



KATHOLIEKE UNIVERSITEIT  
**LEUVEN**

Faculty of Economics and  
Applied Economics

Department of Economics

Improving Policy Credibility: Is There a Case for African  
Monetary Unions?

by

Dominique GUILLAUME  
David STASAVAGE

Development Economics

Center for Economic Studies  
Discussions Paper Series (DPS) 99.08  
<http://www.econ.kuleuven.be/ces/discussionpapers/default.htm>

March 1999



**DISCUSSION  
PAPER**

# IMPROVING POLICY CREDIBILITY: IS THERE A CASE FOR AFRICAN MONETARY UNIONS?

**Dominique Guillaume\***

Department of Economics  
Catholic University of Leuven

and

Centre for the Study of African Economies  
Oxford University

**David Stasavage**

St. Antony's College

and

Centre for the Study of African Economies  
Oxford University

## *Abstract*

*This paper analyses the experience with monetary policy in African countries which have participated in rule-based international monetary arrangements (CFA Franc Zone, Eastern African Currency Board and Rand Monetary Area). It argues that African countries have generally lack the political institutions necessary for governments to credibly commit through domestic institutions (exchange rate pegs or independent central banks). For such countries, monetary unions can provide an alternative source of credible commitment to sound macroeconomic policies, but only when exit from a union is made costly by the existence of parallel regional accords, and only when governance structures of monetary unions have been designed so as to maximise chances for the enforcement of monetary rules.*

**Key Words:** regional integration, monetary and fiscal policy, political economy, rules, Africa

---

\*

Corresponding author: Centrum voor Economische Studien. Katholiek Universiteit Leuven. Naamsestraat 69. 3000 Leuven. Belgium. Fax: +32-16-32.67.96. Email: Dominique.Guillaume@econ.kuleuven.ac.be.

We are grateful to Chris Adam, A. Basu, M. Katz, L. Kuijs and Richard Mash for useful comments. D. Guillaume acknowledges the financial support of a EU TMR fellowship and D. Stasavage of a DFID grant. Part of this research was completed while D. Guillaume was a visiting scholar at the Research Department of the IMF.

## 1. INTRODUCTION

In recent years, a consensus has emerged among economists that credibility is a paramount issue for monetary policy. For developed economies, the key element in a credible commitment to price stability is delegation of monetary policy to an independent central bank with a clearly specified inflation target, associated with sanctions when the target is not met (Persson and Tabellini, 1993). For developing countries, in contrast, the debate continues on what commitment mechanisms are both appropriate and feasible. A first view embodied in many IMF stabilization programs in Sub-Saharan Africa is that floating exchange rates together with a greater independence of central banks would ensure credible monetary policies (Schadler, 1995). The alternative view is that for many African countries the only way to rebuild poor reputations is to establish policy rules at the regional level within the framework of a monetary union, possibly with the participation of advanced industrial countries (Collier, 1991).

The debate over which mechanism African governments should use in order to increase their credibility is all the more central in light of current regional integration initiatives. In East Africa a new treaty paving the way for a common market followed by a planned monetary union was released in April 1998. The states of the West African Monetary Union in 1994 signed a treaty creating the West African Economic and Monetary Union and in 1995 the Central African members of the Franc Zone signed a treaty creating the Central African Economic and Monetary Union. The countries of the Southern African Development Community (SADC) signed a Free Trade Agreement in 1997 and are currently discussing whether to extend the Common Monetary Area to the SADC countries. Several other initiatives for the enhancement of regional cooperation have also been discussed recently, including the Cross-Border Initiative (1993), and a proposed revision to the Lomé agreements which could enhance regional cooperation within Africa along the lines of the NAFTA agreement (European Union, 1997; Collier and Gunning, 1996).

The main economic argument for adopting floating exchange rates and independent central banks, instead of a monetary union, is that current and proposed African monetary unions do not constitute optimum currency areas. For one, the transaction cost benefits of removing exchange rate volatility within an area are likely to be small for countries that trade relatively little with one another. Second, the loss of the nominal exchange rate instrument could potentially represent a very significant cost for countries hit by

asymmetric shocks. Even in the Rand Monetary Area where Jenkins and Thomas (1998) found evidence of relative convergence in the eighties, output disturbances are hardly correlated (Bayoumi and Ostry, 1997). The adverse effects of large asymmetric shocks are reinforced by the difficulty in implementing real adjustments. Labor flows from large to small economies are unlikely to compensate for negative shocks occurring in the larger economies, downward price rigidities have proved significant, and fiscal transfers that are already difficult to operate in the context of the European Union are not a practical option for African economies. Moreover, the asymmetric character of shocks is exacerbated for African monetary unions with an external peg. In the CFA Zone, French monetary policy is obviously unaffected by shocks arising in the Western and Central monetary unions. With the de facto peg to the Euro since January 1999, shocks in the African communities will be even more asymmetric to the conduct of monetary policy by the European Central Bank.

The problem with optimum currency area theory is that it assumes that if a government retains the nominal exchange rate as a policy instrument, it will only devalue (or revalue) when the action is warranted by economic considerations (Eichengreen, 1994). In practice, however, factors such as political instability can greatly increase the likelihood that a country will devalue, independently of whether economic considerations warrant such a move (Klein and Marion, 1996). In the extreme case of an environment of low monetary policy credibility, governments may gain nothing from retaining the nominal exchange rate as a policy tool, because devaluation will simply start a wage inflation spiral.

Another problem with the recommendation that African countries adopt floating exchange rates and independent central banks is that legal central bank independence in the political context of most African countries is likely to be meaningless. In order for the granting of legal independence to a central bank to promote credibility, there must be significant obstacles to reversing this decision. Keefer and Stasavage (1998) have recently shown that political institutions characterized by checks and balances are an important obstacle to reversal of legal central bank independence. The problem is that few African countries have political institutions characterized by significant checks and balances. We provide evidence to support this conclusion and then argue that participation in international agreements may be the best way for African countries to increase their credibility. In order for this solution to be effective, however, exit from international arrangements must also be costly, and we provide evidence to show that participation in parallel international agreements is one factor likely to increase the cost of exit. Finally, we make suggestions on how the rules of these unions could be designed so as to maximize the probability of adherence and so as to mitigate the adverse impact of asymmetric shocks.

