EMU: lessons from the CFA zone Draft conference paper for EUSA 8th International Biennial Conference March 27-29, 2003

Princeton University

chealy@peinceton.edu.

EMU: lessons from the CFA zone

Like so many aspects of the European project, the sheer uniqueness of European Monetary Union can often make proper comparative analysis seem difficult and even strained. It seems in so many different ways to mark out uncharted territory. After all, this is a monetary union of democratic states, with largely stable and highly developed economies. These states have voluntarily ceded complete control over their monetary policy to an independent central bank. Indeed they have acquiesced to an externally determined monetary policy with price stability as its primary goal and they have signed up - nominally, at least - to some very tight controls on their fiscal behavior. Responding, at least partially to the comparative constraints, much of the recent analysis has focused on using accumulated data of the early years of the euro to begin to measure economic effects and suggest possible future consequences¹. A number of other analyses have talked in terms of future institutional reforms, especially with regard to possible expansion to the east². These are obviously issues of profound concern to policymakers. In this paper, however, I will argue for at least a partial return to the comparative approach. Specifically, I will argue that there are still some lessons that the euro area can learn from its African cousin – the CFA franc zone.

On the face of it, the African Franc area is so spectacularly different from the euro zone that it is hard to imagine what Europe can possibly learn from their experience. In terms of economic and even political development, the constituent countries of the two CFA franc areas are very different from their European counterparts. Moreover, the design of the currency zone is also markedly different, with an external French anchor being the dominating feature for regional monetary policy. This is not the free-floating currency that the euro is in international markets. Further, the importance of commodity production and the lack of any comparable political infrastructure to the EU may make comparison seem far-fetched, even outlandish. In this paper, I will firstly describe the

¹ e.g. Barry Eichengreen, *The euro, one year on*, Journal of policy modeling, 22, 3, pp355-368 (2000); Alejandro Micco, Ernesto Stein, Guillermo Ordoñez, *The Currency Union Effect on Trade: Early Evidence from the European Union*, Working Paper, Washington: Inter-American Development Bank (2002)

basic features of the CFA franc area, paying particular attention to institutional structure and the rules that underpin monetary policies. I will then outline more closely the specific differences of the CFA franc area from the euro zone. I do not dismiss these differences as irrelevant or unimportant to my central comparisons. In fact, I believe that it is important to constantly keep them in mind. Nevertheless, I want to address them up front so that my subsequent comparisons are seen in proper context. I will treat the central differences separately as mentioned – the differences of economic and political development; the role of the external peg; the centrality of commodity production; and the very limited political and economic integration to support monetary union. After this I will turn to my main comparisons.

I will look at the potential lessons for the euro zone in three separate areas:

Institutional – I am especially interested in potential lessons for the euro with regard to regulatory matters and any role the ECB might play as "lender of last resort". Does the CFA franc area offer any lessons for their current policy of "constructive ambiguity" in this regard?

Economic – I believe that there are three areas where lessons might be learnt with regard to the economic aspects of monetary union in Europe. Firstly, there is question of the extent to which the concept of an "Optimal Currency Area" (OCA) is relevant to understanding the prospects for economic success. Even now, how should we judge the many OCA critiques of the euro project?³ To what extent, for example, does monetary union so transform the economies that *a priori* it is really not possible to tell what constitutes an "optimum" area?⁴ Secondly, there is the reminder from French Africa that the benefits to a single monetary area might not be evenly shared and that there may be

³ e.g. Tamim Bayoumi, Barry Eichengreen, Shocking Aspects of European Monetary Unification, in Francisco Torres and Francesco Giavazzi (eds), Adjustment and Growth in the European Monetary Union, Cambridge: Cambridge University Press (1993), pp.193-230. See Francesco Paolo Mongelli, "New" views on the optimum currency area theory: what is EMU telling us? ECB working paper No.138, April 2002 for a review of this OCA literature

⁴ See Andrew Rose, Charles Engel, *Currency unions and international integration*, NBER working paper 7872, September 2000 (See Rose's website for reference and for other examples for and against this idea http://faculty.haas.berkeley.edu/arose/RecRes.htm).

asymmetric costs and rewards from the euro area. I believe that there are some obvious, and some perhaps not so obvious examples of how this has turned out in an African context. Finally, the experience of the CFA areas in responding to economic crisis (especially in the late 1980's and early 1990's) might offer some lessons for any future crises within the euro area.

Political – While there has so far been little in the way of political crisis within the euro zone, it is perhaps fruitful to look at how the African franc area has dealt with political upheavals. The democratic fragility of many of the countries within the franc areas probably does not have proper parallel in Europe, but the broad experience of accession to and departure from the currency area might be useful to look at more closely. The highly politicized way in which this has happened within the CFA, I believe, may have potential resonance for the European example. In particular, I believe that the case of Mali offers a useful case study in this respect. Secondly, the experiences of the African franc area with regard to extreme political crisis (for example, the ongoing crisis in Côte d'Ivoire), offer solid case studies for how a monetary union might deal with extreme regional political tension. While hopefully such turmoil would never emerge within the euro zone, the experience of the CFA areas should be looked at to see how centralized monetary authorities might respond.

Background to the CFA franc area

The CFA franc is made up of two separate currency unions with a fixed euro (formerly French franc) parity. The two unions are the West African union (the *Union Economique et Monetaire Ouest Africaine* – UEMOA) and the Central African union (the *Communaute Economique et Monetaire de l'Afrique Centrale* – CEMAC), each with its own central bank (the *Banque Centrale des Etats de l'Afrique de l'Ouest*, BCEAO and the *Banque des Etats de l'Afrique Central*, BEAC, respectively). Between them the two unions have 14 member countries⁵ and a total population of roughly 70 million.

⁵ Since 2 May 1997, the UEMOA includes eight countries, Senegal, Cote d'Ivoire, Burkina Faso (formerly Upper Volta), Mail, Benin (formerly Dahomey), Niger, Togo and (most recently) Guinea Bissau. The CEMAC includes six countries, Cameroon, Chad, Gabon, Congo, Equatorial Guinea and Central African Republic.

Table 1a: Membership of CFA franc

CFA Zone	French	Members	Exchange rate	
	Acronym		Before 1994	
			devaluation	devaluation
West African	UEMOA	Benin, Burkina Faso,	CFA50=FFr1	CFA100=FFr1*
Economic and		Côte d'Ivoire, Guinea		
Monetary Union		Bissau, Mali, Niger,		
		Senegal, Togo		
Central African	CEMAC	Cameroon, Chad, Congo,	CFA50=FFr1	CFA100=FFr1*
Economic and	}	Central African Republic,		
Monetary Union		Equatorial Guinea, Gabon		
*From 1999, CFA6	55.957= €1		-	

The CFA franc zone as it is today evolved from the monetary institutions of French colonial rule in Africa. In addition to the West and Central African Franc zone, there is a third franc area for the island state of Comoros. Since the 1994 devaluation, the CFA franc has been exchangeable for the French franc (or its subsequent euro equivalent) for a fixed rate of CFA100: FFr1 (i.e. CFA655.957: €1). The CFA francs are legal tenders only in their respective regions, but critically the French Treasury guarantees convertibility at a fixed rate into euros and there is free capital mobility within the zones and between the zones and France. France has representation on the two regional central bank executive boards and has traditionally provided extensive technical and financial The extensive involvement of France in the monetary affairs of these countries also stretches to a centralization of exchange reserves of the two central banks. The BEAC and the BCEAO centralize the external monetary assets of the member states and must deposit 65% of their exchange reserves in account with the French Treasury in return for the convertibility guarantee. This guarantee has also enabled the central banks to make reimbursable loans to treasuries of the member countries within a limit of 20% of their tax revenue⁶.

⁶ This summary has drawn closely on similar outlines in Conjoncture, Challenges facing the CFA franc, BNP Paribas publication, October 2001 (http://economic-research.bnpparibas.com); Michael Hadjimichael, Michel Galy, The CFA franc zone and the EMU, IMF Working Paper, November 1997; and David Fielding & Kalvinder Shields, Is the franc an optimal currency area?, Department of Economics, University of Leicester, Discussion papers in economics, WPS/2000-3, October 1999

Table 1b: How does the CFA franc zone work?

- Free convertibility by the French Treasury of CFA francs issued by the central banks of issue
- Fixed parity between the CFAF and the Ffr (euro) since 1948. Only one devaluation: 12 January 1994, CFA100=FFr1. From 1999 CFA655.957= €1
- Liberty of transfer is free in principle within the zone
- Centralization of exchange reserves: convertibility leads to opening of an "operations account" with the French Treasury in the name or either the BCEAO or the BEAC. The central banks centralize the external monetary assets of member states and must deposit 65% of exchange reserves in the account with the French Treasury in exchange for convertibility.

Source: Conjoncture, October 2001; Allechi & Niamkey (1994)

Before comparability: establishing the differences

Perhaps understandably because of the vast differences economically and politically, there has been no single systematic comparison of the European and African monetary unions. Indeed there has been little, if any, comparison of the two unions at all. For my purposes, the main relevant differences I see are as follows.

(i) Role of the external peg.

One of the defining features of the CFA franc area is something completely different from the policies that define the euro zone – an external hard peg. The euro is free to float on the international markets and the ECB can design monetary policy according to its price stability goals. The CFA banks, on the other hand, must determine their monetary policy contingently on maintaining their external peg to the euro. While the French convertibility guarantee offers some flexibility, to all intents and purposes monetary policy is endogenously determined. The hard peg trumps all other policies.

