

IMF Working Paper

Monetary Union in West Africa: An Agency of Restraint for Fiscal Policies?

Paul Masson and Catherine Pattillo

IMF Working Paper

Research Department

Monetary Union in West Africa: An Agency of Restraint for Fiscal Policies?

Prepared by Paul Masson and Catherine Pattillo¹

March 2001

Abstract

The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.

Could a West African monetary union (either of the non-CFA countries, or all ECOWAS members) be an effective “agency of restraint” on fiscal policies? We discuss how monetary union could affect fiscal discipline and the arguments for explicit fiscal restraints considered in the European Monetary Union literature, and their applicability to West Africa. The empirical evidence, EMU literature, and CFA experience suggest that monetary union could create the temptation for fiscal profligacy through prospects of a bailout, or costs diluted through the membership. Thus, a West African monetary union could promote fiscal discipline only if the hands of the fiscal authorities are also tied by a strong set of fiscal restraints.

JEL Classification Numbers: E58, E61, E62, F33

Keywords: monetary union, West Africa, fiscal rules, fiscal discipline, ECOWAS, CFA franc zone

Author's E-Mail Address: pmasson@imf.org and cpattillo@imf.org

¹This is a revised version of a paper presented at the American Economics Association annual meeting in New Orleans, January 4–6, 2001. We would like to thank Grace Juhn and Saji Thomas for research assistance, Paul Collier, Philip Lane, and David Stasavage for comments, as well as numerous colleagues at the IMF and the World Bank who made comments on a larger study (Masson and Pattillo, 2001) on which this paper is partly based.

Contents	Page
I. Introduction.....	3
II. Background on Proposed Monetary Union in West Africa.....	5
III. A Comparison of the Economies in the Euro Area and ECOWAS.....	8
A. Trade Patterns	8
B. Asymmetry of Shocks	10
C. Labor Mobility	12
D. Fiscal Transfers	13
E. Central Bank Independence and Financial Development	13
F. Fiscal Performance	15
IV. Monetary Union and Fiscal Discipline.....	15
A. Will Monetary Union Worsen the Tendencies Toward Excessive Fiscal Deficits?	15
B. Are Constraints on Fiscal Policies Needed in a Monetary Union?	19
C. What Form Should Fiscal Restraints Take?	19
V. Empirical Evidence on Monetary Unions and Fiscal Discipline	21
A. Cross-Country Evidence	21
B. Case Study of the CFA Franc Zone	24
VI. Implementing Monetary Union in West Africa: Convergence Criteria	26
VII. Conclusion.....	30
Tables	
1. ECOWAS Countries: Basic Indicators	6
2. Euro Area and ECOWAS: Patterns of Trade.....	9
3. Euro Area and ECOWAS: Standard Deviations and Correlations of Changes in Terms of Trade.....	11
4. Selected EU and ECOWAS Countries: The Structure of Production.....	12
5. Seigniorage and Inflation.....	14
6. Fiscal Indicators: Comparison of Euro Area and ECOWAS Countries	16
7. Fiscal Policy in Extreme Monetary Regimes: Regressions using Data from Fatás and Rose (2000)	23
8. ECOWAS: Position of non-WAEMU Members with Respect to Convergence Criteria	27
Figures	
1. Membership of the CFA Franc Zone and ECOWAS	7
2. Fiscal Deficit as a Share of GDP	28
3. Total Public Debt as a Share of GDP.....	29
4. Inflation.....	29
References.....	31

I. INTRODUCTION

On April 20, 2000 in Accra, the leaders of six West African countries² declared their intention to proceed to monetary union among the non-CFA³ franc countries of the region by January 2003, as a first step towards a wider monetary union including all the ECOWAS⁴ countries in 2004. The countries committed themselves to reduce central bank financing of budget deficits to 10 percent of the previous year's government revenue, to reduce budget deficits to 4 percent of GDP by 2003, to create a Convergence Council to help coordinate macroeconomic policies, and to set up a common central bank. The declaration states that "Member States recognize the need for strong political commitment and undertake to pursue all such national policies as would facilitate the regional monetary integration process."

Although the goal of a monetary union in ECOWAS has long been an objective of the organization, there has been little progress to date. Recently, however, the initiative has been bolstered by the election of a democratic government and a leader who is committed to regional integration in Nigeria, the largest economy of the region, leading to the hope that the long-delayed project can be revived. In an earlier paper (Masson and Pattillo, 2001) we evaluated whether a monetary union in West Africa makes economic sense, and considered the various institutional options for implementing monetary cooperation. A distinction was made between full monetary union and looser forms of monetary cooperation, e.g. an informal monetary union. We concluded that instead of trying to meet a very short deadline for monetary union, the countries of the region should invest their energies into reinforcing convergence on low inflation, sustainable fiscal policies, and structural policies necessary for strong growth. A degree of exchange rate stability as well as the benefits of mutual surveillance over macroeconomic policies could be achieved through a looser form of regional monetary cooperation.

This paper will evaluate whether a monetary union in West Africa (either an informal monetary union of the non-CFA countries, or a possible future monetary union of all

²The meeting was attended by three heads of state, Presidents Olusegun Obasanjo of Nigeria, Jerry Rawlings of Ghana, and Lansana Conté of Guinea, as well as representatives from Liberia, Sierra Leone and the Gambia. Cape Verde, the remaining non-CFA ECOWAS country, has a currency peg to the euro with the support of Portugal, and was not a signatory of the Accra Declaration.

³CFA stands for "Communauté financière africaine" when it refers to the West African franc zone.

⁴ECOWAS, or Economic Community of West African States, is composed of the seven countries mentioned in footnote 1, plus the eight countries that are members of the West African CFA franc zone, namely Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo.

ECOWAS members) could be an effective “agency of restraint” (Collier, 1991) on fiscal policies. The history of the CFA zone from the mid-1980’s to 1994 shows that it is possible for a monetary union to remain successful and deliver low inflation even while fiscal policy is not well controlled, but it is likely that France’s role as an external guarantor of the currency’s convertibility and as provider of bilateral aid was important for this experience. The situation would likely be very different for a new monetary union including the non-CFA countries in West Africa. Thus, a question critically important for the likelihood of success of the monetary union is whether the union would be likely to promote fiscal discipline.

The relationship between monetary union and fiscal discipline is an issue that has been discussed extensively in the context of the European Monetary Union (EMU). After describing the ECOWAS monetary union project and comparing the relevant characteristics of the two areas, this paper will first discuss the ways that monetary union could affect fiscal discipline and the arguments for explicit fiscal restraints raised in the EMU literature, and consider their applicability to West Africa. Next, we review some recent cross-country empirical evidence on the impact of monetary unions on fiscal performance, as well as case studies of the CFA Franc zone as an agency of restraint.

What are the potential effects of monetary union on the promotion of fiscal discipline? On the positive side, it may be that since monetization of deficits resulting from imprudent fiscal policies will eventually lead to the collapse of the peg with attendant large political costs for sitting governments of member countries, policymakers will avoid excessive deficits.⁵ In addition, by creating supranational institutions, monetary union may in principle strengthen the hand of the central bank relative to national treasuries, making it easier for the monetary authorities to resist pressures to finance any particular government’s fiscal deficit. Going in the other direction, however, monetary union may also encourage governments to allow fiscal positions to get out of hand, either with the expectation that they will be bailed out, or because the costs (in terms of higher interest rates, an overappreciated exchange rate, etc.) will be shared by other countries in the union, and not internalized in the high-deficit country. It may also be that even if the rules establishing independence of the central bank are well-drafted, the central bank is not perfectly independent from political influence.

The concern that monetary union could worsen the tendencies for excessive deficits argues for the establishment of explicit restraints that would be monitored by mutual surveillance. In the EMU case, while the need for fiscal convergence criteria was well accepted, the need for continued fiscal restraints was debated by critics who argued that the costs of restricting fiscal stabilizer policies would be greater than the benefits that could be achieved by other means. But the case for explicit additional fiscal constraints to tie the

⁵This argument has recently been turned on its head by Tornell and Velasco (2000), as discussed below.

hands of fiscal authorities won out in the end, and the Stability and Growth pact was agreed to.

Existing empirical evidence on the impact of monetary unions (not including the EMU) on fiscal deficits and debt is mixed. Thus, the empirical evidence, EMU literature and CFA experience all suggest the possibility that monetary union could create the temptation for fiscal profligacy through prospects of a bailout, or costs that are diluted through the membership. The history of monetization of excessive deficits in a number of the non-CFA ECOWAS countries means that these are very relevant concerns. The paper concludes that a monetary union in West Africa can be an effective agency of restraint on fiscal policies only if the hands of the fiscal authorities are also tied by a strong set of fiscal restraint criteria, applicable not just for accession to monetary union, but throughout the life of the union.

II. BACKGROUND ON PROPOSED MONETARY UNION IN WEST AFRICA

The recent plans for a “second” monetary union in West Africa come as a response to a political commitment by heads of state of ECOWAS countries, who met on December 9–10, 1999 in Lomé, to accelerate the pace of regional integration.⁶ In particular, the Accra Declaration, signed on April 20, 2000 by six non-WAEMU West African countries, expressed their intention to establish a second common currency and to work towards merging it with the CFA franc into a single currency for ECOWAS by 2004. A Convergence Council was set up to oversee implementation of the process, and a technical committee was made responsible for carrying out preparatory activities. The Council recently approved the technical committee’s recommendation to establish an interim institution in early 2001 to serve as a transitional institution to a future, common central bank.