We develop our theoretical framework in section 2. Sections 3 and 4 review the experience of three African monetary unions: Section 3 documents the relative absence of domestic checks and balances and the evolution of monetary rules in these unions while Section 4 evaluates their credibility. Section 5 concludes with some specific institutional issues on the design of monetary unions in Africa.

## **2. CREDIBLE MONETARY POLICIES**

### **2.1. Factors that undermine credibility**

There are at least two grounds on which credibility problems can emerge with respect to monetary policy. The best known is time-inconsistency. Kydland and Prescott (1977) show that even a social-welfare maximizing government will have an incentive to deviate from an announced monetary policy once private sector actors have formed expectations and entered into wage and other contracts. With less well-intended governments that are ready to retain power even at the expense of sub-optimal economic policies, the possibility for time-inconsistency problems expands accordingly. A common example of the latter is the increased incentive for governments to engage in surprise monetary expansions before elections.

Even if a current government is pursuing a prudent monetary policy, a second credibility problem can emerge if investors fear that future governments will not have the same preferences as a current government. Changes in government can bring to the fore interest groups whose demands for subsidies lead to ill-advised macroeconomic policies. A common example of a powerful lobby in contemporary Africa are demobilized soldiers whose requests for transfers may conflict with a government's macroeconomic objectives but whose interests often cannot be easily ignored.

### **2.2. Mechanisms that enhance credibility**

Apart from acquiring a reputation, which is a lengthy process, the common suggestion for governments facing credibility problems is to tie their hands, either by creating a policy rule or by delegating to an independent agent. Early literature generally assumes that once

in place, rules or delegation are immutable (Rogoff, 1985; Walsh, 1995). However, formal independence for central banks, inflation contracts for central bankers, or even exchange rate rules are likely to remain a dead letter if they can be reneged on with little cost. As evidence of this, Cukierman's (1992) study shows that even though African countries score better than average on an index of legal central bank independence, it seems to have little bearing on their inflation performance.

In this paper, we follow more recent work which has emphasized that delegating or adopting a rule will not pose a constraint on a government's actions unless the decision to do so is more difficult to reverse than would be a reversal of the underlying macroeconomic policies implied by the respect of the rule (Moser, 1996; Lohmann, 1998; Keefer and Stasavage, 1998). Keefer and Stasavage develop a theory of how the credibility of rules and of delegation depends upon the existence of checks and balances in a country's political institutions. Checks and balances include features such as having both executive and legislature able to veto legislation, having multiple houses of the legislature, or a tendency to have legislative majorities made up of multiple parties with different preferences. In addition to these formal characteristics of political institutions, however, in order for checks and balances to be present, it is also critical that different actors within government (like the executive and legislative majority) have heterogeneous preferences. Keefer and Stasavage provide cross-country statistical evidence to support the hypothesis that under the above conditions, legal central bank independence is more likely to increase credibility.

For countries in which checks and balances are absent, joining an international agreement might act as a substitute mechanism for establishing credibility<sup>1</sup>. In order for international agreements to be effective, however, exit must be costly and other member states must also be willing to oppose any attempt by their neighbors to break the rules of the arrangement. Costs of exit from a monetary union can include the administrative costs involved in setting-up a separate currency, the difficulty of running an independent monetary policy with a low level of foreign reserves, or increased debt-servicing obligations. Ultimately, however, a more important deterrent to exit may be the fear of losing benefits in parallel regional agreements in areas such as trade or security. We investigate this proposition for three different African monetary unions.

---

<sup>1</sup>

A further step is to base an international agreement on delegation to an international agency whose decision makers will themselves be independent from control by any government, as will be the case in the European Central Bank. This is not applicable to the monetary unions considered in this paper, however, because ministerial representatives have dominated the governing boards of the monetary authorities.

### 3. AFRICAN MONETARY UNIONS

Our empirical analysis concentrates on the three groups of African countries that have been part of an international monetary agreement: the East African Currency Board, the Franc Zone (Central African Monetary Area and the West African Monetary Union), and the Rand Monetary Area (see Table 1)<sup>2</sup>. In this section we consider in turn the political institutions present in these countries and the evolution of monetary rules in each union.

*Table 1: African monetary unions*

Monetary union	Period Covered	Countries participating	Changes and Exits
<i>East African Currency Board</i>	1960-1972	Kenya, Uganda and Tanzania	1966: demise of the EACB
<i>Central African Monetary Area</i>	1960-1993	Cameroon, the Central African Republic, Chad, the Republic of Congo, and Gabon	1973: relaxation of rules
<i>West African Monetary Union</i>	1960-1993	Benin, Burkina-Faso, Côte d'Ivoire, Mali, Mauritania, Niger, Senegal and Togo	1973: relaxation of rules 1962-1968: exit of Mali 1973: exit of Mauritania
<i>Rand Monetary Area</i>	1974-1994	South Africa, Lesotho, Swaziland and Botswana	1976: exit of Botswana

#### 3.1. The existence of checks and balances

Following Keefer and Stasavage (1998) in tables 2, 3, and 4, we use two variables to proxy for the degree of check and balances: the degree of political party fractionalization and an index of constraints on the executive. Fractionalization in the lower house of a country's parliament is measured on a 0 to 1.0 scale with an index which is calculated using the same formula frequently adopted for measuring concentration in industrial sectors (Banks, 1993). In countries where fractionalization is high (tending towards 1.0) there will be a greater tendency for coalition governments to form. It is likely to be more costly to renege on policy rules within coalition governments, as suggested in section 2, because multiple decision-makers must agree to such a change whereas monetary policy decisions would normally be made by the executive alone. The index of "executive constraints" developed

<sup>2</sup>

We do not cover the whole spectrum of monetary regimes in Africa that ranges from currency boards or monetary unions, to a single currency peg, to a peg to a basket of currencies, to a float within a pre-determined range with heavy intervention, to a pure float (Ghosh et al., 1997).

by Gurr et al. (1989) is a subjective indicator of the extent to which the executive in a country is constrained by features such as a constitution and a separate legislature which can veto legislation. The index ranges from the lowest value (1), where “there are no regular limitations on the executive’s actions”, to the highest value (7), where groups such as a legislature or a ruling party have “effective authority equal to or greater than the executive in most areas of activity”.

