual inflation rate maintained at a maximum of 3.0 per cent per year Ceiling on total public debt/GDP ≤0.0 per cent Non-accumulation of internal and external arrears 	 Wage bill /tax revenue ≤35.0 per cent; Public investment /tax revenue ≥20.0 per cent Tax revenue/ GDP ≥17.0 per cent Current account deficit/GDP ≤)5.0 per cent

Source: ECA

The RECs and the IGOs have set up statutory organs with responsibility for carrying out and monitoring the macroeconomic convergence activities in the RECs. These organs include councils of ministers, RECs commissions/secretariats, convergence councils/secretariats, central banks, regional development banks and national committees. The number of times the organs met and their functions are summarized in tables 36 and 37.

Table 6.36

Roles and functions of the statutory organs in charge of carrying out and monitoring the macroeconomic convergence activities within the REC - part one (number of meetings in parenthesis)

RECs	Council of Ministers	Commission/ Secretariat	Convergence Council/ Secretariat
CEMAC	(2) The Council of Ministers formulates broad orienta- tions for economic policy of the Union	The Commission / Secretariat prepares the documents The community organ prepares the work of the Convergence Council/Secretariat.	(2) The Convergence Council/Secretariat oversees the proper functioning of the community and national organs.
COMESA	(2) See COMESA Treaty.	See COMESA Treaty.	
EAC	The Council of Ministers meets at least twice a year	(Regularly) The Commission organizes meetings of the Council of Ministers and central banks	
ECOWAS		(2) The Commission / Secretariat is a joint secretariat of WAMA and ECOWAS. It ensures the compatibility of all the multilateral convergence programmes formulated by member States.	(2) Convergence Council: Comprises Ministers of Finance and governors of central banks of member countries. It monitors mac- roeconomic policies and performance.
SADC	(2) Council of Ministers: see SADC Treaty.		
UEMOA	(2)		

Source: ECA

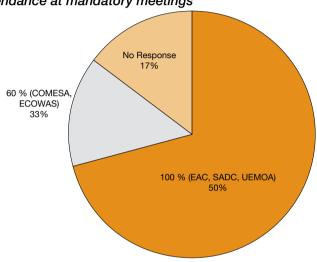
Table 6.37 Roles and functions of the statutory organs in charge of carrying out and monitoring the macroeconomic convergence activities within the REC - part two (number of meetings in parenthesis)

	Central bank	Regional development bank	National committee	Other organs
CEMAC			The National Committee collects and ensures coherence of national statistical data, prepares and analyses information relative to each of the member countries.	(2) The community cell.
COMESA	(Frequently) See COMESA Treaty.			
EAC	(2) Central bank – assesses progress in convergence criteria, discusses problems and recommends collective measures.			
ECOWAS			(4) National Coordinating Committee: exists in every member State. It submits quarterly economic reports to the Joint Secretariat, and manages the database of country economic data.	(2) Technical Monitoring Committee: it comprises the Directors of Research of the central banks and senior Ministry of Finance officials. The committee examines the six-monthly reports on multilateral surveillance submitted by the Joint Secretariat before sending them to the Convergence Council.
SADC	(2) Central bank: See MOU on banking, legal operations and framework.		(12) National Committee: NR.	(2) Committee of Ministers of Finance and Investment: See MOU on macro; (at least twice) Senior Treasury officers and Macroeconomic Sub-committee/Secretariat: See MOU on Macro.
UEMOA				(1) The Conference of Heads of State and Government defines the broad orientations of UEMOA policies and when necessary adopts additional Acts for the Treaty; the UEMOA Commission is the operations centre for multilateral surveillance. As such, it is responsible for managing the database of surveillance measures; establishing a quarterly report on the international environment and submitting it to BCEAO and BOAD; (4) National Economic Policy Committees: assist the commission in collecting data and in preparing and analysing country-specific information.

The organs take their job very seriously, meeting at least once a year and in some cases once every month to review the programmes and activities of the member States. Attendance by member States at the mandatory meetings is very high (Figure 6.3).

Despite the challenges, the organs have been able to promote monetary cooperation and discipline within the RECs by setting up regional payment systems and clearing houses within the communities. Table 6.38 summarizes some of the main achievements.

Figure 6.3
Level of attendance at mandatory meetings



Despite the challenges, the organs have been able to promote monetary cooperation and discipline within the RECs by setting up regional payment systems and clearing houses within the communities

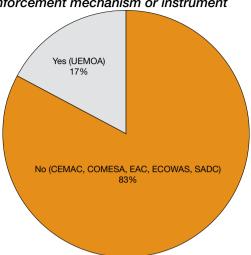
Table 6.38Main achievements of organs in promoting monetary cooperation and discipline within the RECs

RECs	Main achievements
COMESA	1) Enhanced cooperation on monetary issues 2) Regional payment system almost operational 3) African trade insurance agency operational 4) PTA Bank, Clearing House, traveller's cheques created 5) Ongoing work for creation of COMESA Fund
EAC	NA - EAC has not reached the stage of monetary integration
ECOWAS	Promotion of macroeconomic discipline in member States Promotion of the idea of original cooperation and monetary integration Ensuring the incorporation of regional policies and programmes into national development strategies Soliciting donor support to finance the monetary integration process
SADC	Approval of the Finance and Investment Protocol Implementation plans of the relevant annexes National macroeconomic convergence programmes
UEMOA	Organs are quite active, member States are seriously adhering to monetary policy

Source: ECA

Figure 6.4
Existence of an enforcement mechanism or instrument

The analysis carried out so far suggests that there is no mechanism designed by the RECs and IGOs for imposing sanctions on member countries that fail to meet the convergence criteria



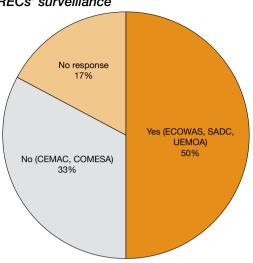
Although all the member States of the RECs have committed to macroeconomic stability, most the RECs do not have legal enforcement mechanisms that ensure compliance with the objectives of the macroeconomic convergence by member States (Figure 6.4). However, in UEMOA, during ordinary sessions, the Council of Ministers reviews the programmes and activities of the member States to see if the programmes conform to community objectives. The Chairperson of the Council then notifies non-performing member States, which are then required to revise their programmes. The decisions of the Council of Ministers are published in the official bulletin of UEMOA and the relevant countries are notified accordingly.

The analysis carried out so far suggests that there is no mechanism designed by the RECs and IGOs for imposing sanctions on member countries that fail to meet the convergence criteria. However, in the CEMAC area, the Council of Ministers publishes a *communiqué* on the performance of member States and announces publicly the withdrawal of support for non-performing member States.

Like CEMAC, UEMOA also imposes sanctions by publishing a *communiqué* of the Council of Ministers on the performance of the member States. The *communiqué* also stipulates measures that non-performing member countries should follow, with the Community withdrawing support to the countries that fail to comply.

Although UEMOA and CEMAC have these sanctions enshrined in their protocols, the sanctions are yet to be implemented. However, the RECs have indicated a desire to strengthen the surveillance mechanism as well as the capacity to impose strong sanctions on member States that fail to adhere to the criteria (figure 6.5).

Figure 6.5 Strengthening of RECs' surveillance



Despite the modest achievements, the RECs and the IGOs face significant challenges, although they are taking measures to address them

Despite the modest achievements, the RECs and the IGOs face significant challenges, although they are taking measures to address them, as shown in table 6.39. These measures include capacity-building, technical assistance to member countries, harmonization of statistics, and the organization of seminars and workshops to sensitize member States.

Table 6.39 Constraints in implementing the arrangements and measures taken to address them

RECs	Constraints	Measures
CEMAC	Elaboration of the three-year programme on convergence	Organization of sensitizing seminars
COMESA	Structural problems of member countries Countries at different levels of development Financial systems of countries at different levels of development Statistical methods not standardized Countries faced with external shocks	Harmonization of statistics (part of COMESA work programme for next year) Sub-committee on financial system development created
EAC	Fiscal deficit is a major constraint Dependence on grants for budgets	Capacity-building of customs revenue authorities Improving efficiency of tax collectors
ECOWAS	ECOWAS does not implement these arrangements but makes it the responsibility of member States to implement them. Some of these constraints have varied depending on the programmes, including inadequate technical and financial capacity, inadequate implementation of ECOWAS protocols and conventions as a result of the absence of the proper legal framework, and the lack of political will.	Giving the REC supranational authority

The rationale for imposing macroeconomic convergence criteria on all member States of a REC is to avoid the distortionary negative economic effects that may arise from member States pursing variant and inconsistent policies

RECs	Constraints	Measures
SADC	The process has just started and a number of member States are facing serious technical capacity problems to deal with the issues and adequately implement the programmes.	The Secretariat has embarked on a process to provide member States with technical assistance in developing their macroeconomic convergence programmes, as is the case for Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mozambique, Namibia and Zambia.
UEMOA	1) Availability and transmission of data 2) Quality of information 3) Issue of permanent political impetus. 4) Lack of medium-term objectives with respect to convergence 5) Inefficiency of the sanctions mechanism 6) Lack of harmonization of procedures for elaboration of data for national accounts and public finances	Not applicable

Source: ECA

6.5 Conclusion

In this chapter, we have taken a critical look at monetary cooperation and the performance of selected regional economic communities on macroeconomic convergence criteria. It was argued in the chapter that regional economic communities generally impose macroeconomic convergence criteria to guide the economic policies of member States. Member States are required to adopt sound macroeconomic policies and to commit to low inflation and prudent fiscal policies. The rationale for imposing macroeconomic convergence criteria on all member States of a REC is to avoid the distortionary negative economic effects that may arise from member States pursing variant and inconsistent policies.

This is why the criteria force member States to implement policies that lead to convergence of key macroeconomic variables such as inflation, the budget deficit and the stock of public debt. In order to guarantee monetary stability, member States would have to undertake tough anti-inflationary policies and bear the associated output loss. Limits on budget and debt requirements ensure that member States adjust their fiscal policies in order to maintain an overall balance between spending and revenues from taxation and ensure fiscal prudence.

This analysis shows that African countries are experiencing enormous difficulties in meeting the desired macroeconomic convergence criteria set by the regional economic communities. Whereas some member States, particularly those that belong to monetary unions (CEMAC and UEMOA), have done well in maintaining relatively

low single-digit inflation, most countries are posting double-digit inflation and consequently struggling to achieve their desired inflation targets. By the same token, most of the countries have not been able to achieve the desired fiscal targets, due in part to negative external shocks, large budget deficits, lack of reliable statistics and poor growth performance (table 6.40).