Table 1 presents some basic statistics for the countries in the region. There is a wide range of income levels and country sizes, with Nigeria constituting by far the largest country in the region, but also one of the poorest. Figure 1 shows the overlapping membership of the CFA franc zone and ECOWAS. Only one of the two regional monetary groups using the CFA franc, the West African Economic and Monetary Union (WAEMU), is part of ECOWAS.

The Accra summit established convergence criteria, which the signatories committed themselves to achieve by end–2003:

- budget deficits, excluding grants, should be no more than 4 percent of GDP;
- the rate of inflation should be no more than 5 percent;
- gross official reserves should be at least 6 months of imports of goods and services;
- central bank advances should be no more than 10 percent of tax revenues.

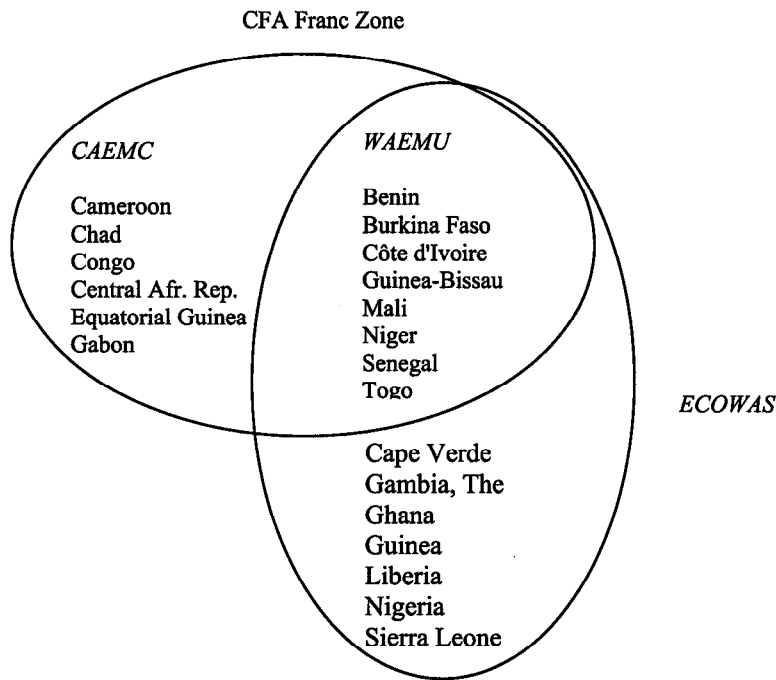
⁶The impetus for monetary union seems also to have been stimulated by the formation of the euro zone. See Irving (1999) and Honohan and Lane (2000).

Table 1. ECOWAS Countries: Basic Indicators

Country Name	GNP per capita, U.S. \$, 1998	Population, millions, mid-1998	Life expectancy at birth, years, 1997	Percent of population under U.S. \$1 a day	Primary school enrollment, percent, 1995-96
Benin	388	6.0	53	45	78
Burkina Faso	260	10.7	44	66	40
Cape Verde	1127	0.4	68
Côte d'Ivoire		14.5	47	35	71
Gambia, The	347	1.2	53	...	77
Ghana	399	18.5	60	45	...
Guinea	576	7.1	46	40	48
Guinea-Bissau	161	1.2	44
Liberia	...	3.0	47
Mali	263	10.6	50	70	45
Niger	204	10.1	47	75	29
Nigeria	228	121.3	54	60	...
Senegal	570	9.0	52	40	68
Sierra Leone	146	4.9	37
Togo	327	4.5	49	66	...

Source: World Bank, *African Development Indicators*.

Figure 1. Membership of the CFA Franc Zone and ECOWAS



Although the project has been described in some detail, it is not clear how the list of planned policy measures can be reconciled with the timetable of a monetary union of the non-WAEMU countries (the “second monetary union”) by 2003 and overall monetary union by 2004. It is also not clear how the convergence criteria are to be applied—in particular whether failing to meet them (and by what margin) would preclude participating in either the second monetary union or the full monetary union. The evident intention of Ghana and Nigeria to proceed, although they are both quite far from achieving the convergence criteria, raises questions about the role of the convergence criteria.

Finally, details are lacking on how the two transitions—one towards the “second monetary union” and the other toward the full regional monetary union—are to fit together. For example, it is not clear how a newly created single central bank for the non-WAEMU countries would be merged with WAEMU’s longstanding central bank, the Banque Central des Etats de l’Afrique de l’Ouest (BCEAO). Moreover, the time horizons for this aspect of the two transitions seem unrealistic, with establishment of the non-WAEMU central bank now planned for end-2002 followed by merger of the two institutions by 2004. While a quick merger of the two institutions seems problematic, a decision to maintain both banks would be wasteful, in terms of both human and financial resources.

III. A COMPARISON OF THE ECONOMIES IN THE EURO AREA AND ECOWAS

The starting point for monetary union in West Africa is considerably different from that in the euro area, which is perhaps not surprising given the large differences in per capita income and levels of development. But the factors that make monetary unions desirable, according to the optimum currency area literature, are largely independent of the income levels of the countries concerned. And the success of a currency union in delivering monetary stability will depend on institutional guarantees that monetary policy will not be dominated by excessive fiscal deficits. We will therefore focus on comparing the EU and ECOWAS with respect to the factors relevant for the desirability and success of a currency union.

The benefits of a fixed rate between countries of a monetary union tend to be greater if the countries concerned already have a substantial amount of trade among themselves, since transactions costs and bilateral exchange rate fluctuations related to that trade will be reduced. The costs of a fixed rate will be higher, the more asymmetric (and large) the shocks facing those countries, as this increases the attraction of retaining an independent monetary and exchange rate policy. Countries are less likely to face large asymmetric terms of trade shocks if they have diversified economies with similar structures. For instance, a country that exports oil and imports mainly manufactures is likely to experience different movements in its terms of trade than a country exporting cocoa and importing oil. Asymmetry of shocks will be less of a problem if there is substantial labor mobility or there exists a system of fiscal transfers across the region.

Relevant to the stability of a monetary union and the central bank's effectiveness in carrying out its monetary policy are the availability of financial instruments and markets, independence of the central bank, and disciplined fiscal policies. We therefore look at measures of financial development and independence of national central banks, and at fiscal performance.

How do the countries of ECOWAS fare on the basis of these criteria?

A. Trade Patterns

Table 2 summarizes the trade patterns for ECOWAS countries, comparing them to those of the EU. Internal trade within ECOWAS is relatively small, at a little over 10 percent of the average of exports and imports. Unfortunately, official statistics do not incorporate informal trade, which is thought to be considerable and to reflect efforts to avoid trade restrictions and trade taxes as well as the difficulty in acquiring convertible currencies in some of the non-WAEMU countries of the region. Underreporting of intra-union trade may also reflect traditional trade patterns (e.g. between coastal states and the Sahel) that are not picked up in the official statistics. Estimates of informal trade suggest that if it were included, intra-ECOWAS trade might be increased by several percentage points. In any case, the aggregate figure hides quite different behavior for WAEMU countries and the remaining countries. The former countries trade considerably more among themselves than do the

non-WAEMU, ECOWAS countries. The EU is the largest trading partner of the countries in the region, accounting for more than 40 percent of the region's total exports and imports.⁷

Table 2. Euro Area and ECOWAS: Patterns of Trade, (1997-98 average)

	Exports (% of total exports)	Imports (% of total imports)
Euro Area		
Euro Area	44.5	44.1
ECOWAS	0.5	0.6
Rest of World	55.0	55.3
ECOWAS		
ECOWAS	8.4	13.1
EU	42.3	43.3
Rest of the world	49.3	43.6
of which WAEMU countries		
WAEMU	7.3	11.2
Other ECOWAS	4.6	6.2
EU	29.9	40.3
Rest of the world	58.2	42.3
of which Non-WAEMU countries		
Non-WAEMU	1.5	3.2
WAEMU	3.0	5.0
EU	56.4	46.7
Rest of the world	39.1	45.1

Source: IMF, *Direction of Trade Statistics*.

In contrast, the euro area does almost half of its trade among member countries. The potential benefits of a common currency in reducing transactions costs are considerably greater when trade is large—though it is true that a peg of a common ECOWAS currency to the euro would stabilize the exchange rate for much of ECOWAS's trade (both within the

⁷The gravity model suggests bilateral trade among ECOWAS countries should be small, given the small size of their economies and low per capita income, while the EU exerts a strong gravitational pull, given the size of its economy and its proximity.

region and with respect to Europe), even if some transactions costs of conversion into euros might remain.