It seems clear from the tables below that for the period studied here African countries have had an increasing tendency towards low party fractionalization and low levels of executive constraints. This is most marked among the CFA states where executive constraints have averaged less than 3.0 on Gurr’s scale and where levels of fractionalization approaching zero reflect the emergency of single-party states. There are two major exceptions to this pattern: Uganda and Botswana. Uganda had a fairly high level of party fractionalization during the 1961-66 period, combined with strong executive constraints. In Botswana there was also a large number of parties with two main political parties dominating the political scene.

*Table 2: Party fractionalisation and executive constraints in EACB countries  
(annual averages)*

	Party Fractionalization		Executive Constraints	
	<b>61-66</b>	<b>67-73</b>	<b>61-66</b>	<b>67-73</b>
EACB average	0.193	0.039	5.1	2.8
Kenya	0.222	0.033	4.5	3.3
Tanzania	0.000	0.000	3.0	3.0
Uganda	0.452	0.084	7.0	2.3
Other SSA countries average**	0.134	0.161	3.0	2.2

\*\* excluding CFA, RMA.

Sources: Banks (1993), Gurr and Jagers (1989).



*Table 3: Party fractionalisation and executive constraints in CFA countries  
(annual averages)*

	Party Fractionalization			Executive Constraints		
	<b>60-73</b>	<b>80-85</b>	<b>86-93</b>	<b>60-73</b>	<b>80-85</b>	<b>86-93</b>
UMOA average	0.016	0.039	0.026	2.6	2.1	2.6
Côte d'Ivoire	0.000	0.000	0.000	n.a.	n.a.	n.a.
BEAC average	0.058	0.052	0.066	2.7	1.8	2.4
Cameroon	0.000	0.000	0.000	2.9	2.1	2.3
Other SSA countries average*	0.147	0.136	0.077	2.7	2.6	2.2

\* excluding EACB, RMA.

Sources: Banks (1993), Gurr and Jagers (1989).

*Table 4: Party fractionalisation and executive constraints in RMA countries  
(annual averages)*

	Party Fractionalization		Executive Constraints	
	<b>68-76</b>	<b>77-93</b>	<b>68-76</b>	<b>77-93</b>
RMA countries <sup>o</sup>	0.289	0.182	n.a.	n.a.
South-Africa	0.405	0.376	n.a.	n.a.
Botswana	0.352	0.396	n.a.	n.a.
Other SSA countries average***	0.142	0.133	2.3	2.51

\*\*\* excluding CFA, EACB. <sup>o</sup> Botswana was part of RMA countries until 1976.

Sources: Banks (1993), Gurr and Jagers (1989).

### 3.2. The evolution of rules

All three monetary unions we consider here began as rule-based systems characterized by a fixed exchange rate peg with full convertibility, strict limits on central bank lending to governments, and minimum legal levels of foreign reserves<sup>3</sup>. Subsequently, there have been modifications in each union.

The *East African Currency Board* (EACB) was the continuation of a monetary arrangement set-up by the British colonial power in Kenya, Tanzania, and Uganda. Though the statutes of the EACB did not specify a legal minimum for reserves, convertibility for the East African shilling issued by the EACB was ensured by a 100% reserve cover. Gradually, the EACB also assumed the lending functions of a central bank. In 1955, it was authorized to back a small portion of its foreign reserves with East African government securities denominated in East African shillings. Possibilities for the EACB to lend to governments and the private sector were gradually increased so that by 1964, if it had been fully used, the £45 million fiduciary issue would have amounted to more than 50% of the currency in circulation in the newly independent East African states (Kratz, 1966). In 1960 the governance structure of the EACB was also changed radically as the British government essentially withdrew from direct involvement with Board decisions. Though there is no record of written voting rules, in practice the Kenyan, Ugandan and Tanzanian representatives each held a veto over EACB decisions.

Following the break-up of their currency union in 1966, all three East African countries initially retained their fixed peg to the sterling as well as full current account convertibility, but they soon abandoned the fixed peg following sterling's devaluation against the dollar in 1967. They also subsequently restricted convertibility of their new currencies (Gulhati, 1983). The new national central banks were not particularly independent in that ministerial representatives had substantial influence on their governing boards, but each government did establish rules to either limit central bank lending to governments or to specify a minimum level of reserves<sup>4</sup>.

---

<sup>3</sup> See Guillaume and Stasavage (1999) for a more detailed account of this and the next section.

<sup>4</sup> For instance, the Kenyan central bank statute adopted a limit on central bank credit to government that was only slightly higher than its limit under the EACB. The Bank of Uganda Act limited direct advances to 15% of estimated current revenues for the financial year in which the advances were made, and all advances were to be repaid within 3 months. The Bank of Tanzania act limited the direct purchase of government securities to 25% of the government's average annual current revenues over the preceding 3 fiscal years. In addition, the Bank could make advances to government equivalent to a maximum of 20% of its revenues, but any advances had to be repaid in full within 300 days. The 45% of revenue that could be loaned through these two facilities were greater than Tanzania's fiduciary limit under the EACB but contrary to the EACB rules were of limited duration.

In the *Franc Zone* at independence convertibility for the currencies issued by each monetary union was ensured through a guarantee by the French Treasury. Positive foreign reserves of each central bank were deposited in an “operations account” at the French Treasury, while the French Treasury allowed an overdraft on the accounts if reserves fell to zero. The counterpart to this guarantee was a substantial delegation of control over monetary policy to the French government: the French government held a third of the seats on the governing board in each of the two central banks, the BCEAO (for UMOA) and the BEAC (for CAMA); both central bank offices remained in Paris; and the director general position of each bank was held by a French civil servant. Lending rules to government were rather strict with borrowing limited to a maximum of 10% (15% from 1968 onwards) of the previous year's revenues, and the loan was limited to 240 days duration. Both unions at independence also established a statutory minimum level of foreign reserve holdings<sup>5</sup>.