An understanding of the currency peg is critical to understanding many of the macroeconomic fluctuations of the last few decades within the CFA franc area. For example, in assigning responsibility for the economic hardships of the 1980's and early 1990's to the CFA area monetary policy, it is the external peg rather than the currency union itself that would receive the greater share of the blame. Problems relating to asymmetric shocks and other issues of currency area "optimality" were arguably of second order to this. At the same time as they were experiencing sharp commodity

shocks, the currency anchor of the CFA zone was undergoing a secular appreciation. This had the effect of reducing their export competitiveness and reinforcing their economic decline.

The currency peg has carried some substantial benefits too, however. For example, throughout the overvaluation crises of the 1980's and 1990's inflation within the CFA zone continued to be better than that experienced by country peers outside the zone⁷. By adopting the hard currency peg, the central banks of the CFA were given a policy rule that offered some degree of stability and consistency. The existence of a convertible currency certainly made investment easier and theoretically also made it possible for investors to adopt a longer-term perspective⁸. Money was able to perform its role as a store of value. For many of the CFA countries France still remained their largest single trading partner so currency stability with this trading partner was also a not insignificant consideration.

Certainly a very hard price stability rule emerging from an independent ECB can in many ways resemble the monetary straitjacket of an external peg. The fact remains however that should a crisis arise or should political or economic circumstance require it, the euro zone has considerably more room for maneuver than its African cousin⁹.

(ii) Differences in economic and political development

Of course, the most striking and obvious difference between the euro zone and the CFA franc area is in the level of economic and political development. The economies we are looking at in CFA Africa are poor developing economies while those in the euro zone are advanced and industrialized. By almost any measure, from size of the economies, to

⁷ Dominique Guillaume, David Stasavage, Improving policy credibility: is there a case for African monetary unions?, WPS/99-2, January 1999

⁸ Theoretically also allowing the economies to escape from the "original sin" problem of short term-ism brought on by currency instability (as described Eichengreen and Hausmann, *Exchange rates and financial fragility*, NBER Working Paper 7418, November 1999)

⁹ There is, in fact, an extensive literature on the use of independent central banks or external pegs as monetary policy "commitment mechanisms". The Autumn 2002 special edition of *International Organization* (56, 4, Autumn 2002) contains a comprehensive overview of many of the most topical aspects of this issue and is a good starting point for approaching this literature.

infrastructure to skill base and education, the gap between the two sets of countries is vast¹⁰. Even when comparing the African countries to the prospective euro entrants from the transition economies, the differences are startling.

And the differences in development are not just on the economic side. For the most part these are countries with lower levels of national-level political infrastructure and that are often at best semi-democratic. The different political landscape and the different capacities of the politics change substantially the impact of monetary union in the two zones and will diminish comparability. In addition the lack of political transparency in these regimes undermines closer analysis. Again, the differences even from the transition economies of Europe are marked.

In Appendix 2, I summarize some of the key economic and political differences between the African franc area countries and their European counterparts.

(iii) Centrality of commodity production

Of perhaps lesser, but still central importance, is the significance of commodity production and export to these economies. The CFA economies are largely undiversified primary product producers and are therefore subject to supply and demand shocks that their euro counterparts would not be subject to. With different CFA countries focusing on different commodities these shocks have also often been asymmetric, with individual countries unable to use the monetary policy tool to cushion their economies from the shock.

Adding to the problem is that much of the pricing of such commodities is on international markets and in dollars. In other words even though such economies may conduct most of their trade with France or Europe in (fixed rate) euros they may still face currency risk if the dollar-euro price shifts. This additional level of complication has often been neglected in analysis of the CFA currency union policy.

¹⁰ And measurement itself is an issue with the economic data from these countries being of such poor quality

None of the existing euro zone members are substantial commodity exporters. Certainly with the greater agricultural base in the transition economies some of these problems may become important, especially with regard to shock asymmetries. In addition if Norway or the UK ever join the euro zone, their large commodity (oil) exports may also have to be taken into consideration. Notwithstanding all of this however, the commodity difference looks likely to continue.

In Appendix 3, I summarize data on the relative commodity dependence of the African franc countries and some of their European counterparts.

(iv) Limited political and economic integration to support monetary union

Finally one of the major differences between the euro zone and the African franc area concerns the very limited degree of supranational organization above or international integration among the CFA currency states. Fundamentally there is no level of comparable trade, for example. Nor is there any supra-national authority comparable to the European Commission or the European Council. Non-bank decision-making is much more *ad hoc* and very much more on an issue-by-issue basis. Certainly since 1994 the supra-national structures of UEMOA and CEMAC have moved to remedy this, but while ambitious goals have been set out, progress is still slow.

To some extent the lack of political centralization has been compensated for in terms of decision-making by the hegemonic role played by France. For example, during the crisis of the early 1990's France offered leadership and a focal point for coordination amongst the states. The secular decline of France's role raises questions as to whether it can continue to perform such a function (irrespective of how desirable this post-colonial status actually was), and what kind of structure might replace it. Even if the hegemonic position of France is to be replaced by a greater institutional centralization, for the time being at least the leadership role France plays has no meaningful parallel within the EU.

In spite of these differences, there remain institutional, economic and political factors that are common to both the CFA and the euro zones. I will now turn my attention toward showing these.

All of these differences are impossible to ignore and will impact on every aspect of my review. Ultimately however, there are quite a few structural features of monetary unions that I believe transcend such differences and permit comparability. I see these comparisons across institutional, economic and political terms. I will now turn my attention toward showing them.

Institutional design

Regulatory authority of the ECB

An ongoing concern with the advent of the euro has been the extent to which the centralization of monetary authority has not been accompanied by any adequate centralization of financial and banking regulatory authority. While the framers of the Maastricht Treaty very much saw monetary union transforming European financial markets and financial institutions, the supervisory and regulatory framework to accompany this was largely to remain at the national level. This lack of centralized regulatory authority within the common monetary area has drawn unfavorable comparisons with the centralized regulatory powers enjoyed, for example, by the Federal Reserve in the US. Certainly the ECB is involved in supervision, but very much in a circumscribed and second order way¹¹. The extent of differentiation of EU financial regulation is summarized in Table 2.

¹¹ The relevant European legislation is contained in Article 105 (5) of the EC Treaty which provides that "the ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system". The Banking Supervisory Committee of the ECB is responsible for cross-border cooperation for the converging European financial market. This body consists of senior representatives of the central banks and regulatory authorities of all 15 EU countries and is thus well suited to covering the various aspects of supervision. In the event of an impending systemic crisis with potential contagion effects, the BSC could also play an important role in crisis management bringing the countries involved together (see C Favero, X. Freixas, T. Persson, C. Wypolosz, *One money, many countries: monitoring the European Central Bank* 2, CEPR, January 2000)

Table 2: Banking supervisory agencies in the EU

Country	Supervisory agencies
Austria	Ministry of Finance
Belgium	Banking and Finance Commission
Denmark	Finance Inspectorate
Finland	Bank Inspectorate and the Bank of Finland
France	Commission Bancaire and Banque de France
Germany	Federal Banking Supervisory Office and Deutsche Bundesbank
Greece	Bank of Greece
Ireland	Central Bank of Ireland
Italy	Banca d'Italia
Luxembourg	Luxembourg Monetary Institute
The Netherlands	De Nederlandshe Bank
Norway	Banking, Insurance and Securities Commission
Portugal	Banco de Portugal
Spain	Banco de Espana
United Kingdom	Financial Services Authority

Source: Kahn & Santos (2002)

The two main criticisms in this regard are closely linked – firstly that a national level regulatory authority is inefficient and subject to inconsistencies; and secondly that it does not take into account the transformative nature of the common currency area, especially regarding the new potential for currency-wide systemic risk. In both regards, there are lessons to be learnt from the existing monetary unions in Africa. The African franc areas constitute shared currency areas with unitary monetary authorities. They have faced systemic crises such as those the ECB might be concerned about, and indeed more recently they have shifted to a more supra-national regulatory approach. Much of the literature has focused on comparing the euro area with national systems with national regulatory authorities. The African examples add another dimension to the analysis.

The large-scale financial crises across the African franc area in the late 1980's and early 1990's saw substantial involvement of the regional central banks in coordinating bailouts and supplying the necessary liquidity in order to contain systemic crisis. The crises affected both the West and Central African franc areas with Côte d'Ivoire, Senegal, Benin, Gabon and Cameroon all suffering during this period (see Appendix 4 for more details of these crises). These financial crises were certainly linked to weak and underdeveloped financial regulatory capacity in each CFA zone country. However, the

sheer scale of the collapses, their destabilizing effect beyond individual countries and the dominant role played by the regional central banks all resulted in greater pressure for greater supra-national control over the regulatory framework. The costs inflicted on the regional banks also strengthened their argument that if they were going to "foot the bill" then at least they should have some say in setting the rules¹². Ultimately, this argument has proved persuasive with stronger centralized regulatory authorities being created in both zones, with in particular the Banking Commission of the BCEAO having real teeth. At a weaker level, financial instability led to the creation of the Organization for the Harmonization of Business Law in Africa (in French OHADA), to build a common framework within which these rules could operate.

The failures of the pre-1990's regulatory order resulted in a fairly widespread abuse of the regional central bank rules as well as "soft" financing of financial sector instabilities¹³. Many lessons for the euro area may in fact be of the "what not to do" variety. Equally, though, it is impressive to see the greater franc zone uniformity now in chartering and supervisory authority; in solvency and liquidity ratios; in systems of deposit insurance; and in inter-bank payments regulation that have come about as a result of greater centralization. And while the risks may not be commensurate with African financial crisis, they are still very large within the euro-zone¹⁴. This is not a trivial problem for the euro area: several members and potential members of the euro-zone have been hard-hit by major financial crises in recent years (as Chart 1, and Appendix 4 also show). Recent scares such as the 2002 speculation about *Commerzbank* in Germany¹⁵, also suggest that these crises have the potential to hit even at the heart of the zone¹⁶.