B. Asymmetry of Shocks

An important source of shocks, especially for countries whose exports are primary commodities, is the terms of trade (TOT). Table 3 summarizes standard deviations and correlations of changes in those TOT, for both ECOWAS countries and the euro area. Several features stand out. *First*, there are very large movements of the terms of trade for several of the ECOWAS countries. The amplitude of the swings is especially large for Nigeria, and the swings are related in large part to changes in the world price of oil, Nigeria's major export. Other countries also face large changes in the terms of trade; those in Côte d'Ivoire and Ghana, for instance, are substantially related to the world price of cocoa. *Second*, these shocks to the terms of trade of ECOWAS countries are typically not well correlated, due in large part to differences in commodity exports, and the fact that the world prices of the various commodities do not move together. While some primary commodities are common to a number of countries in the region—coffee, cocoa, cotton, fish products, timber, and groundnuts—others are found in only one or two countries (bauxite in Guinea, phosphate in Senegal and Togo, uranium in Niger, oil in Nigeria). Nigeria, Guinea, Niger, and Guinea-Bissau are each dependent on a single commodity for 50 percent or more of their export earnings (Cashin and Pattillo, 2000). Nigeria is a substantial oil exporter, while most of the other countries of the region are net oil importers. As a result, Nigeria's TOT changes are negatively correlated on average with those of the rest of ECOWAS, as are Niger's. *Third*, terms of trade shocks for euro area countries are generally smaller and much more highly correlated than those for ECOWAS countries.

A broader assessment of the possibility for asymmetric shocks hitting the economics of the region can be obtained by comparing production structures. The production structure (Table 4) is quite varied across ECOWAS countries. While most are heavily agricultural, the share of agriculture in GDP ranges from 54 percent in 1997 (Guinea-Bissau) to 8 percent (Cape Verde). There are large differences in the share of industry in GDP. Euro area countries are much more homogeneous, with a lower dependence on agriculture and a larger service sector.

Table 3. Euro Area and ECOWAS:
Standard Deviations and Correlations of Changes in the Terms of Trade, 1980-96

	Standard Deviation	Average Correlation with Other Countries in Region
Euro area		
Austria	3.7	0.12
Belgium	3.2	0.60
Finland	3.0	0.46
France	3.1	0.62
Germany	4.7	0.49
Ireland	2.8	0.41
Italy	4.5	0.40
Netherlands	1.2	0.36
Portugal	14.6	0.45
Spain	6.0	0.63
ECOWAS		
Benin	17.8	0.19
Burkina Faso	7.2	0.30
Côte d'Ivoire	6.3	0.18
The Gambia	18.6	0.23
Ghana	11.1	0.13
Guinea	7.3	0.04
Guinea-Bissau	32.8	0.04
Liberia	4.9	0.08
Mali	5.1	0.24
Niger	6.4	-0.19
Nigeria	21.5	-0.05
Senegal	6.5	0.30
Sierra Leone	6.3	0.12
Togo	8.1	0.12

Source: World Bank *World Tables* for ECOWAS, IMF *World Economic Outlook* for Euro area.

Table 4. Selected EU and ECOWAS Countries: The Structure of Production, 1997 or latest year (as a percent of GDP)

	Agriculture	Industry	Services, etc.
EU			
Austria	2.2	34.4	63.5
Belgium	1.6	28.0	70.4
Denmark	3.3	23.9	72.8
Finland	4.8	29.5	65.8
France	2.4	26.6	71.1
Greece	12.7	21.2	66.2
Netherlands	3.4	26.9	69.7
Sweden	2.0	27.5	70.5
United Kingdom	1.7	27.2	71.1
ECOWAS			
Benin	38.3	13.8	47.9
Burkina Faso	32.6	23.8	37.8
Cape Verde	8.7	21.4	69.9
Côte d'Ivoire	27.3	21.2	51.5
Gambia, The	25.9	12.8	48.1
Ghana	47.4	16.6	36.0
Guinea	24.1	33.0	42.9
Guinea-Bissau	53.8	11.0	35.1
Mali	46.9	16.5	32.0
Niger	38.2	18.0	43.7
Nigeria	31.7	45.3	19.8
Senegal	18.4	22.2	59.4
Togo	41.8	20.8	37.4

Source: World Bank, *World Development Indicators*

C. Labor Mobility

Hard data on labor mobility are difficult to obtain. However, it seems likely that mobility is high between some countries of the region, and follows traditional migratory and trading patterns that cut across national boundaries, for instance between the Sahel and coastal areas. According to World Bank estimates, the countries having the largest proportions of resident foreigners in ECOWAS are Côte d'Ivoire (26 percent), the Gambia (14 percent), and Guinea (8 percent) (World Bank, 2000). ECOWAS has facilitated mobility by eliminating visa requirements, but there seem to be administrative difficulties for citizens of one country to establish residency in another ECOWAS country. Labor mobility in ECOWAS is no lower, and probably actually higher, than in the euro area.

In the euro area, lack of labor mobility, combined with less real wage flexibility than, for instance, the United States, is widely recognized to be a problem for smooth adjustment to economic shocks (Buti and Sapir, 1998). Migration in Europe has decreased in recent decades, despite the fact that free mobility of labor is enshrined in the Single European Act.

Low mobility has been attributed to language barriers and administrative constraints, but its persistence even within countries suggests that other social, family, and cultural factors also operate (Buti and Sapir, 1998).

D. Fiscal Transfers

Federal or unitary states that constitute monetary unions have a mechanism that helps to cushion different shocks hitting different regions. In Europe, the absence of fiscal federalism among countries has been viewed as a considerable drawback to the sustainability of monetary union (Sala-I-Martin and Sachs, 1993). Though it does not have a federal system of taxes and transfers, the European Union has set up a "Cohesion Fund" that is designed to subsidize poorer regions. Its size is modest, as the overall EU budget (which is in large part accounted for by transfers related to the Common Agricultural Policy) is only a little more than one percent of EU GDP.

The six non-WAEMU countries in ECOWAS have announced their intention to set up a Compensation Fund to make transfers among countries of the monetary union.⁸ A study is to be prepared first, thus at present details are lacking on how the fund might function. It should be noted that for such a fund to be operational, the commitment of each country to help out its neighbors must be strong. In the past, some countries have not paid their dues to the ECOWAS institutions for many years. In addition, given the size of Nigeria relative to its neighbors, the operation of such a fund may well be asymmetric. Transfers to the smaller countries if they get into difficulties could be sizable, but if Nigeria were to draw it could quickly exhaust available resources of the fund.

E. Central Bank Independence and Financial Development

There have been a number of studies of central bank independence, following the pioneering study by Cukierman (1992). There are of course difficulties in measuring de facto, as opposed to de jure independence, and few studies look at African countries.⁹ Table 5, however, reports their inflation performance over the past half-decade and the extent of seigniorage, as measured by the change in the monetary base divided by GDP. Both variables suggest a low degree of central bank independence, except for the BCEAO, the central bank for the WAEMU. Inflation performance has generally been poor for the non-WAEMU central banks, but good for the BCEAO. The extent of seigniorage in WAEMU, though somewhat higher than in the anchor country for the euro area (Germany),

⁸"ECOWAS Monetary Zone: Compensation Fund Underway," *This Day* (Lagos), July 10, 2000. WAEMU has already established structural funds for sub-regional development.

⁹A measure constructed by de Haan and Kooi (2000) based on the turnover of central bank governors is available only for a few of the ECOWAS countries.

can be seen from Table 5 to be considerably lower than in most of the other ECOWAS countries.

Table 5: Seigniorage and Inflation
(averages, 1995–98, in percent)

Country	Change in the monetary base divided by GDP	Inflation
EURO AREA		
Germany	0.1	1.5
ECOWAS		
WAEMU	0.6	6.0
Gambia, The	1.4	3.0
Ghana	2.0	37.1
Guinea	0.5	
Liberia	3.9	
Nigeria	0.9	30.2
Sierra Leone	1.4	24.9

Source: IMF, International Financial Statistics.

The degree of financial development is also very difficult to measure, and considerably fewer cross-country comparisons exist. A recent IMF study (Mehran et al., 1998) has however compared a number of African countries, dividing them up into 3 categories on the basis of an assessment of the development of their monetary instruments and financial markets. The Group I countries rely primarily on direct instruments and financial markets are small and undeveloped, with essentially no active primary or secondary markets for government securities. Group II countries have made good progress in developing indirect instruments of monetary policy; however they have generally not developed full-fledged secondary markets or full open market operations involving government or central bank securities. Group III countries (only Kenya and South Africa qualify among the countries assessed), have made considerable progress in financial liberalization, development of financial markets, and conversion to indirect instruments of monetary policy. Of the ECOWAS countries, only Ghana and the WAEMU as a whole are evaluated in this study, and both fall into Group II.

Ghana is described as having moved to indirect instruments of monetary policies. There are weekly money market auctions, but the secondary market for government or central bank securities remains very thin, money markets are rudimentary, and interest rates not very flexible. WAEMU is described as facing a similar situation; the BCEAO relies primarily on money market operations to control money and credit, but the regional interbank market is not very active. Thus, both of them stand in contrast to the euro area, where (at least for the largest economies) wide and deep financial markets existed prior to the introduction of the euro.

F. Fiscal Performance

Table 6 compares the recent experience with fiscal policy in ECOWAS and in the euro area. For many countries in the region, the overall fiscal deficit has been persistently high—upwards of 10 percent of GDP; deficit problems have been greater for the non-WAEMU countries, and their debt to GDP levels are also at unsustainable levels. Given limited domestic markets for government debt and limited access to international capital markets, such deficits have only been possible because of grants from foreign donors and resort to advances from central banks. For some of them, the unsustainability of existing stocks of debt is being addressed by the write-down of debt by industrial countries and international financial institutions (the HIPC Initiative). However, past experience suggests that debt problems are endemic.

