

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

Paul Masson and Catherine Pattillo¹
International Monetary Fund

Could a monetary union in West Africa (either an informal monetary union of the non-CFA countries, or a possible future monetary union of all ECOWAS members) be an effective 'agency of restraint' (Collier, 1991) on fiscal policies? We discuss the ways, both positive and negative, that monetary union could affect fiscal discipline and the arguments for explicit fiscal restraints considered in the literature about the European Monetary Union (EMU), and consider their applicability to West Africa. 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 bail-out, or costs that are diluted through the membership. We conclude 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.

1. Introduction

On 20 April 2000, in Accra, the leaders of six West African countries²

¹ Revised version of a paper presented at the American Economics Association annual meeting in New Orleans, 4–6 January 2001. We would like to thank Grace Juhn and Saji Thomas for research assistance, Paul Collier, Philip Lane, David Stasavage and an anonymous referee for comments, as well as numerous colleagues at the International Monetary Fund and the World Bank who made comments on a larger study (Masson and Pattillo, 2001), on which this paper is partly based. The views expressed here are our own, and do not represent the official views of the International Monetary Fund.

² The 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.

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% of the previous year's government revenue, to reduce budget deficits to 4% 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 recognise the need for strong political commitment and undertake to pursue all such national policies as would facilitate the regional monetary integration process'.

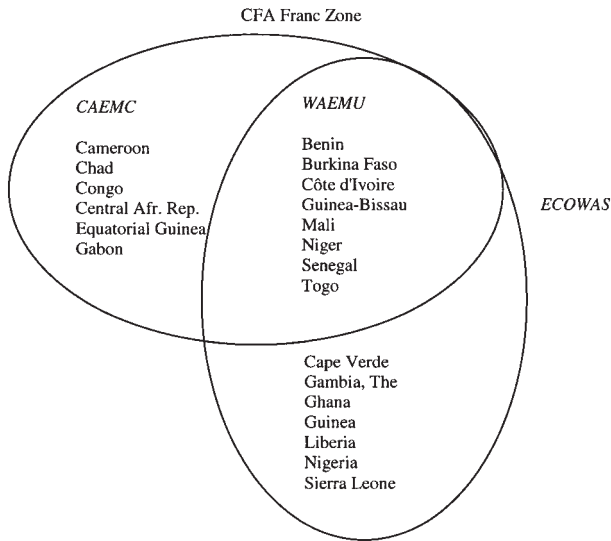
Although the goal of a monetary union in ECOWAS has long been an objective of the organisation, there has been little progress to date. Recently, however, the initiative has been bolstered by the election of a democratic government and a leader who is committed to regional integration in Nigeria, the 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 ECOWAS members) could be an effective 'agency of restraint' (Collier, 1991) on fiscal policies. Figure 1 shows how ECOWAS includes one of the CFA franc zones, the West

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

⁴ ECOWAS, or Economic Community of West African States, is composed of the seven countries mentioned in footnote 2, 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.

Figure 1: Membership of the CFA Franc Zone and ECOWAS



African Economic and Monetary Union (WAEMU), but not the other, the Central African Economic and Monetary Community (CAEMC). The history of the CFA zone from the mid-1980s 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 (Stasavage, 1997; Guillaumont Jeanneney, 2002). France's external guarantee helped ensure the maintenance of the parity for an extended period and hence the same inflation rate as France's. However, the lack of discipline on fiscal policy (abetted by France turning a blind eye) meant that pressures developed that culminated in the devaluation of 1994, as it became clear that the guarantee could only be honoured at the cost of larger and larger financing, and that structural problems could only be corrected by a major change in relative prices. 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). 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. 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.

2. Monetary Union and Fiscal Discipline

This issue has been much debated in the context of the EMU, 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).

2.1 Will Monetary Union Worsen the Tendencies Toward Excessive Fiscal Deficits?

It is widely recognised 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 policy makers expect that they will not have to shoulder the costs of bail-out/default (Beetsma and Bovenberg, 1997, 2001; Chari and Kehoe, 1998). 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 are also paid by other members of the union. Knowing this, policy makers may not be as conservative in their fiscal policies. For this reason, both the European Union (EU) and ECOWAS have constrained their (proposed) regional central banks not to provide monetary financing or indirect bail-outs to member governments. However, another issue, discussed below, is whether such a statutory provision is completely credible.

