Towards a Single African Currency

Vers la Création d'une Monnaie Unique Africaine

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TOWARDS SINGLE AFRICAN CURRENCY:
A Necessity of Prior Convergence of African Regional Economies

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Contents

EXECUTIVE SUMMARY AND RECOMMENDATIONS

About half a century ago, African leaders established the Organization of African Unity (OAU) to promote socio-economic structures aimed at improving the welfare of the citizens of member states and general integration of the continent. Many institutions were established on this vision, but owing to ideological differences and convoluted financial infrastructures, the goals have not materialized. The success of the single European currency, Euro, which has become very central to many recent economic progress in Europe by offering more efficient means of transacting businesses and using the human and institutional capabilities of the continent to foster more prosperity has shown the power of integrated monetary structure in a globalize world (Ekekwe, 2008). As the world moves towards knowledge-based economic structures and information societies, which comprise networks of individuals, firms and nations that are linked electronically and in interdependent global relationships, the power of a single African currency has become very important. A single African currency, if realized, would radically redefine Africa's social, political and economic landscape and position the continent on a solid footing to tackle the enormous challenges of the 21st century (Ekekwe, 2002).

Since the inception of OAU, the founding fathers of many African nations have believed on a more united African continent. The idea of a single African currency became clearer when OAU member states in 2001 agreed to transform the intergovernmental organization into the African Union (AU) towards positioning the continent for the challenges of globalization (Masson, 2004) through better economic policies, growth and good governance. AU, which has become the successor of the OAU, has retained the original vision of the founders of OAU- a greater regional integration in both political and economic affairs (Siddiqi, 2006). Shortly afterwards, in August 2003, the Association of African Central Bank Governors agreed to develop plans to establish a common central bank that would manage a single continental currency

by 2021 (Masson, 2004). This plan is poised to offer an African market with no internal frontiers in which the free movement of goods, persons, services and capital is ensured. This push for a single currency stands for an Africa of unity, integration and strength. However, there is a huge possibility of potential failure of a single currency if implemented haphazardly with enormous consequences to not only Africa's global image but also for individual countries' economies and, ultimately, the people.

A single African currency has many promises in terms of boosting trade across the continent and benefits for all member states through synergy and symbiosis. It has the capacity to increase economic cooperation among member AU nations and stimulate faster development efforts across the continent (Debrun, 2002). Many African nations are still oriented in trade toward former colonizers in Europe than immediate neighbors and across African capitals; there is an understanding that currency unification could be a key catalyst to transforming the continent. The major challenge is how the continent could develop the plan to have this unified monetary union considering the lopsided economic structures among the nations, which can affect response strategy during economic crises. This is fundamental as if major regional economic powers stay out of this unification for fear of being net losers, it could have adverse effects to realizing the continental goal. According to Siddiqi (2006), the technicalities of stronger monetary integration, fixed exchange rates, central control over monetary/fiscal policies and the eventual creation of a single African Central Bank are important issues that require strong institutions at both domestic and regional levels.

To date, insufficient research has been available on the feasibility and desirability of a united African currency union. Paul Masson and Catherine Pattillo [2004, 2006] show that not all the five regional economic blocs would gain on average from a single currency. COMESA with heavy funding needs in proportion to their GDP will benefit while on average, SADC region boasting better fiscal policies would lose. Within SADC, South Africa (the largest economy), would face large welfare losses. Intra-SADC trade accounts for 50% of its trade (exports) in

Africa with AMU, COMESA, ECCAS and ECOWAS having respectively 68%, 42%, 39% and 67% intra-trade of its export African trade. For all the five regions, the total intra-regional trade is extremely low at less than 11% of their total and undiversified; suggesting that transaction costs from a single regional currency may be limited. However, we must note that currency convertibility problems, which would be eliminated with a single currency, are some issues, which contribute to this low number. At intra-African trade level, the number improves, especially for SADC, which tops 20%. ECCAS records the lowest intra-African trade at 4.8%. There are so many factors, which accounts for this trade disparity within the regions. It could be poor transport and communication structures in Africa, which limit more intra-regional and intra-continental trades and increase business costs among members.

Because membership of regional union in Africa appears to be automatic, there is a potential risk of low performing nations affecting others in the region. Yet, Africa cannot afford to leave some of the nations behind. To overcome this challenge, AU could create Regional Monetary Zones (RMZ) in each of the regions and then assist RECs to spell out criteria that countries must meet before they can become members. An alternative to this may be supportive expansion of the existing monetary unions-CMA, CAEMC and WAEMU.

Though data shows only marginal gains for intra-African trade, at least in the short-run, the long-term benefits are huge. The continent has to approach the adoption of the single currency cautiously. The continent should first focus on strengthening the regional economic communities for better currency union and financial integration. This will expand the levels of intra-trade in the blocs, enhance labour mobility and harmonize wage and price. A common regional currency under regional central banks would then emerge. Under this, the regions would be supported to diversify their industrial structures to enable more homogenous trade shocks, stabilize inflation and interest rates. Africa Union should ensure that NEPAD (New Partnership for Africa's Development) delivers on its peer-review mechanism towards economic growth, good

governance and strong fiscal policies across all economic regions. Finally, these regional currencies will converge to a single African currency to be managed by a continent-wide supranational central bank. This strategy will reduce drastic disruptions on African markets and their economic ties.

INTRODUCTION

About half a century ago, African leaders established the Organization of African Unity (OAU) to promote socio-economic structures aimed at improving the welfare of the citizens of member states and general integration of the continent. Many institutions were established on this vision, but owing to ideological differences and convoluted financial infrastructures, the goals have not materialized. The success of the single European currency, Euro, which has become very central to many recent economic progress in Europe by offering more efficient means of transacting businesses and using the human and institutional capabilities of the continent to foster more prosperity has shown the power of integrated monetary structure in a globalize world (Ekekwe, 2008). As the world moves towards knowledge-based economic structures and information societies, which comprise networks of individuals, firms and nations that are linked electronically and in interdependent global relationships, the power of a single African currency has become very important. A single African currency, if realized, would radically redefine Africa's social, political and economic landscape and position the continent on a solid footing to tackle the enormous challenges of the 21st century (Ekekwe, 2002).

Since the inception of OAU, the founding fathers of many African nations have believed on a more united African continent. The idea of a single African currency became clearer when OAU member states in 2001 agreed to transform the intergovernmental organization into the African Union (AU) towards positioning the continent for the challenges of globalization (Masson, 2004) through better economic policies, growth and good governance. AU, which has become the successor of the OAU, has retained the original vision of the founders of OAU- a greater regional integration in both political and economic affairs (Siddiqi,

2006). Shortly afterwards, in August 2003, the Association of African Central Bank Governors agreed to develop plans to establish a common central bank that would manage a single continental currency by 2021 (Masson, 2004). This plan is poised to offer an African market with no internal frontiers in which the free movement of goods, persons, services and capital is ensured. This push for a single currency stands for an Africa of unity, integration and strength. However, there is a huge possibility of potential failure of a single currency if implemented haphazardly with enormous consequences to not only Africa's global image but also for individual countries' economies and, ultimately, the people.

A single African currency has many promises in terms of boosting trade across the continent and benefits for all member states through synergy and symbiosis. It has the capacity to increase economic cooperation among member AU nations and stimulate faster development efforts across the continent (Debrun, 2002). Many African nations are still oriented in trade toward former colonizers in Europe than immediate neighbors and across African capitals, there is an understanding that currency unification could be a key catalyst to transforming the continent. The major challenge is how the continent could develop the plan to have this unified monetary union considering the lopsided economic structures among the nations, which can affect response strategy during economic crises. This is fundamental as if major regional economic powers stay out of this unification for fear of being net losers, it could have adverse effects to realizing the continental goal. According to Siddiqi (2006), the technicalities of stronger monetary integration, fixed exchange rates, central control over monetary/fiscal policies and the eventual creation of a single African Central Bank are important issues that require strong institutions at both domestic and regional levels.

In the continent, there exist low institutional capacities in nearly all the regional economic communities with obstacles to realizing economic and monetary integrations. Excluding the franc zone, many of the sovereign central banks (except the South African Reserve Bank and the Bank of Botswana) are not independent, and several Anglophone countries have often suffered from spiraling inflation because the central banks are politically forced to finance budget deficits and annual subsidies paid to parastatals. Independence in monetary policies, which offers the flexibilities to adjust exchange rates to handle inflation by member states to overcome both endogenous and exogenous shocks, would be taken over by a common central bank. This new bank will then have to coordinate fiscal policies in member states and act directly to influence matters of political sovereignty and control over taxation and public spending (Siddiqi, 2006). Available data shows that many African economic regions as well as the nations within them are not ready for this central control.

THE BENEFITS OF A SINGLE AFRICAN CURRENCY

First, let us examine briefly some of the benefits of a single African currency:

A wider regional integration could help Africa in negotiating favourable trading terms either bilaterally (with the US and the EU) or globally (the World Trade Organization context) (Masson, 2004). This integration offers a broader opportunity for African producers, traders, and consumers within a globalizing world, which favors larger trading blocs, to compete effectively for inward investment and foreign trade.

A bigger African market under one currency could stimulate more foreign direct investments (FDI) in Africa. Over the years, many African economies have been unable to attract them due to the size of their economies. In few cases, where FDI exists, they are largely in mineral mining and petroleum. A single African market could open the continent to FDI opportunities in the areas of semiconductors, nanotechnology, and robotics, among others. More FDI will spur industrializations across Africa, as more transnational corporations will seek more business opportunities in a larger homogenous African market that offers scope for economies of scale and production efficiency.

Under a unification currency, regional nations could benefit by pooling resources and enjoy the economies of scale and

better market access negotiated under better terms. This can also improve regional productivity through competition as well as help diversify production and exports. Coordinated budgetary rules within the union will ensure that excessive budget deficits are reduced in member states as that can undermine the region's exchange rate stability.

Member states of AU will benefit from lower transaction costs and stable exchange rate if one currency is adopted. The cost associated with currency conversions, which in many cases are hedged to the US dollar, will be eliminated within the continent. This will improve financial efficiency, reduce transaction time, save money as well as make goods and services pricing more transparent. It will promote intra-community trade and makes business-decision making simpler by removing the constraints of currency conversion and exchange rate volatility. Elimination of exchange risks could stimulate cross-border trade and investments with improved cost-efficient payments and clearing systems in the banking sectors. However, there is cost associated with loss of national autonomy over macroeconomic policy since member states must give up vital adjustment instrument for balance of payments as option of currency devaluation or revaluation is removed from individual members to a supranational central bank that will oversee major aspects of fiscal and monetary policies like interest and exchange rates.

Jeffrey Frankel and Andrew Rose (2000) quantifying the impacts of common currencies on trade and income for more than 200 nations and dependencies noticed that belonging to a currency union/board increases trade three times for the members than it would be if using different currencies. A single currency within a region facilitates a better promotion of trade and enhances economic growth (Collier, 1991).

A single currency could offer African nations to use productivity and better economic strategies to manage chronic budget deficits thereby curtailing inflation since the option of printing money will be seriously downplayed among member nations. Also, a unification currency will improve fiscal and monetary cooperation among member states. This has the benefit of long-term macroeconomic

stability as a common monetary union and central bank can offer more reliable fiscal control mechanisms and anti-inflationary measures more efficiently.

Africa has lots to benefit by a single currency provided that adequate measures are taken to implement it effectively. Single currency could become an engine for peer-coopetition and reforms in which nations will cooperatively compete and consequently improve. This improvement could come through fiscal prudence that would engineer a better macroeconomic stability, which will help elevate member states credibility internationally. Through peer-induced efficient allocation of resources, economic policies that stimulate growth and job creation, higher productivity through business competitiveness, as well as higher pricing transparency across regions, simplified and cheaper business costs, Africa will be well positioned to become the next hub for global outsourcing owing to its abundant raw materials and cheap labor. With good jobs and higher trade volume in the continent, member states will witness improved consumer welfare, stronger political and mutual security ties.

Despite these enormous benefits of regional integration and a potential single currency in Africa, there are many challenges, which must be overcome by AU given existing political and economic weaknesses in the continent and varying levels of development (Madyo, 2008). A single currency will not just solve all of Africa's problems; African has one of most extensive currency unions, the CFA franc zone and yet Francophone Africa is an "undertrader" (Masson, 2006). Take for example, the Common Market for Eastern and Southern Africa (COMESA), with has varied fiscal requirements and trade stocks, less significant central nation and weak trade links among members. A welfare analysis suggests that there would be many countries that would lose from a common currency even with a doubling of trade (Table 1). When the same analysis was applied on Economic Community of West African States (ECOWAS) countries with dominant Nigeria with its large size and different terms of trade stocks (oil exporter) and fiscal indiscipline, some nations have net losses even at doubling trade (see Table 2) because many of the nations have different

economic structures. These varying asymmetric shocks are some of the major challenges affecting regional integration and must be managed before a single continental currency.

Table 1 COMESA: Net Welfare Gains from Regional Currency (Source: Masson, 2006)

		Welfare gain/loss	
	GDP share	with no trade expansion	with trade doubling
Angola	0.0465	0.1893	0.1973
DR Congo	0.0382	0.1303	0.1443
Egypt	0.5273	0.0038	0.0236
Ethiopia	0.0418	0.0980	0.1136
Kenya	0.0681	-0.0086	0.0117
Madagascar	0.0245	-0.0313	-0.0102
Malawi	0.0129	0.0581	0.0756
Mauritius	0.0279	-0.2191	-0.1920
Namibia	0.0234	-0.1084	-0.0846
Seychelles	0.0039	0.2572	0.2578
Sudan	0.0644	0.0494	0.0673
Swaziland	0.0090	-0.1259	-0.1015
Uganda	0.0416	-0.0505	-0.0287
Zambia	0.0222	0.0326	0.0511
Zimbabwe	0.0485	0.0665	0.0837

Table 2 ECOWAS: Net Welfare Gains from Regional Currency (Source: Masson, 2006)

		Welfare gain/loss	
	GDP share	with no trade expansion	with trade doubling
WAEMU members		Relative to existing WAEMU	
Benin	0.0340	-0.0671	-0.0622
Burkina Faso	0.0406	-0.0272	-0.0234
Cote d'Ivoire	0.1706	-0.0991	-0.0934
Mali	0.0407	-0.0368	-0.0327
Niger	0.0301	-0.0478	-0.0434
Senegal	0.0749	-0.1023	-0.0965
Togo	0.0215	-0.0645	-0.0596
Non-WAEMU Countries Relative to independent currencies			
Gambia	0.0061	-0.0270	-0.0210
Ghana	0.1078	0.0363	0.0380
Guinea	0.0597	-0.0405	-0.0320
Nigeria	0.4037	0.0481	0.0468
Sierra Leone	0.0104	0.0478	0.0501

Though there is a theoretical possibility of member states revenue loss after integration, Africa does not seem to have that problem owing to very low existing intra-community trading across the regions. However, these losses must be quantified and plans developed to recoup them through more economic growth and trade linearization that integration offers. The continent must also work to overcome many forms of barriers that affect trade- an effective tool of regional economic integration. Efforts must push towards improving infrastructure, diversifying the economies away from minerals and hydrocarbons, higher industrialization, promoting good governance, improving and harmonizing policies, and addressing resources inadequacy, etc (Madyo, 2008**).** The key point is that African REC (regional economic community) must systematically and strategically approach all the options, learn together and continuously improve.

STRENGTHENING AFRICAN REGIONAL ECONOMIC COMMUNITIES

The success of a unification currency in Africa will depend largely on the abilities of AU to develop and strengthen monetary unions in the five existing regional economic communities of Arab Monetary Union (AMU), Common Market for Eastern and Southern Africa (COMESA), Economic Community of Central African States (ECCAS), Economic Community of West African States (ECOWAS) and Southern African Development Community (SADC). Owing to the existing political and economic weaknesses

in terms of trade, human and economic infrastructure, and poverty, regional economic integration looks challenging. A successful regional integration is a necessary precedent to an integrated Africa under one monetary union. The challenges of expanding markets and diversifying exports would be better served under a well-managed single currency. From banking to energy, a single currency will facilitate mutual trade and business climate and reduce some of the barriers, which have impeded some African nations into playing at the global level. This is because a single currency could leverage some African nations into better international trade positions than what their sovereign currency presently offers.

For the single currency to succeed, the regional communities must each develop a strong monetary union in their respective regions. This is very important as Africa does not have the infrastructural capabilities to cement a single monetary at the continental level without first developing the regional monetary unions. Central to this is the need for regional nations to have stable macro-economic policies. Each regional community must work to establish a strong regional market with zero tariffs and non-tariff barriers, a common market, including free movement of labour and capital and a single currency and central bank. For this to succeed the nations must agree on parameters and as in the European Union, disputes and non-compliance would be matters for a regional court with hefty fines for governments who fail to adhere (Siddiqi, 2006). Nonetheless, Africa is not Europe and it has to be extremely selective in choosing the European ideas it would like to replicate. Africa's major goals towards a single currency would be to improve economic growth and lower inflation while overcoming poor infrastructure and low investment. As evident in EU, stronger regional nations like Nigeria (in ECOWAS) and South Africa (in SADC), which are economically stronger than many in their regions must have the capacity to carry the weaker ones since monetary and fiscal decisions would affect all the member states. Implementing such plans at the continental level without first trying their effects at the regional level would be catastrophic. Unlike in Europe where many of the economies are stable, Africa has serious economic challenges, which could make managing varying

economic gaps difficult. A typical example is how AU will react to Zimbabwean economic crises considering that many of the member states are struggling. Tackling the Zimbabwean problem, for example, at SADC level and stabilizing the regional markets must come first before a single African currency.

Stabilizing the REC and then merging them together offer a better paradigm than introducing a single currency continent-wide immediately. This will reduce market disruption, which has a potential impact of weakening African standing in the world. A poorly managed monetary union with rapidly depreciating currency could seriously harm the continent and diminish the economic developments of member states. Also, member states would face tougher challenges at reacting to asymmetric shocks since flexibility at state level to overcoming economic problems have been given up for a common monetary union at the continental level. That is why a regional experiment will offer the opportunities to appropriately evaluate and understand the best lines of response to the challenges.

Africa Union must not copy the EU model verbatim since there are many disparities between the nations in these two continents. The EU nations have advanced in the deployment of information and communication technologies with better transportation links enabling them to reduce business costs and maximize the benefits of economies of scale. Also, EU has cooperated for more than half a century and these nations have stabled fiscal policies with credible monetary institutions. On the other hand, Africa regions lack good transportation and communication networks. So while the unified monetary union could offer a vista of low transaction costs, the other benefits arising from economies of scale may not be attainable. Many African economies are not yet knowledge economies (Ekekwe, 2008), and as such are affected by trade shocks in different ways. Owing to the specialized individual market and highly economically diversified exports, the economies of member states do not move alike and this could be a potential issue with a united monetary union. Some states would react differently seasonally and AU must have solutions to curtain the disruptions that can emanate from this. An example is

in West Africa, where Nigeria's oil-based economy differs markedly from its neighbors, which export non-fuel primary commodities (notably cocoa, cotton and gold) and are, therefore subject to different price adjustments (Siddiqi, 2006). In this case, convergence of their national policies and harmonization of banking regulations and institutions would become crucial. Even at regional levels, nothing demonstrates that there are mechanisms and systems, which can manage these shocks for economic stability and prosperity. The best the AU can do is to continue to strengthen regional fiscal transfers and afterwards develop a continental level fiscal homogeneity.

Since membership of regional union in Africa appears to be automatic, there is a potential risk of low performing nations affecting others in the region. Yet, Africa cannot afford to leave some of the nations behind. To overcome this challenge, AU could create Regional Monetary Zones (RMZ) in each of the regions and then assist RECs to spell out criteria that countries must met before they can become members. An alternative to this may be supportive expansion of the existing monetary unions-Common Monetary Area (CMA), Economic and Monetary Community for Central Africa (CAEMC), and West Africa Economic and Monetary Union (WAEMU). Cautionary, selective and expansive strategy, similar to EU model, is needed and membership criteria well spelt out. These criteria should be non-negotiable and ensure that member states harmonize their policies including commitment and adherence to the aims of a political, economic and monetary union before joining the zone. There is a need for more pragmatic and robust agenda than is currently defined in Abuja Treaty and REC agenda must be selective and flexible and hence a need for a review of the Treaty (Madyo, 2008).

It is important that a process to strengthen these regional communities will examine and analyse the key determinants of intra-African trade. While many African nations have significant trade, statistics show that intra-African trade is a small fraction of each nation's total trade and has remained largely constant over many decades (see Table 3). Other policies like infrastructure, ethnic, cultural and linguistic diversify and political structures must be managed

alongside trade policy and currency unification. In the last few years, Africa has made progress in the areas of trade, transport, telecommunications, energy, labour mobility, and peace. Improving growth rates in many of the economies show that. The continent had growth in 2007 (Fig 1) and is expected to continue this trend in future despite the current global economic crises, which can momentarily slow down the world economy. It is evident that insufficient progress in unifying the regional market has affected trade creation and expansion, especially the intra-REC and intra-African trades (Madyo, 2006). Olubomehin and Kwawonishe (2004) noted that lack of export diversification of many Africa nations and the lure to continue to trade with former EU colonial rulers instead of one another accounts for this low result as shown in Table 3.

Table 3 Exports of Regional Economic Communities Averages 1995-2000 (In percent of each REC's total exports) (Source: Masson, 2006)

REC	AMU	COMESA	ECCAS	ECOWAS	SADC	European Union	Rest of World
				Destination of Exports			
AMU	2.74	0.67	0.11	0.45	0.06	71.78	24.19
COMESA	0.77	5.47	0.74	0.19	5.94	41.25	45.64
ECCAS	0.61	0.67	1.89	0.68	0.95	43.76	51.45
ECOWAS	1.01	0.56	1.61	9.08	1.25	37.15	49.34
SADC	0.19	8.28	0.83	0.79	10.28	36.87	42.76

Strengthening the RECs is fundamental owing to varying fiscal disciplines, terms of trade shocks, which would alienate some RECs (especially ECCAS and SADC) in joining a single currency, at least in the short–run. Certainly, if trade should increase, the RECs would benefit, but at the short-run, many could be net losers (see Table 4). This table would certainly improve if Africa invests in infrastructure, stimulate growth, have better fiscal discipline, which will enhance macroeconomic stability and trade, and reduce the barriers to trade liberalization.

Table 4 A Single African Currency: Average Net Welfare Gain Relative to Hypothetical Regional Currencies [10]

REC	No trade expansion	With trade doubling
AMU	-0.0011	0.0104
COMESA	0.0395	0.0484
ECCAS	-0.0128	-0.0012
ECOWAS	0.1125	0.1062
SADC	-0.0739	-0.0778

Fig.1 Regional growth performance 2005-2007 (%)

Figure 1: Regional Growth Performance, 2005-2007 (%)   ■ 2005 ■ 2006 ■ 2007
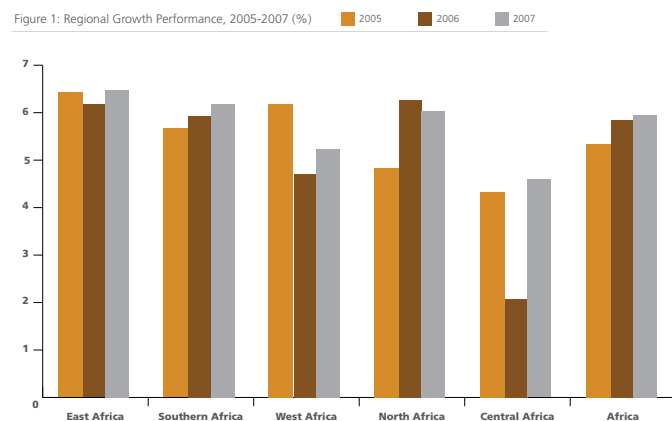
Sources: ECA 2008, Thesis

PRIOR CONVERGENCE OF AFRICAN REGIONAL ECONOMIES

Balassa (1961) had identified and distinguished between five stages or degrees of economic integration: stage 1-free trade area; stage 2-customs union; stage 3-common market; stage 4-economic union; and stage 5-complete regional integration. The final stage involves a monetary union and harmonization of monetary and fiscal policies administered within one supranational authority. Successful regional integrations like EU have followed a model similar to this one. It would be the duties of the AU to assist regions develop strengthened economic blocs. All the RECs need support as nearly all of them are falling behind in terms of the six stages towards the African Economic Community, as set up in Abuja Treaty. The Treaty might need revision based on realities and efforts must be geared to push national governments to demonstrate more support to the Treaty.

The continent must establish, develop and stabilize regional monetary unions and consequently integrate them. Certainly, waiting for the maturity of the regional unions would cause further delay as many of the regional integrations have progressed slowly with poor results. The institutional structures in Africa are poor when compared with EU, which recently achieved a single currency, which AU hopes to realize. The immediate challenge would be establishing a central bank that is more independent and exerts greater discipline over fiscal policies than national central banks in the regions (Masson, 2006). It is evident that nations would not want to join monetary unions where there exist divergent external and asymmetric shocks with key members of the union, which can affect them unfavorably. EU nations have more common shocks than African, which has more specialized economies. The impacts of joining a union with nations which have consistently had undisciplined fiscal policies resulting to inflation in the region is huge. Many of the member nations will benefit, while some will be losers in this union. For some African top currencies like South African rand, a poorly managed single currency with high inflation or unstable exchange rate could be inferior to them and that would harm the progress and development of the nation. At the same time, some nations could see the new currency as improvements in their currencies.

A cursory study of establishment of Euro shows that it took many decades to realize the Treaty of Rome with the goals of regional integration. Painstaking efforts by member states which involved incremental expansion of the communities, consolidating exchange rates margins in the regions, creation of foreign exchange reserves, active coordination of short and medium-term economic and budgetary policies; creation of the European Monetary Cooperation Fund and Regional Development Fund and harmonization

of taxes (Siddiqi , 2006). The Euro was finally introduced on 1 January 1999. It does mean that a single African currency will be extremely challenging if the process of forming the Euro was challenging and time-consuming within a continent with stable political and sound bureaucracies. This EU experiences buttresses the paradigm that regional economic communities should be used as building blocks for a single African currency.

TOWARDS A SINGLE AFRICAN CURRENCY

The AU should focus on building stable and mature monetary unions in the continent's five existing regional communities. These regional trading communities will crystallize into the economic and monetary union, similar to the EU's single marker in 1992. Mergers of the five regional unions and a single African currency under one central bank will follow this. The result will be a single market that will symbolize the achievement of true regional integration.

To date, insufficient research has been available on the feasibility and desirability of a united African currency union. Paul Masson and Catherine Pattillo (2004, 2006) show that not all the five regional economic blocs would gain on average from a single currency. As shown in Table 4, COMESA with heavy funding needs in proportion to their GDP will benefit while on average, SADC region boasting better fiscal policies would loose. Within SADC, South Africa (the largest economy), would face large welfare losses. Intra-SADC trade accounts for 50% of its trade (exports) in Africa (see Table 5). AMU, COMESA, ECCAS and ECOWAS have respectively 68%, 42%, 39% and 67% intra-trade of its export African trade. For all the five regions, the total intra-regional trade is extremely low at less than 11% of their total and undiversified; suggesting that transaction costs from a single regional currency may be limited. However, we must note that currency convertibility problems, which would be eliminated with a single currency, are some issues, which contribute to this low number. At intra-African trade level, the number improves, especially for SADC, which tops 20% (Table 5). ECCAS records the lowest intra-African trade at 4.8%. There are so many factors, which accounts for this trade disparity within the regions. It could be poor transport and communication structures in Africa, which limit more intra-regional and intra-continental trades and increase business costs among members.

Table 5 Exports of Regional Economic Communities Averages 1995-2000 (In percent of each REC's total exports) [Sources: ECA 2004; Masson 2004]]

REC	Intra-trade	Africa	Rest of World
AMU	2.74	4.03	95.97
COMESA	5.47	13.11	86.89
ECCAS	1.89	4.8	95.21
ECOWAS	9.08	13.51	86.49
SADC	10.28	20.37	79.63

Focusing on only Africa, data from Economic Commission for Africa (see Table 6) clearly shows that SADC accounts for the largest intra-REC trade in Africa with 31% for exports and 30% for imports. ECCAS is the smallest with 1.3% for both export and imports. This Table shows the low level of intra-Africa trade and the necessity for integration.

Table 6: Shares of RECs in intra-REC trade, 1994-2000 for Exports/Imports [Source ECA 2004]*

REC	Shares of exports	Shares of imports
AMU	8.6	8.8
COMESA	9.3	9.5
ECCAS	1.3	1.3
ECOWAS	19.8	20.9
SADC	31.1	30.2

The shares percentages are completed by other intergovernmental institutions, which are not recognized by AU as REC.

CONCLUSION

Owing to the success of the Euro, there is a global consensus among economists that regional economic integration offers a good paradigm for responding to the challenges of globalization. For Africa, there are enormous benefits not just for economic growth and development to economically integrate and potentially have one currency. These include viable market size with lower transaction costs, more capacity to negotiate better trade agreements, more FDI, gains of economies of scale, improved productivity through higher competition, regional macroeconomic coordination, export diversification and industrialization.

However, the continent must overcome many years of infrastructural negligence, poor governance and political instability to offer a harmonized and streamlined economic integration that will improve the welfare of the citizens. Member states must show political willingness and sheer commitment to implement agreed plans and programs while ceding some form of economic sovereignty to supranational institutions. If possible, the AU may need a review of the Abuja Treaty towards adopting a more ambitious and robust agenda, which can offer more flexibility and selectivity at the REC level. The continent must also see integration as one of the catalysts among others towards Africa's development, growth and sustainability.

Because membership of regional union in Africa appears to be automatic, there is a potential risk of low performing nations affecting others in the region. Yet, Africa cannot afford to leave some of the nations behind. To overcome this challenge, AU could create Regional Monetary Zones (RMZ) in each of the regions and then assist RECs to spell out criteria that countries must met before they can become members. An alternative to this may be supportive expansion of the existing monetary unions-CMA, CAEMC and WAEMU. From these unions, AU will assist in cautionary, selective and expansive strategy until all the nations are integrated.

Though data shows only marginal gains for intra-African trade, at least at the short-run, the long-term benefits are huge. The continent has to approach the adoption of the single currency cautiously. The continent should first focus on strengthening the regional economic communities for better currency union and financial integration. This will expand the levels of intra-trade in the blocs, enhance labour mobility and harmonize wage and price. A common regional currency under regional central banks would then emerge. Under this, the regions would be supported to diversify their industrial structures to enable more homogenous trade shocks, stabilize inflation and interest rates. Africa Union should ensure that NEPAD (New Partnership for Africa's Development) delivers on its peer-review mechanism towards economic growth, good governance and strong fiscal policies across all economic regions. Finally, these regional currencies will converge to a single African currency to be managed by a continent-wide supranational central bank. This strategy will reduce drastic disruptions on African markets and their economic ties.

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REAL AND NOMINAL CONVERGENCE FOR AFRICA'S COMMON CURRENCY:

Getting the basics right

By Olivia Muza

Contents

EXECUTIVE SUMMARY AND RECOMMENDATIONS

Imagine the same currency being traded from Cape to Cairo if the vision of the African Union is realized! A single currency (unitary or common) for Africa signifies complete monetary union. This comprises one currency, one bank, and one monetary policy. Achieving this similarity across the region involves convergence of the different Regional Economic Communities (RECS): their countries, policies and systems. This further includes political, economic, socio-cultural and technological convergence. In essence the proposal for a single currency for Africa calls for regional harmonization in its profundity and extensiveness. The conditions necessary to have only one common currency are demanding. To start with, the AEC initiative is targeted for 2028, on condition that the currencies of the three main RECS (COMESA in 2018, ECOWAS in 2009 and SADC in 2016) are harmonized.

In 1999, the European Monetary Union (EMU) became the first common currency community when 11 signatories adopted the Euro (Greece followed in 2001). Many studies on monetary union in Europe have underlined a high level of real and nominal convergence as a prerequisite factor, it effects economic and productivity growth (see for example Pacific Basic Notes, 2005; Scnabl and Grauwe, 2004 McDonald and Ricc, 2001; Hein and Truger, 2005; Bora and Boutes, 2007). Convergence is defined as a high degree of homogeneity between economies in what corresponds to principal characteristics. Real convergence is equalization of the standards of living (unemployment rate, the structure of the balance of payments and per capita revenue and government expenditure). On the other hand, nominal convergence expresses the degree of homogeneity of the economies (inflation, type of interest rates, public deficit and exchange rates). Yet, the fulfillment of these variables within the established margins does not imply that a real convergence has occurred, that is to say the one which is reflected through the figures of unemployment per capita revenue and government expenditure. Tensions between real and nominal convergence, low inflation and a stable

nominal exchange rate may arise due to the Balassa-Samuelson effect (B-S effect). On the other hand the adoption of a common currency depends on the nature of shocks across a potential currency area (Hargreaves and Mcdermont, 1999; Horvath and Komarek, 2002). If the shocks are symmetrical the cost of or the need for independent monetary policy control is high. The opposite is equally true if shocks are asymmetrical. This can create big problems for policy makers if they are trying to set a macroeconomic policy that works for both the area affected by the shock as well as the unaffected area.

In the African common currency context, one factor that reduces the likelihood of different shocks is high trade integration among member countries. Other considerations such as high labour mobility and a system of intraregional fiscal transfers also lessen the cost. Four critical considerations include the compatibility of convergence which is measured by the RER (Holden and Mbonigaba, 2005) or GDP per capita, GDP per worker or labour productivity in the manufacturing sector. In particular, the role of the distribution sector in influencing the real exchange sector, the relationship between the exchange and the change in per capita GDP, the relationship in growth terms, the relationship between relative price of non-traded and traded goods.

In the SADC region for instance, macro-economic convergence goals have been set as: inflation rates around 3%, budget deficit over GDP less than 3%, public debt less than 60% and a current account balance over GDP of 9%. However, the existence of a converging group and a non-converging group has derailed the convergence efforts, with the project being dubbed as highly unlikely or an ambitious project. Divergence is perpetrated by: asymmetrical shocks, groupings and intra-regional policy divergence, fluctuations of the real exchange rate and relative prices for each non-CMA country relative to CMA's. Despite all these impediments theoretical and empirical evidence from elsewhere convergence in the region in the region may see the light of the day.

The following are policy recommendations:

i. *The existence of asymmetrical shocks should not deter integration. Countries with a strong B-S effect may receive a waiver.*

ii. *To create a sound and stability oriented environment for sustainable growth and convergence, an open market, stable prices, sound public finances, budgetary and structural policies and reforms and wage developments need to be monitored.*

iii. *Strategic wage setting by non-atomistic unions may render equilibrium employment sensitive to various characteristics of the monetary regime.*

iv. *Promotion of labour and capital mobility.*

v. *Fiscal transfers between member states should be promoted whenever asymmetrical shocks occur. For instance, the fiscal federalism-supranational fiscal mechanism is important to create insurance.*

vi. *Political integration is key to economic integration*

vii. *The views, perceptions of the users of the common should be flighted in all policy documents to keep track of the reality of the situation on the ground.*

viii. *The reality of the socio-economic standing of the various countries of the continent should be closely mirrored in policy particularly the level of poverty in Africa. This is because a common currency will not single-handedly solve Africa's perennial problems deep-rooted in poor governance and corruption.*

INTRODUCTION

Imagine the same currency being traded from Cape to Cairo, if the vision of the 26 member states of the African Economic Community (AEC) is realised! The conditions necessary to have only one common currency (unitary or single) are demanding. However, should African economies necessarily converge before the adoption of a single currency? A single currency for Africa means complete monetary union: one money, one bank and one monetary policy. Achieving this similarity across the region requires convergence of the Regional Economic Communities

(RECs); their countries, policies and systems. This further involves political, economic, socio-cultural and technological cohesion. In essence, the proposal for a single currency for Africa calls for regional harmonisation in its profundity and extensiveness. This paper motivates the need for convergence, harmonisation and cohesion as preconditions for a successful African Monetary Union (AMU).

BACKGROUND TO THE RESURGENCE OF INTEREST IN AN AMU

Africa, a continent of contradictions is at the crossroads economically, politically and demographically. Rich in resources, its people are becoming poorer by the day (Adepoju, 2001). Africa continues to be marginalised by globalisation and liberalisation (increased integration among countries of markets for goods, services and capital, removal of cross-border impediments to the flow of financial services, trade, transportation and communication) even though tariff regimes have been lowered and free trade promoted (Adepoju, 2001).

According to Adepoju (2001), despite the overlapping membership, wavering political support, a poor transport network, border disputes and expulsions, [these] sub regional organisations are crucial for the region's collective integration in the global economy. On a positive note, recently, the approval of expeditious establishment of a Free Trade Area (FTA) encompassing the member/partner states of the RECs with the ultimate goal of establishing a single custom union is one step towards complete liberalisation.[1] The FTA will span 26 countries from the north in Egypt to the south in South Africa. The 26 member countries of the groups have a total population of 527 million people and a gross domestic product (GDP) of US$624bn.[2] Table 1 provides evidence of the RECs membership, regional bloc, demographics and performance as of 2007 statistics.

Table 1: African Economic Community (AEC)

Pillars/ Regional blocs (REC)	Area (km²)	Population	GDP (PPP) ($US)		Member states
			in millions	per capita	
AEC	29,910,442	853,520,010	2,053,706	2,406	53
ECOWAS	5,112,903	251,646,263	342,519	1,361	15
ECCAS	6,667,421	121,245,958	175,928	1,451	11
SADC	9,882,959	233,944,179	737,335	3,152	15
EAC	1,817,945	124,858,568	104,239	1,065	5
COMESA	12,873,957	406,102,471	735,599	1,811	20
IGAD	5,233,604	187,969,775	225,049	1,197	7
Western Sahara	266,000	273,008			N/A
Other African blocs	Area (km²)	Population	GDP (PPP) ($US)		Member states
			in millions	per capita	
CEMAC	3,020,142	34,970,529	85,136	2,435	6
SACU	2,693,418	51,055,878	541,433	10,605	5
UEMOA [3]	3,505,375	80,865,222	101,640	1,257	8
UMA	5,782,140	84,185,073	491,276	5,836	5
GAFTA	5,876,960	166,259,603	635,450	3,822	5

Source: Economy of the African Union[3]

The AU is responding to regional challenges by rationalising and consolidating the RECs, acceleration of the establishment of the institutions provided for in the Constitutive Act, including the African Central Bank, a single African currency, an African Monetary Fund and an African Bank.

The AMU is the culmination of the Pan-Africanism agenda inscribed by Nkwame Nkrumah as far back as 1963.[4] The advantages of a monetary union include stability for internal and international trade, prohibiting predatory speculation on a national currency, and disallowing one nation from artificially manipulating its currency for unfair trade advantage.[5] On the other hand, by delegating authority for monetary policy to a central bank, an individual country's central bank loses independent monetary policy control and therefore, the ability to stabilise the economy when it is hit by a shock (Pacific Basic Notes, 2005).

REGIONAL ECONOMIC COOPERATION AND EMERGING ISSUES

What took us so long? The case of sub-regional divergence and cooperation constraints

The quest for regional liberalisation is hampered by various factors at the inter-regional and intra-regional levels. The following factors are reported to jeopardise economic convergence in the AU (Adepoju, 2001).

- Overlapping membership and institutional arrangements have constrained efforts at integration. Member of states of ECOWAS, COMESA and SADC belong to more than one union with different ideologies, aims and objectives.

- Economic Unions are often dominated by the economies of a single country and movement of persons have been directed to a limited number of countries within these unions-SA and Botswana in SADC, Gabon in UDEAC, Cote de Ivoire in CEAO, Nigerian in ECOWAS and Congo in CEPAL.

- Persistent economic downturn has crippled the ability of states to pursue consistent macro-economic policies, resulting in part to poor funding of these unions.

- The non-convertibility of currencies, especially in ECOWAS, hinders financial and harmonisation of macro economic policies and procedures. Ubiquitous roadblocks across frontiers, especially ECOWAS, lengthy and costly formalities at border posts, and the corruption of officials make intra-community movement a difficult endeavour.

- COMESA's protocol on free movement and SADC's half-hearted attempt to facilitate intra-community movement of nationals are still largely on the drawing board.

- ECOWAS's protocol on Establishment and Residence has not been implemented, in spite of the close link to right of free movement, integration of trade, tariff regimes and promotion of labour mobility in the sub region.

- The weak inter-country infrastructure facility as illustrated in the case of railways which have different track systems as well as rules and regulations that changes across frontiers.

- The share of intra-regional trade is often cited as a measure for success of an integration grouping using, this index, and the share of inter-African trade remains miniscule. 5-8% of export trade over the last two decades compared with over 60% in the EU. Africa's markets are fractured, while fiscal and monetary policies are distorted (Bach, 1999).

- Community citizens have been expelled by most member states in spite of the protocol on free movement of persons.

- Wrong political support, political instability, and the reluctance of countries to surrender national sovereignty to a sub regional organ have rendered the economic groupings ineffective.

At the Conference on Security, Stability, Development and Cooperation in Africa[6], regional divergence was reported to be perpetuated by the following factors:

- Lack of political will
- Lack of adequate financial arrangement
- Absence of key sub-regional/regional promoters
- Weak inter-country infrastructural facilities
- Emergence of economic crisis in the 1980s
- Political instability
- Interstate border disputes and wars

THE CURRENT PLAN: THE AFRICAN UNION-FREE TRADE AGREEMENT (AU-FTA)

The Tripartite Summit, which sat in Kampala recently (25th of October, 2008), proposed an FTA plan to guide and chat the way forward, towards regionalisation. The following strategic plan was agreed:

- A task force comprising members of the three blocs to formulate a strategy for establishing the free trade area within six months

- Tripartite Task Force of the three secretariats to develop a roadmap for the implementation of this merger for consideration at its next meeting

- The summit directed the three blocs to undertake a study incorporating, among other things; the development of a roadmap, within six months. The study would take into account the principle of variable geometry; the legal and institutional framework to underpin the FTA and measures to facilitate the movement of business persons across the RECs. The study will be presented at a Tripartite Council of Ministers for consideration within the next 12 months. The study will determine among

other things the time frame for the establishment of a single FTA encompassing the three RECs.

- Chairpersons of the council of ministers of the three bodies to ensure that joint programmes that enhance co-operation and deepening of co-ordination in industrial and competition policies, financial and payment systems, development of capital markets and commodity exchanges are speeded up. The ministers have also been tasked with ensuring that the secretariats participate, coordinate and harmonise positions on the EPA negotiations and other multilateral negotiations including the WTO Doha negotiations.

- In the area of infrastructure development, the summit launched the joint competition authority (JCA) on air transport liberalisation which will oversee the full implementation of the Yamoussoukro decision on air transport in the three RECs commencing January 2009.

- The three RECs to put in place, within one year; a joint programme for the implementation of a single seamless upper airspace; a joint programme for the implementation of an accelerated, seamless inter-regional ICT broadband infrastructure network.

- A joint programme for implementation of a harmonised policy and regulatory framework that will govern ICT and infrastructural development in the three RECs.

- The summit directed the three blocs to effectively coordinate and harmonise within one year: the regional transport master plans, energy priority investment plans and the energy master plans. It also called for joint financing and implementation mechanisms for infrastructure development within one year.

- With regard to the legal and institutional framework, the summit directed the council of ministers of the three bodies to, within six months, consider and approve an MoU on inter regional cooperation and integration.

- The summit established a Tripartite Summit of Heads of State and/or government which shall sit once every two years.

STAGE AND OVERALL PROGRESS: TOWARDS AN FTA AND A MONETARY UNION

Table 2 and 3, illustrates the progress (stage and overall) of the FTA.

Table 2: Stages progress[7]

| | Regional blocs - pillars of the African Economic Community (AEC)[8] | | | | | | | | | | | |
| | | | | ECCAS | | ECOWAS | | | | SADC | | |
Activity	CEN-SAD	COMESA	EAC	CEMAC	Common	UEMOA	WAMZ	Common	IGAD	SACU	Common	UMA
Free Trade Area	stalled	progress-ing[1]	fully in force	fully in force	proposed for 2007?	fully in force		proposed	stalled	fully in force	proposed for 2008	stalled
Customs Union	stalled	proposed for 2008	fully in force	fully in force	proposed for 2011?	fully in force		proposed for 2007	stalled	fully in force	proposed for 2010	stalled

Source: African Economic Community[9]

Table 3: Overall progress of the Region's blocs[10]

Regional bloc		Free Trade Area	Customs Union	Single Market	Currency Union	Visa-free	Border-less	Political pact	Defence pact
				Economic and monetary union		**Free Travel**			
				Single Market	Currency Union	Visa-free	Border-less	Political pact	Defence pact
AEC		proposed for 2019	proposed for 2019	proposed for 2023	proposed for 2028			proposed for 2028	?
CEN-SAD		proposed for 2010							
COMESA		in force [1]	proposed for 2008	?	proposed for 2018				
EAC		in force	in force	proposed for 2009	proposed for 2009	proposed	?	proposed for 2010	
ECCAS	CEMAC	in force	in force	?	in force				
	Common	proposed for 2007?	proposed for 2011?	proposed	proposed	proposed	?		in force
ECOWAS	UEMOA	in force	in force	?	in force				
	WAMZ			?	proposed for 2009				
	Common	proposed [2]	proposed for 2007	?	proposed	in force [1]	proposed	proposed	in force
IGAD									
SADC	SACU	in force	in force		de-facto in force [1]	?			
	Common [2]	proposed for 2008 [3]	proposed for 2010	proposed for 2015	proposed for 2016				
UMA									

Source: African Economic Community[1]

A critical review of the current state of affairs, the proposed plan of action can provide us with the answer to the critical questions. We seek to understand the nature, timing, mechanism and model of convergence to be adopted in the current case. This is what the next section turns.

THE EUROPEAN MONETARY UNION (EMU) AS A MODEL FOR CONVERGENCE IN AFRICA

According to the EMU model monetary integration is achieved through the introduction of a single currency, common policy managed by common institutions and a high degree of convergence by the partners as a prerequisite. Convergence is defined in the EMU context as 'a high degree of homogeneity between economies in what

corresponds to the principal characteristics'. Integration in the model depends on the fulfilment of nominal and legal convergence criteria and the free will of countries.[12] The variables that serve to express the degree of homogeneity of the economies are listed as:

Nominal convergence

These are all variables that serve to sufficiently express the degree of homogeneity of the economies, even though its fulfilment within the established margins does not imply that a real convergence has occurred, that is to say the one which is reflected through the figures of unemployment rates, per capita revenue, government expenditure

- Inflation
- Types of interest
- Public deficit
- Public debt
- Exchange rates

Legal convergence

The adjustment of the national legislations and the Bylaws of the central banks of the member countries of the EU so that they are compatibles with the ESCB. In a general sense, this convergence includes questions such as the independence of the national central banks and the integration of these banks in the ESCB.

Real Convergence

The equalisation of the standards of living, what the commission calls 'economic and social cohesion'. In order to achieve an equalisation in these areas much more time is required than the minimum variables, whose fulfilment affects in a beneficial way the real variables. Therefore with the installation of the Euro and the existence of a common monetary policy in the Union, the revenue should be evening out. Its variables would be

- The unemployment rate
- The structure of the BOP

- The per capita revenue and government expenditure

Monetary integration in the EMU occurred in three important phases which include:

- Diagnostic stage (1990-1993)-economic and monetary convergence was assessed while member states were to adopt appropriate measures to comply with certain prohibitions in the Treaty on the European Union (signed in 1991)
- Convergence stage (1994-1998)-member states were to prepare towards adopting the euro and were expected to make significant progress towards economic convergence.
- The period of implementation (1999-2002) Conversion rates between the Euro and national currency units were irrevocably fixed, and the Euro was to become the currency of the participating countries and was to be used in the foreign exchange markets.

Compatibility of convergence and the Balassa-Samuelson Effect-theoretical and empirical evidence

The post Euro results show that compatibility of convergence is important. Firstly, openness has had a negative impact on productivity growth and a positive one on the price and resurgence with respect to the Euro area (Lein-Rapprecht *et al.* 2007). Secondly, the mechanism of real convergence highlights that if economic growth is accelerated by virtue of closing a technological gap, the process of nominal and real convergence can indeed be compatible (Smidkova, 2001). Thirdly, growth and convergence of prosperity across a currency union rather depend on the appropriate macroeconomic policy institutions (Hein and Truger, 2003).

Fourthly, new member states are required to have a high level of real and nominal convergence prior to adopting a common currency (Gaspar, 2004). However, tensions between real convergence, low inflation and a stable nominal exchange rate may arise due to the Balassa-Samuelson Effect. The Balassa-Samuelson mechanism is essentially interpreted as reflecting long-term steady-state effects. The Balassa-Samuelson paradigm is useful to interpret current events when intertemporal relative price

and allocation effects are a critical part of the economic response to productivity shocks.

The existence and nature of optimal macro-economic adjustments is an important factor for policy makers to consider:

- Wealth effects lead to changes in optimal demand behaviour on impact and in transition to new steady-state trajectory that are significant
- There is a potential for great changes in demand well before the full extent of productivity changes is felt by the economy
- Demand effects are outside the scope of the standard Balassa-Samuelson paradigm.

Fifth and finally, according to the optimum currency theory, the cost, or the need for independent monetary policy control, is greater when member countries are exposed to different shocks and lesser when they are exposed to the same or similar shocks (Pacific Basin Notes, 2005).

INTRA-REGIONAL CONVERGENCE: SADC REGION

The Balassa-Samuelson Effect suggests that nominal and real convergence in a divergent block like the AEC is a complex process which calls for a case by case analysis taking into account all information. This complication quiz whether the convergence should be inward or outward oriented. An outward oriented approach focuses on inter-regional region convergence whereas intra-regional convergence denotes an inward oriented approach. From Table 1 and Table 2 provided earlier, it is evident that regional blocks are more related in terms of economic activities, (macro and micro targets) for convergence over time. Africa is a fiddly case for the simple reason that political leaders wield more authority over economic concerns. Undoubtedly, economic and political convergence in the region goes hand in hand. To eliminate inter-regional differences this study proposes a case by analysis of the regional blocks. The SADC case is discussed in the next section.

Regionalisation in SADC

*The Southern African Development Community (SADC) may introduce a **single Southern African currency** by 2016, to be managed by a single central bank. SADC plans for further economic integration are far advanced. **A common Southern African market** - following the European Union (EU) model - is to be established by 2016. The SADC block will unite the markets of Angola, Botswana, Congo Kinshasa (DRC), Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. Madagascar is joining SADC later this year. The plan for **a single market** calls for the abolition of tariffs and non-tariff barriers by 2008; a **SADC-wide customs union** by 2010; **a common market**, including free movement of labour and capital, by 2015; and **a single currency and central bank** by 2016.[13].*

Source: afrol News, 11 March, 2008

The above press release shows that the public discourse also carries a cogent message for the region's convergence efforts. However, these public discourses are not supported by the reality and actions on the ground. There is a clear divergence of issues between rhetoric and practice. The plan looks good on paper but the 'will and way' seems to be elusive.

Before one can even consider deeper economic integration in the SADC, liberalisation of the region is a critical point. However, some SADC members still belong to other regional bodies, whose 'ideologies, aims and objectives' shows conflicting interests in practice. For instance the relationship between SADC and Southern Africa Customs Union (SACU) SACU and the Common Monetary Agreement question the dedication of member states to these two regional bodies and stakeholders which take precedence.

Economic integration itself goes beyond liberalisation of border trade.

- Yet member states of SADC still have free travel (visa free and borderless) limitations, for instance South Africa and Zimbabwe still hold travel inhibitions.

- Quotas, prohibitions and licensing applying to imports from one member country. Zimbabwean buyers from South Africa are only allowed to import goods that have a maximum value of R2000. Importation of cars in Zimbabwe for instance, "payments of customs duty and value-added tax on the importation of any item of goods designated as luxury items shall be payable in US dollars, euros, or any other currency denominated under the exchange control,"[13] The general rate of duty for cars ranges between 60% and 80%.

- Technical barriers due to industrial, environmental and other standards, other regulations which discriminate against foreign goods and differences in tax treatment

- Restriction of flows of services and of capital and labour across national borders-Zimbabwean nationals still have to carry a valid visa for South Africa. Recently South Africa has opened the labour markets by announcing a scarce skill work permit for foreign nationals who have these skills and wish to work in South Africa.

The lack of a free market in region has led to discrimination between borders. The lack of a regional Law of One Price which holds for all goods, services and factors derails the free flow of goods and services and goods across SADC.

The call for a common currency in the SADC region is based on the realisation that a single market requires a common currency. A common currency eliminates transaction costs and exchange rate risk, thus price differentials.

The objective of the common market, the timetable for the achievement of the common market as well as the choice of the modalities is all in place. Also the targets and deadlines for the different countries of the region are not clearly spelt out. What modalities are going to be adopted by the different countries? Countries like Zimbabwe, which is in a deep economic and political crisis might require more time to achieve a policy change, as compared to more stable South Africa. Zimbabwe might therefore require a longer implementation period and a more attenuated time table.

There are sectors within the countries that will require sector based modalities to achieve the same regional goal. The institutions of the region further require support so that they reach the timeline goals.

When this kind of regional integration has occurred, then a common currency for SADC can be adopted. The current structure of the macro-economies, the extent of bilateral trade, the sophistication of their financial sectors and other relevant features are important considerations. However for countries to have a single unit of currency there has to be one goal. With the treaty of Maastricht, the community clearly went beyond its original economic objective and its political ambitions came to the fore.

- Strengthen the democratic legitimacy of the institutions
- Improve the effectiveness of institutions
- Establish economic and monetary union
- Develop the community social dimension
- Establish a common and foreign and security policy

As for ASEAN the crisis had its origins in common weaknesses in the financial and corporate sectors among several countries, and so cross-country cooperation on financial reform issues would be beneficial to all.

- Regional information exchange and surveillance
- Regional resources pooling
- Financial sector development
- Exchange rate coordination

Challenges for regional convergence in SADC

- Low trade interdependencies-countries do not trade a lot with each other with a current 7% inter-regional effort. Furthermore most of the African

countries depend on raw materials which still have to be transported out of the region for processing. This leaves out little gain for the regional trading partners.

- Lack of democracy, rare acceptance of basic political and social values-there is currently no apparent desire for political integration, political systems and culture. Some countries still hold on to their historical paths which makes difficult for any other member state to challenge such ideology.

- Fairly uneven economic development and comparable living standards, and divergences amongst its poorest economies-Generally standards within SADC countries and between regional blocks is astounding. The smaller fear that surrendering power is betrayal to their sovereignty to the big powers of the region.

- Lack of commitment to solidarity

- Fear of surrendering power to a central autonomy with leaders hooding on to power.

- The timing of a common currency also is a significant aspect of future debate. Should countries focus on self development until such a time when they can compete with partners at the regional level? Will such a time ever come? Perhaps the best thing is to start now so that weaker nations will eventually catch up with the old partners.

End Note

1 Report available on http://www.busiweek.com/index.php?option=com_content&task=view&id=561&Itemid=1 [last accessed on 29 October 2008]

2 ibid

3 Statistics available on http://en.wikipedia.org/wiki/Economy_of_the_African_Union [last accessed on 24 September, 2008]

4 The vision for Africa he inscribed is inclusive of 10 objectives which are: a common economic and industrial programme, an African common market, a common African currency, an African monetary zone, an African central bank, a continental communication system, a common foreign system and diplomacy, a common system of defence, a common African citizenship, a common African army with an African high command.