The euro area also began from a position of excessive debt for a number of countries, especially Belgium and Italy, where government debt/GDP ratios exceeded 100 percent. However, the operation of regional surveillance through the preparation of convergence programs to reduce “excessive deficits” and the resumption of economic growth has led to sizeable primary surpluses and a notable reduction in debt ratios in recent years.

IV. MONETARY UNION AND FISCAL DISCIPLINE

This issue has been much debated in the context of the European Monetary Union, but is probably even more relevant for ECOWAS. The main questions are the effect of monetary union on fiscal discipline, whether lack of fiscal discipline is an obstacle to achieving the objective of monetary union (in particular, price stability), and what sort of fiscal constraints might be effective while at the same time not interfere with using fiscal policies for other legitimate purposes (e.g. cushioning shocks to the economy).

A. Will Monetary Union Worsen the Tendencies Toward Excessive Fiscal Deficits?

It is widely recognized that the political process can provide perverse incentives for overexpansionary fiscal policies, as the short run electoral benefits of increased spending may be given disproportionate weight relative to the longer run costs of distortionary taxation or higher inflation, given short electoral cycles. How are these and other distortions that affect fiscal policies modified by the existence of a monetary union?

A first channel concerns moral hazard with respect to a country's fiscal policy when policymakers expect that they will not have to shoulder the costs of bailout/default. In a monetary union, if a country that is running excessive deficits and is in a position to default on its debts is bailed out by the central bank, the costs are not borne by the country alone, but also paid by other members of the union. Knowing this, policymakers may not be as conservative in their fiscal policies. For this reason, it is proposed that in ECOWAS, as in EMU, the regional central bank be constrained not to provide monetary financing or indirect bailouts to member governments. However, another issue, discussed below, is whether such a statutory provision is completely credible.

Table 6. Fiscal Indicators: Comparison of Euro Area and ECOWAS Countries, 1999
(as a percent of GDP)

	Government Expenditure	Government Revenue 1/	Overall Fiscal Position Including grants	Excluding grants	Central Bank Advances 2/	total	Public Debt domestic 3/	external
Euro Area	47.6	46.0	-1.6		--	72.9		
ECOWAS of which:								
WAEMU Countries								
Benin	17.1	19.5	2.3	-1.1	-3.9	65	5.7	59.3
Burkina Faso	27.3	23.9	-3.4	-12.3	0.5	77.5	7.0	70.5
Côte d'Ivoire	21.9	19.0	-2.9	-3.5	1.0	139.7	20.9	118.8
Guinea-Bissau	36.0	21.4	-14.6	n.a.	3.9	n.a.	n.a.	364.4
Mali	24.5	20.6	-3.8	-8.0	0.2	121.4	4.6	116.8
Niger	16.1	14.2	-1.9	-8.0	0.4	103.9	11.7	92.2
Senegal	20.6	19.2	-1.4	-3.6	2.8	105.4	11.4	94.0
Togo	18.7	15.5	-3.3	-4.4	--	133.0	17.0	116.0
Non-WAEMU Countries								
Gambia, The	23.7	20.0	-3.7	-4.8	6.4	392.2	281.5	110.6
Ghana	26.2	18.0	-8.2	-8.2	5.1	124.9	21.8	103.1
Guinea	15.5	12.5	-3.0	-5.1	2.1	68.1	0.9	67.3
Liberia	35.4	25.8	-9.6	-0.4	--	n.a.	n.a.	n.a.
Nigeria	29.2	20.8	-8.4	-7.7	11.3	122.4	24.7	97.8
Sierra Leone	24.4	14.2	-10.3	-14.9	6.8	280.6	51.8	228.8

Sources: *EMU One Year On* (OECD, 2000) for euro area. IMF staff estimates for ECOWAS.

1/ Including grants in the case of ECOWAS countries.

2/ Defined as the change in the government's net position with the central bank, taken from Bank of France *La Zone Franc*, 1999, for WAEMU countries, and IMF staff estimates for non-WAEMU countries.

3/ End-1998 in the case of WAEMU countries.

A second reason that monetary union may exacerbate the tendency to large deficits is that, contrary to the conventional wisdom, pegged exchange rates may provide a less visible discipline for policymakers than flexible rates, a position taken by Tornell and Velasco (2000). In their view, countries can run expansionary policies (including expanding domestic credit to the government, if the rules of the central bank do not completely rule this out) for longer when in a fixed exchange rate regime before it shows up in macroeconomic variables of direct concern to the public. Indeed, if reserve levels are comfortable, this situation can go on for an extended period of time, until reserves are run down to zero and a step change of the exchange rate is needed. In a monetary union, with pooled foreign exchange reserves, the expanding country can avoid market discipline even longer.

A third effect that may be especially relevant for West Africa is the danger that countries will be pushed into a region where fiscal policy becomes uncontrollable, as a result of the loss of seigniorage revenues occasioned by a move to monetary union, and through adverse debt dynamics this inevitably leads to bailout or default (Bovenberg, Kremers, and Masson, 1991).¹⁰ Unlike the first channel above, here it is not moral hazard but loss of control over fiscal policy that is the problem. The argument is based on the fact that there are ceilings on the amount of revenue that can be raised by taxation because of administrative weaknesses (especially so in many African countries, where tax revenue to GDP ratios are often around 10 percent), and floors to government spending ratios. In this context, imperfect budgetary management and/or adverse shocks may inadvertently cause debt to accumulate to a point where it cannot be serviced, i.e. where the government is incapable of generating the primary surplus needed to stabilize, much less reduce, the debt to GDP ratio. In those circumstances, a default or bailout is inevitable, and the union central bank may be induced to provide the latter.

There are arguments on the other side of this issue, namely that monetary union induces greater fiscal discipline. First, it has been pointed out in a number of contexts that a monetary union weakens the strategic influence of any single government over the monetary authority, since it is only one of several governments in that position and all may not face the same circumstances. For instance, Beetsma and Bovenberg (1998) assume that there is a distortion such that the fiscal authorities attempt to force the central bank to attenuate the effect of distorting taxes by increasing inflation. With a monetary union, their power to do so is diluted. The authors further point out, however, that fiscal policy coordination may have

¹⁰While monetary union would have the largest consequences for seigniorage, Adam et al. (1996) also show that financial market liberalization and the development of domestic financial asset markets lowers the seigniorage capacity of governments by increasing the elasticity of substitution between base money and other financial assets. Honahan and Lane (2000) question whether higher past seigniorage should be seen as a significant hurdle for achieving monetary union, noting the rapid adjustment of policies to absorb the loss of seigniorage in the Mediterranean EU countries.

the perverse effect of once again strengthening the hand of the governments over the central bank.

A second favorable effect of monetary union is to provide an “agency of restraint” (Collier, 1991) over macroeconomic policies generally. By joining a monetary union, countries voluntarily sign on to conservative monetary and fiscal policies, and hence would be reinforcing domestic tendencies in that direction. This is more likely to be effective if there is some external link, for instance an external currency peg. The CFA franc zones have a fixed peg to the French franc (now the euro), as well as a guarantee of convertibility of their currency from the French Treasury. However, there is a serious debate over the effectiveness of this external agency of restraint, especially since one of the CFA franc zones, the CAEMC, has exhibited little fiscal discipline. Guillaume and Stasavage (2000) argue that the monetary union was not enough to provide fiscal discipline, and that it needs to be reinforced by parallel regional arrangements and/or links to financial and technical assistance of industrial countries that make it costly to violate the rules of the monetary union; effective peer pressure requires other aspects of regional solidarity that make it costly for countries to withdraw from the monetary union. Moreover, Stasavage (1996), in analyzing the operation of the CFA franc zones, argues that France was not willing to use its authority to ensure the effectiveness of the ceilings on monetary financing in either CFA franc zone before 1994.

A final argument for effective fiscal discipline that was much debated in the European context was whether a single currency, and hence a unified capital market, would allow the more effective operation of market discipline. Bayoumi, Goldstein and Woglom (1995) examine the U.S. and Canadian data for the borrowing costs of states and provinces, and conclude that in those currency unions, financial markets effectively price in differences in fiscal positions, providing proper incentives to take action before government debt becomes unsustainable. It is clear, however, that the relevance of this finding to ECOWAS is limited. As discussed in the previous section, financial markets even within the WAEMU monetary union are not well developed or integrated. An active secondary market in government debt does not exist in most countries of ECOWAS, so that an ECOWAS monetary union is unlikely to bring about the market discipline that might operate in more developed economies.

To sum up, the factors leaning toward unsustainable fiscal policies in ECOWAS are considerably greater than in the EU, and one suspects that the danger of fiscal *indiscipline* as a result of monetary union (though, as we have seen above, the effect can go either way) is also greater in Africa. This is mainly because the guarantees provided by a no-bailout, or no monetary financing, clause are less credible in the context of central banks with a history of limited independence and a poor record for low inflation (Table 3 above). Thus, a bailout may seem an attractive possibility when designing fiscal policy. The offsetting force of greater peer pressure in exerting an agency of restraint is uncertain; in any case, it is unlikely to occur automatically as a result of the monetary union, but requires further institutional development—such as the explicit limits on fiscal deficits, discussed below. As for greater market discipline, it will be some time before it can be expected to occur, though monetary union should, over time, contribute to the development of regional financial markets.