¹² France also very substantially involved in the bail-outs (Conjoncture, *Challenges facing the CFA franc*, ibid)

Rohinton Medhora, Dollarization in the Americas: lessons from the franc zone, International development research center, October 2000 (http://www.nsi-ins.ca/ensi/events/06 MEDORA.pdf)

¹⁴ Indeed the greater levels of international integration within the euro area make systemic contagion all the more likely.

¹⁵ For contemporaneous commentary on the Commerzbank scare see for example, *The Observer*, 6 October 2002 (http://www.observer.co.uk/international/story/0,6903,805622,00.html) or the BBC commentary at the time (http://news.bbc.co.uk/1/hi/business/2305511.stm)

¹⁶ For a good alternative argument that centralization of this kind may not be necessary see Favero et al (2000), ibid.

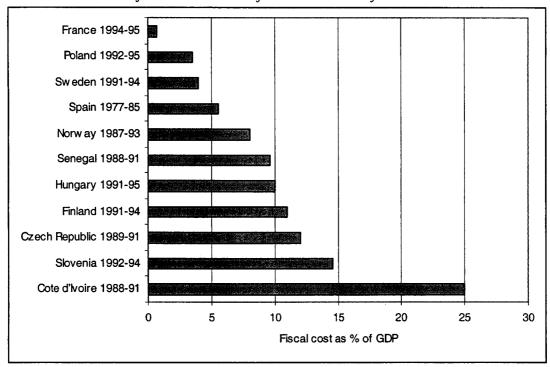


Chart 1: Some recent financial crises and fiscal cost as a % of domestic GDP

Source: http://www1.worldbank.org/finance/assets/images/WBDP428.pdf

Lender of last resort

As should already be clear from this discussion, the central bank's regulatory responsibilities may be closely related to any responsibilities it might have as "lender of last resort". The term lender of last resort (LLR) here I mean in a very narrow sense, as the central banks responsibilities to provide "discretionary liquidity support directly to individual financial institutions in response to a shock which causes an increase in their liquidity needs which they are unable to meet through other sources" 17.

In the euro framework, there exist the normal LLR dangers of moral hazard that might follow from any explicit policy of systematic bailouts. In addition though, there are problems of stopping systemic contagion as well as the conflict that any LLR function might have with the central policy goal of euro area price stability. I do not intend to

¹⁷ Charles Kahn, João Santos, Allocating lender of last resort and supervision in the euro zone, Federal Reserve Bank of New York document, March 2002 (p7). Walter Bagehot's original (1873) principles for lending in last resort are relevant here and refer to situations in which the financial institution may be solvent and is illiquid. The key lesson for Bagehot was that "in a crisis, the lender of last resort should lend freely, at a penalty rate, on good collateral".

elaborate here on the difficulties and challenges of LLR policies more generally, but I will make the following brief points regarding the benefits of any African franc comparison.

- Recent experience with banking crises suggests that the bailout of banks is very much a fiscal issue. Certainly this reflects experience in Europe and would seem to support the more decentralized regulatory and support structures within the common currency area. So long as fiscal policy remains in national hands any switch-over of this authority would not appear especially realistic ¹⁸. However, to the extent to which contagion exists and to which risks are increased by more integrated markets with different LLR's, it is worth looking at the alternatives for centralizing some level of LLR authority. While still not unambiguous in the African franc areas, the greater experience with regard to bailouts certainly gives a greater insight into how such centralized bailouts might work in a monetary union. It offers an example of a monetary area where the policy is not so much the one of "constructive ambiguity" that characterizes the euro zone. It also might permit some insight as to how the fiscal bailouts might be coordinated at a supranational level.
- In both the euro zone and the CFA franc zone, the policy priorities of the central banks explicitly limit the extent to which they may perform LLR functions. For the African franc areas, the goal of the external peg results in money growth being largely endogenously determined. Equally, though less stringently, the ECB's dominant policy of price stability strongly ties its hands with regard to any substantial monetary bailouts. But the very experience of the African central banks in bailing out from within their tight constraints may offer some lessons for the euro-area for what they can (can't) and should (shouldn't) do, and what stabilizing monetary instruments are actually available to them.
- Comparisons with the African franc area with regard to the LLR function may be substantially diminished because of the dominant role played by France in this currency area. In particular, France appears to have played both a financial and a coordinating role in the bailouts in the early 1990's. The more symmetric euro-zone does not have any one hegemonic actor performing this function¹⁹.

¹⁸ Favero et al (2000), ibid.

¹⁹ Conjoncture, Challenges facing the CFA franc, ibid

• It is impossible to ignore the politicization of the LLR function in the African franc zones. While this may diminish comparability with the euro zone, perhaps also there are lessons for the euro zone as to how they might design any more explicit LLR function so as to minimize such risks.

Expansion

With the prospective accession of ten Central and Eastern European countries and two Southern countries into the EU in the coming years, membership of the euro area might increase from the current 12 to up to 24 countries. This is likely to substantially increase the administrative burden on the institutions of the euro area, with some suggesting complete gridlock unless the current voting and organizational structure is reformed²⁰. In addition the expansion will almost certainly involve an increase in the number of lower income countries within the zone, as well as the number of countries that earn a substantial amount of their income from primary good production (see Appendix 5 for some broad data on the prospective entrants). In a number of these respects the experiences of the African franc areas prove instructive.

- Certainly, there are enormous economic differences between the African franc countries and even the prospective entrants into the euro zone. There are lessons to be learnt however from the zone with regard to members who are large agricultural producers and whose economic infrastructure is less sophisticated within a common monetary area. In addition, if countries such as the UK, and especially Norway, ever do join the euro zone, there are also lessons regarding shocks to their large commodity sectors. (The experience of asymmetric shocks may be particularly relevant in this respect).
- The problems of voting structure and the balancing of economic and political power with voting weight loom large in any ECB expansion. While the CFA banks do exercise a large amount of consensus voting, their longer track record in this regard and their

²⁰ E.g. Berger (2002), ibid

DRAFT

various reforms and expansions (especially in the early 1970's and the early 1990's) are worth investigating more closely to assess where optimal efficiency might lie²¹.

• The CFA area is distinct from the euro-zone in that there is a strong hegemonic leadership role played by one actor, France. While previously in the EMS system, in some regards Germany might have been considered to have played a hegemonic leadership role on monetary policy, the ECB and the euro zone offer a much more symmetric distribution of power. As such the effects of expansion and the need for coordination may pose very different questions within the euro zone – diminishing comparability. Perhaps the prospective countries might benefit from an institutional (hegemonic?) guidance from the ECB and other European institutions as they move towards qualifying for euro membership. This might especially be the case as they attempt to ensure currency fluctuation convergence with the euro (one of the membership criteria). Again though, this would imply a very different leadership and coordination role than that played by France for the CFA area.

I will tackle some other aspects of membership expansion (and contraction) from a more explicitly political context in greater detail below.

Table 3: Summary of potential areas for learning in institutional design

Tuble 3. Buninary of potential areas for tearning in institutional aesign				
	Lesson			
Regulatory authority of the ECB	- Lessons from financial sector crises with			
	centralized and de-centralized regulatory			
	authority.			
	- The degree of regulation that is now			
	centralized and how this works			
Lender of last resort	- Experience of system operating with			
	much less "constructive ambiguity"			
	- Experience of bailout where tight			
	monetary rules exist			
	- Lessons from politicization of lender of			
	last resort function			
Expansion	- Lessons of commodity producing			
_	members in a currency union, especially			
	with regard to asymmetric shocks			
	- How to make voting reforms work			
	when new members join			

²¹ They might also offer interesting comparisons with Berger's (2002) assessments on voting reform within the ECB.

16

Economic perspectives

Importance of Optimal Currency Area criteria

Much of the debate in the run-up to the euro concerned the appropriateness or "optimality" of the new currency area. Was there sufficient economic convergence amongst the prospective members? More specifically, how could we know that the euro zone would not be subject to asymmetric supply and demand shocks to which an aggregate monetary policy could not adequately respond? This debate was embedded in the Maastricht treaty which laid out convergence criteria in order to qualify for membership. It has further been instituted in the Growth and Stability criteria, which require fiscal policy discipline within the operating union. The debate was also ingrained in a longer term debate within the community, involving (stereotypically French) "monetarists" who argued that currency fix itself would bring about economic integration and factor mobility in Europe, as against the argument of the (stereotypically German) "economists" that monetary union should be the culmination of a broader economic integration process that readied the economies for the "coronation" point of monetary union²².

There is currently much ongoing academic debate as to whether the criteria of optimality for a currency area can be judged in advance²³. Some empirical investigations have suggested that the very fixing of a currency has transformative effects on factor mobility, and especially on trade, such that an area might *become* optimal even if it weren't so before. Such an argument is clearly very much in line with the monetarists' argument on European monetary union. With regard to the European case, however, the jury is still out²⁴. With just four years of data available, the lack of any large-scale asymmetric shocks could be put down to pure good luck. A closer look at the African franc area,

²² See Charles Goodhart, *The Political Economy of Monetary Union* in Peter Kenen (ed.), Understanding Interdependence: The Macroeconomics of the Open Economy (Princeton, NJ: Princeton University Press, 1995), Chp 12 (p. 454)

²³ See footnote 4 for citations relating to this literature.

²⁴ And indeed as the currency area potentially expands to the east the question of sufficient convergence may become more pressing

with its long history and only limited economic convergence might again prove instructive.