In 1973, the statutes of both Franc Zone central banks were substantially reformed. Limits on central bank credit to governments were raised to 20% of the previous year's revenues, and a number of new facilities allowed the extension of refinancing credits at subsidized rates. The new statutes were quite vague on the issue of whether indirect credit from the central banks to governments via commercial banks should fall under the new 20% rule. Moreover, the rule stipulating automatic increases in discount rates and cuts in refinance ceilings when either central bank's reserves fell below 10% of sight liabilities was loosened, as adjustment measures were now left up to the discretion of the governing boards. The governance structure of the two Franc Zone central banks was also radically modified. France gave up the director general position of each central bank and its participation on the two governing boards was significantly reduced. For the BCEAO, a deal between Côte d'Ivoire and Senegal (the two largest countries) resulted in Côte d'Ivoire's securing the right to choose the BCEAO governor in exchange for installation of the bank's headquarters in Dakar, Senegal. The two largest states in BEAC, Gabon and Cameroon, engineered a slightly different compromise as the new statutes specified that Gabon would name the governor of the BEAC but that Cameroon be given 4 seats on the governing board. These four seats were in many cases sufficient to block any attempt at lowering rediscount ceilings to Cameroonian commercial banks (Stasavage, 1997).

---

<sup>5</sup>

When foreign exchange reserves of either bank fell below 20% of demand liabilities, the governing board was to be convened to take adjustment measures. If foreign exchange reserves fell below 10% of demand liabilities, discount rates were to be raised automatically and significant reductions in refinancing to individual countries were to be implemented (IMF, 1963).

In the *Rand Monetary Area*, the rand initially circulated as a legal tender in all member countries. But soon Lesotho and Swaziland used the right they had retained to issue their own currency. In 1974 Swaziland established an independent monetary authority, converted to the Central Bank of Swaziland in 1979, and issued its own currency, the lilangeni, pegged at par to the South African rand. The monetary authority of Lesotho was established in 1979 and converted to the Central Bank of Lesotho in 1982. Lesotho introduced the loti in 1980, which was fixed at par with the South African rand. Free movements of capital together with a peg to the rand provided free access to South African financial markets but meant that interest rates in the smaller countries were set according to the rates of the South African Reserve Bank. Foreign reserves were held with the South African Reserve Bank<sup>6</sup>.

In 1986 the Trilateral Monetary Agreement supplanted the Rand Monetary Agreement, and established the Common Monetary Area (CMA). The new agreement provided for the signing of bilateral agreements between South Africa and the two partner countries. Conditional credit was made available from the South African Reserve Bank. Swaziland suspended the use of the rand as legal tender and Lesotho took over the management of its own international reserves. When Namibia became independent in 1990, it signed an agreement with South Africa that also provided for Namibia's participation in the CMA, the circulation of the South African rand as legal tender, and for the establishment of Namibia's central bank. Namibia began to issue its own currency (the Namibian dollar) at par with the rand in September 1993.

The CMA committee also provided for consultative meetings on monetary policy, but in practice the rand monetary policy has been determined by the South African Reserve Bank. Until 1979 the rand was pegged to either Sterling or the US dollar. Contrary to the CFA Zone, capital movements outside the zone were strictly controlled. In 1979, a dual exchange rate system was introduced with the financial rand rate applying to non-resident transactions and direct investment. The South African Reserve Bank directly intervened on the other rate, the commercial rand. The two exchange rates were only unified in 1995.

---

<sup>6</sup>

South Africa also compensated the smaller countries for the loss of seignorage resulting from the use of the rand and their international reserves were remunerated at market rates of interest.

## 4. CREDIBILITY OF AFRICAN MONETARY UNIONS

We assess the credibility of each of the above monetary agreements from three angles: their economic performance, their ability to adjust to political and economic shocks, and the cases of exit from each arrangement.

### 4.1. Economic performance

Table 5 shows that the performance of Tanzania and Uganda considerably deteriorated after the Eastern African Currency Board fell apart in 1966. Inflation and net credit to central government rose rapidly even though Uganda temporarily experienced faster growth as a result of an improvement in its terms of trade. Temporary rapid growth in investment in Tanzania can be attributed to a shift to socialist planning.

There is some evidence that the relatively good fiscal and inflation performance of Tanzania and Uganda between 1960 and 1966 resulted from the enforcement of the EACB's limits on lending to governments backed up by a Kenyan veto of any increases in fiduciary limits which it saw as unwarranted<sup>7</sup>. The Tanzanian government was forced to scale back certain investments (IMF, 1969) and from the end of 1962 on, found itself frequently at or near its limit for borrowing from the EACB. The Ugandan government also found itself in periodic borrowing difficulties with the EACB. As early as 1963, documents show that Ugandan representatives were complaining about the "uncompromising" attitude of the EACB<sup>8</sup>. By contrast, the Kenyan government itself rarely borrowed more than 50% of its fiduciary limit.

---

<sup>7</sup> The best direct evidence on the attitude taken by the Kenyan government is from 1964 and 1965. (de Loynes papers (OV7/63 609/5, OV7/64 610/1).

<sup>8</sup> de Loynes papers 14 May 1963 (OV7/61 609/3).

*Table 5: Economic performance in the EACB countries  
(annual averages)*

	Inflation %		Budget Deficit % GDP		Change in Net Claims on Govern. % GDP		Gross Invest. % GDP		GDPGrowth %	
	<b>61-66</b>	<b>67-73</b>	<b>61-66</b>	<b>67-73</b>	<b>61-66</b>	<b>67-73</b>	<b>61-66</b>	<b>67-73</b>	<b>61-66</b>	<b>67-73</b>
EACB average	3.3	7.5	-4.4	-5.2	0.1	2.8	12.2	17.6	5.4	5.8
Kenya	2.3	3.5	-5.4	-4.4	-0.9	0.7	12.6	20.0	4.0	7.4
Tanzania	4.0	9.7	-2.4	-4.7	-1.8	1.5	12.2	18.9	10.1	-1.5
Uganda	3.4	9.3	-5.4	-6.4	2.9	6.1	12.1	13.8	3.9	11.5
Other SSA countries average**	3.6	4.7	-0.6	-2.9	0.9	3.5	14.9	13.7	4.2	3.8

\*\* excluding CFA, RMA.