B. Are Constraints on Fiscal Policies Needed in a Monetary Union?

Whether or not the incentives for undisciplined fiscal policies increase in a monetary union, there is a more basic question of whether constraints on fiscal policies are needed. Why should an iron-clad prohibition on monetary financing not be sufficient? In discussing the question, it is useful to consider the separate use of ceilings on deficits and debt first as conditions for membership in the monetary union, and second as permanent features of a monetary union to limit fiscal deficits.

The main justification for explicit fiscal restraints is that prohibition against bailouts in some form is never ironclad (Eichengreen and Wyplosz, 1998). This is especially true for countries with weak monetary and fiscal institutions, and lack of strong public support for low inflation. Thus, formal rules are in danger of being broken. Large fiscal deficits make it more likely that the point would be reached that the central bank, despite its formal statutes, might yield to pressures for bailout. This could come either in the form of monetary financing, or through lowering interest rates, thus lowering a government's interest cost and ultimately inflating away the real value of the debt. The latter channel would be especially difficult to rule out by statute, since there could be other plausible arguments for loosening monetary policy (or not tightening it in the face of inflationary pressures). In addition to the need for a mechanism to restrict deficits once in monetary union, another justification for the use of ceilings on debt and deficits is as condition for entry to monetary union (Masson, 1996). First, a country in a monetary union with an overhang of debt would be vulnerable to adverse shocks (e.g. to growth or interest rates), even if its fiscal deficit were currently under control. An unsustainable level of debt would raise the dilemma for the central bank of choosing between allowing a government to default or bailing it out. Second, fiscal convergence criteria (as well as other conditions) signal the country's willingness to adhere to the constraints of a monetary union. Inability to satisfy the criteria would indicate that the country was unlikely to maintain policies necessary to remain in the monetary union in the face of unfavorable shocks. The history of large budget deficits and inability to service external debt suggests that it will be important to apply criteria for membership in an ECOWAS monetary union rigorously. Section VI below discusses the convergence criteria selected by ECOWAS and the prospects for non-WAEMU countries to meet them within the timetable for forming the "second monetary union," the West African Monetary Zone.

C. What Form Should Fiscal Restraints Take?

In the EU, the Maastricht Treaty describes an excessive deficit procedure that would apply to countries in the monetary union, intended to limit general government deficits to 3 percent of GDP and gross debt to 60 percent of GDP. These provisions, which allowed for the possibility of sanctions that might include denial of access to EU regional or structural funds, were supplemented by more precise commitments by euro area countries. The Stability and Growth Pact provides for fines imposed on countries running excessive deficits which were not due to exceptional circumstances, in particular those not due to a sharp or sustained downturn in economic activity.

The debate in Europe has mainly concerned whether it was desirable to restrict fiscal policy in this way and whether other criteria, such as cyclically adjusted deficits, would have been preferable. Opponents have pointed to the need for greater fiscal flexibility to offset the loss of national monetary policy flexibility in response to shocks, and in a context where other shock absorbers (fiscal transfers between countries, labor mobility) were modest. The operation of automatic stabilizers to cushion cyclical fluctuations could be inhibited, especially if countries started at fiscal positions that were close to the 3 percent deficit ceiling.

Defenders of the Stability and Growth Pact point to the fact that it takes into account cyclical downturns in evaluating whether financial sanctions would be applied, as well as allowing a degree of discretion to the Council of Finance Ministers. Moreover, its intended role is to force countries to have reduced fiscal deficits before the downturn occurs. Countries which in good times ran fiscal surpluses would have substantial room to let the automatic stabilizers operate and to perform discretionary fiscal expansion.

In ECOWAS, there is also a potential need to respond to shocks using fiscal policy, judging by the experience of cyclical fluctuations in the CFA franc zone (Hoffmaister, Roldós, and Wickham, 1998). However, the challenge of achieving fiscal sustainability is more demanding in many of the countries of the region than in the euro area, so that the room for maneuver for increased budget deficits in downturns is smaller. This suggests that the costs of potentially limiting the operation of counter-cyclical fiscal policies in ECOWAS may be less—at least at the margin.

ECOWAS countries have also agreed to ceilings on fiscal deficits. However, many countries currently exceed those limits, and it is too early to know how strictly they will be applied. The experience of WAEMU is somewhat longer, and regional surveillance has had some success in reducing fiscal deficits, eliminating payment arrears, decreasing the public wage bill, raising the investment financed from domestic resources, raising the government revenue as a ratio to GDP, and lowering the external current account deficit. However, while the inflation rate is well under the ceiling of 3 percent, despite considerable progress other criteria were generally not met by the end of 1999. Initially there were no effective sanctions; while they were agreed among WAEMU members in December 1999, there is as yet insufficient experience to assess their effectiveness.

In the non-WAEMU ECOWAS countries, the dangers of fiscal overshoots are considerably greater, judging from their recent history (Table 6). These countries have defined fiscal criteria that are somewhat looser than those of WAEMU, and so far no sanctions mechanism has been put in place nor has any indication been given that they would be applied rigorously to screen countries from participating in the WAMZ. On the contrary, the evident political determination in Nigeria and Ghana to proceed to monetary union suggests that meeting the criteria will not be applied rigorously. This raises the danger that the monetary union may not be successful, in that either countries that join may be forced to

withdraw later or that the central bank will follow expansionary policies because of pressures exerted on it by profligate governments.

A number of issues should be kept in mind in designing fiscal restraints to maximize the likelihood that they could contribute to limiting deficits and to try and prevent the negative outcomes discussed above. First, the countries should agree that the restraints define the most relevant fiscal deficit concept, and that the deficit is measured properly.

Second, the monitoring of compliance with fiscal restraints should recognize the scope for circumvention of rules through illusory fiscal adjustment and creative accounting. Easterly (1999) argues that fiscal adjustment in many countries with World Bank/IMF programs relied heavily on decumulation of government assets (through fiscally motivated privatizations, cuts in public investment and operations and maintenance spending) and expenditure postponement or accumulation of hidden liabilities. Milesi-Ferretti (2000) develops a model illustrating that fiscal rules are more likely to lead to creative accounting rather than real fiscal adjustment when the budget process is not transparent. The experience of the CFA zones during the 1980s discussed below demonstrates that this is a relevant concern for a potential WAMZ. Thus, efforts to improve the transparency of fiscal policy will be important to ensure that adherence to fiscal restraints translates to actual fiscal adjustments.

Third, it is not clear that a sanctions mechanism is a feasible way to deter violations of fiscal restraints. The credibility of a policy in which the union imposes sanctions on its members, either small or large countries, is questionable, as is the likelihood that a sanctioned member would pay its fines. It may be more effective to consider a system where a country's union membership is temporarily suspended if it is deemed to be in serious violation of the rules.

V. EMPIRICAL EVIDENCE ON MONETARY UNIONS AND FISCAL DISCIPLINE

Thus far, we have largely discussed the effect of monetary unions on fiscal discipline in theory, but what has been the experience in practice? Although the ability of cross-country empirics to shed light on this question is limited, we present some evidence below, followed by a description of the experience of the CFA zone.

A. Cross-Country Evidence

In a recent paper, Fatás and Rose (2000) examine fiscal policy in countries with extreme monetary stances: currency boards, multilateral currency unions, or countries that have unilaterally adopted the currency of an anchor country (termed unilateral currency unions). Using a panel data set with annual data on 206 territorial entities for the period 1960–98, they regress fiscal policy measures on dummies for currency boards, multilateral and unilateral currency unions, and include some controls for variables that are likely to be correlated with both fiscal policy and the exchange rate regime. The authors note that some

of the “countries” (not all are independent countries) in the panel are small and this may raise questions about the generality of the results.

Fatás and Rose find that currency boards and multilateral currency unions have smaller sized governments and smaller budget deficits, while unilateral currency unions have larger sized governments. The interpretation of the latter finding is that countries that have tied their hands by adopting another country’s currency used fiscal policy to a greater degree to insure the additional risk from the absence of an independent monetary policy. They argue that this logic is also supported by the finding that the composition of the budget in currency boards and multilateral currency unions is biased toward types of expenditures and taxes generally associated with automatic stabilizers.

We note that it is difficult to examine empirically the impact of multilateral currency unions because there are so few unions in existence. In the Fatás and Rose sample there are only two multilateral currency unions, the Eastern Caribbean Currency Union (ECCU), consisting of 8 small island countries and the CFA franc zone, with 14 West and Central African countries, plus Comoros.¹¹ The East African Community’s (EAC) 1967–77 currency union is excluded, as well as the failed ruble zone, and, of course, the EMU is too recent to include.

Since the authors have kindly made their data publicly available, it is straightforward to check whether the result that multilateral currency unions have smaller budget deficits holds if we consider only the CFA franc zone. We run the same six regressions as in their paper: a benchmark model with only the log of real GDP per capita and the log of openness as controls, benchmark with time dummies, benchmark using only data from countries with extreme monetary regimes (currency boards and currency unions) versus those with fixed exchange rate regimes, a model with four additional controls (log of: population, land area, urbanization and the dependency rate), and the additional control model with time dummies and versus fixed exchange rate regimes. Replacing the multilateral currency union dummy with a dummy for the CFA franc zone countries, we find the results to be broadly similar.