The very limited increases in intra-regional trade over the period of the CFA franc tends to imply that the trade benefits of single currency stability may have not been fully reaped. Certainly, these are very underdeveloped economies, with primary production that might bias their exports more naturally toward the developed world. Also there is the legacy of colonial dependence and the long history of export focus towards France (with whom they have a fixed currency peg). However, the lack of evolution of trade within the zone over its history asks questions as to the extent to which a currency union might overcome other economic and political impediments to trade expansion on its own. While Table 4 shows that the EU area already has considerably healthier intra-EU trade on which to reap currency union dividends, the CFA asks broader questions as to the extent of trade gains from currency union alone (thus asserting the primacy of other single market factors in Europe). It might begs questions as to the extent to which prospective entrants with lower baseline trade with the euro zone might rely more on other aspects of economic integration in order to properly enjoy benefits from joining up to the single currency itself²⁵.

²⁵ Interestingly, Andrew Rose's (2000) analysis, which uncovers large trade benefits from single currencies, does make extensive use of the CFA data. I am unsure of the extent to which the controls in Rose's analysis compensate for the lower baseline of intra-CFA trade, and the extent to which his large numbers are driven by CFA-France trade rather than trade from within the CFA-zone. It would obviously be worthwhile to examine this in closer detail.

Table 4: Levels of trade integration within CFA and within the EU

Franc zone 1990-2000	Import origin within CFA	Export destination within CFA
Benin	10.5	5.2
Burkina Faso	23.3	13.7
Cameroon	3.5	6.1
Central African Republic	15.7	1.0
Congo	2.8	0.2
Côte d'Ivoire	1.7	14.7
Gabon	8.6	0.5
Guinea Bissau	8.2	4.0
Equatorial Guinea	13.5	5.3
Mali	24.1	3.2
Niger	12.7	4.1
Senegal	6.5	18.4
Togo	-	7.8
Average for zone	7.5	6.8
	Import origin within EU	Export destination within EU
EU 2001		
EU	63.0	64.9
		-

Source: Conjoncture October 2001; IMF; WTO

By any number of economic measures the suitability of the African franc area for currency union might be regarded as questionable. There exists rigidity in the domestic price and wage levels; business cycles do not appear to be overly synchronous; there are low levels of intra-zone trade; the economies are highly dependent on one or a few different commodities, with each country's output vulnerable to both supply and demand shocks; and the structures of response to such asymmetric shocks are largely decentralized and highly inefficient. Moreover, as well as on the trade that I have already discussed, there does not appear to have been much convergence on these indicators as a result of the currency union (see Appendix 6 for a summary of some of the economic indicators for the African franc countries). This lack of convergence further reinforces the more "economist" view from Europe that other economic convergence and integration is first required for monetary union to be fully successful.

Perhaps this is instead an area where the lessons are learnt by the older monetary union from its younger successor. Since 1994 both the West and Central African currency areas have moved toward greater economic integration with the creation of the West African Economic and Monetary Union (in French UEMOA) and the Central African

Economic and Monetary Union (in French, CEMAC). This move toward greater economic integration in the franc areas is a function both of the crisis of the early 1990's and the example being set by the emergent European monetary model. With the UEMOA moving slightly faster, both currency areas have set economic targets on spending, inflation and in other areas that echo the European Maastricht targets (see Appendix 7). There have been concerted efforts to reduce tariffs within the zone and there has been a greater centralization of (quite strong) regulatory authority. In the coming years then, the CFA may prove an interesting complementary study for the ways in which the benefits of currency union can be achieved *ex post*, through more active attempts at bringing about economic and political convergence.

Finally, briefly, in any comparison between the CFA and euro zones, it is important to remember the critical importance of the external peg to the CFA area. Monetary policy there is largely endogenously determined by the tight nature of this peg and arguably much of the economic hardship of the 1980's and early 1990's can be attributable to being anchored to French monetary policy and the *franc fort*. Combined with a number of commodity shocks the hardness of the peg enforced macroeconomic adjustment that might otherwise have been brought about through depreciation or devaluation. Of course, the external peg has also been credited with the lower inflation and more generally stable economic environment enjoyed by the CFA countries, but the critical point here is the centrality of the external peg to CFA monetary policy. There is no parallel to this, at any level within the euro-zone.

Uneven sharing of costs and benefits

Many arguments for currency union focus on microeconomic benefits regarding price transparency, the reduction in transactions costs and greater overall efficiency. These are then balanced against more macroeconomic costs such as the dangers of asymmetric shocks and the constraints on national policies in response to them. And certainly, like free trade, even if there are aggregate gains, there are also both losers and winners to a currency union. Again there are a number of broad lessons that can be drawn from the African example.

- The commodity export dependence of the CFA countries makes them especially susceptible at an individual level to supply and demand shocks. Such shocks have affected the countries individually throughout the history of the franc zone, and how the countries have been affected and have responded offers a rich source of data for study into currency union responses. It also offers a greater richness of information about the type of countries that are most vulnerable, and which countries should best avoid such monetary union commitments.
- I have already alluded to the costs of bailouts at a supranational level. The BCEAO's more active role in bailouts has, according to Medhora²⁶, resulted in a marked shift in patterns of seigniorage allocation. Seigniorage allocation has had to take into account bailout costs, with for example, Senegal receiving 21% of the internal distribution one year, and Côte d'Ivoire receiving consistently higher shares in recent years²⁷. Such policies have resulted in what Medhora²⁸ calls an allocation policy not based on fair principles (size, development etc.), but on a "financial mess".
- Under the BEAC and BCEAO systems, the foreign assets of the central banks are centralized in an account at the French Treasury. The centralization sees the French Treasury offering an unlimited guarantee on the CFA franc. This "operations account" also allows the BEAC and the BCEAO to make reimbursable loans up to 20% of their tax revenue. While this procedure has historically been open to abuse and moral hazard, it has been much tightened following the 1990's crisis and devaluation. What is perhaps more interesting is that there appears to be a reasonably consistent empirical disparity between the behavior of small and larger countries concerning this account, with the larger countries generally tending to overdraw disproportionately more. Fielding²⁹ argues that this is the Nash behavior within the rules of the UEMOA, not to do with conscious exploitation but to do with the unbalanced fiscal policy incentives of the union (see Tables 5a and 5b). While I find Fielding's formal model of explanation to be confusing, the empirical fact remains and suggests a greater puzzle. And while certainly there is no equivalent to the operations account within the euro-zone, I wonder whether

²⁶ Medhora (2000), ibid

²⁷ Medhora (2000), ibid, p8

²⁸ Medhora (2000), ibid, p8

²⁹ David Fielding, The macroeconomics of monetary union: an analysis of the CFA franc zone, (Routledge, London, 2002), Chp 4

there exist similar incentive disparities for large and small country fiscal policy there. (Perhaps a closer analysis of this might also lead to a reexamination of the Growth and Stability rules and what we might want them to achieve).

Table 5a: Operations account in billions of CFA francs (% of GDP)

	CFA francs bn (%GDP)			
	1990	1984		
Benin	15.88 (3.0)	-20.00 (-5.1)		
Burkina Faso	72.37 (13.1)	45.00 (10.8)		
Côte d'Ivoire	-327.68 (-14.3)	-179.00 (-8.4)		
Mali	45.57 (8.3)	8.00 (1.8)		
Niger	53.85 (8.6)	37.00 (6.0)		
Senegal	-41.69 (-2.9)	-53.00 (-5.2)		
Togo	90.45 (25.2)	96.00 (36.0)		

Source: Fielding (2002)

Table 5b: Ivorian and UEMOA operations accounts deficits

GDP year	Ivorian deficit	UEMOA deficit	Difference		
1980	117.8	52.7	65.1		
1982	149.8	77.7	72.1		
1984	179.0	121.7	57.3		
1988	240.1	73.0	167.1		
1990	327.7	7.3	321.1		

Source: Fielding (2002)

Experience of economic change and crisis

Perhaps surprisingly for a region at such a low level of development, in many ways the CFA zone has been characterized throughout its history more by economic stability than by change. Especially in the 1980's and 1990's though, the region experienced severe economic hardship, even crisis. To an extent, though, most of the substantial changes that have accompanied economic crisis have had to do with redefinitions of the hegemonic role played by France and with the external peg to the French franc. As such useful comparability to the European situation is diminished.

Two instances of change may offer some slight insight for the European situation.

• There have been two major overhauls of the French position with regard to the CFA franc. In both the early 1970's and the early 1990's France scaled back its involvement in the monetary affairs of the CFA zone. In both cases greater authority was handed over to the component countries and they were given greater control over monetary operations

at a supra-national level. This change may been further hardened by the loss by France of its own monetary sovereignty in 1999, and with the new requirement that it consult the ECB/European Council before any substantial new commitments with regard to the CFA³⁰. In the face of all of this it has been interesting to see the evolution of the CFA area as it has very slowly moved away from a hegemonic institution. The shift from an asymmetric to a more symmetric order is one with parallels to Europe, but the still strongly dominant position of France has no proper parallel with the euro zone.

• In response to economic crisis, and ultimate devaluation of the CFA franc against the French franc in 1994, members of both currency unions moved to redesign the institutions to prevent a repetition of the crisis. The expansion of the monetary unions into UEMOA and CEMAC was more than just a symbolic gesture towards integration. This has been accompanied by a strong impetus toward tariff reduction, expanded financial regulation and greater harmonization of power. Economic convergence criteria have been set and there appears to have been at least some concerted attempt to meet them. There has also been much discussion of expanding monetary cooperation beyond the current franc members. All of this institutional movement shows a capacity to change the order within a pre-existing system, and to adapt to changed circumstances. While in many ways it took crisis to bring about this change, the level of possible change within the existing order is perhaps instructive for any suggested future redesigns of the euro.