*Sources: International Financial Statistics, World Development Indicators, IMF (1969).*

After 1966, rules limiting central bank finance of government deficits at the national level proved much less effective at constraining governments than had been the case under the EACB. In Uganda, the statutes of the central bank were easily modified to suit the government's increased demands for both current and capital expenditures. For instance, in 1968 the statutes of the central bank were reformed to allow government representatives to have more direct influence on the bank. In 1970 a law was passed to enlarge the scope of foreign reserves to include "any external fund, facility, or drawing rights which the Minister considers acceptable". This was followed in June 1971 by a decree removing the official floor on foreign reserves altogether. This same decree raised the limit on temporary advances to government<sup>9</sup>. In Tanzania, increased domestic financing of the socialist economic development program was made possible by nationalizing of the banking sector and by the grouping of existing commercial banks within a new entity, the National Bank of Commerce. This allowed for indirect channeling of credit from the central bank to the government and public sector entities. Credit to the public sector from the state owned National Bank of Commerce expanded at an annual average rate of 245% in real terms between 1966 and 1973 (Kimei, 1987).

Table 6 shows that there has been low inflation in CFA Zone throughout the various periods. After 1973, however, the fiscal performance of the CFA zone countries deteriorated as net claims of the banking sector on government rose rapidly. Though GDP growth was higher in the CFA countries until the beginning of the 1970s and remained strong in the oil-producing countries of BEAC between 1973 and 1985, the CFA Zone performed poorly when compared to other Sub-Saharan African countries between 1986 and 1993. In contrast to Sub-Saharan Countries outside the CFA Zone where total investment increased over the three periods, it decreased in the CFA Zone as a result of the crowding out of private investment and significant cuts in public investment after 1985.

---

<sup>9</sup> Bank of Uganda annual reports.

*Table 6: Economic performance in the CFA countries  
(annual averages)*

	Inflation %			Budget Deficit % GDP			Change in Net Claims on Govern. % GDP			Gross Invest. % GDP			GDP Growth %		
	<b>60-73</b>	<b>73-85</b>	<b>86-93</b>	<b>60-73</b>	<b>73-85</b>	<b>86-93</b>	<b>60-73</b>	<b>73-85</b>	<b>86-93</b>	<b>60-73</b>	<b>73-85</b>	<b>86-93</b>	<b>60-73</b>	<b>73-85</b>	<b>86-93</b>
UMOA average	3.7	10.9	3.9	0.0	-8.0	-6.3	1.5	3.9	3.6	13.8	21.2	16.3	3.8	3.2	2.0
Côte d'Ivoire	3.2	11.6	6.0	n.a.	-7.1	-12.0	-2.6	-0.4	8.8	16.9	21.6	9.2	7.3	4.0	-4.4
BEAC average	4.1	12.2	8.4	-2.6	-2.1	-8.4	-1.2	4.5	8.4	15.6	23.2	18.3	3.9	7.3	0.0
Cameroon	5.4	11.7	5.7	n.a.	0.7	-6.8	-2.7	1.7	2.9	14.4	21.2	26.2	3.6	7.1	-2.3
Other SSA countries average*	4.2	18.6	31.9	-2.0	-5.9	-4.6	-1.6	13.8	14.1	14.4	16.3	18.3	4.0	2.2	2.4

\* excluding EACB, RMA.

Sources: *International Financial Statistics, World Development Indicators, IMF (1968; 1970).*



The particularly good inflationary and fiscal performance of the countries that remained in the Franc Zone until 1973 was the result of strict compliance with the rules of their central banks and conservative monetary policies where lending to governments remained far below statutory limits. BCEAO lending to governments only once reached more than 40% of the statutory limit. BCEAO's foreign reserve coverage ratio during this period remained significantly higher than the 20% minimum stipulated by statute (Bhatia, 1985). The BEAC pursued similar policies, and the operations accounts for the two banks at the French Treasury remained in constant surplus. The effectiveness of the constraints posed by central bank borrowing rules is evidenced by major shortfalls in the financing of the development plans of many CFA states that resulted in the cancellation or deferral of numerous public investment projects. For instance, in Senegal the public finance component of the development plan for 1965/66 - 1966/67 amounted to only 37% of original projections. The shortfall was equivalent to 5.6% of GDP per year. In the absence of a rule limiting government borrowing from the monetary authorities, these shortfalls might well have been financed by monetary means, as is suggested by the increasing number of complaints lodged by governments about the lending limits of the two central banks (IMF, 1970).

By contrast, after 1973 it became increasingly difficult to argue that participation in the unions served as an effective constraint on member states. Rules establishing a minimum level of foreign reserves were broken and rules limiting central bank lending to governments were either broken or easily circumvented. There were several major direct violations by Côte d'Ivoire, Benin and Mali, of the rule limiting borrowing to 20% of revenues, but even so, direct lending from the two central banks never constituted a principal source of deficit finance. Instead, the accumulation of deficits took place through pressuring commercial and development banks into lending to relieve fiscal pressures. The BCEAO and BEAC then engaged in heavy refinancing of these credits and paid little heed to the solvency of the banks to which they were lending. Though refinancing of these credits was cheap (as it took place at heavily subsidised rates), it led to an important crowding out of private credit demand for investment. According to the statutes of both BCEAO and BEAC, much of this indirect lending should have counted towards a government's borrowing ceiling, but it seems clear that this was often not the case.