Table 6.40 Reasons invoked for good/poor performance

REC	Good performance	Poor performance
EAC	Criteria are in line with IMF conditionalities	Budget deficit
ECOWAS	Preponderance of fiscal domi- nance in economic manage- ment in the region	Negative effects of external shocks, especially esca- lating global oil prices and falling world market prices for agricultural exports of member States
SADC	Almost all member States are under IMF and World Bank programmes	Lack of reliable statistical information
UEMOA		Only one country respected the four criteria in 2005, due to -Unfavourable revenue trends -Weak revenue due to corruption -Ivorian crisis -Three countries with socio-political crises -Weak growth in general -Slow structural reforms -Insufficient public information -Lack of/insufficient internalization of integration

Misalianments of tariffs, inflation, exchange rates, debt-to-GDP ratios, rate of money growth and other vital macroeconomic variables between member countries would be disruptive to the regional integration process

Source: ECA

This raises the issue of the relevance of the convergence criteria. Macroeconomic convergence mechanisms are needed because the success of regional integration also hinges on member countries pursuing convergent macroeconomic policies. Misalignments of tariffs, inflation, exchange rates, debt-to-GDP ratios, rate of money growth and other vital macroeconomic variables between member countries would be disruptive to the regional integration process. In addition, these misalignments could lead to rent-seeking activities by governments and private individuals that could stifle legitimate investment opportunities.

This could contribute to the demise of the economy of a member country, thereby weakening the whole integration process. It is therefore imperative that the process of strengthening regional integration should include guidelines for the convergence of macroeconomic and trade polices of the entire regional space so as to strengthen the overall regional integration agenda.

However, for the coordination of macroeconomic policies in the RECs to succeed, African countries should have a clear sense of their own development objectives and strategies and be fully committed to these goals. Member States should muster the political will to mainstream regional monetary and macroeconomic objectives into their national development strategies.

Member States should muster the political will to mainstream regional monetary and macroeconomic objectives into their national development strategies

Reference

Chamley, Christophe and Patrick Honohan. (1993.) Financial Repression and Bank Intermediation. Savings and Development 17(3): 301-308.

Collier, Paul. (1991.) Africa's External Relations: 1960-90. African Affairs 90: 339-56.

Honohan, Patrick and Philip Lane. (January 2000.) Will the Euro Trigger More Monetary Unions in Africa? World Bank Mimeo.

Honohan, Patrick and Stephen O'Connell. (1997.) Contrasting Monetary Regimes in Africa. IMF Working Paper, WP/97/64.

Mothae Maruping (2005.) Challenges for Regional Integration in Sub-Saharan Africa: Macroeconomic Convergence and Monetary Coordination. Chapter 11 of: Africa in the World Economy - The National, Regional and International Challenges, Fondad, The Hague, www.fondad.org.

Michael Ojo (2004.) Regional currency areas and use of foreign currencies: the experience of West Africa. Bank of International Settlements Papers # 17.

Financial Integration in Africa



7.1 Introduction

Strong financial markets and institutions play an important role in supporting economic development, because they enhance the exchange of goods and services, the mobilization of resources (both domestic and international), the efficient allocation of factors of production, and the diversification of risk. The economic literature shows strong evidence of a positive relationship between developed financial markets and economic growth.¹

Although some form of financial development has taken place in Africa in recent years, financial market activities remain very shallow, with low capitalization and inadequate liquidity in capital markets. Most financial instruments issued in Africa have very short-term maturities. Bank financing continues to be concentrated at the short end of the term structure. Consequently, the spread between lending and deposit rates remains very high and the ratio of non-performing loans is also high, indicating a weakness in the financial market structure on the continent. Furthermore, only a limited number of financial instruments are issued on the financial markets, making it extremely difficult to hedge against financial market risk in Africa.

Recognizing the need for the pooling of financial resources, African regional economic communities (RECs) are beginning to establish subregional capital markets to overcome the limitations of their fragmented capital markets. RECs recognize the need to integrate and consolidate financial markets as a vehicle for promoting economic development on the continent. Furthermore, financial integration would enhance competition, promote efficiency and productivity and facilitate the flow of information.

They are pursuing strategies of financial integration through programmes for the harmonization of regulatory and legislative frameworks and policies and the promotion of cross-border investments and listing of securities. Overall, regional financial integration is expected to establish stronger links with financial systems and capital markets in more developed countries.

The economic literature shows strong evidence of a positive relationship between developed financial markets and economic growth

See Levine (1997); Gelbard and Pereira Leite (1999) and Rousseau and Sylla (2001).

Financial
integration involves
a process whereby
a country's financial
markets become
linked or integrated
with those of other
countries or with
those of the rest of
the world

RECs need to carry out financial integration programmes to complement their monetary integration efforts. The economic literature demonstrates that deeper integration of financial markets strengthens the transmission of monetary shocks as well as monetary policy across the member countries of a monetary union.² Weak forms of financial integration lead to differential effects of monetary policy and lack of financial integration, because of the differences they generate in propagation mechanisms and responses to REC-wide shocks. This in turn increases the costs of participation in a monetary union. Therefore, there is a clear case for financial integration to match the process of monetary integration.

7.2 Need for financial integration

Financial integration involves a process whereby a country's financial markets become linked or integrated with those of other countries or with those of the rest of the world. In fully integrated markets, all forms of barriers are eliminated to enable foreign financial institutions to participate in domestic markets. In such an environment, domestic banking networks, equity and other types of financial markets are linked to their foreign counterparts.

There are several ways in which a country's financial markets could be integrated. It could occur through membership in a regional integration community where formal protocols have been established to link up the financial markets of the community. In this arrangement, the regional integration community would remove or minimize restrictions that impede the flow of capital, and harmonize all financial rules, regulations and taxes between member countries.

Financial integration could also occur through the penetration of foreign financial institutions into domestic markets, in the absence of formal integration agreements. For example, developed countries allow foreign participation in the banking and insurance markets and pension funds, securities trading abroad and direct borrowing by domestic firms in international markets. These activities are possible because domestic laws permit the operation of foreign financial institutions in the domestic markets.

Whether a country chooses to integrate its financial markets formally or informally, it needs to create an enabling environment that would attract foreign participation. To this end, steps that the country could take include the harmonization of rules and regulations governing its domestic financial markets, and the creation of standards and benchmarks similar to those of international markets.

² See Buch, 2001, De Bondt, 2000, Dornbusch et al. 1998

However, for financial integration to be effective in Africa, it needs to be achieved through the regional economic communities. Formal financial integration at the level of the RECs would allow small African economies to increase their financial links with the rest of the world. An African regional economic community could harmonize the standards and regulations governing financial markets in the region, so as to attract foreign participation. Such an effort could lead to the creation of a large financial market that would support Africa's regional integration agenda, particularly in the area of economic development. Indeed, smaller African countries cannot achieve such economic impact by themselves unless they are linked up through the financial markets of the regional economic communities.

The strengthening of African financial markets through integration with world financial markets would also lead to the promotion and strengthening of trade and investments. The presence of foreign financial institutions in African countries strengthens ties between the countries involved, since these same institutions facilitate financial services linked to trade and investment flows.

7.3 Markets and stock exchanges in Africa

In a very short time period, Africa has developed an equity market sector. By the end of 1996, there were only 11 operating stock markets in sub-Saharan Africa, excluding South Africa. Today, Africa has about 20 active stock exchanges, including one of the only regional stock exchanges in the world, linking eight French-speaking countries in West Africa. Capital market development across Africa is primarily aimed at domestic resources mobilization – both corporate and individual. It is also expected to increase cross-border investments and catalyze foreign direct investment by helping to establish partnerships with foreign investors. Although it is very small in comparison to the United States capital market, which has a total capitalization of \$US10 trillion, the South African stock market is valued at \$US245 billion, making it the sixteenth-largest exchange in the world. The emergence and expansion of stock markets in Africa represents a significant trend toward attracting private capital investment and integration into the global financial marketplace.

With the exception of the South African market and to a limited extent the North African markets, African stock markets are fragmented, with very low capitalization and liquidity levels. The total value of African stocks outside South Africa is only 0.6 per cent of all emerging-market stocks. The exchanges are also small relative to their own economies. Market capitalization in Nigeria is only 8 per cent of GNP, while Kenya, Ghana and Zimbabwe's capitalizations are 25-35 per cent. These figures are much less than those of other emerging markets. For example, many stock market capitalizations in Asia and Latin America represent up to 100 per cent of their countries' GNP, with some close to 200 per cent. As a consequence, most of these markets are excluded from the main regional equity market indices and therefore attract little Global Emerging Markets (GEM) portfolio funds.

With the exception of South Africa, the small bourses created south of the Sahara are highly illiquid, with very few shares to be traded. None of the stock markets had a turnover above 10 per cent of capitalization in 1996, compared to 226 per cent in Turkey, 115 per cent in China and 85 per cent in the United States of America (IFC, 1996). Lack of liquidity is also demonstrated in large gaps between buy and sell orders.

Despite their small size, illiquidity and often-unstable political and economic environments, several leading African capital markets have recorded solid performances lately. Many of these small African markets are offering dramatic returns for investors, making them relatively immune to the global jitters hitting share values worldwide, due to their lack of correlation with developed markets. This distinct characteristic of African equity markets offers positive benefits in terms of risk diversification.

In an effort to deepen their capital markets, some African countries have made impressive changes in recent years. As a result, capital markets that had been dormant for years have rebounded strongly and several new ones have emerged. Moreover, since the 1990s, a number of African countries are moving to free market policies, which are driven by the desire to reduce the burden on government finances. As a result, African governments are implementing market-friendly reforms, particularly the privatization of State-owned companies. A number of these privatization efforts were supported through listings on local exchanges. In order to further stimulate the development of a local capital market, many subsidiaries of large international companies have also been encouraged to list their local operations. For entrepreneurs as well as emerging private companies, capital generation in African equity markets is vibrant, despite the relative small size of issues.

Privatization efforts undertaken in almost all African countries as part of their structural reforms were expected to stimulate the development and dynamism of capital markets. But this did not necessarily happen because privatization alone could not do much without supportive government policies. Nevertheless, in some countries such as Botswana, Ghana and Nigeria, privatization efforts backed by appropriate policies have stimulated their respective stock markets.

Empirical evidence in the economic literature suggests that market efficiency, defined as the degree to which prices efficiently factor in all available information on companies and the environment, is comparable in some African countries (notably Botswana, Côte d'Ivoire, Kenya, Mauritius, Nigeria and South Africa) to that achieved in emerging Asian and Latin American economies (Magnusson and Wydick, 2002).

Despite
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Indeed, these equity markets have facilitated cross-border investments, although the extent is constrained by currency inconvertibility and payment system problems and by variations in listing procedures.

Some African governments have taken advantage of the development of the local capital markets to issue exchange-listed treasury debt instruments. For example, the governments of Kenya and Ghana have been able to issue longer-term instruments that have allowed them to better manage their local debt, improve transparency in the pricing of local bank lending facilities, and increase competition in their banking industries.

It must also be noted that modest progress has been registered in the development of the pension fund industry in Africa. With the exception of South Africa and some Southern African countries, private and institutional cash flows have traditionally been invested mostly in real estate, term bank deposits and treasury bills. In recent years, a number of African countries have introduced, as part of wider financial sector reforms, new laws enabling the emergence of a local fund management industry. African capital markets have great potential, provided that political instability, conflict and bad governance become a thing of the past.