Table 6: Summary of potential areas for learning from economic experiences

	The state of the s			
	Lesson			
Importance of	- The problems involved in attaining "optimality" without prior			
OCA criteria	convergence			
	- The importance of complementary economic & political policies for			
	convergence			
Uneven sharing of	- Experience of asymmetric shocks & lessons about those countries			
costs and benefits	most vulnerable to them			
	- Problems of cost-sharing where bailouts are permitted			
	- Potential different fiscal incentives for different size countries			
Experience of	Experience of complete structural redesign following external and			
economic change	internal political change			
and crisis	Experience of radical redesign of institutions following devaluation &			
	failure of central policy goals			

³⁰ Though as the CFA commitment remains within the French Treasury, this particular scaling back is perhaps smaller than one might initially have expected.

Political perspectives

Membership changes

It seems almost a cliché to suggest that the process toward European monetary union has been as much a political as an economic enterprise. Nowhere has this been more clear-cut than in determining membership and ruling whether countries have or have not met the broad convergence criteria. To many, for example, the accession of the "Club Mediterranean" countries in the first round seemed a decision based more on political pragmatism than on economic readiness. Equally, it will be interesting in the coming years to see how the prospective membership of countries from East and Central Europe will unfold. With a long and varied history of accession and departure, the African franc area offers some useful comparison.

Table 7: Timeline of departures with some relevant dates in CFA history

1945	Creation of CFA Franc Zone	
1948	Devaluation of French franc	
1955	BCEAO and BEAC* created	
1958	New French franc introduced	
1958	Departure: Tunisia	
1959	Departure: Morocco	
1960	Departure: Guinea	
1962	Departure: Mali	
1964	Departure: Algeria	
1973	New monetary conventions and some rule changes	
1973	Departure: Madagascar	
1973	Departure: Mauritania	
1984*	(Re)accession: Mali	
1984	Accession: Equatorial Guinea	
1994	Devaluation of CFA Franc, creation of UEMOA and CEMAC	
1997	Accession: Guinea Bissau	
1999	Introduction of the euro	

Sources: Fielding (2002); Giorgioni & Holden (2000)

As Table 7 illustrates, there has been a reasonable turnover of membership in African franc area across its history. Particularly in the late 1950's and early 1960's the passing away of the colonial era obviously played a strong role in this. Following independence several countries left the zone: Tunisia (1958), Morocco (1959), Guinea (1960), Mali (1962), Algeria (1964), Madagascar and Mauritania (1973). Each set up its own currency

^{*} originally BEAC was called the Central Bank of Equatorial African States and Cameroon

^{**}rejoined Franc zone 1968 with CFA Franc replacing Malian franc only in 1984

and autonomous economic system while at the same time adapting to a situation where substantially their international trade continued to be concentrated predominantly with their old colonial master. Often this process was heavily affected by mutual animosity. Uche³¹, for example, quotes (after the *Economist*) de Gaulle's reaction to the Guinean independence vote in 1958:

"...a furious de Gaulle granted immediate independence, pulled out all French advisors, cancelled all aid, and told French officials to bring back all movable equipment including, it is said, light bulbs"

Although almost certainly an exaggeration, the coincidence of post-colonial bad-will with continued economic dependence is something that all countries leaving the zone have had to face. The rebuilding of trust alongside some inevitable re-direction of trade are also important consequences. Treaties of mutual respect and cooperation only partially heal such a split. In addition there are some basic logistics regarding the liquidation of regional central bank operations and currency replacement, but to a large extent these have proven to be the easiest and smoothest parts of the process (perhaps surprising in such poorly developed countries). For the euro zone there are surely lessons to be learnt here regarding the maintenance of relationships should any member decide to leave. Especially this would be the case if the member were to stay inside the EU while departing the common currency. Already we have seen the political tensions that arose when the UK and Italy were forced to leave the EMS in the early 1990's. In particular the sharp devaluation of sterling left it at a competitive advantage that strained economic and political relations even more³². While it is hard to lay down the rules for how countries should be accommodated were they to leave, the African example suggests a whole range of both acceptable and of unhelpful behavior.

³¹ Chibuike Uche, The politics of monetary sector cooperation among economic community of West African state members, World Bank working papers – international economics, trade, capital flows, July 2001 (p 9)

³² Perhaps most famously the Hoover Co. shifted a vacuum cleaner plant from Dijon to Scotland. Fernández-Arias et al describe the situation as follows: "...France accused the United Kingdom and Italy of harming the overall stability of the European Union...French public officials went as far as to threaten the British with exclusion from the single market, and even EC Commission president Jaques Delors got into the act, warning the British about the incompatibility of their exchange rate policies with the single market" (http://150.108.69.10/public/m-union/abstracts/Ugopaper.pdf).

The experience of Mali with the CFA extends the comparison even more. For Mali is in the unique position of having first left and then re-acceded to the CFA union. If ever a member decides to leave the euro zone, the experience of Mali offers a cautious lesson for both the costs of departure and the substantial political obstacles to rejoining. Crum³³ offers an interesting and detailed analysis of this history – stressing at all times the importance of the political over the economic factors. Political change within Mali brought about the split with France, leading to complicated and often difficult negotiations as to what kind of monetary relations would replace it. On the decision to re-enter in 1967 (only five years later) a number of economic criteria were set for reaccession. Mali then entered a half-membership stage which was complicated both by its poor economic performance and by ongoing difficult political relations with another West African monetary union member, Upper Volta (Burkina Faso). (According to Crum "Mali had left the [union] for political reasons and was now being denied re-entry for similar motives"³⁴). In the end Mali's negotiating position on re-entry was quite poor, but according to Crum it took a more neutral economic advisor, the IMF (not France) to shape criteria for re-entry that were acceptable to everyone. Only in 1984 then, almost 20 years after it reapplied, was Mali allowed formally back into the CFA fold. The difficulties in terms of political obstacles both with the institutions of the CFA and with individual members, and the importance of an external neutral assistance to the reaccession process all mark out the Malian case as one for closer investigation. Should the euro zone see any departures, the Malian experience should hopefully inform how the departing country might be treated.

Political upheavals

One aspect of political experience that has characterized the CFA, and which (so far at least) the EU has had the luxury of not having to tackle has been the problem of chronic political instability at the national level. While hopefully such turmoil would never

34 Ibid, p481

³³ David Leith Crum, *Mali and the UMOA: a case study of economic integration*, Journal of modern African studies, 22, 3 (Sept 1984), 469-86; see also Reference – see also Salam.

emerge within the euro zone, the experience of the CFA areas should be looked at to see how centralized monetary authorities might respond.

The high incidence of political and economic shocks is shown in Table 8.

Table 8: Political and economic shocks in the CFA areas

	Number of coups			Cabinet changes			Commodity index change		
	60-73	80-85	86-93	60-73	80-85	86-93	60-73	73-85	86-93
West	0.033	0.077	0.048	0.35	0.42	0.43	-0.7	1.3	-1.2
African									
CFA av.									
Côte	0.000	0.000	0.000	0.31	0.07	0.33	0.8	5.1	-12.5
d'Ivoire									
Central	0.102	0.000	0.000	0.41	0.38	0.00	1.5	8.2	-3.7
African				•					
CFA av.									
Cameroon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.8	5.2	-11.0

Source: Hadjimichael & Galy (1997)

Throughout its history the CFA franc zone has had to cope with incidences of profound political instability. Even today, for example, Côte d'Ivoire is racked by near civil war. Crises such as this ask substantial questions of the monetary authorities. How should monetary policy accommodate the political and economic shock? To what extent would there be economic (and maybe even political) contagion? And what responsibility do the supra-national authorities have to stabilize the economic situation? The last of these questions raises the issue as to whether such crises should be treated in some senses as similar to economic bailout in financial crisis situations. Is there a particular supranational responsibility? Or should monetary constraint be maintained until a systemic threat is perceived? In all of these situations the CFA area is in the unfortunate position of being rich in case studies for investigation.

From a purely more mechanistic policy front too, the CFA examples may prove interesting. Many of the political instability instances also create economic uncertainty. It might be rewarding to observe how the component economies react to this within the monetary straitjacket. It might also be fruitful to look more closely at the more mundane standard monetary responses of the supra-national authorities to political instability of this kind.

Certainly the EU already has some experience with admitting democratizing countries into its fold, but it has seen nothing like the political instability or the democratic fragility of the CFA countries. In addition the monetary authorities are not as constrained as the externally pegged CFA countries are. From another perspective, however, the lack of any hegemonic actor within the euro zone limits perhaps some of the direct responses that have been possible within the African franc area. Though still not closely comparable, in some respects the admittance of the transition economies with their nascent democracies has the potential to change the EU/euro dynamic, putting much greater strain on the EU/euro institutions. Political and economic adjustment in these countries may prove difficult. The comparability with the African franc area may indeed be loose then, but it might be worth taking a second look at.