Next, rather than using the entire 1960–98 period, we restrict the estimation to 1985–98. This is an interesting period because it follows the debt crisis and is associated with declines in the terms of trade for West Africa. Table 7 shows Fatás and Rose’s results for reference, and the model estimated over the latter sub-period.¹² While the result that

¹¹The ECCU consists of: Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines. CFA zone countries include the 8 West African countries listed in footnote 3, plus the Central African zone members: Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea and Gabon.

¹²Following Fatás and Rose we report only the coefficient and t-statistic for the currency board, unilateral and multilateral currency board dummies; we also add the adjusted R^2 . The coefficients for the control variables were generally significant and of the expected signs.

Table 7. Fiscal Policy in Extreme Monetary Regimes:
Regressions using Data from Fatás and Rose (2000)

(Results with Income and Openness Controls)

Dependent Variable	Benchmark Results			With Time Effects			Against Fixes		
	Uni-lateral	Multi-Lateral	CB	Uni-lateral	Multi-lateral	CB	Uni-lateral	Multi-lateral	CB
Budget Surplus 1960-98 (Fatás and Rose)	1.65 (2.5)	1.98 (4.3)	3.13 (6.8)	1.73 (2.7)	2.05 (4.4)	2.24 (4.6)	1.87 (2.8)	2.40 (5.0)	2.63 (5.2)
Adjusted R ²		[.04]			[.06]			[.08]	
Budget Surplus 1985-98	1.50 (2.0)	0.94 (1.8)	2.33 (4.3)	1.54 (2.0)	1.03 (2.0)	2.22 (4.0)	2.13 (2.8)	1.48 (2.7)	2.10 (3.9)
Adjusted R ²		[.07]			[.07]			[.09]	
Central Government debt 1960-98	-34.32 (9.1)	17.11 (1.8)	-43.06 (17.1)	-33.34 (8.3)	12.06 (1.4)	-36.35 (2.9)	-24.56 (6.3)	23.33 (2.6)	-33.48 (13.2)
Adjusted R ²		[.09]			[.11]			[.13]	

Controls included in each regression are: natural logarithms of real GDP per capita and log of trade/GDP ratio. Absolute values of t-statistics (calculated with robust standard errors) recorded in parentheses.

(Results with Additional Controls)

Dependent Variable	Benchmark Results			With Time Effects			Against Fixes		
	Uni-lateral	Multi-lateral	CB	Uni-lateral	Multi-lateral	CB	Uni-Lateral	Multi-lateral	CB
Budget Surplus 1960-98 (Fatás and Rose)	1.00 (1.2)	1.88 (3.2)	2.95 (5.5)	0.71 (0.9)	1.91 (3.2)	2.18 (4.0)	1.02 (1.2)	2.77 (4.1)	3.00 (4.7)
Adjusted R ²		[.04]			[.06]			[.10]	
Budget Surplus 1985-98	1.07 (1.1)	0.94 (1.3)	2.44 (3.7)	1.06 (1.1)	0.98 (1.4)	2.37 (3.6)	0.88 (0.8)	1.83 (2.4)	2.56 (3.8)
Adjusted R ²		[.07]			[.07]			[.17]	
Central Government debt 1960-98	-14.76 (2.6)	18.77 (1.8)	-38.84 (6.5)	-23.13 (3.7)	11.92 (1.2)	-29.62 (2.1)	-5.16 (0.9)	17.07 (1.7)	-38.22 (4.0)
Adjusted R ²		[.13]			[.15]			[.17]	

Controls included in each regression are natural logarithms of: (a) real GDP per capita; (b) openness; urbanization; dependency; population; and land area. Absolute values of t-statistics (calculated with robust standard errors) recorded in parentheses.

multilateral currency unions have smaller budget deficits still holds in the benchmark models (top panel), it is not robust to the additional controls.

While Fatás and Rose examine the impact of extreme monetary regimes on government size, budget deficits and the composition of the budget, they do not explore the impact on government debt. The literature on monetary unions and fiscal discipline has shown, however, that monetary union might encourage excessive accumulation of public debt, either because of the prospect of a bailout, or because the costs are not fully internalized by the member country with large debts. Beetsma and Bovenberg (1999) and Chari and Kehoe (1998) develop models illustrating this mechanism. The central element in their analysis is that although usually the fact that public debt leads to future inflation through monetization exerts a disciplinary force on the fiscal authorities, in a monetary union the discipline imposed by future inflation is diluted proportionally to a country's size in the union.

We estimate the same six models using central government debt as a percent of GDP as a dependent variable—results are reported in the third row of Table 7. Interestingly, while unilateral currency unions and currency boards tend to have smaller levels of government debt, the opposite holds for multilateral currency unions (results are not significant in the specifications with time effects). In summary, subject to the difficulties of estimation with relatively few observations on multilateral currency unions, the empirical results on currency unions and fiscal discipline are mixed. Including some relevant controls, multilateral currency unions tended to have smaller budget deficits over the entire 1960–98 sample, although the results were not as robust over a 1985–98 sub-sample. However, multilateral currency unions also tended to have higher levels of public debt. Thus, the evidence that monetary union by itself is associated with tighter fiscal discipline is limited; again pointing to the importance of introducing explicit fiscal constraints.¹³

B. Case Study of the CFA Franc Zone

The cross-country study discussed above used a measure of the government deficit including grants in the analysis of the impact of monetary unions on fiscal performance. For the case of the CFA zone, however, this measure does not adequately reflect the extent of fiscal indiscipline in the 1980s and early 1990s. Much of the activity was initially kept off the fiscal accounts, as the governments pushed state owned banks to make loans to public enterprises. This relieved budgetary pressures but led to banking sector crises that had to be financed.

¹³ Almost all of the multilateral currency union observations in the sample were from unions with no fiscal rules. WAEMU instituted convergence criteria, including fiscal criteria, in 1993, but problems in their design limited effectiveness and led to adoption of a new process and set of criteria in 1999.

The extent of fiscal indiscipline may seem somewhat surprising given that in order to guard against the risk of monetization of budget deficits both central banks in the zone limit the stock of total advances to government to 20 percent of the previous year's fiscal revenue, and that the French Treasury participates in decision-making at the central bank and plays a policy oversight role in exchange for its guarantee of convertibility for the currency. Stasavage (1997, 2000) explores reasons for the lack of fiscal discipline. He concludes that much of the responsibility rests with political interests in France and the zone members. These groups affected the design of the rules and institutions, and the application of those rules and functioning of the institutions during the crises of the 1980s and early 1990s.

Stasavage documents the poor fiscal performance of the CFA zone in the 1980s, relative to the rest of sub-Saharan Africa (SSA).¹⁴ The primary source of deficit financing was not direct central bank lending to governments, but rather indirect financing through refinancing credits. In the West African zone, the larger countries (Côte d'Ivoire and Senegal) avoided direct controls on financing by borrowing from commercial and development banks, which could obtain refinancing from the BCEAO at concessional rates. As a result of this implicit lending to governments, excessive fiscal deficits in both zones exacerbated the overvaluation of the CFA franc that was caused by negative terms of trade shocks and the appreciation of the French franc against the U.S. dollar in the 1987–93 period. Since prudential ratios on banks were not adequately enforced, a banking crisis occurred in both zones in this period, and the central banks, which had extended loans to the banks, ended up the major (unpaid) creditors. In effect, this led to seigniorage being obtained by the larger countries, which had benefited from the commercial bank loans (Stasavage, 1996; Nascimento, 1994).

An important external financing source was the French government. By running an “operations account” deficit with France during much of the 1980s, the WAEMU countries obtained substantial short-term finance.¹⁵ After access to that source was tightened in 1989, French non-project aid to cover budgetary gaps increased, and even went particularly to the large countries that had been disproportionately responsible for bank failures. Stasavage (1997, 2000) argues that during this period, political interests in France were more interested

¹⁴See also Nashashibi and Bazzoni (1994) and Tornell and Velasco (2000). The first paper argues that real exchange rate misalignment was a major factor in the deterioration of fiscal performance in the CFA zone during the second half of the 1980s. The second shows that between 1980–84, the CFA zone countries had worse fiscal adjustment than African countries outside the CFA Franc zone that had more flexible exchange rate arrangements, controlling for changes in terms of trade, initial debt and GDP per capita.

¹⁵For each of the 2 zones, member countries' reserves are held in separate Operations Accounts with the French Treasury. Each zone is required to hold external assets at least equal to 20 percent of the central bank's sight deposits. The operations account is the mechanism through which France guarantees convertibility for the CFA franc.

in preserving the zone and assuring short-term political stability of heads of state than in forcing fiscal adjustment.