The rule establishing minimum foreign reserve levels of 20% of sight liabilities should also have limited the expansion of both direct and indirect credit to governments, but in both unions member governments used the latitude provided by the 1973 statutes to avoid taking adjustment measures. In the case of the BCEAO, when gross foreign reserves fell below

20% of sight liabilities the governing board is required to meet to consider what action to take. BCEAO's discount was raised but this was not completely effective since most of BCEAO lending to commercial banks was given through directed credit schemes. BCEAO's ratio of gross foreign assets to sight liabilities remained under the statutory minimum of 20% for almost the entire period from 1980 to 1994. In the case of the BEAC, gross foreign assets did not fall below the minimum until 1986, but when they did the BEAC governing board delayed in taking action (Stasavage, 1997).

Data for the Rand Monetary Areas countries presented in Table 7 shows their relatively good inflation and fiscal performance. They also experienced relatively higher investment and growth rates, although these were somewhat reduced after 1977. This good performance resulted from the relative independence of monetary policy in South Africa, due in part to the central bank governors' ten-year term of office, and to the fact that membership of the RMA left little room for independent fiscal and monetary policies in Lesotho and Swaziland. In South Africa, the Reserve Bank pursued the dual objective of stabilising the dollar price of gold and maintaining price stability. As interest rates in smaller RMA countries were broadly in line with those of South Africa, the pass-through of South Africa's inflation was relatively rapid (Tirongo, 1998).

Botswana is an exception to this pattern as performance improved considerably *after* it had left the RMA. The government actually became a significant net creditor to the central bank as part of an overall strategy of building up foreign reserves in response to Botswana's diamond boom of the early 1970s. When a severe drought hit Botswana in 1982, the accumulated reserves were able to serve as a buffer. Note, however, that in practice, Botswana's ability to conduct an independent monetary policy from South Africa has been limited. Its inflation record closely follows South African performance, as nearly the totality of South Africa price movements are passed through to Botswana's price index within a year (Atta et al., 1996). The discretion that Botswana could exercise in this area was also exercised at the cost of imposing heavy capital controls and restrictions on commercial bank reserve holdings.

*Table 7: Economic performance in the RMA countries  
(annual averages)*

	Inflation %		Budget Deficit % GDP		Change in Net Claims On Govern. % GDP		Gross Invest. % GDP		GDP Growth %	
	<b>68-76</b>	<b>77-93</b>	<b>68-76</b>	<b>77-93</b>	<b>68-76</b>	<b>77-93</b>	<b>68-76</b>	<b>77-93</b>	<b>68-76</b>	<b>77-93</b>
RMA countries <sup>o</sup>	9.3	13.4	-6.3	-3.2	6.2	2.6	21.8	29.8	8.8	2.5
South-Africa	8.5	13.6	-4.0	-4.3	10.2	5.4	25.8	22.7	3.8	1.6
Botswana	10.7	11.4	-12.4	9.1	-13.4	-34.8	31.4	27.9	16.7	10.2
Other SSA countries average***	9.8	25.6	-3.4	-5.7	5.2	69.8	15.4	17.0	4.5	1.7

\*\*\* excluding CFA, EACB. <sup>o</sup> Botswana was part of RMA countries until 1976.

Sources: *International Financial Statistics, World Development Indicators, IMF (1973).*

## 4.2. Political and economic shocks

In Tables 8 to 10, we proxy for political instability with the average frequency of *coups d'état* and of major cabinet changes over the period of reference. The average annual change in an index of export commodities was taken to reflect major economic shocks<sup>10</sup>.

Whereas the RMA countries were remarkably stable according to our measure, both the EACB and BEAC countries showed significant instability during the initial period of rule-based policies (1960-66 for the EACB and 1960-73 for BEAC) which was nonetheless characterized by a credible commitment to monetary rules resulting in strong inflation and fiscal performance. While the number of cases here is obviously limited, this evidence runs contrary to the predictions of political economy models where political instability is necessarily associated with poorer performance.

*Table 8: Political and economic shocks in the EACB countries  
(annual averages)*

	Number Coups		Cabinet Changes		Commodity Index % Change	
	61-66	67-73	61-66	67-73	61-66	67-73
EACB average	0.000	0.055	0.53	0.11	-0.5	1.3
Kenya	0.000	0.000	0.75	0.00	-1.1	-0.1
Tanzania	0.000	0.000	0.50	0.17	-0.9	1.6
Uganda	0.000	0.167	0.60	0.17	0.4	2.4
Other SSA countries average**	0.086	0.065	0.59	0.29	0.7	4.6

\*\* excluding CFA, RMA

Sources: Banks (1993), Deaton and Miller (1997).

<sup>10</sup> Evidence on major droughts, another major type of economic shocks, was unfortunately more difficult to gather.

*Table 9: Political and economic shocks in the CFA countries  
(annual averages)*

	Number Coups			Cabinet Changes			Commodity Index % Change		
	60-73	80-85	86-93	60-73	80-85	86-93	60-73	73-85	86-93
UMOA average	0.033	0.077	0.048	0.35	0.42	0.43	-0.7	1.3	-1.2
Côte d'Ivoire	0.000	0.000	0.000	0.31	0.07	0.33	0.8	5.1	-12.5
BEAC average	0.102	0.000	0.000	0.41	0.38	0.00	1.5	8.2	-3.7
Cameroon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.8	5.2	-11.0
Other SSA countries average*	0.076	0.056	0.024	0.45	0.46	0.47	2.6	1.8	-0.1

\* excluding EACB, RMA.

Sources: Banks (1993), Deaton and Miller (1997).

*Table 10: Political and economic shocks in the RMA countries  
(annual averages)*

	Number Coups		Cabinet Changes		Commodity Index % Change	
	68-76	77-93	68-76	77-93	68-76	77-93
RMA countries <sup>o</sup>	0.000	0.063	0.14	0.29	4.2	3.2
South-Africa	0.000	0.000	0.00	0.33	6.1	1.9
Botswana	0.000	0.000	0.00	0.00	1.9	6.5
Other SSA countries average***	0.075	0.036	0.39	0.45	6.1	-0.5

\*\*\* excluding CFA, EACB. <sup>o</sup> Botswana was part of RMA countries until 1976.

Sources: Banks (1993), Deaton and Miller (1997).