Despite the modest progress made, African stock exchanges still face a number of challenges. To strengthen the institutional operation of their exchanges, they need to set up mechanisms to support the dissemination of information on these markets, the implementation of robust electronic trading systems and the adoption of central depository systems. Some of the countries have already started introducing changes, particularly in the area of trading and settlement systems and regulatory regimes.

The move by African countries towards privatization and market-friendly reforms has also helped strengthen their stock exchanges as the number of listings has increased. In addition, the listing of many subsidiaries of large international companies has helped to further stimulate and firm up African exchange markets.

7.3.1 The South African Stock Market

The South African stock market or the Johannesburg Stock Exchange (JSE) was founded on 8 November 1887. From its humble beginnings, the JSE has emerged as a technological and innovative exchange, becoming the seventeenth-largest equity exchange in the world, with a total market capitalization of some \$US570 billion at the end of 2005 (table 7.1). The value of traded assets on the JSE at the end of 2005 stood at \$US203 billion, up from \$US187 billion the previous year. With approximately 400 companies listed on the exchange, the JSE is the largest in Africa, and is also larger than exchanges in some developed economies.

African capital markets have great potential, provided that political instability, conflict and bad governance become a thing of the past

Table 7.1Snapshot of the Johannesburg Stock Exchange (JSE)

2000 2001 2002 2003 2004 2005 Market capitaliza-204.952 139, 750 182, 616 272,900 467, 500 570, 100 tion (USD million) Value traded 77, 494 69,676 76, 792 114,800 187,800 203, 300 (USD Million) General index 8,326 10, 441 9, 358.90 N/A 12, 656,86 18, 096.54 426 403 Number of listed 616 542 472 388 companies

Source: ECA, African Security Exchange Association 2005 Year Book, UNDP African Stock Market Review

The JSE has been affected by exchange rate movements in recent years. In the early 2000s, the Reserve Bank of South Africa tightened its monetary policy in a bid to keep inflation within the target band of 3-6 per cent. Consequently, the South African rand appreciated significantly. However, the strength of the rand led to a 10 per cent decline in the JSE index in local currency terms and a 24 per cent increase in US dollar terms.

Unlike most other African exchanges, the JSE is affected by shocks to global stock markets. Hence, the downturn of global markets in the early 2000s weakened the performance of South African blue-chip companies. Standard & Poor's rates South Africa's international debt very favourably, because of the prudent monetary and fiscal policies undertaken by the country. As a result, South Africa is seen as having one of the best-run emerging economies in the world, with efficiently managed world-class companies. Hence, JSE stands as an attractive vehicle for the infusion of foreign investments into Africa.

7.3.2 The Namibian Stock Exchange

The Namibian Stock Exchange was created shortly after the country's independence in 1990. Since its inception, it has been very efficient in offering long-term capital to Namibian entrepreneurs and businesses to create wealth, jobs, profits and economic growth.

At end of 2005, the market capitalization of the exchange stood at \$US121,270 million, up from \$US101,210 million in 2004 (table 7.2). In the same period, the value of traded assets on the exchange was about \$US529 million. From 2000, the index has been appreciating strongly, making it one of the most the attractive exchanges for investors. It must be noted that with the Namibian dollar linked to the South African rand, the exchange is not immune to shocks to the Johannesburg Stock Exchange.

Unlike most other African exchanges, the JSE is affected by shocks to global stock markets The Namibian Stock Exchange, which is self-regulated, trades shares and other financial securities such as government and corporate bonds. Both local and foreign investors can trade on the exchange. It currently has a cooperation arrangement with the Johannesburg and London Stock Exchanges, which has allowed it to raise capital for businesses in offshore diamond mining, food and groceries distribution, cement manufacturing, farming, banking, a bulk cargo terminal and the national airline.

Table 7.2 Snapshot of the Namibian Stock Exchange

onaponot or the manifest exertainge								
	2000	2001	2002	2003	2004	2005		
Market capitaliza- tion (USD million)	311	151	201	69, 200	101, 210	121, 270		
Value traded (USD million)	22	8	129	272	450	529		
General index	92	88.50	47.28	N/A	425. 93	561. 68		
Number of listed companies	13	13	13	35	32	28		

Source: ECA, African Security Exchange Association 2005 Year Book, UNDP African Stock Market Review

The Cairo and Alexandria Stock Exchanges 7.3.3

The Alexandria Stock Exchange is one of the oldest in the Middle East. It was founded in 1883. Known as the Alexandria Bourse, it operated at that time in coffee houses where merchants met to strike their deals. The Cairo Stock Exchange was established in 1903 with 97 listed companies and an aggregate capital of Egyptian pound 29 million. By 1907, the number of listings had jumped to 228 companies and the aggregate capital had risen to Egyptian pound 91 million. In the early 1940s, the two bourses were merged.

Table 7.3 Snanshot of the Cairo and Alexandria Stock Exchanges (CASE)

onaponot of the	Chapshot of the Cano and Alexandra Glock Exchanges (CACE)						
	2000	2001	2002	2003	2004	2005	
Market capitaliza- tion (USD million)	28, 741	24, 335	26, 245	28, 000	28, 000	79, 000	
Value traded (USD million)	11, 120	3, 897	7, 362	4, 514	6,808	27, 937	
General index	626.00	613.00	491.67	N/A	2,567	6324	
Number of listed companies	1,076	1, 110	1, 151	978	795	744	

Source: ECA, African Security Exchange Association 2005 Year Book, UNDP African Stock Market Review

The Cairo and Alexandria Stock Exchange (CASE), which is the third-largest exchange in Africa, has been strengthening in recent years. As of 2005, its market \$US79 billion compared to its value of \$US29 billion in capitalization stood at

The Alexandria Stock Exchange is one of the oldest in the Middle East 2000 (table 7.3). Trades on the bourse, although very small by world standards, are relatively strong by African standards. In 2005, the market value of traded assets was \$US28 billion, four times higher than the previous year.

The geo-political tensions in the Middle East and weak macroeconomic environment impacted negatively on the CASE in 2001 and 2002, with its index falling in those periods. The poor economic performance at the time weakened the balance sheet of the banking sector, as increased bank loan loss provisions were observed. Since then, the markets in Cairo have recovered strongly, bolstered by investor confidence, infusion of foreign capital and a rise in the number of listings.

7.3.4 The Moroccan Stock Exchange

The Moroccan Stock Exchange or the Casablanca Stock Exchange was established on 7 November 1929. Since then it has undergone a number of structural and institutional reforms, which have lent strong legal support to the exchange, introduced a range of rules and technical procedures, and defined the key market players. The exchange has also been strengthened with the launching of an electronic-based trading system and a central securities depository system in 1997. It has also introduced an efficient and state-of-the-art settlement and payment system.

Table 7.4 shows that the market capitalization of the Casablanca Stock Exchange stood at \$US27,280 million in 2005 compared to \$US25,150 a year before. The fourth-largest exchange on the continent also saw \$US16,060 assets being traded, up from \$US8,740 the previous year. The general index appreciated from 4,522 at the end of 2004 to 5,539 at the end of 2005. All these factors indicate that the exchange is poised for bigger growth in the future and would continue to have a central role in the economic development of Morocco.

Table 7.4 Snapshot of the Casablanca Stock Exchange

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	2000	2001	2002	2003	2004	2005		
Market capitalization (USD million)	10, 899	9, 087	8, 319	13, 180	25, 150	27, 280		
Value traded (USD Million)	1, 094	974	922	6, 130	8, 740	16, 060		
General index	3,995.27	3,568.68	2,980.44	N/A	4,521.98	5,539.13		
Number of listed companies	53	55	56	52	53	54		

Source: ECA, African Security Exchange Association 2005 Year Book, UNDP African Stock Market Review

The fourth-largest exchange on the continent also saw \$US16,060 assets being traded, up from \$US8,740 the previous year The Moroccan economy relies heavily on trade with Europe and tourism. The dirham is also linked to the euro and therefore has appreciated recently vis-à-vis the US dollar, mainly propelled by the strength of the euro. Agriculture output also remains strong for the country. All these factors and the sound monetary and fiscal policies undertaken by the country bode well for the Casablanca Stock Exchange.

7.3.5 The Zimbabwe Stock Exchange

The Zimbabwe Stock Exchange was established in 1946 in Bulawayo and later moved to Harare in 1951. Equities, preference shares, government bonds and municipal stocks, debentures and warrants are the instruments traded on the exchange. It is regulated by an Act of Parliament and operates under the supervision of a ninemember committee composed of seven representatives of stock-broking companies and two government nominees.

Despite the worsening macroeconomic conditions in Zimbabwe, perhaps due to current political uncertainties, table 7.5 shows that the Zimbabwe Stock Exchange is performing extremely well. It shows that market capitalization stood at about \$US20,000 million, up significantly from \$US10,000 million a year earlier. The value of assets traded in 2005 was \$US760 million, with the number companies listed rising from 69 in 2000 to 80 by the end of 2005.

Table 7.5 Snapshot of the Zimbabwe Stock Exchange

	2000	2001	2002	2003	2004	2005
Market Capitaliza- tion (USD million)	2, 432	7, 972	11, 689	40, 000	10, 000	20, 000
Value traded (USD Million)	279	1,530	131	190	1, 220	760
General index	17, 984.30	46, 351.90	10, 2229	N/A	1, 097, 493	18, 055, 724
Number of listed companies	69	72	77	80	80	80

Source: ECA, African Security Exchange Association 2005 Year Book, UNDP African Stock Market Review

Given the poor economic fundamentals of Zimbabwe, the relative good performance of the Zimbabwe Stock Exchange defies the prediction of any sound economic model. This may be because in an environment of negative real interest rates, high inflation and a fixed exchange rate regime, investors seek alternatives for the preservation of their financial capital. Hence, investors have moved away from interestbearing instruments and are investing in real estate and equities. However, this capi-

Given the poor economic fundamentals of Zimbabwe, the relative good performance of the Zimbabwe Stock Exchange defies the prediction of any sound economi<mark>c model</mark>

The Algeria
Stock Exchange
was created in
1993, with a
few companies
listed. Its market
capitalization is

about \$US200

million

tal preservation strategy is not sustainable in the long run if the political situation does not improve.

The weak economic environment has diminished Zimbabwe's productive capacity, particularly in key sectors such as banking, agriculture, mining and manufacturing. A study by UNDP suggests that Zimbabwe's GDP has declined by 25 per cent and the trend would continue unless the Government is able to rectify the damage. Compounding the economic challenges are unresolved matters related to property rights, which in turn are making it difficult for banks to recover loan losses.

The modest capital valuations of the Zimbabwe Stock Exchange have made it attractive to investors. A number of conglomerates have also taken steps to unbundle their risk, and sound risk management of the corporate sector has made it more efficient and thus strengthened the Exchange.

7.3.6 Other stock exchanges

In addition to the five large African stock exchanges referred to earlier, there are exchanges in Algeria, Botswana, Côte D'Ivoire, Ghana, Kenya, Malawi, Mauritius, Mozambique, Nigeria, Swaziland, Tanzania, Tunisia, Uganda and Zambia.