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 policy makers 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 a longer period 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. Assuming that there is an upper limit to the debt ratio that investors are willing to finance, governments could be pushed close to this threshold as a result of the loss of seigniorage revenues occasioned by a move to monetary union. Given the impossibility of suddenly reducing the deficit to zero, governments would be vulnerable to adverse shocks that might inevitably lead to bail-out or default (Bovenberg *et al.*, 1991).⁵ 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

⁵ While monetary union would have the largest consequences for seigniorage, Adam *et al.* (1996) also show that financial market liberalisation 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.

administrative weaknesses (especially so in many African countries, where tax revenue to GDP ratios are often around 10%), and floors to government spending ratios. In this context, imperfect budgetary management combined with the monetary union's loss of seigniorage revenue 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 stabilise, much less reduce, the debt to GDP ratio. In those circumstances, a default or bail-out 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 (de Grauwe, 1996). For instance, Beetsma and Bovenberg (1998) assume that because of political myopia or other reasons, the fiscal authorities attempt to force the central bank to attenuate the effect of distorting taxes by increasing inflation. With a monetary union, and non-cooperating fiscal authorities, their power to do so is diluted. The authors further point out, however, that fiscal policy coordination may have the perverse effect of once again strengthening the hand of the governments over the central bank. Thus, coordination may not be welfare improving in this context — another application of the theory of the second best.

A second favourable effect of monetary union may be to provide an 'agency of restraint' (Collier, 1991) over macroeconomic policies generally, if the monetary union contains 'convergence criteria' requiring conservative monetary and fiscal policies. They are more likely to be effective if there is some external link, for instance an external currency peg, and a visible indicator of balance of payments pressure, such as the level of reserves. 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, but they are forced to take emergency measures if the reserves cover ratio falls below a certain level. 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 (1997), in analysing 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 *et al.* (1995) examined the US and Canadian data for the borrowing costs of states and provinces, and concluded 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. 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.

The factors leaning toward unsustainable fiscal policies in ECOWAS are considerably greater than in the EU, for reasons discussed above, 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-bail-out, or no-monetary-financing, clause for the prospective monetary union would be less credible in a context where national central banks have a history of limited independence and a poor record for low inflation. Thus, a bail-out may seem an attractive possibility when designing fiscal policy, and the costs of a bail-out would be shared within a monetary union, exacerbating the temptation toward lax policies. 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.

2.2 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 to limit fiscal deficits in a monetary union.

The main justification for explicit fiscal restraints is that prohibition against bail-outs in some form is never ironclad (Eichengreen and Wyplosz, 1998; Beetsma and Uhlig, 1999). 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 (Debrun, 2000). 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 bail-out. 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 a 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. Secondly, 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 unfavourable 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 4 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.

2.3 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% of GDP and gross debt to 60% 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, in a context where other shock absorbers (fiscal transfers between countries, labour mobility) were modest. The operation of automatic stabilisers to cushion cyclical fluctuations could be inhibited, especially if countries started at fiscal positions that were close to the 3% deficit ceiling (Eichengreen and Wyplosz, 1998).

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 (Buti *et al.*, 1998). 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 stabilisers 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 *et al.*, 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 manoeuvre 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 with convergence in WAEMU is somewhat longer, dating back to 1994. The current set of convergence criteria are: a fiscal deficit (excluding grants and foreign-financed investment) ceiling of zero, the elimination of payment arrears, a public debt ceiling of 70% of GDP and a rate of inflation of at most 3%. In addition, there are secondary criteria: decreasing the public wage bill to 35% of fiscal revenues, raising the investment financed from domestic resources to 20% of tax receipts, raising the tax revenues to 17% of GDP and lowering the external current account deficit to 3% of GDP. While the inflation rate is well under the ceiling of 3%, despite considerable progress in the 1994–7 period, other criteria have generally not been met in recent years (Doré and Masson, 2002). There have until recently been no sanctions. Sanctions that include a prohibition on access to central bank credit or West African Development Bank loans were agreed to by WAEMU members in December 1999, but there is as yet no experience to assess their effectiveness, since they are only to be applied starting in 2003. Experience in Africa and the EU suggests that sanctions are difficult to apply, especially since countries unable to meet convergence criteria are often facing unfavourable economic circumstances, making their neighbours unwilling to add to their woes.

In the non-WAEMU ECOWAS countries, the dangers of fiscal overshoots are considerably greater, judging from their recent history (Table 1). These countries have defined fiscal criteria that are somewhat looser than those of WAEMU,⁶ 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 West African Monetary Zone (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.

⁶ The ECOWAS criteria for 2003 are: inflation below 5%; gross revenues at least 6 months of imports; central bank advances no more than 10% of tax revenue; and an overall fiscal deficit excluding grants no more than 4% of GDP.