There was a noticeable improvement in public finances of the WAEMU region, following the CFA franc devaluation in 1994. The overall fiscal deficit (including grants) of the WAEMU countries declined from an average of 6.7 percent of GDP during 1990–93 to 2.5 percent of GDP during 1994–98 (IMF, 2000). This was a somewhat greater improvement in fiscal balances than occurred in the rest of SSA. Structural reforms under IMF-supported programs, as well as the mutual surveillance process associated with the WAEMU convergence criteria played some role in improved fiscal discipline. Ending the substantial real exchange rate misalignment through the devaluation was also very important for the improved fiscal performance because it allowed a resumption of economic growth.¹⁶

The role of France as an external guarantor of the CFA franc's convertibility has been credited as playing an important role in the success of the CFA zone. Given that the European Union is unlikely to serve as an external guarantor for a WAMZ, there is a large question regarding the likelihood of success of a union without such an external guarantee. The experience of the CFA zone reviewed here, however, illustrates that an external guarantor could have both positive and negative effects on the promotion of fiscal discipline. While external surveillance and links to assistance of industrial countries that make it costly to violate fiscal criteria can have a restraining effect, there is a potential for moral hazard related to bailouts and partial fundings of fiscal indiscipline.

VI. IMPLEMENTING MONETARY UNION IN WEST AFRICA: CONVERGENCE CRITERIA

Following the example of the European Union and WAEMU, the non-WAEMU countries have set various targets for convergence. By end-2000 (end-2003), countries are expected to lower inflation to 10 percent (5 percent); raise gross official reserves to at least 3 months (6 months) of imports; reduce central bank advances to no more than 10 percent of tax revenues by end-2003; and cut the overall fiscal deficit (excluding grants) to no more than 5 percent (4 percent) of GDP. Exchange rate stability is to be added to the list of criteria, but it has yet to be defined precisely. Table 8 presents the data at end-1999 for the existing convergence criteria.

ECOWAS countries are currently very far from achieving all the criteria. Ghana and especially Sierra Leone are experiencing high inflation, as well as large fiscal deficits that are well over the target (Nigeria also has a large deficit). Four of the six (all except the Gambia and Nigeria) would not currently satisfy the relatively loose reserve target of 3 months of imports for 2000 (much less the criterion of twice that for 2003), and it should be recognized that achievement of exchange rate stability may lead to a rundown of reserves by some

¹⁶Adam et al. (2000) show that real exchange rate misalignment contributed to the poor cumulative revenue performance of the CFA zone during 1980–94.

countries. Central bank advances as a percent of tax revenue are currently a multiple of the ceiling in all countries except Ghana and Liberia.

Table 8. ECOWAS: Position of non-WAEMU Members
with Respect to the Convergence Criteria 1/

	Inflation rate (In percent)	Gross official reserves (In months of imports)	Central bank advances (In percent of tax revenue)	Overall fiscal deficit 2/ (In percent of GDP)
Situation at end-1999				
Gambia	1.7	5.7	32.0	4.8
Ghana	13.8	1.5	8.2	8.2
Guinea	4.6	2.6	29.6	5.1
Liberia	4.0	0.0	0.0	0.4
Nigeria 3/	6.6	4.5	55.0	7.7
Sierra Leone	34.1	2.0	70.9	14.9
Norms for end-2000	< 10	> 3	...	< 5
Norms for end-2003	< 5	> 6	< 10	< 4

Source: IMF staff estimates.

1/ Cape Verde was not signatory of the "Accra Declaration" on the creation of a second monetary zone in 2003.

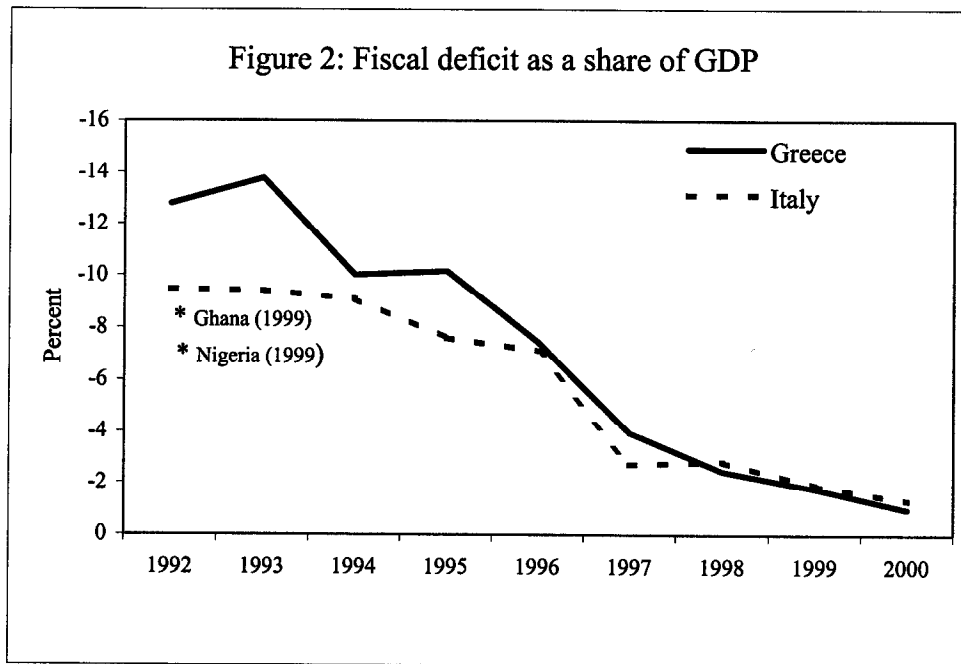
2/ Excluding grants.

3/ Central bank advances are in percent of total government revenue.

It is instructive to compare the starting point for the countries of the proposed "second monetary union" (or WAMZ) with that of countries in the European Union, where the transition period took about 7 years from the signing of the Maastricht Treaty in February, 1992.¹⁷ Figures 2-4 plot the fiscal deficit ratio, the public debt ratio, and the rate of inflation for Italy and Greece, where the 1999-2000 figures for Nigeria and Ghana are aligned with the 1992 figures for the EU countries. Interestingly enough, the two principal candidates to form the WAMZ are at about the same point as Italy and Greece were in 1992: their fiscal deficits and inflation are somewhat lower, while debt is higher. However, Nigeria has faced a particularly favorable environment recently, given high world oil prices, and this may not continue. The comparison suggests that a realistic transition period for ECOWAS would not

¹⁷Dating the start of the convergence process in the EU is difficult, given that some of the stages (e.g. removal of capital controls by 1990) antedated signing of the Treaty, and the creation of the European Monetary System in 1979 was intended as Stage I of a transition to monetary union. Formal convergence programs were first introduced in 1992.

be the 3-4 years or so from the beginning of 2000, but rather the 7-9 years taken by Italy and Greece to join the euro zone.¹⁸ Some of the EMU conditions required achievement over several years, not just on the basis on one year's performance.¹⁹ Moreover, many of the European countries had a long period of sound finances and low inflation. Nevertheless, qualification for monetary union was subject to intense scrutiny and efforts to harmonize data and close loopholes that might permit a temporary or unsustainable achievement of the criteria. For ECOWAS, it will be important to remove any ambiguity about how convergence criteria are defined, to ensure that they are calculated in the same way in all countries, and for countries proceeding to monetary union to have demonstrated their ability to meet the criteria in a sustained and durable fashion.



¹⁸Italy was a founding member on January 1, 1999, while Greece did not become a member of the euro zone until January 1, 2001.

¹⁹In particular, exchange rate stability was required for 2 years, though the widening of the bands of fluctuation made this condition less constraining from August, 1993. The general government debt criterion also stipulated that the trend was important, not just the level at a point in time.

Figure 3: Total Public Debt as a share of GDP

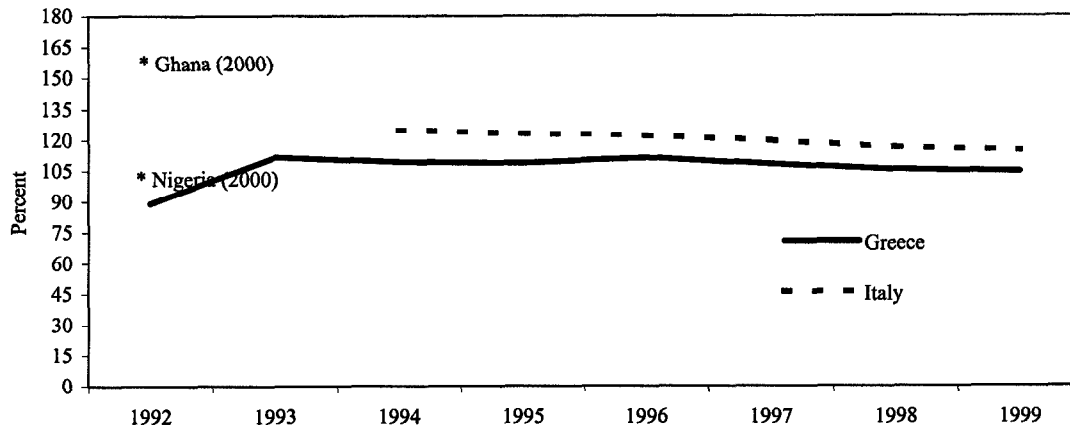
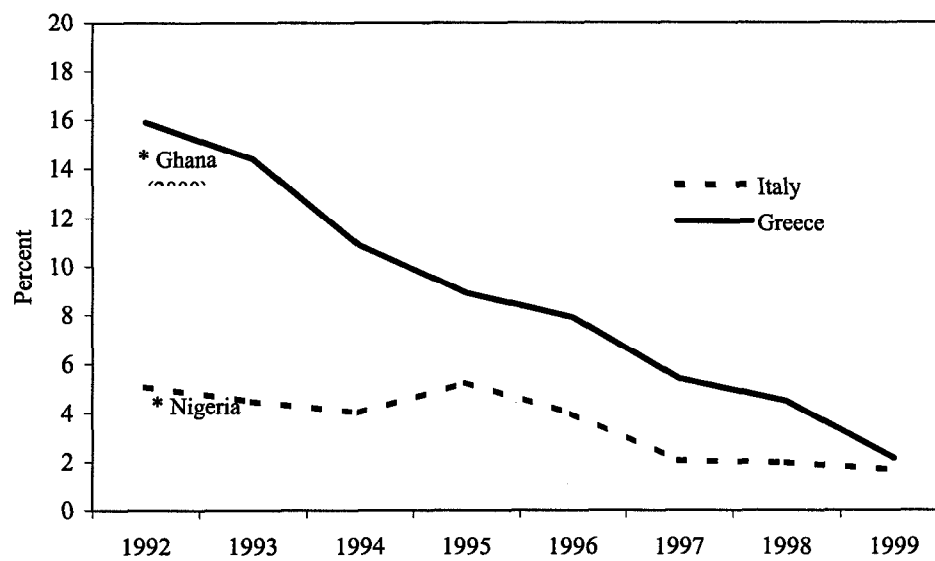