The **Algeria Stock Exchange** was created in 1993, with a few companies listed. Its market capitalization is about \$US200 million. The value of trade in financial assets (equities and corporate bonds) on the floor each year is about \$US3 million. Since 2002, when the market experienced a significant downturn, a number of economic policies have been put in place to strengthen the economy. Given its endowment with petroleum and natural gas, Algeria has been able to improve its economy thanks to the high prices of petroleum products and its strong trading ties with the European Union. As result, the Algeria Stock Exchange is expected to grow in the future as more companies look to list on the exchange.

The **Botswana Stock Exchange (BSE)** was established in 1989 to operate and regulate the equities and fixed interest securities market. The BSE, with about 28 companies listed on it, offers an avenue for government, quasi-government and the private sector to raise debt and equity capital. The market valuation of the BSE at the end of 2005 stood at \$US2,650 million, up from \$US2,320 million in 2004. The market is very active and efficient, with \$US47.19 million of financial securities and bonds being traded at the end of 2005, also up from \$US44.94 million in 2004.

The economy of Botswana is very strong and vibrant, driven mainly by the diamond mining industry, which accounts for 25 per cent of world diamond production. The economy has also benefited from sound monetary and fiscal policies over the

last three decades. Inflation remains tamed and the pula has strengthened relative to the South African rand. The stock exchange closed the year up 74 per cent in 2005, largely due to good economic fundamentals. With the government policy to diversify the economy into manufacturing, tourism and financial services firmly in place and with continued sound monetary and fiscal policy, the BSE is set for continuous strong growth.

The Côte D'Ivoire Stock Exchange or Bourse Regionale des Valeurs Mobilières/ West African Stock Exchange (BRVM) is the only regional stock exchange on the continent and was founded in 1998. The exchange, which replaced the old Ivorian Bourse des Valeurs d'Abidjan, serves the UEMOA member States: Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo. It trades securities and bonds, with no restriction for foreign participation. Its market capitalization is about \$US1.6 million and the annual value of trades is about \$US20 million. It currently has about 40 companies listed on it.

The political uncertainty in Côte d'Ivoire has had negative effects on the market. Some of the challenges faced by BRVM include: establishing fast and efficient clearing and settlement, currency and accounting systems in all countries; developing the necessary political will; integration of markets; and respect of competition rules. However, if the recent peace initiative holds and if the country continues on a path of prudent macroeconomic policies, then the regional exchange could record significant gains in the future.

The Ghana Stock Exchange was established in 1990, trading securities and government and corporate bonds. Its market capitalization is about \$US400 million and the number of companies listed on it is 30. In 2005, the value of assets traded was about \$US15 million. The Ghanaian economy is growing at a robust rate despite the nascent energy crisis. Sound fiscal and monetary policies have given the country very good economic fundamentals, such as a stable exchange rate, relatively low inflation and a low debt-to-GDP ratio. Furthermore, production and prices of gold and cocoa, the main export commodities of the country, have improved. Relatively low interest rates have provided the needed support for the stock exchange as investors seeking higher returns have invested in local equities. Ghanaian companies posted higher earnings in 2005, which further encouraged investors to enter the equity market. Looking ahead, the exchange would make significant gains if the Government continues to pursue prudent economic policies.

The **Kenyan Stock Exchange** began in 1951 as a private entity. In 1954, and under the colonial authorities, the Nairobi Stock Exchange (NSE) was recognized by the London Stock Exchange as an overseas stock exchange. Since Africans and Asians were not permitted to trade in securities until after attaining independence in 1963, the trading of shares was then confined to the resident European community. In

The Côte D'Ivoire Stock Exchange or Bourse Regionale des Valeurs Mobilières/ West African Stock Exchange (BRVM) is the only regional stock exchange on the continent and was founded in 1998

The Malawi Stock
Exchange started
its operations
in 1996, under
the aegis of the
Reserve Bank of
Malawi

1984, the exchange underwent major structural reforms that led to the formation of the *Capital Markets Authority (CMA)* in 1989, a regulatory body of the NSE. The overall objective of the CMA is to help create an environment conducive to the growth and development of the country's capital markets.

Reforms have helped strengthen the NSE as its market capitalization rose from \$US3,860 million in 2004 to \$US6,140 million at the end of 2005. With about 48 companies listed on the exchange, trading of financial instruments has been very active, amounting to \$US485 million in 2005. The outlook for the stock market is very positive because the economy is growing at a robust rate and the Government is determined to continue with its current sound macroeconomic policies. Furthermore, the Government's plan to increase investments in infrastructure would induce more private investment and therefore boost the stock market.

The **Malawi Stock Exchange** started its operations in 1996, under the aegis of the Reserve Bank of Malawi. International Finance Corporation and the Financierings Maatschappij Ontwikkelingslanden, a Dutch development bank with close ties to the Dutch Ministry for Development Cooperation, provided 40 per cent of the \$500,000 required to establish the stock market in Blantyre. Its market capitalization at the end of 2005 was \$US9,050 million, up from \$US6,490 million in 2004. There are 10 companies listed on the exchange and trading in 2005 totalled \$US62 million. The exchange is supervised by a supervisory committee comprising representatives of the central bank, the Government and the private sector.

The **Stock Exchange of Mauritius Ltd (SEM)** began its operation in 1989. It is composed of two markets: the official market and the over-the-counter (OTC) market. The official market started its operations in 1989 with five listed companies and a market capitalization of only \$US92 million. There are 41 companies currently listed on the official market and market capitalization has expanded significantly to the tune of \$US2,650 million at end of 2005. The OTC market commenced its operations in 1990 and has since grown quite substantially. There are 76 companies with a market capitalization of \$US1.1 billion traded on this market.

Since 1994, foreign investors can freely trade any share listed on the official market without any restriction, except for listed sugar companies, where foreign investors collectively cannot hold more than 15 per cent of the shares. The performance of the stock market has been very strong, with the SEMDEX all-share price index growing by 723 per cent during a 17-year period. The outlook for the rest of the year remains positive, supported by a set of excellent economic fundamentals. Mauritius has managed to diversify its economy over the past few years, enabling it to better absorb external economic shocks.

The Mozambique Stock Exchange is one of the smallest exchanges on the continent. Its market capitalization at the end of 2005 was about \$US242 million. There are 13 companies listed but only five are traded. The value of traded assets in 2005 was about \$US34 million. Efforts are being made by the Government and the private sector to strengthen the exchange.

The Nigerian Stock Exchange was established in 1960. It is owned by the private sector and subscribes to international accounting standards. It has a market capitalization of about \$US10,000 million. The annual trade of financial assets averages about \$US1,000 million, with about 250 companies listed. Strong oil prices, the debt pay-out and prudent macroeconomic policies are helping to strengthen the economy. The outlook of the stock exchange is therefore positive, as it stands to benefit from robust economic performance in the future.

The Swaziland Stock Market was established in July 1990. There were six companies listed on the exchange as at the end of 2005. Financial assets traded are government stock options, debentures, government-guaranteed stock and non-trading mutual funds. The market capitalization as at 2005 was \$US197 million, up from \$US193 million in 2004. The value of trades stands at about \$US70 million on an annual basis. It should be noted that exchange control approval is required for foreign investors to participate in the stock market.

The Tanzania Stock Exchange or the Dar-es-Salaam Stock Exchange (DSE) was founded in 1996 to support the privatization initiatives of the Government. The listings had increased from two to eight by the end of 2005. The market capitalization also grew strongly from \$US236 million in 1998 to \$US 2,283 million in 2005. Similarly, the value of trading on the floor increased steadily from \$US7 million to \$US28 million at the end of 2005. The governing organ of the DSE is the Council of the Exchange, which consists of 10 members representing various interest groups in the society.

In a bid to deepen the market, the exchange has embarked on activities, including identifying potential companies and encouraging cross-border listings and linkage of the markets in the East African region and in the SADC area. As a result of these activities, two companies have cross-listed on both the Nairobi Stock Exchange (NSE) and the Uganda Securities Exchange (USE) as well on the DSE. Several other companies are in the process of obtaining cross-listings in all the three markets.

The **Tunisia Stock Exchange** was established in 1969 and subsequently privatized in 1994. The number of companies listed grew from 17 in 1992 to about 50 at the end of 2005. At the same time, the market capitalization rose substantially from \$US814 million in 1992 to roughly \$US3, 000 million by the end of 2005. The value of traded assets also grew significantly from \$US33 million in 1992 to about

The Mozambique Stock Exchange is one of the smallest exchanges on the continent

\$US800 million at end of 2005. The Tunisian stock market is poised to strengthen further because of the expected robust growth of the Tunisian economy, which is benefiting from improved tourism, gains in trade with the European Union (EU) and a strong banking sector.

The **Uganda Stock Exchange** (USE) started its operations in 1998 with the listing of the East African Development Bank 4-year bond. In January 2000, USE listed its first equity, Uganda Clays Ltd. The market capitalization of the exchange has increased over time, from \$US37 million in 2000 to \$US1, 850 million in 2005. There were seven companies listed on the exchange as at 2005. As a result, the value of traded assets at 2005 was \$US3.1 million. Like the Nairobi and the Dar-es-Salaam exchanges, the USE encourages cross-listing. Three companies are currently listed on the exchange and on the three exchanges in the East African subregion. The outlook is very positive for the USE as the Ugandan economy continues to grow remarkably. However, the economy's strong reliance on agriculture (approximately 50 per cent of GDP) leaves it and the USE susceptible to swings in commodity prices.

The **Zambia Stock Exchange** or Lusaka Stock Exchange was established in 1993, but started its operations in 1994. The Exchange was created as a vehicle for the private sector to raise long-term capital and thus create wealth. It started with a market capitalization of \$US19 million and grew rapidly to the tune of \$US2,456 million in 2005. At the end of 2005, there were 13 companies listed on it and the value of trades was \$US20 million, a seven-fold increase from 1996 when it was only \$US3 million.

The Zambian economy is heavily reliant on the price of copper and the rise of commodity prices, including those of copper, is contributing to its growth. Agricultural output has been very favourable in recent times, accounting for approximately 17 per cent of GDP. The positive economic performance is helping to strengthen the exchange, but for the exchange to grow further, the economy needs to be diversified away from agriculture and mining.

7.4 Regional integration of African capital markets

As noted earlier, Africa needs deep, efficient and well-established financial markets, including bond markets and stock exchanges, to mobilize the necessary domestic resources to support its development objectives, particularly the Millennium Development Goals (MDGs). These markets would help increase the quantity and productivity of investment, bolster competition in the financial sector, and improve corporate governance. Furthermore, capital markets provide policymakers with an

As noted earlier. Africa needs deep, efficient and well-established financial markets. including bond markets and stock exchanges. to mobilize the necessary domestic resources to support its development objectives, particularly the Millennium Development Goals (MDGs) array of tools to conduct monetary policy also serve as vehicles for Africa to integrate into the global economy.