Table 1: Fiscal Indicators: Comparison of Euro Area and ECOWAS Countries, 1999 (as a Percentage of GDP)

	Government expenditure	Government revenue ^a	Overall fiscal position			Public debt		
			Including grants	Excluding grants	Central bank advances ^b	Total	Domestic ^c	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	65.0	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								
The Gambia	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.

^aIncluding grants in the case of ECOWAS countries.

^bDefined 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.

^cEnd-1998 in the case of WAEMU countries.

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 maximise 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.

Secondly, the monitoring of compliance with fiscal restraints should recognise the scope for circumvention of rules through illusory fiscal adjustment and creative accounting. Easterly (1999) argued that fiscal adjustment in many countries with World Bank/IMF programmes relied heavily on decumulation of government assets (through fiscally motivated privatisations, cuts in public investment and operations and maintenance spending) and expenditure postponement or accumulation of hidden liabilities. Milesi-Ferretti (2000) developed 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.

Thirdly, 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. We have no concrete experience with the application of sanctions, either by ECOWAS or by the two CFA franc zones, but ECOWAS has a history of commitments by member countries that were not honoured (such as eliminating internal barriers to trade and labour mobility, and paying dues to the community organisations). In the euro area, also, the excessive deficits procedure seems unlikely (given the rather flexible interpretations applied to countries that have so far exceeded the 3% ceiling) to lead to sanctions except in egregious circumstances. It may therefore 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.

3. 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.

3.1 Cross-country Evidence

In a recent paper, Fatás and Rose (2001) 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 motivate their empirical work by suggesting two theoretical perspectives on the effect of extreme monetary regimes on fiscal policy. The view that currency unions and boards would be associated with conservative fiscal policy because of credibility concerns is contrasted with a view that fiscal policy would be used to a greater degree in extreme monetary regimes, as it is the only tool available to smooth economic fluctuations. Since theory is ambiguous on the expected effect on budget deficits and government size, the paper tests whether there is any systematic difference in extreme monetary regimes versus typical countries that retain monetary sovereignty. Another hypothesis is that the revenue and spending composition in extreme monetary regimes should favour items which play roles of automatic stabilisers and insurance.

In Section 2, we reviewed a number of theoretical arguments for why monetary unions could be expected to either reduce or enhance fiscal discipline. In this section we use the Fatás and Rose data to check certain results relating to the effect of multilateral currency unions on budget deficits, as well as extend the analysis by considering government debt. The hypothesis is that it may not be possible to find definitive results on the effect of monetary unions on budget deficits

and debt. Some of the theories we considered predict that the effect on deficits or debt occurs through particular channels, for example, due to higher taxes because of diluted influence of a single government in trying to force the monetary authority to increase inflation. However, our analysis does not consider the specific theoretical mechanisms for how monetary union can affect fiscal discipline; the approach is reduced-form. Another limitation is that the analysis does not address causality; results are better viewed as correlations.⁷

Fatás and Rose (2001) found 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 use fiscal policy to a greater degree to insure the additional risk from the absence of an independent monetary policy. Fatás and Rose argued 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 stabilisers.

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 eight small island countries, and the CFA franc zone, with fourteen West and Central African countries, plus Comoros.⁸ The East African Community's (EAC) 1967–77 currency union is excluded, as well as the failed rouble zone, and 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 models as in their paper: (1) a benchmark model with only the log of real GDP per capita and the log of openness as controls; (2) benchmark model with time dummies; (3) benchmark using only data from countries with extreme monetary

⁷ The endogeneity problem in the analysis of currency unions may not be particularly large, as most of the currency unions have been in existence for long periods.

⁸ The 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 eight West African countries listed in footnote 4, plus the Central African zone members: Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea and Gabon.

regimes (currency boards and currency unions) versus those with fixed exchange rate regimes; (4) a model with four additional controls (log of population, land area, urbanisation and the dependency rate); (5) the additional control model with time dummies; and (6) additional control model versus fixed exchange rate regimes. The idea of models (3) and (6) is to compare extreme monetary regimes only to other fixers, (not to floaters or intermediate regimes) to see if extreme monetary regimes have an effect on fiscal policy over and above any effect common to all fixed regimes. Replacing the multilateral currency union dummy with a dummy for the CFA countries, we find the results in the six models to be broadly similar (results not shown).