5 Hardy, A. (1999).

6 Report available on http://www.iss.co.za/Pubs/Books/Unesco/Aderinwale.html [Last accessed on 20 August, 2008]

7 Members not yet participating: Angola, DR Congo (in talks to join), Eritrea, Ethiopia, Seychelles (in talks to join), Swaziland (on derogation until SACU gives permission for Swaziland to join the FTA), Uganda (to join very soon)[1]

8 Stage 1: Completed, only UMA members and Sahrawi Republic not participating. Somalia is participating, but no practical implementation as of yet, Stage 2: Steady progress, nothing factual to check, Stage 3: no progress yet, Stage 4: no progress yet, Stage 5: no progress yet, Stage 6: no progress yet

9 [http://en.wikipedia.org/wiki/African_Economic_Community]

10 Not all members participating yet [2] Telecommunications, transport and energy - proposed [3] Sensitive goods to be covered from 2012

11 Available on http://en.wikipedia.org/wiki/African_Economic_Community [last accessed on 23 August 2009]

12 The ECT included the designated exclusion clause, for which certain countries could remain outside of the EMU if they so decided in spite of their compliance with the convergence criteria.

13 Information released by the government of Lesotho Report available on http://www.afrol.com/articles/15869 [last accessed on 25 August, 2008]

14 Mumbengegwi the current Minister of Finance in Zimbabwe, 18 June 2008

An Alternative Reconsideration of Macroeconomic Convergence Criteria for West African Monetary Zone

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Contents

EXECUTIVE SUMMARY AND RECOMMENDATIONS

This study presents an alternative reconsideration of traditional Optimum Currency Areas (OCA) macroeconomic convergence criteria as options for West African Monetary Zone (WAMZ) commencement, in the light of recent advancements in monetary theory. It presents micro-founded models, rooted in New Keynesian traditions to show that tests confirming widespread divergence from ideal macroeconomic benchmarks with unsustainable independent monetary and exchange rates pursuits and trade gravity models offer a more appropriate evaluating criterion for WAMZ than the current one, if the ultimate objective is a merger with West African Economic and Monetary Union (WAEMU). Using econometrics methods, especially pooled single equation models applied to national macroeconomic data which span 1991Q1 to 2007Q4, I evaluate the roles of past unsustainable independent national monetary and exchange rates policy pursuits as determinants of macroeconomic stabilizations (reflected by the inflation differential and output gaps/performance vis-à-vis the WAMZ area targets) and inter/intra-regional export performance. This was accompanied by the estimation of a trade gravity model. The strong convergence of aggregate output/demand pattern between WAMZ countries based on trade gravity models thus emerges as a possible positive attribute of countries participating in efficient currency areas.

The WAEMU can be studied further to identify the optimal policy and institutional framework for the WAMZ.

i. *A vertical integration option similar to that of WAEMU should be adopted for integrating the national central banks, common monetary policy and currency managements so as to make the future merger of WAMZ with it easy to accomplish for the region-wide ECOWAS common currency. This means that WAMZ should consider fusing together their existing central banks into one regional central bank, instead of the proposed maintenance of a system of national central banks (similar to the EU) which requires the need for the attainment of ex ante macroeconomic convergence.*

ii. *A complimentary political and over-sight institutional arrangements similar to that of the WAEMU, meaning that WAMZ would be headed by Conference of Heads of States, while the common central bank would be headed by a Council of Ministers that should include Finance Ministers of member countries. However, unlike WAEMU, this body should be expanded to include the Governor of each of the participating central banks (the promoters of the union) as executive members of the West African Central Bank governing board.*

iii. *An adoption of institutional and administrative options for the supra-national central bank that is modeled along the lines of the BCEAO, the common central bank of the WAEMU.*

iv. *An adoption of a monetary policy option that is consistent with the integration model chosen. In this wise, the West African Central Bank should possess instruments autonomy to set ultimate objectives, intermediate targets and operating procedures for the implementation of union-wide monetary policies without interference from any participating country's government within or outside the sub-region.*

v. *An adoption of a payment systems framework that takes into account the current habit and*

preference of the people in the region to transact in cash as against cheques, credit cards or other bank instruments. This requires making adequate provisions for cash dispensing machines. This should also be accompanied with the development of region-wide payment systems.

vi. *The adoption of an exchange rate mechanism and convertibility arrangements such that the initial parity rate is one that is optimal and socially acceptable by all stakeholders. It is recommended that this should be determined as a weighted average (using either stock of external reserves or any other criteria as weights) of the exchange rates of the existing national currencies of participating countries to the US Dollar at the time of commencement of the common currency. It is also recommended that the Euro and not the US Dollar should be adopted as the main reserves currency of the WAMZ given the dominance of the EU countries as trading partners.*

INTRODUCTION

The evaluation of WAMZ feasibility has been guided by both the general and "shocking" studies criteria (Ojo 2005; Nnanna 2007). This approach insists on **ex ante** pursuit of macroeconomic policy convergence that leads to similarity of shocks and minimizes the costs of unionization (Mundell 1961, Kenen 1969) as a necessary precondition for the optimal operations of the OCA **ex post**. However, several such convergence reports to the WAMZ authorities by the West African Monetary Institute (WAMI) returned a verdict that WAMZ was unripe for commencement in 2003 but suggested 2005 that was ultimately deferred to 2009. Nnanna (2007) also relied on macroeconomic convergence criteria to ask if a third postponement of the Eco Currency introduction for the WAMZ is unavoidable. A few number of other studies used a VAR model to analyze asymmetric shocks in West Africa following the standard techniques applied in industrialized countries, as pioneered by Blanchard and Quah (1989) and Bayoumi and Eichengreen (1992). Among them are Fielding and Shields (2001 & 2003), Houssa and Leuven (2004), Ogunkola (2005) and Masson and Pattillo (2004) studies based on the optimum currency area literature, which focuses on asymmetries of shocks and fiscal distortions associated with independent monetary policy pursuits in the region. They show that countries that were very different with respect to fiscal distortion would be unattractive partners for a monetary union, because the central bank would produce undesirable outcomes for one or both of them. In most of these studies, Nigeria was identified as an unattractive partner for the WAMZ monetary union, while suggesting selective accession to existing monetary union by intending members of this union to the WAEMU.

Indeed, these traditional evaluation criteria tests provided by several studies on the desirability of the EMU were appropriate as the underlying basic assumptions of the model apply to market economies that are competitive, organized, developed and respond quickly to policy stimuli. However the application of this model to African and ECOWAS countries characterized by less developed regimented markets tended to produce indeterminate and undesirable results.

There have emerged new literatures which show that real economic convergence which follow stronger trade ties rather than policy convergence may represent better evaluating criteria for the WAMZ. Among them is Frankel and Rose (1998), Rose (2000), Debrun, Masson and Pattillo (2003), Anyanwu (2003), Hausman et al. (2001), Corsetti and Pisentti (2005) and Corsetti (2008) that argues that irrespective of the stage of development and economic structures, membership of a currency union can boost intra-regional trade and could act as a veritable instrument for macroeconomic convergence **ex post**. Their findings show that important beneficial effects follow **ex post** a monetary union through the promotion of trade and central bank credibility induced by unionization, which acts as an 'agency of restraint' for otherwise undisciplined independent fiscal impetus and monetary stance. Hence tying the hands of the monetary authorities through a regional constrain on monetary policy in the context of a monetary union would be a good thing.

The problem this study is designed to examine revolves around mainly the failures of traditional evaluating criteria to lead to a determinate date for the commencement of the WAMZ. In particular, there is an urgent need to explore alternative models to macroeconomic convergence criteria. Such alternatives should capitalize on current socio-economic and financial structures of the WAMZ to show that **ex ante** convergence is unnecessary if the ultimate target is unification with WAEMU. In particular there is the need to show that current independent monetary and exchange rates policy pursuits neither served as instruments for macroeconomic stabilization nor global/intra-regional trade stimulation and that trade gravity models may represent a better test for the commencement of WAMZ than macroeconomic convergence criteria. The rest of the paper presents a brief overview of WAMZ performance with macroeconomic convergence criteria in part 2. Part 3 reviews the theoretical and analytical models. Part 4 presents the results while Part 5 the concluding remarks and policy implications.

A REVIEW OF WAMZ MACROECONOMIC CONVERGENCE CRITERIA TARGETS AND PERFORMANCE, 2001-2006

These criteria has its origin in traditional OCA theory which believes that countries exposed to similar symmetric shocks and business cycles, or possessing mechanisms for the absorption of similar asymmetric shocks may find it optimal to adopt a common currency. Much of this literature focuses on four inter-relationships between the members of a potential OCA. As observed by Frankel and Rose (1998) these are: the extent of trade; the similarity of the shocks and cycles; the degree of labor mobility; and the system of fiscal transfers (if any). The greater the linkages between the countries using any of the four criteria, the more suitable they are for a common currency. These have been encapsulated in a number of primary and secondary quantitative targets that intending members of WAMZ must comply with prior to the commencement of the project. They include: the attainment of single digit inflation that is less than 10 per cent; a budget deficit (excluding grants) to GDP ratio that must be equal to or less than 4.0 per cent; central bank financing of the budget deficit that should be equal to or less than 10 percent of previous year's tax revenue and maintenance of external reserves to cover at least 3 months of imports. The targets for the secondary convergence criteria specified to compliment the primary ones are: that the level of domestic arrears should be equal to, or less than zero; tax revenue to GDP ratio must be equal to or greater than 20 percent; government wage bill to tax revenue ratio to be equal to or less than 35 percent; public sector investment to tax revenue ratio to be equal to or more than 20 percent; real interest rate to be greater than 0.0 percent, and lastly, the nominal exchange rate movement to be within the band of (± 15 percent)

Tables 1 show the summary of average regional performance of WAMZ participating countries with regard to the primary and secondary convergence criteria. The regional average performance shows that only the fiscal deficit/ GDP ratio and maintenance of adequate foreign reserves criteria were met in 2006 on a region wide basis. However,

when analyzed from the perspective of the number of participating countries that met the criteria, Figure 1 show that two countries, The Gambia and Nigeria met all the four primary criteria in 2006; Guinea and Sierra Leone met 2 out of the 4 primary criteria, while Ghana met 1. The graphical analysis of the extent of compliance with convergence criteria is as shown in Figures 2 and 3. Two inter-twined preconditions were set for the commencement of WAMZ. The first relates to participating countries eligibility criteria, which demands that they meet 4 primary and at least 6 secondary convergence criteria. The second relates to the commencement date of the WAMZ which stipulates that an optimal date would be one in which at least 3 countries meet a minimum of 3 primary and 3 secondary criteria immediately prior to the commencement of the union. While the first requires conscious effort of each participating country fiscal and monetary authorities towards adopting sustainable policies, the second requires the need for synchronization of such policies with the regional target set for the collective endeavors.

Table 1: Status of WAMZ Region-Wide Primary and Secondary Convergence Criteria Performance

Primary Convergence Criteria Performance	Target	2001	2002	2003	2004	2005	2006
Inflation Rate (end Period)	<10%	15.2	11.6	22.1	11.5	13.4	11.5
Fiscal Deficit/ Surplus/GDP (%) excl. grants	4 – 5%**	-4.2	-4.5	-2.8	-2.0	-1.7	-1.3
Central Bank Fincg. Of fiscal deficit as % of Prev. Yr's tax rev.	<10%	17.9	12.3	27.7	4.6	0.0	13.5
Gross External Reserves (Months of Imports) (*)	3 months	7.4	5.5	4.8	9.7	13.2	20.3
Number of Criteria Satisfied	4	1	1	2	3	3	2
Secondary convergence Criteria Performance	**Target**						
Change in arrears	≤ 0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tax revenue/GDP ratio	> 20%	14.70	10.70	12.10	15.20	19.40	15
Salary mass/Total tax revenue	≤35%	30.8	48.1	30.8	25.6	21.2	23.2
Domestically financed investment/Rev	>20%	31.0	69.5	48.4	28.4	38.2	39.0
Real interest rate	>0	-2.4	-1.3	-11.6	-6.3	-6.5	-5.9
Exchange rate Dep/App. (-/+) against WAMZ ERMII	+/- 15%	3.8	11.3	7.1	0.7	7.9	9.2
Number of Criteria satisfied	6	3	2	3	3	3	3

*(*) in months of imports CI: ** 5% IN 2001-20002 and 4% in 2003-2006*

Source: Derived from data obtained from west African and Monetary Institute Website: wami-imao.org

Figure 1: Number of Primary Convergence
Criteria met by Wamz, 2001 - 2006

Guinea   Gambia   WAMZ
Ghana   Target   Sierra Leone
                    Nigeria
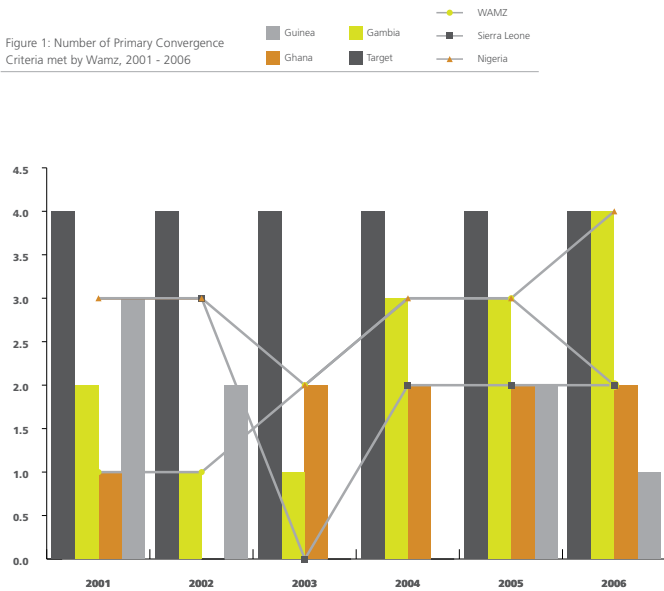
Figure 2: Number of Secondary Convergence
Crieria met by WAMZ, 2001- 2006

Guinea   Gambia   WAMZ
Ghana   Target   Sierra Leone
                    Nigeria

With regard to the first, the trend reflected in Figure 1 show that in 2004 to 2006, only two countries, the Gambia and Nigeria, progressed towards attaining the primary criteria. Both met the primary criteria in 2006. While Guinea progressively deteriorated in performance, Ghana and Sierra Leone met only two criteria during the period. The situation is most precarious with regard to meeting the secondary convergence criteria. While Nigeria met 4 of the secondary criteria, Gambia and Ghana met 3 out of the recommended 6 convergence criteria. What this translates to is that only two countries met the prequalification criteria for the membership of the union as the score card for Guinea and Sierra Leone has not been encouraging enough.

With regard to the second criteria, Figure 2 shows that since inception, the number of countries that met the primary convergence so far were 2, namely Gambia and Nigeria in 2006. However, the precondition for takeoff requires that a minimum of 3 countries must satisfy at least 3 primary and 3 secondary convergence criteria. The best attainment so far is that while three countries met 3 secondary convergence criteria, only 2 of them met the primary criteria which are considered a sine qua non for the commencement of the programme. The most worrisome aspect of this situation is that there is no likelihood that up to 3 countries would meet these criteria given the didactic actions and apparent lack of policy coordination among them. This would therefore tend to suggest the inevitability of another postponement at the end of the terminal period of the third phase of the WAMZ project. It also tends to portend a gloomy prospect for the commencement of WAMZ within the foreseeable future.

Figure 3: Performance with Meeting Minimum
Criteria for Commecement of WAMZ, 2001-2006 ■ Secondary ■ Primary ■ Target
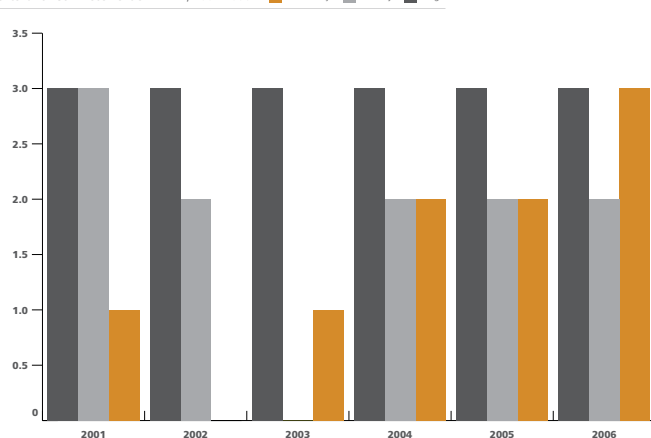
Table 2: WAMZ Country Share in Total WAMZ Trade

The Gambia	2001	2002	2003	2004	2005	Avg.
Ghana	0.41	0.29	0.29	0.37	0.38	0.37
Guinea	10.32	11.87	11.87	7.67	9.73	10.71
Nigeria	0.25	0.35	0.35	0.76	0.34	0.42
Sierra Leone	0.20	0.19	0.19	0.36	0.36	0.28
Total: WAMZ intra-trade	4.16	2.96	2.96	0.94	0.94	2.03
To total trade	3.07	3.13	3.22	2.05	2.35	2.76

Source: derived from data compiled from ECOWAS

The prospect for macroeconomic convergence remain slim, given the fact that trade relations among WAMZ member countries remain very small. Table 2 show the the average share of WAMZ intra-trade in total ECOWAS trade which stood at 2.76 percent in the period 2001 to 2005, with a peak of 3.22 per cent in 2003. Perhaps, the main reasons for this low level of trade relations include the use of multiple inconvertible currencies within the Zone, the narrowness of tradable products in member countries, existence of tariff and non-tariff barriers to trade, multiple borders among the countries, and poor regional transportation infrastructure. These fundamental reasons had very little to do with macroeconomic convergence as it cannot stimulate trade

relations except ***ex ante*** actions are taken in that direction through regional integration which includes ultimately a monetary union. One of the main objectives of creating the WAMZ is to promote trade among the members. Apart from the single currency agenda, other important elements of the program include the removal of tariff and non-tariff barriers to trade through the implementation of the ECOWAS Trade Liberalization Scheme (ETLS), the adoption of a Common External Tariff (CET), and the implementation of the Interstate Road Transit Convention by the member states.

Figure 4: Share of WAMZ in Intra-ECOWAS
Total Trade, 2003-2006 ■ ECOWAS ■ WAMAZ ■ WAEMU
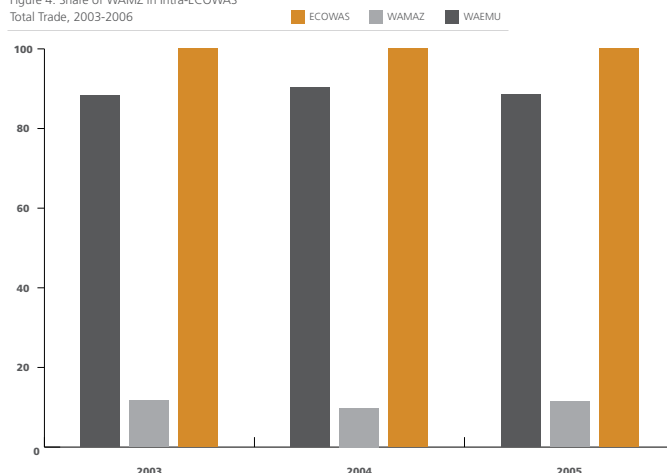
The implementation of the above measures, together with the creation of a single economic space in the Zone through the monetary union and single currency, are expected to significantly increase the volume of intra-trade in the Zone. Table 2 show the total value of intra-ECOWAS total trade by all the countries according to sub regional groupings within the region. A comparison of the level of intra- ECOWAS trade shows that WAMZ countries trade less with other ECOWAS countries as it accounts for an average of 11% annually of total intra-regional trade in 2003-2005 (Figure 2.11). While WAEMU has other advantages over WAMZ, including the better contiguity of its states, the single currency of WAEMU is about the most important factor in the higher trade relations among its member states and has been credited as one major factor which fostered relative

macroeconomic convergence. It is therefore expected that a successful launch of the Eco would significantly improve intra-trade relations in WAMZ and which could become a veritable instrument for macroeconomic convergence **ex post**.

THE THEORETICAL AND ANALYTICAL FRAMEWORK

The reconsideration of WAMZ convergence criteria is designed to show that the inability to use monetary policy as instrument of independent macroeconomic stabilization is in itself a sufficient test to confirm the need for subscribing to a monetary union. The model adopted for this study draws from various New Keynesian models that have been used in part to analyze the inflation differentials in the euro area (i.e. the degree of non-convergence of prices {Hofmann and Remsperger (2005), Angeloni and Ehrmann (2007), Altissimo et al. (2005), and Honohan and Lane (2003)}, and partly on new micro-founded model of the costs of adopting common currency, relative to an ideal benchmark in which domestic monetary authorities pursue country specific efficient stabilizations (Corsetti 2008). In particular the empirical methodology specified for this study draws from Honohan and Lane (2003) and Horvath and Koprnicka (2008) who focus their attention to finding the relationship between inflation differentials and the role of exchange rate channel, output gap, fiscal policy, and the countries' relative price level in a panel of euro area countries using annual data over 1999-2001. Honohan and Lane (2003) postulated a fairly general specification for inflation differentials as:

$$\pi_{it} - \pi_t^E = \beta(z_{it} - z_t^E) + \delta([P_{it-1} - P_{it-1}^*] - [P_{t-1}^E - P_{t-1}^{E*}]) + \varepsilon_{it} \cdots (Eq.1)$$

Where π_{it} and π_t^E are the annual national and euro zone inflation rates, respectively; z_{it} and z_t^E denote national and euro area variables that exercise short-term influence on the inflation rate; P_{it} and P_i^E denote the national and euro area price levels, P_{it}^* and P_t^{E*} represent the national and euro zone long-run equilibrium price levels. In order

to account for long run convergence, in the face of tight trade and institutional linkages, Honohan and Lane (2003) assume a common long-run national and euro area price level, simplifying Eq. 1 as:

$$\pi_{it} - \pi_t^E = \beta(z_{it} - z_t^E) + \delta(P_{it-1} - P_{t-1}^E) + \varepsilon_{it} \cdots (Eq.2)$$

Horvath and Koprnicka (2008) noted that it is easy to realize that a combination of euro area variables results in a time dummy, and as such re-wrote Eq. 2 as:

$$\pi_{it} = \phi_t + \beta z_{it} + \delta P_{it-1} + \varepsilon_{it} \cdots (Eq.3)$$

Where they define the z in line with Honohan and Lane (2003) as:

$$z = [\Delta NEER_{it-1}, GAP_{it}, FISC_{it}] \cdots (Eq.4)$$

Where $\Delta NEER_{it-1}$ is the lagged change of nominal effective exchange rate; GAP_{it} denotes the output gap, $FISC_{it}$ represent the fiscal deficit and P_{it} is the lagged price level. Horvath and Koprnicka (2008) estimated the following empirical specification:

$$\pi_{it} = \phi_t + \beta_1 \Delta NEER_{it-1} + \beta_2 GAP_{it} + \beta_3 FISC_{it} + \delta P_{it-1} + \varepsilon_{it} \cdots (Eq.5)$$

They noted that the time dummies (ϕ_t) in Eq. 5 capture the common movements in inflation, so that the regression explains the inflation differentials in terms of idiosyncratic national movements. Horvath and Koprnicka (2008) expectations of the coefficient on effective exchange rate β_1 is negative, as exchange rate appreciation is expected to decrease inflation rate. On the other hand, β_2 is expected to be positive, as higher output gap results in more inflationary environment. β_3 is likely to be negative, as fiscal surplus reduces aggregate demand and therefore contributes to lower inflation. The sign of δ is expected to be negative as lower price level is likely to be associated with higher inflation rate. They further posit that for obvious reasons, output gap and fiscal balance can be endogenous to

inflation and therefore estimated Eq. 5 by the generalized method of moments (GMM), where endogenous variables were instrumented by lagged values.

This model appears adequate for analyzing EU Euro areas, especially so since inflation targeting is a central objective of monetary policy. For the purpose of this study, I lean further towards Corsetti (2008) that analyzed monetary stabilization policies from a Neo-Keynesian perspective. Corsetti (2008) uses a new micro-founded model of the costs of adopting common currency, relative to an ideal benchmark in which domestic monetary authorities pursue country specific efficient stabilizations that encompass both demand and supply stabilization. The analytical framework is premised on the assumption of a closed economy populated by identical households, who derive utility from consumption of goods and leisure, i.e. their utility is decreasing in labour effort. In the tradition of macroeconomic models, especially as in many modern contributions to monetary theory, he posits that aggregate demand coincides with consumption expenditure, i.e. abstract from investment and government spending. From the demand side, Corsetti (2008) argues that if C denote aggregate consumption, and P its price (or CPI), then nominal aggregate demand is thus given by PC, and real domestic output YH coincides with real consumption expenditure, i.e. C = Y_H. Corsetti (2008) therefore related aggregate demand PC to a variable μ, which indexes the stance of monetary policy: a higher μ means that monetary authorities pursue expansionary policies, raising aggregate demand and thus nominal consumption. Corsetti (2008) therefore hypothesize that the dynamic aggregate demand in nominal terms which reflects optimal consumption and savings decisions by households can be written as follows:

$$\mu_t = \frac{1}{\beta(1+i)} \frac{1}{E\left(\frac{1}{\mu_t + 1}\right)} \quad \cdots \quad \cdots \quad \cdots \quad (Eq.6)$$

Where β is the discount factor reflecting consumers' impatience, E denotes expectations of future variables and the equation makes it clear that, for given expectations of

future prices and future real demand, current spending (corresponding to the current monetary stance) μ is decreasing in the nominal interest.

From the supply side, Corsetti (2008) assumes that output is produced in many varieties by specialized small firms with monopoly power and characterized by production function such that: $Y_H = Z_H \ell$, where Z_H denotes the level of productivity, identical across firms, ℓ denotes employment under the assumption that Z_H vary randomly at business cycle frequency. He further assumes that if firms face demand for output that is constant price elastic and preset prices which maximizes their market value, such that it results from charging the equilibrium markup over expected marginal costs, the following equilibrium conditions obtains:

$$P_H = mkp * E[MC_H] = mkp * E\left[\frac{wage}{Z_H}\right] \quad \cdots \cdots \quad (Eq.7)$$

Where the marginal costs MC_H, the nominal wage divide by productivity and the equilibrium markup *mkp* is a decreasing function of the elasticity of substitution. As the price is fixed over the production period, the (ex-post) realized markup will vary inversely with marginal costs. Corsetti (2008) assumes that labour market is competitive and varies proportionally with the monetary stance μ and linking both

$$MC_H = \left[\frac{wage}{Z_H}\right] = \left(\frac{\overbrace{\mu}^{monetatr\ policy\ s\tan ce}}{\underbrace{Z_H}_{productivity}}\right) \quad \cdots \cdots (Eq.8)$$

Abstracting from Eq. 7, Corsetti (2008) characterized the natural rate of employment (output) if all prices were flexible (i.e. in the absence of nominal rigidities) by assuming that each firm would maximize current profit by charging the equilibrium markup over current marginal costs:

$$P_H^{flex} = mkp.MC_H = mkp.\frac{\mu}{Z_H} \quad \cdots \quad \cdots \quad \cdots \quad (Eq.9)$$

$$MC = \frac{\mu}{Z_H} = \tau \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad (Eq.11)$$

Substituting the definition of μ, the production function $Y_H = Z_H \ell$, and re-arranging, yields the result that the natural level of employment (output), ℓ^{nr}, is constant:

$$\ell^{nr} = \frac{1}{mkp} \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad (Eq.10)$$

In the long run, ℓ^{nr} is a decreasing function given the monopoly of domestic firms and as goods become better substitutes, or regulation and competition policy reduces the average markups in the economy, the natural rate of employment and output rise. At business cycle frequencies, the natural rate of output fluctuates with productivity, i. e. $Y_H^{nr} = Z_H \ell^{nr}$.

For an efficient monetary stabilization, Corsetti (2008) examined the macroeconomic implications of random fluctuations in current and future productivity, and optimal policy response to stabilize the economy (demand shocks). He therefore argued that holding monetary stance μ (hence nominal wages) fixed, a positive productivity shock (an increase in Z_H) lowers marginal cost **ex post**. But if prices are preset, firms cannot take advantage of higher productivity to lower prices and raise output: a fixed μ implies that aggregate demand is also fixed in nominal and real terms. As a result firms satisfy current demand using less productive inputs, while the positive productivity shocks opens a positive output gap: employment and output fall short of their natural rate, i.e., their equilibrium value in a flexible price allocation.

In response to an unexpected increase in productivity, monetary authorities can improve welfare by expanding aggregate demand via expansionary stance (in the case of positive shocks (and contracting it in response to a negative shock, as to rule out over-heating and excess employment). This it can do by setting monetary policy such that nominal marginal costs are constant during the period:

If the above holds, i.e. if private agents expect the central bank to credibly pursue rules such that $\mu = Z_H \tau$, optimal prices would remain constant in nominal terms also in the absence of nominal rigidities as there would be no difference between the Eq. 7 and Eq. 9. Thus, a monetary rule that satisfies this condition make nominal rigidities inconsequential, in that the sticky price allocation coincides with the flex-price allocation and the economy operates at a natural rate. Corsetti (2008) observed that Eq. 11 requires a central bank to commit to (a) align aggregate demand and (b) keep the price level along the predetermined path, indexed by τ.

With regard to interest rates and demand stabilization, Corsetti (2008) noted that traditional models of stabilization would require central banks to pursue interest rates policy corresponding to the optimal stabilization policy by substituting Eq. 11 into the dynamic demand equation, that is:

$$\frac{1}{\tau Z_H} = \beta(1 + i)E\left(\frac{1}{\tau_{+1} Z_{H+1}}\right) \quad \cdots \quad \cdots (Eq.12)$$

He then derived the interest rate corresponding to the implementation of the optimal stabilization policy as:

$$i = -\ln \beta + \ln \frac{\tau_{+1}}{\tau} + \ln \frac{1}{Z_H} - \ln E\left(\frac{1}{Z_{H,+1}}\right) \quad \cdots \cdots (13)$$

Corsetti (2008) concludes from this expression that given the path of price levels τ to which a central bank commits when it defines inflation targets at different horizon, and holding expectation of future productivity constant, the natural rate of interest falls with current productivity gains – which, in the absence of a contingent optimal reaction by monetary authorities, would open a positive output gap

that rises with anticipated productivity growth. He further maintains that the need to promote a non-inflationary growth as in the condition in Eq. 11 would require that monetary authorities not only respond to current productivity shocks, but also to current aggregate demand disturbances.

Against this framework, Corsetti (2008) analyzed and compared the costs of losing monetary autonomy when it translates into insufficient stabilization of national business cycles to the apparent noise generated by subscribing to a common monetary policy rules. He characterized the main inefficiencies from insufficient stabilization in terms of relative price distortions, which translates into suboptimal level of output and consumption. He therefore argued that if the central bank does not stabilize marginal costs completely, demand does not fall optimally when productivity is low. With preset prices, these turn out to be too high relative to factor costs, and firms supply too much relative to the flex-price level of output, and vice versa. He therefore concludes that a highly unstable monetary policy could potentially produce large welfare losses, up to dwarfing the costs of insufficient stabilization.

Corsetti (2008) introduced trade and international interdependence into the model via nominal exchange rates under the assumption that growth rates of marginal utilities are equalized across countries in Purchasing Power Parity. He argues that if the two countries involved in trade are perfectly symmetric **ex ante**, it means that wealth and consumption are always equalized in nominal terms across countries. This implies that exchange rate depends on both home and foreign monetary stance. He concludes that a commitment to a monetary union (in which the two countries adopt a common currency or irrevocably pegged exchange rates offer a least cost than two national monetary authorities acting independently or even under an international monetary policy coordination but which yields undesirable results.

Empirical Models

The empirical models to be estimated rely very strongly on the theoretical foundations of these New Keynesian models. Two fundamental equations would be estimated in line with neo-Keynesian framework that independent monetary policies target both inflation and output as the central theme of macroeconomic stabilization.

With regard to aggregate price stabilization around a preset target or benchmark, I adopt Horvath and Koprnicka (2008), i.e. Eq. 3:

$$\pi_{it} = \phi_t + \beta z_{it} + \delta P_{it-1} + \varepsilon_{it} \cdots \cdots (Eq.3)$$

but with significant modifications. Whereas they define the vector z of Eq. 3 as: $z = [\Delta NEER_{it-1}, GAP_{it}, FISC_{it}]$ where $\Delta NEER_{it-1}$ is the lagged change of nominal effective exchange rate; GAP_{it} denotes the output gap, $FISC_{it}$ represent the fiscal deficit and P_{it} is the lagged price level, I redefine the vector z as: $z = [\Delta NER_{it-1}, y_{it}, M_2, CP_{it}, CG_{it}, i_{it}]$ where ΔNER_{it-1} is the lagged change in nominal exchange rate of the national currencies to the US $, their dominant reserve currency; y_{it} denotes the real output while M_2 is money supply, which is an important component of independent monetary policy targets of WAMZ countries, in the light of pursuits of multiple objectives of macroeconomic stabilization policy; CP_{it} and CG_{it} represents banking sector credit to private and government sectors respectively, to capture the loose stand of monetary policy with regard to government borrowing and the extent of bias it implies for private sector credit; and finally, i_{it} denotes the overall interest rate policy stance of the monetary authorities, represented in this model by the monetary policy rate or minimum rediscount rates. This gives us the following empirical specification:

$$\pi_{it} = \phi_t + \beta_1 \Delta NER_{it-1} + \beta_2 y_{it} + \beta_3 CP_{it} + \beta_4 CG_{it} + \beta_5 M_2 + \beta_6 i_{it} + \delta P_{it-1} + \varepsilon_{it} \quad \cdots (Eq.13)$$

Whereby π_{it} is the net inflation differential of each participating country from optimal targets; ϕ_t represents

cross-sectional fixed effects constants of independent movements in inflation differentials within the panel; βs are regression coefficients of the included explanatory variables, δ the regression coefficient of past trends in aggregate price level.

The expectation of the coefficient of nominal exchange rate β_1 is negative, as exchange rate appreciation is expected to decrease inflation rate. On the other hand, β_2 is expected to be positive, as higher output gap results in more inflationary environment. β_3 is likely to be negative, as expansion in credit to the private sector is expected to lead to output expansion (a positive shock) and therefore contributes to lower inflation. β_4 is likely to be positive , as expansion in credit to government is expected to lead to expansion in aggregate demand and therefore contributes to higher inflation. β_5 is likely to be positive, as expansion in in aggregate money supply is expected to lead to expansion in aggregate demand and therefore contributes to higher inflation. β_6 is likely to be negative, as lower interest rates is expected to lead to output expansion (a positive shock) and therefore contributes to lower inflation. The sign of δ is expected to be negative as lower price level is likely to be associated with higher inflation rate.

This specification presupposes that the only ultimate objective of independent monetary policy is the need to stabilize local currency prices via interest rates operating procedures that supports low inflation and an exchange rates management (via expenditure switching transmission mechanisms) that minimizes demand for foreign goods.

However, price stabilization around the optimal path is not the only objective of monetary policy of the WAMZ countries as a number of rigidities exist which inhibits the capacity of factor prices such as interest and exchange rates from performing effectively expenditure switching transmission mechanism. Indeed, these economies are characterized by large non-tradable sector which tends to compromise efforts at domestic and foreign price stabilization. In line with Corsetti (2008), monetary policy stance can also give rise to welfare losses due to insufficient stabilization derived from the case in which domestic productivity shocks are

purely idiosyncratic. This suggests a reformulation of Eq. 3.13 to reflect the effect of monetary policy stance on productivity shocks or output gaps:

$$y_{it} = \vartheta_t + \alpha_1 \Delta NER_{it-1} + \alpha_2 \pi_{it} + \alpha_3 CP_{it} + \alpha_4 CG_{it} + \alpha_5 M_2 + \alpha_6 i_{it} + \lambda y_{it-1} + \varepsilon_{it} \quad (Eq.14)$$

Where both the dependent and explanatory variables are as defined earlier, while ϑ_t refers to the fixed effects constants of the pooled regression equation. All the αs are the coefficients of the explanatory variables of the model, while λ represents the coefficient of the lagged value of output gap.

The expectation of the coefficient of nominal exchange rate in Eq. 3.14 α_1 is neutral since a home nominal depreciation following a home monetary expansion has no expenditure switching effects, but can potentially worsens terms of trade in favour of the foreign partner in trade. It can be potentially harmful if the foreign exchange content of domestic production is very high. On the other hand, α_2 is expected to be negative, since higher widening gap of inflation from desired level could lead to higher costs of production and consequently lower output. α_3 is likely to be positive, as expansion in credit to the private sector is expected to lead to output expansion (a positive shock) and therefore contributes to higher growth in output. α_4 is likely to be negative, if the potential goal of macroeconomic stabilization is to reduce the gap between consumption and its efficient level, which may vary with time depending on the state of the economy. Credit to government and especially monetary authorities borrowing from the public through public debt instruments as part of monetary control measures can critically stifle credit to the private sector, with a crowding out effect and adverse effect on output. α_5 is likely to be negative if an expansionary monetary stance originates from fiscal indiscipline, weak monetary authorities that lacks autonomy to restrain fiscal authorities or from inability of the monetary authority to adopt an appropriate monetary framework in the face of deep internal economic distortions. This would generally have adverse effects on output. α_6 is expected to be negative, in line with Corsetti's (2008) argument that given

the path which monetary authorities commit when it defines inflation targets at different horizon, and holding expectation of future productivity constant, the natural rate of interest falls with current productivity gains. This could potentially open a positive output gap in the absence of a contingent optimal reaction by the monetary authorities, which rises with anticipated productivity growth. The sign of λ is expected to be negative as lower past values of output level is likely to be associated with higher output gap.

A combination of the two equations shows that a highly unstable monetary policy could produce simultaneously larger welfare losses which could be far more destabilizing than the costs of insufficient stabilization that is associated with loss of monetary autonomy. These losses arise firstly through destabilizing impact on prices, and secondly through supply shocks effects and it is higher than the costs of losing monetary autonomy when it translates into insufficient stabilization of national business cycles.

Alternative Trade Gravity Model Test

The analytical model estimated in this section is rooted in the trade gravity models as propounded by Frankel and Rose (1997), Rose (2000) and Masson and Pattillo (2004). These authors maintained that a typical gravity model is usually specified to include as explanatory variables the product of the two countries' real GDP, both in levels and per capita, the distance between them, and the land areas of the two countries. In addition, a number of dummy variables are included to capture the possible effects of common features of the countries: membership in a free trade area or currency union, a common language, border, or colonizer, etc. The gravity equation is typically specified in logarithms, so that:

$$\ln(X_{ij}) = \beta_0 + \beta_1 \ln(Y_i Y_j) + \beta_2 \ln(\frac{Y_i}{Pop_i} \frac{Y_j}{Pop_j}) + \beta_3 \ln(Area_i Area_j) + \sum_{k=1}^{n} \beta_{3+k} D_k \quad (Eq.15)$$

Whereby $\boldsymbol{X_{ij}}$ is the bilateral trade between the two countries, Y is the real output, Pop is the population, Area denotes the land mass, D the various dummy variables. This

specification is consistent with Rose (2000) and a number of others. It was also observed that the other variant of the endogeneity of OCA model as estimated by Frankel and Rose (1997) can be rendered as:

$$Corr(Q_i, Q_j) = \alpha + \beta \log(TI_{ij}^T) + \lambda B + \theta|Y_i - Y_j| \quad \cdots \quad (Eq.16)$$

This was however modified by Fidrmuc (2001) to include intra-industry trade intensity as one of the explanatory variables as follows:

$$Corr(Q_i, Q_j) = \alpha + \beta \log(TI_{ij}^T) + \gamma IIT_{ij} + \lambda B + \theta|Y_i - Y_j| \quad \cdots (Eq.17)$$

Whereby:

Bilateral Trade Intensity is defined as:

$$TI_{ij}^T = \frac{T_{ij}}{T_i + T_j} \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad (Eq.18)$$

Whereby Co-mov(Qi,Qj) stands for the co-movement of real gross domestic product , Q of country i and j.; TI_{ij}^T denotes the natural logarithm of bilateral trade intensity between country i and j defined in relation to export, import or total trade; IIT_{ij} is a measure of intra-industry trade intensity; B is defined as the log of distance between a country or region and the nearest member; Y denotes the national incomes of the countries.

Abstracting from the above models the explicit form of the trade gravity model that is estimated in this section can be rendered as:

$$\ln(BETI_{ij}^E) = \beta_0 + \beta_1 \ln(Y_{Ri} Y_{Rj}) + \beta_2 \ln(\frac{Y_{Ni}}{Pop_i} \frac{Y_{Nj}}{Pop_j}) + \beta_3 \ln(IITE_{ij}^{AG}) + \beta_4 \ln(IITE_{ij}^{AGMI})$$

$$+ \sum_{k=1}^{n} \beta_{4+k} \ln(D_k) \quad (Eq.19)$$

And

$$\ln(BMETI_{ij}^{ME}) = \beta_0 + \beta_1 \ln(Y_{Ri} Y_{Rj}) + \beta_2 \ln(\frac{Y_{Ni}}{Pop_i} \frac{Y_{Nj}}{Pop_j}) + \beta_3 \ln(IITME_{ij}^{AG}) + \beta_4 \ln(IITME_{ij}^{AGMI})$$

$$+ \sum_{k=1}^{n} \beta_{4+k} \ln(D_k) \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad \cdots \quad (Eq.20)$$

Whereby the variables are defined as follows:

$$BETI_{ij}^{E} = \frac{BTE_i + BTE_j}{TME_i + TME_j} \quad \cdots \quad \cdots \quad (Eq.21)$$

$$BMETI_{ij}^{ME} = \frac{BTME_i + BTME_j}{TTME_i + TTME_j} \quad \cdots \quad \cdots (Eq.22)$$

And $BETI_{ij}^{E}$, $BMETI_{ij}^{ME}$, BTEi and BTEj BTMEi and BTMEj TTMEi and TTMEj denotes the bilateral export and total trade; YRi YRj, YNi and YNj are the real and nominal GDP of countries i and j. IIT_{ij}^{AG} is the ratio of the agricultural (intra-industry) trade intensity of both countries; IIT_{ij}^{AGMI} is the ratio of the agricultural and mining (intra-industry) trade intensity of both countries; D1 is a dummy for adjacency or common border; D2 is a dummy for common language; D3 is a dummy for common currency and D4 is a dummy for common colonial ties

EMPIRICAL RESULTS

The specific models estimated in this section are Eq. 13 , 14, 19 and 20.

$$\pi_{it} = \phi_t + \beta_1 \Delta NER_{it-1} + \beta_2 y_{it} + \beta_3 CP_{it} + \beta_4 CG_{it} + \beta_5 M_2 + \beta_6 i_{it} + \delta P_{it-1} + \varepsilon_{it} \quad (Eq.13)$$

$$y_{it} = \vartheta_t + \alpha_1 \Delta NER_{it-1} + \alpha_2 \pi_{it} + \alpha_3 CP_{it} + \alpha_4 CG_{it} + \alpha_5 M_2 + \alpha_6 i_{it} + \lambda y_{it-1} + \varepsilon_{it} \quad (Eq.14)$$

The estimate of Eq. 13 is reported in Table 3 and it provides the pooled regression estimation of the monetary policy instruments determinant of inflation divergence in the WAMZ region. The regression results of Eq. 14 is reported in Table 4 which show firstly, the implication of independent monetary policy pursuits on business cycles divergence or shocks (output gaps); and secondly the determinants of aggregate output performance given the national monetary policy stance of WAMZ participants. These results would be discussed and inferences drawn under two sub headings: (i) "Partial Effects of National Monetary and Exchange Rate Policy on Inflation Divergence" which analyses the single pooled equation estimate for Eq. 13 and (ii) "Partial Effects of National Monetary and Exchange Rate Policy on Output Performance" which analyses the pooled single equation estimate for Eq. 14.

(i) Partial Effects of Independent National Monetary and Exchange Rate Policy on WAMZ Inflation Divergence

Table 3: Pooled Single Equation Regression Results

π it for the partial Effects of Monetary and Exchange Rate Policy on WAMZ inflation Divergence (Equation 3.12)					
Dep. Variable: inflation Differential:					
Method: Pooled EGLS (Cross-section SUR)					
Sample (adjusted) : 1991 Q 32007 Q 4					
Included observations : 66 after adjustments					
Cross – sections included : 5					
Total pool (balanced) observations : 330					
Linear estimation after one step weighting matrix					
Variables			**Coefficient**	**Statistics**	
Name	**Symbol**	**Name**	**Value**	**t-stat.**	**Prob.**
Constant		Ø1	.2.07	-1.2	0.23
Nom. ERAPP/Dep.	? NER$_{it-1}$	β_1	0.021	1.6	0.11
Real Out Put Shock	Y$_{it}$	β_2			
Credit to pr. Sect.	CP$_{it}$(-1)	β_3	-0.000012	-3.7	0.00
Credit to Govt.	CG$_{it}$(-2)	β_4	-0.000001	-0.8	0.43
Money Supply:	M$_2$(-1)	β_5	0.00001	4.3	0.00
Monetary Policy Rate	LOG i$_{it}$	β_6	2.25	4.0	0.00
Lagged Aggr. price (Cpl)	P$_{it-1}$		-0.011	-2.5	0.01
Fixed Effects (Cross)					
• GAM -- C			-1.40		
• GHA -- C			0.90		
• GUI -- C			-2.40		

• NIG -- C		2.71
• SLN -- C		0.19
Weighted Statistics		
R Squared	0.47	Main Dependent Var	0.96
Adjusted R Squared	0.45	S D Dependent Var	1.29
S E of regression	0.97	SUM Squared resid	298.4
F Statistics	28.41	Durbin – Watson stat	1.47
Pro F Statistics	0.00		

Source Estimated Using Eviews 6.1

Table 3 presents the regression results of the effects of independent monetary policy stance on inflation convergence around the less than 10 per cent target set for the commencement of WAMZ. The adjusted R2 value, which measures the overall goodness of fit of the regression, show that independent monetary policy stance variables could only account for about 45 per cent of inflation divergence from set targets. It can be inferred that efforts at macroeconomic (price) stabilization around a desired target was not attained. Over the sample period, the un-weighted average regional inflation rates were most often above a single digit target and vary widely among the countries. The summary of the descriptive statistics associated with the inflationary pattern displayed in Figure 5 is as shown in Table 4. This table shows that except for Gambia, all the WAMZ countries have had astonishing records of double digit inflation. The country that recorded the minimum inflation rate during the study period is Gambia at an average of 5.6 per cent while Sierra Leone recorded the maximum average inflation rate of 29.3. The table also shows that for more than half the period under review, both Gambia and Guinea recorded single digit inflation with the median statistics estimated at 3.3 and 7.0 per cent, respectively. These two countries can be described as the low inflation group among WAMZ while Nigeria and Ghana are the highly inflation group, with Sierra Leone joining the club after a protracted period of political crisis and instability.

Figure 5: Inflation Trends in WAMZ, 1991-2007

Legend: Gambia Inflation Rate (%), Ghana Inflation Rate (%), Guinea Inflation Rate (%), Nigeria Inflation Rate (%), Sierra Leone Inflation Rate (%)
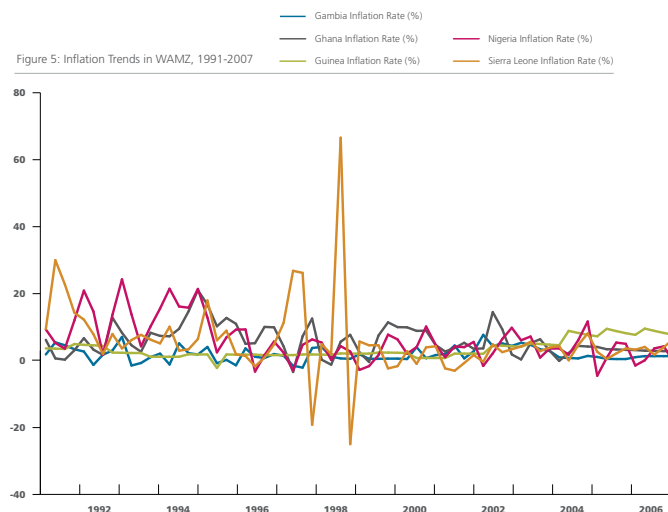
Table 4: WAMZ Inflation Descriptive Statistics 1991 Q 1 to 2007 Q 4

	Gambia	**Ghana**	**Guinea**	**Nigeria**	**S/Leone**
Mean	5.6	23.1	12.2	25.3	29.3
Median	3.3	16.4	7.0	16.9	14.1
Maximum	29.9	102.3	38.7	123.7	588.2
Minimum	-9.2	-13.8	-9.6	-17.5	-66.3
Std. Dev.	8.3	21.1	11.2	30.2	78.6
Skewness	0.7	1.2	1.0	1.3	5.6
Kurtosis	3.2	4.9	3.0	4.6	39.6
Jarque -Bera	5.4	26.1	11.2	26.8	4083.5
Probability	0.1	0.0	0.0	0.0	0.0
Sum	378.1	1550.4	817.5	1693.5	1966.0
Sum Sq. Dev.	4518.9	29260.6	8280.8	60079.2	408136.0
Observation	67.0	67.0	67.0	67.0	67.0

Source : Estimated With Eviews 6.1 from the Regression Data

The overall estimate of the fixed effects constant, ϕ_i, show significant variation in its value across the participating countries in WAMZ. Whereas, it exhibited a negative spread

from the regional average in the case of the Gambia and Guinea, the countries with low records of inflation, it is positive for Nigeria, Ghana and Sierra Leone that have poor records of inflation control. This finding tends to confirm that there is a wide divergence among the participants with regard to the average outcomes of price stabilization efforts, with very slim hope for attaining convergence with independent monetary policy pursuits. The trends in national consumer prices displayed in Figure 6 shows the divergent growth path of prices in these countries. The regression result also shows that the major monetary policy instruments determinants of inflationary divergence are the pursuit of distorted interest rates and expansionary monetary policies, which penalized credit and accentuated output supply/demand gaps, and exchange rates overvaluation.

With regard to interest rates policy stance, the result shows that a 1% rise in interest rates generates about 2.25% rise in inflation rates. This means that high monetary policy rates translated into high lending rates in virtually all the countries within the region. Two fundamental issues belie the independent interest rate policies of WAMZ countries: firstly, is the lack of clear cut policy rules for an objective determination of optimal interest rates. The independent monetary authorities seem to set interest rates arbitrarily, neither following Taylor's rules or the Neo Keynesian framework as the pass-through mechanism to inflationary control. The experience in Ghana and Nigeria is that monetary authorities were more concern with the adverse implication of cheap funds for foreign exchange management. This was with a view to fostering both internal and external balance within a Mundellian framework of balancing the use of monetary policy represented by interest rate/reserve money control and fiscal policy represented by government expenditure. This attempt was a colossal failure because monetary policy rates hike meant for stemming excess national demand could not restrain fiscal borrowing via ways and means, as well as through public debt instruments.

Figure 6A: Trends in Nigeria's Interest Rates, 1991-2007

Figure 6B: Trends in Ghana's Interest Rates, 1991-2006

Figure 6C: Trends in Gambia Interest Rates, 1991-2007
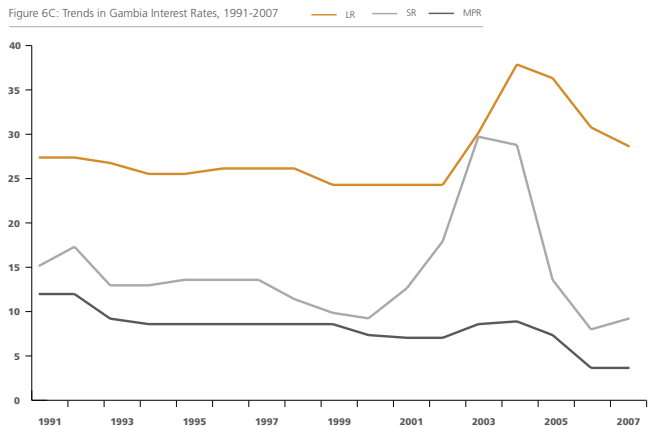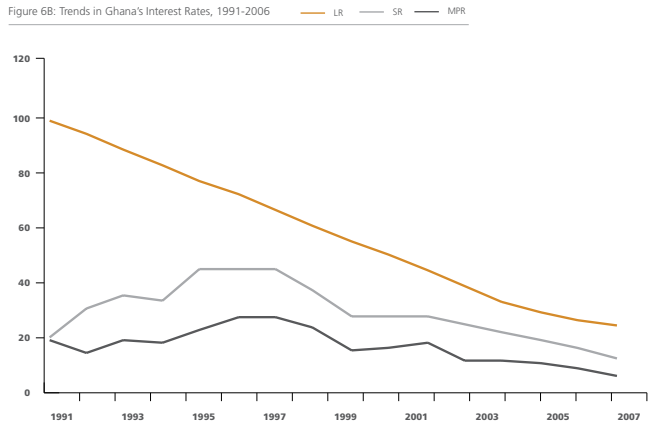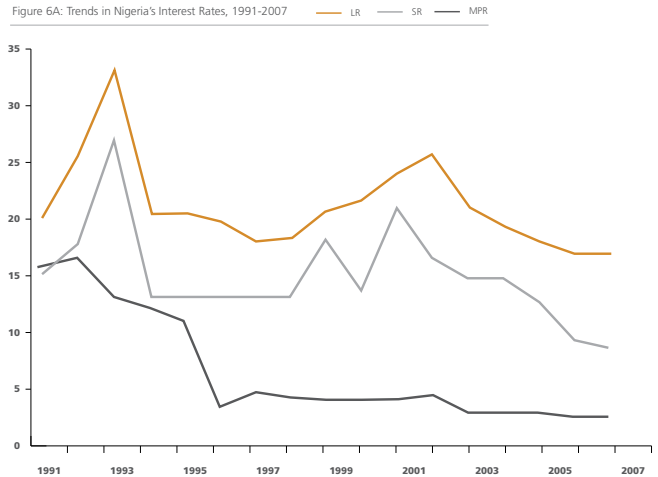
The second is the pervasive internal economic distortion which accompanied the interest rates policy stance, especially the widened divergence between low savings rate which inhibits savings mobilization and high lending rates which resulted in credit apathy by both lenders and borrowers. Financial market operators, especially the banking system capitalized on the distortions to diversify their portfolios from lending to speculations in money markets, in the face of a wide spread margin between savings and treasury bills rates which moved in tandem with the monetary policy rates. Figures 6a and 6b show that both Nigeria and Ghana kept monetary policy rates high, even when savings rates suggest lower costs of funds, while the Gambia aligned her monetary policy rates to savings rates which eliminated speculations.