Implications for political integration

"L'europe se fera par la monnaie ou elle ne se fera pas"

Jacques Rueff, 1950³⁵

From a political perspective, one of the more discussed aspects of the euro zone is the extent to which it is just a "stalking horse" for more widespread political centralization within the EU. Certainly, the centralization of monetary authority within the ECB accords with such a view, but even here we have already seen, there is widespread domestic organization of monetary relevant issues, such as for example in ongoing national control of fiscal and regulatory authority. Eichengreen suggests that instead of being an inevitable accompaniment to monetary centralization, political integration is contingent, with political integration only following if fiscal centralization and well enforced budgetary rules come closely behind monetary union. Recent controversy surrounding enforcement of the Growth and Stability criteria suggests that this is a far from foregone conclusion. And the African example follows on from this too, with a complete paucity of political integration despite over 40 years of monetary union. Perhaps the historical hegemonic role played by France made such a political

³⁵ quoted in Kenen (1995), ibid, p.480

centralization unnecessary. And perhaps the current reforms suggest that political integration has begun to fill gaps left by a departing hegemon. Taken overall though, the evidence from Africa suggests that monetary integration does not at all imply the inevitable political integration that many have called for...or warned of.

Table 9: Summary of potential areas for learning from political experiences

	Lesson		
Membership changes	- Huge political costs of departure and the		
	economic and political difficulties of		
	maintaining necessary relationships after		
	- The highly politicized nature of negotiation		
	for re-entry and some ways of de-politicizing		
Political upheavals	- How to deal with large scale political		
	instability at a national level – when to treat		
	political shocks and whether to anticipate		
	contagion		
	- The day-to-day mechanics of coordinating		
	supranational monetary policy for crisis zones		
Implications for political integration	- The lack of inevitable moves to political		
	union following monetary union		

Conclusions

Ultimately the often turbulent political and economic context of the CFA member countries has shrouded the broader relevance of their currency union experience. Institutionally the CFA countries have learnt the lessons and risks of their previously more balkanized regulatory regime. Further their experiences of financial crisis offer lessons, often of the cautionary variety, for the nascent euro zone. From an economic perspective the CFA experiences stress the importance of economic and political convergence across a much broader spectrum in order to make currency union work. At this extreme anyway, "optimality" does not appear to be endogenous. It needs the push of complementary policies. From an economic perspective too, the CFA area experiences highlight the uneven gains and losses of a single currency area, perhaps marking off some avoidable "pitfalls" along the way. On a number of occasions the monetary area has been tested in the heat of economic crisis. It has shown some durability in this regard – and even where it has not, the lessons may prove to be as important. Finally, the CFA experience has relevance for some of the more political

aspects of the euro zone. It has an extensive experience of membership changes and the accommodations and modifications of relationship that these involve. At the extreme, too, political instability within member states has also tested aspects of both durability and adaptability. The last lesson of my brief overview concerns the lack of any inevitability of political union following from monetary union. The limited political integration after over forty years of currency union surely stands as testament to this.

The CFA franc zone has itself undergone radical change and transformation in the last ten years. It has learnt lessons from the euro zone especially with regard to its own institutional structure and attempts toward convergence. At a more profound level than the euro zone too, it has begun the slow process of moving from an asymmetric monetary system toward one more symmetric and at least nominally based on a membership of equals. The CFA franc countries have therefore shown an awareness and a preparedness to learn from their European currency union peers. Perhaps in this regard the Europeans should follow their example.

Appendix 1: Some useful acronyms

Institutions	
CFA	Colonies Françaises d'Afrique (colonial acronym)
	Communaute Financiere Africaine (West African post-colonial acronym)
	Cooperation Financier Africaine (Central African post-colonial acronym)
UEMOA	Union Economique et Monetaire Ouest Africaine
	(in English, West African Economic and Monetary Union – WAEMU)
BCEAO	Banque Centrale des Etats de l'Afrique de l'Ouest
	(in English Bank of West African States)
CEMAC	Communaute Economique et Monetaire de l'Afrique Centrale
	(in English, Central African Economic and Monetary Union - CAEMU)
BEAC	Banque des Etats de l'Afrique Central
	(in English Bank of Central African States)
OHADA	Organisation pour l'Harmonisation en Afrique du Droit des Affaires
	(in English Organization for the Harmonization of Business Law in Africa)
ECB	European Central Bank
EMS	European Monetary System
Terminology	
LLR	Lender of last resort
OCA	Optimal Currency Area

Appendix 2: Some economic and political background for the CFA and euro countries

	Population*	GDP/cap (PPP)*	Pop. below	Regime	Freedom
VV 4 T12#77		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	poverty line*	type**	rating
WAEMU	. = 22 222	<u> </u>	070 (0001)		_
Benin	6,788,000	\$1,040 (2001 est.)	37% (2001 est.)	DEM	F
Burkina Faso	12,603,000	\$1,040 (2001 est.)	45% (2001 est.)	AR	PF
Côte d'Ivoire	16,805,000	\$1,550 (2001 est.)	NA	AR	PF
Guinea-Bissau	1,345,000	\$900 (2001 est.)	NA	DEM	PF
Mali	11,340,000	\$840 (2001 est.)	64% (2001 est.)	DEM	F
Niger	10,640,000	\$820 (2001 est.)	63% (1993 est.)	DEM	PF
Senegal	10,590,000	\$1,580 (2001 est.)	54% (2001 est.)	RDP	PF
Togo	5,286,000	\$1,500 (2001 est.)	32% (1989 est.)	DEM	PF
CEMAC:					
Cameroon	16,185,000	\$1,700 (2001 est.)	48% (2000 est.)	RDP	NF
Central African Rep.	3,643,000	\$1,300 (2001 est.)	NA	DEM	PF
Chad	8,997,000	\$1,030 (2001 est.)	80% (2001 est.)	RDP	NF
Rep. Of Congo	2,958,000	\$900 (2001 est.)	NA	AR	PF
Equatorial Guinea	498,100	\$2,100 (2001 est.)	NA	AR	NF
Gabon	1,233,000	\$5,500 (2001 est.)	NA	AR	PF
Euro area:					
Austria	8,170,000	\$27,000 (2001 est.)	NA	DEM	F
Belgium	10,275,000	\$26,100 (2001 est.)	4%	DEM	F
Finland	5,184,000	\$25,800 (2001 est.)	NA	DEM	F
France	59,766,000	\$25,400 (2001 est.)	NA	DEM	F
Germany	83,252,000	\$26,200 (2001 est.)	NA	DEM	F
Greece	10,645,000	\$17,900 (2001 est.)	NA	DEM	F
Ireland	3,883,000	\$27,300 (2001 est.)	10% (1997 est.)	DEM	F
Italy	57,716,000	\$24,300 (2001 est.)	NA	DEM	F
Luxembourg	449,000	\$43,400 (2001 est.)	NA	DEM	F
Netherlands	16,068,000	\$25,800 (2001 est.)	NA	DEM	F
Portugal	10,084,000	\$17,300 (2001 est.)	NA	DEM	F
Spain	40,077,000	\$18,900 (2001 est.)	NA	DEM	F

^{*} Source: CIA - world factbook 2002 (http://www.cia.gov/cia/publications/factbook/)

Key to Freedom house regime type measures: DEM = Democracy; RDP = Restricted Democratic Practice; TM = Traditional Monarchy; AR = Authoritarian Regime; P = Protectorate.

Definition of Restricted democratic practices (RDP): These are primarily regimes in which a dominant ruling party controls the levers of power, including access to the media, and the electoral process in ways that preclude a meaningful challenge to its political hegemony. In the first half of the century, states with restricted democratic practices included countries which denied universal franchise to women, racial minorities, and the poor and landless.

Source for freedom ratings Annual survey of freedom scores 1972-2002 (Freedom House publication: http://www.freedomhouse.org/research/freeworld/FHSCORES.xls). The ratings are made up of a composite of combined scores for political rights and civil liberties in each country. Key: F = free; PF = partially free; NF = not free

^{**} Source for democracy ratings: Democracy's century: a survey of global political change in the 20th century (Freedom House publication: http://www.freedomhouse.org/reports/century.html)

Appendix 3: Sectoral breakdown in CFA and Euro countries

Table A1: Breakdown of sectors in CFA countries

CFA Zone 1995 output	Primary	(Of which)	Secondary	Tertiary
components	sector	Crude oil	sector	sector
Benin	33.9		13.9	52.2
Burkina Faso	37.9		18.2	43.9
Cameroon	40.8	6.4	15.8	43.4
Central African Republic	54.5		16.8	28.7
Congo	45.3	34.1	11.6	43.0
Côte d'Ivoire	31.5		18.4	50.1
Gabon	53.8	42.4	11.0	35.2
Equatorial Guinea	71.7	23.1	8.3	20.0
Mali	46.4		14.1	39.5
Niger	36.6		15.6	47.8
Senegal	20.3		30.5	49.2
Chad	37.1		22.1	40.8
Togo	34.8		22.7	42.5
Average (weighted)	36.4	4.8		45.3

Table A2: Breakdown of sectors in euro zone countries

	Agriculture %GDP	Manufacturing %GDP	Services, %GDP
Austria	2	21	65
Belgium	1	20	71
Finland	4	25	63
France	3	19	71
Germany	1	23	68
Greece	8	12	68
Ireland	4	28	60
Italy	3	21	68
Luxembourg	1	13	78
Netherlands	3	17	70
Portugal	4	19	65
Spain	4	-	66
Euro-zone	3	21	68

Source: World Bank, World Development Indicators, http://devdata.worldbank.org/dataonline/

Appendix 4: Systemic and non-systemic banking crises within the CFA area and Europe