Though the economic performance for our three groups of countries was relatively correlated to the changes in the index of export commodities, the case of the CFA countries

shows how rules actually amplified the impact of commodity price fluctuations after 1973. When the CFA states experienced temporary increases in commodity prices in the second half of the 1970s, instead of adopting counter-cyclical policies, they increased their stock of borrowing at the central banks. The CFA states also failed to respond effectively to negative terms of trade shocks, especially to those which many countries suffered after 1985. The increase of fiscal deficit was especially important in the two largest CFA states, Côte d'Ivoire and Cameroon, which were also the hardest hit during that period.

### **4.3. Cases of exit**

There were two main obstacles to Tanzania and Uganda exiting the East African Currency Board. Tanzania had an incentive not to exit the EACB as long as its government believed that integration in areas other than money would result in significant benefits. For the Ugandan government, there were both the incentives of potential gains in other areas of integration, as well as the fact that until 1964 its Prime Minister was constrained by significant checks on his authority within his own country.

When the common market between the three East African territories was preserved at independence, Tanzania in particular hoped to extract concessions from Kenya in the form of subsidies or, at a minimum, through the allocation of rights to produce certain industrial products in exchange for maintaining free trade. There may also have been a hope of deriving benefits from the political federation, which the three East African governments in 1963 announced their intention of creating. Members of the Ugandan government, and its Prime Minister in particular, also hoped that political federation with Kenya might provide access to increased development finance. The problem for the sustainability of the EACB was that Kenya was ultimately not willing to agree to the sort of regional subsidies which the Tanzanian government in particular was demanding. The Kenyan and Ugandan delegations agreed to extend limited trade privileges to Tanzania, but only on the proviso that in exchange Tanzania would formally agree to preserve a common currency. The Tanzanian government did not agree to this demand, and from the late spring of 1964 there were rumors of a Tanzanian unilateral initiative to set up a separate currency. In February 1965 the Ugandan government also changed its position, as it made a unilateral decision that it would create its own state bank which effectively spelled the end of the common currency.

Evidence on the obstacles to exit from the Franc Zone during the first thirteen years of independence is also consistent with the propositions laid out in section 2. While the CFA

states generally lacked checks and balances in their political institutions, they received a number of benefits from co-operation with France in areas other than money, such as military affairs, aid, and intelligence support. In Senegal, for instance, French military and intelligence support helped weigh in favor of President Senghor in his conflict with a political rival in 1963. In Côte d'Ivoire and Gabon, France played a similarly prominent role involving permanent stationing of French troops. As one would expect, the only states to leave the Franc Zone were those which were eager to break off all forms of co-operation with France.

In 1962 the Malian government decided to create its own currency after a series of disputes with the BCEAO over requests for extensions of credit to government and public enterprises (Julienne, 1987). Underlying this dispute over lending, however, was the fact that the French colonial administration had given strong support to the PSP party, but an opposing party gained power at independence. Modibo Keita's government made a number of moves to establish close diplomatic relations with Soviet bloc governments and its decision to leave the Franc Zone was accompanied by a distancing of overall relations with France. Likewise, Mali's return to the Franc Zone was made possible by a coup that toppled the Keita government.

Mauritania's exit from the Franc Zone in 1973 also occurred as part of a broader political break with France, although it was less brutal than that which occurred in Mali. At independence Mauritania was not recognized by North African states like Morocco and Algeria which laid claim to portions of its territory. In order to balance against these threats, Mauritania's President studiously cultivated links with Paris. In the early 1970s, however, a growing nationalist movement in this predominantly Arab speaking country prompted a change of strategy, as the Mauritanian government was able to negotiate accords with Morocco and Algeria while deliberately distancing itself from Paris. Exit from the Franc Zone occurred during this transition<sup>11</sup>.

In the Rand Monetary Area, where there were also little checks and balance, side-payments from the Southern African Customs Union (SACU) provided a strong incentive not to exit the agreement. The re-negotiation of SACU in 1968 provided for a compensation of 42 percent of their respective share of customs revenue by South Africa to the smaller SACU countries. In addition, since 1977 SACU has also included a stabilisation factor to counteract variations in payments. As a result, SACU transfers represent a very significant

---

<sup>11</sup> *Le Monde*, 30 November, 1972.

share of government's receipts for both Lesotho and Swaziland. Finally, the two countries also gain in that they receive large remittances from labour working in South Africa.

The case of Botswana's departure from the CMA is not consistent with the hypotheses laid out in section 2 to the extent that it was able to leave the CMA without having to also forego the benefits it derived from SACU. Normally, we would expect this selective exiting to be rare. From the point of view of its domestic political institutions, however, the Botswanan decision to opt for discretionary policies and the preservation of prudent macro-economic policy is consistent with our propositions from section 2. Botswana's political system has been characterized by a number of constitutional limitations on executive authority and a relatively democratic system, and so in practice there has been the sort of checks and balances which could allow for credible commitment in monetary policy via domestic institutions.

## **5. DRAWING LESSONS FROM THE PAST**

The evidence presented in this paper is that African countries have generally lacked the checks and balances in their political institutions that we suggest are necessary for the conduct of a credible monetary policy commitments at the national level. Little separation of powers existed between executive and legislature, governments for much of the period considered were ruled by single parties, and changes in governments were often extra-constitutional in nature. While the existence of checks and balances in a country's political system is not synonymous with a system with multiple political parties, there is likely to be a fairly high correlation between the two. The re-emergence of multiparty systems in African countries may over time improve possibilities for governments to make credible commitments at the national level, but this development is likely to take time.

In the absence of domestic checks and balances, fear of losing benefits of parallel international agreements has, in many cases, proved sufficient to dissuade governments from exiting a monetary union even when they would have preferred to adopt an independent monetary policy. Two policy recommendations can be derived from these observations. First, while African integration schemes have often suffered from a tendency to be over-ambitious and to recommend integration in a plethora of different areas, there does seem to be a strong logic to accompanying monetary integration with trade integration



and sectoral agreements such as the Cross-Border Initiative. Second, the European Union in particular may play an important role by establishing a link with African regional monetary unions and by making this cooperation part of the revised Lomé agreements<sup>12</sup>.