The discussion in section 3 clearly demonstrates that capital markets in Africa remain relatively underdeveloped compared to other emerging markets. Most of the established national stock exchanges are small and fragmented. Their market capitalization/GDP is very low and investors have no access to long-term capital. In addition, the exchanges have very low liquidity and investors still have a limited choice of financial instruments and face liquidity problems.

Integration of national capital markets has the potential to address the thinness and lack of liquidity in African capital markets by enabling various countries to pool their resources for regional cooperation and capital market development. An integrated market would reduce costs and facilitate capacity-building and the provision of regional and international services and infrastructure. This approach would help small African economies in particular to jointly build and operate efficient regional capital markets that maximize resource mobilization and allocation in all countries, while minimizing the cost of market infrastructure, operations and administration. Ultimately, capital market integration will also contribute to wider economic integration in Africa.

Implementing a regional approach to capital market development on the continent, however, entails overcoming numerous barriers and impediments at the national, regional and continental levels. This will require, above all, the adoption of common policies and the establishment of institutions and regulatory frameworks for policy coordination and harmonization.

The focus of this section is to examine policies and strategies that could be used to enhance regional integration of the financial markets in Africa. It shall also look at the challenges and offer a "way forward" for deeper market integration.

7.4.1 **Case for integration of African financial markets**

Given the small and fragmented capital markets in Africa, the markets need to be integrated in order to unlock the economic potential of the continent and alleviate the mass poverty that afflicts its people. The integration of markets would entail the reduction or removal of fiscal, infrastructure, legal and regulatory barriers, in order to facilitate transactions and the movement of financial capital and services.

Capital market integration often involves the harmonization of laws, regulations and standards among countries so as to achieve the desired levels of mobility of capital and financial services. The harmonization process could take the form of member States adopting similar laws. Through the harmonization process, standards

Integration of national capital markets has the potential to address the thinness and lack of liquidity in African capital markets by enabling various countries to pool their resources for regional cooperation and capital market development

For the success of the integration process, member States need to ensure that there is macroeconomic stability and an independent central bank committed to price stability so that the real value of financial assets is protected

are created to act as guideposts for the operation of the markets in a region. The harmonization process ensures that differences in the technical content of standards are prevented or eliminated, because the markets are forced to adopt international treaties and regulatory principles.

It must be noted that the harmonization of fragmented national markets does not mean the adoption of a single or uniform set of rules nor does it necessarily require standardizing all the rules, because some of rules are very specific to certain member States. What is required is an eventual convergence of national markets to common standards of rules and procedures for the operation of the markets.

Many advantages could result from the integration of African financial markets:

- Economies of scale, increased competition and a wider range of instruments available for both investors and savers;
- Vehicle for the mobilization of domestic resources, foreign investment and remittances, and reverse capital flight, and hence, enhanced market liquidity;
- Avenue for financing regional projects such as infrastructure projects;
- Lower transaction and capital costs;
- Governments gain a larger set of monetary and fiscal policy instruments;
- Promotion, strengthening and supporting of the private sector by providing platforms for the mobilization of productive financial capital;
- Facilitation of capacity building in countries with less developed capital markets
- Opportunities for long-term investment financing; and
- Deepening of financial development and economic integration, key strategies for accelerating economic growth and reducing poverty in Africa.

The integration of the financial markets requires that appropriate steps be taken to create the enabling environment. This environment could be attained through common policies, institutions and regional frameworks and, above all, the necessary political commitment. For the success of the integration process, member States need to ensure that there is macroeconomic stability and an independent central bank committed to price stability so that the real value of financial assets is protected. National policies must also be pro-growth and the capital markets backed by strong legal, regulatory and supervisory mechanisms as well as good general economic and corporate governance and a respect for property rights.

To ensure the stability of an integrated market, national governments would have to harmonize their respective macroeconomic policies as well as the legislative, institutional, regulatory frameworks across countries. Solid information and communications technology (ICTs) would have to be put in place to support the high-quality, efficient and linked clearance and payment settlement systems required to facilitate financial asset transactions. The technology should also facilitate the flow of information to all stakeholders.

The operation of financial markets is a very complex process that requires specific skill sets. Member States would therefore have to commit to develop sufficient capacity and skills at all levels, including governments, regulators, brokers, auditors, stock exchanges and regional institutions, so as to ensure the smooth operation of the markets. To improve liquidity, governments also need to use the financial markets for privatization of well-functioning State-owned enterprises as well as bond issues. The political commitment and the adoption of consistent policies by governments are paramount for the success of market integration.

The operation of financial markets is a very complex process that requires specific skill sets

7.4.2 **Models of financial markets integration**

Integration of African capital markets could take different forms. However, some of the models which could be considered in the process are:

- (a) A single formal regional regulator and stock exchange;
- (b) Cross-listing;
- (c) Cross-border trading;
- (d) The European Union model;
- (e) The Euronext model (a virtual stock exchange); and
- (f) Pan-African institutions.

A single formal regulator and stock exchange

The single formal regional regulator and stock exchange model requires that all the existing financial markets be merged into one single market and under a single regulator. In this case, all the member States would use one single rule book for listing, trading, clearing and settlement. An example is the Bourse Régionale des Valeurs Mobilières (BRVM) situated in Côte d'Ivoire. As explained in section 3, the BRVM is the only fully integrated regional capital market in Africa, covering eight West African Francophone countries.

Cross-listing

The effectiveness of cross-border trading requires the recognition of each market's trading rules and practices

Under the cross-listing model, member States would have their own capital markets and their own regulators. However, trans-boundary listings would be encouraged among member States within a REC or a particular subregion. In other words, a regional capital market could be developed with different regulators and stock exchanges through the promotion of cross-border IPOs and simultaneous crosslisting of securities on all the securities exchanges. Cross-listing has been utilized in a number of African regions, including East Africa (Kenya, Uganda and Tanzania), and in Anglophone West Africa (Gambia, Ghana and Nigeria). Through cross-listing, investors could mobilize resources outside their countries of residence.

Cross-border trading

Cross-border trading is different from cross-border listing in that it allows the trading of financial assets across a subregion regardless of their origin. This approach, which is the fastest route to the market integration process, gives investors access to other financial markets through their local intermediaries, who are in turn linked to their counterparts in the other countries within a subregion. The benefits of cross-border trading include the diversification of investment portfolios in the wider market; increased liquidity; lower transaction costs and good corporate governance through competition.

It also encourages and promotes parallel development of local markets and deeper regional integration. The effectiveness of cross-border trading requires the recognition of each market's trading rules and practices. Investors must also conform and adhere to the set disclosure standards and the information dissemination system. Furthermore, there should be agreements between local intermediaries and local clearing and settlement houses.

The European Union model

The European Union (EU) has member States maintaining their own separate regulators and securities exchanges, but they are subject to EU laws and directives and common minimum standards. The Union also allows market operators licensed in one country to freely operate in any of the member countries of the Union. However, the operators remain subject to supervision by the licensing State regulator. A financial institution incorporated in a member State is also permitted to do business across the EU. The vision of the EU integration process is that minimal harmonization of rules and mutual recognition should lead to gradual convergence over time. The EU is currently working on a policy, which it terms "mutual recognition", to

allow a company listed in one market to be automatically recognized by other regulators.

Euronext model (a virtual stock exchange)

The other European model is the Euronext approach, which is a pan-European stock exchange with subsidiaries in Belgium, France, Netherlands, Portugal and the United Kingdom. Euronext was formed in 2000 through a merger of the stock exchanges of Amsterdam, Brussels and Paris, in order to take advantage of the harmonization of the European Union financial markets. As of January 2006, markets run by Euronext had a market capitalization of \$US2.9 trillion, making it the fifth-largest exchange in the world. The model allows for several domestic markets operating under domestic rules, but they all follow a single rule book for trading and listing. Market operators licensed in one country can freely operate in any of the participating countries of Euronext, but are subject to the supervision of a licensing State regulator.

Pan-African stock markets

The Constitutive Act of 2000, which transformed the Organization of African Unity (OAU) into the African Union, and the Treaty establishing the African Economic Community (AEC) or the Abuja Treaty, proposed the setting up of an African Stock Market. This is to be created alongside other pan-African bodies such as an African Central Bank, an African Investment Bank and an African Monetary Fund. Studies are being conducted on the framework and modalities for the creation of these pan-African financial institutions.

7.4.3 **Creating regional stock markets**

To reach the goal of developing a regional capital market, African countries have to consider reducing the disparities among rules and regulations between countries within subregions, regions and the continent as a whole. Policies would need to be put in place to minimize the costs of dealing with diverse regulatory systems so as to attract both domestic and foreign investors and savers.

An approach that could be adopted is perhaps to begin the process of integration of the financial markets with subregional groupings such the regional economic communities (RECs). This is because the RECs have in place policies and legal, political and institutional frameworks that would facilitate the integration process. The RECs could then form a working group made up of stock exchanges, market operators,

To reach the goal of developing a regional capital market, African countries have to consider reducing the disparities among rules and regulations between countries within subregions, regions and the continent as a whole

regulators and policymakers to draw up the modalities and framework for the integration of the financial markets within the respective RECs.

However, before any process of integration can begin, it is important that African countries strengthen their respective capital markets, because the aggregation of small, weak domestic capital markets in an effort to establish a well-functioning regional capital market poses particular difficulties. Therefore, strengthening domestic capital markets will assist in the broader objective of integration.

Once the initial conditions of domestic capital markets are addressed, countries have to decide on the institutional structures for establishing the regional market. The roles of the RECs in facilitating the integration process are very critical at this juncture. The committee mentioned above could be established at the level of the RECs to develop minimum standards based on international standards that would guide the operation of the regional stock markets.

The committee should encourage and support member States in implementing their recommendations. To ensure convergence towards a continental financial market, the committees across all regions would have to cooperate in sharing training and investor education programmes and facilities, streamline licensing requirements for market operators, work together with policymakers to tackle impediments to market integration, and establish monitoring and enforcement mechanisms.

To ensure the success of the integration process, the RECs, in collaboration with member States, should strive for the harmonization of laws, regulations and standards of the existing financial markets. It should be noted that harmonization would require the adoption of similar laws, elimination of discrepancies between rules in different national jurisdictions, and establishment of common standards. It is very important that the RECs and member States do not ignore other impediments to capital market integration as they pursue the harmonization of the standards, rules and regulation of the market.

Initiatives by the regional economic communities to harmonize their markets

As we saw in section 3, there are stock exchanges in all regional economic communities recognized by the African Union. SADC has the most national exchanges, with the most active and important one being the Johannesburg (South Africa) Stock Exchange, which also serves as a subregional hub. Cross-border investments are very high in SADC, particularly among Botswana, Namibia, Lesotho, Swaziland and South Africa. ECOWAS, and to a large extent CENSAD, has three exchanges: the Nigeria Stock Exchange, the Ghana Stock Exchange, and a regional exchange for UEMOA in Abidjan (Côte d'Ivoire). There are also a number of exchanges in

H<mark>ow</mark>ever, before any process of integration can begin, it is important that African countries strenathen their respective capital markets, because the aggregation of small, weak domestic capital markets in an effort to establish a wellfunctioning regional capital market poses particular difficulties

COMESA, with the Cairo (Egypt) and Nairobi (Kenya) Stock Exchanges being the most active. UMA has evolving exchanges in Morocco and Tunisia. In the ECCAS zone, there is the relatively new Douala Stock Exchange in Cameroon, and there are plans for a regional exchange.