Economy	Scope of crisis	Estimated losses or costs
Systemic Bank	ing Crises	
Benin	1988-90: All three commercial banks collapsed; 80% of banks loan portfolios were non-performing.	CFA95 billion, equivalent to17% of GDP
Burkina Faso	1988-94: Banking system non-performing loans estimated at 34%.	
Cameroon	1987-93: In 1989 banking system non-performing loans reached 60-70%. Five commercial banks were closed and three banks were restructured. 1995-98: At the end of 1996 non-performing loans accounted for 30 % of total loans. Three banks were restructured and two were closed.	
Central African Rep.	1976-92: Four banks were liquidated. 1988-99: The two largest banks, accounting for 90 % of assets, were restructured. Banking system non-performing loans reached 40 %.	
Chad	1980s: Banking sector experienced solvency problems. 1992: Non-performing loans to the private sector reached 35 %.	
Congo, Rep. Of	1992- present: Two large banks were liquidated. The three remaining banks are insolvent. Situation aggravated by the civil war.	
Côte d'Ivoire	1988-91: Four large banks affected, accounting for 90 % of banking system loans; three definitely and one possibly insolvent. Six government banks closed.	Government costs estimated at CFA677 billion, equivalent to 25% of GDP.
Equatorial Guinea	1983-85: Two of the country's largest banks were liquidated.	
Finland	1991–94: Savings banks badly affected; government took control of three banks that together accounted for 31 % of system deposits.	Recapitalization costs amounted to 11% of GDP.
Guinea-Bissau	1995-?: At the end of 1995 non-performing loans accounted for 45% of commercial banks loan portfolio.	
Mali	1987-89: Non-perf. loans of largest bank reached 75%.	
Niger	1983-?: In the mid-1980s banking system non-performing loans reached 50 %. Four banks were liquidated and three restructured in the late 1980s.	
Poland	1990s: In 1991 seven of nine treasury-owned commercial banks— accounting for 90 % of credit—the Bank for Food Economy, and the cooperative banking sector experienced solvency problems.	In 1993 recap. costs were \$750m for the 7 commercial banks and \$900m for the Bank for Food Economy & the cooperative banking sector, for a total equiv. to 2% of GDP.

Slovenia	1992–94: Three banks—accounting for two-thirds of banking system assets—were restructured.	Recapitalizations cost \$1.3 billion.
Senegal	1988-91: In 1988, 50 % of banking system loans were	\$830 million equivalent
	non-performing. Six commercial banks and one development bank closed, accounting for 20-30% of financial system assets.	to17 % of GDP.
Norway	1987–93: The Central Bank provided special loans to six banks suffering from the recession of 1985–86 and from problem real estate loans. The state took control of the three largest banks (with 85 % of banking system assets, whose loan losses had wiped out capital), partly through a Government Bank Investment Fund (5 billion kroner), and the state-backed Bank Insurance Fund had to increase capital to 11 billion kroner.	Recapitalization costs totaled 8 % of GDP.
Spain	1977–85: In 1978–83, 24 institutions were rescued, 4 were liquidated, 4 were merged, and 20 small and medium-size banks nationalized. These 52 banks (of 110), representing 20% of banking system deposits, were experiencing solvency problems.	Estimated bank losses were equivalent to about 17 % of GNP.
Sweden	1991–94: Nordbanken and Gota Bank, accounting for 22 % of banking system assets, were insolvent. Sparbanken Foresta, accounting for 24 % of banking system assets, intervened. Overall, five of the six largest banks, accounting for more than 70% of banking system assets, experienced difficulties.	Recapitalization costs totaled 4% of GDP.
Togo	1993-95: Banking sector experienced solvency problems.	
Borderline and	Smaller (Nonsystemic) Banking Crises	
Denmark	1987–92: Cumulative loan losses over 1990–92 were 9% of loans; 40 of the 60 problem banks were merged.	
France	1994–95: Credit Lyonnais experienced serious solvency problems.	According to unofficial estimates, losses totaled about \$10 bn, making it the largest bank failure up to that time.
Gabon	1995-?: One bank was temporarily closed in 1995.	
Germany	Late 1970s: So-called Giroinstitutions faced problems.	
Greece	1991–95: Localized problems required significant injections of public funds into specialized lending institutions.	
Italy	1990–95: During 1990–94, 58 banks (accounting for 11% of lending) were merged with other institutions.	
United Kingdom	1980s and 1990s: Notable bank failures included Johnson Matthey (1984), Bank of Credit and Commerce International (1991), and Barings (1995).	

Source: http://www1.worldbank.org/finance/assets/images/WBDP428.pdf

Appendix 5: Selected characteristics of prospective euro members

	Population (In millions)	GDP per cap (€, PPP)	Share of agricultural employment	
Accession countries				
Poland	38.6	7,921	18.8	
Romania	22.4	5,663	42.8	
Czech Republic	10.2	12,203	5.1	
Hungary	10.0	10,714	6.5	
Bulgaria	8.5	4,753	26.6	
Slovak Republic	5.4	9,928	6.7	
Lithuania	3.7	6,239	20.2	
Latvia	2.5	5,872	17.1	
Slovenia	2.0	14,977	9.9	
Estonia	1.4	7,832	8.3	
Cyprus	0.6	17,816	9.6	
Malta	0.4	14,238	1.7	
EU members not yet in	euro area			
Denmark	5.4	24,249	46.8	
Sweden	8.9	21,218	55.3	
UK	59.6	20,709	42.4	
Summary euro area (status quo)				
Minimum	0.4	14,448	1.9	
(Weighted) average	25.0	21,242	4.5	
Maximum	82.0	40,090	17.0	

Source: Berger (2002)

Appendix 6: Some economic statistics for UEMOA and BEAC countries

	UEMO/	UEMOA Countries					-	BEAC countries	tries			
	Benin	Burkina	Côte	Senegal	Togo	Mali	Niger	Cameroon	Congo	Gabon	Central	Chad
		Faso	d'Ivoire								African	
			•								Rep.	
Ag. share of GDP 1977	31.9	34.3	24.3	27.1	35.4	61.3	51.8	33.6	15.4	5.5	40.2	35.2
Ag. share of GDP 1987	33.3	31.5	29.2	21.7	33.5	45.2	36.3	24.8	11.9	11.0	46.9	33.1
Ag. share of GDP 1997	38.4	31.8	27.3	18.5	42.2	44.0	38.0	42.1	9.5	7.5	54.1	37.4
Tot. debt share of GDP 1977	22.3	16.4	41.1	31.7	47.6	44.9	13.2	31.4	75.6	52.6	26.0	15.8
Tot. debt share of GDP 1977	76.4	38.4	134.6	87.6	6.86	94.2	75.1	33.2	145.2	79.8	47.8	27.9
Tot. debt share of GDP 1977	75.9	54.5	152.3	81.0	89.2	119.9	88.7	101.9	227.0	67.5	92.3	54.9
Export share of GDP 1977	23.5	9.0	42.6	42.0	41.5	12.8	19.6	25.1	45.6	51.6	25.2	15.4
Export share of GDP 1977	29.3	10.6	33.4	24.1	41.4	16.6	21.5	15.7	41.7	42.7	16.2	15.4
Export share of GDP 1977	24.9	11.2	46.6	32.8	34.7	25.5	16.2	26.8	77.0	64.0	19.5	18.7
Inv. Share of GDP 1977	17.8	22.1	27.3	14.5	34.3	15.6	19.7	28.5	26.6	58.1	11.6	18.5
Inv. Share of GDP 1977	12.9	20.9	12.3	12.5	17.6	20.7	12.0	24.7	19.7	26.4	12.5	9.1
Inv. Share of GDP 1977	18.5	27.0	16.0	18.7	14.9	20.6	10.8	16.2	26.0	26.3	9.0	16.3
Trade taxes % tax rev. 1980	0.79	53.0	49.0	41.0	40.0	22.0	43.0	44.0	18.0	1	47.0	,
Trade taxes % of exp. 1980	43.0	40.0	31.0	32.0	28.0	16.0	28.0	32.0	9.0	1	30.0	_
								Source: Gr	uillaumont	& Guillaun	Source: Guillaumont & Guillaumont (1988)	

Appendix 7: WAEMU Budgetary convergence criteria

	1995	2001
Basic fiscal balance*	Target: Zero or positive	basic fiscal balanc
Benin	-0.8	0.6
Burkina Faso	8.6	-1.2
Côte d'Ivoire	-1.2	1.7
Guinea Bissau	-2.8	-3.6
Mali	0.1	-1.3
Niger	-3.7	-1.2
Senegal	-0.1	1.4
Togo	-4.3	-1.9
WAEMU average	-0.3	0.3
Wages & salaries/fiscal revenue	Target: Less	than 35% wage bi
Benin	43.8	31.8
Burkina Faso	48.1	38.8
Côte d'Ivoire	32.0	42.8
Guinea Bissau	40.4	56.5
Mali	36.5	29.3
Niger	80.1	5.2
Senegal	47.7	32.1
Togo	59.9	52.0
WAEMU average	42.9	37.9
Capital expenditure domestically financed/fiscal revenue	·	Target: Over 209
Benin	10.7	21.5
Burkina Faso	8.2	25.3
Côte d'Ivoire	14.7	4.9
Guinea Bissau	3.2	17.6
Mali	14.1	23.7
Niger	3.9	13.9
Senegal	10.8	20.1
Togo	9.6	3.2
WAEMU average	11.8	13.9
Fiscal revenue/GDP		Target: Over 17
Benin	12.3	14.5
Burkina Faso	10.8	13.8
Côte d'Ivoire	18.0	16.5
Guinea Bissau	6.9	9.5
Mali	11.1	14.8
Niger	6.6	11.9
Senegal	14.8	17.1
Togo	13.6	12.2
WAEMU average	14.4	15.4

Primary targets: Basic fiscal balance zero or positive; overall debt: GDP less than 70%; No change or a decrease in domestic and external payments arrears

Secondary targets: Wage bill less than 35% of tax receipts; ratio of domestic investment to taxes over 20%; tax receipts to GDP over 17% external current account deficit less than 3% GDP