Next, rather than using the entire 1960–98 period, we restrict the estimation to 1985–98. This is an interesting period because many developing countries began structural adjustment and macroeconomic reform programmes, and the terms of trade for West Africa deteriorated, which made fiscal adjustment necessary. The hypothesis is that currency unions may not have any effects on fiscal policy during this more difficult period. For reference, Tables 2 and 3 show Fatás and Rose's results (row I), and the model estimated over the latter sub-period (row II).⁹ While the result that 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 examined the impact of extreme monetary regimes on government size, budget deficits and the composition of the budget, they did not explore the impact on government debt. However, the literature on monetary unions and fiscal discipline has shown that monetary union might encourage excessive accumulation of public debt, either because of the prospect of a bail-out or because the costs are not fully internalised by the member country with large debts. Beetsma and Bovenberg (1999) and Chari and Kehoe (1998) developed models illustrating this mechanism. The central element in their analysis is that while usually the fact that public debt leads to future inflation through monetisation 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

⁹ Following Fatás and Rose (2001), we report only the coefficient and t-statistic for the currency board, unilateral and multilateral currency board dummies; we also add the adjusted R². The coefficients for the control variables were generally significant and of the expected signs.

Table 2: *Fiscal Policy in Extreme Monetary Regimes: Regressions using Data from Fatás and Rose (2000) (Results with Income and Openness Controls — Models 1–3)*

Dependent variable	(1) Benchmark results			(2) With time effects			(3) Against fixes		
	U	M	CB	U	M	CB	U	M	CB
Budget surplus, 1960–98 (Fatás and Rose; I)	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		0.04			0.06			0.08	
Budget surplus, 1985–98 (II)	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		0.07			0.07			0.09	
Central government debt, 1960–98 (III)	-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		0.09			0.11			0.13	

U, unilateral; M, multilateral; CB, currency board.

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) are given in parentheses.

Table 3: *Fiscal Policy in Extreme Monetary Regimes: Regressions using Data from Fatás and Rose (2000) (Results with Additional Controls — Models 4–6)*

Dependent variable	(4) Benchmark results			(5) With time effects			(6) Against fixes		
	U	M	CB	U	M	CB	U	M	CB
Budget surplus, 1960–98 (Fatás and Rose; I)	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		0.04			0.06			0.10	
Budget surplus, 1985–98 (II)	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		0.07			0.07			0.17	
Central government debt, 1960–98 (III)	-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		0.13			0.15			0.17	

U, unilateral; M, multilateral.

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

a percentage of GDP as a dependent variable, and present the results in the third row of Tables 2 and 3 (equation 3). 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 and to caveats on causality, the empirical results on currency unions and fiscal discipline are mixed. Including some relevant controls, multilateral currency unions are associated with smaller budget deficits over the entire 1960–98 sample, although the results were not robust over a 1985–98 subsample. 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.¹⁰

3.2 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.

The extent of fiscal indiscipline may seem somewhat surprising, given that in order to guard against the risk of monetisation of budget deficits both central banks in the zone limit the stock of total advances to government to 20% 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.

¹⁰ 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 the adoption of a new process and set of criteria in 1999.

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).¹¹ 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 US 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 (Nascimento, 1994; Stasavage, 1997). Thus, ceilings on lending to governments need to be combined with effective banking supervision that rules out this sort of 'connected' or 'directed' lending.

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.¹² 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

¹¹ See 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 and 1984, 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.

¹² For each of the two 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% of the central bank's sight deposits. The operations account is the mechanism through which France guarantees convertibility for the CFA franc.

this period, political interests in France were more interested 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% of GDP during 1990–3 to 2.5% of GDP during 1994–8 (International Monetary Fund [IMF], 2000). This was a somewhat greater improvement in fiscal balances than occurred in the rest of SSA. Structural reforms under IMF-supported programmes, 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.¹³ However, after 1998 the economies faced negative terms of trade shocks and there was some reversal of the progress made in fiscal adjustment (Doré and Masson, 2002).

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 EU 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 bail-outs and partial fundings of fiscal indiscipline.

4. 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% (5%); raise gross official reserves to at least 3 months (6 months) of

¹³ Adam *et al.* (2001) show that real exchange rate misalignment contributed to the poor cumulative revenue performance of the CFA zone during 1980–94.

Table 4: ECOWAS: Position of Non-WAEMU Members with Respect to the Convergence Criteria^a

	Inflation rate (%)	Gross official reserves (months of imports)	Central bank advances (% of tax revenue)	Overall fiscal deficit ^b (% of GDP)
Situation at end 1999				
The 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 ^c	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.

^aCape Verde was not signatory of the 'Accra Declaration' on the creation of a second monetary zone in 2003.

^bExcluding grants.