The coefficient of the change in nominal exchange rate variable is not significant, contrary to the expectation that devaluations drive the inflationary pressures of these countries. It is however positively signed implying that it could potentially be a cause of inflation. This result is expected, since the currencies of these countries are non-traded put pegged to a basket of currencies dominated by the US $. The availability of the US Dollar quantitatively becomes the issue, while the effects of devaluation translate to imported inflation on a narrow basket of imported consumer and capital goods. The experience, in most of the countries is that consumers resorted to local alternatives, while the significant efforts at foreign exchange controls through restrictive tariffs and quantitative controls accrued as rents to protected industries and traders. This finding re-enforces the assertion that devaluation as an instrument of demand management approach to macroeconomic stabilization is rather ineffective to cope with economies that suffer from deep structural maladjustments.

The coefficient of the past trends in national aggregate prices on inflationary convergence is significant and rightly signed. The result showed that a 100% decline in aggregate price level would reduce the inflation gap by about 1.1%. This natural growth path suggests that indeed inflation is not a monetary phenomenon and that macroeconomic losses which emanated from inadequate stabilization would be far greater than the noise generated from subscription to a convergence stance rooted in common monetary and exchange rates stance. Also, credit to private sector exhibited the expected right and significant but inelastic relationship to inflation while credit to government variable turned out to be insignificant. This also confirms that it may not be very correct to blame fiscal indiscipline reflected in public sector borrowing from the banking system for spiraling inflation as the monetary authorities of these countries had often claimed.

(ii) Partial Effects of Independent National Monetary and Exchange Rate Policy on WAMZ Output Performance

The regression results of the estimates of the partial effects of national monetary and exchange rate policy on production shocks asymmetry among participating countries in WAMZ is presented in Table 5. Two sets of equations were estimated. The first estimated the effect of monetary policy instruments on output gap, measured by the extent of divergence between the national growth targets and attainment, denoted by Δy_t. The second evaluated the relative effectiveness of independent monetary and exchange rates policy on national economic performance, measured by the real Gross Domestic Product denoted by y_t. The adjusted R-squared of the regression results of Δy_t dependent equation (see table 5a) is very low, suggesting that independent monetary and exchange rate policy pursuits explained less than 15 per cent of the pervasive output shocks within the WAMZ in the study period. A plot of the growth rates in a Figure 7: Trends in Real GDP Growth Rate (%) of WAMZ Countries stacked graph as shown by Figure 7 suggests very strong business cycles asymmetry. Aggregate economic performance vacillated very widely around stagnation, with a good number of the countries recording declining growths, while most had never attained up to 5 per cent growth rates. The descriptive statistics associated with this graph is as shown in Table 6. The statistics shows that mean average growth rates ranged from as low as 2.2 per cent for Sierra Leone to about 6.6 per cent for Guinea. Gambia, Ghana and Sierra Leone had records of minimum growth rates that were

negative, while Guinea output was most volatile ranging from a minimum of 0.9 per cent to a maximum of 190.4 percent. In general, these countries are characterized by slow growth rates. Another important source of asymmetry is the relative size of participating countries in the real aggregate demand of the region.

Table 5: polled single Equation Regression Results for the partial Effects of Monetary and Exchange Rate policy on WAMZ Output (Equation 3.14)

Dep. Variable: real GDP, y_{it}

Method Pooled EGLs (Cross. Section SUR)

Sample (adjusted): 1991 Q 3 2007 Q 4

Include observations: 66 after adjustments

Cross .sections included: 5

Total pools (balanced) observations: 330

Lines at estimation after one-step weighting matrix

Dep. Variables			**a. ? y_{it}**			**b. y_{it}**		
Independent variables			**Coeff.**	**Statistics**		**Coeff.**	**Statistics**	
Name	**Symbol**	**Coeff.**	**Value**	**t. stat**	**Prob.**	**Value**	**t. stat**	**Prob.**
Constant		ℓ_t	3.47	1.2	0.24	426.08	0.5	0.65
Nom. ER App/ Dep.	? NER_{it-1}	$á_1$	-0.00093	-0.4	0.66	-4.7	-1.9	0.6
In flation Divergence	π_{it}	$á_2$	-0.296	3.3	0.00	-7.6	-1.4	0.16
Credit to pr. Sect.	$CP_{it}(-1)$	$á_3$						
Credit to Govt.	$CG_{it}(-2)$	$á_4$	6.69E - 07	3.8	0.00	-0.0024	-14.8	0.00
Money Supply:	M2(-1)	$á_5$	5.21 E - 07	4.7	0.00	0.0030	19.5	0.00
Monetary Policy Rate	Log i_{it}	$á_6$	-0.268	-2.3	0.02	-268.6	-4.0	0.00
Lagged Aggr. Output (GDP)	$y_{it-1}(-2)$		-0.873	-2.4	0.02	1058.3	9.9	0.00
Fixed Effects (Cross)								
• GAM -- C			-1.72			-5471.1		
• GHA -- C			0.2			-3244.0		
• GU I-- C			-0.09			-6874.4		
• NIG -- C			1.96			-20942.2		
• SLN -- C			-1.08			-5352.6		
Weighted Statistics								
R Squared			0.157			0.988		
Adjusted R Squared			0.131			0.987		
S .E. of regression			0.987			0.803		
F Statistics			0.954			2568.9		
Pro F Statistics			0.000			0		
Mean dependent var				-2.6			5.6	
S. D dependent var				3.1			4.5	
Sum Squared reside				310.5			205.7	
Durbin W- aston Stat				1.1			0.3	

Source : Estimated Using Eviesw s 6.1

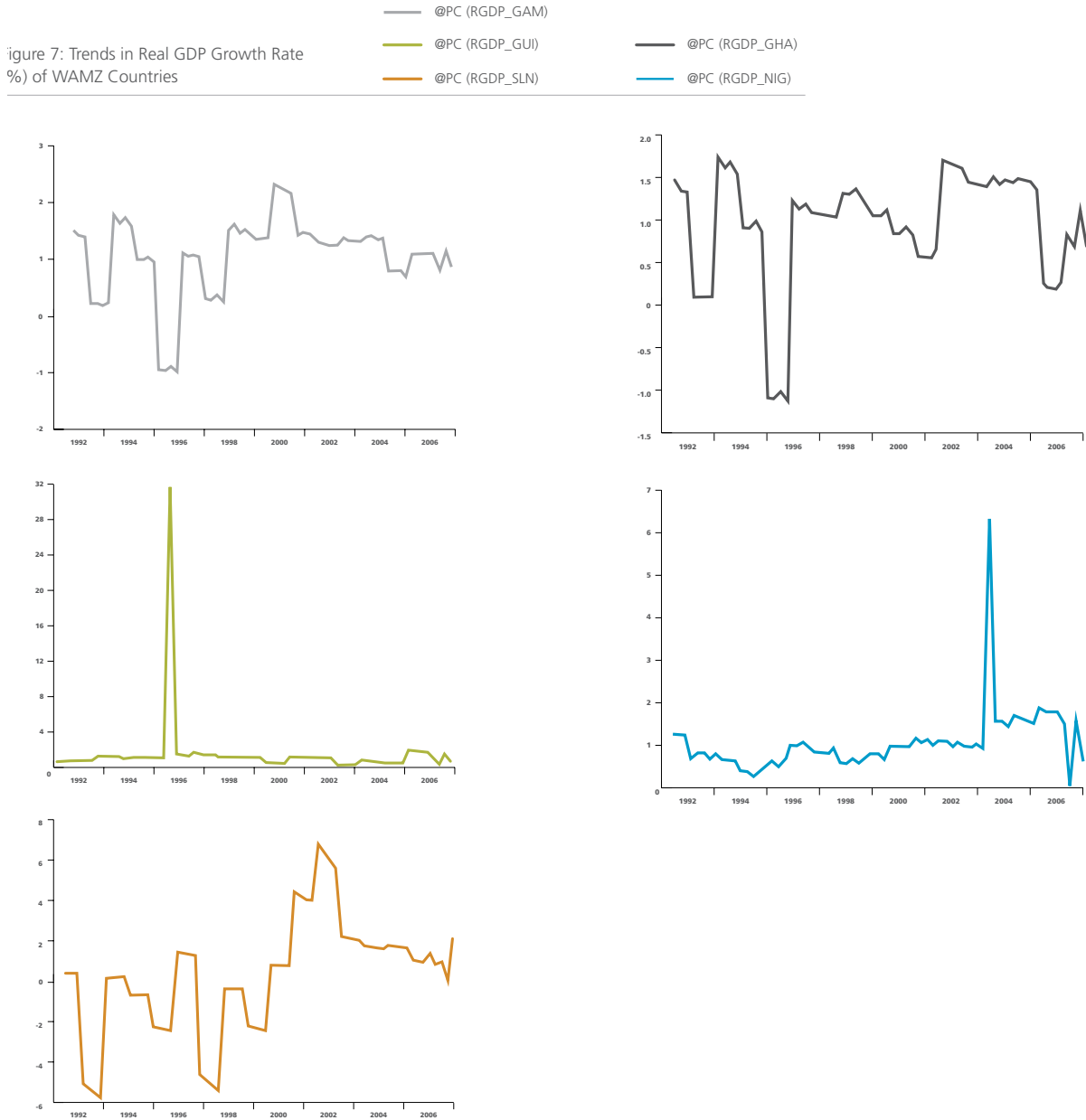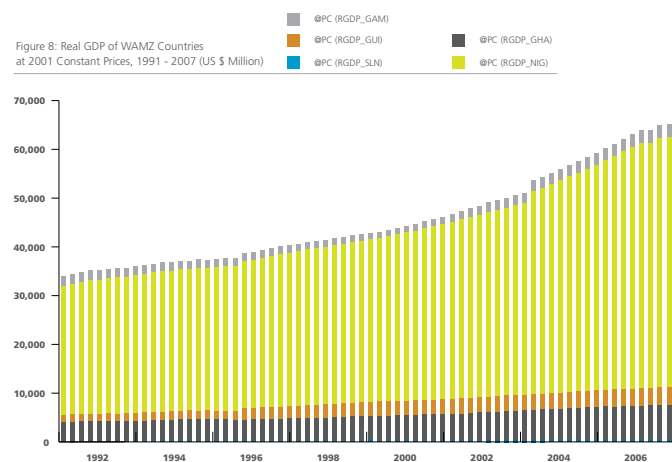Figure 7: Trends in Real GDP Growth Rate (%) of WAMZ Countries

Figure 7: Trends in Real GDP Growth Rate (%) of WAMZ Countries

Table 6: WAMZ Real GDP Growth descriptive Statistics 1991 Q 1 to 2007 Q 4%)

	Gambia	Ghana	Guinea	Nigeria	S/Leone
Mean	4.0	3.8	6.6	4.1	2.2
Median	4.7	4.3	4.2	3.7	3.7
Maximum	9.3	7.0	190.4	26.9	30.4
Minimum	-4.2	-4.3	0.9	0.0	-20.3
Std. Dev	2.9	2.7	22.8	3.3	11.4
Skewness	-1.2	-1.5	7.9	5.1	0.1
Kurtosis	4.8	5.1	64.4	36.5	3.2
Jarque - Bera	24.9	37.2	11217.4	3435.2	0.2
Probability	0.0	0.0	0.0	0.0	0.9
Sum	266.4	251.4	444.5	275.0	147.6
Sum Sq. Dev.	537.2	473.8	34445.1	702.8	8515.2
Observations	67	67	67	67	67

Source: Estimated with Eviews 6.1 from the Regression Data

Figure 8 shows that Nigeria accounts for a significant proportion of the output WAMZ (approximately 80 per cent).

Figure 8: Real GDP of WAMZ Countries at 2001 Constant Prices, 1991 - 2007 (US $ Million)

@PC (RGDP_GAM) @PC (RGDP_GUI) @PC (RGDP_GHA) @PC (RGDP_SLN) @PC (RGDP_NIG)

The overall estimate of the fixed effects constant, ϑ_{it}, for both equations of Table 5 are not significant, but also reflects very significant variation in its value across the participating countries in WAMZ. Whereas, it exhibited a negative spread from the regional average in all the other countries, it posted a positive average for Nigeria. This finding tends to confirm that there is a wide divergence among the participants with regard to the average outcomes of macroeconomic stabilization efforts, with a higher disproportionate weight in favour of Nigeria that is obviously an outlier of the proposed convergence club. This implies that pursuits of a less than optimal macroeconomic stabilization policy could have very negative spillover effects on efforts towards convergence. The trend in National Real GDP displayed in Figure 5.5 shows the divergent growth path which tended to accentuate these asymmetries.

The coefficient, α_1, of exchange rate devaluation, ΔNER_{it-1}, is not significant as a determinant of demand/output shocks within WAMZ in equation 5a, but exhibited an inverse relationship to aggregate output at about 6% confidence level. This result tends to suggest that the production and asymmetric shocks experienced by these countries is not caused by exchange rate devaluation. This is expected, since as a group of small countries, with non-tradable currencies, both export and import prices are preset in foreign traded currencies. As such, exchange rates movements do not necessarily perform the expenditure switching stabilization roles envisioned by traditional theory. Instead, exchange rate devaluation translates into higher costs of imported inputs and consumer goods. The magnitude of these costs can be very high if the foreign resource content of domestic production and consumption is also very high, and economic activity is dominated by non-tradable and primary commodities export. This assertion is consistent with regression results of Table 5b, which shows that 1% devaluation can potentially lead to about 4.7% decline in output.

On the other hand, the coefficient, α_2, of inflation divergence variable, π_{it} is negative and significant in the regression results of Table 5a, confirming the expectation that higher widening gap of inflation from desired level could lead to higher costs of production and consequently lower output. Although the t-statistics of 5b results show that inflation is not a significant determinant of aggregate

output in WAMZ, it exhibited a negative relationship confirming the earlier assertion.

The performance of credit to the private sector variable, Cp_{it}, in the estimated equations was poor, and had to be eliminated from the regression, while the estimate of the coefficient, α_4, of the credit to government, CG_{it}, is significant and correctly signed but inelastic in both equations. The positive sign of this coefficient in 5a suggests that credit to government, especially through the issue of public debt instruments as part of monetary control measures can critically stifle credit to private sector via a crowding out effect with adverse consequence on output performance.

The coefficient, α_5, of the money supply variable, M_2, is significant, positive but inelastic, in line with New Keynesian stance that expansionary monetary stance can spur limited growth when economies operate at less than full employment capacity. This is most likely the case, given the slow growth rates, and inelastic supply which characterize these countries. However, the inelastic outcome of this coefficient points to the weakness of using reserve control via monetary targets as an instrument for promoting growth.

The coefficient, α_6, of monetary policy rate, i_{it}, is significant and exhibit the correct sign. This is consistent with the literature (Corsetti, 2008) that given the path which monetary authorities commit when it defines inflation targets at different horizon, and holding expectation of future productivity constant, the natural rate of interest falls with current productivity gains. This could potentially open a positive output gap in the absence of a contingent optimal reaction by the monetary authorities, which rises with anticipated productivity growth.

The coefficient estimate, λ, of lagged aggregate output variable, y_{it-2} is significant and have the right signs in both equations. The negative sign of this coefficient in 5a is consistent with theoretical expectation that lower past values of output level is likely to be associated with higher output gap. The finding that past trends in output is the major determinant of current output performance

is remarkable. This implies that monetary policy pursuits, in the face of nominal and structural rigidities play insignificant role in demand/output stimulation. Instead, trend in business cycles and output tended to follow the natural rate path which fluctuates with productivity along the production possibility frontiers.

This study examined three alternative options to macroeconomic convergence criteria and policy available to WAMZ countries for entering into monetary union. The first tests the hypothesis that **ex ante** independent monetary and exchange rate policies of each participating country in WAMZ have been relatively ineffective as instruments of national macroeconomic stabilization and therefore suggests that they could be better off surrendering such in favour of regionally coordinated policies. The second tests the hypothesis that **ex ante** independent exchange rates policies of participating countries in WAMZ were generally ineffective as instruments of aggregate global export stimulation of each of the country and in particular, bilateral trade between member countries, suggesting that they could be eliminated among them, while taking a common stand with regard to trade with third parties. The third model tested the hypothesis that there are significant **ex ante** similarities in business cycles induced by intense bilateral trade and other elements of its "gravity" sufficient enough to make the intending members of WAMZ an optimum currency area **ex post**. The summary of findings and conclusions with regard to these tests are as follows

(iii) Trade Gravity Models Results

Using pooled equation regression models, equations 19 and 20 are estimated for the WAMZ countries. In general, I adopted the 5 x 2 cross sectional panel data to capture the entire bilateral relationships of Gambia-Ghana, Gambia-Guinea, Gambia-Nigeria, Gambia-Sierra Leone, Ghana-Guinea, Ghana-Nigeria, Ghana-Sierra Leone, Guinea-Nigeria, Guinea-Sierra Leone and Nigeria-Sierra Leone. These results are as shown in Table 7. Equation 7a represents the regression results for the bilateral export trade dependent variable, while that of 7b is for the total bilateral trade dependent variable. The independent variables can be

grouped into economic or quantitative variables presumed to be the determinants of endogeneity and qualitative variables captured by the dummies. The equations were estimated using seemingly unrelated regression models from a quarterly sample 1996:1 to 2004:4 amounting to 36 numbers of observations for 10 cross-sections making a balanced panel of 360.

Table 7: Regression Results on Intra-WAMZ Trade Gravity Models

	a. BILAT. EXPORTS			b. BILAT. TOT. TRADE		
Dep. Variable	LOG(BTELJ)			LOG (TTMELJ)		
Indepent Variable	Coef.	T-Stat.	Prob.	Coef.	T-Stat.	Prob.
LOG (YRI *YRJ)	0.172	3.8	0.00	0.632	19.1	0.00
LOG {(Y$_i$/popi)*(YJ/POPj)}	-0.370	-8.3	0.00	0.082	4.2	0.00
LOG (IIT$^{AG}_i$/IIT^{AG}j)	0.064	4.1	0.00	-0.007	-3.6	0.00
LOG (IIT$^{AGMI}_i$/IIT^{AGMI} j)	-0.635	-11.4	0.00	0.019	4.8	0.00
Fixed Effects						
• GAMGHA-C	1.940			0.203		
• GAMGUI-C	0.573			-1.123		
• GAMNIG-C	0.779			1.985		
• GAMSLN-C	-0.115			-1.713		
• GHAGUI-C	0.787			0.202		
• GHANIG-C	7.578			2.151		
• GHASLN-C	-0.661			0.266		
• GUINIG-C	4.098			1.853		
• GUISLN-C	1.705			-1.071		
• NIGSLN-C	2.230			1.978		
R-Squared	0.856			0.978		
Adjusted R-squared	0.851			0.977		
S.E. of regression	0.980			0.203		
Durbin-Watson stat	0.274			0.371		
Log Likelihood						502
Mean dependent var	-0.51			0.479		
S.D. dependent Var	2.534			1.351		
Sum Squared resid	316.8			14.31		

Estimated Using Seemingly Unrelated regression methods

The log linear regression models were estimated and the results are summarized into a table for analytical convenience. A review of the estimated equations shows that their goodness of fit is high with adjusted R2 as high as 85% for both equations. It is worthy to mention that three groups of the relationship of interest in this regression analysis are: (i) the effect of output covariability on trade intensity (which is proxied by the log of the product of the bilateral real as well as per capita GDP of the two countries; (ii) the effect of intra-industry trade on bilateral trade intensity (which is captured in this model by the agricultural and primary commodities intra-industry trade); and (iii) the effects of common features of the countries such as membership in a free trade area or currency union, a common language, border, or colonizer, etc. on bilateral trade.

Bilateral Trade and Real and Per Capita GDP Relatives

As indicated in the theoretical framework, the OCA theory suggests that if there are similarities in the co-variation or correlation of outputs, it is expected to be positively related to the bilateral trade intensity between the two countries. Two measures of output correlations in our model are: (a) log of the product of Real GDP of country i and j in the bilateral trade relations denoted by $LOG(Y_{Ri} * Y_{Rj})$ and (b) the log of the product of their per capita income respectively which is denoted by $LOG\left(\frac{Y_{Ni}}{Pop_i} * \frac{Y_{Nj}}{Pop_j}\right)$.

This specification is consistent with Rose (2000). These coefficients are significant especially that of the intra-WAMZ total trade model. However, while the sign of the log of the product of real GDP variable is positive, confirming

that similarities in business cycles have positive effects on bilateral trade among the countries, the coefficients of the product of the per capita GDP is negative.

This is consistent with the results of similar gravity models tests by Masson and Pattillo (2004) which seems to capture well the determinants of bilateral trade between countries. The positive sign of the real GDP variable coefficient estimate agrees with their findings that larger countries exert a greater gravitational pull on imports and push to exports. This is most likely to be true with respect to trade flows intra-WAMZ given the fact that Nigeria accounts for approximately 60 per cent of the GDP, land mass and population of the group. Her pull on imports is very dominant especially so given her buoyant foreign exchange reserves derived from exports of crude oil. She also seems to serve as a base for re-exports of food and other consumer products via informal trade within the ECOWAS sub region.

The negative sign of the coefficient of the per capita GDP variable is also consistent with Masson and Pattillo's (2003) findings that richer countries (in per capita terms) also tend to have higher trade and by implication poorer countries tend to have lesser trade. This is largely true since a priori information on per capita incomes of the countries indicated that they are all classified among low income and somewhat below the poverty lines. One is therefore not surprise that the sign of the coefficient of this variable is negative. The result can therefore be said to be salutary as it portends that improvements in per capital incomes of WAMZ countries could invariably be associated with greater trade in the absence of trade barriers and if supported with common currency. This assertion is consistent with the per capita income **ex post** convergence theorists who maintains that regional integration especially the one advanced by creating a monetary union, may lead to convergence of income levels by stimulating growth in the poorer countries through increased trade (Masson and Pattillo (2004)). They further argue that related initiatives to liberalize factor movements would also favor growth of poorer countries by allowing capital and labor to move to the locations where they are most productive. In general, this is consistent with the assertion by Jenkins and Thomas

(1996) that "there is a growing consensus that 'convergence clubs' exist, where countries with a lower GNP per capita grow more rapidly because they are members of a trade group, or because domestic policy gains credibility by being tied to the domestic policy of a country with a better economic reputation". Although for now, there are doubts with regard to fiscal credibility of the intending members of WAMZ, especially Nigeria, she can certainly gain from allowing her domestic monetary and exchange rate policy to be tied to a regional convergence benchmark if for no other reason but fiscal discipline effects.

Bilateral Trade and Intra-Industry Trade Intensity

You would recall that from the point of view of endogeneity of OCA theory, if intra-industry trade accounts for a high share in trade, then, **ceteris paribus**, business cycles are expected to become more similar across countries. By contrast, increased bilateral trade intensity may lead to divergence of business cycles if the increase in trade is due mainly to increased specialization as predicted by the alternative OCA view (the Krugman's specialization theory).

In order to reflect both theories in our model, I included as explanatory variables and determinants of bilateral trade two variants of intra-industry trade variables: the first is defined as the log of the ratio of intra-industry trade in

$$LOG\left(\frac{IIT_i^{AG}}{IIT_j^{AG}}\right)$$

agriculture of both countries, , designed to capture endogeneity of OCA theory, as **a priori** information suggests very strong similarities in structure of agricultural trade. The second is defined as the log of the ratio of intra-industry trade in primary commodities (agriculture and

$$LOG\left(\frac{IIT_i^{AGMI}}{IIT_j^{AGMI}}\right)$$

mineral resources), , designed to capture Krugman's specialization theory effects, given the sharp differences in this variable between Nigeria and the rest members of WAMZ. This stems from the fact that Nigeria is a major exporter of crude oil and a member of OPEC, a marketing cartel that was able over time to guarantee better terms of trade for her members, as against the

deteriorating terms of trade faced by the other WAMZ members with regard to exports of solid minerals.

From the Table, it can be seen that the coefficient estimates of both variables are significant suggesting that intra-industry trade intensity have significant effects on bilateral trade. However, while the sign of the parameter estimate of intra-industry trade in agricultural commodities is positive, that of bilateral primary commodities trade intensity is negative.

The positive sign of the agricultural trade intensity variables suggest that the positive bilateral co-movements can, **ceteris paribus**, lead to trade creation within the region. This is plausible, given the structure of agricultural trade within the region, which are mostly in staple foods especially grains, tubers, vegetable oils and livestock products (live animals, poultry and eggs). Sufficient pockets of deficit in supply of these products exist within the region, especially in Nigeria, enough to pull imports towards her. This fact is evidenced by the large food imports of these countries from the rest of the world which accounts for a significant proportion of their foreign exchange spending annually. Also, there are strong similarities in agricultural export baskets to the rest of the world, made up of cocoa, coffee, palm produce, groundnut and ginger, and they indeed face the same terms of trade. This similarity is therefore supportive of the fact that opportunities exist to negotiate for better terms of trade as a regional group or trade bloc, an action that could lead to **ex post** convergence of business cycles and ultimately trade creation within the sub region.

The negative sign of the parameter estimate of the coefficient of the intra-industry trade in primary commodities is to be expected given the divergence in the structure of commodities trade basket. While oil exports account for about 95 percent of Nigeria's primary commodity exports, the other member countries of WAMZ relied entirely on agricultural and solid mineral exports. Thus, increased dominance of a specialized product like petroleum in the export basket of Nigeria portends the fact that opportunities exist for trade expansion in the face of other endogenous factors such as proximity, adjacency and common currency. While Nigeria's exports of petroleum

products to the other WAMZ member countries is expected to increase, a reciprocal increase in agricultural exports of these countries to Nigeria may also take place. Thus, in the event of the emergence of a monetary union, opportunities exist to internalize **ex post** a greater fraction of the region's trade, given this significant and indeed negative divergence of these variables between Nigeria and the rest others.

Bilateral Trade and Qualitative Trade Gravity Indicators

You would recall that the third interest of the estimated gravity model is to measure the effects of common features of the countries such as membership in a free trade area or currency union, a common language, border, or colonizer, etc… on bilateral trade. Consequent on this, four dummy variables were included in the regression analysis, viz.: adjacency, $LOG(D_1)_{ADJ}$, common language, $LOG(D_2)_{lANG}$, common currency, $LOG(D_3)_{CUR}$, and common colonizer. $LOG(D_4)_{COL}$.

Table 8 : regression Results of Intra-WAMZ Trade Gravity Models which Include Trade Dummies

	a. BILAT. EXPORTS			b. BILAT. TOT. TRADE.		
Dep. Variable	**LOG<BTEIJ>**			**LOG<TTMEIJ>**		
Independent variable	**Coef.**	**t-Stat.**	**Prob.**	**Coef.**	**t-Stat.**	**Prob.**
C	-10.036	-7.9	0.00	-4.702	-14.3	0.00
LOG«GDPI?> * <GDPJ?»	-0.262	-2.3	0.02	0.363	12.2	0.00
LOG«NGDPI?/POPI?>*<N	1.112	11.4	0.00	0.878	31.8	0.00
LOG<XAGI? / XAGJ?>	0.238	15.4	0.00	0.00012	0.1	0.96
LOG<XAGMII? / XAGMIJ?>	-0.819	-14.9	0.00	-0.122	-14.3	0.00
DCUR?	-3.329	-6.9	0.00	-2.746	-34.4	0.00
LOG<DADJ?>	0.184	0.9	0.37	0.095	3.3	0.00
DCOL?	-1.100	-8.0	0.00	-0.481	-13.7	0.00
R-Squared	0.376			0.752		
Adjusted R-Squared	0.362			0.747		
S.E. of regression	2.153			0.680		
Durbin-Watson stat	0.080			0.032		
Log Likelihood				206.7		
Mean dependent Var		-1.44			7.479	
S.D. dependent Var		2.696			1.351	
Sum Squared resid		1502			162.5	

The regression result is as shown in table 7.2. In general, the coefficient estimates of these dummies were significant for the bilateral total trade but not significant for the bilateral export trade functions. This result shows that intra-WAMZ total trade was significantly influenced by these variables. While adjacency had positive effects, differences in currency and language had significant negative effects. These tended to confirm the Rose effects of currency union dummies on trade expansion and/or contraction for the WAMZ. A widely cited recent paper (Rose, 2000), using a global sample, finds that currency unions increase trade by about a factor of 3 from cross-sectional results while time-series analysis with fixed effects give somewhat lower estimates of around 1.7 (Glike and Rose, 2002). Although a simulation to estimate the effects of trade gravity models on the extent of trade creation has not been carried out, it is most likely that the outcome will compare favorably with these results. This would be subject to particularities which Masson and Pattillo (2004) pointed out. In particular, they note that "while it is useful to have the widest sample possible if that sample is homogeneous, it may also be the case that there are particularities in a region that make it not comparable to others". Perhaps the non-significance of these dummies with regard to the bilateral trade coefficients could be attributed to these "particularities" such as lack of common borders and common currency, while the dummies for common language and common colonizer are not strikingly distinguishing enough to make a difference. Lack of common border becomes much more important, in the face of weak transportation links within the ECOWAS sub region and between many African countries. The Rose effect could also have been compromised by poor data on regional trade, as there seems to be a consensus among policy analysts that an appreciable unrecorded trade takes place within the sub region.

SUMMARY, CHALLENGES, POLICY RECOMMENDATIONS AND CONCLUSIONS

This study presents an alternative reconsideration of traditional Optimum Currency Areas (OCA) macroeconomic convergence criteria as options for WAMZ commencement, in the light of recent advancements in monetary theory. It presents micro-founded models, rooted in New Keynesian traditions to show that tests confirming widespread

divergence from ideal macroeconomic benchmarks with unsustainable independent monetary and exchange rates pursuits and trade gravity models offer a more appropriate evaluating criterion for WAMZ than the current one, if the ultimate objective is a merger with WAEMU.

The results show that: (i) substantial macroeconomic costs have been associated with monetary autonomy reflected in the wide divergence of outcomes from set benchmarks, with very little prospect for moving towards macroeconomic convergence in the absence of internationally binding monetary policy coordination framework; (ii) that exchange rates do not perform the stabilizing role envisioned by traditional OCA theory, as it is an inconsequential determinant of intra-WAMZ exports, but translates into higher domestic inflations; (iii) a common monetary policy given the significance of trade gravity dummies in the regression, confirms that it can be more efficient than nationally differentiated policies, even when shocks are strongly asymmetric, provided that the composition of aggregate spending tends to be symmetric at union-wide level. The strong convergence of aggregate output/demand pattern between WAMZ countries based on trade gravity models thus emerges as a possible positive attribute of countries participating in efficient currency areas.

Alternative Perspectives on the Challenges and Policy Options for WAMZ

This study presents a new perspective of the challenges which confronts the WAMZ projects by debunking the traditional theories of inevitability of macroeconomic convergence as the sole criteria for determining its commencement. It noted that the pitfall of such arguments is the erroneous assumptions that *ex ante* policy environment is a good mirror of *ex post* outcomes with monetary unionization as has been the case with the EU (characterized by advance economic and financial market structures) experience. However, the review of the background to this study show that participating countries in WAMZ are characterized by weak economic and financial structures and undue fiscal impetus which compromises independent monetary and exchange rates policies that have kept participating

countries from attaining macroeconomic convergence in the foreseeable future. The only comparable monetary union to the WAMZ is that of WAEMU (with similar economic and financial structure to WAMZ) whose experience show that their union was not preceded by insistence on attainment of macroeconomic convergence, but that unionization had served as a veritable instrument for the attainment of macroeconomic convergence **ex post**. This further lends support to the findings of the trade gravity models as viable alternative tests to macroeconomic convergence criteria tests, with the conclusion that new perspectives of the real challenge to WAMZ union be identified. In the light of these findings, this study agree with Ojo (2005) and Nnanna (2007) that the real challenge to WAMZ commencement is not macroeconomic non-convergence, but lack of political will and commitment on the part of all stakeholders towards full implementation of the schemes along the path taken by WAEMU (the first monetary zone with which WAMZ must be merged to obtain the ECOWAS monetary union). Among these challenges are:

i. Inadequate political commitment on the part of the participating countries that have continued to draw up their independent annual economic programmes without taking into consideration the regionally agreed benchmarks or matching same with adequate financial support.

ii. Political instability characterized by military dictatorships, poor governance practices and civil conflicts which have been part of the history of these participating countries in WAMZ. These not only prevent these countries from pursuing sustainable independent fiscal, monetary and exchange rates policies, but accentuated the degree of non-convergence as well as alienates crisis afflicted members of the Zone from the much needed technical and financial support by external partners and foreign investors.

iii. Poor sustainability of policy actions towards the process of monetary unionization, especially by the major economies of WAMZ (Nigeria and Ghana) and their failure to provide the desired leadership

and role similar to that which Germany and France played in the European Union integration programmes.

iv. Poor Communication and sensitization strategy reflected in:

- apparent lack of clearly defined communication strategy for winning the support of the government and people of participating countries;

- weak dissemination of information on progress made and the relative inability to stimulate and encourage the necessary complimentary technical preparations by all stakeholders;

- Doubts, uncertainty and lack of information of what the transition to a single currency would involve

- Doubts about the gains and benefits of the projects among influential elites and major stakeholders.

Recommended Policy Options

The lesson to be learned so far from the review of the constraints and challenges to the WAMZ projects is the need to adopt a credible and feasible integration model that is capable of addressing these constraints. In this context, the choice of model should be guided by the overriding need to curtail fiscal impetus and indiscipline that hampered the effectiveness of erstwhile independent monetary and exchange policies. It should also be one which capitalize on and exploit the **ex ante** strong endogenous factors and the results of the trade gravity tests to proceed on establishing the monetary union in anticipation that it could act as instruments for the achievement of macroeconomic convergence of WAMZ **ex post**. The WAEMU can be studied further to identify the optimal policy and institutional framework for the WAMZ. In particular, the core strategic elements of the integration model to be adopted should be compatible with the enabling environment, the existing state of financial infrastructure and human capacities. Above all, it should be a model that can garner support and assure all stakeholders that the gains from the project far outweigh the costs in addition to eliminating implicit

doubts and fear associated with the anticipated changes. In the light of these, this study recommends the following policy options:

a. *A vertical integration options similar to that of WAEMU should be adopted for integrating the national central banks, common monetary policy and currency managements so as to make the future merger of WAMZ with it easy to accomplish for the region-wide ECOWAS common currency. This means that WAMZ should consider fusing together their existing central banks into one regional central bank, instead of the proposed maintenance of a system of national central banks (similar to the EU) which requires the need for the attainment of ex ante macroeconomic convergence.*

b. *A complimentary political and over-sight institutional arrangements similar to that of the WAEMU, meaning that WAMZ would be headed by Conference of Heads of States, while the common central bank would be headed by a Council of Ministers that should include Finance Minister of member countries. However, unlike WAEMU, this body should be expanded to include the Governor of each of the participating central banks (the promoters of the union) as executive members of the West African Central Bank governing board. It is recommended that they be designated as Vice President and Head of Country Operations of the proposed regional bank as a way of garnering their support instead of relegation to the position of Branch Managers which is the current situation under the WAEMU arrangements.*

c. *An adoption of institutional and administrative options for the supra-national central bank that is modeled along the lines of the BCEAO, the common central bank of the WAEMU. This suggests the creation of a single regional monetary authority for managing the internal and external value of the envisaged common currency and guaranteeing its integrity through implementation of credible management strategies.*

d. An adoption of a monetary policy option that is consistent with the integration model chosen. In this wise, the West African Central Bank should possess instruments autonomy to set ultimate objectives, intermediate targets and operating procedures for the implementation of union-wide monetary policies without interference from any participating country's government within or outside the sub-region.

e. An adoption of a payment systems framework that takes into account the current habit and preference of the people in the region to transact in cash as against cheques, credit cards or other bank instruments. This requires making adequate provisions for cash dispensing machines. This should also be accompanied with the development of region-wide payment systems.

f. The adoption of an exchange rate mechanism and convertibility arrangements such that the initial parity rate is one that is optimal and socially acceptable by all stakeholders. It is recommended that this should be determined as a weighted average (using either stock of external reserves or any other criteria as weights) of the exchange rates of the existing national currencies of participating countries to the US Dollar at the time of commencement of the common currency. It is also recommended that the Euro and not the US Dollar should be adopted as the main reserves currency of the WAMZ given the dominance of the EU countries as trading partners.

Concluding Remarks

The overall contribution of this study to knowledge is that it debunked the inevitability of macroeconomic convergence criteria as the most optimal options for the commencement of the WAMZ. Indeed, it was established that given the **ex ante** independent fiscal and monetary policy pursuits of each of the participating country, there is the likelihood that not more than two countries can meet these criteria, suggesting that the commencement date could remain indeterminate. It also shows that there are alternative empirical tests of OCA that offer more credible evaluating criteria for the WAMZ project than the macroeconomic convergence criterion. It further reinforced the our conviction that opportunities exist for the stakeholders to advance the common currency project, given the trade gravity model results to commence the programme since their independent monetary and exchange rate policies have had adverse effects on economic growth and inflation in WAMZ countries.

In conclusion, it is desirable to note that the relative ineffectiveness of independent monetary and exchange rates policies stemmed in part from the lack of political autonomy of the national monetary authorities (the central banks, which hitherto led to a compromising stance with respect to its choice of instruments for monetary controls) and partly to inappropriate choice of instruments, with inherent bias against growth, but laying very strong foundation for inflationary spiral. It does appear that under this macroeconomic environment, there is little prospect for improvement except some alternative actions are taken to overcome the overbearing political influence. This study has shown that this can be found in entering into a currency union, with the surrender of monetary and exchange rate policy to a superior body.

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SINGLE CURRENCY IN THE ECOWAS REGION:
Is it a plausible option?

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Contents

EXECUTIVE SUMMARY AND POLICY RECOMMENDATIONS

This paper investigates empirically the possibility of forming an Optimum Currency Area (OCA) in which members will be countries of Economic Community of West African States (ECOWAS). ECOWAS was initiated in 1975, and includes Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone and Togo, as members. ECOWAS is the largest single regional trade grouping in Africa. Under OCA, member countries share a common currency (like the Euro), while foregoing their autonomy with respect to their use of monetary policy instruments. We say that the countries are good candidates for forming an OCA if there is a long run relationship in the trend (permanent) component of output. There is a general consensus among macroeconomists that the trend component of GDP is explained by supply shocks and is of a permanent nature. Our results indicate existence of long run relationship in the trend component of GDP among the member countries in the ECOWAS region.

We found that the ECOWAS region has got most of the desirable characteristics for forming an OCA. The preliminary inferences are supported well by our empirical results. To identify temporary and permanent components of output we used the Beveridge-Nelson methodology. The permanent component of the output is due to changes in real (supply) side factors, like resource endowments, technology, etc. whereas the temporary component of the output is attributed to the changes in effective demand. Most of the movement in output is driven by the unobserved trend component. Hence, if we see there is a co-movement i.e. existence of a long term relation among the trend component of GDP, we can say there will be little or no conflict in following common macroeconomic policy to reach a common economic goal of minimizing output gap (that is, lower inflation and lower unemployment numbers). In this paper we find existence of long term relationship in the trend component of output among the West African countries. This implies that a common monetary and fiscal policy may be appropriate for these nations. That is, forming an OCA in ECOWAS region would be expected to result in monetary and fiscal policy settings that would not create relative advantages or disadvantages between the member states.

However, these similarities in economic characteristics will not work in favor if some of the present problems in the ECOWAS region are not addressed. First there is a need to build a proper infrastructure. There is a dearth of road and railway infrastructures. Secondly, the member countries should take more initiatives to trade among themselves rather than trading with more advanced economies. Many operating companies in the ECOWAS region are headquartered in developed countries. So when agreements are concluded among member countries of ECOWAS, the dominance of these trans-national corporations reduces such policy initiatives. Also, since most of the trade in the region involves primary commodities there is a need to diversify production into higher value added manufactured items. This might lead to possibility of intra-industry trade and sustain monopolistic type competition. Third, the presence of fixed exchange rate regimes between French Franc and some currencies in West Africa also discourages any further initiative for having a common currency in the ECOWAS region. Fourth, given the ever increasing rise in population in Africa, there is a need to increase employable opportunities in the region. According to recently published world population statistics by United Nations Population Information Network, in 2050, Africa with 1.99 billion inhabitants, will be more populated than India (around 400 millions more inhabitants), and much more than China (around 600 millions more inhabitants). And finally, there should be some conscious effort by the relatively resource endowed economies in West Africa, such as, Nigeria, Ghana, Senegal and Côte d'Ivoire, to undertake more initiative to trade with relatively resource-poor States in West Africa. At a time when direct transfer of resources sounds rather implausible, trade can help to build purchasing power in the region.

INTRODUCTION

Despite ongoing controversy over the hypothetical and empirical merits of regional trade agreements in and of themselves and in relation to global trade liberalization, over the last two decades, regional trade agreements have gained ever increased prominence. Around 200 regional trade agreements, notified under the General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO), are in force today. Rather than attempting to resolve the controversy regarding the merits of regional trade agreements, we have instead chosen to explore whether economic characteristics of the members of one such regional agreement, the Economic Community of West African States (ECOWAS), predispose the successful formation of an optimum currency area (OCA).

ECOWAS was initiated in 1975, and includes Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone and Togo, as members. ECOWAS is the largest single regional trade grouping in Africa. The idea behind ECOWAS was initially to form a Free Trade Area (FTA) among the member States before moving towards higher types of regional integration in the form of Customs Union (CU), Common Markets (CM) and Economic Union (EU).[1] Although, at present, most of the trade within ECOWAS is tariff-free, indication about higher form of regional integration in the form of free movement of labours, are still missing. In this aspect, the present exercise looks into viability of forming deeper economic integration (in the form of an OCA) among ECOWAS member countries.

WHAT IS AN OCA?

The concept of an OCA was originally developed by Mundell (1961) and extended by McKinnon (1963). A currency area is an area in which exchange rates are fixed or which has a common currency. A currency area becomes optimal when the economic efficiency (measured in terms of benefits less costs) for forming it is maximized. Therefore, much of the debate on the desirability of forming an OCA deals with identification of the characteristics of member nations that

would make monetary union more (or less) beneficial. The four categories of factors that have been identified as key determinants of whether members will benefit from joining a monetary union are: (1) the extent of trade, (2) the symmetry of economic activity, (3) country characteristics, and (4) labor mobility.

Criterion 1: extent of trade

The more the member countries trade among themselves, the more they will value bilateral exchange rate stability. When trading partners are on a floating exchange rate, uncertainty about future exchange rate movements can adversely affect trade in goods, services, and capital. While forward exchange rate markets can reduce the risk of exchange rate uncertainty, such markets are not well developed in the ECOWAS region. In contrast, when a group of nations form a monetary union like the European Union (EU), exchange rate uncertainty is eliminated.

Criterion 2: symmetry of economic activity

One objective of traditional macroeconomic policy is to maintain internal balance, i.e., keep the economy near full employment and inflation near zero. Expansionary monetary policies are needed to accomplish these goals during a recession, while contractionary monetary policies are prescribed as a response to heightened inflation. Because members of monetary unions lose their ability to adopt independent monetary policies, countries that share dynamic economic trends are better candidates for forming a successful monetary union than countries with dissimilar economic dynamics. This also means that similar economies can better afford to share a common exchange rate, an important consideration because countries within a monetary union can no longer use exchange rates as an instrument for relative price adjustments.

Criterion 3: country characteristics

The abundant body of literature that has explored the role of economic characteristics of member nations within OCAs concludes that economies that are similar in

size, openness, and development, and are geographical proximate, are more likely to benefit from forming an OCA. McKinnon (1963) points out that the more open the economy, the more it will be inclined to use fixed exchange rates, while flexible exchange rates are more advantageous for fairly closed economies. Lumsdaine & Prasad (2003), and Backus & Kehoe (1992) observed that countries with similar economic profiles are better candidates for forming an OCA.

Criterion 4: labor mobility and wage flexibility

The main cost of a currency union is related to the loss of an independent monetary policy for member countries to smooth-out business cycles. If wages are rigid and if labor mobility is limited, countries that form an OCA will have more difficulty adjusting to demand shifts than countries that have maintained their own national currency and that can devalue (or revalue) their currency. A high degree of labor mobility may serve as a channel through which adjustment to shocks can occur. Blanchard & Katz (1992) present empirical evidence that labor mobility in the United States has played an important role in adjustment, substituting to a large extent for price flexibility.

In the light of the above literature we will now try to examine plausibility of forming an OCA in the ECOWAS region. The reason why we choose ECOWAS is because it is the largest single grouping in Africa. Although we examine similarity in economic structure, trade flow and labor mobility, the main objective of the paper will be to examine symmetry in economic activity as a preliminary guide to form a monetary union in the ECOWAS region. The rest of the paper is structured as follows. Section 3 examines ECOWAS member economies on the basis of their economic structure, trade flows and labor mobility. Section 4 deals with the empirical methodology and analyzes whether external economic shocks have similar or dissimilar economic consequences on the member countries. Section 5 interprets the results while discussing the potential of forming an OCA within ECOWAS region. Section 6 concludes.

ECONOMIC CHARACTERISTICS OF ECOWAS NATIONS

When compared in terms of their economic structure namely, saving as a percentage of GDP, demographic profile and labor mobility, ECOWAS nations has got some similarities. The industrial sector constitutes roughly a fourth of GDP in most member countries, while share of agriculture hovers around a third of national income. Majority of the population still lives in the rural areas. Agriculture seems to be the dominant means of livelihood, although in case of economies like, Nigeria, natural resources (mainly, crude oil) is the mainstay of economic activity. Except for Burkina Faso, Guinea, and Sierra Leone, saving as proportion of GDP are also similar across countries. These countries also share a similar demographic profile. Very few percentage of the population belongs to the group aging 65 and above. This indicates that these countries are not likely to face aging problem anytime soon which could put pressure on common fiscal resources. When countries share a similar type of economic characteristics, it indicates a lower pressure to transfer funds from relatively resourceful countries to the poorer ones and hence a greater harmony in following a common fiscal and monetary policy.

However, the extents of trade among the ECOWAS nations are low. ECOWAS member countries trade in much greater amount with European Union relative to what they trade among themselves (See Table 2). One reason for low value of trade among ECOWAS nations are because tradables primarily comprise of agricultural items (cocoa beans, timber, coffee, yarn, etc.) and extractive items in the form of natural resources, like, oil. Similar exports profile with respect to primary commodities discourages trade.

Another reason for low intra-ECOWAS trade is because of poor infrastructure in the region. As is evident from Table 3, the region is not well served by a good network of roads and railways, crucial for the movement of goods in the region. Only Nigeria and Cape Verde have somewhat more miles of paved road relative to unpaved roads. Similar is the case with miles of railway network, with, Nigeria and Guinea having somewhat better railway network facilities

when compared to other African States. In general, railway lines coverage as percentage of total surface area is less than 0.5 percent for most African countries, which is quite low when compared to some emerging economies in Asia. For example, railway lines coverage as a percentage of total surface area for China, India, South Korea and Vietnam are, 0.78, 1.92, 3.40, and 0.79 percent, respectively. Political and social conflicts in Liberia, Sierra Leone, Guinea Bissau and Niger, has prevented national governments divert adequate funds for development of both physical and social infrastructures.

However against these odds, the hope lies as most of these economies are relatively open. Forming an OCA is likely to enhance the trade figures more as there will be no restrictions on movement of goods and services (Table 4).

Finally, we examine symmetry in economic activity. We based our analysis by examining how the key economic variable, namely the outputs of the ECOWAS member countries, respond to external shocks. We considered Gross Domestic Product (GDP) as a proxy for output. Changes in the level of output over time are due to permanent and transitory disturbances. There is a general consensus among macroeconomists that the transitory part of the GDP (also known as cycle) is of temporary in nature and is caused by demand shocks. The trend part of the GDP (also known as permanent component) is explained by supply shocks and is of permanent nature. In order to show synchronized movement in output we have to consider the permanent part of GDP and test whether there is any long term relation among the trend component of GDP in the region. The temporary part of GDP by definition is stationary and therefore cannot be tested for cointegration to ascertain presence of any long term relation.

METHODOLOGY

To examine comovement we need to model changes in output over time. In the 1970s, the most popular method for determining fluctuations in output was to model a time series as having a trend as a deterministic function of time. In modeling GDP, the simple model containing a linear time trend is given as follows:

$$y_t = \alpha + \beta t + \varepsilon_t \qquad (1)$$

where y_t is GDP, t stands for time trend, ε_t has zero mean and variance σ^2, and ε_t is serially uncorrelated. The idea behind this specification is that the potential output is measured along the trend line, and the residuals measure cyclical fluctuations around the trend output. The main drawback of this type of model is that the trend is assumed to be a deterministic function of time. But the trend itself may vary over time.

When the time series has a variable or stochastic trend, the conventional regression analysis containing a linear trend in the model could give misleading results (Nelson and Plosser 1982; Stock and Watson 1988). Box and Jenkins (1976) allowed trend to be driven by cumulative effects of random shocks, resulting in stochastic trend. The advantage of using Box-Jenkins framework is that "they have the potential to approximate dynamics more parsimoniously than purely autoregressive or moving average models" (p. 180, Diebold 1998).

Once we have estimated the model using Box-Jenkins methodology, the next step is to extract the stochastic trend from the model. Mechanical filters, such as the Hodrick and Prescott (1997) filter, hereafter the HP filter, or the band-pass filter proposed by Baxter and King (1995), hereafter the BK filter, can extract a trend measure from the actual output series. However, these univariate filters have been criticized. For example, Harvey and Jaeger (1993) find that the HP filter with (nearly) integrated data can induce spurious cyclicity. Guay and St-Amant (1996) show that both the BK and HP filters do not accurately decompose time series into their trend and cyclical components when the data have the typical spectral (or pseudo-spectral) shape identified by Granger (1996). Moreover, Baxter and King (1995) find that the HP and the BK filters show instability of estimates near the end of the sample period.

In this paper an alternative estimation techniques, the Beveridge-Nelson (1981) methodology is used to estimate the stochastic trend. Beveridge and Nelson show that any ARIMA model can be represented as a stochastic trend

plus a stationary component where a stochastic trend is defined to be random walk, possibly with a drift. For any data generating process y_t, using Beveridge-Nelson methodology, we can decompose it as follows:

$$y_t = y_t^p + y_t^s$$

where $y_t^p = \mu t + h \sum_{r=1}^{t} \varepsilon_r$ and $y_t^s = d(L)\varepsilon_t$ or

$$y_t^p = \mu + y_{t-1}^p + h\varepsilon_t \qquad (2)$$

y_{tp} is a stochastic trend and is modeled as random walk with a drift μ. The permanent and the stationary components of the time series are both proportional to the disturbance term ε_t and are thus perfectly correlated. Beveridge and Nelson (1981) defined the permanent part as that part of y_t which will be continued into the future, whereas the temporary part is purely a stationary random process.

Data

We have GDP data for each country, namely, Benin, Burkina Faso, Cote d'Ivoire, Ghana, Liberia, Niger, Nigeria, Senegal, Sierra Leone and Togo. Cape Verde, Gambia, Guinea, Liberia, Mali and Mauritania are excluded from the analysis as relevant data for all time periods for these countries are not available. The results of the analysis will not change much as these countries are smaller economies, with, Cote d'Ivoire, Nigeria, Ghana and Senegal being the largest economies. The data consisted of 48 annual observations from 1960 to 2007. The data used in this study are real GDP data measured in current US dollars. The data is obtained from World Development Indicators, World Bank.

RESULTS AND ANALYSIS

The first step involves testing the data series for stationary. To test for nonstationarity, we used Augmented Dickey-Fuller tests (ADF). Using this test statistic, we found evidence of nonstationarity for the GDP. The result of the ADF test in Table 6 show that for all the sample countries data exhibit unit root, suggesting that these variables are not mean reverting but are I(1) processes. Specifically, we estimated the regression model

$$\Delta y_t = \beta_0 + \beta_1 y_{t-1} + \sum_{j=1}^{n} \alpha_j \Delta y_{t-j} + \varepsilon_t$$

where, y_t is the logarithm of the GDP series for each countries, and β_1 is the ADF parameter. To determine appropriate specification for the number of lagged GDP terms, we use the standard lag-length diagnostic tests, such as AIC and Schwarz Criterion. The most parsimonious specification is obtained choosing a lag-length of $n = 3$. The partial t-statistics on second and third-order lagged output were not statistically significant (P-value>0.10). Loss functions, such as AIC and Schwarz Criterion, were roughly minimized in the neighborhood of $n = 3$. Given the MacKinnon (1996) critical values of 2.61, we fail to reject the null hypothesis of a unit root at the 5% level of significance. Taking first difference of the data, we reject the null hypothesis of a unit root at the 1% level of significance. Hence, the GDP data are non stationary.

Having identified the data as non-stationary, we take the first difference of the level data series and make them stationary. The autocorrelation and the partial autocorrelation function of the first difference of the log of output (y_t), for the ten countries were then examined. They were identified and estimated as an ARIMA process. The Beveridge and Nelson (1981) decomposition is now applied to these data sets. Using (5) and (6) we can compute the permanent and the temporary component of y_t. The results of the estimated model for each of the ten countries are summarized below[2].

Benin

Identification: $\Delta y_t = \underset{(5.305)}{0.0673} - \underset{(2.076)}{0.3055}\,\varepsilon_{t\text{-}4} + \varepsilon_t$

Solution:

$$y_t = y_0 + 0.0673 \cdot t + 0.6945 \sum_{r=1}^{t} \varepsilon_r + 0.3055 \cdot \left(\varepsilon_t + \varepsilon_{t-1} + \varepsilon_{t-2} + \varepsilon_{t-3}\right)$$

Burkina Faso

Identification: $y_t = \underset{(4.6374)}{0.0650} - \underset{(24.73)}{0.850}\,\varepsilon_{t\text{-}14} + \varepsilon_t$

Solution:

$$y_t = y_0 + 0.065 \cdot t + 0.15 \sum_{r=1}^{t} \varepsilon_r + 0.85 \cdot \left(\varepsilon_t + \varepsilon_{t-1} + \varepsilon_{t-2} + \cdots\cdots + \varepsilon_{t-13}\right)$$

Cote d'Ivoire

Identification: $\Delta y_t = \underset{(2.831)}{0.07511} + \underset{(2.230)}{0.3187}\,\Delta y_{t\text{-}1} + \varepsilon_t$

Solution: $y_t = y_0 + 0.1103 \cdot t + 1.4678 \sum_{r=1}^{t} \varepsilon_r$

Ghana

Identification: $\Delta y_t = \underset{(4.36)}{0.05585} - \underset{(27.93)}{0.8586}\,\varepsilon_{t\text{-}14} + \varepsilon_t$

Solution:

$$y_t = y_0 + 0.05585 \cdot t + 0.1414 \sum_{r=1}^{t} \varepsilon_r + 0.8586 \cdot \left(\varepsilon_t + \varepsilon_{t-1} + \varepsilon_{t-2} + \cdots + \varepsilon_{t-13}\right)$$

Liberia

Identification:

$$\Delta y_t = \underset{(.5853)}{0.0344} + \underset{(2.25)}{0.354}\,\Delta y_{t\text{-}2} + \underset{(1.50)}{0.439}\,\varepsilon_{t\text{-}1} + \varepsilon_t$$

Solution: $y_t = y_0 + 0.0533 \cdot t + 2.228 \sum_{r=1}^{t} \varepsilon_r - 0.679 \cdot \varepsilon_t$

Nigeria

Identification: $\Delta y_t = \underset{(2.153)}{0.0813} + \underset{(1.923)}{0.2796}\,\varepsilon_{t\text{-}4} + \varepsilon_t$

Solution: $y_t = y_0 + 0.0813.t + 1.2796 \sum_{r=1}^{t} \varepsilon_r + 0.2796.\left(\varepsilon_t + \varepsilon_{t\text{-}1} + \varepsilon_{t\text{-}2} + \varepsilon_{t\text{-}3}\right)$

Niger

Identification: $\Delta y_t = \underset{(1.84)}{0.0476} + \underset{(0.29)}{0.229}\,\Delta y_{t\text{-}1} + \underset{(0.53)}{0.1275}\,\varepsilon_{t\text{-}1} + \varepsilon_t$

Solution: $y_t = y_0 + 0.0618 \cdot t + 1.4624 \sum_{r=1}^{t} \varepsilon_r - 0.1654 \cdot \varepsilon_t$

Sierra Leone

Identification: $\Delta y_t = \underset{(1.97)}{0.032} - \underset{(2.48)}{0.357}\,\varepsilon_{t\text{-}2} + \varepsilon_t$

Solution: $y_t = y_0 + 0.032 \cdot t + 0.643 \sum_{r=1}^{t} \varepsilon_r + 0.357 \cdot \left(\varepsilon_t + \varepsilon_{t-1}\right)$

Senegal

Identification: $\Delta y_t = \underset{(2.16)}{0.0619} + \underset{(19.22)}{0.835}\,\varepsilon_{t\text{-}11} + \varepsilon_t$

Solution: $y_t = y_0 + 0.0619 \cdot t + 1.835 \sum_{r=1}^{t} \varepsilon_r - 0.835 \cdot \left(\varepsilon_t + \varepsilon_{t-1} + \varepsilon_{t-2} + \cdots + \varepsilon_{t-10}\right)$

Togo

Identification: $\Delta y_t = 0.065 + 0.261 \Delta y_{t-1} + \varepsilon_t$
${\scriptstyle (2.41)}{\scriptstyle (1.79)}$

Solution: $y_t = y_0 + 0.08796 \cdot t + 1.353 \sum_{r=1}^{t} \varepsilon_r$

Note: Results derived using EVIEWS 6 Software. Absolute t-statistics are reported in the bracket. All the variables are significant at 5% level of significance. In all the equation Y_0 refers to the log of real output for each of the individual countries for the base year 1960. t takes value 1 for the year 1963 and takes value 45 for the year 2007.