Source: Doré & Masson (2002)

^{*}Total revenue, excluding grants minus total expenditures, excluding foreign-financed investment outlays

Appendix 8: Summary of lessons from the CFA area

Institutional	Lesson
Regulatory authority of	- Lessons from financial sector crises with centralized and
the ECB	de-centralized regulatory authority.
_	- The degree of regulation that is now centralized and how
	this works
Lender of last resort	- Experience of system operating with much less
	"constructive ambiguity"
	- Experience of bailout where tight monetary rules exist
	- Lessons from politicization of lender of last resort function
Expansion	- Lessons of commodity producing members in a currency
	union, especially with regard to asymmetric shocks
	- How to make voting reforms work when new members
	join
Economic	
Importance of OCA	- The problems involved in attaining "optimality" without
criteria	prior convergence
	- The importance of complementary economic and political
	policies for convergence
Uneven sharing of costs	- Experience of asymmetric shocks and lessons about those
and benefits	countries most vulnerable to them
	- Problems of cost-sharing where bailouts are permitted
	- Potential different fiscal incentives for different size
	countries
Experience of economic	- Experience of complete structural redesign following
change and crisis	external and internal political change
	- Experience of radical redesign of institutions following
	devaluation and failure of central policy goals
Political	TT 1/2 1 and 6 days and 4b according and
Membership changes	- Huge political costs of departure and the economic and
	political difficulties of maintaining necessary relationships
	after The highly politicized network of possition for recentry and
	- The highly politicized nature of negotiation for re-entry and
Political unbassala	some ways of de-politicizing - How to deal with large scale political instability at a
Political upheavals	national level – when to treat political shocks and whether to
	anticipate contagion
	- The day-to-day mechanics of coordinating supranational
	monetary policy for crisis zones
Implications for political	- The lack of inevitable moves to political union following
integration	monetary union
THE STREET	J. Carrier J. Walter

Bibliography

CS Adam, DL Bevan, G Chambas, Exchange rate regimes and revenue performance in sub-Saharan Africa, *Journal of Development Economics*, 64, 173-213, 2001

Anatolie Marie Amvouna, Determinants of trade and growth performance in Africa: a cross-country analysis of fixed versus floating exchange rate regimes, *African Economic Policy, Discussion Paper No. 18*, July 1988

R D Asante, Paul Robert Masson, The pros and cons of expanded monetary union in West Africa, *Finance and Development*, March 2001, 38, 1

Jean Paul Azam, Public debt and the exchange rate in the CFA franc zone, *Journal of African Economies*, 6, 1, March 1997, 54-85

M'bet Allechi, Madelaine Kimkey, Evaluating the net gains from the CFA franc zone membership: a different perspective, *World Development*, 22, 8, 1994, 1147-1160

Walter Bagehot, Lombard Street: A Description of the Money Market, (London, H. S. King & co., 1873)

Tamim Bayoumi, Barry Eichengreen, Shocking Aspects of European Monetary Unification, in Francisco Torres and Francesco Giavazzi (eds), Adjustment and Growth in the European Monetary Union, Cambridge: Cambridge University Press (1993), pp.193-230.

BBC news story, 7 October 2002 (http://news.bbc.co.uk/1/hi/business/2305511.stm)

Helge Berger, The ECB and euro-area enlargement, IMF working paper, WP/02/175, October 2002

Paul Collier, Patrick Guillamont, Sylviane Guillamont, Jan Wilhem Gunning, The future of Lomé: Europe's role in African growth, *The World Economy*, 20, 3, 285-305

Conjoncture, *Challenges facing the CFA franc*, BNP Paribas publication, October 2001 (http://economic-research.bnpparibas.com)

Stephen Deardon, The CFA and European Monetary Union, DSA European Development Policy Study Group, Discussion Paper No 14, June 1999

Shantayanan Devarajan, Jaime de Melo (1992), Membership in the CFA zone: Odyssean journey or Trojan horse? In A Chhibber and S Fischer (eds), *Economic reform in sub-Saharan Africa*, pp 25-34

Shantayanan Devarajan, Real exchange misalignment in the CFA zone, *Journal of African Economies*, 6, 1, March 1997, 35-54

Ousmane Doré, Jean-Claude Nachega, Budgetary convergence in the WAEMU: adjustment through revenue or expenditure, *IMF Working paper*, June 2000

Ibrahim Elbadawi, Nadir Majd, Adjustment and economic performance under a fixed exchange rate: a comparative analysis of the CFA zone, *World Development*, 24, 5, 1996, 939-951

Barry Eichengreen, International monetary arrangements for the 21st century, Brookings Institution Press, 1995

Barry Eichengreen, *The euro, one year on*, Journal of policy modeling, 22, 3, pp355-368 (2000)

Barry Eichengreen, Ricardo Hausmann, Exchange rates and financial fragility, *NBER Working Paper 7418*, November 1999

Antonio Fatás, Andrew Rose (2000), Do monetary handcuffs restrain Leviathan? Fiscal policy in extreme exchange rate regimes, *Centre for Economic Policy Research*, 2001

Carlo Favero, Xavier Freixas, Torsten Persson and Charles Wyplosz, *One money, many countries: monitoring the European Central Bank 2*, CEPR, January 2000

David Fielding, Kalvinder Shields (1999), Is the franc zone an optimal currency area?, Department of Economics, University of Leicester, mimeo

David Fielding, Kalvinder Shields (2000), Modeling macroeconomic shocks in the CFA franc zone, Department of Economics, University of Leicester, *mimeo*

Seraphin Magloire Fouda, David Stasavage (2000), The CFA franc after EMU: status quo, reform or dissolution, *The World Economy*, 23/2, 2000/02, p. 221-233

Sepraphin Magloire Fouda, Political monetary cycles and independence of the central bank in a monetary union: an empirical test for a BEAC franc zone member country, *Journal of African Economies*, 6, 1, March 1997, 112-132

Charles Goodhart, *The Political Economy of Monetary Union* in Peter Kenen (ed.), Understanding Interdependence: The Macroeconomics of the Open Economy (Princeton, NJ: Princeton University Press, 1995), Chp 12

John Green, Philip Swagel, The euro area and the world economy, *Finance and Development*, December 1998, 35, 4

Dominique Guillaume, David Stasavage, Improving policy credibility: is there a case for African monetary unions?, *World Development*, 28, 8, August 2000, pp1391-1408

Michael Hadjimichael, Michel Galy, The CFA franc zone and the EMU, IMF Working

Paper, November 1997

Patrick Honohan, Stephen A. O'Connell, Contrasting monetary regimes in Africa, *IMF Working Paper*, WP/97/64, May 1997

Graciela Kaminsky, Carmen Reinhart, The twin crises: the causes of banking and balance of payments problems, *International Finance Discussion Paper No. 544*, Board of Governors of the Federal Reserve System, March 1996

Felipe Larraín, Andrés Velasco, Exchange rate policy in emerging markets: the case for floating, Conference paper for conference When is a National Currency a Luxury, London Business School, March 2001

Paul Masson, Catherine Pattillo, Monetary union in West Africa: an agency of restraint for fiscal policies?, *IMF working paper*, March 2001

Sanuo Mbaye, CFA franc: a colonial relic, West Africa, May 2000

Malcolm McPherson, Sustaining trade and exchange rate reform in Africa: lessons for macroeconomic management, *Development discussion paper no. 713*, Harvard Institute for International Development, July 1999

Rohinton Medhora, Dollarization in the Americas: lessons from the franc zone, International Development Research Centre, conference on *Dollarization in the western hemisphere*, October 2000 (http://www.nsi-ins.ca/ensi/events/06_MEDORA.pdf)

Alejandro Micco, Ernesto Stein, Guillermo Ordoñez, *The Currency Union Effect on Trade: Early Evidence from the European Union*, Working Paper, Washington: Inter-American Development Bank (2002)

The Observer, 6 October 2002 (http://www.observer.co.uk/international/story/0,6903,805622,00.html)

Francesco Paolo Mongelli, "New" views on the optimum currency area theory: what is EMU telling us? ECB working paper No.138, April 2002

Andrew Rose, Charles Engel, Currency unions and international integration, NBER working paper 7872, September 2000

Philipp Rother, Money demand and regional monetary policy in the West African Economic and Monetary Union, *IMF Working Paper*, *WP/98/57*, April 1998

Khalid Sekkat, Aristomène Varoudakis, Exchange rate management and manufactured exports in sub-Saharan Africa, OECD Technical Papers, No 134, March 1998

Shantayanan Devarajan, Dani Rodrik, Do the benefits of fixed exchange rates outweigh their costs: the franc zone in Africa, NBER Working Paper 3727, June 1991

David Stasavage, The CFA franc zone and fiscal discipline, *Journal of African Economies*, 6, 1, March 1997, 132-165

James Tybout, Bernard Gauthier, Giorgio Barba Navaretti, Jaime de Melo, Firm level responses to the CFA devaluation in Cameroon, *Journal of African Economies*, 6, 1, March 1997, 3-35

Chibuike Uche, The politics of monetary sector cooperation among economic community of West African state members, World Bank working papers – international economics, trade, capital flows, July 2001

United Nations Department of Public Information, For better or for worse: the euro and the CFA franc, *African Recovery*, 12, 4, April 1999

John Williamson, Exchange rate regimes for emerging markets, Institute for International Economics, 2000

West African economic and monetary union: recent economic developments and regional policy issues in 2000, *IMF country report no. 01/193*, October 2001

Fahrettin Yagci, Choice of exchange rate regimes for developing countries, Africa Region Working Paper No. 16, World Bank, April 2001