^cCentral bank advances are given as a percentage of total government revenue.

imports; reduce central bank advances to no more than 10% of tax revenues by end-2003; and cut the overall fiscal deficit (excluding grants) to no more than 5% (4%) of GDP. Exchange rate stability is to be added to the list of criteria, but it has yet to be defined precisely. Table 4 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 recognised that achievement of exchange rate stability may lead to a rundown of reserves by some countries. Central bank advances as a percentage of tax revenue are

Figure 2: Fiscal Deficit as a Share of GDP

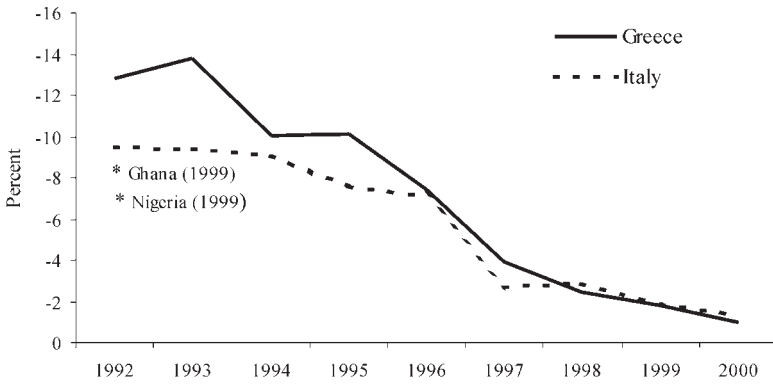
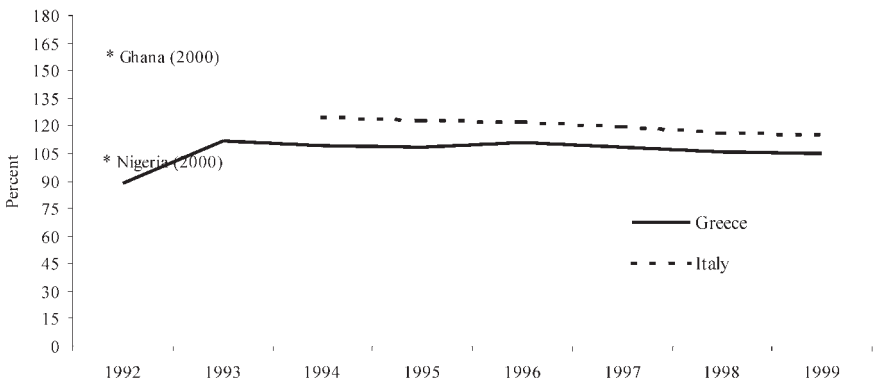


Figure 3: Total Public Debt as a Share of GDP

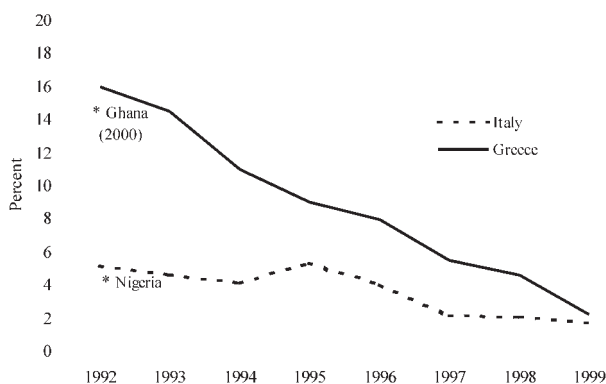


currently a multiple of the ceiling in all countries except Ghana and Liberia.

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 EU, where the transition period took approximately 7 years from the signing of the Maastricht Treaty in February 1992.¹⁴ Figures 2–4

¹⁴ Dating 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 programmes were first introduced in 1992.

Figure 4: Inflation



plot the fiscal deficit ratio, the public debt ratio, and the rate of inflation for Italy and Greece, with the 1999–2000 figures for Nigeria and Ghana 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 favourable environment recently, given high world oil prices, and this may not continue. The comparison suggests that a realistic transition period for ECOWAS would not 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.¹⁵ Some of the EMU conditions required achievement over several years, not just on the basis of a single year's performance.¹⁶ 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 harmonise 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

¹⁵ Italy was a founding member on 1 January 1999, while Greece did not become a member of the euro zone until 1 January 2001.

¹⁶ In 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, and not just the level, was important at any point in time.

proceeding to monetary union to have demonstrated their ability to meet the criteria in a sustained and durable fashion.

5. 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-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 monetise 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-bail-out 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.

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