The permanent and the temporary components can now be easily calculated using the solution to the above difference equations. For example, in case of Nigeria the permanent component of GDP is given as $y_0 + 0.0813 \times t + 1.2796 \sum_{r=1}^{t} \varepsilon_r$. y_0 is the log value of Nigeria's GDP for the year 1960, and $t = 1 \cdots 45$. The permanent component of the log output for Nigeria for the year 1963 is given as $y_{1960}^{Nigeria} + .0813 \times 1 + 1.2796 \varepsilon_{1963}$. Similarly, the permanent of the log output for Nigeria for the year 1964 is given as $y_{1960}^{Nigeria} + .0813 \times 2 + 1.2796(\varepsilon_{1963} + \varepsilon_{1964})$. Repeating for each point in the data sets for Nigeria, starting 1963 and ending 2008, will yield the permanent component. We follow the same rule in calculating the permanent component of GDP for other countries. As one of the model specifications, that is, in case of Liberia involving an *AR (2)* process, we lose three initial observations (one due to differencing the data and the other related to *AR(2)* process). Since we want to examine cointegrating relation among permanent components of all the sample countries, t takes value 1 for the year 1963 and takes value 45 for the year 2007, to address comparability.

Once we have estimated the permanent component we can easily calculate the temporary component by subtracting permanent component from the actual data sets. As the GDP series for each country are expressed in natural log, the temporary and permanent component of GDP are also in natural log format. Evidently the innovations in the Beveridge-Nelson permanent and stationary components are both ε_t, so that the permanent and stationary components are perfectly correlated. The permanent component and temporary components of log GDP are reported in Table 7 and Table 8 respectively.

In the final step we test for cointegration or presence of long term relationship among the permanent component of GDP and examine the correlation matrix of the temporary component of GDP across the member countries. Cointegration refers to a linear combination of nonstationary variables. Hence, we need to examine nonstationarity in the permanent component of GDP in their level form. Using Augmented Dickey-Fuller tests (ADF), we found evidence of nonstationarity in the permanent component of GDP for the sample countries. The data series can now be tested for cointegration.

The identification of the cointegration between output is based on an unrestricted model (i.e. we will use a Vector Autoregressive (VAR) Model). Here all the variables enter all the output equations and there is no restriction on the parameter values. There are ten I(1) process in the data, implying there can be, at most, nine cointegrating relations across ten countries (Johansen and Juselius, 1995). Results indicate on the basis of maximum eigenvalue and the trace tests at a 95 percent level of significance, there are three cointegrating relationship among the output variables (See Table 9).

The relationship:

$$y^{Benin} - 1.63\, y^{BurkinaFaso} - 0.381\, y^{Cote} + 0.875\, y^{Ghana} - 0.079\, y^{Liberia} - 0.581\, y^{Niger}$$
$$\phantom{y^{Benin}} {\scriptstyle (0.726)} \phantom{y^{BurkinaFaso}} {\scriptstyle (0.118)} \phantom{y^{Cote}} {\scriptstyle (0.886)} \phantom{y^{Ghana}} {\scriptstyle (0.019)} \phantom{y^{Liberia}} {\scriptstyle (0.099)}$$
$$+ 0.268\, y^{Nigeria} - 0.547\, y^{Senegal} + 0.449\, y^{SierraLeone} + 0.837\, y^{Togo} = 0$$
$$ {\scriptstyle (0.044)} \phantom{y^{Nigeria}} {\scriptstyle (0.092)} \phantom{y^{Senegal}} {\scriptstyle (0.094)} \phantom{y^{SierraLeone}} {\scriptstyle (0.1215)}$$

(3)

where *y* is the permanent component of log output from restrictive countries.[3] The standard errors are reported in the parentheses. The cointegrating relationship (3) identified three stable time trend relationships among the permanent components of GDP growth rates among the ten sample countries. This implied that the permanent components of GDP for these ten countries tend to move proportionally in

the long term. At the five percent level of significance, the λ_{trace} tests and λ_{max} tests statistics indicated that there are three cointegrating vectors. The corollary of this result is that there are seven common trends in the system. The fact that there is co-movement in the permanent component of GDP is also seen graphically. Figure 1 suggests co-movement, implying a possible long-term relationship among the variables.

Evidence of common trend is indicative of the fact that fluctuation in real output of the ten West African nations is synchronized. It means an economic boom (recession) in a country within ECOWAS region is matched by economic boom (recession) in the West African region as a whole. Such co-movements of outputs may be due to dependence on common factors, such as geographical proximity and similar trade composition of the West African nations. Economies in ECOWAS share more or less similar industry profile, mainly extractive types. When countries share similar industry profile and are located closely, then demand shocks in one country may affect other countries in the region. In this case, trends would become more similar because all the sectors and therefore all the countries would be affected in a similar way. The other reason for the presence of common trend and hence comovements can be explained through intra-industry trade. As far as the trade structure is representative of the output structure, the cycles should become more synchronized because they would be affected by common shocks. This is the argument of Kenen (1969), who states that more intra industry trade increases the greater is the synchronized movement in output.

We next examined the correlation matrix of the temporary component of GDP (see Table 10) and found that little or no correlation in the temporary component of GDP. This corroborates the fact that the cyclical components of GDP across member countries are not related. Economic boom in one country does not necessarily suggest recession in other member countries. However, the permanent components of the GDP across member countries are cointegrated and are highly correlated (see Table 11). From the above analysis a crucial inference can be made. A common macroeconomic

policy (a combination of monetary and fiscal policies) can be followed without any conflict of interest among the member countries. While fiscal policy can be used for development of of infrastructure – an important component affecting long-term growth – monetary policy can be used for financing infrastructure and technology, factors affecting long-term growth potential. Because the permanent components of GDP are highly related with no relation among the temporary components, it can be concluded that in the long run there is a synchronized movement in output variables in among the ECOWAS nations.

In addition, as is evident from Figure 2, ECOWAS countries (except for Sierra Leone and Togo) have more or less similar inflation rates. Hence, conflicting issues resulting from loss of seignorage is also minimized.[4]

CONCLUSION AND POLICY RECOMMENDATIONS

In this paper, we have attempted to determine to what extent countries in ECOWAS regions are ready to form an OCA. We found that the ECOWAS region has got most of the desirable characteristics for forming an OCA. The preliminary inferences are supported well by our empirical results. To identify temporary and permanent components of output we used the Beveridge-Nelson methodology. The permanent component of the output is due to changes in real (supply) side factors, like resource endowments, technology, etc. whereas the temporary component of the output is attributed to the changes in effective demand. Most of the movement in output is driven by the unobserved trend component. Hence, if we see there is a comovement i.e. existence of a long term relation among the trend component of GDP, we can say there will be little or no conflict in following common macroeconomic policy to reach a common economic goal in the ECOWAS regions. In the paper we find existence of long term relationship in the trend component of output among the West African countries. This implies that a common monetary and fiscal policy may be appropriate for these nations. That is, forming an OCA in ECOWAS region would be expected to

result in monetary and fiscal policy settings that would not create relative advantages or disadvantages between the member states.

However, these similarities in economic characteristics will not work in favor if some of the present problems in the ECOWAS region are not addressed. First there is a need to build a proper infrastructure. There is a dearth of road and railway infrastructures. Secondly, the member countries should take more initiatives to trade among themselves rather than trading with more advanced economies. Many operating companies in the ECOWAS region are headquartered in developed countries. So when agreements are concluded among member countries of ECOWAS, the dominance of these trans-national corporations reduces such policy initiatives. Also, since most of the trade in the region involves primary commodities there is a need to diversify production into higher value added manufactured items. This might lead to possibility of intra-industry trade and sustain monopolistic type competition. Third, the presence of fixed exchange rate regimes between French Franc and some currencies in West Africa also discourage any further initiative for having a common currency in the ECOWAS region. Fourth, given the ever increasing rise in population in Africa, there is a need to increase employable opportunities in the region. According to recently published world population statistics by United Nations Population Information Network, in 2050, Africa with 1.99 billion inhabitants, will be more populated than India (around 400 millions more inhabitants), and much more than China (around 600 millions more inhabitants). And finally, there should be some conscious effort by the relatively resource endowed economies in West Africa, such as, Nigeria, Ghana, Senegal and Cote d'Ivoire, to undertake more initiative to trade with relatively resource poor States in West Africa. At a time when direct transfer of resources sound rather implausible, trade can help to build purchasing power in the region.

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1 In forming, a FTA, members remove trade barriers among themselves but keep their separate national barriers against trade with outside nations. In a CU, members not only remove trade barriers among themselves but also adopt a common set of external barriers. In a CM, members allow full freedom of factor flows (migration of labour and capital) among themselves in addition to having a CU. In an EU, members unify all their economic policies, including monetary, fiscal and welfare policies, while retaining the features of a CM. An OCA is a special type of EU where the countries operate with a single currency.

2 Estimation was performed using the econometric software package EVIEWS 6. Let y be the name used for the series, log of real output, in a EVIEWS session. The ARIMA (1,1,1) model was estimated using the EVIEWS commands: $y = c + AR(1) + MA(1)$.

3 The normalized cointigrating vector in this case is (1, -1.63, -0.381, 0.875, -0.079, -0.581, 0.268, -0.547, 0.449, 0.837).

4 Seignorage is the revenue government obtains by financing its budget deficit through printing money rather than selling debt.

CRITICAL AREAS OF MONETARY POLICIES IMPLEMENTED IN REGIONAL ECONOMIC COMMUNITIES (RECS):

The Case of the Southern African Development Community (SADC)

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Contents

EXECUTIVE SUMMARY AND POLICY RECOMMENDATIONS

Monetary policy is the process by which governments and Reserve/Central Banks control the supply and cost of money to attain a set of objectives oriented towards the growth and stability of the economy. The success of the Southern African Development Community (SADC) region will depend on its ability to promote growth in intra-regional trade for the benefit of all member states. This will require, amongst other things, stable macro-economic conditions for capacity-creating cross-border investment. Achieving monetary integration between SADC countries is often promoted as a way to enhance fiscal discipline on national authorities and assist in creating this macro-economic environment. Monetary integration, epitomised by all countries adopting a common regional currency and, therefore adhering to fixed exchange rates across the region requires macro-economic convergence. But this is only stage one in the progression of regional integration. This will take a considerable time to materialize in SADC.

A case can be made for a programme of single-indicator convergence that focuses on the control of inflation as the broadest indictor of balance in resource utilization. The Southern African Development Community (SADC) has been in existence since 1980, when it was formed as a loose alliance of nine majority-ruled States in Southern Africa. The main aim then was coordinating development projects in order to lessen economic dependence on the then apartheid South Africa. Monetary union and a common regional currency implies a single regional institution, the Southern African Monetary Authority (SAMA?) is given responsibility for controlling the money supply and therefore setting the level of interest rates across the region.

In this situation the use of fiscal policy instruments would be constrained because an excessive budget deficit in one member state could undermine the regional exchange rate stability. This in turn could subject other member states to external pressures. Strong intra-governmental co-operation would be required to sustain the geo-political regional stability required for the overall success

of common monetary union. But, the economies of SADC are characterised by divergent political, economic, trading and social challenges. The regional economy is dominated by the Republic of South Africa (RSA), an economic whale swimming, sometimes uneasily, with a host of smaller fish.

Although the prospect of a Common African Currency, (in SADC, the 'SAMARAND'?) had been mooted as a goal of the Organisation of African Unity since 1963, the process was given renewed priority in 2001 when the OAU's 53 member states agreed to transform the intergovernmental organisation into the African Union (AU). In August 2003, the Association of African Central Bank Governors announced plans to create a common monetary and financial system that would complement the single African common market anticipated by 2021. A common central bank would manage a single African currency in an area without internal frontier. Free movement of goods, persons, services and capital would be ensured. The AU's strategy entails two steps. First build genuine monetary unions in Africa's five existing regional economic blocs. These regional trading communities represent the first stage towards a "full-blown" Economic and Monetary Union (EMU), similar to the creation of the European Union's (EU's) single market in 1992 and the common currency area, the 'Eurozone', for some of its members that appeared later.

This monetary and economic union is proposed as an essential part of Africa playing a full and growing role in world trade. But it is noted that global trade is still strongly characterised by inequities that prevent export growth in African countries. The removal of export limiting subsidies and tariffs may be a better solution for expanding exports from Africa to the rest of the world and much easier to implement than persuading African countries to give up their independence and flexibility in fiscal and monetary policies to an African Central Bank will be enormous. Unless all countries were agreed that the benefits to them from giving up their economic policy freedom would allow them more chance to reduce poverty faster through boosting trade, investment growth and technological transfer, they are unlikely to give up the policy instruments, including exchange rate policies, transition they now have.

African countries are unclear how they can contribute to greater economic growth and currency stability in the continent. For example, amongst the best strategies for maximizing the development of foreign direct investment (FDI) is the creation of export of processing zones. But such zones, with favourable tax treatment of the industries in the zone, can also be seen as a nation rewriting the rules of international and regional trade to gain a national advantage. If every country is offering similar benefits to exporters and foreign investors, the comparative advantage of each is reduced. In the Eurozone, for example, the European Commission and the European Central Bank have the authority to prevent such trade-distorting activities and to fine countries that engage in them. Would an African Central Bank (or in SADC, the SAMABANK?) be able to do this? In SADC, if the votes on the SAMA Bank 'independent' board are weighted by the relative size of the economies represented, the RSA would have a majority vote over every decision. This would be used in the interest of the RSA.

Most African countries, including some in SADC, even excluding Zimbabwe, face a crisis in economic management attributed to poor governance and corruption. Would Botswana, Mauritius and the RSA want to retain a veto on decisions because they have the most to lose in terms of giving up the policy freedoms that have allowed them to become relative successful economies? Would oil-rich Angola be prepared to transfer some of its new wealth to 'bail out' a fellow SAMA member fighting to retain its fixed exchange rate?

Most literature recognizes that both fiscal and monetary policy must be operating in an appropriate way if price stability is to be achieved. The view that inflation is essentially a monetary phenomenon suggests that independent reserve/central banks should operate with rules that include controlling inflation. As prices are determined by money supply and demand, the fiscal authorities must adopt a complementary and appropriate fiscal policy for sustainable development in Africa. This necessitates additional fiscal and monetary disciplines from authorities, with this discipline being imposed by the Regional monetary authority where necessary. Within the SADC region, the historical record indicates difficulties with this discipline which places a high risk on success of a price stability policy outcome.

Movements towards African Monetary Co-operation Programme (AMCP) and eventual union are guided by the Committee of Central Bank Governors (CCBG). In 1995 the CCBG was established with the specific purpose of achieving closer cooperation and integration in the area of monetary policy among SADC central banks. The CCBG has contributed to major developments such as the harmonisation of the payment and clearing systems, the approval of Memoranda of Understanding on Cooperation, and the Coordination of Exchange Control Policies in SADC. CCBG has also coordinated training for central bank officials via a Training and Development Forum. If progress can be maintained along these lines it has been suggested that a SADC monetary union be considered for 2016.

It is likely that this monetary union would build from the foundation of the Southern African common currency union and the common customs union, which include the RSA, Namibia, Lesotho and Swaziland. In these countries the South African Rand circulates alongside the national currency, there using a common system of V.A.T rates and customs and excise duties. The members of the agreement manage economic policy to retain sufficient reserves to maintain the value of the national currency at par with the Rand. Unfortunately, the Currency Union appears to have done little to build a common framework for the transfer of deposits. Cheque clearing between the national banking systems is slow and expensive compared to transfer mechanism within the country. This is despite the fact that the banking systems of all the peripheral countries exist as national branches of RSA-based banking conglomerates.

Economic convergence lies at the heart of SADC monetary union. Government targets are development indicators such as per capita growth to equal indicators of the developed world. Monetary policy, the domain of central banks, has an indirect role in facilitating the engine of regional growth. Production, trade and capacity creating investment are the roles of government. But the central bank is, ultimately, a creature of the Government and must operate within the structures of governmental economic policies, in terms of its macro-economic influence.

One significant challenge for SADC is that its member states also participate in other regional economic, political and security cooperation schemes that may compete with or undermine SADC. On October 22, 2008, the African Free Trade Zone was initiated by SADC, the Common Market for Eastern and Southern Africa (COMESA), and the East African Community (EAC). If the intent is achieved a single free trade zone will result with a combined economic power of an estimated GDP of $624bn (£382.9bn) from 26 countries.

It is argued that the adoption of a common currency regime, where countries maintain fixed exchange rates within the area will bring a number of benefits such as increased trade between the countries, price stability, increased aggregate investment, and the elimination of the exchange rate risk. There will be increased capital flows and enhanced regional investment opportunities, resulting in socio-economic gains and growth. In the short term a SADC monetary union is the only practicable option. It will have unique challenges. Member states must prepare themselves if they are to benefit optimally from the process. Given the importance of the process, and sensitivities around it, the citizens of the member states must be properly informed. There are benefits as well as costs of monetary unions. The member states need to demonstrate benefits. Diversification of the joining economies should be towards manufacturing and developing of human capital. But, most importantly the free movement of human, physical and financial capital resources should continue between the member states.

For SADC the working model for regional cooperation is the common monetary area of Southern African Countries: South Africa, Lesotho, Namibia, and Swaziland. To enable a SADC Common Monetary Union to succeed, it is recommended that the remaining SADC states join this union first. This model for monetary union before currency union is believed to be the most practical approach to the long term objective of the creation of a single currency in Africa. But it has its dangers.

INTRODUCTION

Africa is the world's second-largest and second most-populous continent, after Asia. As part of the world picture, Africa, with a current population of more than 934 million people[1], is witnessing changes that are remaking its nations. These changes arise in the social, economic and political spheres. The average citizens of Africa are most aware of political changes. The greater degree of multipartyism and wider democratisation that are part of these changes are important and necessary. But, social and economic changes are even more important. They form the agenda of politics and fundamentally affect every individual citizen.

The region has sought economic recovery through the implementation of the New Partnership for Africa's Development (NEPAD) programmes. The overall aim of NEPAD can be summed up as a commitment by Africa's leaders to place the continent on an accelerated path of social, technological and economic development. NEPAD recognises that economic growth is not an end in itself. It is largely a means for improving the conditions and overall well-being of a country's citizens, to free them from the daily struggle for survival so they have the time and resources to better themselves and their society. The goal of a common African currency has long been a pillar of the development of African unity; a symbol of the strength that its backers hope will emerge from efforts to integrate Africa. Although the prospect of a single African currency had been mooted as a development goal of the Organisation of African Unity created in 1963, the process was given renewed priority in 2001 when the OAU's 53 member states agreed to transform the intergovernmental organisation into the African Union (AU)[2]. In August 2003, the Association of African Central Bank Governors announced plans to create a single African market - an area without internal frontiers in which the free movement of goods, persons, services and capital is actively promoted. A single, common central bank would manage a single African currency by 2021[3].

The AU's twofold strategy entails first building genuine monetary unions in Africa's five existing regional economic blocs. These regional trading communities represent the

first stage towards "full-blown" Economic and Monetary Union (EMU), similar to the creation of the European Union's (EU's) single market in 1992[4]. The Accra Declaration of 2007 highlighted the key role that the Regional Economic Communities (RECs) should play in the process of continental integration. Furthermore, the second AU conference of African Ministers of Economy and Finance meeting agreed that the RECs should play key role in the process of establishing the AU financial intuitions.

Therefore the establishment of the African Union (AU) offers some hope that African governments are now committed to greater collective efforts to address the continent's greatest challenges. Most countries in Africa are small and are listed by the United Nations as Least Developed. Future significant advances in economic development in Africa will depend in no small part on the success with which countries can exploit the opportunities and avoid the risks presented by globalisation. A viable outward oriented strategy will have to reflect the economic structural endowments relative to other parts of the world. The formation of a monetary union requires harmonisation of exchange rate mechanisms and fiscal and monetary policies.

Since Africa is relatively rich in agricultural, mineral and other raw materials, this comparative advantage must be used to develop the continent's economies and people. As much as possible value must be added to raw materials within the countries in which they are exploited. The establishment of diamond cutting industries in Botswana and Namibia is a good example in the region. Average incomes for the world as a whole are rising, and there is an obvious capacity for innovation and wealth creation in Africa. But these gains are accompanied by persistent inequality, growing exclusion, insecurities caused by economic fluctuations, and a feeling that the ground rules are unfair[5]. Everyone wants a stable, prosperous world economy. We all want to be able to look to the future with some sense of security. Everyone is concerned about such global problems as the deterioration of the environment, and poverty. But views diverge on many specifics, and are largely influenced by what place a country occupies in the current world economic set-up.

African countries have not yet benefited from the increases in international trade. African fiscal problems are much more severe, monetary policy often begins at the departments of finance and the reserve/central banks that are forced to finance growing budget deficits in a monetary union may have to implement neutralising monetary policies that will drive interest rate up in order to maintain the agreed currency parity.

Policies are needed to promote export diversification out of primary commodities and into industrial and service industries with a higher value-added. The failure of the governments to maintain their commitment towards ending fiscal dominance can led to an upwards shift in the terms and structure of inflation expectations and increased exchange rate volatility. Experience shows that the fiscal policy regime must be such that it does not allow changes in price level to become the mechanism through which the condition for government solvency is satisfied.

The world has done much to help Africa to develop but has very little positive results to show for its efforts. While most of the world, especially Asia, is forging ahead in the development stakes, Africa is marking time at best, and often marching backwards. Until the onset of the world wide financial crisis arising from the collapse of the property market prices in the United States and the consequent illiquidity and then insolvency of international financial institutions and markets, precipitating expectation of a sharp down turn in world economic growth the global economy has been especially strong in recent years, with average worldwide per capita income growing more rapidly than ever. One group of developing countries led by Brazil, Russia, India and China (the so-called BRICs) and representing a large share of world population, has been at the forefront of global growth. These economies are also growing faster than those of African countries. They are increasingly are accessing global markets for goods, capital and technology; they are trading more and more with each other as well as with rich nations. They are also starting to catch up with the wealthiest countries in terms of human development. But, another group of developing countries in Africa, greater in number, if small in population are

being, and are today further away economically from the richest countries than ever before[6]. The gap between rich and poor citizens within both developed and developing nations is also growing[7].

What Africa needs most is a stable macro-economic framework, which will contribute to higher GDP growth, and supports job creation in Continent. In addition, a single currency will improve monetary cooperation in banking sectors. Most literature recognizes that both fiscal and monetary policy must be selected in the appropriate way if price stability is to be achieved. Nonetheless, view that price determination is mainly a matter of monetary policy is retained, that if the reserve /central banks are independent, automatically, the fiscal authorities will be compelled to adopt an appropriate fiscal policy for sustainable development. Allocating the main thrust of economic policy to the central bank, making this independent and bound by rules to keep inflation within strict bounds and ultimately making national central banks no more than local agencies delivering national policies to keep national currencies linked by fixed exchange rates in a common currency area will lead to more efficient payments and clearing systems across Africa and enforce common, predictable fiscal policies on governments. This will promote common sustainable economic development. Africa has been neglected for a long time. It is our duty to seize the opportunity. The paper highlights critical areas of how such a common monetary policy would be implemented in the REC: delineated by SADC. It is not exhaustive, but rather intended to lead to further discussions at this Congress.

MACRO-ECONOMIC TRENDS IN THE ECONOMY

After solid and broad-based growth for three consecutive years, world economic growth is moderated in 2007, in line with the projections of the UN World Economic Situation and Prospects Report. The growth of world gross product was expected to slow to a pace of 3.4% for 2007 as whole, down from 4.0% as recorded in 2006. The slow down is expected to stabilize this year with a projected growth of 3.6 %[8].

One challenge for policy makers in Africa is how to sustain a robust growth path linked with the world economy, and, more importantly, how to engender higher growth in our individual countries so as to secure the fulfilment of their Millennium Development Goals. As the world economy is dragged closer to recession by the notable slowdown in the United State of America, as its housing sector is falling into a substantial recession and business investment is weakening, economic growth in Africa has increased by it is still not enough. African countries continue to sustain the growth momentum of previous years, recording on overall GDP growth rate of 5.7% in 2006 compared to 5.3% in 2005 and 5.2% in 2004. As many as 28 countries recorded improvements in growth in 2006, relative to 2005. Only Zimbabwe recorded a negative growth rate in 2006.

However, for most African countries, real growth rates have remained low relative to their development goals. With only five countries recorded an average real GDP growth rate of 7.0% or more during 1998-2006. Countries in North Africa recorded the highest acceleration in GDP growth. There was deceleration in growth in West Africa and East Africa, whereas Central Africa maintained the same growth rate as in 2005. Heavy dependence on primary commodities remains a common feature of production, export and growth. This continues to expose the continent to external shocks and makes economic diversification a top priority. Meanwhile, growth performance exhibits substantial disparities across the five sub-regions[9].

Africa's growth performance in 2006 as in previous years was underpinned by improvement in macro-economic management in many countries, and strong global demand for key African export commodities, sustaining high export prices, especially for crude oil, metals and minerals[10]. But Africa faces major socio-economic and political challenges in accelerating growth, reducing poverty, combating corruption, building up its human resources, and creating an environment that encourages the development of all sectors of the economy for balanced growth. Experience shows however that for Africa, raw materials booms have often proved to be more a curse than a blessing. Africa needs to end corruption, unnecessary conflict and create

the conditions of stability that are necessary for a virtuous circle of economic growth, social and political inclusion and prosperity creating the environment for more growth as an African priority.

Countries are never economically self-sufficient. All must engage in international economic transactions, including trade in goods, services and financial resources. Rich or poor, capitalist or socialist, all nations are linked in a global economic web. No single nation can determine its domestic economic policies without considering international trends. High interest rates in the industrialized countries push up the cost of borrowing money worldwide[11]. They increase the cost of servicing existing debts, contributing greatly to the onerous financial burden that presses down on African countries, stifling their prospects for growth and development.

Economic growth is crucial to the creation of opportunities in Africa. Growth of gross domestic product (GDP) is positively correlated with various dimensions of poverty reduction. Macro-economic stability, adequate structural and regulatory policies, and good management of public expenditures all contribute to creating a sound basis for private investment, which in turn can spur the creation of gainful and productive employment. Growth alone is not enough, however. The poor and vulnerable may not be able to benefit because they may lack the good health, technology and the skills required to find gainful employment. The areas in which they live may be cut off because of poor infrastructure, or there may be structural weaknesses in asset distribution.

African countries will need to make debt sustainability central to their economic planning[12]. The focus needs to be on total debt because the line between external and domestic debt is becoming increasingly blurred. Africa countries need comprehensive debt management systems that allow them to choose between different financing options in a way that is consistent with their economic policy objectives. Strengthening public financial management (PFM) is essential, so that the spending financed by loans is efficient. African countries also need to broaden the domestic investor base for local currency debt so that

sudden capital inflows or outflows do not destabilize the market. African countries need a new approach to growth policy with fair globalization. Table 1.1 shows regional economic blocs.

Table 1.1: Regional Economic Blocs

Pillars Regional Blocks (REC)	Area Square km	Estimated Population 2007	GDP (PPP) millions of US$	(PPP) per Capita US$	Member States
AEC	29,910,4442	853, 520,010	2,053,706	2,406	53
ECOWAS	5,112,903	251,646,263	342,519	1,361	15
ECCAS	5,667,421	121,245,958	175,928	1,451	11
SADC	**9,882,959**	**233,944,179**	**737,335**	**3,152**	**14**
EAC	1,763,777	97,865,428	104,239	1,065	3
COMESA	12,873,957	406,102,471	735,599	1,811	20
IGAD	5,233,604	187,969,775	225,049	1,197	7
Western Sahara	266,000	273,008	?	?	N/A

*Source: http://en.wikipedia.org/wiki/Southern_African_
Development_Community*

SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) TOWARDS CRITICAL AREAS OF MONETARY POLICIES: STATUS AND WAY FORWARD

SADC as a Economic Region

The Southern African Development Community (SADC) has been in existence since 1980, when it was formed as a loose alliance of nine majority-ruled States in Southern Africa known as the Southern African Development Coordination Conference (SADCC), with the main aim of coordinating development projects in order to lessen economic dependence on the then apartheid South Africa[13]. Table 1.2 shows economic indicators and population and Figure 1.1 shows SADC Trade with the Rest of the World: Winning export sectors and revealed comparative advantage ratios. Regional integration is necessary considering that the majority of countries are small, weak and poor. Integrating the economies countries in the region can, in theory at least, help them in dealing with issues of globalisation that poses serious threat to poor nations. Currently, already some countries in the region are emerging as continental leaders in terms of macro- economic policies and poverty reduction strategies as well as institutional building. These are Botswana, Mauritius, Namibia and South Africa. In terms of economic performance of economic growth, Angola is leading the way with 13.8% growth rate, followed by Mozambique with 8% and Tanzania with 6.2%. Improvements in growth rates have also been witnessed in Lesotho, Namibia and South Africa. Four SADC member states ranked among the top ten in the Public Index Rankings (PIR), as contained in the Global Competitiveness Report. These were Botswana, which was ranking first South Africa, Mauritius and Tanzania[14].

Map 1.1 Southern African Development Community Countries
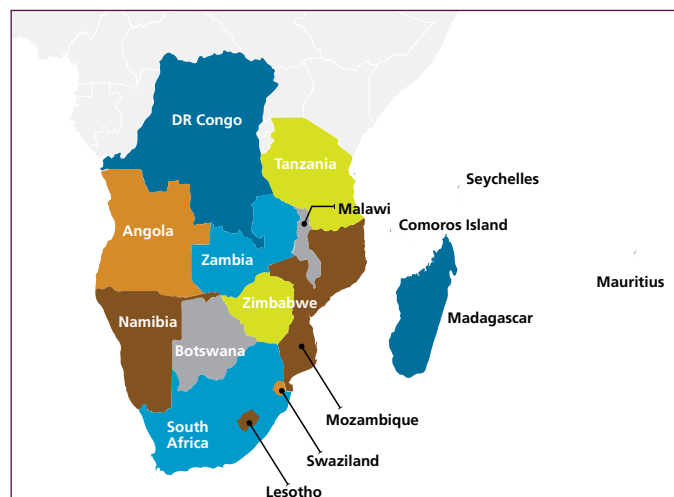
Table 1.2 Economic Indicators and Population

Country	Total GDP (Nominal) in 2006 (billion US$) (a)	GDP per capital in 2005 (US$) (b)	Population Approximately 238.2 (Millions)	HDI in 2005 (c)
Angola	44.03	5,985	14.8	0.733
Botswana	10.33	12,057	1.7	0.654
D.R. Congo	8.54	264	54.8	0.411
Lesotho	1.48	1,415	2.1	0.549
Madagascar	5.50	988	17.4	0.533
Malawi	2.23	691	11.2	0.437
Mauritius	6.45	10,155	1.2	0.804
Mozambique	7.61	743	19.2	0.384
Namibia	6.37	4,547	1.9	0.650
Seychelles	0.75	13,887	0.1	0.43
South Africa	254.99	8,477	46.7	0.674
Swaziland	2.65	4,384	1.1	0.547
Tanzania	12.78	1,018	42.1	0.467
Zambia	10.91	1,175	10.7	0.434
Zimbabwe	5.01	538	13.2	0.513

Source: SADC Secretariat: Key: (a) Fast economy growth in Africa (b) African growth to expand 6.2% (c) African growth steady but frail.

Figure 1.1: SADC Trade with the Rest of the World: Winning Export Sectors and Revealed Comparative Advantage Ratios

Figure 1.1: SADC Trade with the Rest of the World:
Winning Export Sectors and Revealed Comparative Advantage Ratios — – Abstract Views —— File Downloads

Source:http://logec.repec.org/scripts/paperstat.pl?h=RePEc:bla:sajeco:v:68:y:2000:i:2:p:114-124
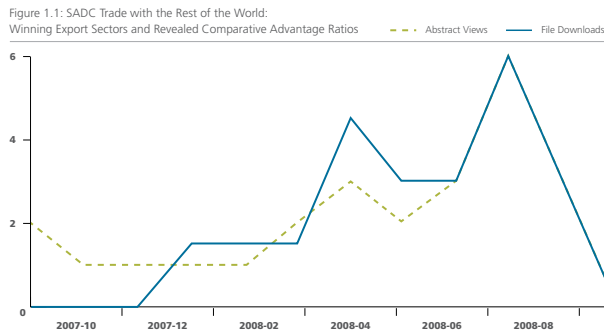
In order to provide strategic direction to the organization and to operationalised the SADC Common Agenda, a Regional Indicative Strategic Development Plan (RISDP) is in place. The RISDP is a 15-year plan being implemented in phases of five years each. In 2007, the RISDP entered its third year of implementation. It reaffirms the commitment of SADC member states to good political, economic and corporate governance entrenched in a culture of democracy, full participation by civil society, transparency and respect for the rule of law. The RISDP emphasizes that good political, economic and corporate governance are prerequisites for sustainable socio-economic development, and that SADC's quest for poverty eradication and deeper levels of integration will not be realized if these are not in place[15]. Widening macro-economic imbalance constitute a major concern for the future growth prospects and economic stability in the region. These imbalances cause uncertainty and increase the risk of financial instability, which have negative impacts on economic growth. Recently, equity markets and commodity and currency markets have become more volatile while short-term capital outflows from some emerging market have increased. This development has raised fears of a new global financial crisis. In general growth in Southern Africa improved in 2006 largely because of economic recovery in Malawi and Lesotho, contributing about 5% of SADC GDP, they make little impact and sustained good performance in most other countries of the sub-region.

With increased public spending and high FDI flows, South Africa maintained the same growth rate of 2005 through 2006 although private consumption declined due to higher oil prince[16].

Towards SADC Monetary Policy

To evaluate the potential for a common monetary market in SADC an overview of the principles of monetary policy development and application are made. This is followed by a review of the current strength and weakness of monetary institutions available to support such a union. World Bank recommends the adoption of monetary policy in SADC region so as to create jobs, and improve socio-economic development[17]. One main benefit seen by the World Bank is for the Central Banks of developing countries to enforce fiscal discipline on national authorities so as to avoid low economic productivity from government and private expenditure. SADC comprehensive monetary policy and common monetary union will require significant international support. But the international system is ill equipped to provide it because of a shortage of supportive rules, effective institutional arrangements and, above all, resolve to translate commitments to action. World Bank recommends the adoption of monetary policy in SADC region so as to create jobs and improve socio-economic development. One main benefit seen by the World Bank is for the Central Banks to enforce fiscal discipline on national authorities so as to avoid low productivity from government expenditure.

Monetary policy often begins in the Treasury and is implemented by the Central Bank. In the absence of a monetary policy, central banks can be used by Treasury to finance growing budget deficit by lending money which has no value, the net result is reduction in value of the unit value of money in circulation. This is measured by exchange rates and interest rates on bank loans. In economies with poorly developed financial markets the central banks find themselves without the means to implement the required anti-inflationary measures. A Pressure-State-Response model[18] describes the control functions of a Central Bank[19]. The Pressure is measured by deviation from a desired future

State, and the Response is the open market intervention by the Central Bank. Monetary policy options for SADC Central Banks over the past 25 years are Inflation Targeting, Price Level Targeting, Monetary Aggregates, Fixed Exchange Rate, Gold Standard, and a Mixed Policy. African politicians have a history of undisciplined application of Monetary and Fiscal Policy in which case the Central Bank functions of maintaining the value of the currency has not been achieved[20].

As the primary tool of monetary policy is open market intervention, the Central Bank requires access to financial exchanges. In SADC stock exchanges are operating in Namibian, Johannesburg, Mauritius, Tanzania, Botswana, Lesotho, Malawi, Zimbabwe and Zambia. The largest and most varied of options for share trading is on the JSE (Johannesburg Stock Exchange) which includes derivatives, a bond exchange, and a fully regulated on line trading system, and agricultural commodities[21]. The South Africa Reserve Bank operates in the money market via regulatory requirements for overnight deposits to settle transactions between the private banks[22]. The SA financial system therefore offers size and disciplined monetary policy required to craft an optimal SADC monetary policy. The Monetary policy options for these Central Banks are shown in Table 1.3.

Table 1.3: Types of Monetary Policy and Control of the Value of a Currency

Monetary policy types	Policy assumptions, measurements and policy responses	Market variable (that is to be controlled)	Long Term Objectives (desired state)
Inflation Targeting	This policy assumes that inflation is controlled by controlling interest rates; inflation is measured from growth in Stats SA indices, e.g. the Consumer Price Index.	Interest rate on overnight debt	Targeted rate of change in inflation indices
Price Level Targeting	This policy has the same assumption as inflation targeting. Measurement of growth of inflation is offset in subsequent years such that over time the price level on aggregate does not move.	Interest rate on overnight debt	Targeted inflation rate, e.g., CPI
Monetary Aggregates	This policy assumes economic growth is controlled by growth in the money supply. Measurement is growth in classes of money (e.g.) and credit, e.g., (M0, M1). In the 1980s, several countries used an approach In the USA this approach to monetary policy was discontinued with the selection of Alan Greenspan as Federal Chairman. This approach is also sometimes called monetarism.	The growth in money supplies	Targeted rate of change in inflation indices, e.g., CPI
Fixed Exchange Rate	This policy assumes value of a currency is controlled by exchange rate. Measurement is by a selection of currencies. There are varying degrees of fixed exchange rates, which can be ranked in relation to how rigid the fixed exchange rate is with the anchor nation.	Buying and selling on the spot market	Targeted value of the currency
Gold Standard	This policy assumes the value of a currency is measured by the amount of gold in the reserve bank. Measurement is by the value of a currency is by the gold bar equivalent of the currencies held by the Reserve Bank. Each Reserve Bank has a mass of gold bars that set the value. Control is by daily buying and selling of base currencies. (i.e. open market operations, cf. above?). The ability to sell gold to support a currency is very important for economic growth and stability.	Amount of gold in the Reserve Bank and the spot price of gold in the national currency	Stable currency value as measured by the gold price
Mixed Policy	Assumption: All the above policies can apply. Under this policy in practice, a mixed policy approach is most like "inflation targeting". However some consideration is also given to other goals such as economic growth, unemployment and asset bubbles. This type of policy was used by the US Federal Reserve in 1998.	Usually interest rates	Usually unemployment + CPI change

Note: Statistics South Africa and the South Africa Reserve Bank are Statutory Bodies the heads of which are appointed by the SA President. Ref http://www.reservebank.co.za/

The primary tool of monetary policy is open market intervention. For a Central Bank having a mixed monetary policy, each sub-policy is called a regime. For example a monetary regime, can be controlled in parallel with an exchange rate regime. A fixed exchange rate is also called an exchange rate regime. An exchange rate regime entails managing the quantity of money in circulation through the buying and selling of various credit instruments, foreign currencies or commodities. All of these purchases and sales result in base currency entering or leaving the national market. The purpose of monetary policy in the region is to provide government and their reserve/central bank growth and stability of the economy. Controls are place on the supply of money, availability of money, and cost of money

or rate of interest. However it is not possible to control interest rates if there is no consistent Monetary Policy[23]. An understanding of monetary theory can provide insight into how to craft an optimal SADC monetary policy.

Monetary policy can be either an expansion policy, or a contractionary policy. Expansionary policy increases the total supply of money in the economy. Contractionary policy decreases the total money supply. Expansionary policy is traditionally used to combat unemployment in a recession by lowering interest rates, while contractionary policy involves raising interest rates in order to combat inflation. The monetary policy is contrasted with fiscal policy, which refers to governments borrowing, spending and taxation. Therefore, monetary policy rests on the relationship between the rates of interest in an economy, that is the price at which money can be borrowed, and the total supply of money.

Monetary policy uses a variety of tools to control one or both of these, to influence outcomes like economic growth, inflation, exchange rates with other currencies and unemployment. Despite political agreement on the strategies and policies of employment creation in the development strategies in the region, monetary policies have not followed e.g. options which promote fully employment for its people. About 55.0% of all people employed are not earning enough to lift themselves and families above the US$1 a day poverty line[24]. The general conclusion that can be drawn from SADC statistics and reports is that by the year 2015 the region will have a total population of almost 278 million people with an estimated available labour force of 44.0% of the population. The assumptions behind an employment friendly policy is that increases in the size of the money supply, and decreases in the interest rate, reduce barriers to economic activity and make it easier for labour to sell its skills.

Although there is universal agreement in SADC treasuries that sound Monetary Policy is required[25]. Many or most countries in SADC have had problems establishing an effective operating monetary policy. The primary reason is deep government debt. To reduce debt government must have savings. Any option for government to increase savings

requires attractive real interest rates. To control interest rates requires targets for inflation, currency exchange rates for major currencies, stable inflation and high employment. In order to set these targets requires certainty in forecasts of money demand. This is a difficulty with underdeveloped monetary systems. The risk of a mismatch between targets and outcomes is the unmatched expansion of the monetary base with the value of the economy. This is complexed with the focus where increased size of monetary transactions is followed by increased tax to government activity. If tax rates are too high this reduces economic activity. The cycle of too little or too much currency in circulation results in unstable currencies. Despite frequent claims to credibility of central banks, e.g., in search of prestige and lower interest borrowing rates for national development programmes the meaning of the term credibility is rarely defined. The World Bank/OECD describes the ability to serve the public interest as one aspect of credibility. There are approaches for example, the independence of the government expenditure from International Aid for essential services, degree of independence provided by the constitution and the independence from factional political appointments.

SADC monetary policy, common monetary union and stabilization of the currencies in SADC might be achieved through a common monetary union where economies of scale provide governments with more options to increase economic activity. Much can be learned from the European Union as the Southern African Development Community (SADC) attempts to create a single monetary union for the region by 2016. It is clear that the Euro's successful launch has stimulated interest in monetary unions in other region. But it is sometimes forgotten just how long the road actually was travelled in Europe. The conditions[26] for a SADC common monetary union include reducing inflation in all SADC countries to single-digit figures by 2008 and to 5% or less by 2012. The budget deficit of SADC countries has to be 5% or less of gross domestic product by 2008 and 3% or less by 2012. This can be compared with actual performance for 2008. Those governments which do not meet these targets will to increase their tax base and stop reliance on central bank borrowing to fund deficit budgets. With the exception of Zimbabwe and the Democratic

Republic of the Congo. It is expected that economic targets will be met to achieve the proposed timetable.

Towards Common Monetary Union in the Region

Article 44 of the Africa Union Abuja Treaty calls for the harmonisation of economic policies across the African continent and emphasises two important pillars of economic integration: the promotion of intra-Africa trade and the enhancement of monetary cooperation. The latter is guided by the African Monetary Co-operation Programme (AMCP), which seeks to operationalise the monetary cooperation mandate of the Abuja Treaty and the Constitutive Act[27]. Within the SADC region, the movement towards monetary integration and eventual union is guided by the Committee of Central Bank Governors (CCBG) that has pledged support for the AMCP.

The CCBG was established in 1995 with the specific purpose of achieving closer cooperation and integration in the area of monetary policy among SADC Central Banks. The work of the CCBG has contributed to major developments towards regional monetary cooperation such as significant progress in the harmonisation of the payment and clearing systems, the approval of Memoranda of Understanding on Cooperation, Coordination of Exchange Control Policies in SADC and Cooperation in the area of Information and Communication Technology. The CCBG has also contributed to the coordination of training for central bank officials in SADC and the creation of a training and development forum. As at April 2005, the integration programme envisaged the establishment of a SADC monetary union by 2016[28].

Options for and different types of monetary integration have been outlined by Masson and Pattillo (2005) as follows:

i. An informal exchange rate union with separate currencies that are fixed to one another, whose parties are fixed but only at the margins.

ii. A formal exchange rate union with separate currencies, which are fixed to one another with zero (or very narrow) margins and a strong degree of co-ordination amongst central banks. Example is Common Currency Area of South Africa, Swaziland, Lesotho and Namibia.

iii. A full monetary union with a single currency.

iv. A situation where one country adopts the currency of another country (often called dollarization) and does not issue its own currency.

v. A currency board, where a country pegs its own currency to another currency or trade weighted basket of currencies, with zero margins for parity adjustment. The money supply is limited to the quantity of reserves held in the other currency.

Currently, the African Union is aiming for option number three-full monetary union with a single currency. However, SADC may use some of the other options as stepping-stones to full monetary integration.

In discussing movement towards common monetary union in the SADC other conditions are needed for the monetary union to be sustained. In terms of labour markets workers must be able, eventually, to move to those areas of the union where their inputs are most productive. This will maximize growth and prosperity. The growth of labour supply has too often been seen as a problem and as an obstacle to economic growth. Under a common monetary union the importance of the labour market and migration policies for economic development and prosperity which AU have adopted in different times. What could be achieved in terms of economic is increased. This will require implementing policies on employment and migration that have already been adopted by the AU. It will require the harmonization of the certification of educational and skills qualification and their acceptance throughout the Union. It also assumes the coming together of labour laws, social protection policies etc.

The issue of monetary integration in the region is meant to ultimately lead to a monetary union on the whole African continent. There are two approached taken to this. The first approach is the top-down continent-wide policy, under the African Union (AU) which is meant to establish a common monetary policy and therefore a common central/reserve bank. The Association of African Central Banks has been

requested by the African Union to work and prepare the establishment of African central bank. The second approach is bottom-up from arrangements at regional level under RECs where all five African regions are expected to work on regional monetary integration. In Southern African region, SADC is working on a programme to establish a common reserve/ central bank in the region by 2016 and a common currency by 2018[29].

One problem the SADC facing is resources. The regional bodies are under-resourced. The member states are not happy to give it the powers and resources to use these powers that they agreed to give when SADC was overhauled in 2001. One significant challenge is that member states also participate in other regional economic cooperation schemes and regional political and security cooperation schemes that may compete with or undermine SADC's aims. For example, South Africa, Botswana, Lesotho, Swaziland and Namibia are all members of the Southern African Customs Union Customs Union which coordinates external trade tariffs, national taxes such as the Value Added Tax (VAT) and excise duties. SACU has developed elaborate schemes for collecting duties at the point of entry to the Customs Union Area and then allocating these revenues between its members. For countries like Lesotho SACU revenues are a critical component of Budget revenue. Zambia is a part of the Common Market for Eastern and Southern Africa and Tanzania is a member of the East African Community (EAC). But one positive outcome on the common monetary union in the region is that on October 22, 2008, SADC joined with the Common Market for Eastern and Southern Africa and the East African Community to form the African Free Trade Zone. The leaders of the three trading blocs agreed to create a single free trade zone, the African Free Trade zone, consisting of 26 countries with a GDP of an estimated $624bn (£382.9bn). It is hoped the African Free Trade Zone agreement would ease access to markets within the zone and end problems arising from the fact that several of the member countries belong to multiple economic and trading groups. Groups envisioned by Cecil Rhodes and other British imperialists in the 1890's. The African Free Trade Zone an effective step in the realization of the vision of Cecil Rhodes and the European Imperialist powers, of a rand zone spanning the whole African continent from the Cape to Cairo. The only difference is that the African Free Trade Zone is the creation of African Countries working for the mutual benefit and development of the continent and its people. In addition to eliminating duplicative membership and the problem member states also participating in other regional economic cooperation schemes and regional political and security cooperation schemes that may compete with or undermine each other, the African Free Trade Zone further aims to strengthen the bloc's bargaining power when negotiating international deals. Analysts believe that the African Free Trade Zone agreement will help intra-regional trade and boost growth in the Region. It may also have to be complemented by common monetary policies and, eventually a common currency.

Common Monetary Union Status

In 2004, the combined Gross Domestic Product (GDP) for Southern Africa was approximately $296.4 billion. Individual national economies are structurally diverse and at varying stages of development. South Africa, the region's most developed economy, has a GDP of $213.1 billion, which is more than double the combined GDP of the other Southern African countries[30]. The Southern African Development Community (SADC) may introduce a single Southern African currency by 2016, to be managed by a single central bank. This has already been announced by the Governors of the central banks in South Africa and Lesotho[31]. The 15-member SADC plans to introduce a free trade area by 2008, abolishing all tariffs and non-tariff barriers[32]. The SADC is one of the most diverse sub-regions in Africa, both in terms of growth performances and level of economic development. Some countries, particularly the South Africa, Botswana and Mauritius, have a substantial upper and middle income economic sector and enjoying relatively high per capita incomes and life styles to match. This reflects the strong and robust economic growth rates recorded in some of the countries over the past few years. But, in spite of this positive record, the region also still has numerous low-income countries with poorly performing economics. South Africa and Mauritius have diversified sources of growth and are less subject to growth volatility,

other countries confronted with significant macro-economic and development challenges, including macro-economic stability, fiscal sustainability and deficits, volatility of prices and poor growth and high and continuing levels of poverty. Even in the 'powerhouse' RSA, wealth is still unevenly spread and large numbers live in disparate circumstances.

Nevertheless, the region is one of the most advanced in the pursuit of economic integration, enjoying gradually increasing intra-regional exchange and trade. In addition, the South African rand is consolidating its strong position as a trading and financial medium within the region, reflecting the penetration of South African financial and customer service companies into many countries. At the same time, the region is facing tremendous growth and economic development challenges, including inflation and fiscal deficits that pose serious challenges for monetary policy and macro-economic stability. The diversity in terms of growth performance and macro-economic stability, captured by large variance in the level of per capita income and slow fiscal convergence, poses a serious challenge for advancing the objectives of economic and financial integration within the region. The introduction of common monetary union in the region will improve macro-economic stability by ensuring fiscal and monetary policy credibility. This is necessary for attraction of investment, which eventually translates into economic growth and sustainable development as potential investors would only invest if they have full confidence that they would get sufficient returns on their investment.

Despite all the enthusiasm, experience from the development of a common currency in the European Community suggest that widespread adoption of a common currency for SADC will require, above all, that the RSA believes that this will be in its own economic interest. And that the other countries are willing to subordinate their economic policies to do whatever is needed to maintain a fixed exchange link with the Rand in whatever manifestation it takes as the regional unit of account. It took these countries of Europe almost half a century to get to this point, and has required the economically richest areas to be willing to make massive transfer payment to help their poorer neighbours to participate. Will South Africa be willing to and politically able to do this in SADC?

What meant by SADC moving towards a common monetary union. Common monetary union signifies a bloc where one currency prevails, and where a single institution, like the US Federal Reserve System or European Central Bank, is responsible for controlling the money supply and interest rates policy. There are two distinct forms of monetary integration the region can adopt. The first one will involve fixing of exchange rates and the existence of financing facilities to ease money and trade adjustments, referred to as a "currency union". The second form "financial integration", involves the unification of financial institutions and markets facilitate free capital mobility. For the monetary club to be established, member countries have to accept they will operate under common fiscal rules, particularly the maintenance of the budget deficit within agreed limits. Even after 30 years of membership, significant economies in Europe like the United Kingdom have decided they can benefit more from the additional digress of freedom they have by staying of the Euro zone.

Economic difficulties ahead: The economic obstacles in the implementing the common monetary union in the region, is these are similar to those in the European Union's Maastricht Treaty criteria for currency convergence, will prove stringent for the member-state to get through. Participating countries must first achieve a marked degree of macro-economic stability. This can be determined by curbing the size budget deficit including foreign grants to keep within a certain range of GDP. The reserve /central bank's deficit financing must be limited to an amount consistent with a maximum proportion of the previous fiscal year's tax revenue. Inflation must be kept below a target rate. Reserves of foreign currency must provide at least six months import cover. The formation of a common monetary union also will require harmonization of exchange rate mechanisms, fiscal and monetary policies as well as other policies that will affect the overall pace of the economy. Table 1.4 shows SADC countries macro-economic convergence targets.

Table 1.4: SADC Countries Macro-economic Convergence Targets set in MOU August 2002 for Monetary Union 2018

Criteria	2008	2012	2018
Inflation Core	9%	5%	3%
Ratio of Budget Deficit to GDP	<5%	3 as an anchor within a band of 1%	3%/ as an anchor within a band of 1%.
Nominal value of Public and Public Guaranteed debt	Less than 60% of GDP	Less than 60% of GDP	Less than 60% of GDP
Current Account/GDP	3-9%	3-9%	3%
External Reserves/Import cover	3 Months	More than 6 months	Sustained
Central bank Credit to Government	Less than 10% of previous year's tax revenue	Less than 5% by 2015	Sustained

Source: SADC Committee of Central Bank Governors.

What are the Benefits: The most important immediate benefits to accrue from monetary union are thought to be a reduction in cross border business transaction costs and exchange rate uncertainty. Currency stability simplifies the business decision-making process as exchange risks discourage cross-border investment. A single monetary zone should also lead to better fiscal control mechanism such those now forced on Lesotho, Namibia and Swaziland as a requirement of maintaining their currencies at par with the Rand in the Southern African Monetary Union. Countries will not be able to finance deficits through printing more money and inflating the national money supply at a higher rate that other countries in the Union. Fiscal prudence can only enhance the external credibility of government's policies although it may only be achieved by actions that reduce domestic demand and incomes. Other potential long-term gains are that an enlarged market will encourage foreign direct investments and increase intra-regional trade. It is accepted that a stable and sustainable macro-economic framework contributes to higher long-term GDP growth and supports employment creation.