Figure 4: Inflation



VII. CONCLUSION

In an earlier paper (Masson and Pattillo, 2001) we recommended that ECOWAS members should not rush to meet a very short proposed deadline for monetary union. Instead, these countries could gain the benefits of exchange rate stability and mutual surveillance over macroeconomic policies through a looser form of regional monetary cooperation, similar to the earlier European Monetary System (EMS) style mechanism, with the euro as a reference currency. At the present time, however, it appears that the non-WAEMU countries are still determined to go forward with the plan to move to a formal monetary union, and have recently agreed to set up the West African Monetary Institute to serve as a transitional institution to a future, common central bank. Thus it is important to consider how the current political momentum for cooperation can contribute to improving policies in the region.

The EMU literature, CFA zone experience and empirical studies reviewed in this paper demonstrate that if the ECOWAS monetary union project continues to go forward, it will be critically important to set up rules, institutions and a mutual surveillance process to try and make the monetary union an effective agency of restraint for fiscal policies. Fiscal excesses that either led individual countries to leave the monetary union, or the supranational central bank to monetize deficits and engage in over expansionary policies, would likely mean that the monetary union would not be successful. This would be a large setback to the process of regional cooperation and integration in West Africa.

The conclusion from comparison of the EMU and West Africa is that the danger of fiscal indiscipline as a result of forming a monetary union is much more likely in West Africa, since no-bailout or no-monetary financing clauses are less credible given the region's history of central banks with limited independence and poor inflation records. At this point the potential for the offsetting force of mutual surveillance is uncertain. The experience of the WAEMU and EMU illustrate that effective surveillance would require substantial further institutional development in ECOWAS and agreement on explicit fiscal restraints. The hands of the fiscal authorities would need to be tied by a strong set of fiscal restraint criteria, applicable not just for accession to monetary union, but throughout the life of the union. The evident determination of the non-WAEMU countries to move forward quickly even though they are very far from the established convergence criteria is not a good sign. Thus the first step in ensuring that monetary union in West Africa will promote fiscal discipline would be for the countries proceeding to monetary union first to demonstrate their capacity to meet the convergence criteria in a sustainable fashion. This would provide a strong signal that the political momentum for this project can be channeled to achieve positive results.

References

- Adam, Christopher., David L. Bevan, Gerard Chambas (2001), "Exchange Rate Regimes and Revenue Performance in Sub-Saharan Africa," *Journal of Development Economics*, Vol. 64, pp. 173-213.
- Adam, Christopher, Benno Ndulu and Nii Kwaku Sowa (1996), "Liberalisation and Seigniorage Revenue in Kenya, Ghana and Tanzania," *The Journal of Development Studies*, Vol. 32, No. 4, pp. 531-553.
- Beetsma, Roel and A. Lans Bovenberg (1997), "Does Monetary Unification Lead to Excessive Debt Accumulation?" *Journal of Public Economics*, 74:299-325.
- Beetsma, Roel, and A. Lans Bovenberg (1998), "Monetary Union without Fiscal Coordination May Discipline Policymakers," *Journal of International Economics*, 45: 239-258.
- Bayoumi, Tamim, Morris Goldstein, and Geoffrey Woglom (1995), "Do Credit Markets Discipline Sovereign Borrowers? Evidence from US States," *Journal of Money, Credit and Banking*, 27(4): 1046-59.
- Bovenberg, A. Lans, Jeroen Kremers, and Paul Masson (1991), "Economic and Monetary Union in Europe and Constraints on National Budgetary Policies," *IMF Staff Papers*, 38 (June): 374-98.
- Buti, Marco, and André Sapir, eds. (1998), *Economic Policy in EMU: A Study by the European Commission Services* (Oxford: Clarendon Press).
- Chari, V.V. and Patrick Kehoe (1998), "On the Need for Fiscal Constraints in a Monetary Union," Working Paper 589, Minneapolis: Federal Reserve Bank of Minneapolis.
- Collier, Paul (1991), "Africa's External Economic Relations, 1960-90," *African Affairs*, Vol. 90 (July), pp. 339-56.
- Cukierman, Alex (1992), *Central Bank Strategy, Credibility, and Independence: Theory and Evidence* (Cambridge, MA: MIT Press).
- Cukierman, Alex, Steven Webb, and Bilin Neyapti (1992), "Measuring the Independence of Central Banks and its Effects on Policy Outcomes," *World Bank Economic Review*, 6(3): 353-98.
- De Haan, Jakob, and Willem Kooi (2000), "Does Central Bank Independence Really Matter? New Evidence for Developing Countries Using a New Indicator," *Journal of Banking and Finance*, 24: 643-64.

- Easterly, William (1999), "When is Fiscal Adjustment an Illusion?" *Economic Policy* (April), pp. 57-86.
- Eichengreen, Barry, and Charles Wyplosz (1998), "Stability Pact: More than a Minor Nuisance?" *Economic Policy*, 26 (April): 67-113.
- Fatás, Antonio and Andrew Rose (2000), "Do Monetary Handcuffs Restrain Leviathan? Fiscal Policy in Extreme Exchange Rate Regimes," mimeo.
- Guillaume, Dominique, and David Stasavage (2000), "Improving Policy Credibility: Is There a Case for African Monetary Unions?" *World Development*, Vol. 28, No. 8, pp. 1391-1407.
- Hernández-Catá, Ernesto and others (1998), "The West African Economic and Monetary Union," *IMF Occasional Paper* No. 170 (Washington: International Monetary Fund).
- Hoffmaister, Alexander, Jorge Roldós, and Peter Wickham (1998), "Macroeconomic Fluctuations in Sub-Saharan Africa," *IMF Staff Papers*, 45: 132-60
- Honohan, Patrick, and Philip Lane (2000), "Will the Euro Stimulate More Monetary Unions in Africa?" Policy Research Working Paper No. 2393 (Washington: World Bank)
- International Monetary Fund (2000), "WAEMU: Recent Economic Developments and Regional Policy Issues in 1999," May (Washington)
- Masson, Paul (1996), "Fiscal Dimensions of EMU," *Economic Journal*, 106 (July): 996-1004.
- Masson, Paul and Catherine Pattillo (2001), *Monetary Union in West Africa (ECOWAS)—Is it Desirable and How Could it be Achieved?*, Occasional Paper No. 204 (Washington: International Monetary Fund).
- Mehran, Hassanali, Piero Ugolini, Jean Philippe Briffaux, George Iden, Tonny Lybeck, Stephen Swaray, and Peter Hayward (1998), *Financial Sector Development in Sub-Saharan African Countries*, Occasional Paper 169 (Washington: International Monetary Fund).
- Milesi-Ferretti, Gian Maria (2000), "Good, Bad or Ugly? On the Effects of Fiscal Rules with Creative Accounting," IMF Working Paper WP/00/172 (October).
- Nascimento, Jean-Claude (1994), "Monetary Policy in Unified Currency Areas: The Cases of the CAMA and ECCA during 1976-90," *IMF Working Paper* WP/94/11 (January).
- Nashashibi, K. and Stefania Bazzoni, (1994), "Exchange Rate Strategies and Fiscal Performance in Sub-Saharan Africa," *IMF Staff Papers*, Vol. 41, No. 1 (March).

OECD (2000), *EMU One Year On* (Paris: Organisation for Economic Co-operation and Development).

Stasavage, David (2000), "The Franc Zone as a Restraint," P. Collier, P. and C. Pattillo, eds., in *Investment and Risk in Africa*, pp. 275-305.

Stasavage, David (1997), "The CFA Franc Zone and Fiscal Discipline," *Journal of African Economies*, Volume 6 (No. 1), pp. 132-67.

Tornell, Aaron and Andrés Velasco (2000), "Fixed Versus Flexible Exchange Rates: Which Provides More Fiscal Discipline?" *Journal of Monetary Economics*, 45, pp. 399-436.