These exchanges have different tax regimes and capital account restrictions. The rules and regulations governing the operations of the markets vary from country to country. The laws and statutes for the listing, disclosure, trading, clearing and settlement systems and rules, capital adequacy requirements and accounting standards vary across the markets and across the RECs. As a result, some of the RECs are embarking on initiatives to harmonize the financial markets in their zone with the view of achieving convergence.

In the ECOWAS region, three exchanges, the Nigerian Stock Exchange, BRVM and the Ghana Stock Exchange, are negotiating on how they can increase cooperation and achieve convergence of their rules. The Nigerian Stock Exchange and the Ghana Stock Exchange have also signed a memorandum of understanding to cooperate in the areas of staff training, surveillance procedures, self-regulation and communication of information. Although they are very cumbersome and costly, cross-border listings are also being promoted in the ECOWAS zone. For example, some Gambian banks have listed on the Ghana Stock Exchange, while Ecobank Transnational Inc (incorporated in Togo) has also listed on the three exchanges. Other companies are being encouraged to do the same.

The proposed Central African Exchange based in Gabon and serving Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Equatorial Guinea and Gabon, has focused on the harmonization of trading rules. There are ongoing discussions to merge the Central African Exchange with the Douala Exchange.

In SADC, the Johannesburg Stock Exchange (JSE) is heavily involved in cross-border investment. The SADC Committee of Stock Exchanges is providing the leadership in the process of harmonizing the listing requirements of exchanges of member States based on 13 principles set out in the JSE listing guidelines. The region is also harmonizing the operating systems of all the exchanges as well as encouraging crosslisting amongst exchanges within SADC. The Committee is in discussions to set up a common entry-level examination for all stockbrokers in the SADC zone.

The financial markets in the AMA region are also pursing integration initiatives. Libya, Morocco, Tunisia and Egypt have signed cooperation agreements on technological and regulatory support for each other, and Morocco, Tunisia and Egypt allow cross-border trading. When fully operationalized, the agreements would allow investors of the different capital markets to have access to each other's markets through their local intermediaries. The agreements also require participating countries to

In the ECOWAS region, three exchanges, the Nigerian Stock Exchange, BRVM and the Ghana Stock Exchange. are negotiating on how they can increase cooperation and achieve convergence of their rules

recognize each other's market trading rules and practices and securities listed in the regional markets; and to conform to established disclosure standards and the information dissemination system.

The experience in the EAC subregion could serve as a model for the integration of financial markets in Africa. The areas of cooperation and harmonization are: (a) policy formulation; (b) regulatory and legal issues; and (c) structural and institutional matters. Common policies for the subregion are initiated by the Capital Markets Development Committee (CMDC) of EAC, which was established in 2001.

The CMDC is made up of representatives of member States from the following institutions: central banks, securities markets regulators; ministries of finance/treasuries, stock exchanges, and insurance and pension sector regulators. The objective of the CMDC is to facilitate implementation of sections of the Treaty for the Establishment of the East African Community (EAC) related to capital markets. It generally formulates policies for consideration by the Ministers of Finance, who then submit them to the Summit of Heads of State for a decision.

The CMDC facilitates the strengthening of capital markets so as to ensure free movement of capital within the EAC. It is working on the harmonization of capital market policies on cross-border listing, foreign portfolio investors, taxation of capital market transactions, accounting, auditing and financial reporting standards, commissions and other charges. These harmonization measures are being undertaken to establish a regional stock exchange within the EAC with trading floors in each of the Partner States. Furthermore, the CMDC ensures that national authorities adhere to harmonized stock trading systems, which allow residents of the member States to acquire and negotiate monetary instruments freely within the EAC.

7.4.5 Way forward on the integration of financial markets in Africa

The experiences shared here of the RECs are very helpful in pushing forward the agenda on capital markets integration in Africa. We have witnessed that interventions being advocated to strengthen capital markets on the continent call for action at national level, with limited consideration for action at regional level. Although efforts are under way on the harmonization of legal and regulatory frameworks, the progress of financial markets in various subregions has been very slow. In addition to full harmonization, it is essential that countries recognize, respect and comply with regulatory regimes of other countries. Harmonization of reporting and disclosure requirements and liberalization of financial services are also needed at the national, subregional and continental levels.

Although efforts are under way on the harmonization of legal and regulatory frameworks. the progress of financial markets in various subregions has been very slow. In addition to full harmonization. it is essential that countries recognize, respect and comply with regulatory regimes of other countries

It must be noted that capital markets are not created by mere declaration, but must be backed by sufficiently large demand and supply of securities. This is why regional cooperation can be used to establish links with other markets in order to achieve a critical mass of demand and supply. The RECs and other regional bodies have a major role to play in the promotion of costs and benefits of stock market trading so as to educate investors and involve more potential issuers. Coordination of regional capital market development should include strategies for private sector involvement as well as promotion of cross-border listing.

Yet, it should also be noted that the creation of regional markets might face some difficulties and challenges in some of the subregions, because of the interest that countries have in retaining their individual stock exchanges. In such cases, consideration could be given to "virtual" regional markets based on automated common trading systems and central depository systems (World Bank 2002).

An approach toward integration of the financial markets in Africa could begin with the integration of the markets in the subregions. The RECs have already put in place programmes that seek to offer a framework for the creation of subregional financial markets, which could serve as the overall driving force behind continental capital market integration. For the effective integration of the markets in the subregion, it is important that committees are established in the RECs made up of representatives of stock exchanges, central banks, market operators, regulators and other policymakers. These committees would facilitate the formulation and implementation of programmes geared towards the formation of subregional markets.

These programmes could include the merger of some of the markets and the establishment of strategic alliances for cooperation and platform-sharing arrangements. The committees should also encourage countries with no formal stock exchanges to establish a well-regulated OTC market, while allowing their issuers to cross-list on neighbouring exchanges. New markets could rent/buy capacity on the market infrastructure of neighbouring exchanges without having to invest in expensive technical platforms.

The committees could also determine the level of integration to adopt and the level of control each market would retain. They should also establish the level of control of national market regulators and minimum benchmarks and standards in each subregion. They should develop common training standards and standards of professional conduct for market professionals as well as investor education programmes and facilities. The committees should provide a framework for streamlining licensing requirements for market operators and improve information sharing among regulators.

For the market effectiveness and efficiency, the committees should work with policymakers to remove legal and tax impediments to cross-border capital market activity

An approach toward integration of the financial markets in Africa could begin with the integration of the markets in the subregions

(e.g. exchange control restrictions) and to streamline and simplify cross-border dispute resolution mechanisms, settlement delays and costs (multiple currencies even at the REC level), weaknesses in payment systems and ICTs.

Once the strong subregional financial markets have been well established, the committees could come together and work towards the formation of a continental market as proposed under the Constitutive Act establishing the African Union and the Abuja Treaty. It is important that measurable indicators and time bounds are established jointly between the RECs and the African Union Commission for the creation of a continental financial market. As argued earlier, Africa needs a continent-wide stock market for the mobilization of resources for growth and development. The need to integrate Africa's financial markets into the globalized financial system implies that regional standards should be raised to meet international standards.

7.5 Regional financial institutions in Africa

To support their integration and development agenda, some of the RECs have established institutions to support regional financial cooperation. Regional development banks operate in CEMAC, COMESA, EAC, ECOWAS, UEMOA and UMA (table 7.6).

 Table 7.6

 List of financial institutions in each REC

RECs	Financial institutions			
CEMAC	Commercial banks, development banks, micro-finance establishments, insurance companies, stock exchanges			
COMESA	1) PTA Bank, 2) African Trade Insurance Agency (ATIA), 3) clearing house, 4) ZEPRI			
EAC	1) East African Development Bank 2) Several commercial banks with branches in the three countries			
ECOWAS	1) Central banks, 2) Deposit money banks, 3) Discount Houses, 4) Mortgage Institutions, 5) finance companies, 6) micro finance institutions, 7) foreign exchange bureaus, 8) development banks, 9) insurance companies, 10) cooperative societies and credit unions and 11) stock exchanges			
SADC	1) Central banking institutions (CCBG), 2) development finance institutions (DFI), 3) stock exchanges (COSSE) and insurance and non-banking institutions (CISNA)			
UEMOA	1) Central bank (BCEAO) and development bank (BOAD), 2) commercial banks and financial institutions, 3) Intermediation and management companies, 4) property holding firms, 5) insurance companies, 6) decentralized financial systems and 7) regional solidarity bank in each UEMOA Member State			

Source: ECA

The role and functions played by the financial institutions are: collecting of deposits and granting of loans to individuals and enterprises; transmission of stock exchange

It is important that measurable indicators and time bounds are established jointly between the RECs and the African Union Commission for the creation of a continental financial market

orders and management of interactions between financial institutions through the central bank; financial intermediation on short-term and long-term considerations and receiving public funds. Furthermore, the regional institutions have limited relations with the national institutions (table 7.7), in most cases dealing only through the central banks.

Table 7.7 Relationship between national and regional financial institutions

RECs	Interaction between national and regional financial institutions
COMESA	The PTA Bank has relationships with commercial banks in the region. e.g. co-financing arrangements, floating of local currency bonds. The clearing house also has a close relationship with central banks
EAC	Not much interaction. Basically not serving the same clients
ECOWAS	At UEMOA, national banks are branches of the regional central bank (BCEAO)
SADC	Regional financial institutions are not yet in place
UEMOA	Interaction between financial institutions through the central bank.

Source: ECA

Since 2002, the Maghreb Bank for Investment and External Trade has been operating in the UMA zone. Headquartered in Tunis, the bank supports the economic integration agenda of UMA by financing agricultural and industrial projects in which the member States have a common interest. It provides financing services to facilitate trade, to undertake projects at national and regional level; and to assist poorer members in each region. It also mobilizes investments for other bankable projects and promotes trade and related payment arrangements. In SADC, the South African Development Bank has taken the responsibility for serving the interests of all community members.

The COMESA Clearing House, which was established in 1984, provides foreign exchange support for the facilitation of intra-COMESA trade. The clearing house has been restructured in a number of areas, including: (a) transferring the clearing function to commercial banks, (b) transforming the clearing house into a regional SWIFT centre and a hub for electronic money transfer among regional commercial banks, and (c) putting the new clearing house in charge of providing regional export guarantee against political risk.

The PTA Reinsurance Company (ZEP-RE), which was opened in 1991, provides insurance and re-insurance to investors in the region. The COMESA PTA Bank, a development bank based in Burundi, provides financing for trade and projects at national and regional level in the form of credit, credit guarantee and minority equity participation in joint ventures. The bank also supplements the activities of national development agencies of member States through joint financing operations

The COMESA PTA Bank, a development bank based in Burundi, provides financing for trade and projects at national and regional level in the form of credit. credit quarantee and minority equity participation in joint ventures

and the financing of development projects. Since its operations began, the bank has financed the manufacturing, agribusiness, tourism, mining, infrastructure and energy sectors of the REC.