A single currency will also improve cooperation between national in banking sectors, including better payments clearing mechanism between countries. Beside the increase intraregional trade a single regional currency will have a more stable internal and external value. Therefore, the benefits of price stability and monetary policy credibility are more likely to be realized under common monetary union and single currency process. However, this process can bring these positive results if the regional common monetary authority will be autonomous in carrying out its functions and where its primary objective is price stability in the region. In reality, the regional authority would be, effectively the Reserve Bank of South Africa. The economic predominance of South Africa in SADC will mean that South Africa is very unlikely to give up the right to veto decisions of the SADC regional central bank. This situation may be acceptable at present where the stated monetary policies of the RSA include an emphasis on price stability and retaining international confidence in the Rand. But, ultimately the Reserve Bank is required to facilitate the policies of the elected government. A change of government might mean less emphasis on price stability and an increase deficit spending.

Currently the potential costs of the proposed single currency are more complex and difficult to evaluate. For a participating country there will be a cost involved in participating in this process from the loss of autonomy to manage its own monetary policy. In the case of Lesotho, Namibia and Swaziland, whose economies are very heavily influenced by the economic conditions in the Republic of

South Africa, the availability of benefits from having and independent monetary policy if they were outside the currency union would be small. It is unlikely they would gain any more freedom.

National autonomy over monetary policy is giving a member state the maximum freedom and flexibility, through the use of various monetary instruments such as interest rate and reserve requirements, to steer the economy in particular direction. Member states know that monetary policy is a key instrument of macro-economic management. Member states understand the constraints on independent policies imposed by the processes of a monetary union. These may be seen as constituting obstacles to achieving the specific economic goals of member states. SADC member states are at different stages of development and have different financial and economic structures. Such diversity would make it difficult to move positively to establishing a SADC monetary union in the short time.

The critical question is whether the creation of a common monetary union and single currency can be a vehicle for solving credibility problems that bedevil existing central banks. If so, establishing a common monetary union and central bank that is more independent and exerts discipline over fiscal policies than national central bank do more may enable it to become and agency of restraint[33]. Experience from the countries in the existing Common Monetary Area (CMA) based on the Rand does not suggest that the existence of monetary union per se is associated with a dramatic increase in regional trade and policy coordination. The Southern African region is already dependent on the South African rand. Lesotho, Namibia and Swaziland already have tagged their national currencies to the rand in a one-to-one exchange rate. Also the currencies of Botswana, Mozambique, Zambia and Malawi are heavily dependent on the Rand because of South Africa being their major trade partners.

Economic wealth and stability is particularly high in South Africa, Botswana and Namibia relative to other SADC countries other than Angola and Mauritius some countries like Mozambique, Angola and Tanzania are producing impressive growth rates. The political situation in Zimbabwe and Swaziland will make it difficult to meet SADC for membership of a SADC monetary union. The plan for a single market calls for the abolition of tariffs and non-tariff barriers by end of this year (2008); a SADC-wide customs union by 2010; a common market, including free movement of labour and capital, by 2015; and a single currency and central bank by 2016[34]. A common Southern African market - following the European Union (EU) model - is to be established by 2016. The SADC block will unite the markets of Angola, Botswana, Congo Kinshasa (DRC), Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. Madagascar has joined SADC this year, 2008. Core factors to control in a SADC regional monetary policy are relative economic growth, inflation, budgetary deficits, exchange rates, and unemployment. Table 1.5 shows time frame on common economic and monetary union in the region and Table 1.6 shows changes in economic growth from 1985 and 2008 selected countries.

Table 1.5 Common Economic and Monetary Union in SADC

Target	Item	Time Frame
1	Free Trade area	2008
2	SADC Customs Union	2010
3	SADC Common Market	2015
4	SADC Monetary Union	2016

Source: SADC Committee of Central Bank Governors.

Table 2.6: Changes in Economic Growth from 1985 to 2008

Country	Government Debt % of GDP 1983	Economic Growth % GDP 1970-1981	Inflation % 1970-1981	Government Debt % of GDP 2005	Economic growth % GDP 2004-2005
South Africa	-	3.7	12.8	17	5.6
Zimbabwe	13.8	1.8	10.1	33	-7.6
Malawi	42	5.6	10.3	60	0.4
Tanzania	28.3	5.1	11.9	22	5.0

Source: World Development Reports; 1983 and 2007

Regional Common Monetary Union and Globalisation

Capitalist economic theory holds that a completely liberalized global market is the most efficient way to foster growth, because each country specializes in producing the goods and services in which it has a comparative advantage. Yet, in practice, cutting trade barriers and opening markets do not necessarily generate development. The so-called rich countries and large corporations dominate the global market place and create very unequal relations of power and information between themselves and Africa. The poor countries seldom experience the rising well being promised from globalisation but instead have increasing unemployment, poverty, and income inequality.

An additional problem is that free trade is not equally free. A monetary union will be more feasible among regional countries with open economies and strong trade links with each other. Further more, is a common monetary union and single currency in the region is successful it will promote economic convergence among the member states. Currently the regional empirical data suggests that the region does not meet all the criteria suggested by the optimum currency area theory neither is there convergence in most of the economic variables. The process to establish a SADC common monetary union and single currency will therefore be a long one because of macro-economic convergence that must established first.

Financial globalisation has taught us that the use of an independent monetary policy is severely limited. With globalisation, cross-border capital flow is inevitable and this makes independent monetary policy ineffective especially for small countries in the region. Since that cannot, in any case, effectively implement independent monetary policy small countries in the region may be better off with a monetary union. The initiatives for free trade areas; customs unions and common market are designed as an inter-linked strategy in the region for promoting Southern Africa as a strong regional block within the global economy. Increasingly, the globalisation process in terms of integrated markets is seen as a mechanism to enhance and promote the region's competitiveness with other trading blocks reduced internal trade barriers and free flow of the factors of production – labour and capital. In the globalised financial market, the feasibility and effectiveness of an independent monetary policy is questionable, especially for small open economies. It can be argued that it is very hard for a country to simultaneously maintain a fixed exchange rate and an open capital market while pursuing an independent monetary policy geared towards the domestic economy. A country can try to opt out of financial globalisation. The outcome may not be desirable.

What is likely to happen is that such a country will be isolated and might become further marginalized in terms of its participation in the world economy. Globalisation is being portrayed as good for the world but globalisation has fundamentally altered the world economy, creating winners and losers. Reducing inequalities, both within and between

countries, and building a more inclusive globalisation is the most important development challenge of our time. Globalisation will not benefit those countries that are not prepared to take advantage of the new system. Obtaining a fair globalisation is the collective responsibility of many actors. It requires a convergence of commitment and will. And as always on issue of change and leadership those with the greatest power to make things better also have the greatest responsibility at every level-nationally and internationally.

SADC is amongst these important change agents. SADC countries' increasing interest and momentum for the creation of a common monetary union and single currency seems to be led by the pressure for the internal free trade agreements. It is increasingly being seen as part of the strategic push to integrate the region. In this regard, the common monetary union and single currency are seen as a way of reinforcing regional cohesion and demonstrating a commitment to regional solidarity that started during the Southern African Development Coordination Conference (SADCC). Ironically, membership of a SADC Monetary Union, dominated by the new South Africa, will recreate the dependency that SADCC countries were trying to escape from. Or, will the new Republic of South Africa (RSA) gracefully step back and agree to decisions made by its neighbours? Will the RSA be will to provide the resource transfers to its less developed neighbours that will be required to mitigate the uneven impacts from economic and monetary integration? If SADC countries are convinced of the benefits of monetary integration why are they not queuing up to join Lesotho, Namibia and Swaziland as members of the existing Monetary Agreement? Would they be allowed in if they applied? The SADC region has moved from fighting with apartheid South Africa to fighting to defend its place in globalisation. To benefit from a globalised economy the region must ensure that it has the necessary human skills capable of competing effectively within the world economy and institutional arrangements that conform to international standards, governance and legal system must work well. Regional common monetary union initiatives should recognize that globalisation has developed in an ethical vacuum, where market success

and failure has tended to become the ultimate standard of behaviour, and where the attitude of the winner takes all weakens the fabric of communities and societies[35]. The leaders of SADC and Southern Africa have a duty to help fill this vacuum.

Globalisation has generated significant international opposition over concerns that it has increased inequality and environmental degradation. Advances in communication and transportation technology, combined with free-market ideology, have given goods, services, and capital unprecedented mobility. Northern countries want to open world markets to their goods and take advantage of abundant, cheap labour in the South, policies often supported by Southern elites[36]. The proponents of 'value-free' localization use international financial institutions and regional trade agreements to compel poor countries of Africa to "integrate" by reducing the import tariffs that protect their workers, privatising state enterprises, and relaxing environmental and labour standards. The unfair obstacles to trade and the ecological degradation experienced by Africa are reinforced by the world's marketing system, which denies African states higher prices for their agricultural products and minerals, provides competition for African-produced food-stuffs from heavily subsidized European and American food exports and limits their access to markets in industrialized countries[37].

Way Forward

Experience showed that the population in both urban and rural areas tends to benefit from sustained and high rates of growth only if they are given the opportunities to build or improve their physical, financial, and human assets. Adequate public investment in basic education, heath, sanitation, and physical infrastructure, and a stable macro-economic environment for saving and investment, contribute greatly to this end. Strengthening co-operation between African countries and other developed countries, as appropriate at regional and sub-regional levels, will play an important role in the development efforts of African countries under African Union. The successful nations in the twenty-first century will be those who are willing to take

informed decisions concerning their affairs in the light of their own specific realities and goals, despite the conflicting and chaotic directions coming from the so-called economic and development experts. Until African countries begin to engage the global economy on their own terms and not on the terms of developed nations sustainable development will continue to elude them.

In general the common monetary union is desirable, as it will likely to promote macro-economic stability and economic growth in the region. However, a common monetary union should not be seen as an end in itself but as part of a process for wider economic integration in the region. To ensure a successful implementation of this process in the region within the agreed framework, it is important that member states intensify and redouble their efforts towards realization of this process in positive way. Member states would need to pursue appropriate policy measures in order to satisfy the convergence criteria. The lack of convergence in key macro-economic variable may suggest that the region is not yet ready for the process of common currency. The region must meet all crucial criteria prior to formation of process. European Union experience taught us that it was not only the economic argument that was the defining factor in the formation of monetary union, but also the political drive for unification. It is therefore important for the region to have political champions to promote the cause for regional monetary union. We all know that in Europe France and Germany were the political champions for their monetary integration.

Taking into account the sensitivity of process of common monetary union and single currency, it is important that citizens in the region are properly informed on this process and they understand its importance to themselves. SADC member states should begin to prepare themselves now if they are to optimally benefit from this arrangement. Member states should be strategically position themselves such that they increase their share of trade and investment within the region and beyond. All member states should continue with diversification of their economy towards manufacturing and services and development of human capital to enable labour move freely without exploitation.

This is the first time in history that capitalism has moved to the position of controlling the entire globe. It is able to penetrate anywhere it pleases and move labour and capital and manipulate trade. But capitalism cannot develop the whole world in its own image. He techniques used to develop the main capitalist countries, represented for example by those in the 'Group of Seven', are no longer enough, as has been vividly shown in the financial and economic melt-down that has swept the world in the last year[38]. One way of working towards a common monetary integration and single currency for entire continent could be to continue with the efforts taken within the RECs and to think about gradually expanding these money efforts within the RECs which have both been in existence for sometime and which have proved relatively durable and stable.

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End Note

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3 Finance and Development December 2004.
4 http://www.africasia.com/africanbusiness/ab.php?ID=890&back_month=57
5 The gaps and imbalances between countries are vast and growing. In 1960, per capita GDP in the richest 20 countries was 14 times that in the poorest 20 countries. By 1998 the gap had widened to 34 times. Only 24 percent of the world's total foreign direct investment (FDI) went to developing countries in 1999, down from 38 percent over the period 1993-97. Eighty percent of FDI flows went to only ten developing countries. Although the share of developing countries in world trade in manufactured goods rose from 23 percent in 1970 to 38 percent in 1997, 80 percent of that increased share was attributable to just 13 economies. Many countries are marginalised from the world economic system. Economies in transition have lost ground. For too many people the world seems full of opportunities but they do not see how to connect their lives to the opportunities available. World Employment Report 2001 International Labour Organisation. Geneva 2001.
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9 Building blocks for Monetary Union: **Arab Monetary Union (AMU) members:** Algeria, Libya, Mauritania, Morocco, and Tunisia. **Common Market for Eastern and Southern Africa (COMESA) members:** Angola, Burundi, Comoros, Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, and Zimbabwe. **Economic Community of Central African States (ECCS) members:** Burundi, Cameron, Central African Republic, Chad Democratic Republic of Congo, Equatorial Guinea, Gabon, Rwanda, and Sao Tome and Principe. **Economic Community of West Africa States members:** Benin, Burkina Faso, Cape Verde, cote d'Ivoire, The Gambia, Ghana, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo. **Southern African Development Community (SADC) members**: Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe. Within SADC South Africa, Lesotho, Swaziland and Namibia already constitute the Southern African Currency Union (SACU), the longest existing such Union in the world.

It has been suggested that monetary integration in SADC could be best achieved by other SADC members joining SACU.
10 Economic Commission for Africa- African Union: Economic Report on Africa 2007: Accelerating Africa's Development Through Diversification. Addis Ababa.
11 **Note:** Developed counties, especially the United States, faces the challenge of rising current account, government, and private sector deficits which threaten domestic economic recovery as well as global financial stability. The US current account deficit has risen systematically since 1990s. reaching 6.6 percent of GDP in 2006. Meanwhile, its budget balance has moved from surplus in 2000 (1.9 percent of GDP) to a deepening deficit that stood at 2.5 percent of GDP in 2006. Moreover, the US private sector position continues to deteriorate due to insufficient savings partly driven by the easy credit that fuel consumption. Economic Commission for Africa/African Union: Economic Report on Africa 2007. Addis Ababa.
12 **Note:** The level of saving in Africa has been historically less than 20.0% of GDP, which is considerably below the average of East Asia and the Pacific (35.0%), Latin America and the Caribbean (21.0%) and Middle East and North Africa (26.0%). Five countries, Algeria, Botswana, republic of Congo, Gabon and Nigeria, have reached a savings ratio of more than 30.0%. Their key challenge facing these countries is how to translate these high savings into productive investment, especially in non-oil and non-mineral activities, to achieve sustained economic growth. Other African governments need to focus efforts on mobilizing both public and private savings. Economic Commission for Africa/African Union: Economic Report on Africa 2007. Addis Ababa.
13 http://www.sadcreview.com/sadc/frsadc.htm
14 SADC 2005.
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16 Economic Commission for Africa- African Union: Economic Report on Africa 2007: Accelerating Africa's Development Through Diversification. Addis Ababa. **Note:** Brent oil futures dropped to a 22 month low on 13Novemeber as evidence strengthened that a global recession would have deep effect on demand. As this paper is being written in November 2008 London Brent crude fell 7c to US$52.30. US crude futures were 19c firmer at US$56.35.Oil has lost more than 60% of its value since hitting a peak of more than US$147 a barrel in July 2008. Business Day South Africa.14 November 2008.
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28 SADC Secretariat 2008.

29 SADC Secretariat 2008.

30 SADC 2005.

31 http://www.afrol.com/articles/15869

32 http://www.afrol.com/articles/15869

33 **Note:** These are words of Paul Collier who worked on wide range of economic topics concerned with African Development.

34 http://www.afrol.com/articles/15869

35 Thomas L. Friedman "examines the impact of the 'flattening' of the globe", and argues that globalised trade, outsourcing, supply chaining, and political forces have changed the world permanently, for both better and worse. He also urges that the pace of globalisation is quickening and will continue to have a growing impact on business organization and practice. See: Friedman, Thomas L. "The Dell Theory of Conflict Prevention." Emerging: A Reader. Ed. Barclay Barrios. Boston: Bedford, St Martins, 2008.49.

36 http://www.globalpolicy.org/globaliz/econ/index.htm

37 The World Bank Report: Global Economic Prospects 2004 said the liberation would shift agricultural production from the so-called North to developing countries, and boost world prices for many commodities. For example, the price of rice in world markets would rise by as much as 90 % while those for cotton, dairy products, groundnuts and sugar would rise by10%-40%. It is said the European Union is spending around US$100.0 billion a year on direct budget subsidies to producers, depressing world market prices in sugar, dairy and wheat. One of the biggest culprits is the US, which spends US$50 billion annually on direct support to its agriculture sector alone. Its annual cotton subsidy expenditure of US$ 3 billion is three times its foreign aid to Africa. The South Africa Sunday Times Business Times September 7, 2003.

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LE COMMERCE EXTÉRIEUR DES PAYS DE LA CEEAC:

Une Base Fragile pour la Mise en Place d'une Monnaie Communautaire

Par Prof. Jean-Marie GANKOU et Dr. Dieudonné BONDOMA YOKONO, Université de Yaoundé II

Contents

RESUME ET RECOMMANDATIONS

Le plaidoyer pour l'unification monétaire en Afrique n'est pas une préoccupation récente pour les économistes, experts et autres analystes financiers du continent. Cela se justifie par le fait que la plupart des pays africains utilisent des monnaies nationales, à l'exception de quelques Unions Monétaires que l'on retrouve en Afrique de l'Ouest, avec l'UEMOA, et en Afrique Centrale, avec la CEMAC.

Les avantages d'une monnaie unique dans un espace économique donné sont évidents: d'une part, au niveau des relations intra-communautaires, et d'autre part, au niveau des échanges avec le Reste du monde.

Le passage à une monnaie communautaire obéirait à un schéma théorique, selon un processus séquentiel représenté par les étapes de l'intégration économique totale. C'est ce qu'on a observé par ailleurs, le cas de l'Union Européenne étant le plus cité. La question qui se pose est alors celle de savoir si l'Unification monétaire en Afrique, telle que prônée par l'Union Africaine, est possible, au regard des spécificités actuelles du commerce extérieur des pays membres, qui laissent apparaître, d'une part des exportations dominées par les produits de base, et d'autre part une faiblesse des échanges intra-communautaires.

DES EXPORTATIONS DOMINEES PAR LES PRODUITS DE BASE, ET UN DEFICIT STRUCTUREL DES SERVICES

Les économies de la CEEAC à l'instar de celles des autres pays de l'Afrique au sud du Sahara, sont principalement tournées vers la production et l'exportation des produits primaires. Cette situation contraint de façon notable leurs performances en matière de commerce extérieur, car les recettes d'exportation sont essentiellement tributaires des cours des produits de base, eux-mêmes fluctuants sur les marchés internationaux, avec une tendance à la baisse. Les importations par contre, sont constituées pour la plupart de produits à forte valeur ajoutée dont les prix, à défaut d'augmenter, sont stables sur une longue période. La combinaison de ces facteurs débouche sur une détérioration continue des termes de l'échange pour les pays de la CEEAC.

Sur la période 1999-2003, les parts respectives des exportations et des importations dans le PIB, qui indiquent le degré d'ouverture, sont les suivantes, par pays:

Graphique 1: Part des exportations et des importationsdans le PIB (%)
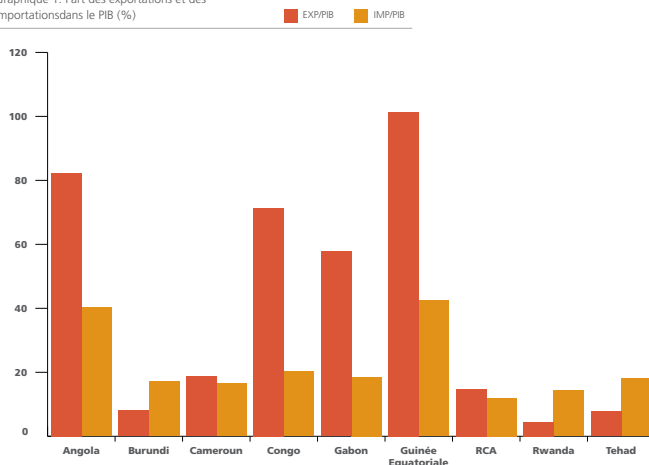
Source: FMI/BPS 2003

Le graphique 1 permet de dégager deux catégories de pays.

La première catégorie, dont le degré d'ouverture est relativement faible, est constituée par le Burundi, le Cameroun, la RCA, le Rwanda et le Tchad. L'Angola, le Congo, le Gabon et la Guinée Equatoriale, qui constituent le deuxième groupe de pays, sont relativement plus ouverts, en raison notamment du quasi-monopole du pétrole dans leurs exportations.

Comme mentionné précédemment, les économies de la CEEAC sont essentiellement productrices de matières premières. Les exportations de marchandises sont concentrées autour d'une douzaine de produits dont le taux de transformation à l'échelle locale est encore faible. Au nombre de ces produits, le pétrole brut figure en bonne place. En effet, malgré des baisses de production enregistrées depuis quelques années notamment au Cameroun et au Congo, la CEEAC reste une économie fortement

pétrolière. Six des onze Etats membres constituent des pays producteurs relativement importants. En 2003 par exemple, les activités pétrolières ont représenté en moyenne 40% du PIB et 69,6% des exportations des pays exportateurs de pétrole de la sous-région CEMAC.

Tableau 1: Le pétrole en zone CEMAC

	Prod. (mlo de tonnes) 2002 2003	PIB pétrole/ PIB (%) 2003	% dans Export. 2002 2003	% dans rec. Fisc. 2002 2003
Cameroun	5,2 4,9	6	44 40	28 24
Congo	11,8 11,2	51	87 86	70 70
Gabon	12,6 13,4	42	79 81	60 54
Guinée Equatoriale	11,5 13,3	88	91 92	88 87
Tchad	- 1,8	12	0 49	0 0

Source: BEAC, AIE in Rapport Zone Franc 2003

L'Angola produit actuellement 950 000 barils par jour, pour un revenu annuel de 3,2 milliards de dollars qui représente environ 80% des revenus de l'Etat.

Les exportations de services sont encore marginales.

Les importations de biens quant à elles sont très diversifiées et concernent les produits semi-finis, les produits finis, les biens d'équipement et les produits minéraux.

Une balance commerciale dont l'évolution globale est fortement influencée par le pétrole

Sur la période 1999-2003, la balance commerciale globale des pays de la zone CEEAC, hormis la RDC dont les informations ne sont pas récentes, est excédentaire. Cet excédent masque cependant quelques différences. Ainsi, de manière un peu plus détaillée, deux grands groupes de pays peuvent être identifiés. Le premier groupe concerne les pays de la zone dont le commerce est structurellement excédentaire. Il s'agit de l'Angola, du Cameroun, du Congo, du Gabon, de la Guinée Equatoriale et de la RCA. A l'opposé, le groupe de pays constitué par le Burundi, le Rwanda, Sao-Tomé et Principe et le Tchad se caractérise par un déficit commercial tout le long de la période sous-revue.

Hors pétrole, la balance commerciale des pays de la zone devrait fortement être affectée à la baisse au regard de l'importance de ce produit dans les exportations totales (cf. tableau 1).

*Tableau 2: Evolution de la Balance commerciale en zone CEEAC
(en millions $US)*

	1999	2000	2001	2002	2003
Angola	2 047,2	4 881,2	3 355,1	-	-
Burundi	-42,3	-58,8	-69,1	-73,0	-119,3
Cameroun	283,1	510,7	65,5	21,8	66,5
Congo	1 037,4	2 036,5	1 374,0	1 597,7	1 011,2
Gabon	1 588,3	2 522,5	1 766,4	1 825,5	1 240,3
Guinée Equatoriale	284,1	744,6	1 001,4	1 905,1	1 002,3
RCA	15,2	43,8	31,7	28,8	-5,1
RDC	-	-	-274	-	-
Rwanda	-185,4	-154,8	-151,9	-166,1	-
Sao-Tomé et Principe	-18,0	-22,4	-21,2	-22,9	-
Tchad	-33,7	-40,2	-239,4	-466,2	-198,8
Total	**4 975,9**	**10 463,1**	**7 112,6**	**4 650,7**	**3 116,4**

Source: FMI/BPS 2003, Banque du Burundi 2003
- Données non disponibles

Les exportations de biens

Les exportations des pays de la CEEAC sont principalement constituées par les produits de base. Il convient cependant de signaler que quelques produits manufacturés sont aussi exportés. De manière générale, il s'agit de produits pétroliers, de matières précieuses (diamants, or), de métaux et produits du secteur minier (cuivre, cobalt, manganèse, uranium, méthanol, aluminium), du cacao, du café, du thé, du coton, du bois, du tabac, des peaux, du bétail, du sucre et des poissons.

De manière générale, il apparaît que les exportations des pays de la CEEAC sont peu diversifiées. De plus, elles se caractérisent par la prédominance des produits de base. Aussi, la diversification des produits d'exportation et un plus grand degré de transformation devraient constituer la priorité en matière de politique commerciale, afin de renforcer la contribution du commerce extérieur à l'intégration sous-régionale.

Les importations de biens

La structure des importations de la CEEAC est quasi identique dans tous les pays membres. Elle peut être éclatée en grands groupes et principaux produits suivants:

- Produits alimentaires, boissons et tabacs (viandes et abats; poissons, crustacées et mollusques; laits et produits laitiers; farine de froment; tabacs et cigarettes; malts; blés; riz; boissons; préparations viandes, poissons)
- Produits minéraux (ciment hydraulique, pétrole lampant, fuel-oil, gasoil, essence)
- Produits chimiques (médicaments, savons, produits de chimie inorganique, produits de chimie organique)
- Papiers et applications (papier, cartons)
- Produits de l'industrie textile (coton et tissus coton, tissus synthétiques, bonneterie, vêtements)
- Verrerie et ouvrages en pierre
- Métaux et ouvrages en métaux (fer, fonte, acier)

- appareils électriques)
- Matériel de transport (voitures, camions et tracteurs)
- Instruments d'optique, photos et sons
- Autres produits

Tableau 11: Evolution des importations par pays (en millions de $US)

	1999	2000	2001	2002
Angola	3,109,1	3 039,5	3 179,2	nd
Burundi	97,3	107,9	108,3	104,0
Cameroun	1,317,5	1 626,2	1 863,9	2 070,3
Congo	522,7	455,3	681,3	691,1
Gabon	910,5	798,1	847,4	1 063,3
Guinée Equatoriale	425,2	515,0	813,5	564,8
RCA	131,1	117,0	107,0	139,1
RDC	Nd	Nd	1 024	nd
Rwanda	246,9	223,2	245,2	233,3
Sao-Tomé	21,9	25,1	24,4	28,0
Tchad	153,2	170,4	377,7	590,0
Total	**6,935,4**	**7,077,7**	**8,247,9**	**5 483,9**

Source: FMI/BPS 2003; nd: non disponible

Un déficit structurel de la balance des services

La balance des services non facteurs (transport, assurances, voyages) de la zone CEEAC est structurellement déficitaire.

Tableau 12: Balance des services (en millions $US)

	1999	2000	2001	2002	2003
Angola	-2,441,6	-2,432,2	-3 315,6	-	-
Burundi	-26,6	-36,7	-31,1	-35,7	-
Cameroun	-292,3	-357,5	-426,5	-713,7	-297,7
Congo	-722,6	-601,8	-708,4	-762,1	-460,2
Gabon	-586,1	-684,9	-536,5	-744,0	-536,5
Guinée Equatoriale	-	-551,7	-768,3	-657,6	-565,2
RCA	-64,5	-83,7	-78,3	-85,3	-43,5
RDC	-	-	-	-	-
Rwanda	-142,6	-140,8	-123,3	-136,3	-
Sao-Tomé	-10,9	-12,5	-13,0	-14,2	-
Tchad	-	-189,9	-270,9	-435,5	-266,0
Total	**-4,287,2**	**-5,091,7**	**-6,271,9**	**-3,584,4**	**-2,169,1**

Source: Rapport Zone Franc 2003; IMF/BPS Yearbook 2003

Dans le cas du Burundi par exemple, les exportations de services sont essentiellement le fait des administrations publiques tandis que les importations concernent le transport et les voyages. Sur la période 1999-2002, les services exportés ont représenté 11% des exportations de biens; les dépenses de services ont valu 30% des importations de biens.

Au Cameroun, les ventes de services à l'exportation sont concentrées sur cinq services représentant 84% des ventes: les télécommunications, les services juridiques comptables et de gestion en réalisent presque la moitié (47,8%); viennent ensuite les transports qui représentent 25,5%. Les assurances valent 14,8% de l'ensemble des services.

En ce qui concerne le Congo, le Gabon et la Guinée Equatoriale, les «autres services» et notamment ceux destinés aux entreprises constituent l'essentiel des ventes et des dépenses de services avec l'extérieur.

Au Tchad, la facture des services, avec notamment le fret et les «autres services aux entreprises», représente 35% à 40% du coût des biens. L'organisation et la professionnalisation des fonctions liées au transport, y compris l'assurance, sont d'une impérieuse nécessité.

Au Rwanda, les revenus tirés des services valent 51,4% de ceux tirés des exportations de marchandises. En importations, les dépenses de services équivalent à 65,4% de celles effectuées pour les marchandises.

A Sao Tomé et Principe, la facture des services est le quart de celle des biens.

Malgré l'indisponibilité des informations sur les autres pays de la CEEAC, force est de constater que la charge des services non facteurs grève encore lourdement le solde courant de l'ensemble des pays concernés. Cette situation est davantage aggravée par le poids des intérêts sur la dette extérieure.

LES ECHANGES COMMERCIAUX DES PAYS DE LA CEEAC: POLARISATION VERS LES PAYS DEVELOPPES ET FAIBLESSE DES ECHANGES INTRA-COMMUNAUTAIRES

Une polarisation des échanges autour de l'Amérique du Nord et de l'Union Européenne

Le commerce des pays de la CEEAC est essentiellement orienté vers les pays développés et notamment vers deux pôles: l'Amérique du Nord (les Etats-Unis en particulier) et l'Union Européenne. Certains pays asiatiques comme la Chine, Taiwan, la Corée du Sud, le Japon, l'Indonésie, l'Inde ou les Philippines figurent également parmi les grands partenaires de la région.

Bien que dans des proportions moindres, l'Afrique hors CEEAC (République d'Afrique du Sud, Kenya, Ouganda, Tanzanie, Zambie, Nigeria et Côte d'Ivoire) est également présente dans ces échanges. Au sein de la sous-région, le volume des produits échangés est encore faible, comme l'indique le graphique ci-contre.

Graphique 2: Exportations et Importations intra CEEAC par rapport aux échanges mondiaux de la CEEAC (%)

Graphique 2: Exportations et Importations intra CEEAC par rapport aux échanges mondiaux de la CEEAC (%) ■ Export Intra-CEEAC ■ Export CEEAC-Afrique ■ Export.CEEAC-Monde

■ Import Intra-CEEAC ■ Import CEEAC-Afrique ■ Import CEEAC-Monde

Source: DOTS-FMI, 2002

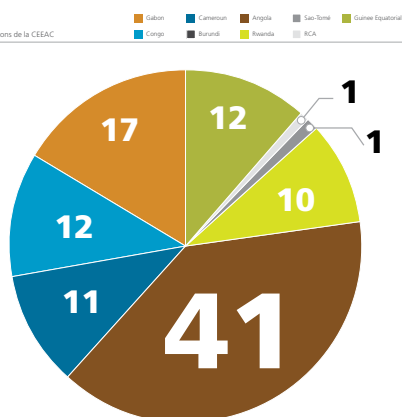En 2003, les exportations totales de la région s'élevaient à 21,2 milliards de dollars US et les importations à 12,2 milliards de dollars US, soit une balance commerciale excédentaire de 9 milliards de dollars US.

L'Angola est le plus grand exportateur et importateur de la zone. Il a contribué pour 40,5% et 36,5% respectivement en exportations et en importations aux échanges mondiaux de la zone.

Part dans les exportations de la CEEAC

Gabon | Cameroun | Angola | Sao-Tomé | Guinée Equatorial
Congo | Burundi | Rwanda | RCA

Part dans les importations de la CEEAC

Gabon | Cameroun | Angola | RDC | Guinée Equatorial
Congo | Burundi | Rwanda | RCA
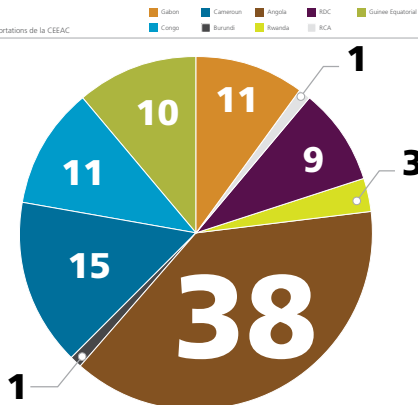
Source: FMI, DOTS 2004

Une faiblesse des échanges intra-communautaires

Les échanges intra CEEAC demeurent marginaux. En 2003 par exemple, les exportations intra-régionales ne représentaient que 1,4% des exportations mondiales de la région. Rappelons que cette part n'a pas fondamentalement changé depuis 1990 (1,2%). Il apparaît que ce commerce est insignifiant, par rapport aux performances des entités comme la CEDEAO ou le COMESA dont les échanges intra-communautaires oscilleraient entre 10 et 15%.

Toutefois, le commerce intra-régional de la CEEAC connaît depuis 1990 une évolution à la hausse. Il a atteint 293 millions de dollars US en 2003, contre 200 millions de dollars US en 2000, et 163 millions de dollars US en 1990. Sur la base des données de la Banque Mondiale (UNCOMTRADE), la contribution par pays à cette évolution est la suivante (en %):

Tableau 13: Contribution par pays au commerce intra-régional

	2000	2001	2002	2003	Moyenne
	Exp Imp	Exp Imp	Exp Imp	Exp Imp	Exp Imp
Angola	2,3 7,2	3,8 4,4	2,8 2,3	2,2 1,8	2,7 3,8
Burundi	1,7 0,6	1,9 0,4	2,5 0,5	1,0 0,0	1,6 0,3
Cameroun	66,5 4,0	66,0 11,4	64,3 4,3	61,7 4,1	64,1 6,1
Congo	7,7 8,8	6,0 7,6	8,0 9,3	18,4 5,4	11,4 7,5
Gabon	16,6 62,1	18,8 60,3	19,9 64,2	12,5 65,4	16,2 63,0
Guinée Equat.	0,0 0,0	0,0 0,0	0,0 0,0	0,1 0,0	0,0 0,0
RCA	1,0 3,4	1,3 2,5	0,9 3,5	1,0 2,4	1,0 2,8
RDC	0,7 9,6	1,2 8,7	0,9 4,0	1,7 8,8	1,2 8,0
Rwanda	0,0 0,0	0,3 0,5	0,1 0,6	1,4 0,3	0,6 0,3
Sao-Tomé et P.	0,1 1,2	0,0 1,3	0,1 1,6	0,1 1,2	0,1 1,3
Tchad	3,5 3,2	0,7 2,9	0,4 9,7	0,1 10,8	1,0 6,7

Source: Calculs effectués à partir des données UNCOMTRADE- et de DOTS Yearbook 2004 , FMI

Ce tableau appelle quelques commentaires:

- La prédominance de la CEMAC qui à elle seule réalise en moyenne 91% des exportations intra CEEAC et 78,7% des importations à l'intérieur de la zone. Au nombre des facteurs pouvant expliquer cette situation, on peut évoquer l'existence d'une monnaie commune aux six (6) Etats concernés, l'effectivité de leur Zone de Libre Echange, et les conflits socio-politiques dans les autres Etats (RDC, Rwanda, Burundi et Angola) durant la période d'analyse;

- La prédominance des exportations du Cameroun avec un peu plus de 64% dans le commerce intra-régional et une certaine homogénéité des niveaux d'importations par pays, si l'on exclut le Gabon en tant que plus grand importateur, et des pays comme l'Angola, le Burundi, le Rwanda et Sao-Tomé et Principe dont les niveaux globaux des échanges dans la zone sont restés timides. Le commerce intra régional de cette dernière catégorie de pays subit ainsi les contrecoups de l'instabilité politique dont ils ont été victimes et de la faiblesse de leurs secteurs manufacturiers.

Il apparaît important que les pays de la CEEAC s'engagent résolument dans la voie de la construction effective d'un espace économique, ce qui suppose le développement des échanges entre ces pays. Cette recommandation peut être **étendue** à l'ensemble des pays africains, dans la perspective de la mise en place d'une monnaie unique en Afrique.

THE FUTURE OF MONETARY INTEGRATION IN SOUTHERN AFRICA:

Lessons from the European Monetary Union?

By Donald L. Sparks and Richard Dutu, Citadel University (USA) and University of Waikato (New Zealand)

Contents

EXECUTIVE SUMMARY AND RECOMMENDATIONS

The states of southern Africa face a dilemma: while the region already sustains a successful and long-running monetary union, the Common Monetary Area (CMA, known as the "Rand Zone"), the region's leading economic integration organization, the Southern African Development Community (SADC), is opposed to joining the union. However, the Common Market for East and Southern Africa (COMESA), a less successful, but rival economic organization favors a monetary union. The situation is further complicated by the existence of the successful and also long-lived Southern African Customs Union (SACU) and by the recent Cross Border Initiative (CBI). This paper will attempt to answer the basic --and indeed important-- question: is SADC prepared for joining the CMA?

While several scholars have looked at southern African regional integration until recently there has been little research on the specific issue of expanding CMA. There are a number of reasons for this. The first, and most important, is that the region's dominant player, South Africa, is not in favor of expansion at this time. The second is also somewhat political: the existing regional organizations are so rivalous that reaching any sort of agreement is a difficult, time consuming and cumbersome process. Third, the smaller non-CMA members might be reluctant to join because of South Africa's overwhelming economic and commercial dominance. Fourth, there is no general consensus that SADC is ready for monetary integration. Fifth, the Rand is not always the region's strongest currency. Sixth, no state has yet come forward with a concrete proposal.

In addition to the macroeconomic fundamentals, there are also important political considerations. First, there is a political reality on the ground that indicates the smaller SADC members are afraid of South African political, economic, commercial, military and strategic hegemony. Perhaps South Africa needs a longer track record of "good neighbourness" before these concerns are laid to rest. A second aspect is whether South Africa wants to expand the CMA northward. While there are a number of commercial

reasons to go with such expansion, there are the risks of the poorer performing countries causing problems for the whole. One might consider, for example, a parallel in the EU where the German Central Bank feared "importing inflation" from the high inflation EU members into the rest of the union. Additional analysis needs to be done to determine whether it would be in South Africa's interest to push for CMA expansion. Finally, in the light of what has been done in the Euro zone, southern African countries should put more in building southern Africa as a single political entity. One way to achieve that goal is to devote more time and resources in political aspects of economic integration. One can reasonably conclude that this way of thinking was one of the major reasons for the successful building of the Euro.

Nonetheless, according to SADC, one of its objectives is to, "develop policies aimed at the progressive elimination of obstacles to free movement of capital and labour, goods and services, and of the peoples of the region generally among member states." In addition, the organization may, "develop such other activities as member states may decide in furtherance of the objectives of SADC." And, the Board of Central Bank Governors has expressed a desire for an eventual monetary union in the future.

Nonetheless, without a significant change in the political and economic climate in southern Africa, it is unlikely that SADC will soon join CMA or make its own monetary union. However, in the near term some states, perhaps Botswana, Mauritius or Seychelles, may individually negotiate joining. This paper calls for further study of such individual potential members to estimate the costs and benefits of unilateral decisions to join CMA. In reality, if CMA expands, it will probably be gradually, one new member at a time.

For the Southern African REC, it is recommended that initially the SADC members adopt the rand as a common currency by joining the Common Monetary Area (CMA). This could be done in stages, with the countries with the closest convergence criteria joining almost immediately, followed by the remaining members by 2015.

After most or all of the members have joined, then the next

stage would be to convert the CMA into a true monetary union, replacing the South African Reserve Bank with a Southern African Central Bank.

In the meantime, South Africa should encourage the enlargement of the CMA, especially with those countries that have satisfactory convergence criteria (including Botswana, Seychelles and Mauritius). It should find ways to help other countries meet the criteria, for example Zambia or Tanzania.

The African Union should act as a facilitator in this process, with the cooperation of the UN Economic Commission for Africa, the IMF, African Development Bank, UNDP and other interested regional and international organizations.

INTRODUCTION

The states of southern Africa face a dilemma: while the region already sustains a successful and long-running monetary union, the Common Monetary Area (CMA, known as the "Rand Zone"), the region's leading economic integration organization, the Southern African Development Community (SADC), is opposed to joining the union. However, the Common Market for East and Southern Africa (COMESA), a less successful, but rival economic organization favors a monetary union. The situation is further complicated by the existence of the successful and also long-lived Southern African Customs Union (SACU) and by the recent Cross Border Initiative (CBI). The somewhat confusing and overlapping memberships in these organizations are illustrated in Figure 1, below.

Figure 1: Souther African Membership in Major Regional Organizations

CMA	Malawi	Burundi	Egypt
Namibia	Zambia	Rwanda	Eritrea
Swaziland	Zimbabwe	Comoros	Ethiopia
	Mauritius	Madagascar	Sudan
	Seychelles	Kenya	Djibouti
	Tanzania	Uganda	
	Angola		
Lesotho	Congo, DR		
South Africa			
Botswana			
Mozambique			

While several scholars have looked at southern African regional integration (Mwase 1995, Holden 1998, Mclymont 1999, Maasdorp 1992, Collings 1983, Mukherjee 1996, Fine 1994), there has been little research on the specific issue of expanding CMA (Jenkins 1996). There are a number of reasons for this. The first, and most important, is that the region's dominant player, South Africa, is not in favor of expansion at this time[1]. The second is also somewhat political: the existing regional organizations are so rivalous that reaching any sort of agreement is a difficult, time consuming and cumbersome process. Third, the smaller non-CMA members might be reluctant to join because of South Africa's overwhelming economic and commercial dominance. Fourth, there is no general consensus that SADC is ready for monetary integration. Fifth, the Rand is not the region's strongest currency. Sixth, no state has yet come forward with a concrete proposal.

To help fill the gap in the literature, this paper will attempt to answer the basic --and indeed important-- question: is SADC prepared for joining CMA? In addition to examining that question, the paper contains five other sections: Section 2 provides an economic and historical overview of the region. Section 3 looks at several convergence criteria

of the nine SADC members (of the 14) which are not in CMA and examines the possibility of them joining. Section 4 presents a comparison between the SADC and the EMU considering political aspects of economic integration. Section 5 concludes the paper.

AN ECONOMIC AND HISTORICAL OVERVIEW OF THE REGION

Some economic comparisons

The states of southern Africa are varied in size, both in population and economic terms.[2] This paper includes only the 14 SADC members as comprising southern Africa.[3] The combined population of the area is approximately 187 million. The smallest state, Seychelles, has a population of only 80,000, while largest, the Democratic Republic of Congo has 48 million. Also, the states are unequally endowed with natural resources. For example, South Africa, Namibia, Botswana, Congo (DR), and to a lesser degree Zimbabwe and Zambia have significant and important strategic mineral reserves including copper, cobalt, diamonds and gold, Angola is heavily endowed with petroleum, while other states, eg. Swaziland, Lesotho and Tanzania have very little such natural resources (Europa Publications 2000). The countries have differing levels of education, literacy, health provisions and other social indicators.

There are two important and fundamental characteristics of the SADC region: (1) it is poor; and, (2) South Africa is the dominant economic force. The region's average GDP per capita is $1,763 (in current 1997 prices), which places it in one of the lowest such areas in the world. These per capita GDPs range with a low of $94 in Mozambique to a high of $7,304 in Seychelles. The CMA average is a bit higher than the SADC average, at $1,825. Growth rates have been uneven. The average GDP growth rate for the region from 1989 to 1997 was 3.9percent. The fastest grower, Seychelles, averaged 8.2percent during that time, while the Democratic Republic of Congo achieved only 0.6percent growth over the same period. The sizes of the economies also vary dramatically: South Africa, with 13percent of land area and 22percent of the population accounts for some 73percent of SADC's total GDP, with $129,094 million of a SADC total of $178,710 million. South Africa dominates CMA, comprising 96percent of the area's GDP. Such poverty and unequal economic power is likely to make further economic integration difficult.

Table 1. Selected Economic Indicators for SADC, CMA and South Africa (1997)

	Pop (millions)	**GDP ($m current)**	**GDP Per Capita**	**GDP Growth (annual average, 1989-97)**
SADC	187.7	178,710	1,763	3.9 percent
CMA	45.7	134,743	1,825	4.0 percent
RSA	41.2	129,094	3,331	1.2 percent

Source: World Bank, International Monetary Fund. See Appendix, tables A1-A4.

The states of SADC trade little with themselves, for obvious reasons. Most of the exports are commodity products, with little value added (Europa Publications 2000). Tanzania, for example, does not need to import tobacco from Malawi, Zimbabwe doesn't need to import minerals from South Africa. As South Africa's former trade minister once stated, the region produces products that, "we dig from the earth and shake off the trees." (The Economist 1995) Only 10 percent of the region's trade is among its members themselves -- by way of contrasts, the EC has over 60 percent of its trade within its community (Foroutan 1993, The Economist 1995). About 86 percent of intra-regional imports are supplied by South Africa. The region desperately needs to diversify their exports.

A Brief History of SADC and the CMA

The Southern African Development Community (SADC) was established in 1979 as a loose association of states grouped in an effort to coordinate economic development projects. It was originally known as the Southern African Development Coordination Conference (SADCC) and it was not concerned with regional trade issues such as integration, other than to lessen dependence with then apartheid-ruled South Africa (Maasdorp and Whiteside 1993). It changed its name and mission with a 1992 treaty. The original nine members have been joined by five more, most importantly South Africa, upon its gaining majority rule in 1994.

The 14-member economic community has a long-term goal of becoming a full common market. However, it has never officially acknowledged the desire for a monetary union. In 1997 the community agreed to phase in a Free Trade Agreement over eight years. This could increase intra-regional trade and boost foreign investment (Holden 1998). However, there are serious obstacles to increased intra-regional trade because the countries' trade patterns are similar.

The organization has taken steps toward greater coordination in finance, investment and monetary affairs. For example, the SADC Finance and Investment Co-ordinating Unit (FISCU), established in 1995, has been working on a framework to achieve regional macroeconomic stability and convergence.[4] Currently the FISCU is drafting a protocol which is planned to be developed during the next four years. According to FISCU, the relevant areas being drafted are:

- Develop an information data bank on policies and structures of SADC central banks and the financial markets in SADC countries;
- Develop a payment, clearing and settlement system;
- Repatriation of bank notes and coins among SADC countries;
- Train central bank officials;
- Examine exchange controls and their impact on the cross-border flows of goods, services and capital; and,
- Examine aspects of the legal and operational framework of SADC central banks.[5]

Also in 1995 the Committee of Central Bank Governors was established as part of the Finance and Investment Sector of SADC. The South African Reserve Bank coordinates this and

the Governor of the South African Reserve Bank acts as the committee's chairman (SADC 1998). In 1998 the SADC member states created a Banking Association to establish international banking standards and a regional payments system. Although not specifically mentioned, a major component of fuller integration could include a common currency arrangement.[6]

Thus, while there is a general agreement among SADC members that some sort of deeper coordination in financial and monetary areas is essential, there are neither plans for establishing a monetary area, nor for joining CMA.

What exactly is the CMA? The Common Monetary Area (CMA, known as the "Rand Zone") is composed of South Africa, Namibia, Lesotho and Swaziland, all of which are SADC members (Coilins 1983, van der Merwe no date). It is the region's only currency area. Before independence, Botswana, Lesotho and Swaziland (the B-L-S states) used the South African Rand, and there was free movement of capital among these states. After independence in 1972, the B-L-S states and South Africa began negotiations for rationalizing the existing system. The Rand Monetary Agreement came into force in 1974, when Botswana opted out. The Rand Monetary Area was replaced by CMA in 1986 with the signing of the Trilateral Monetary Agreement (TMA) between South Africa, Swaziland and Lesotho. This agreement gave both Swaziland and Lesotho considerably more power in determining their respective monetary policies, although in reality not much was changed. The TMA was in turn replaced by the Multilateral Monetary Agreement in 1992 when Namibia formally joined (although it had been a de facto member as a protectorate administered by South Africa).

The CMA uses the South African Rand as a common currency, although each member issues its own currency as well, at par with the Rand. The South African Reserve Bank in effect plays an important --even dominant-- role in the monetary policies of each member (Lundhal and Peterson, 1991). The residents of Lesotho, Namibia and Swaziland can freely access to the South African capital and money markets. There are a number of other important aspects of the CMA (van der Merwe no date, Maasdorp and Whiteside, 1992). The member states:

- Share a common pool of foreign exchange reserves, managed by the South African Reserve Bank;
- Apply a common exchange control policy towards the outside world;
- Hold regular consultations to make changes to the agreement,[7] and,
- Must permit the repatriation of their notes and coins issued which may circulate in other countries of the CMA.
- All maintain current accounts with the South African Reserve Bank. In addition, Lesotho, Namibia and Swaziland can hold foreign reserves managed by themselves for their own immediate needs. They can hold up to 35percent of these reserves in currencies other than the Rand.

One of the most important aspects of the CMA is South Africa's obligation to compensate Lesotho and Namibia for using the South African Rand, ie. the loss of seignorage (Fisher 1982). The assumption is that these states could have earned an income if the Rand circulating in their areas had been issued by them and had been fully invested in income-generating assets. Swaziland does not receive such compensatory payments, because it "officially" suspended the use of the Rand as legal tender in 1986, although the Rand is widely accepted in Swaziland.

Other Regional Economic Organizations

The other major regional organizations in southern Africa are: the Southern African Customs Union (SACU), The Common Market for Eastern and Southern Africa (COMSEA), and the Cross Border Initiative (CBI).

The five member SACU was established in 1910 and is thus one of Africa's oldest organizations. Like most customs unions, SACU provides for duty free movement of goods within the union, and a common tariff rate extended to non-members. Tariffs are collected by South Africa on behalf of the members and placed into a common pool. The smaller members receive a share with a 42percent bonus over what they would have received had the tariffs been collected by the smaller members themselves. This is

designed to compensate those members for a loss of fiscal policy options (Lennart and Peterson 1991). The agreement has been under negotiation for over five years (Maasdorp, Robson and Hudson 1995) with the small members wanting even greater compensation, and South Africa pushing for less (Fagenbaum, Sharer, Thugge and DeZoysa, 1999). Tariff revenues are very important for the smaller members. In 1996 SACU revenue as a share of central government revenues was: Lesotho, 50.6percent; Swaziland, 50percent, Namibia, 30percent; and, Botswana, 16percent. (Holden 1998). In addition, the smaller states must accept the reduced tariff rates South Africa has been accomplishing under GATT and now WTO (Harrold, 1995). The CMA no doubt facilitates trade between the SACU members.

The twenty two-member organization COMESA was originally begun as the Preferential Trade Area for East and Southern African States (PTA) in 1983. As the name implies, its goal was to offer preferred tariff rates among its members. More ambitiously, it had hoped to abolish all tariffs among members by the year 2000. For a variety of reasons, not least because tariffs contribute such a proportion of member government's revenues, this goal has not been met. In 2000 it announced the COMESA Free Trade Area to be completed by 2002. In 1994 COMESA replaced the PTA. COMESA has several initiatives that duplicate or overlap SADC, such as a clearing house for settling accounts between members. In 1998 PTA began issuing checks denominated in PTS Units of Accounts. In 1990 COMESA declared a goal of establishing a monetary union by 2020 (Holden 1998). According to COMESA, its Monetary Harmonisation Programme will… "be implemented in four phases, from 1991 to 2025, with the final phase to culminate in full monetary union which implies the use of irrevocable fixed exchange rates; a single currency… and the establishment of a common monetary authority." (COMESA 2001). COMESA has not been very successful in reducing tariffs in particular, on in promoting intra-regional trade in general (Rwegasira 1998, Foroutan and Pritchett 1993). It remains unclear if SADC members will abandon COMESA, although Tanzania already has. And, most importantly, until South Africa joins, the future of a successful COMESA is unclear at best. Competition between SADC and COMESA diverts members from accomplishing their goals and instead continues to muddle the political landscape (World Bank 2000). Finally, the point most relevant to this study is that the organization has done little –if anything-- to move its goal of monetary union to fruition.

Finally, the 14 member CBI, established in 1990, is funded by the World Bank, IMF, EU and AfDB. (Fagenbaum, Sharer, Thugge and DeZoysa, 1999). The goal is to promote trade and investment in east and southern Africa. According to the IMF, about one half of the CBI states have either fully or substantially implemented financial sector reforms, essential in achieving its overall goals. Nonetheless, according to Holden, "The CBI represents the interesting combination of unilateral trade liberalisation through the low common external tariff with a lower probability of trade diversion occurring." (Holden 1998).

THE POSSIBILITY OF MONETARY INTEGRATION IN SOUTHERN AFRICA

In discussing options for the region, and specifically whether SADC will join CMA, a preliminary question must be asked: what are the gains of closer monetary coordination? The answer to this question depends, of course, on which countries or sets of countries are being considered (Kenen 1969, Connolly 1982). Clearly, instituting a common currency among geographically related countries could be expected to reduce the fluctuations and uncertainty --and thus costs-- of foreign currency conversions. For small and open economies, the costs of flexible exchange rate systems can outweigh the advantages (Artis 1991, Emerson 1992). Many countries with relatively small economies will peg their currencies of their main trading partner or –in the case of Botswana- to a basket of currencies of their main trading partners. This can promote greater price stability than under a flexible exchange rate system. Greater price stability in turn can lead to long term confidence, increased foreign investment, trade and growth.

In addition to the above, Van der Mewre sites several specific and significant benefits accruing to the smaller

members of CMA. He suggests:

- "they have free access to the South African money and capital markets;
- capital and labour move freely between the countries because there is no exchange control or other restrictions;
- no foreign exchange problems arise in the servicing of foreign debt, which facilitates raising loans for development purposes from non-member countries;
- trade is promoted between member countries through the absence of any exchange risk, payment restrictions, inconvenience or additional costs of transactions; the close relations with South Africa have been to the benefit of macro-economic stability; and, the countries concerned have experienced relative exchange rate stability, which might have been difficult to achieve if an independent exchange rate policy had been pursued." (Van der Mewre no date).

The associated question is: what are the costs of monetary union? The most obvious answer is loss of autonomy and control over domestic monetary and fiscal affairs. This has proven to be a major reason for the UK's reluctance for joining the Euro (Schnitzer 1999). The small members of CMA have surrendered their monetary policy to the South African Reserve Bank. Ultimately, the best interests of South Africa may not necessarily always also be in the best interest of CMA. The Reserve Bank is guided by domestic economic stability, most importantly price stability, but also associated goals, for example lessening unemployment. The smaller members have little power to influence policy which would have profound effects over their own destinies. A good example of this came in the 1980s when the appreciating rand had adverse effects on the smaller members (Guma, 1985).

The benefits generally appear to outweigh the costs. As Van der Mewre suggests, " Despite the fact that these other countries have forfeited monetary, exchange rate and fiscal autonomy by deciding to become members of a monetary union, their close relationship with the rand currency and financial markets in South Africa probably outweighs these disadvantages. Co-operation and consultation between members as well as other arrangements have ensured that overall control of the rand currency and foreign reserves of the area has not been autocratic or centralised." (Van der Mewre no date).

There have been a number of studies of the criteria of optimal currency areas (OCAs) (Mundell 1961, 1971, Ricci 1977, Williamson 1982, Bayoumi 1994, DeGrauwe 1977, Rose 2000, Tower 1976, Giordano 1998). In the 1960's, OCAs generally included such criteria as similar tax regimes, flexible wages, labor and capital mobility, free prices, similar inflation rates, degrees of openness and perhaps geographical proximity (Mundell 1957, 1961, Bertola 1989, Gros 1996). However, the consensus today is that perhaps the idea may not be so relevant (Tavlas 1993). Indeed, Cohen (1994) examined six cases where the OCA criteria would have not predicted monetary union. This paper will not enter this theoretical debate, but will nonetheless look at some convergence criteria that might be important for the SADC region. In other words, are the countries sufficiently close in a number of important macroeconomic fundamentals to make a monetary union viable?

While there are numerous potential criteria that are essential for the feasibility of a monetary union, this paper will use seven. They are: (1) currency exchange rate fluctuations; (2) inflation rates; (3) public debt as a percentage of GDP; (4) foreign economic assistance per capita and (5) as a percentage of GDP; and, (6) importance of trade; (7) interest rates, all based on available data from the past five years. These criteria were selected because they are probably the most important ones for an area representing developing nation, and because most of them were used in the Maastricht Treaty for economic convergence in Europe (Maastricht Treaty, 1991).[8] Other important criteria, such as the size of budget deficits cannot be used because of the lack of data.

Exchange Rate Fluctuations

Clearly members' currency rates should show stability over time. Table 2 below shows the fluctuation of potential members' currency exchange rate fluctuations relative to the South African Rand. The criteria here is that local currency rates would not fluctuate more than a given percentage annually against the Rand over the past five-year period. If a (arbitrary) 3 percent threshold were established, then only Botswana (0.4 percent) and Mauritius (3.0 percent) would "qualify". If that threshold were raised to 5percent, then Tanzania (5.5 percent) could be added to the list. The currencies of the other states fluctuations range from 9.4 percent up to 892 percent. Clearly only three states would meet this convergence criteria.

Table 2. Annual Percent Currency Change Against South African Rand: 1995-98

	1995/6	1996/7	1997/8	1998/9	1995-98 (average)
Angola	2,667.7	24.8	120.6	663.3	892.1
Botswana	0.6	0.6	-2.8	-1.3	-0.4
Congo (DR)	Na	Na	Na	Na	Na
Malawi	-22.1	33.0	72.4	0.6	16.2
Mauritius	-20.7	19.3	-7.3	-1.8	-3.0
Mozambique	Na	Na	Na	Na	Na
Seychelles	-20.3	-0.9	-11.4	-6.4	-9.4
Tanzania	-15.6	0.7	-9.3	14.4	-5.5
Zambia	4.6	5.9	35.0	9.0	18.2
Zimbabwe	-4.8	72.9	39.0	-5.2	21.5

Source: IMF. IFS Yearbook 2000.

Inflation rates

Another important fundamental is annual rate of inflation. Table 3 shows inflation rates for the potential members for the past four years. A possible criteria would be that no country's inflation rate would exceed 10 percent on average Only Mauritius and Seychelles met that criteria. (It

is somewhat arbitrary. One could also use an average of the 3 best countries considering inflation, plus 1.5 percent like in the Maastricht Treaty). The other states' inflation rates range from 12 percent to 1,865 percent. It should be noted, however, that inflation has been reduced in all states, and seriously reduced in some (e.g., Angola and Congo).

Table 3. Inflation (GDP Deflator annual percent rates): 1995-98

	1995	1996	1997	1998	1995-8 (average)
Angola	1,886	5,422	94	61	1,965
Botswana	9	12	9	8	59
Congo (DR)	466	613	187	15	315
Lesotho	9	9	8	8	8
Malawi	90	40	13	23	44
Mauritius	5	6	5	6	5
Mozambique	52	41	11	4	47
Namibia	7	12	8	10	9
Seychelles	-0	-0	3	2	2
South Africa	10	8	8	8	8
Swaziland	19	10	11	9	12
Tanzania	29	22	18	19	17
Zambia	37	24	26	23	27
Zimbabwe	10	27	16	30	20
SADC Average	187	843	29	16	268
CMA Average	11	9	6	8	8

Source: World Bank, 2000

External debt as a Percentage of GDP

The level of external debt in an economy is an important fundamental. Table 4 shows the amount of total debt as a percentage of GDP. The criterion here could be that total debt should not exceed 100 percent of GDP on average during the past five years. The countries which met that criteria are Botswana, Malawi, Mauritius, Seychelles and

Zimbabwe. Had the 60 percent external debt Maastricht criterion been used, only Mauritius and Seychelles would be qualified.

Table 4. Total External Debt as percentage of GDP: 1995-1998

	1995	1996	1997	1998	1995-98 (average)
Angola	500.5	273.4	276.6	297.1	336.9
Botswana	14.5	12.6	11.7	11.8	12.6
Congo (DR)	241.8	249.5	232.3	208.2	232.9
Lesotho	53.7	52.5	51.9	64.7	55.7
Malawi	141.6	100.7	87.9	137.5	94.4
Mauritius	44.4	42.7	59.4	59.6	51.5
Mozambique	337.8	283.2	234.6	23.0	269.6
Namibia	na	na	na	na	na
Seychelles	34.4	29.9	28.2	36.3	32.2
South Africa	70.8	71.6	66.7	68.9	69.5
Swaziland	17.4	16.6	25.4	18.7	19.5
Tanzania	148.9	125.6	100.9	94.3	117.4
Zambia	215.3	229.0	197.4	217.4	210.2
Zimbabwe	74.4	60.5	60.3	79.8	68.8
SADC Average	146.3	119.0	108.8	116.7	120.8
CMA Average	47.3	46.9	48.0	50.1	48.2

Source: World Bank, Global Development Finance, Country Tables, 2000

Foreign economic assistance per capita and as a percentage of GDP

Foreign economic assistance is important in most countries in the region. Excessive dependence on official development assistance (ODA) probably indicates some structural problems in an economy. Table 5 shows how important foreign aid is to each country on a per capita basis. Table 6 shows ODA as a percentage of GDP. A possible criteria here would be that no country should have more than $50 per capita in ODA (roughly the SADC average), and that

ODA should not represent more than 10 percent of GDP. The countries which met the per capita criteria are Angola, Congo, Mauritius, Tanzania and Zimbabwe. The countries meeting the 10 percent of GDP criteria are Angola, Botswana, Congo, Lesotho, Mauritius, Namibia, Seychelles, South Africa, Swaziland and Zimbabwe.

Table 5. Official Development Assistance per capita (US$): 1995-98

	1995	1996	1997	1998	1995-98 (average)
Angola	38	42	30	28	34.5
Botswana	62	50	79	68	64.7
Congo (DR)	4	4	3	3	3.5
Lesotho	59	53	46	32	47.5
Malawi	44	49	34	41	42.0
Mauritius	21	17	36	34	19.5
Mozambique	67	55	57	61	60.0
Namibia	124	119	101	108	113.0
Seychelles	171	247	191	294	225.7
South Africa	10	9	12	12	10.7
Swaziland	62	33	28	31	38.5
Tanzania	30	29	30	31	30.0
Zambia	226	66	65	36	98.2
Zimbabwe	45	33	29	24	32.7
SADC Average	69	58	53	58	58.6
CMA Average	64	54	47	38	52.4

Table 6. ODA as a percentage of GDP: 1996-1998

	1996	1997	1998	1996-98 (average)
Angola	6.3	4.6	5.2	5.3
Botswana	1.5	2.4	2.2	2.0
Congo (DR)	2.8	2.7	2.3	1.9
Lesotho	11.0	9.0	7.4	9.1
Malawi	20.2	13.5	25.0	19.5
Mauritius	0.5	1.1	1.0	0.5

Mozambique	31.3	27.9	26.8	28.6
Namibia	5.4	4.5	5.3	5.0
Seychelles	3.5	2.9	4.0	3.4
South Africa	0.3	0.3	0.4	0.3
Swaziland	2.6	2.0	2.6	2.4
Tanzania	13.5	12.3	11.6	12.4
Zambia	18.6	15.6	10.8	15.0
Zimbabwe	4.3	3.9	4.4	4.2

South Africa	23	25	25	26	24.7
Swaziland	83	81	82	101	86.7
Tanzania	23	22	18	18	20.2
Zambia	38	34	32	29	25.7
Zimbabwe	38	36	38	46	39.5
SADC Average	42	40	41	52	40.7
CMA Average	40	47	47	52	47.6

Source: OECD Development Assistance Committee. www.oecd. org/dac; World Bank 2000; African Development Indicators 2002.

Source: World Bank, 2000

Importance of Trade

The "openness" of an economy may not be, strictly speaking, an important or necessary convergence criteria. However, it is important for illustrative and comparative purposes. If a country's exports are relatively low, for example, this could point to the lack of need for monetary union. Table 7 shows how important trade is to each country. Except for Mozambique, exports represent at least 20percent of the GDP in each country. The high is Swaziland, whose exports equal 86percent of GDP. The SADC and CMA averages are very close, 40.7 and 47.6, respectively.

Table 7. Exports of Goods and Services as a percentage of GDP: 1995-98

	1995	**1996**	**1997**	**1998**	**1995-98** (average)
Angola	69	66	68	52	63.7
Botswana	50	54	44	35	38.2
Congo (DR)	28	28	24	N.A	26.6
Lesotho	21	25	28	27	25.2
Malawi	29	23	24	31	26.7
Mauritius	60	65	63	63	62.7
Mozambique	15	15	13	12	13.7
Namibia	54	56	53	53	54.0
Seychelles	53	62	68	70	63.2

Interest rates

Fluctuations in interest rates can indicate a country's economic instability. Table 8 details the wide fluctuations in this area. Over a three year average, these rates fluctuate from a low of 1 percent in Seychelles to 36 percent in Angola. This section employs nominal interest rates – as opposed to real—interest rates which does not incorporate inflation, which has already been studied previously (table 3). This provides a good picture of the way monetary policy is conducted in these countries. If an arbitrary average of under 15 percent were set, only Seychelles, Botswana and Mauritius would qualify.

Table 8. Discount Rates: 1996-1998 (percentage)

	1996	**1997**	**1998**	**1996-98** (average)
Angola	2.0	48.0	58.0	36.0
Botswana	13.0	12.5	12.5	12.6
Congo (DR)	na	na	na	na
Lesotho	17.0	15.6	19.5	17.4
Malawi	27.0	23.0	43.0	31.0
Mauritius	11.8	10.5	17.2	13.1
Mozambique	na	na	na	na
Namibia	17.8	16.0	18.8	17.6
Seychelles	1.0	1.0	1.0	1.0

South Africa	17.0	16.0	19.3	17.4
Swaziland	16.8	15.8	18.0	16.9
Tanzania	19.0	16.2	17.6	17.6
Zambia	47.0	17.7	na	32.3
Zimbabwe	27.0	31.5	39.5	32.6

Source: World Bank, African Development Indicators 2002.

All the above criteria show that most members of the SADC are far from the economic stability that is required for convergence and monetary union. There are too big differences in crucial statistics like inflation or nominal interest rates. However progress has been made, and one could consider a progressive union between the countries that perform good criteria, like Botswana, Tanzania, Mauritius, Namibia or Seychelles, and the CMA members. Besides these economic considerations, it would be useful to try to draw some lessons from the European experience in monetary unification.

THE EXPERIENCE OF MONETARY INTEGRATION: LESSONS FROM THE EMU

The history of the Euro Zone provides important lessons for regions trying to establish a monetary union. In this section we compare some basic economic, geographical and political features of both the European Economic Community (EEC) and the SADC. We also consider some of their main achievements. As will be seen further, such comparison clearly do not speak for an immediate monetary integration in South Africa. Beyond this foreseeable result, it appears that the political aspects of economic integration should also be taken into account. They have played an important role in the successful building of the EMU. Economic convergence is not the only criterion to be considered.[9]

Compared economic and geographical features

The SADC and the EMU are populated with a large number of potential consumers, 187 million in the SADC and 304

in the Euro Zone, with varying tastes and standards of living that can trigger economies of scale in production. While both regions have a large scale of specialization, in SADC raw materials and low value-added commodities are the norm, while, financial services, agricultural and industrial high value-added goods in the EMU. This specialization and division of labour clearly promotes exchange and overall efficiency in production. For southern African countries, the problem is that its members trade little with themselves due to small intra-sectorial trade, as well as other infrastructure and logistical impediments. Conversely, intense intra-sectorial trade is a stylized fact of developed countries.

However, the differences are much more numerous. First, there is a strong asymmetry inside the SADC because of South Africa's dominant position. The size of South Africa's economy (73 percent of total SADC's GDP) is far bigger in proportion than the EMU's biggest economy, Germany, which represents only 30 percent of EMU's total GPD. This generates a desequilibrium between South Africa and the other members. Second, there is the same asymmetry in the GDP per capita. The biggest GDP per capita in the SADC (Seychelles) is 80 times the lowest (Mozambique) whereas the biggest GDP per capita in the EMU (Luxembourg) is only 3 times the lowest (Greece). On top of that, the average GDP per capita in the SADC is 12 times smaller than EMU's average GDP per capita. Third, SADC's exports are mainly low value added commodities and raw materials. This specialization pattern is far less rewarding than the higher valued one of the EMU. It might then be difficult to build an offensive common budgetary policy. Finally, only 10 percent of SADC's trade is among its members, while some 60 percent of the EMU trade is among its members. Transaction costs benefits of a single currency would then be small (Guillaume and Stasavage, 1999).

The need for political convergence

The idea of a European community goes back a very long time. It is the search of peace among European nations after World War II that has definitively ensured its launch (Lafay, 1997). According to contemporary statesmen, the most appropriate way to fulfill that goal was to achieve economic

prosperity and welfare (Ambrosi & alii 1990). Besides this economic background, there was also a strong will among politicians toward closer political integration. Several projects have been managed successfully, like the Common Agricultural Policy (CAP) and the Euro. However, several other initiatives have failed (e.g., European Community of Defense). But Europe as a single political entity has always been a reference for the fathers of Europe. Considering the EMU experience, are there any political aspects relevant to economic integration in southern Africa?

Both economic communities face (or used to face) one or several alternative competing associations. In Europe, the Stockholm Treaty of the 4th January 1959 created the European Association for Free Trade (EAFT) following Great Britain's initiative and gathered Denmark, Norway, Sweden, Switzerland, Austria and Portugal. In southern Africa, as discussed above, several entangled communities (COMESA, CBI, SACU) are also contesting the lead for economic integration, as the EAFT did in Europe. Second, both the EEC and the SADC have followed a progressive union toward a fully integrated common market. The first achievement of the EU was a mere common market for coal and steel, the European Community for Coal and Steel in 1951. It was followed five years later by the Treaty of Rome (1957) which aimed at: 1) establishing a plan for a generalized trade union; 2) a common agricultural policy and market; and, 3) unification of the labour and capital markets. In the same way, the SADC was first a loose association of states grouped to coordinate economic development projects and to lessen dependence on South Africa. In 1997 it established a free trade agreement including South Africa as a key element. It is now considering deeper monetary and financial integration. Note that both economic associations did not officially acknowledge in their first steps the desire of a monetary union, and this is especially true for Europe. At the beginning of the EEC, monetary independence was considered by many as the last remote and sacred place of political sovereignty. It was not until the 1970 Werner's report that this question put in the European agenda (Ambrosi et al. 1990). Finally, for Europe as for southern Africa, the advance toward monetary integration took first the form of an agreement establishing an exchange rates

stabilizing policy. It was the European Monetary Snake in 1972, replaced by the European Monetary System (EMS) in 1979. As discussed above, the Rand Zone has been carrying out this job for southern Africa since 1974. The big difference between the two agreements is that the EMS used to apply to every member of the EMS, which is not the case for the CMA, which includes only 6 states out of SADC's 15.

Besides these similar political aspects of economic integration, several strong differences remain between the EU and the SADC. These differences generally reinforce the unfavourable chances of monetary union in southern Africa in the near term. First of all, there is no clear overall common economic policy agenda inside the SADC members. Yet, several specific policies strongly supported the building the EMU. They even appeared to reveal the need for a common monetary agreement. This was especially the case for the Common Agricultural Policy. Here, deficiency payments were established in order to compensate the fluctuations of the European currencies. A common currency soon appeared to be one way to get rid of this problem. As soon as 1970, the Werner's report launched the basis of a future monetary agreement. In 1989 the Delors report established a more detailed agenda (Ambrosi et al. 1990). The SADC still lacks a plan for economic convergence and common economic policies although a lot of efforts have been carried over recently to promote financial integration. Second, a symbolic, yet important point lies in the different nature of both common currencies. The Euro, former the ECU (for European Currency Unit), is a weighted basket of previous national currencies (the German Mark, the Dutch Florin, the French Franc, etc) whereas the CMA uses an existing currency, the South African Rand. Finally, the long term objectives of the European Union are admittedly more ambitious than the SADC's. The fathers of Europe were looking for peace, growth and social progress. The main objective of the SADC do not exceed for the time being the coordination of economic projects and the implementation of free trade. Monetary union generally represents the last step in the process of economic integration. Monetary union goes beyond an economic agreement and is likely to be better supported by a superior goal.

CONCLUSIONS

As the literature shows, monetary unions themselves are not panaceas for solving economic development problems (Kenen 1969, Obstfeld 1995). In SADC the convergence criteria for a viable monetary union appears to be lacking. Of the seven areas examined above, only one or two were close to convergence. Until and unless there is more convergence, the chances for a successful monetary union are low in the near term. As important, until SADC countries produce a more diverse set of goods and services that will allow increased trade with each other, reaching the goal of a monetary union remains unlikely, and perhaps even unnecessary.

In addition to the macroeconomic fundamentals discussed in section 3, there are also important political considerations. First, there is a political reality on the ground that indicates the smaller SADC members are afraid of South African political, economic, commercial, military and strategic hegemony. Perhaps South Africa needs a longer track record of "good neighbourness" before these concerns are laid to rest (Sparks 1992, 1993). A second aspect is whether South Africa wants to expand the CMA northward. While there are a number of commercial reasons to go with such expansion, there are the risks of the poorer performing countries causing problems for the whole. One might consider, for example, a parallel in the EU where the German Central Bank feared "importing inflation" from the high inflation EU members into the rest of the union. Additional analysis needs to be done to determine whether it would be in South Africa's interest to push for CMA expansion. Finally, in the light of what has been done in the Euro zone, southern African countries should put more in building southern Africa as a single political entity. One way to achieve that goal is to devote more time and resources in political aspects of economic integration. One can reasonably conclude that this way of thinking was one of the major reasons for the successful building of the Euro.

Although there has been very little official discussion on monetary integration by SADC officials, in early 2000 Dr Baledzi Gaolathe, Botswana's Minister of Finance was asked the specific question: "What about the issue of monetary union? Do you think that's a realistic prospect that SADC should be thinking about?" His reply is below:

> *"I don't think that monetary union is a priority at this stage, because monetary union is one of the last things in an economic community that you deal with. Again looking at the European Union, it is only recently that they achieved monetary union. Even then, you are having countries like the United Kingdom which are still hesitating. So, I think in the case of SADC, we still have a long way to go. We have something like 11 Protocols that we still have to implement fully. For instance there is the Trade Protocol which is still to come into force because a number of countries are still to sign. And as you know in economic union, the movement of goods across borders and so on is very important. So the short of it is that yes, eventually we should get there, but we are still very far from the concept of creating a monetary union in SADC. We must get these other things done. But having said that, of course there are certain experiences here. There's a mini-monetary union, which involves South Africa, Lesotho, Namibia and Swaziland, to some extent, the Rand Monetary Union. Possibly those SADC countries which are not part of it, like ourselves, would be observing how that works as time goes on."*

Nonetheless, according to SADC, one of its objectives is to, "develop policies aimed at the progressive elimination of obstacles to free movement of capital and labour, goods and services, and of the peoples of the region generally among member states." (SADC/FISCU 2000) In addition, the organization may, "develop such other activities as member states may decide in furtherance of the objectives of SADC." (SADC/FISCU 2000) This seems to leave open the door of a monetary arrangement in the future. As van der Mewre reminds us, "In the final analysis, the appropriateness of a country's exchange rate system depends on the extent to which the level of its currency reflects the long-term equilibrium real exchange rate of the

country, i.e. the exchange rate at which internal and external equilibrium exist in the economy." (Van der Mewre no date) One could add to that analysis the need to examine the external consideration: does an expanded monetary union in southern Africa make sense?

Without a significant change in the political and economic climate in southern Africa, it is unlikely that SADC will soon join CMA or make its own monetary union. However, in the near term some states, perhaps Botswana, Mauritius or Seychelles, may individually negotiate joining. This paper calls for further study of such individual potential members to estimate the costs and benefits of unilateral decisions to join CMA. In reality, if CMA expands, it will probably be gradually, one new member at a time.

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APPENDIX

Table A1: Population (in millions)

	1991	1992	1993	1994	1995	1996	1997
Angola	9.5	10.6	10.2	10.6	10.9	11.3	11.7
Botswana	1.3	1.3	1.3	1.4	1.4	1.5	1.5
Congo (DR)	36.6	40.5	42.2	43.9	45.4	46.7	47.9
Lesotho	1.7	1.8	1.8	1.8	1.9	1.9	2
Malawi	8.5	8.8	9.1	9.4	9.7	10.1	10.4
Mauritius	1.04	1.05	1.06	1.08	1.09	1.13	1.15
Mozambique	14.4	14.8	15.1	15.4	15.8	16.1	16.5
Namibia	1.3	1.4	1.4	1.5	1.5	1.5	1.6
Seychelles	0.07	0.07	0.07	0.07	0.07	0.08	0.08
South Africa	36.2	36.9	37.8	38.6	39.4	40.3	41.2
Swaziland	0.8	0.8	0.8	0.9	0.9	0.9	0.9
Tanzania	25.2	25.9	26.7	27.4	28.2	29	29.9
Zambia	7.9	8.1	8.4	8.7	9.1	9.4	9.7
Zimbabwe	10.1	10.4	10.7	11.1	11.5	11.9	12.2
SADC Total	154.6	162.4	166.6	171.8	176.8	181.8	186.7
CMA Total	40	40.9	41.8	42.8	43.7	44.6	45.7

Source: United Nations. Statistical Yearbook, 1997. New York: United Nations Publications, 2000.

Table A2: GDP per capita at current prices (in US $)

	1992	**1993**	**1994**	**1995**	**1996**	**1997**
Angola	503	323	328	481	582	663
Botswana	2 922	2 693	2 880	3 066	2 918	3 209
Congo (DR)	1 247	1 109	698	786	787	702
Lesotho	367	380	403	442	437	505
Malawi	190	209	123	142	225	234
Mauritius	2 965	2 938	3 182	3 567	3 827	3 688
Mozambique	72	78	74	77	95	94
Namibia	2 030	1 836	2 053	2 185	2 026	2 046
Seychelles	6 096	6 527	6 643	6 920	6 728	7 304
South Africa	3 385	3 240	3 299	3 566	3 311	3 331
Swaziland	1 214	1 200	1 253	1 452	1 366	1 420
Tanzania	169	151	155	176	212	245
Zambia	435	419	419	427	393	450
Zimbabwe	654	624	648	707	781	802
SADC Average	1 589.2	1 551.9	1 582.7	1 713.8	1 692	1 763.7
CMA Average	1 749	1 664	1 752	1 911.2	1 785	1 825.5

Source: IMF. International Financial Statistics Yearbook.
Washington, D.C.: International Monetary Fund 2000.

Table A3: GDP at current prices (in US million $)

	1992	1993	1994	1995	1996
Angola	4 967	3 302	3 473	5 273	6 605
Botswana	3 969	3 766	4 140	4 520	4 401
Congo (DR)	2 932	2 684	1 736	2 011	2 072
Lesotho	661	700	759	851	860
Malawi	1 818	1 999	1 181	1 369	2 216
Mauritius	3 189	3 205	3 510	3 973	4 301
Mozambique	1 098	1 248	1 232	1 337	1 710
Namibia	2 895	2 689	3 089	3 372	3 207
Seychelles	434	469	483	508	499
South Africa	119 833	116 961	121 406	133 610	126 238
Swaziland	970	987	1 062	1 267	1 228
Tanzania	4 601	4 258	4 511	5 255	6 469
Zambia	3 308	3 273	3 347	3 498	3 298
Zimbabwe	6 751	6 563	6 925	7 687	8 627
SADC Total	157 426	152 104	156 854	174 531	171 731
CMA Total	124 359	121 337	126 316	139 100	131 533

Table A4. GDP Growth Rates (at constant 1991 prices)

	1991	1992	1993	1994	1995	1996	1997
Angola	-1.6	1.2	-21	7.3	10.9	7	6
Botswana	8.7	6.3	-0.1	4.1	3.1	7	5.5
Congo (DR)	-1.9	4.8	-2.8	-5.5	0.9	6	0.9
Lesotho	0.7	3.6	3.9	12.9	9.2	12.7	5
Malawi	7.2	-8.9	9.6	15.7	4.6	-2.5	5.3
Mauritius	4.1	6.2	5.6	3.9	4.7	5.7	5.5
Mozambique	1.9	-1.9	17.2	5.7	2	4	3.8
Namibia	5.4	7.6	-1.5	6.7	4.9	2.6	4.5
Seychelles	2.7	7.2	6.2	-0.8	-0.6	1.9	39.5
South Africa	-1	-2.2	1.3	2.7	3.4	3.2	1.7
Swaziland	2.6	1.4	3.8	3.6	2.5	3	3.7
Tanzania	5.7	1.8	1.2	0.6	3.6	4.2	3.3
Zambia	-2	-1.8	6.8	-3.5	-2.3	6.5	3.5
Zimbabwe	5.5	-9	1.3	6.8	0.1	7.3	3.4
SADC Average	2.7	1.1	2.2	4.3	3.3	4.9	6.5
CMA Average	1.9	2.6	1.8	6.4	5	5.3	3.7

Source: IMF. International Financial Statistics Yearbook. Washington, D.C. 2000.

	1991	1992	1993	1994	1995	1996	1997
Angola	-1.6	1.2	-21	7.3	10.9	7	6
Botswana	8.7	6.3	-0.1	4.1	3.1	7	5.5
Congo (DR)	-1.9	4.8	-2.8	-5.5	0.9	6	0.9
Lesotho	0.7	3.6	3.9	12.9	9.2	12.7	5
Malawi	7.2	-8.9	9.6	15.7	4.6	-2.5	5.3
Mauritius	4.1	6.2	5.6	3.9	4.7	5.7	5.5
Mozambique	1.9	-1.9	17.2	5.7	2	4	3.8
Namibia	5.4	7.6	-1.5	6.7	4.9	2.6	4.5
Seychelles	2.7	7.2	6.2	-0.8	-0.6	1.9	39.5
South Africa	-1	-2.2	1.3	2.7	3.4	3.2	1.7
Swaziland	2.6	1.4	3.8	3.6	2.5	3	3.7
Tanzania	5.7	1.8	1.2	0.6	3.6	4.2	3.3
Zambia	-2	-1.8	6.8	-3.5	-2.3	6.5	3.5
Zimbabwe	5.5	-9	1.3	6.8	0.1	7.3	3.4
SADC Average	2.7	1.1	2.2	4.3	3.3	4.9	6.5
CMA Average	1.9	2.6	1.8	6.4	5	5.3	3.7

Source: IMF. International Financial Statistics Yearbook.
Washington, D.C. 2000.

End Note

1 See www.finance.gov.za and summary from a personal communication with R Mowatt, SADC Finance and Investment Co-ordinating Unit (FISCU) Republic of South Africa .

2 See Table 1.

3 Other states in the area, eg. Madagascar and Comoros, are excluded since they are not SADC members.

4 Personal communications with R Mowatt, FISCU, and www.sadcreview.com.

5 Information provided by the Sector Coordinator, Finance & Investment Programme, Republic of South Africa.

6 While it is clear that these efforts fall short of developing a monetary union, it clearly demonstrates the need for closer monetary policy coordination.

7 The Common Monetary Area Commission convenes at regular intervals or at the request of any member. A technical committee also meets every quarter to solve problems of a technical nature encountered by members.

8 The EU, for example, did not have to concern itself with the levels of official development assistance.

9. Most of the statistics used for Europe can be found on the web site of the French Central Bank, www.banque-france.fr

HETEROGENEITY OF MONETARY REGIMES IN MAGHREB:

An illustration with national Taylor rules

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Contents

EXECUTIVE SUMMARY AND RECOMMENDATIONS

Starting from the idea that the European experience offers several lessons for countries looking to reinforce their financial and economic integration, this preliminary work allowed us to highlight the heterogeneity of the Maghreb countries and the difficulties of establishing a common monetary policy.

Firstly, we described the characteristics of monetary and exchange rate policies in the three countries and explained their foundations. Our results prove that, although the monetary policies of the MC have similar final objectives, the operational frames and the monetary instruments used for the realization of these objectives differ from one country to another. Furthermore, the exchange rate policies of these countries are led and interpreted differently.

Thereafter, we illustrated this heterogeneity from a simple model reflecting the characteristics of each country. This latter contains an IS equation, a Phillips curve equation and an exchange rate equation. It turned out that the extent of economic policies (monetary and exchange rate policy) on real variables differs amongst the MC.

Finally, we simulated national Taylor rules for each country which describes the behaviour of central banks facing the challenge of price, activity and exchange rate stability. Our results suggest that these central banks will not choose identical monetary rules to achieve their stabilization objectives. Central Bank of Tunisia (CBT) is inclined to grant more weight to inflation, Bank Al Maghreb (BAM) has to grant a similar weight to inflation, activity and exchange rate, while Bank of Algeria (BA) has to place greater emphasis to activity.

It follows then that the application of a unique monetary policy over the whole zone of the Maghreb would not be beneficial for all countries.

However, even though there is strong heterogeneity, we consider that the Maghreb can draw numerous lessons from monetary integration experiences. These demonstrate that the movement towards the creation of a regional monetary union presupposes certain conditions that would be necessary to ensure the long term success of the monetary integration process.

In this regard, the MC have to:

i. **Opt for gradualism.** *The MC have to continue the liberalization of their capital accounts and deepen their market-based operations in order to improve the efficiency of the financial markets in the allocation of resources. At the same time, they must continue consolidating macroeconomic stability and adapting macroeconomic frameworks to deal with an increase in the level and volatility of capital flows.*

ii. **Deepen national and regional financial integration.** *With this end in view, the MC have to continue and further reinforce their efforts toward the modernization of their national financial systems as well as harmonize the infrastructure of their domestic financial markets (harmonization of payment systems, regulatory and supervisory frameworks, financial information, financial contracts, technical platform, etc.) Moreover, they should seek to eliminate financial barriers to intra-Maghreb trade, by allowing Maghreb banks to set up cross-border branches or subsidiaries.*

iii. **Accelerate movement toward economic integration.** *In this framework, MC have to eliminate trade distortions, press forward with tariff reforms, modernize and extend logistical chain – including transport infrastructure and joint investments –, as well as harmonize trade regulations, etc.*

iv. **Promote banking sector competition and intensify its solidity.** *The financial and economic integration process will continue to lack dynamism if national bank balance sheets are not strengthened. To this effect, the authorities of the MC must reduce non performing loans, ensure adequate loan classification and provisioning,*

privatize non efficient public banks, strengthen corporate governance in the banking sector, move to international standards in financial reporting and auditing and continue upgrading prudential regulation toward international standards, etc.

v. ***Improve financial and budgetary situations.*** *In fact, although some of them underwent significant progress towards budgetary stability during the last decade (notably Tunisia and Morocco), the financial and budgetary situations remain vulnerable. This vulnerability is the result of budget balance sensitivity to terms of trade imbalances, a dependence on external flow assistance, as well as a wide exposure to natural disasters, given the importance of the agricultural sector. Therefore, the MC have to diversify the production, in particular, through commercial liberalization, modernizing the banking and financial system, as well as creating new financial instruments, etc.*

vi. ***Improve coordination of financial, monetary and exchange rate policies.*** *In this vein, central banks of the MC have to accelerate their cooperation via sharing and exchanging information, etc.*

vii. ***Overcome political conflicts.*** *In fact, these countries have to set in motion a "state rhetoric" calling for «Maghreb solidarity and fraternity» and pushing citizens toward feeling "Maghrebian". This feeling may constitute a permanent driving force toward cooperation and, at the same time, a major hindrance to future conflicts.*

All these measures can help the MC improve nominal and real convergences and become a homogeneous bloc. They can also bring the monetary integration process more in line with the economy of these countries.

INTRODUCTION

The launch of the euro has fueled doubts concerning the constitution of an optimal European monetary zone. Indeed, the differences in legal, institutional and cultural frameworks… as well as the diversity of the productive and financial European systems may have led to the idea that Europe does not constitute a viable monetary zone.

The idea behind this reasoning is that the conduct of a unique monetary policy in the presence of heterogeneity faces many constraints insofar as the objective of monetary stability is hard to achieve in the presence of this heterogeneity (for example, one decision may suit the macroeconomic evolutions of one country and not be suitable for another).

However, even if the partner countries are unanimous concerning the objectives of the common monetary policy, they face an additional constraint related to the divergence of monetary transmission mechanisms. Indeed, different structures between many economies composing a monetary zone make their reaction (or their response) to a shock diverse. Moreover, the speed of price adjustments differs according to the extent of this diversity. In addition, the delays in monetary transmission are long and inconsistent, and expand according to changes in the financial, economic and institutional environment.

Basically, the common Central Bank can no longer achieve its objective of price stability for the entire zone given the increasing complexity of the transmission mechanisms of monetary policy.

On the other hand, the absence of political unification within Europe makes the situation more difficult. In fact, in spite of a strong political desire to create the unique European currency, the discordance of individual decisions, especially budgetary ones, renders the success of the euro more problematical. Up to now, the feeling of national citizenship has come before the feeling of being European.

The history of monetary unions shows that the failure of the monetary integration process was often due to the absence of efficient adjustment mechanisms allowing the viability of the monetary zone, especially when it is deeply heterogeneous. Bordo & Jonung (1999) consider the theory of optimum currency areas (OCA) as static and ahistorical. They also consider that studies which have dealt with the question of the stability and durability of monetary unions

are few. This is why future research into OCAs must be oriented toward the practical questions linked to the relative efficiency of different adjustment mechanisms.

Also, history shows that the absence of political involvement toward the process of monetary integration facilitates the disintegration and the division of countries into many independent entities, each of them characterized by a new national currency and a unique Central Bank (Goodhart, 1995).

In Africa, the decision of African Central Bank governors to adopt a single currency by 2021 and the call from the union of Maghreb banks in November 2007 to create one currency for the Maghreb raises the same doubts as to the efficiency of such decisions.

The Maghreb countries (which groups together Algeria, Libya, Morocco, Mauritania and Tunisia) indeed decided to improve the coordination of their economic policies and to reinforce their financial and commercial relations when they created the Arab Maghreb Union (AMU) in February 1989. The reasoning behind this creation is that a Maghrebian zone where goods, services and capital circulate freely would be an attractive market for domestic and foreign investors. In particular, a well-integrated Maghrebian zone would bring more important advantages then the potential gains resulted from association agreements with the European Union and the new European neighbourhood policy. It would moreover become an attractive destination for other investors notably the oil-exporting countries of the Middle-East (IMF 2007). Besides, the establishment of supranational central bank would resolve the problem of dependence of national central banks.

This ambition to pursue an autonomous monetary policy in order to avoid the marginalisation of their monetary power faces many problems. Indeed, the economic and financial structures of these countries are different and evolve with changes in the international environment. Furthermore, these countries conduct monetary policies whose objectives and strategies are not yet transparent.

Moreover, a political involvement directed towards the creation of a monetary union probably constitutes a serious problem for governments, given the traditional rivalry between some countries of the zone and the importance of the seigneuriage role as a last resort. Furthermore, there are still many political problems which have prevented, until now, the completion of the economic and financial integration within the Maghreb as well as the functioning of the AMU (Darrat & al 2002).

In this preliminary work, we have tried to understand the foundations of differences in Maghrebian monetary regimes to evaluate the consequences of the choice of monetary unification in these countries[1].

To this end, we have tried in a first section to describe the evolution of the monetary practices of the Maghreb countries (MC). We have illustrated in a second section the heterogeneity of these practices from a model describing the functioning of their economies. We have finally tried in a third section to evaluate the consequences of this heterogeneity by simulating optimal monetary policy rules for each country.

Our choice is focused on the Taylor rule and expresses our willingness to define an efficient, credible and simple rule which will be understandable by all economic agents and will constitute the key to the success of all future reforms undertaken by the Maghrebian authorities.

MONETARY REGIMES IN MAGHREB

McKinnon & Schnabl (2004) admit that emerging markets and developing countries cannot choose their monetary regimes in an exogenous way. These regimes are in fact endogenous and generally determined by interdependent factors such as macroeconomic stabilisation, invoicing of international trade as well as currency denomination of the international capital flows.

In this section, we will try to describe the evolution of monetary regimes (monetary and exchange rate policies) in MC over the last two decades before illustrating the foundations of this evolution via a simple model of an open economy.

Tunisia

In the early 1980s, the Central Bank of Tunisia (CBT) undertook to define a strategy aiming at the preservation of the value of the currency and the support of the economic policies of the government. However, although this strategy has more than one objective, price stability remains the primary (implicit) objective of monetary policy.

Indeed, since 1987, the Tunisian monetary authorities have had as an intermediary objective the targeting of M2 aggregate. This is determined according to the quantitative function MV=PY. In fact, the CBT fix a growth of M2 at 2% below the projected growth of nominal GDP[2]. Then, under the assumption of a roughly constant multiplier, the amount of base money supply consistent with the target growth of M2 is calculated. Finally, taking into account projected net international reserves and the credit requirement of the agricultural sector, the CBT determines the quantity of liquidity to be distributed through the refinancing facilities. On a weekly basis, these amounts are fine-tuned taking into account the perceived financing needs of the commercial banks (Treichel 1997). Any deviation of M2 from its reference value is considered as a risk to the price stability objective.

To attain its intermediary objective, the CBT acts on the amount of liquidity. Until 1996, this amount was regulated from the restrictions imposed to the commercial banks. These banks are in fact submitted to constraints such as the obligation to finance priority sectors as well as the fixation of debtors' interest rates.

Furthermore, from 1997, after the removal of these restrictions, the principal instrument became that of money market interventions (FMI 2004). The CBT inject or withdraw liquidity through the refinancing facilities (repurchase agreements and bid techniques[3]). These techniques are completed with standing facilities and weekly fine-tuned operations in light of the financing needs of the commercial banks. As regards reserve requirement techniques, this was not actively used during the last two decades. In October 1989, the reserve requirement rate rose from zero to 2%. From that date to the early 2000s, banks had to deposit on non remunerated accounts, at the Central Bank, all deposits which were above a certain rate determined monthly by the emission institute.

Since 2003, the CBT has modified the quantitative approach through the targeting of M3 instead of M2. The final aim being to attain an inflation objective close to the one observed in partner and competitive countries. However, in reality, the formulation of the monetary policy has not really changed and the Central Bank has continued to act on the level of banking liquidity through many operations, notably call for tender, allowance uptake[4] as well as weekly fine tuned operations. The reserve requirement technique was also reactivated and differentiated according to the duration of deposits in 2002[5].

Moreover, from 2006, the monetary authorities claimed that the fundamental objective of the Central Bank is price stability and that the emission institute will use the interest rate as a basic instrument which, in line with fine regulation, will help it to influence the price level[6].

Practically, the adoption of this new frame will be established in two stages. At the first stage, the Central Bank will apply a quantitative approach by acting on the monetary base (considered as its operational objective) and by using money market operations to regulate bank liquidity. Afterwards, during the second stage, the institute of emission will establish an inflation targeting approach (CBT 2007). This target will be reached through the manipulation of interest rates and will allow it to continue to control prices.

Concerning the exchange policy, the aim of establishing prudent monetary policy following the recession and the balance of payment problems of the middle 1980s – combined with the start of an openness and a liberalization process of the economy – urged the monetary authorities to target the real exchange rate (after having devaluated the dinar).

This policy consists of indexing the nominal exchange rate to the domestic price level in order to cancel the loss of competitiveness of the economy and the overvaluation of the Tunisian dinar. A domestic price shock can in fact be

resolved through a depreciation of the nominal exchange rate and rapid monetary growth.

The aim of this strategy is then to keep a constant real exchange rate level (CRER) vis-à-vis the partners through nominal exchange rate adjustments.

More recently (the beginning of 2000s), the monetary authorities have been more flexible in the application of this rule by basing themselves on a series of indicators of competitiveness. This evolution has allowed wider fluctuations in the actual real exchange rate notably successive depreciations (Fanizza & al 2002).

It seems then that monetary authorities sometimes use the nominal exchange rate to correct shocks on domestic prices. Such a practice can lead to hyper inflation[7]. But, in the case of Tunisia, the success of targeting real exchange rate policy was facilitated by the absence of shocks in the terms of trade, the rigidity of prices and wages as well as the continuity in controlling the capital account (Dropsy & Grand 2004).

Morocco

At the beginning of the 1990s, Bank Al Maghrib (BAM) was led to rely more on a quantitative approach to attain its final goal which was redefined around price stability and the stability of the value of the national currency. Indeed, the objective of monetary rule prompted it to define a growth rate for the monetary aggregate M1[8] considered as an intermediary objective. The growth rate is estimated at 8,3% to reach a 2% inflation rate (Benbouziane & Benamar 2004).

To achieve their goal, the monetary authorities have adopted a policy of base. Indeed, BAM tried to manipulate the monetary base by putting in place indirect intervention instruments (instead of rediscount techniques) such as 7 days call for tender, 5 days and 24 hours advances, as well as reserve requirement operations. The latter were used consistently at the beginning of the financial liberalization process (early 1990s).

On the contrary, the constraints imposed on the asset side of the banks were gradually softened down and finally disappeared completely. For example, the public bill floor was abrogated in 1998 and the coefficient of compulsory uses was also eliminated in April 1994 (Sagou 2006).

During the last few years, notably in the early 2000s, the Moroccan money market has been characterized by an excess of banking liquidity[9]. This situation has influenced the functioning of the money market and the conduct of the monetary policy of BAM. So, the operational framework has been renewed. The Central Bank indeed tries to intervene on the interbank market in order to insure the refinancing of the banks while reaching a desired level of "from day to day" rate. This rate has to fluctuate between a floor rate (interest rate applied to the 24 hours deposit facilities) and a ceiling rate (interest rate applied to 24 hours advances). Such a framework allows the Central Bank to manage liquidity and to point out the general short and middle term orientation of monetary policy.

It follows that the modification of banking liquidity is made through quantities and the level of intervention rate is stable and rarely revised. Basically, the instruments used to that end are essentially liquidity injection canals (7 days advances via weekly call for tender and 24 hours advance facilities at the initiative of banks) as well as liquidity tapping channels (weekly resumption liquidity operations at the initiative of the Central Bank and 24 hours deposit facilities at the initiative of banks). These techniques are completed with secondary instruments such as fine tuned operations (temporary selling or purchasing of treasury bonds, firm operations or foreign exchange swaps) and reserve requirement operations.

But, with the persistence of the excess of liquidity, notably since 2003, the liquidity tapping operations have become almost the only usual technique used by the Central Bank. Indeed, this institution has become constantly concerned with the sterilisation of the superfluous "over liquidity" through the sale of securities on the money market. It also raised the rate on 7 days tapping liquidity operations from 2.5 % to 2.75 % in December 2006.

Therefore, the operational frame of the Central Bank of these last few years has not worked well, since BAM intervened, via their leading rates[10] only to counter excess liquidity instead of conducting an efficient monetary policy.

Nowadays, the Moroccan monetary policy continues to benefit from a certain autonomy given the limitations imposed on the financial account (in particular the exit of capital), which allowed the convergence of the inflation rate towards those of developed countries. The final goal of the monetary policy is always to guarantee price stability but via a multicriteria approach[11]. Efforts are made to forecast inflationary pressures within the framework of a strategy aiming at the establishment of inflation targeting regime.

As regards the exchange policy, it had for objective a gradual real depreciation of the dirham during the period 1980-1985. Combined with dollar appreciation, this policy led to a depreciation of the real exchange rate of about 84%.

Moreover, the 1990s knew the accentuation of the liberalization movement of the economy and the stimulation of the exchange market. Monetary authorities continued over this same period a careful monetary policy having for objective the stabilization of the exchange rate, notably by anchoring the dirham to a basket of currencies, the composition of which is kept secret. However, the real exchange rate was appreciated in relation to the other currencies following a rise of the dollar which forms a significant part of the basket but also because of a downward rigidity of prices and wages (Jbili & Kramarenko 2003).

It is important to note at this point that the lack of competitiveness of Moroccan products should have urged the authorities to devalue the currency several years ago. However, these authorities have instead concentrated their efforts on the consolidation of the financial system and the lowering of the burden of the debt. It was necessary to wait until 2001 to see the authorities devalue de facto the dirham by 5 % (Bouoiyour & al 2004).

Furthermore, the increasing integration of the Moroccan economy into the world economy of these last few years, in particular into the European one, has incited the Moroccan Central Bank to adjust the basket by giving bigger weight to the euro in 2001[12]. The objective was to keep inflation under control and to preserve the external competitiveness of the Moroccan economy.

The terrorist attacks of 2003 had an immediate impact on the value of the dirham which depreciated. At the same time, the exchange office announced an increase of the trade deficit due to an increase of petroleum imports and a slowing of exports, what created disturbances on the exchange market.

However, the IMF and the Moroccan monetary authorities consider that the actual real exchange rate does not reveal an important gap with regard to the fundamentals and that the anchoring of the dirham to a basket of currencies has contributed to macroeconomic stability and inflation control. In return, despite this stability, growth remains low and reflects the dependence of the country on its agricultural sector and raw material resources (notably phosphate) as well as the slowness of structural reforms.

Algeria

The institution of the credit and money law in the early 1990s led to a shift in the banking and monetary fields of the Algerian economy. The Central Bank, unlike in the years before, was henceforth able to define monetary policy, prudential rules and the regulation of macroeconomic activity.

In reality, over the period 1990-1993, the monetary policy was an accommodating policy trying to satisfy the financing needs of banks and the public sector in a difficult economic context characterized by a stagflation[13]. No priority in monetary policy objectives was defined and the risk of conflict between the objectives of price and activity was very real.

Besides, this same law of the early 1990s set up a package of indirect instruments such as rediscount, allowance uptake of private and public bills, open market operations as well as reserve requirement. However, in reality, given the prevalent situation at the time, instrumentation was direct. The interest rates could not really play their role in the allowance of resources given the weak situation of public companies and the high level of inflation, making them negative in real terms.

It was with the enforcement of the macroeconomic stabilization program (1994-1995) followed by the structural adjustment program (1995-1998) that monetary policy was really able to play its role. Indeed, on the eve of the coming into force of the stabilization program, the governor of Bank of Algeria (BA) signed instruction n°16-94 of April 1994 concerning the instruments of monetary policy and the refinancing of banks. The final objective of monetary policy was inflation control[14], but also the activity growth (at a secondary degree)[15].

To reach this objective, a double intermediary objective was defined, that is the limitation of the money supply and credit growth. However, reaching this double objective required having recourse to a double operational objective consisting in fixing an upper limit to the growth of the Central Bank internal assets (credits to the State and refinancing of banks) as well as those of the banks (credits to the State and to the economy)[16].

As for the instruments used, the Central Bank was led to set up a battery of rates in order to supervise the banking rates and direct its intervention, namely: a rediscount rate set at 15%, an intervention pivot rate over the money market set at 20% and a rate applied to advances to banks set at 24%. But, due to the prevalent economic situation and the incapacity of these instruments to control monetary and credit expansion, other instruments were introduced, notably: a rediscount upper limit by bank, credit restriction, credit auctions[17] (call for tender) as well as reserve requirement techniques[18].

During the structural adjustment period, the monetary policy was assigned the role of fighting inflation which had primacy over a full employment objective. In this context, the inflation rate, after its stabilization during the previous period, had to evolve to a rate comparable to that of the main trade partners. The intermediate objective was the limitation of money supply growth of M2 via the control of Central Bank internal assets. The instruments put in place were those used during the stabilization period but accompanied by the introduction of Treasury bill auction techniques as well as the establishment of open market operations[19].

From 2001, the conduct of the Algerian monetary policy consisted in targeting clearly a rate of inflation as a middle term prospect. Unlike the previous years, this rate was set at 3% (Grand Alger index). The objective was not only to insure price stability but particularly to maintain a low level of prices already reached during the stabilisation and structural adjustment period[20]. The intermediary objective was money supply (and credit to the economy). In coherence with this objective, BA tries to use a reserve requirement technique –which has been really reactivated– and bank liquidity mapping (Zouache & Ilmane 2008).

Besides, these last few years has been marked by the durability of the abundance of liquidity (because of the prodigious increase in oil receipts), which has allowed the commercial banks to work in an "out of bank" system. This has limited the use of Central Bank monetary policy instruments such as rediscount. At the same time, this situation has forced BA to act in two directions. On the one hand, it offers remuneration to banks for the liquidity which is not used. On the other hand, it subjects these banks to mandatory regulations. Indeed, to mop up the excess of liquidity, BA has intervened on the interbank money market by using resumption liquidity operations with more frequency. These became the main indirect instrument of the monetary policy. Similarly, a further indirect instrument called "remunerated deposit facilities" was introduced at the end of 2005 (Bank of Algeria 2006). Also, in the field of regulation, the base of calculus of reserve requirements was increased to 6.5% of deposits in dinars.

As regards the exchange policy, after anchoring the dinar to a basket of currencies, the petroleum counter shock and the

term of trade deterioration during the second half of the 1980s forced the monetary authorities to let the Algerian dinar depreciate against the other currencies. During all the period of depreciation (from the middle 1980s to 1995), the parallel market developed and the black market exchange rate reflected better the economic reality.

Faced with this situation, Algerian authorities took as a guideline the stability of the dinar. Indeed, since 1995, the Algerian exchange rate policy has tried to maintain a stable real exchange rate against a basket of currencies including the main trading and competing countries. The monetary authorities tried to apply in this framework a managed float with no predetermined path. BA intervenes on the exchange market to periodically re-align the nominal exchange rate to honour its objective of real effective exchange rate (REER).

Between 1995 and 1998, the REER appreciated[21]. Until 2001, it depreciated with regard to the euro because of the appreciation of the European currency against the dollar. The authorities intervened on the exchange market in 2003 to align the REER with its level of 2002 rather than that of 1995 (Koranchelian 2005). It has remained relatively stable over these last four years and close to the equilibrium value (IMF 2006). The difference between the official rate and the parallel one disappeared in 2006 and expressed the willingness of the authorities to fight against illicit operations.

In practice, BA influences considerably the nominal exchange rate on the official market to attain its objective of real exchange rate. It acts as a seller of foreign currencies, which allows it to influence the orientation of prices and realign the nominal exchange rate: it feeds the market with necessary foreign currencies and reduces the excess of liquidity whenever necessary. This facility of intervention over the exchange market may be explained by its capacity to manipulate the counterparts of most exchange transactions. This manipulation is the result of three factors[22]: the primacy of hydrocarbon exports in total exports (more than 95%), the obligation of conversion in dinar (to the Central Bank) of hydrocarbon export receipts as well as the continuity on controlling the capital account.

To conclude, one can notice that, although the monetary policies of MC have similar final objectives, the operational frames and the monetary instruments used for the realization of these objectives differ from one country to another. Also, the exchange rate policies of these countries are led and interpreted differently.

A question arises at this level: can one illustrate this heterogeneity of Maghreb? It is the object of the following section.

ILLUSTRATION OF THE HETEROGENEITY OF MAGHREB COUNTRIES[23]

The model

Our method tries to detect the heterogeneity of MC. It consists firstly of estimating a model characterising the economy of each country. Once the model is estimated, we should define the most effective rule. To do so, it is essential to define a loss function which the Central Bank tries to minimise[24].

Our model is that of an open economy. It contains an IS equation (supply and demand over goods and services market), a Philips curve equation (inflation-unemployment trade-off) and an exchange rate equation (exchange behaviour) for each country.

This model is estimated on the basis of quarterly data over the period 1990Q1, 2006Q4[25]. These data are extracted from the IMF database (International Financial Statistics) and DATASTREAM. The three equations are as follows:

$$y_t = A(L)y_t - B(L)e_t - C(L)[i_t - \pi_t] + \eta_t$$

$$\pi_t = D(L)\pi_t - E(L)e_t + F(L)y_t + \varepsilon_t$$

$$e_t = G(L)e_t + H(L)\pi_t + K(L)y_t + v_t$$

Where y, π, i and e are respectively the growth rate of

industrial production index (IPI), the growth rate of consumption price index (CPI), nominal interest rate (the instrument of monetary policy) and REER in each country[26]. $A(L)$, $B(L)$, $C(L)$, $D(L)$, $E(L)$, $F(L)$, $G(L)$, $H(L)$ and $K(L)$ are the traditional polynomial lags of which the degrees are naturally different from one country to another according to the significance of the estimated coefficients. η, e and v are error terms.

The first equation shows the effect of monetary and exchange rate policy on the activity and therefore on the real sphere. An appreciation (depreciation) of the exchange rate implies a price increase (a price fall) of the domestic goods comparing to the foreign ones which leads to a decrease (increase) in domestic production. Also, a restrictive (expansionist) monetary policy reflected by an increase (decrease) in interest rate acts negatively (positively) on the global demand component and leads to a decrease (increase) in domestic production. The expected coefficients for e and $(i_t - \pi_t)$ are then negative.

The second equation shows how economic growth and exchange policy affect prices[27]. An appreciation (depreciation) of exchange rate makes domestic products less required (more required) and decreases (increases) the inflationary pressures while a rapid (sluggish) economic growth due to expansionist (restrictive) monetary policy for example leads to an acceleration (deceleration) of inflationary pressures[28]. This argument is often stated by central bankers when they claims that demand increase more rapidly then supply. The expected coefficient for e is then negative while that of y is positive.

Finally, the third equation shows how evolution of inflation and activity acts on the exchange rate. Higher (lower) inflation leads to an appreciation (depreciation) of the real exchange rate following a price increase (decrease) of domestic goods – more (less) than foreign one – while low (high) activity growth leads to the reverse effect (same effect). The expected coefficients for π and y are then positive.

One can note at this level that we can find in these equations the different sources of difference between countries. Indeed, the growth rate equation (the first equation) describes how exchange rate and monetary policy can influence the dynamism of the economy. The effect of exchange policy on economic growth depends for example on the degree of openness of the countries and shows in fact the diversity of economic structures. Similarly, the effect of monetary policy on economic growth depends for example on the sharing of direct finance versus indirect finance and shows therefore the differences in financial structures.