In order to promote the creation of regional financial institutions, the RECs are making attempts to deregulate the financial environment. Some of the RECs are instituting polices to support their deregulation efforts, as summarized in table 7.8.

In order to promote the creation of regional financial institutions, the RECs are making attempts to deregulate the financial environment

Figure 7.1
Existence of regional policy on financial sector deregulation

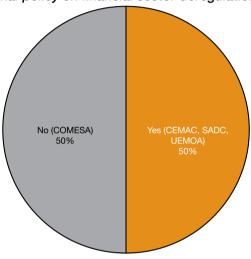


Table 7.8

Regional policy on financial sector deregulation

RECs	Have regional policy	Do not have
COMESA		Plans to have financial system development and stability plan
EAC		Has not progressed to that stage of monetary union
ECOWAS		NA
SADC	 Liberalization of capital markets Liberalization of exchange rates Convertibility of national currencies Liberalization of banking sector and financial institutions 	
UEMOA	The regional policy on financial sector deregulation is aimed at ensuring free movement of capital within the Union, the free provision of financial services to registered institutions on the basis of a uniform regulation and legislation within member States, and at providing even access to resources through the strengthening of market infrastructures.	

The need to integrate local financial markets into the globalized financial system implies that regional standards should be raised to meet international standards

Source: ECA

Some of the measures taken to deregulate the market include the liberalization of capital markets; liberalization of exchange rate controls, convertibility of national currencies and liberalization of national banking laws. With respect to international standards, member States are making efforts to eliminate controls on capital transfer and capital repatriation.

7.6 Conclusion

Development of Africa's capital markets and a deeper degree of financial intermediation are crucial for the mobilization of resources needed to carry out regional integration objectives, particularly in the areas of growth and development. The need to integrate local financial markets into the globalized financial system implies that regional standards should be raised to meet international standards.

African financial markets are attempting to integrate within the continent. However, their integration into the global market is still a distant target. Financial integration in Africa comes mainly through the creation of development banks by the regional economic communities to support regional integration objectives. In general, the macroeconomic and institutional set-up of countries within Africa has not favoured the development of integrated markets. A number of different types of policies can foster integration.

Direct policies such as eliminating controls and impediments to the free mobility of financial capital or creating specific agreements between countries or within regions can serve as a basis for financial integration

Direct policies such as eliminating controls and impediments to the free mobility of financial capital or creating specific agreements between countries or within regions can serve as a basis for financial integration. Types of indirect policies that play an important role for future financial integration include the adoption of international best practices on accounting standards, disclosure of information and tax regimes. Other useful instruments include harmonizing regulations that govern information sharing, and allowing cross-border information sharing. Even if full harmonization of regulations is reached, however, problems with key national institutions and macroeconomic instability can hinder the process of financial integration. Protection of property rights and legal stability must also be safeguarded.

References

African Stock Exchanges Association Year Book 2005.

Buch, C. (2001) "Financial Market Integration in a Monetary Union", Kiel Working Paper n. 1062.

De Bondt, G. (2000), Financial Structure and Monetary Transmission in Europe: A cross-country study, Edward Elgar, Cheltenham.

Dornbusch, R., C. Favero and F. Giavazzi (1998), "Immediate Challenges for the European Central Bank", Economic Policy, 26, 17-64.

Levine, R. (1997), "financial Development and Economic Growth: Views and Agenda", Journal of Economic Literature, 35, 688-726.

Magnusson, M. and B. Wydick (2002), "How Efficient are Africa's Emerging Stock Markets?", The Journal of Development Studies, 38, 141-156.

Rousseau, P. and R. Sylla (2001). «Financial Systems, Economic Growth and Globalization», NBER Working Paper 8323.

United Nations Development Programme (2003) 2003 UNDP African Stock Exchanges Handbook.

World Bank (2002), Capital Market Integration in the East African Community, Washington DC.

The Way Forward



8.1 Introduction

The focus of this chapter is to summarize the main findings of the report, the challenges and the way forward. Monetary and financial integration is an important step toward deeper economic integration. As indicated in previous chapters, there is ample empirical evidence in the literature to show that trade within a community and outside increases significantly when a regional bloc attains an advanced form of monetary cooperation (such as a common currency). Furthermore, the literature also shows that if a regional economic community is able to achieve a common market, then stronger monetary integration is needed to strengthen that market. In addition, advanced form of monetary and financial cooperation improves overall economic performance and per capita output in participating countries.

In order to reap the benefits of monetary unions, several African RECs are taking steps towards the formation of such unions. This report has examined progress made by the RECs towards monetary and financial integration in Africa. The analysis was divided in two parts. The first provided theoretical underpinnings for monetary and financial integration, while the second provided progress reports on the performance of the RECs in their move towards monetary and financial integration. In doing so, the report shed light on the progress towards macroeconomic convergence in those RECs that have formally agreed to convergence criteria and the status of capital markets, stock exchanges and investments in Africa. Preceding the two parts was a progress report on regional integration on the continent.

Monetary and financial integration is an important step toward deeper economic integration

8.2 Monetary Cooperation

The success of regional integration hinges on member countries pursuing convergent macroeconomic policies. However, for successful macroeconomic convergence it is essential that, at the minimum, the following conditions should be fulfilled:

Despite the efforts of the RECs in establishing protocols and MOUs for monetary programmes, reality on the ground shows substantial gaps in the implementation of the programmes

- Efficient and non-distortionary markets for products and factors of production, including freer movement of capital and labour;
- A mechanism such as an effective compensatory financing arrangement to
 make the domestic costs of adjustment affordable, has to be in place for
 participating countries to handle the ill-effects of exogenous shocks such as
 adverse weather, terms of trade and external financing shocks;
- Proper timing and sequencing as well as consensus-based choice of a convergence anchor (whether rigid or flexible benchmarks and criteria); and
- Mitigating policies that reduce risks.

However, most of the participating countries of the RECs are not able to attain the conditions suggested above. The assessment carried in the report indicates that most African countries have great difficulties in achieving the desired macroeconomic convergence criteria set by the regional economic communities. In addition, most African countries are registering double-digit inflation and are therefore not able to achieve the desired inflation targets or the desired fiscal targets. This poor performance is partly attributable to negative external shocks, unsustainable budget deficits, lack of reliable statistics and poor growth performance.

8.2.1 Challenges

Despite the efforts of the RECs in establishing protocols and MOUs for monetary programmes, reality on the ground shows substantial gaps in the implementation of the programmes, due to:

- Multiple memberships. Most African countries belong to more than one
 regional economic community. Given the resource constraints faced by many
 countries, the multiple memberships in RECs lead to wasteful duplication.
 REC countries find it difficult to pursue macroeconomic convergence policies because of the variations and conflicting objectives of their monetary
 programmes;
- Slow implementation of monetary programmes. Participating countries have been reluctant to fully implement monetary programmes on a timely basis. This is due in part to countries lacking full information on the net benefits of the programme. In addition, there are minimum consultations within the member countries concerned;
- Divergence in economic policies. Participating countries tend to pursue different economic policies because of the difference in their levels of economic performance. These policy inconsistencies have contributed to the low level of implementation of REC monetary programmes and activities. There have been challenges to integrate regionally where there have been continuously

glaring policy, implementation and information inconsistencies at the national level. There is therefore need for an appropriate policy mix and coordination at the national level that targets low inflation and fiscal discipline;

- *Limited national and regional capacities*. The lack of capacities, mechanisms and resources at the national and regional levels for the effective planning, coordination, implementation and monitoring of monetary programmes has made it difficult to satisfy macroeconomic criteria;
- Lack of mobility of factors of production. Macroeconomic performance stands to benefit from the mobility of factors of production. However, xenophobia has partly hampered labour movement among member countries, while underdeveloped financial markets are responsible for the limited mobility of capital.
- Domestic, regional and international financial and investment constraints. These drawbacks have limited the ability of member States to achieve sound macroeconomic performance. Moreover, considerable resources are needed to plan, coordinate, implement and monitor progress in the implementation of monetary programmes. Compounding the problem is the savings rate of many African countries as well as limited inflow of FDI;
- *Lack of private sector involvement.* The engine of growth in developed countries is the private sector, and its contribution to sustainable economic growth cannot be underestimated. However, in Africa, the participation of the private sector in the formulation of macroeconomic convergence criteria is very limited. In addition, in most African countries, the private sector remains very weak and not well organized; and
- Lack of mechanisms to handle external shocks. African countries are extremely vulnerable to exogenous shocks, including heavy and unsustainable external debt burdens, inadequate and erratic external resource inflows, unfavourable terms of trade shocks as well as adverse weather patterns and natural disasters. These factors make it extremely difficult for countries to meet the set macroeconomic targets. Hence, appropriate mechanisms need to be developed to mitigate these external shocks.

From the above challenges, it could be concluded that, on the whole, Africa's ability to achieve monetary integration remains very difficult. This raises the question of the appropriateness of the convergence criteria for Africa. As argued in the report, macroeconomic convergence mechanisms are needed because the success of regional integration hinges critically on member countries pursuing convergent macroeconomic policies. Misalignments of key macroeconomic variables could hamper the regional integration process. It is therefore imperative that the process of strengthening regional integration should include guidelines for the convergence of macroeco-

As argued in the report. macroeconomic convergence mechanisms are needed because the success of regional integration hinges critically on member countries pursuing convergent macroeconomic policies

nomic and trade policies of the entire regional space so as to strengthen the overall regional integration agenda.

It is important that the macroeconomic convergence criteria established by member States should:

- Ensure that only member States that have economic conditions that are favourable to the achievement of the set targets participate;
- Ensure that the countries meet the convergence targets at all times;
- Be coherent and holistic, drawing on the development objectives of the RECs and member States;
- Be simple, transparent and consistent with broad, national and regional objectives; and
- Be satisfied and meet on the basis of current data.

However, for the coordination of macroeconomic policies in the RECs to succeed, African countries should have a clear sense of their own development objectives and strategies and be fully committed to the pursuit of these goals. Member States should muster the political will to mainstream regional monetary and macroeconomic objectives into their national development strategies.

It is also essential to strengthen and consolidate Africa's financial markets and institutions, in order to mobilize the financial resources needed to finance integration efforts such as infrastructure projects

8.3 Financial cooperation

It is also essential to strengthen and consolidate Africa's financial markets and institutions, in order to mobilize the financial resources needed to finance integration efforts such as infrastructure projects. These institutions also enhance the payment system and help facilitate trade within and outside the regional communities. In addition to improving the financial markets, efforts must be made to encourage the RECs to establish development banks in their regions, in order to assist member countries in financing infrastructure projects. However, the integration of financial markets in Africa requires the harmonization of national policies and procedures governing these markets and institutions across member countries.