Moreover, the second equation shows the effect of growth and exchange rate on inflation and exemplifies the differences in productive and institutional structures. In an open economy for example, the effect of growth on inflation is more important than in a closed one. Besides, rigid labour markets may lead to a permanent effect of economic growth on inflation. Likewise, the effect of exchange rate variations on inflation depends for example on the market power of local participants – and so on the degree of competition – as well as the "pricing to market behaviour" and reflects the differences in productive structures. This effect may also depend on the willingness of monetary authorities to maintain their price stability objectives and reflect then differences in the credibility and the effectiveness of the monetary policy (Taylor 2000).

Finally, the third equation shows the effect of growth and inflation on the exchange rate and expresses for example the differences of labour market functioning. It may also express the characteristics of the economy (case of rental economy).

The effect of inflation on the exchange rate for example is minor if prices and wages are flexible. Similarly, the effect of economic growth on the appreciation of exchange rate is big if prices and salaries do not adjust rapidly or if the economy is based on a unique sector.

Estimation of the model

Before estimating the parameters of the model, we established a stationarity test for the different variables to avoid a spurious regression. The following tables synthesizes our results:

Table 1: Results of Dicky Fuller test[29]

Tunisia	Zero mean DF Statistic	P-value	Single mean DF Statistic	P-value	Trend DF Statistic	P-value
Growth rate (y)	-85.7544	<0.0001	-93.0509	0.0001	-93.0713	<0.0001
Inflation rate (π)	-13.8598	0.0062	-43.4721	0.0001	-52.7584	<0.0001
Real money rate $(i_t - \pi_t)$	-0.8403	0.0072	-1.2919	0.656	-2.9667	0.9510
Real exchange rate (e)	-0.1313	0.2149	1.1474	0.9875	-3.3306	0.8890

Morocco	Zero mean DF Statistic	P-value	Single mean DF Statistic	P-value	Trend DF Statistic	P-value
Growth rate (y)	-109.328	<0.0001	-111.246	0.0001	-111.324	<0.0001
Inflation rate (π)	-41.9485	<0.0001	-64.1475	0.0001	-73.8384	<0.0001
Real money rate $(i_t - \pi_t)$	-1,0716	0,0396	-0.4902	0.8989	-7.6871	0,5519
Real exchange rate (e)	0.0883	0.8923	-4.547	0.2308	-3.6445	0.8448

Algeria	Zero mean DF Statistic	P-value	Single mean DF Statistic	P-value	Trend DF Statistic	P-value
Growth rate (y)	-206.293	<0.0001	-206.723	<0.0001	-206.724	<0.0001
Inflation rate (π)	-100.658	<0.0001	-108.959	<0.0001	-120.184	<0.0001
Real money rate $(i_t - \pi_t)$	-1.8283	0.1956	-3.0226	0.6906	-4.7633	0.81
Real exchange rate (e)	-2.1433	0.3131	-31.9247	0.0011	-38.8168	0.0005

Table 2: Result of Phillips Perron test[30]

Tunisia	PP	Model (1)	Model (2)	Model (3)
Growth rate (y)	Level	-2.78***	-5.58***	-6.57***
	First difference			
Inflation rate (π)	Level	-10.86***	-14.2***	-14.55***
	First difference			
Real money rate $(i_t - \pi_t)$	Level	-2.52**	-1.23	-1.13
	First difference	-6.07***	-6.59***	-6.67***
Real exchange rate (e)	Level	-1.16	0.57	-1
	First difference	-7.79***	-7.9***	-8.73***
Morocco	PP	Model (1)	Model (2)	Model (3)
Growth rate (y)	Level	-5.74***	-7.77***	-8.94***
	First difference			
Inflation rate (π)	Level	-14.67***	-39.62***	-51.04***
	First difference			
Real money rate $(i_t - \pi_t)$	Level	-1.94**	-0.48	-2.07
	First difference	-6.54***	-6.81***	-6.75***
Real exchange rate (e)	Level	0.2	-1.42	-1.44
	First difference	-7.83***	-7.94***	-10.86***
Algeria	PP	Model (1)	Model (2)	Model (3)
Growth rate (y)	Level	-3.39***	-4.57***	-6.59***
	First difference			
Inflation rate (π)	Level	-28.68***	-88.93***	-88.31***
	First difference			
Real money rate $(i_t - \pi_t)$	Level	-1.28	-0.31	-1.94
	First difference	-5.6***	-5.73***	-5.72***
Real exchange rate (e)	Level	-2.06**	-3.91***	-4.07**
	First difference			

It transpires then from these tables that for all countries, the two non stationary variables are the real exchange rate and the real interest rate I (1) while the growth rate of IPI and ICI are stationary I (0).

We then established an Engle & Granger (1987) and Johansen (1991) co-integration test about the relevant variables. The following table shows our results:

Table 3: Results of Engel & Granger test[31]

	Zero mean		Single mean		Trend	
	DF Statistic	P-value	DF Statistic	P-value	DF Statistic	P-value
Tunisia	-1.1935	0.26	-1.9746	0.4126	-0.6863	0.99
Morocco	0.4019	0.7934	-0.7343	0.8495	-6.3894	0.729
Algeria	-4.5602	0.0947	-6.0594	0.3585	-8.9871	0.3044

Table 4: Result of Johansen test[32]

Tunisia	Model (1)		Model (2)		Model (3)	
TCR – TMR	Trace statistic	0.05 critical value	Trace statistic	0.05 critical value	Trace statistic	0.05 critical value
None	14.32	12.32 (0.02)	15.13	20.26 (0.21)	9.73	15.49 (0.3)
At most 1	5.16	4.12 (0.02)	5.38	9.16 (0.24)	0.6	3.84 (0.43)
TCR - TMR	Max-Eigen statistic	0.05 critical value	Max-Eigen statistic	0.05 critical value	Max-Eigen statistic	0.05 critical value
None	8.7	11.22 (0.13)	10.25	15.89 (0.31)	10	14.26 (0.21)
At most 1	1.68	4.12 (0.22)	7.31	9.16 (0.11)	3.39	3.84 (0.06)

Morocco	Model (1)		Model (2)		Model (3)	
TCR – TMR	Trace statistic	0.05 critical value	Trace statistic	0.05 critical value	Trace statistic	0.05 critical value
None	10.38	12.32 (0.1)	17.57	20.26 (0.11)	13.39	15.49 (0.1)
At most 1	1.68	4.12 (0.22)	7.31	9.16 (0.11)	3.39	3.84 (0.06)
TCR - TMR	Max-Eigen statistic	0.05 critical value	Max-Eigen statistic	0.05 critical value	Max-Eigen statistic	0.05 critical value
None	8.7	11.22 (0.13)	10.25	15.89 (0.31)	10	14.26 (0.21)
At most 1	1.68	4.12 (0.22)	7.31	9.16 (0.11)	3.39	3.84 (0.06)

Algeria	Model (1)		Model (2)		Model (3)	
TCR – TMR	Trace statistic	0.05 critical value	Trace statistic	0.05 critical value	Trace statistic	0.05 critical value
None	5.3	12.32 (0.52)	22.88	20.26 (0.02)	19.99	15.49 (0.00)
At most 1	1.26	4.12 (0.30)	2.78	9.16 (0.62)	0.16	3.84 (0.68)
TCR - TMR	Max-Eigen statistic	0.05 critical value	Max-Eigen statistic	0.05 critical value	Max-Eigen statistic	0.05 critical value
None	4.04	11.22 (0.62)	20.09	15.89 (0.01)	19.82	14.26 (0.00)
At most 1	1.26	4.12 (0.30)	2.78	9.16 (0.62)	0.16	3.84 (0.68)

It turns out that in the case of three countries and for equation (1), the two variables (real money rate and real exchange rate) are not co-integrated. The regression is therefore made by using the first difference of the two variables. For equation (2), the co-integration problem does not arise (except that the regression is made by using the first difference of the real exchange rate). Similarly, for equation (3), the problem does not arise and the regression is simple (and not in difference) [33].

The next step consists in the search for the optimal lags based on information criteria: Akaike (aic) and Schwartz (bic)[34]. Our results are shown in the following table:

Table 5: Optimal lags for each country

	1st equation			2nd equation			3rd equation		
	$A(L)$	$B(L)$	$C(L)$	$D(L)$	$E(L)$	$F(L)$	$G(L)$	$H(L)$	$K(L)$
Tunisia	4	1	2	1	1	2	1	5	2
Morocco	4	1	1	3	3	2	4	3	1
Algeria	3	2	1	2	1	3	1	1	1

We notice from this table that the majority of lags vary between countries, meaning that, the effects of monetary and exchange rate policies on activity and prices take different lapses from one country to another (equation 1 and 2). Similarly, the effects of activity and price evolution on the exchange rate are different (equation 3)[35].

Indeed, the optimal lags of the first equation show that the effects of monetary policy on the real sphere ($C(L)$) appear after two quarters for Tunisia and one quarter for Morocco and Algeria. This result may express the resemblance of the sharing direct/indirect financing in these countries. Besides, despite many efforts aiming at developing the capital markets, indirect financing remains the pillar in financing the economies of MC and financial markets still remain superficial. However, the financial specificities of each country make the extent of monetary policy transmission different (see below).

As for the effects of exchange policy ($B(L)$), they appear after one quarter for Tunisia and Morocco and two quarters for Algeria. A variation in real exchange rate will have an immediate effect in the Tunisian and Moroccan economies with regard to the Algerian one. This last result can be expected especially because these economies are open. It can also explain the flexibility of Tunisian monetary authorities in the treatment of the real exchange rate target rule.

Concerning the lags of the second equation, the results show that the final effects of economic growth on prices ($F(L)$) appear after two quarters for Tunisia and Morocco and three quarters for Algeria. Accelerated economic growth for example in these countries does not entail an immediate effect on prices (even if these economies are opened). This result may be due to the rigidity of labour markets. Indeed, the speed of renovation efforts in these markets remains modest and the pace of wage adjustment is still slow.

As for the effects of the exchange policy on prices ($E(L)$), they appear after one quarter for Tunisia and Algeria and three quarters for Morocco. This result allow to mention that an appreciation of the real exchange rate for example may have an immediate effect on inflation in the first two countries, and can probably reflect the importance of efforts of openness in these economies. This may strengthens the idea of the importance of the "pass through" effect of exchange rates in an open economy. It may also corroborate the idea according to which, although the Moroccan economy is opened, quasi-fixed exchange rates can delay the effect of exchange rates on prices.

Finally, for the lags of third equation, the table shows that the effects of inflation on exchange rates ($H(L)$) appear after five quarters in Tunisia, three quarters in Morocco and one quarter in Algeria. Inflation affects immediately the Algerian exchange rate while the effect is not immediate in Tunisia and Morocco. This result can reflect the structure of the Algerian economy where dependence on one sector renders the exchange rate more sensitive to the variation of foreign good prices.

As regards the effects of activity on the exchange rate ($K(L)$), they appear after two quarters in Tunisia and one quarter in Morocco and Algeria. Accelerated economic growth for example may have an immediate effect on the exchange rate in the last two countries while the effect is more delayed in the Tunisian case. This confirms the idea that wages and prices do not adjust quickly in these economies.

Finally, the estimation of our model has allowed us to reach the following results[36][37]:

For Tunisia

$$y_t = 0{,}01557 + 0{,}41561 y_{t-4} - 0{,}00507 \Delta e_{t-1} - 0{,}01408(\Delta i_{t-2} - \Delta \pi_{t-2}) + \eta_t^{Tun}$$
$$\quad (2.51)*** \quad (3.35)*** \quad (-1{,}66)* \qquad (-1.76)*$$

$$DW = 1{,}846 \qquad\qquad \overline{R}^2 = 0{,}4012$$

$$\pi_t = 0{.}00555 + 0{,}35104 \pi_{t-1} - 0{,}00044 \Delta e_{t-1} + 0{,}03494 y_{t-1} + 0{,}04 y_{t-2} + \varepsilon_t^{Tun}$$
$$\quad (3.13)*** \;(2.5)** \qquad (-1.06)* \qquad (2.59)** \qquad (1.84)*$$

$$DW = 2{,}005 \qquad\qquad \overline{R}^2 = 0{,}1219$$

$$e_t = -3{.}32712 + 1{,}036 e_{t-1} - 5{.}20482 \pi_{t-5} + 6{,}12838 y_{t-2} + v_t^{Tun}$$
$$\quad (-1.16)* \quad (34.25)*** \;(-2.07)** \quad (1.53)*$$

$$DW = 2{.}021 \qquad\qquad \overline{R}^2 = 0{,}9531$$

For Morocco

$$y_t = 0{,}02203 - 0{,}53969 y_{t-1} + 0{,}49101 y_{t-4} + 0{,}00088 \Delta e_{t-1} - 0{,}005(\Delta i_{t-1} - \Delta \pi_{t-1}) + \eta_t^{Mor}$$
$$\quad (3.42)*** (-4.47)***(3.88)*** \quad (0.32)* \qquad (-1.94)*$$

$$DW = 1{.}961 \qquad\qquad \overline{R}^2 = 0{,}9296$$

$$\pi_t = 0{.}00276 + 0{,}12584 \pi_{t-1} + 0{,}68989 \pi_{t-3} - 0{,}00513 \Delta e_{t-3} - 0{,}04566 y_{t-1} + 0{,}03512 y_{t-2} + \varepsilon_t^{Mor}$$
$$\quad (1.31)* \quad (1.93)** \qquad (4.63)*** \quad (-4.07)*** \quad (-2.42)*** \quad (1.96)**$$

$$DW = 2{,}059 \qquad\qquad \overline{R}^2 = 0{,}3733$$

$$e_t = 9{.}30842 + 1{,}86477 e_{t-1} + 0{,}467 e_{t-4} + 4{.}4703 \pi_{t-3} - 1{,}853 y_{t-1} + v_t^{Mor}$$
$$\quad (2.49)** \quad (11.19)*** \;(2.53)** \quad (2.43)** \qquad (7.06)***$$

$$DW = 1{.}603 \qquad\qquad \overline{R}^2 = 0{,}9074$$

For Algeria

$$y_t = 0{.}00736 - 1{,}02928 y_{t-1} - 0{,}69344 y_{t-2} - 0{,}51546 y_{t-3} - 0{,}00091 \Delta e_{t-2} - 0{,}00115(\Delta i_{t-1} - \Delta \pi_{t-1}) + \eta_t^{Alg}$$
$$\quad (1.94)* \quad (-12.25)*** (-6.11)*** \quad (-6.14)*** \quad (-2.54)** \qquad (-1{,}47)*$$

$$DW = 2{.}064 \qquad\qquad \overline{R}^2 = 0{,}679$$

$$\pi_t = 0{.}01397 + 0{,}20230 \pi_{t-2} - 0{,}00039 \Delta e_{t-1} - 0{,}39761 y_{t-2} - 0{,}36534 y_{t-3} + \varepsilon_t^{Alg}$$
$$\quad (2.47)** \;(2.05)* \qquad (-0{,}62)* \qquad (-2.53)** \quad (-3.07)***$$

$$DW = 1{.}988 \qquad\qquad \overline{R}^2 = 0{.}0575$$

$$e_t = 26{.}7196 + 0{.}72405 e_{t-1} + 4{.}41155 \pi_{t-1} - 19{.}132 y_{t-1} + v_t^{Alg}$$
$$\quad (5.81)*** (16.44)*** \;(3.08)*** \quad (-1{,}6)*$$

$$DW = 1{.}913 \qquad\qquad \overline{R}^2 = 0{,}7079$$

These results show that the most important coefficient is not the same and strengthen the idea of the heterogeneity of MC. Indeed, the extent of different policies conducted by monetary authorities on activity, inflation and exchange rate is different and sometime divergent. Concerning the extent of monetary policy on the real sphere, while it is modest, it appears more important in the Tunisian case than in that of Morocco or Algeria. This result may express the specificities of the Tunisian financial structure which can expose it to more interest rate variation. The small size of Tunisian banks and companies, the small availability of capital direct contributions and the short-term debts of Tunisian companies and households are perfect illustrations. However, the existence of bank liquidity excess in Morocco and Algeria can explain the weak capacity of monetary authorities in managing money market operations and so, in influencing banking conditions. The money and credit channels turn out to be less functional in Morocco and Algeria than in Tunisia[38].

Similarly, the effect of exchange policy on activity is relatively more important in the Tunisian case than in that of Algeria and may express the importance of the degree of openness in influencing the activity. Indeed, the Tunisian economy is more open than the Algerian one (98% in Tunisia against 83,1% in Algeria in 2006) and may reveal the relative importance of exchange rate channels in this country. However, the low sensitivity of the activity to exchange rate modification in the three countries seems to relativize this fact.

Yet, it is useful to mention that the «contradictory effect» of exchange policy on Moroccan activity may be explained by the fact that a great part of Moroccan debt is labelled in foreign currency, by the effects of imported inflation as well as the effects of the increase in petroleum bill (Boughrara 2003).

Concerning the effect of activity growth on inflation, it turns out to be similar in the case of Tunisia and Morocco. Accelerated economic growth for example is translated by an increase in the inflation level, but the effect appears after two quarters. This can reflect the fact that in an open country, the effect of growth on inflation is more important

than in a closed one. However, as was explained earlier, the rigidity of the labour market can delay this effect[39].

It is moreover important to note in this frame that the weakness of the adjustment process in these economies may express price inertia. This inertia may be explained by the still important presence of the public sector in the economy, low competition between sectors but also the presence of industry characterised by sticky prices.

However, the inverse effect occurs in Algeria. Accelerated growth in this country may result in a decline of prices while this decline is felt from the second quarter. This result can reflect the importance of tradable good prices in the Algerian economy. These prices are generally on a par with world prices following acceleration or deceleration of tradable goods production sector[40].

In return, the effect of exchange policy on inflation turns out to be small in the three countries, although their economies are open. This effect seems to be the result of continuity in controlling capital movements and the absence of total convertibility of the currency. Moreover, as Engel (2002) noted, in a country where the market power of local participants is important, variations in the exchange rate do not hardly affect domestic prices. Besides, a good proportion of prices is still administered by the governments of these countries reflecting the firmness in establishing price stability.

This result can also reflect the nominal rigidities and slow adjustment of good prices which could make domestic prices less responsive to exchange rate movements.

Finally, concerning the effects of growth on the exchange rate, they are important for the Tunisian case while the reverse happen in Algerian and Moroccan one[41]. The effect of economic growth on exchange rate appreciation is important in Tunisia and can reflect the slowness of wage and price adjustment in this country.

As for the Algerian and Moroccan results, it can be explained by the nature of production in these two countries. A rapid growth in agricultural products for example, which represent an important part of Moroccan economy, may

lead to a decrease in prices and then to a depreciation of the exchange rate.

However, results concerning the effects of inflation on the exchange rate show that these effects are acute in Morocco and Algeria but differs from what is expected in the case of Tunisia. The acceleration of inflation in this last country will be translated by a depreciation of the real exchange rate at the end of the fifth quarter. This result can express a progressive substitution of domestic goods by foreign ones following an increase in the price of the former. Final result may be so an increase in the price of the latter[42].

Differences between countries appear therefore partially in the estimation of the model, but they can be strengthened by the observation of more efficient Taylor rules defined at each country's level.

We would try therefore to answer the following question: which will be the characteristics of the monetary practices in MC?

HETEROGENEITY OF THE MAGHREB COUNTRIES: THE OPTIMISATION RESULTS

After estimating the model for each country, our aim is to determine the monetary rules which best fulfil the objective of the Central Bank, that is, to minimise a loss function[43]. We retain the Taylor rule in an open economy which the simple form is as follows[44]:

$$i_t = \phi i_{t-1} + \alpha(y_t - y^*) + \beta(\textstyle\prod_t - \textstyle\prod{}^*) + \delta(e_t - e^*)$$

Where α, β and δ are respectively the weight attached to activity, inflation and exchange rate by the Central Bank[45]. Moreover, the existence of the term i_{t-1} expresses the interest rate smoothing behaviour of the emission institute (or the monetary policy inertia). Moving the policy rate by small steps in the same direction increases its impact on the long term interest rate because market participant expect the change to continue and hence price their expectations into forward rates (Mohanty & Klau 2004). Such practice is also often present, especially in countries where banking and financial weakness is significant. It also expresses the

willingness to maintain the credibility of the Central Bank and the reduction of uncertainty that mark the key parameters of the structure of the economy. These parameters govern the transmission mechanisms of monetary policy. Lastly, i_{t-1} represent the output gap or the difference between current production and potential production, $(\prod_t - \prod *)$ is the deviation of inflation from its target value and $(e_t - e*)$ is the deviation of current exchange rate from its equilibrium level. However, given that several studies showed that in the three countries, there were no problems of substantial alignment and there were no important pressures with regards the exchange rate, we replace the expression $(e_t - e*)$ with the real effective exchange rate variation $(e_t - e_{t-1})$[46].

The presence of this last term shows that the Central Bank can also act, alongside inflation and output variations, in exchange rate deviations in order to maintain its objective of price stability but also to guarantee financial stability, which reinforces the "fear of floating" hypothesis (Mohanty & Klau 2004).

Generally, the presence of the output gap and the exchange rate variation in the Central Bank rule expresses the concern of this institute regarding the lack of a price stability announced objective. This case often applies for small opened economies where an excessive variation of activity or exchange rate considerably affects the inflation rate.

As such, the Taylor rule expresses the behaviour of the Central Bank in setting the interest rate which follows a change in correspondent variables. In general, the Central Bank raise their interest rates when the output gap increases (situation where current production is far from potential production), the inflation gap deepens (situation where current inflation is far from its target value) and also when the exchange rate gap increases (situation where e increase comparing to e_{t-1}).

It follows that, once our model is estimated, the residual which are considered to be the shocks affecting the economy, are recovered. These last ones respect the distribution of historical shocks. It is then a matter of historical simulations which deal with reproducing the past shocks.

Our objective consists so of observing the behaviour of monetary authorities following a shock hitting the economy. For that purpose, we use for each country a model with four equations: the first three describe the functioning of the economy (the model above) while the last one is the Taylor rule. We look through this rule for the parameters α, β, δ in the interval [0.1:10.1] by choosing a step of 0.1 and by repeating 250 times. We hold the value of the coefficients which corresponds to the minimal loss function[47].

To do so, we suppose that the money market rate (MMR) is the instrument of monetary policy while several Central Banks (including the Maghrebian one) have not until now developed an official policy rate. Moreover, most banking rates are indexed in MMR, which reinforces our choice. We further suppose that **f**=1 in the three countries since – as mentioned above – the Central Banks have to gain in maintaining financial stability and reducing uncertainty by controlling interest rate volatility. Finally, we consider that the potential growth rate over the period 1990-2006 is 5.5% for Tunisia, 5% for morocco and 4% for Algeria while the inflation target over the same period is 3% for Tunisia, 2.8% for Morocco and 3% for Algeria[48].

The final results of our optimisation are reported in the following table[49]:

Table 6: Results of optimisation

	α	β	δ	Loss function
Tunisia	4.6	6.0	0.1	230.333
Morocco	1.1	1.1	1.1	10.7745
Algeria	1.6	1.1	0.1	71.549

It follows that the optimal Taylor rule for each country can be described as follows:

For Tunisia:

$$\Delta i_t = 4.6(y_t - y*) + 6.0(\prod_t - \prod *) + 0.1(e_t - e_{t-1})$$

For Morocco:
$$\Delta i_t = 1.1(y_t - y^*) + 1.1(\textstyle\prod_t - \prod{}^*) + 1.1(e_t - e_{t-1})$$

For Algeria:
$$\Delta i_t = 1.6(y_t - y^*) + 1.1(\textstyle\prod_t - \prod{}^*) + 0.1(e_t - e_{t-1})$$

We notice that the coefficients of each Taylor rules are not the same (except for the exchange rate)[50]. The CBT has to grant more important weight to inflation. The activity objective has to be taken into account but to a lesser extent. Indeed, in the hypothesis where inflation will be on its target value, an increase of a half point in prices will necessitate an increase in interest rate by a 3%. Similarly, when the production corresponds at its potential value, an increase of a half point in activity will necessitate an increase in interest rate by 2.3%.

This result may reflect the existence of other instruments which are oriented toward the stabilization of the activity, notably budgetary and fiscal policy, and may explain the least importance of the weight of the activity with regards to inflation in the Tunisian Central Bank function.

As for the Moroccan authorities, they have to grant similar weight to inflation, activity and exchange rate. Indeed, in the case where inflation is at its target value or production corresponds to its potential value or the exchange rate corresponds to its past value, an increase of a half point in prices or activity or exchange rate will necessitate an increase in interest rates by 0.55%.

This similarity may translate the importance of activity variation on prices and consolidates the idea that the Moroccan economy is weak. It is subject to the effects of climate changes as well as socio-political instability. Also, the same importance of exchange rate variation effects on prices clearly explains their existence in the Central Bank rule and can be expected as far as the Moroccan authorities foresee to adopt inflation targeting.

Finally, BA has to grant more weight to activity rather than inflation or exchange rate. Indeed, when the production corresponds to its potential value, an increase of a half point in activity will necessitate an increase in interest rate

by 0.8%. In return, in the hypothesis where inflation will be on its target value, an increase of a half point in prices will necessitate an increase in interest rate by 0.55%.

This result may reflect the behaviour of Central Banks in transition economies (from centralized to more liberalized) that partly accommodate non monetary pressures on prices in order to reduce costs in terms of output. It may also reflect the willingness of the monetary authorities to absorb the demand shock provoked by expansionist fiscal policies. The dependence of Algerian budgetary policy vis-à-vis petroleum receipts could lead to demand shock and will render the monetary authorities' reaction more aggressive vis-à-vis the stabilization of the activity.

Likewise, for small open economies where the excessive variation of activity considerably affects prices, the Central Bank must grant more important weight to the activity in order to respect its announced inflation objective.

After all, we notice that the Central Banks of the three countries will not have to attach similar weight to inflation and activity objective. The reaction of the latter at an inflation deviation for example differs from one country to another. Also, the primacy of the reaction to the inflation objective compared to the activity objective differs (primacy of the inflation for Tunisia and activity for Algeria).

However, the weight of the exchange rate is relatively weak compared to the others objectives (especially in Tunisia and Algeria). The Central Banks of these countries do indeed have others means of controlling this variable other than the interest rate. These banks often use the control of capital account, foreign exchange swaps… in order to stabilize the exchange rate expectations.

In the same vein, the small reaction of monetary policy for exchange rate variations may reflect the nature of the shocks hitting the economy (Mohanty & Klau 2004). Indeed, according to Taylor (2002), if the exchange rate varies due to temporary disturbances, the interest rate should remain unchanged because such exchange rate movements do not have much effect on expectations of inflation.

In our case, the non reactivity of the Maghrebian Central Banks to this variable (exchange rate) shows that shocks are often temporary. This hypothesis seems to be consolidated in several works that show that Maghrebian exchange rates are near their equilibrium value.

These results strongly support the idea that the Maghreb zone is heterogeneous and that this heterogeneity is the result of differences in productive, financial and institutional structure. It follows thus that, problems are likely to emerge if these countries decide to belong to a monetary union with a common conducted monetary policy. This would likely prove a hindrance for all the countries and would create important costs as far as heterogeneity persist[51].

CONCLUSION AND POLICY RECOMMENDATIONS

Starting from the idea that the European experience offers several lessons for countries looking to reinforce their financial and economic integration, this preliminary work allowed us to highlight the heterogeneity of MC and the difficulties of establishing a common monetary policy.

We have described first of all the characteristics of monetary and exchange rate policies in the three countries and explained their foundations. We then illustrated this heterogeneity from a simple model reflecting the characteristics of each country. It turned out that the extent of economic policies (monetary and exchange rate policy) on real variables differs between MC.

We then simulated national Taylor rules for each country. Our results suggest that the latter will not choose identical monetary rules to achieve their stabilization objectives. Tunisia has to grant more weight to inflation, Morocco has to grant a similar weight to inflation, activity and exchange rate while Algeria has to grant more weight to activity.

It follows that the application of a unique monetary policy over the whole zone of Maghreb would not be beneficial for all countries.

However, even though there is strong heterogeneity, the Maghreb can draw numerous lessons from monetary integration experiences. These show that the movement towards the creation of a regional monetary union presupposes certain conditions that would be necessary to ensure the long term success of the monetary integration process. The MC must opt for gradualism, deepening the national and regional financial integration, promoting the banking competition, intensifying the banking sector solidity, diversifying the production notably through a commercial liberalization (in order to reduce the effects of independence) as well as improving coordination of financial, monetary and exchange rate policies to guarantee the success of Maghreb monetary integration process.

In the same vein, they have to outshine their political conflicts and further improve their financial and budgetary situation.

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1 Our sample is limited to Algeria, Morocco and Tunisia.

2 The CBT inserts in the definition of M2 the anticipation of prices, products and the velocity of this aggregate.

3 The distinction between the two instruments is a little bit vague. For further details, see Dack (1999).

4 The 3 months allowance uptake of treasury bonds was introduced in 2001.

5 It is useful to note that the CBT continue his rising of the reserve requirement rate given the prevailing situation of excess of liquidity of the Tunisian money market (CBT 2007).

6 Article 33 of the law n°2006-26 of 15 May 2006 modifying the law n°1958-90 of 19 September 1958 relating to the creation and the organization of CBT.

7 The depreciation of the nominal exchange rate could lead to an increase in the price of foreign goods (and/or a revision in the increase of the inflation expectations concerning the price of domestic goods), which can feed inflationary pressures.

8 Until 2006, the aggregate target was M1, but, with the great instability of this aggregate (privatization operations, tourist receipts, foreign workers' remittances), the Central Bank chose M3 aggregate.

9 This excess of liquidity was often attributed to the increase of net outside assets of Central Bank due to selling of 35% of the capital of Maroc Télécom, favourable increase of tourist receipts as well as increase of foreign workers remittances.

10 They are call for tender, facility of deposit and facility of lending rates.

11 For further details, see BAM (2007).

12 Besides, Mussa et al (2000) consider that the anchoring to a basket of money which represents the main trading partners remains better than close money anchoring.

13 This stagflation was the result of a historical fall of hydrocarbon prices of the middle 1980s and a deterioration of the socio-political situation in the early 1990s.

14 It was more a question of cancelling the inflationary drift due to important adjustment of the dinar exchange rate combined to a liberalization of many prices (Ilmane 2006).

15 The consideration of the activity objective is reflected by the fact that the inflation target which the Central Bank have to control is defined in compatibility with a certain growth rate of the economy.

16 According to Ilmane (2006), the real operational objective which BA could master in that time was its «internal assets » post.

17 This technique was used at the same time as rediscount, but within the limits of the fixed ceilings.

18 This instrument was effectively used from 2001.

19 These operations were used solely two times during the second half of 1990s.

20 The objective of stabilization was not excluded but BA took the political liberty by only taking care for price stability as final objective of monetary policy.

21 This appreciation coincides with the structural adjustment period and may be due to productivity growth and administrative price adjustments (Sorsa 1999).

22 Koranchelian T (2004): The Equilibrium Real Exchange Rate in a Commodity Exporting Country: Algeria's experience» IMF Working

Paper n°135, July.

23 Many empirical studies have tried to explain the heterogeneity of a zone by putting in place a series of macroeconomic variables. For a survey, see Penot (2002).

24 This methodology was adopted in many works such as Durand & Payelle (1998), Freedman (1981), McCallum (1994), Penot & al (2001), Penot & Pollin (1999) …

25 The choice of this period is imposed by the fact that, in these countries, the liberalization process started only in the early 1990s.

26 The REER is defined as follows: $REER = P^D \big/ P^F * NEER$ (P^D are the price of domestic goods and P^F the price of foreign goods). An increase in REER is synonymous with appreciation.

27 We consider that the hypothesis of Stock and Watson (1999) is verified (the potential economic activity is constant over the short term period) and that the activity, rather then the output gap, affect the inflation.

28 It is the effect of imported inflation in an opened economy.

29 For the non stationary variables (real exchange rate and real money rate), variables in difference are stationary. The results of correspondent DF tests are not reported here. Our thresholds of significance are respetively 1%, 5% and 10%.

30 *** Significant at the 1% level. ** Significant at the 5% level. * Significant at the 10% level. Model (1): Without Constant and Trend. Model (2): With Constant. Model (3): With Constant and Trend.

31 We transfer the results of DF test to the residual series obtained from the regression of real money rate over the real exchange rate. Our thresholds of significance are respectively 1%, 5% and 10%.

32 Model (1): Without Constant and Trend. Model (2): With Constant. Model (3): With Constant and Trend.

33 Hassler (1996): «Spurious regression when stationary regressors are included» Economic letters 50 p25-31.

34 Generally, lag length criteria such as Akaike and Schwartz statistic are not without shortcomings and should be used more as a guide than as uncompromised rules.

35 However, these results and the interpretations which follow remain dependent on the degree of significance of the estimated parameters (see below).

36 Non significant coefficients are not transferred here, unless they are about one lag. *** Significant at the 1% level. ***significant at the 5% level. *significant at the 10% level.

37 Estimation can also be done by using panel technique but, in our case, we have only few observations.

38 However, a detailed analysis concerning the respective position of intermediation and markets, interest rate indexation practices, share of short term credits compared to the long term… in the Maghreb will be interesting in this frame.

39 Furthermore, investigation fields concerning the functioning of the Maghrebian labour market, such as the nature of wage negotiation, legal setting, active and passive employment policies, are important in this frame.

40 It is useful to note that the weakness of this effect in the case of Algeria may also translate the bad representation of the total production by the industrial production. This bad representation can be attributed to a weak industrialization of this country.

41 This result joins many works which mention the absence of Balassa-Samuelson effect, especially in the case of Algeria.

42 This result can also reflect the flexibility of Tunisian monetary authorities in the application of real exchange rate target rules. Inflation is corrected by a more important nominal devaluation, which finally leads to a depreciation of the real exchange rate.

43 The form of this loss function is:
$E(L_t) = E(\prod_t - \prod *)^2 + \lambda E(y_t - y*)^2 + \psi E(e_t - e*)^2 + \phi E(i_t - i_{t-1})^2$ We suppose that each element in the loss function is identically weighted, which means that $\lambda = \psi = \phi = 1$. This function express the willingness of the monetary authorities to reduce inflation fluctuations, output gap and exchange rate variations in accordance with their objectives. The existence of interest rate in the loss function is justified by the fact that most efficient rules in term of activity stabilisation and inflation control generate very high interest rate variations. For further details on the shape of the loss function in a closed economy, see Penot & al (2001), Woodford (2001).

44 This rule displayed many improvements such as the incorporation of targeted variables in the form of expected inflation.

45 The price of financial securities is not taken into account here. We consider that the quasi absence of financial market role in these economies make monetary policy inactive toward a shift in price assets.

46 We consider that the fact of integrating the exchange rate in the Central Bank rule may be useful. However, this hypothesis must be approached cautiously.

47 This methodology is subject to Lucas criticism.

48 These numbers are approximate but close to the authorities' statements. See also the IMF and European Commission reports.

49 These results can be confronted with two types of instabilities: on the one hand, because weight assigned to inflation, activity and exchange rate changed during the period of estimation and on the other hand because the reaction function of the central bank is «backward looking» and is not simulated according to expected variables (refer to Lucas criticism 1976).

50 It is interesting to reconsider the results by taking a Taylor rule on which the exchange rate does not figure.

51 In this respect, an evaluation of the effects of introducing a common monetary policy, by identifying a Taylor rule for the whole area could be fruitful.

CRÉATION DE LA MONNAIE UNIQUE EN AFRIQUE:

L'expérience de l'Afrique de l'Ouest

Par Prof Mohamed Ndiaye, Agence Monétaire de l'Afrique de l'Ouest (AMAO)

Contents

RESUME ET RECOMMANDATIONS

L'accélération de la mondialisation de l'économie constitue l'une des caractéristiques majeures des mutations de ces dernières années. Ce phénomène, appelé à s'intensifier, est générateur d'opportunités considérables pour les agents économiques les plus performants et pour les Etats qui auront rendu leur espace économique attractif pour les investisseurs nationaux comme étrangers. A contrario, elle est porteuse de risques pour les autres opérateurs et les Etats qui ne se seront pas adaptés à la nouvelle donne, s'exposant à de sérieux risques de marginalisation. A cet égard, il importe de souligner qu'en Afrique, un consensus commence à émerger sur les vertus de l'intégration monétaire, désormais, considérée comme un amortisseur efficace des effets systémiques éventuels du processus de globalisation financière. C'est dire que, dans le cas de la CEDEAO (comme en Afrique) une intégration monétaire effective, sans toutefois en constituer une condition suffisante, est une exigence qui serait de nature à favoriser une accélération du processus d'intégration des économies des pays membres, dont force est de reconnaître que le bilan est mitigé, trente trois (33) ans après la signature, en 1975, de son traité constitutif.

Toutefois, au regard des aspects fondamentaux de l'intégration régionale, l'espace CEDEAO se présente aujourd'hui comme une zone économique assez bien organisée lorsqu'on la compare à d'autres communautés économiques régionales en Afrique. En effet, depuis sa création en 1975, la CEDEAO a réalisé des étapes importantes dans la matérialisation de l'intégration économique.

Cependant, la CEDEAO éprouve encore des difficultés dans le cadre de la réalisation de l'intégration monétaire malgré l'adoption il y a plus de vingt ans du Programme de Coopération Monétaire de la CEDEO (PCMC) et en dépit d'une volonté évidente d'accélérer la création de la monnaie unique régulièrement renouvelée par les leaders politiques de la région.

Le retard enregistré dans la création de l'Union monétaire de la CEDEAO est principalement lié au fait que les dirigeants de la région ont tenu à s'assurer que toutes les conditions économiques et financières soient réunies avant le lancement de la monnaie unique. De ce fait, la viabilité et la stabilité de la future monnaie seront mieux garanties.

Par ailleurs, des interrogations se rapportent à l'efficience de la zone monétaire de la CEDEAO, à son optimalité aux regards des critères classiques, et parfois aux résultats mitigés enregistrés en matière de convergence des économies. En effet, l'évolution de la CEDEAO et les thèses sur les unions monétaires optimales semblent indiquer que les pays membres des deux zones économiques de la CEDEAO (UEMOA et ZMAO) ne connaissent pas encore les efficiences attendues de l'intégration économique.

En présence de ses nombreuses interrogations et inquiétudes quant à l'avenir de la zone monétaire de la CEDEAO, il importe de faire l'état de l'expérience de la Communauté économique des états de l'Afrique de l'ouest (CEDEAO) en matière d'intégration monétaire avant de projeter une vision sur l'orientation de l'intégration monétaire dans la CEDEAO vers l'intégration monétaire africaine.

Ce document retrace les expériences vécues dans le cadre du Programme d'intégration monétaire de la CEDEAO depuis sa mise sur pied, en 1987, en espérant que ces expériences seront profitables à d'autres sous-régions d'Afrique. Il donne une vue d'ensemble du processus d'intégration monétaire en Afrique de l'Ouest avant d'exposer les objectifs du programme. Ensuite, il met en exergue l'état d'avancement des différents volets du programme, en soulignant, bien sûr, les obstacles qui entravent sa mise en œuvre mais aussi les mesures prises pour faciliter la réalisation de l'objectif ultime. Enfin il dégage une vision sur l'orientation de l'intégration monétaire dans la CEDEAO.

Comme indiqué plus haut, la stratégie d'accélération a tiré en longueur, suscitant ainsi des inquiétudes par rapport à la lenteur de la mise en œuvre du programme de coopération monétaire.

Après avoir exprimé son insatisfaction devant la lenteur de la mise en œuvre, la Conférence des Chefs d'États, en a appelé, à l'occasion de son sommet du 15 juin 2007 à Abuja, à une révision de la stratégie d'accélération, laissant

la porte ouverte à son éventuel remplacement par une approche unique. Dans ce contexte, le Secrétariat conjoint de l'AMAO et de la commission de la CEDEAO a réuni les institutions régionales afin d'étudier les propositions sur les options alternatives que sont: l'approche de la voie unique, l'approche Big Bang, l'approche de l'adhésion à l'UEMOA, l'approche de l'élargissement du Projet de ZMAO et l'approche de la Masse Critique.

Aujourd'hui l'AMAO se propose de réfléchir sur un Plan Stratégique visant l'accélération du processus d'intégration monétaire en Afrique de l'Ouest. Ce Plan stratégique indique que le processus de création monétaire passera nécessairement par différentes phases notamment une période de stabilisation des taux de change et une étape de passage à la monnaie unique assortie d'un calendrier précis. L'adoption du cadre juridique va concerner la préparation de l'ensemble des documents, instruments et procédures pour la mise en place de la zone monétaire unique de la CEDEAO, et les reformes institutionnelles porteront essentiellement sur la mise en place du Conseil Monétaire, la création de la Banque centrale de la CEDEAO et des autres institutions financières pertinentes.

L'Agence Monétaire de l'Afrique de l'Ouest (AMAO) est d'avis que ce genre de réunions organisées au niveau international constitue le cadre idéal pour des échanges d'idées et d'expériences sur une base périodique, d'autant plus qu'elles offrent un mécanisme d'apprentissage utile pour faciliter la réalisation effective de l'intégration des différents programmes sous-régionaux du continent africain.

Ainsi, dans sa communication faite à l'occasion de ce Premier Congrès des Economistes africains, l'AMAO a procédé à l'analyse approfondie des expériences spécifiques du Programme de coopération monétaire de la CEDEAO. Les contraintes ne sont pas particulières à la sous-région ouest-africaine, car on constate que la plupart des pays du continent africain ont des caractéristiques économiques et sociales similaires.

Les difficultés rencontrées dans la plupart des regroupements pour l'intégration et la coopération sous-régionales en Afrique ne sont pas insurmontables. Avec l'adoption d'une bonne gouvernance économique et politique par nos pays respectifs et avec l'option résolue en faveur de la coopération régionale, appuyée par un engagement national idoine, nous avons bon espoir de pouvoir accélérer le rythme de développement du continent africain pour le bien-être de nos peuples.

Dans la perspective de l'actuelle mondialisation rapide de la structure économique du monde, les régions africaines n'ont d'autres alternatives que de pousser de l'avant à l'aide de nos programmes de coopération et d'intégration régionales. Si les «géants» pays du Nord ont senti la nécessité de renforcer leur coopération, les pays du Sud devront trouver les stratégies idoines pour surmonter nos difficultés et développer nos économies afin de rester compétitifs dans l'arène internationale.

Ainsi, pour la mise en place de la monnaie commune en Afrique, un certain nombre de recommandations peuvent être formulées.

i. D'abord, il faut nécessairement élaborer un Plan d'Actions. Il s'agira particulièrement:

- D'élaborer un Programme précis pour la création de la monnaie commune en Afrique;

- De définir les tâches et actions fondamentales (prioritaires) pour la création de la monnaie commune en Afrique: parmi lesquelles toutes les tâches d'harmonisation des statistiques, des systèmes de paiements, des politiques économiques, etc.;

- De fixer des échéances (un agenda) pour chacune des tâches ou action à entreprendre dans le processus;

- De constituer des Groupes de travail composés de spécialistes qui peuvent venir de toutes les composantes de la société (Autorités Gouvernementales, Banques, Université, Syndicat, etc.).

ii. Par ailleurs, il serait utile de revoir certaines considérations sur les principes de base du processus d'intégration monétaire actuel en Afrique particulièrement et travailler sur une stratégie commune et précise de coopération

monétaire en Afrique. Ces (deux) principes de base se retrouvent dans:

- L'Analyse faite sur les critères de reconnaissance d'une zone monétaire optimale: Ici, il faut comprendre qu'aucune zone monétaire ne peut être optimale au regard des critères traditionnels et modernes de reconnaissance d'une zone monétaire optimale. De tels critères, qui définissent un cadre de référence théorique, constituent des conditions idéales vers lesquelles il est souhaitable de diriger l'union monétaire, laquelle ne les attendra pas forcément;

- Les exigences en termes de respect des critères de convergence macroéconomique: dans ce cas, il est important d'étudier la pertinence des critères de convergence. En d'autres termes, il serait nécessaire dans ce processus de déterminer le niveau de convergence (ou de divergence) idéal (acceptable) pour nos économies. La convergence à l'absolue, c'est-à-dire la convergence de tous les pays à la fois sur une plus ou moins longue période, est quasiment irréalisable. Tout en ayant à l'idée la nécessité d'une discipline collective, il faut considérer la convergence comme un processus continu même au-delà de l'établissement de la monnaie commune, mais non une condition strictement obligatoire sans laquelle (sans l'atteinte des cibles par tous les pays), tout processus de création monétaire est impossible.

iii. Evaluer la pertinence du modèle d'intégration régionale basé sur le développement des échanges (modèle privilégié actuellement) par rapport au modèle fondé sur le développement du secteur financier (et des services). Cette seconde option permettrait, par le développement de la finance (libéralisation du capital), de stimuler la production par exemple.

iv. Donner davantage de l'importance au rôle que la monnaie peut jouer dans nos économies.

v. Eviter autant que possible la création d'une monnaie (sous-régionale) et ou d'institutions transitoires, de courte durée et coûteuse.

vi. A moyen ou long terme, il faut impérativement procéder

(au chapitre des harmonisations) à l'harmonisation ou la fusion des systèmes de paiements des différents pays ou zones économiques africaines. Pour atteindre cet objectif, les actions suivantes sont à entreprendre:

- La modernisation des systèmes de télécommunication à travers une technologie de pointe permettant la promotion des paiements scripturaux, l'utilisation de plus en plus accrue et facile du système bancaire par les opérateurs économiques et le grand public;

- Le développement des infrastructures de transport et de production d'électricité sans lesquelles la promotion des systèmes de paiement serait aléatoire;

- L'interconnexion du réseau bancaire de la sous-région en vue de faciliter les paiements transfrontaliers;

- Le renforcement de la lutte contre la pauvreté dans nos pays ainsi que l'éducation et la formation des populations à l'utilisation du système bancaire et financier;

- La sensibilisation et l'incitation des opérateurs du secteur informel à l'utilisation du secteur bancaire à travers, entre autres, l'allègement des procédures, la réduction des charges, la formation.

INTRODUCTION

L'accélération de la mondialisation de l'économie constitue l'une des caractéristiques majeures des mutations de ces dernières années. Ce phénomène appelé à s'intensifier est générateur d'opportunités considérables pour les agents économiques les plus performants et pour les Etats qui auront rendu leur espace économique attractif pour les investisseurs nationaux comme étrangers. A contrario, elle est porteuse de risques pour les autres opérateurs et les Etats qui ne se seront pas adaptés à la nouvelle donne, s'exposant à de sérieux risques de marginalisation. A cet égard, il importe de souligner qu'un consensus commence à émerger sur les vertus de l'intégration monétaire régionale, désormais considérée comme un amortisseur efficace des effets systémiques éventuels du processus de globalisation financière. C'est dire que, dans le cas de la CEDEAO, une intégration monétaire effective, sans toutefois en

constituer une condition suffisante, est une exigence qui serait de nature à favoriser une accélération du processus d'intégration des économies des pays membres, dont force est de reconnaître que le bilan est mitigé, trente trois (33) ans après la signature, en 1975, de son traité constitutif.

Toutefois, au regard des aspects fondamentaux de l'intégration régionale, l'espace CEDEAO se présente aujourd'hui comme une zone économique assez bien organisée lorsqu'on la compare à d'autres communautés économiques régionales en Afrique. En effet, depuis sa création en 1975, la CEDEAO a réalisé des étapes importantes dans la matérialisation de l'intégration économique.

Cependant, la CEDEAO éprouve encore des difficultés dans le cadre de la réalisation de l'intégration monétaire malgré l'adoption il y a plus de vingt ans du Programme de Coopération Monétaire de la CEDEO (PCMC) et en dépit d'une volonté évidente d'accélérer la création de la monnaie unique régulièrement renouvelée par les leaders politiques de la région.

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En présence de ses nombreuses interrogations et inquiétudes quant à l'avenir de la zone monétaire de la CEDEAO, il importe de faire l'état de l'expérience de la Communauté économique des états de l'Afrique de l'ouest (CEDEAO) en matière d'intégration monétaire avant de projeter une vision sur l'orientation de l'intégration monétaire dans la CEDEAO.

Ce document retrace les expériences vécues dans le cadre du Programme d'intégration monétaire de la CEDEAO depuis sa mise sur pied, en 1987, en espérant que ces expériences seront profitables à d'autres sous-régions d'Afrique. Il donne une vue d'ensemble du processus d'intégration monétaire en Afrique de l'Ouest avant d'exposer les objectifs du programme. Ensuite, il met en exergue l'état d'avancement des différents volets du programme, en soulignant, bien sûr, les obstacles qui entravent sa mise en œuvre mais aussi les mesures prises pour faciliter la réalisation de l'objectif ultime. Enfin il dégage une vision sur l'orientation de l'intégration monétaire dans la CEDEAO.

PRESENTATION DE LA COMMUNAUTE ECONOMIQUE DES ETATS DE L'AFRIQUE DE l'OUEST (CEDEAO)

L'accélération de la mondialisation des économies ainsi que la perception par les Chefs d'Etat et de Gouvernement de la sous-région ouest africaine de la nécessité de s'organiser pour mieux faire face à ce phénomène, ont décidé, en mai 1975, de créer la Communauté Economique des Etats de l'Afrique de l'Ouest (CEDEAO). L'objectif visé par cette communauté étant de renforcer la coopération entre ses Etats membres, dans la perspective de création d'une union économique et monétaire pouvant contribuer à relever le niveau de vie de ses populations à travers un développement accru de leurs échanges. A cet effet, le Traité portant création de la CEDEAO a prévu, entres autres, la libéralisation des échanges, la création d'une union douanière et d'un marché commun etc.

A l'heure actuelle, deux institutions sous-régionales, l'UEMOA et la ZMAO, fonctionnent et sont toutes parties prenantes au programme global de création d'une monnaie unique pour la CEDEAO piloté par l'AMAO. Elles disposent de leur propre organisation institutionnelle comprenant, selon le cas, un Comité technique, un Comité des Gouverneurs, un Conseil d'Administration, un Conseil de convergence, un Conseil des ministres et une Conférence des chefs d'Etat et de Gouvernement.

En marge de ces deux grandes zones (UEMOA et ZMAO), nous avons le Cap Vert et le Liberia qui continuent, bien qu'étant membres de la CEDEAO, d'évoluer séparément pour des raisons diverses.

L'Union Economique et Monétaire Ouest Africaine (UEMOA)

Comme rappelé plus haut, la majorité des pays francophones d'Afrique de l'Ouest (Bénin, Burkina-Faso, Côte d'Ivoire, Guinée Bissau, Mali, Niger, Sénégal et Togo) ont préféré rester dans la zone franc[1] après leur indépendance. C'est dans ce cadre que l'Union Monétaire Ouest Africaine (UMOA) a été mis en place en 1962. Ce nouveau mécanisme monétaire, placé sous les auspices de la France, a été renforcé par la suite et son champ d'application étendu à d'autres composantes de la politique économique, conduisant à la création de l'Union économique et monétaire ouest-africaine (UEMOA) en 1994

La Zone Monétaire de l'Afrique de l'Ouest (ZMAO)

L'idée de création de la Zone Monétaire de l'Afrique de l'Ouest (ZMAO) dérive, principalement, des résultats de la revue effectuée en 1999 du PCMC qui a fait le constat de la faiblesse des progrès réalisés dans sa mise en œuvre. En effet, les Etats membres avaient d'énormes difficultés à atteindre les objectifs quantitatifs et qualitatifs nécessaires à toute intégration monétaire crédible et les contrastes qui existaient entre les performances des différents pays étaient très marqués. C'est ce qui a amené les Chefs d'Etat et de Gouvernement de la CEDEAO, lors de leur 22ème Sommet tenu en Décembre 1999 à Lomé, au Togo, à décider de l'abandon de la stratégie d'une convergence d'ensemble, jusqu'alors observée, pour opter pour une stratégie d'approche accélérée ou «fast track» en matière d'intégration monétaire. La conséquence de cette décision fut la prorogation de l'échéance de la date de création de la monnaie unique de 2000 à 2004. Suite à cette création, l'Institut Monétaire de l'Afrique de l'Ouest (IMAO) a été mis en place en janvier 2001 à Accra, au Ghana, en vue d'exécuter un programme spécial visant à rendre cette zone relativement homogène et prête à fusionner avec la zone UEMOA dans le cadre d'un ensemble plus élargi d'union monétaire de la CEDEAO.

LE PROGRAMME DE COOPERATION MONETAIRE DE LA CEDEAO (PCMC)

Les Chefs d'Etat et de Gouvernement ont lancé l'idée de sa création en mai 1983 à Conakry en Guinée. Ainsi ont-ils décidé de lui consacrer toute l'attention nécessaire en tant qu'étape essentielle de l'intégration. Ainsi, un Programme de coopération monétaire fut institué, en juillet 1987, avec l'objectif ultime de création d'une monnaie unique gérée par une Banque centrale commune.

Contexte historique du PCMC

Historiquement, l'intégration économique et monétaire de l'Afrique de l'Ouest remonte à l'ère coloniale. Avant les indépendances, les territoires coloniaux (anglophones et francophones) étaient liés à leurs métropoles respectives par des arrangements monétaires qui leur permettaient d'utiliser la même monnaie sur un espace commun. Ainsi, dans l'espace anglophone, la Gambie, le Ghana, le Nigeria et la Sierra Leone, étaient régis par un arrangement conclu avec la **West African Currency Board,** qui était gérée par la Grande Bretagne et avait en charge l'émission et le remboursement de la Livre Sterling en billets de banque et en pièces dans ces quatre pays. Quant aux pays francophones de la sous-région, en l'occurrence le Bénin (Dahomey à l'époque), le Burkina Faso (ancienne Haute-Volta), la Côte d'Ivoire, la Guinée, le Mali, le Niger, le Sénégal et le Togo, ils avaient un arrangement similaire avec la France qui reposait sur l'utilisation du franc CFA comme monnaie commune de leur espace.

Toutefois, l'arrangement des pays anglophones fut supprimé au début des années 1960 au lendemain des indépendances tandis que l'arrangement des pays francophones s'était consolidé et même transformé en union monétaire en 1962. La Guinée s'est retiré du système, en 1960, pour créer sa propre monnaie. Par contre, la Guinée Bissau, pays lusophone, y a adhéré et est membre, à part entière, de cette union depuis 1997.

Objectif du Programme de Coopération Monétaire de la CEDEAO (PCMC)

Le Programme de coopération monétaire de la CEDEAO (PCMC) vise comme objectif ultime la création d'une zone monétaire utilisant une monnaie unique gérée par une banque centrale commune.

Ceci, à travers l'adoption, par ses membres, de mesures assurant une convergence des politiques économiques nationales et facilitant la mise en place d'un système monétaire et financier harmonisé et d'institutions de gestion communes. A ce titre, les pays membres se doivent:

- de respecter les critères de convergence macroéconomique établis;
- d'harmoniser leurs politiques budgétaires, monétaires et financières;
- d'harmoniser leurs règlementations en matière de taux de change et d'adopter un régime de change déterminé par le marché;
- de créer un marché communautaire efficace grâce à la libéralisation des échanges, en supprimant les barrières tant tarifaires que non tarifaires;
- de libéraliser leurs marchés monétaires et de capitaux et de faciliter la création de bourses régionales de valeurs mobilières afin de stimuler l'épargne et la croissance.