As noted in the previous chapters, stronger financial markets contribute significantly to economic growth by promoting domestic savings and increasing the quantity and quality of investments. The markets also act as vehicles for wealth generation, as individuals are able to invest in additional financial instruments according to their risk preferences and liquidity needs, and help boost the national savings rate. Firms also use the financial markets to raise capital at lower cost. In countries that have advanced markets, firms use the markets more than the banks for financing and therefore reduce the risk of a credit crunch. Hence, sound functioning financial

markets influence economic growth by boosting savings amongst individuals and financing the activities of firms.

Financial markets also ensure the efficient allocation of resources, with poor-performing firms generally under the threat of a takeover. Such perceived threat provides an incentive for management of the poor-performing firm to try to maximize the value of the firm to fend off any attempts by another group of investors to take control of the firm. In this regard, financial markets foster corporate discipline and ensure the efficient allocation of productive assets and the efficient use of managerial resources.

Financial markets also ensure the best use of information at low cost, through the generation and dissemination of firm-specific information as revealed in stock prices. Efficiency of the markets ensures that market prices of firms reflect all available information, thus reducing the costs of acquiring market information and thereby improving resource allocation. The markets also assist investors in making better investment decisions, thereby ensuring better allocation of funds among productive firms and boosting economic growth.

Africa is making progress in the development of financial markets. Before the 1990s, Africa had only five stock markets compared to 19 today. With the exception of South Africa, most African stock markets are very small. However, total market capitalization increased from \$US113,423 million to \$US244,672 million between 1992 and 2002.

Despite the rapid growth in the development of stock markets, most of the markets are not very deep and therefore not mature, with very few stocks traded and accounting for a large part of the total market capitalization. The average number of listed companies on sub-Saharan African markets excluding South Africa is 39. In addition, the markets suffer from low liquidity, making it extremely difficult to support a local market with its own trading system, market analysis or brokers, because the business volume would simply be too low.

The markets also face serious informational and disclosure deficiencies. Furthermore, supervision by regulatory authorities is often far from adequate. Compared to advanced markets that have electronic trading, most of the markets in Africa are paper-based, trading manually and using manual clearing and settlement systems. Furthermore, most of the markets do not have central depository systems and restrict foreign participation.

Despite these challenges, African stock markets continue to perform remarkably well in terms of return on investment. The markets in Ghana, Uganda, Kenya, Egypt, Mauritius and Nigeria were among the best performers in 2004.

Despite the rapid growth in the development of stock markets. most of the markets are not very deep and therefore not mature, with very few stocks traded and accounting for a large part of the total market capitalization

Despite the challenges they face, the markets have financed a number of companies, thereby contributing to economic growth

Most of the financial markets are not integrated. At the moment, the only regional stock exchange in Africa is the BRVM, which is located in Côte d'Ivoire and serves eight French-speaking West African countries of UEMOA. The BRVM was created in 1998 and has branches in each UEMOA country. The bourse is mainly owned by the private sector, but the member States own 13.4 per cent of the capital. Trading on the BVRM is computerized with satellite links. Brokers and agents can transmit orders and consult and edit quotation results to the central site in Abidjan while in the national branch offices. All trades are cleared and settled at the Depositaire Central/Banque de Reglement SA.

There have been other initiatives undertaken to integrate the markets in Africa. The Southern African Development Community (SADC) has created a Committee of SADC Stock Exchanges (COSSE), whose responsibility is to develop a framework for an integrated real-time network of securities markets within the community. The COSSE requires each national market to automate its trading of financial instruments through a single and accessible regional system. It also encourages the harmonization of listing rules across the region. The Johannesburg Stock Exchange (JSE) and the Namibian Stock Exchange (NSX) have also advanced further in harmonizing their systems, with the NSX using the trading and settlement systems of the JSE. The two exchanges are also linked on the regulatory side; the NSX rules and requirements are based on those of the JSE, and the majority of shares listed on Namibia Stock Exchange (NSX) are also listed on the JSE.

Bilateral Memorandums of Understanding (MOUs) have been reached between the JSE and each of the markets in Egypt, Ghana, Kenya, Nigeria and Uganda. The Nairobi Stock Exchange has also signed MOUs with Nigeria and Ghana. South Africa is in discussions with a number of African countries to create a virtual African exchange for the trading of shares of large African companies. The market would enable qualifying companies to simultaneously list on all member exchanges.

Under the framework of the MOU of the East African member States Securities Regulatory Authority, the East Africa Community (EAC) is promoting the integration of its markets, and member States are currently harmonizing their rules and regulations in accordance with those of the Nairobi Stock Exchange.

8.3.1 Conclusion

As discussed earlier, African stock markets are small, illiquid, with infrastructural bottlenecks and weak regulatory institutions. Despite the challenges they face, the markets have financed a number of companies, thereby contributing to economic growth. It is therefore imperative that the RECs and national policymakers design

policies that would support the deepening of the markets in Africa. Some of the suggestions proposed in the literature include:

- Need to promote a stable macroeconomic environment: A stable macroeconomic environment is needed for the development and strengthening of the stock market in Africa. Increased volatility of macroeconomic variables worsens the problem of informational asymmetries and becomes a source of vulnerability for the financial markets. Low and predictable rates of inflation are more likely to contribute to stock market development and economic growth. Both domestic and foreign investors are reluctant to invest in financial markets where there are expectations of high inflation. Sound macroeconomic environments and sufficiently high income levels, including GDP per capita, domestic savings, and domestic investments, are key factors for the promotion and development of financial markets.
- **Need to increase automation**: By increasing the level of automation, financial markets in Africa would be more efficient, increasing their trading activities as well as their liquidity. Automation would cut down the cost of trading and also speed up operations and activities on the markets. Automation requires that stock exchanges adopt a central depository system (CDS), which would eliminate risks associated with the loss, mutilation and theft of certificates and paper-based securities. CDS systems also reduce errors and delays associated with paper-based systems.
- **Demutualization of exchanges:** All financial markets would have to be demutualized. This means that the legal status, structure and governance of stock exchanges would be changed from non-profit to profit-making ventures. The process of demutualization involves a change in ownership structure and a change in legal and organizational form. With regards to the ownership structure, members' seats on the exchange are monetized and values assigned per seat. Members then either keep or sell shares. Ownership restrictions are placed (for example, 5-10 per cent non-controlling stakes) on individuals and groups to prevent potential takeovers by other exchanges. The legal and organizational change normally entails the exchange becoming a typical profit- making company with limited liabilities and abiding by company laws. Demutualization of exchanges, which started in the 1990s, encourages competition among exchanges; increases capital infusion; promotes good corporate governance; opens up ownership to public investors; and eliminates government interference in the operation of exchanges.
- Integration of African financial markets: In order to overcome the challenges of fragmented markets, African financial markets need to be fully integrated. Merging stock exchanges (the extreme form of integration) would increase the volume of trade. An integrated regional stock exchange in Africa will be a powerful source and driver of capital flows to Africa.

An integrated regional stock exchange in Africa will be a powerful source and driver of capital flows to Africa

Integration of the markets would promote cost efficiency and improve liquidity and price discovery.
Integrated markets would help assemble the economic and human capital skills of various markets in one single market

Such an exchange will also, if well structured, solve the current problems of illiquidity, small size and fragmentation. Integration of the markets would promote cost efficiency and improve liquidity and price discovery. Integrated markets would help assemble the economic and human capital skills of various markets in one single market. Moreover, integration enhances synergies in risk management as trading, operations clearing and settlement systems are harmonized. In addition, integration improves surveillance and risk management, by enabling access to information in all market segments. A prerequisite for a successful integration of the markets is that trading laws, accounting standards, legislations, rules, listings, trading days, settlement, and reporting standards would all have to be harmonized. Furthermore, participating countries should ensure currency convertibility, because an integrated exchange with a multiplicity of inconvertible currencies only compounds the administrative costs which integration itself seeks to remove.

- Need to promote institutional investors: It is important that institutional investors are encouraged to participate in the financial markets in Africa, because they are effective in promoting efficient market practices and financial innovation. As well, this group of investors encourages greater transparency and integrity in both primary and secondary markets, seeks lower transaction costs, and promotes efficient trading and settlement facilities. Pension funds, insurance houses and other institutional investors can therefore act as a countervailing force to commercial and investment banks as well as other market intermediaries, forcing them to be more competitive and efficient.
- Need to have sound regulation and supervision: Regulation and supervision are typically aimed at preventing exploitation by some investors. Protecting the rights of investors helps eliminate the problem of information asymmetry. This helps in making optimal decisions, increasing access to external finance and results in productive investment and eventually higher firm growth. Policymakers would have to provide well-structured and clear rules within an efficient judicial system that allows for the respect of contracts and eliminates expropriation risk. Regular disclosure, transparency and enforcement of the law underpin the regulation and supervision of the markets. Important disclosure requirements include relevant information with regards to transactions, accounting and the identity of ultimate beneficial owners. The presence of strong corporate governance mechanisms also helps boost investor confidence in regulatory issues. Thus, regulation and supervision of the financial system play a great role in determining both its stability and the extent of services provided.
- **Need to encourage foreign participation**: Private capital flows such as foreign direct investment, remittances and portfolio investment are crucial for

the development of financial markets in Africa. African countries need to do more to attract capital flows, especially portfolio flows. Africa would have to increase its efforts to create an enabling environment with low costs of doing business, property rights protection, effective regulations, legal institutions and liberalization of capital accounts. Furthermore, African countries should engage in sustainable economic growth and establish quality public institutions and infrastructure, trade liberalization and efficient capital markets, so as to attract increased capital flows. Capital account restrictions need to be removed in order to attract cross-border investments. However, capital account liberalization should be preceded by trade liberalization and domestic financial liberalization to minimize financial market risks.

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Regional integration remains a viable strategy for Africa to achieve sustainable economic growth and development, reduce poverty and participate effectively in the globalization process. This vision is embodied in the Abuja Treaty Establishing the African Economic Community, and is re-emphasised in the Constitutive Act of the African Union. These blueprints include a roadmap for a monetary union and the harmonization and integration of financial systems and markets across the continent. Achievement of these goals requires a climate of macroeconomic stability, monetary and financial integration and effective trade and economic relations.

Monetary unification and financial integration overcome problems associated with multiple and non-convertible currencies and with underdeveloped capital and financial markets and would also propel the continent towards establishment of the envisioned African Monetary Union. Several Regional Economic Communities (RECs) have adopted common macroeconomic policy frameworks and convergence targets, underpinned by monetary and financial cooperation.

As follow-up to ARIA-II, ARIA-III focuses on gauging the performance of African RECs in the areas of macroeconomic convergence, monetary cooperation, and financial integration. The report finds that although there are some successes, African countries are still experiencing enormous difficulties in achieving the macroeconomic convergence criteria set by their RECs, such as targets on inflation, debt-to-GDP ratio, and deficit-to-GDP ratio. The assessment also indicates that despite some financial developments, African financial market activities remain shallow, with capital markets characterized by low capitalization and liquidity.

The report also provides policymakers with recommendations on how to deepen monetary and financial integration on the continent and create an enabling macroeconomic environment for the continent.



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