Afin d'atteindre l'objectif d'intégration monétaire, un mécanisme de surveillance multilatérale a été mis en place en vue d'assurer une coordination très étroite des politiques économiques des Etats membres et la convergence des économies nationales (Décision A/DEC.17/12/01 du 21 décembre 2001 de la Conférence des Chefs d'Etat et de Gouvernement des pays membres de la CEDEAO). Les organes du mécanisme sont les suivants:

a. *le Conseil de convergence, comprenant les Ministres des Finances et les Gouverneurs des Banques Centrales, qui a vocation à assurer le suivi des politiques et performances macroéconomiques;*

b. *le Comité de suivi technique, constitué des directeurs des études des Banques centrales et les hauts responsables des ministères des Finances, qui est responsable de l'établissement de rapports semestriels sur les performances macroéconomiques des Etats membres aux fins de présentation au Conseil de convergence;*

c. *l'Agence Monétaire de l'Afrique de l'Ouest (AMAO) et la Commission de la CEDEAO, qui sont conjointement responsables de la compatibilité du programme de convergence mis en œuvre par les Etats membres; et*

d. *les Comités Nationaux de Coordination qui aident l'AMAO et la CEDEAO à recueillir et à traiter les données portant sur les Etats membres.*

EXAMEN DES DIFFERENTS VOLETS DU PCMC

Les différents volets du Programme de Coopération Monétaire de la CEDEAO peuvent, d'une façon générale, être classés comme suit: les conditions de convergence macroéconomique; le mécanisme de surveillance multilatérale CEDEAO; le mécanisme de change CEDEAO et l'intégration des systèmes de paiement au sein de la CEDEAO.

Convergence macroéconomique

La convergence macroéconomique, qui est une composante essentielle du Programme de coopération monétaire de la CEDEAO (PCMC), accorde la priorité aux domaines suivants: la stabilité des prix, l'assainissement des finances publiques, la maîtrise du financement monétaire du déficit public et le maintien de niveaux appropriés de réserves extérieures brutes[2].

Le respect des critères permet d'évaluer les progrès en vue de la réalisation de la convergence macroéconomique. Les critères de convergence adoptés par la Conférence des chefs d'Etat et de Gouvernement sont classés en critères primaires et secondaires[3], comme suit:

Critères primaires

i.   Ratio du déficit budgétaire/PIB (hors dons) ≤ 4 pour cent;

ii.   Taux d'inflation ≤ 5 pour cent;

iii. Financement des déficits budgétaires par la Banque centrale ≤ 10 pour cent des recettes fiscales de l'année précédente;

iv.   Réserves extérieures brutes ≥ 6 mois de couverture des importations.

Critères secondaires

i.   Interdiction d'accumuler de nouveaux arriérés et apurement de tous les arriérés existants;

ii.   Ratio recettes fiscales/PIB ≥ 20 pour cent;

iii. Ratio masse salariale/recettes fiscales totales ≤ 35 pour cent;

iv.   Ratio investissement public financé par les ressources internes/recettes fiscales ≥ 20 pour cent;

v.   Taux d'intérêt réel positif; et

vi.   Stabilité du taux de change réel.

Le bilan de l'exécution du PCMC, effectué en 1999, a révélé que des progrès, certes, ont été accomplis au titre de la convergence macroéconomique mais que ceux-ci étaient insuffisants pour assurer le lancement de l'union monétaire en 2000. Hormis le problème de l'instabilité macroéconomique et l'incidence des chocs externes, le problème de l'instabilité politique, dans certains pays, a figuré au nombre des facteurs qui ont sous-tendu ces résultats modestes.

Aussi, la Conférence des chefs d'Etat et de Gouvernement, au cours de sa session tenue à Lomé en décembre 1999, a-t-elle décidé de repousser l'échéance de 2000 à 2004. A cette même occasion, la Conférence a adopté un certain nombre de mesures visant à accélérer le processus d'intégration, notamment l'intensification du processus de convergence macroéconomique et l'adoption d'une approche dite accélérée pour la mise en œuvre rapide du processus d'intégration.

Ainsi fut adoptée l'initiative accélérée ou double approche dans le cadre de la mise en œuvre du PCMC. L'approche accélérée repose sur une stratégie de création d'une seconde union monétaire (ZMAO) transitoire appelée à fusionner avec l'UEMOA, à terme, pour former une union monétaire plus large regroupant l'ensemble des quinze pays de la CEDEAO. Pour le moment, le lancement de la monnaie unique de la ZMAO n'a pas encore pu se faire, la mise en circulation de la monnaie unique de la seconde zone, l'ECO, a été reportée à plusieurs reprises. La persistance des problèmes budgétaires et l'instabilité politique ont été identifiées comme étant des obstacles majeurs à la réalisation de la convergence.

La prédominance des problèmes budgétaires constitue la plaie qui gangrène l'environnement macroéconomique, entraînant l'incapacité des Etats membres à satisfaire aux critères de convergence arrêtés. La taille trop souvent importante des déficits budgétaires nuit à l'épargne et à l'investissement nationaux, au compte courant et à l'efficacité de la politique monétaire. Le mode de financement du déficit met en lumière des différents types de distorsions qui occasionnent l'inflation par la demande, la dépréciation du taux de change et la hausse des taux d'intérêt.

Les conflits civils et l'instabilité politique entravent également les actions menées en vue de la convergence. La baisse de l'activité économique, qui a pour corollaire le chômage, les tensions sociales et le faible degré de démocratisation se sont combinés pour faire de l'Afrique de l'Ouest une zone de conflit civil et d'instabilité politique. Les changements de régime à la faveur des coups d'Etat ont été monnaie courante au cours des dernières décennies et presque tous les pays de la sous-région qui ont connu ce type de changement politique. Un environnement instable de ce genre a toutes les chances d'engendrer une instabilité macroéconomique. Quelle que soit la qualité des politiques formulées, leur mise en œuvre sera vouée à l'échec si le nécessaire climat de paix et de stabilité n'est pas assuré. Ce problème a considérablement affecté le rythme et la direction de la coopération régionale et du programme d'intégration de la CEDEAO.

La prise de conscience de la nécessité de garantir la stabilité sociale et politique pour pouvoir mener le processus de développement de la sous-région a obligé la CEDEAO à prendre un certain nombre d'initiatives destinées à créer un environnement paisible. Au nombre de ces mesures, il faut noter la lutte contre la corruption, l'adoption de protocoles sur la démocratie, sur la bonne gouvernance et sur la défense, et la création d'un mécanisme de prévention, de gestion et de résolution des conflits. La contribution appréciable du Groupe CEDEAO de suivi de la paix (ECOMOG) à la restauration de la paix dans certains pays ouest africains témoigne amplement des efforts entrepris par la CEDEAO pour garantir un environnement paisible qui facilite le processus d'intégration.

En somme, malgré les différents reports et les difficultés dans la réalisation de la convergence, il importe de nuancer le bilan de la mise en œuvre du PCMC. En effet, au-delà des réalisations quantitatives, une mobilisation de plus en plus croissante est perceptible autour des idéaux de l'intégration monétaire. Plus particulièrement, les populations sont de plus en plus mobilisées en faveur de l'avènement d'une monnaie commune dans l'espace CEDEAO. Cette situation constitue une donne importante qui augure de meilleures perspectives pour le processus d'intégration monétaire dans la mesure où elle constitue une source nouvelle de pression exercée sur les autorités communautaires les obligeant à accélérer le processus. S'y ajoute la volonté politique qui est de plus en plus manifeste. Le volontarisme des dirigeants de la CEDEAO pour la création de la monnaie unique est de plus en plus marqué.

Aperçu sur les performances en matière de convergence macroéconomique dans la CEDEAO.

L'évolution vers la convergence macroéconomique est demeurée mitigée dans la CEDEAO et diffère au cours de la période considérée, selon les pays ou les zones (UEMOA ou ZMAO). Certains pays membres ont éprouvé des difficultés à maintenir leur performance en ce qui concerne les objectifs atteints au cours des années précédentes.

Les Tableaux 1 et 2 donnent un résumé du nombre de pays qui ont atteint les critères, ainsi que le nombre total de critères (tant primaires que secondaires) atteints par chaque pays. Il convient de souligner que le Tableau 2 ne prend pas en compte le critère des arriérés intérieurs, en raison de l'absence de réponses dans certains pays.

Tableau 1: Nombre de Pays qui ont rempli les critères de convergence au sein de la CEDEAO au cours de la période 2000-08.

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Critères primaires									
Déficit budgétaire/PIB	6	6	5	5	3	5	6	6	6
Inflation	11	9	10	10	9	9	8	7	10
Financement du déficit budgétaire par la banque centrale	11	13	11	11	14	15	13	14	15
Réserves extérieures brutes	10	10	9	9	9	9	9	9	9
Critères secondaires									
Arriérés intérieurs[4]	n.d.	5	4	5	4	4	7	8	8
Recettes fiscales/PIB	1	0	0	0	2	2	2	3	3
Masse salariale/recettes fiscales	6	6	5	8	5	7	7	8	8
Investissements publics/recettes fiscales	6	6	5	5	7	6	7	7	7
Taux d'intérêt réels positifs	12	7	8	9	7	7	7	7	9
Stabilité du taux de change réel	1	9	3	0	0	12	12	13	14

Source: AMAO

Concernant la performance du principal critère primaire, le ratio déficit budgétaire/PIB, seulement six (6), sur les quinze ont atteint ce critère en 2007. Le nombre de pays qui ont réalisé le critère relatif a l'inflation a chuté à sept (7) au cours

de la période considérée, contre huit (8) en 2006. Quatorze (14) pays ont atteint l'objectif requis pour le financement du déficit budgétaire par la banque centrale, contre 13 en 2006. S'agissant des réserves extérieures brutes, neuf pays (le Nigeria et les huit pays de l'UEMOA) ont pu atteindre cet objectif au cours de la période.

La performance au titre des critères secondaires a également été mitigée, d'une manière générale. Seuls trois (3) pays ont atteint l'objectif recettes fiscales/PIB au cours de la période considérée. Etant donné que la masse salariale absorbe l'essentiel des recettes fiscales générées au plan interne dans la plupart des pays, la réalisation de ce critère s'est également avérée difficile. Il convient de prendre en compte l'incidence des taux d'intérêt réels positifs dans la majorité des pays en 2007. D'une manière générale, les taux de change réels sont demeurés stables dans les pays membres et ce critère a été rempli par treize (13) pays à la fin de 2007.

Le Tableau 2 montre qu'aucun pays n'a encore pu respecter tous les critères de convergence primaires et secondaires. A la fin de 2007, la meilleure performance a été réalisée par le Bénin avec huit (8) objectifs atteints. Ce pays est suivi par le Mali qui a satisfait à sept (7) critères. Le Burkina Faso, la Côte d'Ivoire, le Niger, le Sénégal et le Togo ont réussi chacun six critères de convergence. Pour leur part, le Cap Vert, la Guinée et le Nigeria ont obtenus chacun cinq (5) critères. Quant à la Gambie, elle a réussi quatre (4) critères. De leur côté, la Guinée Bissau et la Liberia ont satisfait à trois critères. Enfin, le Ghana et la Sierra Leone n'ont réalisé que deux (2) critères de convergence chacun.

Tableau 2: Nombre total de critères de convergence atteints[4]

PAYS/PERIODE	2000	2001	2002	2003	2004	2005	2006	2007	2008*
BENIN	5	6	6	6	5	5	4	8	8
BURKINA FASO	5	5	4	5	5	6	6	6	6
CAP-VERT	2	4	2	3	3	5	4	5	4
COTE D'IVOIRE	5	5	4	5	5	5	6	6	6
GAMBIE	7	2	0	1	4	5	6	4	6
GHANA	2	1	0	1	2	2	3	2	4
GUINEE	1	4	3	1	1	3	2	5	4
GUINEE-BISSAU	3	5	5	4	5	5	5	3	5
LIBERIA	7	4	4	4	2	3	3	3	3
MALI	6	5	5	6	6	7	6	7	7
NIGER	4	5	5	4	5	5	7	6	7
NIGERIA	5	4	3	4	4	6	5	5	6
SENEGAL	6	8	7	7	6	7	6	6	8
SIERRA LEONE	3	3	4	0	1	2	1	2	2
TOGO	4	5	5	6	5	5	6	6	6

Source: AMAO

Le niveau élevé des déficits budgétaires est demeuré un défi majeur de la politique de gestion macroéconomique dans les Etats membres de la CEDEAO en 2007, en dépit de quelques améliorations. Six (6) pays, à savoir le Bénin, la Côte d'Ivoire, la Gambie, la Guinée, le Liberia, le Nigeria, ont atteint cet objectif à la fin 2007, contre sept (7) à la fin de 2006.

La bonne performance de la production agricole dans la plupart des Etats a contribué à atténuer l'impact des poussées inflationnistes dues à l'envolée des cours des produits pétroliers et de leurs produits dérivés en 2007. Sept (7) pays (Bénin, Burkina Faso, Cap-Vert, Côte d'Ivoire, Mali, Niger et Togo) ont atteint cet objectif au cours de la période considérée contre 8 pays au cours de l'année précédente.

Concernant le critère relatif au financement du déficit budgétaire par la banque centrale, il est demeuré

satisfaisant au cours de la période, dans la mesure où 14 pays ont atteint cet objectif. Cette performance pourrait s'améliorer en 2008 pour l'ensemble des pays respectant la norme, comme ce fut le cas en 2005.

L'accumulation des réserves extérieures brutes à fin 2007 au sein de la CEDEAO s'est maintenue avec les huit pays de l'UEMOA et le Nigeria qui remplissent ce critère comme d'habitude. Le faible niveau des réserves au Cap-Vert, en Guinée et au Liberia demeure une préoccupation.

Concernant l'accumulation d'arriérés intérieurs, aucun pays de l'UEMOA n'a enregistré une accumulation d'arriérés intérieurs au cours de la période considérée. Les autres pays de la ZMAO, le Cap-Vert et le Liberia sont exhortés à fournir les données et informations pertinentes pour l'évaluation de ce critère.

La performance au niveau des recettes fiscales est demeurée faible durant la période considérée. Seuls trois pays (Cap-Vert, Ghana et Sénégal) ont satisfait à ce critère en 2007, contre deux pays ces dernières années. Ceci nécessite une réflexion plus approfondie sur le caractère optimal des taux d'imposition mais aussi sur l'efficacité actuelle de l'Administration fiscale dans la majorité des pays. Les mêmes pays pourraient remplir ce critère en 2008.

La masse salariale, qui représente une part non négligeable des dépenses renouvelables dans les Etats membres de la CEDEAO, fait également l'objet d'un suivi périodique afin de mettre en évidence son impact sur le budget. En fin décembre 2007, huit (08) pays (Bénin, Gambie, Guinée, Mali, Niger, Nigeria, Sénégal et Togo) avaient atteint cet objectif et ce niveau de performance sera maintenu en 2008.

Le critère, relatif au ratio investissement public en pourcentage des recettes fiscales (≥ 20 %), qui assure le suivi de l'utilisation des ressources internes en vue de satisfaire les besoins d'investissement des pays membres, a connu la même évolution que le critère de la mobilisation des recettes fiscales, bien que sa performance soit légèrement meilleure en ce qui concerne le nombre de pays ayant atteint l'objectif. Sept (7) pays (Bénin, Burkina Faso, Ghana, Mali, Niger, Nigeria et Sénégal) ont satisfait à ce critère en 2007. En fin 2008, les mêmes pays pourraient maintenir leur performance en ce qui concerne ce critère.

Ces dernières années, les taux d'intérêt réels ont été constamment négatifs dans certains pays en dépit des efforts déployés en vue de résoudre le problème connexe des taux d'inflation élevés. La prévalence des taux d'intérêt réels négatifs est incompatible avec la mobilisation de l'épargne intérieure et l'intermédiation financière qui sous-tendent l'importance du critère en tant que variable macroéconomique clé. Huit (8) pays (Bénin, Burkina Faso, Cap-Vert, Côte d'Ivoire, Guinée, Mali, Sierra Leone et Togo) ont réalisé ce critère en 2007. Il est attendu que neuf (9) pays respectent ce critère en 2008.

Enfin, concernant la stabilité des taux de change réel (a +ou – 5%), il faut noter que deux principaux régimes de taux de change co-existent au sein de la CEDEAO: le régime de taux de change fixe (vis-à-vis de l'euro) pour le Cap-Vert et les huit pays de l'UEMOA, et le régime de taux de change flexible pour le Liberia et les pays de la ZMAO. La coexistence des deux régimes de taux de change rend peu pertinente toute évaluation fondée sur l'évolution des taux de change nominaux. C'est la raison pour laquelle les analyses fondées sur l'évolution du taux de change réel sont plus appropriées dans ce cas de figure. Ainsi, le taux de change réel de la plupart des économies est demeuré stable en 2007. Avec une marge de fluctuation de ± 5 %, treize (13) pays remplissent le critère, contre 12 pays l'année précédente.

Mécanisme de surveillance multilatérale

Le concept de surveillance multilatérale suppose le suivi continu des politiques économiques et financières des Etats membres pour garantir la meilleure coordination et la plus grande convergence possible entre les économies nationales. L'Agence est confrontée à un certain nombre de problèmes dans l'exercice de sa fonction de surveillance multilatérale, les problèmes les plus cruciaux étant l'absence de données statistiques standardisées, le manque d'engagement politique et la faiblesse des arrangements

institutionnels dans les pays membres.

S'agissant des impératifs en matière de statistiques, il convient de souligner qu'une évaluation effective de la qualité du respect des indicateurs de convergence nécessite l'utilisation de statistiques économiques comparables et fiables qui garantirait la crédibilité du mécanisme de surveillance multilatérale. Il est toutefois pertinent de noter que les méthodes de calcul des agrégats statistiques diffèrent d'un pays à l'autre de la sous-région, en particulier en ce qui concerne le calcul, la compilation et la présentation de l'inflation et des comptes nationaux. Concernant l'inflation, la couverture géographique et le contenu du panier de la ménagère diffèrent d'un pays à l'autre.

On n'insistera jamais assez sur la nécessité d'une harmonisation des cadres juridique, comptable et statistique, des méthodologies et de la définition des agrégats macroéconomiques dans les différents pays de l'espace CEDEAO. Des efforts louables ont été faits, au cours de ces dernières années, dans le domaine de la standardisation.

Un autre problème relatif à la surveillance multilatérale est le manque d'engagement politique et l'existence d'arrangements institutionnels précaires. Le processus d'intégration ne s'est pas vu accorder la priorité absolue dans la plupart des pays membres, dans la mesure où l'engagement politique montré en faveur du programme n'a pas été appuyé de manière appropriée par une rapide mise en application des politiques essentielles.

Afin de faciliter la réalisation de la convergence souhaitée, il a été demandé aux Etats membres de prendre en compte les critères de convergence lorsqu'ils élaborent leurs programmes économiques nationaux, en particulier lors de la préparation des budgets publics. En outre, chaque pays était censé mettre sur pied un comité national de coordination, organe chargé d'organiser et de mettre en œuvre les volets techniques du programme d'intégration au niveau des pays et de travailler en collaboration avec la commission de la CEDEAO et l'AMAO dans les domaines de la collecte, du traitement, de l'analyse des données, et de la préparation de rapports d'évaluation périodiques portant sur les performances macroéconomiques de ces pays. Bien que les Autorités soient au courant de ces exigences, seuls quelques Etats membres ont fait montre de leur engagement en incorporant les cibles de convergence dans leurs budgets et leurs programmes nationaux de développement.

Le mécanisme de change CEDEAO (MCC)

Le prochain volet du PCMC, a trait au mécanisme de change de la CEDEAO. L'existence de regroupements sous-régionaux dans l'espace CEDEAO, en particulier la zone CFA (UEMOA) et la seconde zone monétaire (ZMAO), avec des orientations quelque peu différentes, crée un problème administratif lorsqu'il s'agit de faire fonctionner le mécanisme de change de la CEDEAO. Dans le cadre du programme de coopération monétaire, les pays membres sont tenus d'harmoniser leurs réglementations des changes et d'accéder à un mécanisme de change de la CEDEAO.

Il est, toutefois, pertinent de noter que les pays de la ZMAO ont des régimes de change flexibles dans lesquels les taux bilatéraux sont déterminés de manière immuable, alors que l'UEMOA fonctionne avec un système de change à parité fixe déterminé de manière administrative. En outre, la ZMAO a, depuis avril 2002, introduit un mécanisme de change en vertu duquel les différents taux de change sont référés au dollar des Etats Unis, alors que le franc CFA de l'UEMOA et l'Escudo cap-verdien sont ancrés à l'Euro sur la base d'un taux de parité fixe.

Malgré cette dichotomie entre les deux unions monétaires de la sous-région, l'Agence monétaire de l'Afrique de l'Ouest est en train d'introduire un mécanisme de change de la CEDEAO (MCC) qui propose un système de taux de change stables par rapport à l'unité de compte de l'Afrique de l'Ouest (UCAO), rattachée au DTS du FMI pour une simple raison de stabilité. L'obstacle manifeste qui se dresse devant l'Agence est de taille, car il s'agit d'amener ces deux blocs à assouplir leurs positions respectives au profit du mécanisme de change de la CEDEAO qui leur serait commun.

L'intégration des systèmes de Paiement

L'importance du développement des systèmes de paiement n'est plus à démontrer dans le contexte actuel de globalisation des marchés financiers caractérisée par des progrès importants en matière d'innovations technologiques et par l'accroissement des flux de capitaux et d'investissements.

Rappel de quelques initiatives en matière de mécanisme et moyens de paiement au sein de la CEDEAO

a La Chambre de Compensation de l'Afrique de l'Ouest (CCAO)

Au cours des années 70, l'Association des Banques Centrales Africaines (ABCA) avait initié la mise en place de systèmes d'accords multilatéraux de paiements dans les différentes sous-régions de l'Afrique en vue de faciliter les échanges entre leurs Etats membres.

C'est dans ce cadre que la Chambre de compensation de l'Afrique de l'Ouest de l'Afrique de l'Ouest (CCAO) fut créée le 25 juin 1975 par les Banques Centrales de douze pays, à savoir le Bénin, le Burkina-Faso, la Gambie, le Ghana, la Côte d'Ivoire, le Libéria, le Mali, le Niger, le Nigeria, le Sénégal, la Sierra Leone et le Togo.

Le mécanisme de compensation mis en place à travers la CCAO était basé sur un accord multilatéral de paiement qui mettait en jeu l'Agence Monétaire de l'Afrique de l'Ouest (AMAO), les Banques Centrales et les banques commerciales opérant dans les quinze (15) Etats membres de la CEDEAO. Il facilitait les règlements, en monnaies locales, des transactions commerciales entre les pays membres ce qui, du coup, permettait de réaliser des économies sur leurs ressources en devises étrangères. L'utilisation des devises intervenait seulement lors du règlement des soldes nets issus de la compensation en fin de mois.

Les transactions relevant des opérations inscrites au compte courant de la balance des paiements et qui satisfont à la règle d'origine de la sous-région de l'Afrique de l'Ouest étaient éligibles au mécanisme. Les dons, les prêts intergouvernementaux et autres paiements ne correspondant pas à des transactions internationales courantes étaient aussi admis de commun accord entre les parties prenantes.

Toutes les transactions du mécanisme de compensation étaient enregistrées dans une unité de compte dénommée Unité de Compte de l'Afrique de l'Ouest (UCAO) qui servait de dénominateur commun pour les différentes monnaies des Banques Centrales des pays membres. Cette unité de compte équivaut à un Droit de Tirage Spécial (DTS) du FMI.

La valeur des monnaies nationales par rapport à l'UCAO est calculée à travers les taux croisés du DTS et des monnaies d'ancrage de ces monnaies.

Cependant, après quelques années de fonctionnement normal et réussi, le mécanisme a été confronté à des difficultés liées, entre autres, à la suppression du contrôle des changes, à la libéralisation financière, au manque de complémentarité entre les productions des pays membres, à la concurrence du secteur informel, à la quasi méconnaissance du système de compensation. Finalement, il a été arrêté depuis décembre 2006.

b le chèque de voyage CEDEAO

La mise en circulation, en octobre 1998, du chèque de voyage CEDEAO, comme instrument de paiement, visait surtout à la familiarisation des populations de la sous-région à la future monnaie unique de la CEDEAO.

Cependant, malgré les espoirs suscités lors de sa création et après quelques années de fonctionnement, les résultats obtenus sont restés en deçà des attentes en raison de plusieurs aléas et entraves qui ont émaillé son chemin. Parmi ces aléas et entraves il faut citer:

- la concurrence des autres types de chèques de voyage libellés en monnaies convertibles et beaucoup plus prisés par la clientèle et les utilisateurs (American express, Thomas cook, Mastercard, Crédit Lyonnais….);
- l'insuffisance de la sensibilisation des utilisateurs et acteurs impliqués dans la promotion des chèques de voyage Cedeao;

- la préférence des opérateurs économiques du secteur informel pour l'argent liquide;
- le refus de certaines banques commerciales d'encaisser les chèques de voyage non vendus par leurs propres correspondants à cause de soupçons de spéculation.

Pour soutenir le fonctionnement correct du mécanisme de compensation et du chèque de voyage Cedeao, un Fonds de Crédit et de Garantie fut mis en place et financé par les Banques centrales.

Ce fonds était destiné à l'octroi de crédit, à court terme, aux Banques Centrales débitrices en vue de leur permettre de liquider leurs positions débitrices. Sa dotation initiale fut fixée à Ucao 2 millions (soit environ Usd 3 millions).

Etat des lieux en matière de système de paiement au sein de la CEDEAO

Depuis quelques années, nous assistons au niveau des deux zones monétaires de la CEDEAO, Union Economique et Monétaire Ouest Africaine (UEMOA) et la Zone Monétaire de l'Afrique de l'Ouest (ZMAO), à d'intenses activités de modernisation des infrastructures et du cadre juridique des systèmes de paiement en vue de s'adapter aux normes internationales admises et aux évolutions techniques actuelles.

a Union Economique et Monétaire Ouest Africaine (UEMOA)[5]

Le système de paiement dans l'UEMOA est composé de deux (2) éléments fondamentaux à savoir un cadre légal et réglementaire rénové et une infrastructure constituée de systèmes d'échange et de règlement de gros montants en temps réel, de compensation automatisée pour les paiements de masse et de paiement interbancaire par cartes bancaires.

La réforme des systèmes de paiement des pays de l'UEMOA s'articule autour des trois axes majeurs suivants:

- la modernisation du système d'échange et de règlement des transactions de gros montants ou d'importance systémique avec la mise en place d'un système de règlement brut en temps réel (RTGS), notamment pour les virements de trésorerie, les transferts, les opérations du marché monétaire, le règlement des opérations de bourse, le règlement de la dette publique, dénommé Système de Transfert Automatisé et de Règlement dans l'UEMOA (STAR-UEMOA);
- la modernisation du système d'échange et de règlement des transactions de petits montants, à savoir les paiements de masse: virements, chèques, cartes, avec le démarrage d'un système de compensation multilatérale automatisé dénommé Système Interbancaire de Compensation Automatisé dans l'UEMOA (SICA-UEMOA);
- le développement d'un système de carte interbancaire sous-régional mis en place par le secteur bancaire sous l'impulsion de la BCEAO avec la création du Groupement Interbancaire Monétique de l'UEMOA (GIM-UEMOA) et du Centre de Traitement Monétique Interbancaire de l'UEMOA (CTMI-UEMOA) et permettant la promotion de paiement alternatif par rapport aux espèces.
- Les règlements des soldes de compensation des paiements de masse et des opérations compensées de la Bourse Régionale des Valeurs Mobilières (BRVM) à travers le Dépositaire Central Banque de Règlement (localisé à Abidjan) sont effectués par STAR-UEMOA. De même, les soldes des opérations monétiques régionales sont réglés dans ce système.

- **Le cadre juridique et réglementaire**

Le cadre légal et réglementaire est bâti autour de principes de gestion respectant les normes internationales en matière de sécurité, de délai de paiement et de gestion des risques. Il offre toutes les conditions requises pour le bon fonctionnement et le renforcement du système financier.

A cet effet, la BCEAO a édicté le règlement No 15/2002/CM/UEMOA qui actualise le cadre juridique pour lui permettre de répondre aux multiples exigences de sécurité découlant de l'évolution technique des instruments de paiement.

Ce dispositif veille, d'une part, à la sécurisation des instruments et procédés de paiements électroniques existants et à venir et, d'autre part, à la sécurisation des transactions financières à travers une assise juridique suffisante de garantie des titres.

La loi uniforme sur les instruments de paiement de l'UEMOA prend aussi en compte les nouveaux instruments et procédés de paiement nés de l'évolution technologique. Elle prévoit un dispositif de traitement des infractions liées à l'utilisation des nouveaux moyens et procédés de paiement.

Cette loi est complétée par la Directive 08/2002/CM/UEMOA qui porte sur la promotion de la bancarisation et l'utilisation de nouveaux instruments et procédés de paiement scripturaux; et par l'instruction 01/2003/SP relative à la promotion des moyens de paiement scripturaux et à la détermination des intérêts exigibles en cas de défaut de paiement.

Au terme de cette directive, toutes les opérations financières, tous les salaires, impôts, taxes, indemnités et autres prestations, en argent, portant sur un montant de référence fixé par la BCEAO, doivent être payés par chèque ou par virement, sur un compte ouvert auprès des services financiers de la Poste ou d'une banque.

La Directive communautaire de lutte contre le blanchiment de capitaux et de promotion des moyens scripturaux de paiement vient compléter ce cadre juridique et réglementaire.

- **L'infrastructure**

Les trois systèmes (STAR-UEMOA, SICA-UEMOA et Monétique interbancaire régionale) sont régis par un cadre juridique et réglementaire solide, un arsenal de principes de gestion respectant les normes internationales en matière de sécurité, de délai de paiement et de gestion des risques et une rénovation du dispositif de la Centralisation des Incidents de Paiement.

De même, ils sont sous tendus par une infrastructure de télécommunication à haut débit permettant d'assurer une haute qualité à un coût moindre.

b Zone Monétaire de l'Afrique de l'Ouest (ZMAO)[6]

Les travaux sur les systèmes de paiement dans la ZMAO, ont débuté par l'évaluation de leur niveau de développement dans les différents Etats membres, à travers une étude réalisée, en 2004, par l'Institut Monétaire de l'Afrique de l'Ouest (IMAO).

Cette étude a permis de faire un état des lieux et d'élaborer un cadre de stratégie et de politique devant guider le développement et le fonctionnement des systèmes de paiement. Il est ressorti de cette étude les conclusions que:

- Les systèmes de paiement dans les pays de la ZMAO, individuellement pris, se trouvaient à des niveaux de développement différents.
- Qu'aucun des pays membres ne disposait de composante de système de paiement pouvant servir de modèle pour l'ensemble de la zone parce que les systèmes en place ne répondaient, seulement, qu'à des contextes spécifiques utilisant des infrastructures bancaires qui diffèrent d'un pays à un autre.
- Qu'aucun d'eux n'avait de cadre juridique, de règles et procédures reflétant les plus récentes évolutions technologiques. Toutefois, tous les pays avaient entrepris la révision de leurs lois, règles et procédures en la matière, en vue de les adapter aux exigences d'harmonisation engagée dans la ZMAO.

En dehors des constats faits, ci-dessus, il faut noter que le Nigeria et le Ghana sont en avance sur les autres pays et que, ces deux pays ont entrepris d'importantes réformes de leurs systèmes de paiement dans la perspective de fusion de leurs bourses de valeurs à plus ou moins brève échéance.

- **Politiques et stratégies**

Dans le cadre de ces politiques et stratégies, le développement des systèmes de paiement nationaux, la rationalisation des systèmes financiers des Etats membres et l'interopérabilité des systèmes de paiement de la ZMAO sous l'égide de la future Banque centrale de l'Afrique de l'Ouest (BCAO) occupent une place importante. C'est pourquoi, les actions suivantes ont été entreprises:

- Le développement de normes communes pour les chèques, la chambre de compensation automatique (CCA) et d'autres composantes du système de paiement;
- l'élaboration d'un acte commun de la ZMAO sur le système de paiement;
- La conception de règles et procédures en vue d'assurer le fonctionnement de chacune des composantes du système de paiement.

En vue de faciliter la mise en œuvre d'un système de paiement commun au sein de la ZMAO, des tâches avaient été assignées à chaque Etat membre sous la supervision de l'IMAO.

Ainsi, la Gambie devait réfléchir sur l'acquisition et la mise en œuvre d'un système de paiement commun à la ZMAO; le Ghana fut chargé de l'élaboration du cadre juridique du système de paiement de la zone; la Guinée avait en charge la mise en œuvre d'un Système de compensation automatique fonctionnel sur l'ensemble de la ZMAO ainsi que des règles et procédures qui l'accompagnent; le Nigeria, de son côté, avait comme mission, la mise en place d'un déclencheur de Distributeur Automatique de Billets/Point de Vente (DAB/PDV) fonctionnel sur l'ensemble de la zone ainsi que la conception des normes, règles et procédures communes de base pour son fonctionnement; enfin la Sierra Leone, le développement de la reproduction d'images sur les chèques.

- **Cadre réglementaire**

Dans le but d'atteindre un système de paiement commun et moderne (système RTGS système de Traitement Automatique des chèques, Chambre de Compensation Automatique, système de Traitement des Cartes bancaires) répondant aux normes internationales, la ZMAO a jugé utile de doter les pays membres d'un cadre réglementaire solide. Ce dispositif qui n'attend que son adoption, par les pays membres, permettra de disposer d'un moyen de contrôle et de supervision des systèmes de paiement électroniques.

Une fois que ce cadre légal commun aura été adopté, un ensemble de règles communes sera préparé pour chaque composante des systèmes de paiement.

Les utilisateurs des systèmes de paiement (les banques, les entreprises, les gouvernements et le public) seront ainsi soumis aux mêmes lois et règlements dans tous les pays membres de la ZMAO. Ce qui facilitera les paiements transfrontaliers et rehaussera la confiance en l'union monétaire envisagée.

- **Infrastructure**

Les travaux en cours en matière d'infrastructure visent à doter la future Banque Centrale d'un mécanisme efficace assurant la sécurité et la solidité des systèmes de paiements et de règlements en temps réel. Cette infrastructure comprend deux principales composantes: l'infrastructure de la BCAO et le système RTGS.

- **Le réseau de la Banque Centrale de l'Afrique de l'Ouest (BCAO)**

Cette infrastructure sera un vaste réseau reliant les Etats membres de la ZMAO. Tous les utilisateurs des systèmes de paiement et de règlement de la BCAO qui ne participent pas directement aux transferts transfrontaliers de fonds auront accès au système, à travers les banques centrales nationales.

- **Le système de RTGS**

Ce système est une plateforme qui facilitera le traitement des paiements de gros montants à travers le réseau. Son rôle est de transmettre les ordres de paiement de n'importe quelle partie du système au point ou serveur central où est logée la base de données comportant les comptes des différentes banques centrales.

Le plan d'action qui avait été élaboré pour la mise en place du système de paiement de la ZMAO était le suivant:

- Conception du réseau: Mars 2008;
- Acquisition de l'équipement et du logiciel: Juin 2008;
- Construction du réseau: Septembre 2008;
- Adaptation du logiciel: Octobre 2008;
- Test du réseau: Décembre 2008.

Contraintes et défis

Les principales contraintes auxquelles les pays de la sous-région font face dans le développement de leurs systèmes de paiement peuvent être ainsi résumées:

- la forte importance de l'économie informelle qui a tendance à privilégier beaucoup plus les espèces ou numéraires que les autres formes de paiement. Aussi, la majorité de la population est très pauvre et n'a pas la culture bancaire ou financière;

- la faiblesse des réseaux de télécommunications qui ne couvrent pas généralement toutes les zones du pays ainsi que leur manque de fiabilité;

- l'insuffisance de la fourniture d'électricité qui ne permet pas un développement des systèmes comme les guichets automatiques de banques qui nécessitent une fourniture régulière et stable de courant électrique. Par ailleurs, l'infrastructure électrique en zone rurale est quasi inexistante dans la plupart de nos pays;

- la précarité des infrastructures de transport rend difficile le développement des échanges au sein de la sous-région;

- le niveau élevé du coût des investissements nécessaires pour la mise en place des infrastructures constitue une préoccupation pour certaines banques;

- les difficultés rencontrées au niveau des paiements transfrontaliers qui doivent le plus souvent passer par les banques intermédiaires étrangères.

A moyen ou long terme, l'objectif visé est l'harmonisation ou la fusion des systèmes de paiement de l'UEMOA et de la ZMAO. Pour cela, les défis à relever sont très importants et méritent une attention particulière des Autorités de la CEDEAO à tous les niveaux. Parmi ces défis il faut citer:

- La modernisation des systèmes de télécommunication à travers une technologie de pointe permettant la promotion des paiements scripturaux, l'utilisation de plus en plus accrue et facile du système bancaire par les opérateurs économiques et le grand public;

- Le développement des infrastructures de transport et production d'électricité sans lesquelles la promotion des systèmes de paiement serait aléatoire;

- L'interconnexion du réseau bancaire de la sous-région en vue de faciliter les paiements transfrontaliers;

- Le renforcement de la lutte contre la pauvreté dans nos pays ainsi que l'éducation et la formation des populations à l'utilisation du système bancaire et financier;

- La sensibilisation et l'incitation des opérateurs du secteur informel à l'utilisation du secteur bancaire à travers, entre autres, l'allègement des procédures, la réduction des charges, la formation;

- L'harmonisation des réglementations et l'interconnexion des systèmes de paiement des deux zones monétaires de la CEDEAO.

En conclusion, il faut signaler qu'à la suite de cette revue des systèmes de paiement, l'Agence Monétaire de l'Afrique de l'Ouest (AMAO) a inscrit dans son programme d'activités, une étude sur le développement d'un système de paiement couvrant l'ensemble de la CEDEAO à travers soit la mise en place d'un nouveau système de paiement pour l'ensemble des pays membres et qui ferait fi de l'existant, soit sur l'interconnexion ou l'interopérabilité entre le système de paiement de l'UEMOA (entièrement opérationnel) et celui de la ZMAO (en cours de construction).

Cette étude pourrait déterminer les coûts et avantages inhérents à chacune de ces options ainsi que les processus et phases de leur mise en œuvre.

EXAMEN DES DIFFERENTES OPTIONS VISANT À ACCELERER LE PROCESSUS DE CREATION DE LA MONNAIE UNIQUE DE LA CEDEAO

Comme indiqué plus haut, la stratégie d'accélération a tiré en longueur, suscitant ainsi des inquiétudes par rapport à la lenteur de la mise en œuvre du programme de coopération monétaire.

Après avoir exprimé son insatisfaction devant la lenteur de la mise en œuvre, la Conférence des Chefs d' États,

en a appelé, à l'occasion de son sommet du 15 juin 2007 à Abuja, à une révision de la stratégie d'accélération, laissant la porte ouverte à son éventuel remplacement par une approche unique. Dans ce contexte, le Secrétariat conjoint de l'AMAO et de la commission de la CEDEAO (l'un des principaux organes du Mécanisme Multilatéral de Surveillance) s'est réuni à Freetown, en Sierra Léone, en juillet 2007, pour étudier la voie à suivre. Le Secrétariat conjoint a par la suite convoqué une réunion entre les institutions régionales afin d'étudier les propositions sur les options alternatives. Voici, les options étudiées à l'occasion de cette rencontre.

Approche de la voie unique

Il s'agit essentiellement d'une modification de l'actuelle approche des deux blocs par une approche d'un bloc unique fondée sur des critères d'éligibilité prescrits. Son succès dépendrait largement de la réussite de l'actuelle approche progressive des deux blocs dont les piliers centraux sont la convergence économique et l'harmonisation des politiques. Ainsi, le projet de ZMAO devrait poursuivre ses programmes jusqu'en 2009, excluant par conséquent la création de la Banque Centrale Ouest Africaine (BCOA) et l'introduction finale de l'éco.

Sur la base de critères convenus d'un commun accord, les États membres éligibles pourront tendre vers la formation de l'union monétaire régionale, à condition que les pays remplissent les critères aient la possibilité d'accéder plus tard à l'union en temps voulu. L'accent a été mis sur la nécessité d'une surveillance multilatérale efficace et l'introduction d'un Pacte de Croissance et de Stabilité qui serait assorti de sanctions afin de rendre le processus durable.

Le principal avantage de cette option serait en termes d'économies qui iraient aux États membres de la seconde zone monétaire en raison de la non création ou de la mise en suspens de la BCAO ainsi que des autres institutions financières prévues dans le cadre de la ZMAO. La mise en attente de ces institutions financières serait une mesure de prudence lorsque l'on considère les dépenses colossales en capital et leur caractère transitoire. Le second avantage serait la garantie d'une monnaie régionale forte et stable

grâce aux conditions de convergence. Avec cette option, l'union monétaire pourrait voir le jour dès que possible.

Toutefois, elle présente un inconvénient majeur, à savoir la perte des sommes englouties dans les projets abandonnés et ayant trait à l'établissement des institutions financières pertinentes, aux éventuelles modifications des statuts pertinents et des règlements bancaires dans le but de refléter les objectifs régionaux

Approche Big Bang

Cette option appelle une unification monétaire immédiate des quinze États membres de la CEDEAO par une simple décision politique et ce, à une date convenue entre eux. Vu l'absence de conditions préalables, le projet de la CEDEAO peut démarrer dès que possible. La convergence macroéconomique et l'harmonisation des politiques ne seraient plus des conditions prérequises mais exigibles seulement après.

Cette option présente l'avantage d'être la manière la plus simple de réaliser l'unification dans un délai le plus court possible. Il n'y aurait pas de critères d'éligibilité, ni de procédures de convergence et d'harmonisation des politiques longues et compliquées. La seule condition majeure serait la mise sur pied d'institutions financières pertinentes.

Toutefois, cette option présente quelques risques liés aux politiques divergentes, à la faiblesse des fondamentaux économiques et aux situations d'instabilité macroéconomique pouvant avoir des effets adverses sur la durabilité de la monnaie unique proposée. La stabilité budgétaire, la stabilité du taux de change, la stabilité des prix, la durabilité structurelle et la crédibilité de la politique monétaire seront confrontés à des risques considérables à cause l'inexistence d'un cadre institutionnel approprié. De ce fait les Etats membres devront observer une certaine discipline en vue de maintenir la convergence après le lancement de la monnaie unique.

Approche de l'adhésion à l'UEMOA

Avec cette option, les États qui ne sont pas encore membres de l'UEMOA devraient s'engager à y adhérer. Cette décision serait essentiellement politique. Toutefois, l'éligibilité serait fondée sur des critères macroéconomiques, juridiques, etc. Dans ce dispositif, une banque centrale qui adopterait le CFA serait transformée en une filiale de la BCEAO. Cette formule présente certains avantages qui tiennent au fait que l'UEMOA possède la capacité technique requise pour servir de noyau à l'édification d'une union monétaire à l'échelle de la CEDEAO. Le premier: la garantie d'une stabilité macroéconomique pour les nouveaux entrants étant donné que la BCEAO a jusqu'ici fait preuve d'une très grande efficacité en matière de gestion de la politique monétaire. Deuxième avantage: le coût de cette formule serait modéré en comparaison de la phase de création de l'union puisque l'architecture du système financier est déjà en place. Avec ce dispositif, une banque centrale qui déciderait d'adopter le CFA comme monnaie deviendrait une filiale de la BCEAO. Il n'y aurait pas de coût supplémentaire pour établir de nouvelles institutions financières communautaires à l'exclusion des dépenses pour la modification des statuts, des procédures, et l'impression de nouveaux billets de banque ainsi que les contributions aux capitaux propres des institutions existantes.

Cependant, cette formule présente quelques difficultés qui méritent d'être mis en relief. Le premier est que le CFA est considéré comme une survivance du système colonial français en Afrique. Le deuxième se rapporte aux liens avec le Trésor Français.

Approche de l'élargissement du Projet de ZMAO

Avec cette option, la monnaie de la ZMAO – l'Eco – serait lancée pour l'ensemble des pays de la CEDEAO. Y prendraient part tous les États membres de l'UEMOA ainsi que les pays de la ZMAO qui rempliraient les quatre critères fondamentaux. Par la suite, tout autre pays satisfaisant aux critères pourrait adhérer.

Toutefois, il restera à savoir si les pays de l'UEMOA seront prêts à abandonner leur union bien établie et leur monnaie stable pour rejoindre une nouvelle union sur laquelle planent des incertitudes.

Approche de la Masse Critique

Avec cette option, l'union monétaire pourrait démarrer dès que possible à condition qu'une "masse critique" de pays constituant au moins soixante-quinze pour cent (75%) du PIB de la CEDEAO remplissent les critères de convergence. Toutefois, tous les pays devront s'engager à respecter un Pacte de Croissance et de Stabilité qui garantirait la pérennité de l'union. Le principal avantage de cette option est qu'elle reposerait sur de solides fondamentaux macroéconomiques.

Après avoir passé en revue tous ces scénarios, les institutions régionales ont présenté trois options pour créer l'union monétaire régionale:

    i.   l'approche big-bang;

    ii.   l'approche purement graduelle; et

    iii. l'approche de la masse critique.

Mais à l'issue des débats, la réunion a marqué sa préférence à l'option de la masse critique. Par la suite, le Conseil de Convergence s'est réuni le 9 octobre 2007 à Ouagadougou pour étudier les options présentées par les institutions régionales. Après s'être accordé sur la nécessité d'une seule approche pour l'intégration monétaire dans la région, le Conseil a demandé à ce qu'une étude soit effectuée afin de déterminer la faisabilité de toutes les options proposées et de proposer un calendrier précis pour l'introduction de la monnaie unique de la CEDEAO.

Sur la base de ces pertinentes réflexions, l'AMAO propose ici deux schémas devant aboutir à la création de la monnaie unique dans un bref délai.

PERSPECTIVES

Aujourd'hui l'AMAO se propose de réfléchir sur un Plan Stratégique visant l'accélération du processus d'intégration monétaire en Afrique de l'Ouest. La finalité de ce Plan est de permettre la création dans l'espace

CEDEAO d'une monnaie commune suffisamment stable pour promouvoir le développement durable et assurer la convergence des économies. Elle s'est intéressée à la faisabilité de cette zone monétaire au regard des critères de reconnaissance d'une zone monétaire optimale et par rapport au niveau de performance dans le cadre de la convergence macroéconomique. Il ressort de l'analyse que quelques critères fondamentaux de reconnaissance d'une zone monétaire optimale ne sont pas encore remplis. En ce qui concerne la convergence, le niveau de réalisation est considéré comme insuffisant en dépit de quelques efforts louables. Ce constat au lieu d'être un motif de découragement doit renforcer la conviction en faveur de l'idéal d'intégration monétaire.

Plusieurs raisons doivent justifier cette démarche. La zone monétaire optimale doit être perçue comme une situation de référence idéale et non comme une condition sans laquelle toute intégration monétaire serait impossible. Le cas de l'Union Economique et Monétaire Européenne (UEME), considéré comme le modèle le plus réussi dans ce domaine, constitue une parfaite illustration. Par rapport à la convergence macroéconomique, beaucoup d'analystes s'accordent à la considérer comme un processus qui ne doit pas être la condition primordiale à la création d'une zone monétaire unique.

Par ailleurs, l'existence d'une monnaie unique favorise la réalisation de cette convergence. En plus, l'analyse en terme d'avantages et de coûts, approche privilégiée par beaucoup de spécialistes des zones monétaires, montre clairement que les opportunités sont considérables pour les pays de l'Afrique de l'Ouest dans la perspective d'une union monétaire. En outre, la CEDEAO peut compter sur une donnée non moins importante à savoir l'engagement des leaders politiques de la région en faveur de l'intégration.

Une fois le doute levé sur l'opportunité ou non de la future zone monétaire, le document s'est intéressé aux options qui s'offrent dans le cadre de l'accélération du processus. A la suite de cette revue, l'AMAO a proposé deux scénarios pour la création rapide de la monnaie unique de la CEDEAO. Dans les deux cas, l'introduction de la monnaie sera précédée d'une phase de stabilisation des taux de change. Dans chacun de ces scénarios, les performances en matière de convergence ne seront pas des conditions obligatoires pour l'adhésion. Toutefois, l'introduction de la monnaie pourrait être précédée par l'adoption d'un pacte de stabilité dans le but de garantir la stabilité de l'environnement économique et la viabilité de la future monnaie.

La mise en œuvre de l'une ou l'autre des options proposées passera nécessairement par différentes phases notamment une période de stabilisation des taux de change et une étape de passage à la monnaie unique assortie d'un calendrier précis. L'adoption du cadre juridique va concerner la préparation de l'ensemble des documents, instruments et procédures pour la mise en place de la zone monétaire unique de la CEDEAO et les reformes institutionnelles porteront essentiellement sur la mise en place du Conseil Monétaire, la création de la Banque centrale de la CEDEAO et des autres institutions financières pertinentes.

CONCLUSION ET RECOMMANDATIONS

L'Agence Monétaire de l'Afrique de l'Ouest (AMAO) est d'avis que ce genre de réunions organisées au niveau international constitue le cadre idéal pour des échanges d'idées et d'expériences sur une base périodique, d'autant plus qu'elles offrent un mécanisme d'apprentissage utile pour faciliter la réalisation effective de l'intégration des différents programmes sous-régionaux du continent africain.

Ainsi, dans sa communication faite à l'occasion de ce Premier Congrès des Economistes africains, l'AMAO a procédé à l'analyse approfondie des expériences spécifiques du Programme de coopération monétaire de la CEDEAO. Les contraintes ne sont pas particulières à la sous-région ouest-africaine, car on constate que la plupart des pays du continent africain ont des caractéristiques économiques et sociales similaires.

Les difficultés rencontrées dans la plupart des regroupements pour l'intégration et la coopération sous-régionales en Afrique ne sont pas insurmontables. Avec l'adoption d'une bonne gouvernance économique et politique par nos pays respectifs et avec l'option résolue en faveur de

la coopération régionale, appuyée par un engagement national idoine, nous avons bon espoir de pouvoir accélérer le rythme de développement du continent africain pour le bien-être de nos peuples.

Dans la perspective de l'actuelle mondialisation rapide de la structure économique du monde, les régions africaines n'ont d'autres alternatives que de pousser de l'avant à l'aide de nos programmes de coopération et d'intégration régionales. Si les «géants» pays du Nord ont senti la nécessité de renforcer leur coopération, les pays du Sud devront trouver les stratégies idoines pour surmonter nos difficultés et développer nos économies afin de rester compétitifs dans l'arène internationale.

Ainsi, pour la mise en place de la monnaie commune en Afrique, un certain nombre de recommandations peuvent être formulées.

1. D'abord, il faut nécessairement élaborer un Plan d'Actions. Il s'agira particulièrement:

   - D'élaborer un Programme précis pour la création de la monnaie commune en Afrique;

   - De définir les tâches et actions fondamentales (prioritaires) pour la création de la monnaie commune en Afrique: parmi lesquelles toutes les tâches d'harmonisation des statistiques, des systèmes de paiements, des politiques économiques,…;

   - De fixer des échéances (un agenda) pour chacune des tâches ou action à entreprendre dans le processus.

   - De constituer des Groupes de travail composés de spécialistes qui peuvent venir de toutes les composantes de la société (Autorités Gouvernementales, Banques, Université, Syndicat).

2. Par ailleurs, il serait utile de revoir certaines considérations sur les principes de base du processus d'intégration monétaire actuel en Afrique particulièrement et travailler sur une stratégie commune et précise de coopération monétaire en Afrique. Ces (deux) principes de base se retrouvent dans:

   - L'Analyse faite sur les critères de reconnaissance d'une zone monétaire optimale: Ici, il faut comprendre qu'aucune zone monétaire ne peut être optimale au regard des critères traditionnels et modernes de reconnaissance d'une zone monétaire optimale. De tels critères qui définissent un cadre de référence théorique constituent des conditions idéales vers lesquelles il est souhaitable de diriger l'union monétaire, laquelle ne les attendra pas forcément;

   - Les exigences en termes de respect des critères de convergence macroéconomique: dans ce cas, il est important d'étudier la pertinence des critères de convergence. En d'autres termes, il serait nécessaire dans ce processus de déterminer le niveau convergence (ou de divergence) idéal (acceptable) pour nos économies. La convergence à l'absolue, c'est-à-dire la convergence de tous les pays à la fois sur une plus ou moins longue période, est quasiment irréalisable. Tout en ayant à l'idée la nécessité d'une discipline collective, il faut considérer la convergence comme un processus continu même au-delà de l'établissement de la monnaie commune, mais non une condition strictement obligatoire sans laquelle (sans l'atteinte des cibles par tous les pays), tout processus de création monétaire est impossible.

3. Evaluer la pertinence du modèle d'intégration régionale basé sur le développement des échanges (modèle privilégié actuellement) par rapport au modèle fondé sur le développement du secteur financier (et des services). Cette seconde option permettrait, par le développement de la finance (libéralisation du capital), de stimuler la production par exemple.

4. Donner davantage de l'importance au rôle que la monnaie peut jouer dans nos économies.

5. Eviter autant que possible la création d'une monnaie (sous-régionale) et ou d'institutions transitoires, de courte durée et coûteuse.

6. A moyen ou long terme, il faut impérativement procéder (au chapitre des harmonisations) à

l'harmonisation ou la fusion des systèmes de paiements des différents pays ou zones économiques africaines. Pour atteindre cet objectif, les actions suivantes sont à entreprendre:

- La modernisation des systèmes de télécommunication à travers une technologie de pointe permettant la promotion des paiements scripturaux, l'utilisation de plus en plus accrue et facile du système bancaire par les opérateurs économiques et le grand public;

- Le développement des infrastructures de transport et production d'électricité sans lesquelles la promotion des systèmes de paiement serait aléatoire;

- L'interconnexion du réseau bancaire de la sous-région en vue de faciliter les paiements transfrontaliers;

- Le renforcement de la lutte contre la pauvreté dans nos pays ainsi que l'éducation et la formation des populations à l'utilisation du système bancaire et financier;

- La sensibilisation et l'incitation des opérateurs du secteur informel à l'utilisation du secteur bancaire à travers, entre autres, l'allègement des procédures, la réduction des charges, la formation.

End Note

1 Après l'adhésion de la Guinée Bussau en 1997, la Zone franc compte 8 membres. Le franc CFA qui avait à l'époque une parité fixe avec le Franc français est aujourd'hui arrimé à l'euro (1 EUR = 655,95666 F CFA)

2 Les pays membres sont tenus de respecter les objectifs fixés afin de favoriser la mise en place d'un cadre macroéconomique stable en vue d'assurer une intégration monétaire réussie.

3 Les critères primaires sont les variables jugées essentielles pour la réalisation de la convergence. Les critères secondaires sont les outils d'intervention qui concourent à la réalisation des critères primaires.

4 Ce critère n'a été évalué que pour les pays de l'UEMOA; les autres pays n'ont pas fourni de données.

5 Les arriérés intérieurs n'ont pas été pris en compte

6 Cf Expérience de la BCEAO dans le cadre de la modernisation des systèmes de paiement dans les pays de l'UEMOA (Séminaire sur la conduite des systèmes de paiement en RDC-Kinshasa du 3 au 4 juin 2008)

7 Cf Rapports IMAO sur le Développement du système des paiements dans les Etats membres de la ZMAO