A word of caution, however, is that even if it is costly to exit a monetary union, monetary integration will not allow states to credibly commit unless other participants are ready and able to veto attempts to break policy rules. In the East African Currency Board, Kenya vetoed attempts by Uganda and Tanzania to raise limits on central bank lending to governments. In the Franc Zone, France vetoed such efforts between 1960 and 1973. Between 1973 and 1994 neither France nor the largest states in the CFA Zone played this role.

Three further issues in the institutional design of monetary unions deserve attention: the necessity to mitigate the impact of asymmetric shocks when adopting an external peg or designing the limits to place on central bank credit to government; the design of the governance structure of a central bank to avoid the potentially adverse effects caused by the hegemony of a dominant regional power; and the sequence of steps to follow in moving towards monetary union.

Our first suggestion is that when monetary unions adopt external pegs, these should be seen as Bretton Woods type arrangements which allow devaluation in cases of “fundamental disequilibria” rather than being immutable. This could potentially weaken the credibility enhancing effect of an exchange rate peg. Credibility should however be compensated by other institutional sources of credibility existing in a monetary union such as the independence of the regional central bank, the limits on central bank lending to governments, and the fact that within a union individual countries cannot devalue unilaterally.

A second suggestion is that countries should consider rules for central bank lending that minimize incentives for countries to engage in pro-cyclical policies during commodity booms. Current rules in the CFA Zone actually intensify the adverse effects of shocks by encouraging pro-cyclical policy. By raising export tax receipts, positive terms of trade shocks increase the credit ceiling of a government with the central bank instead of forcing it to save a portion of any windfall. Thus, Côte d’Ivoire in the second half of the 1970s launched massive public investment programs that could not be sustained when the good

---

<sup>12</sup> In principle, any similar international agreement would do.

days were over. Conversely, a country hit by negative terms of trade shock will be forced to proceed to an even greater real adjustment than would otherwise be required. One way to solve this would be for countries simply not to borrow up to their limit during good times so as to leave themselves more room for maneuver when negative shocks occur. In practice this has not happened in the CFA Zone since 1973, nor did it occur under the East African Currency Board.

One way to minimize this pro-cyclical aspect would be to set lending limits in terms of some absolute figure, but this would need to be regularly revised unless inflation was kept extremely low. Another possibility is that a counter-cyclical element could be integrated into rules limiting central bank lending. The direct credit ceiling could be initially determined as a proportion of either government revenue or some absolute figure and subsequently be raised or lowered in inverse proportion to a country's terms of trade index<sup>13</sup>. At the same time, a minimum reserve requirement for a union's foreign reserves should be maintained as in the CFA Zone to ensure that the extension of credit to countries hit by adverse terms of trade shocks is covered by the potential savings accrued in other countries. This system would be more complex than simply setting limits for the stock of lending as a percentage of some aggregate, but it would be based on figures which are readily available and which would be difficult for governments to falsify. If necessary, intra-year adjustments to lending limits could also be made.

The experience of the CFA countries has also shown that limits only on direct central bank credit to government are not sufficient and should be extended to cover external borrowing and indirect credit, particularly in the absence of well-developed and liquid domestic financial markets. In that respect, Cottarelli's (1993) made the useful recommendation that specific measures should be included in a central bank's status to deal with cases where credit ceilings are broken. In such instances, Cottarelli recommends a provision for a freeze on all central bank payments to the government.

The second institutional design issue relates to the potentially adverse effects caused by the hegemony of a dominant regional power as highlighted by the evolution of the CFA monetary unions and of the Common Monetary Area. Preferences of the larger economy are likely to prevail in the conduct of monetary policy. This will be less of a problem when the larger economy has established a strong reputation of prudent monetary policy, but it is

---

<sup>13</sup> This would only introduce a pro-cyclical component for terms of trade shocks. Another potentially important source of asymmetric shocks in African countries are droughts.

especially problematic to the extent that the larger country has low credibility and itself needs to be able to “tie its hands” through the regional arrangement. Adopting an external peg to a currency like the Euro would have the advantage of limiting the larger economy's capacity to dominate monetary policy, although as noted above this would also have certain disadvantages. Another possibility is to establish appropriate governance structures for regional central banks. In the CFA Zone, rules were overturned when the dominant country either chose the governor of the central bank (BCEAO) or was able to single-handedly block certain central bank board votes (BEAC). To guarantee independence for the central bank, we suggest a system where the dominant country in a union might nominate the governor, but this choice would then need to be unanimously approved by other members. The governor should also have a long period of office (say 8 to 10 years) and should not be re-appointable. Finally, were the monetary unions more closely linked to the EMU, an observer of the ECB with no voting power might sit on the board.

The third design issue involves the sequence of steps to follow for countries considering deepening their level of monetary integration. Past experience suggests that it is important to adopt a voluntary scheme on a country by country basis and to involve the private sector, two key elements of the current relative success of the Cross-Border Initiative. Pegging to an external currency might also put limits to the design of the scheme, thereby facilitating an agreement when one country dominates a region<sup>14</sup>. Monetary integration should also be accompanied by the creation of an unified inter-bank market, the harmonization of payments systems, the abolition of exchange restrictions, and the adoption of a common regulatory and banking supervision authority, all of which are essential elements of a common monetary policy meant to rely increasingly on indirect instruments. As shown by the experience of the CFA countries, it is also important to realize that the establishment of a common market for goods and services need not to precede the creation a monetary union.

A final remark with regard to monetary unions involves the need for governments to provide more than just a stable macro-economic environment. As highlighted by the experience of CFA countries, rules can help governments to make a credible commitment to stable monetary and fiscal policies, but this does not necessary guarantee private investments large enough to lead to a higher growth path than if governments had

---

<sup>14</sup> Given that the European Union is the main trading partner of African countries, pegging to the Euro is a natural choice. One could argue, however, that the main currency of reference for African export commodities is still the dollar. An intermediate solution might be to peg to a basket of currencies, but Ghosh et al. (1997) find that such pegs often provide less credibility.

attempted to fund development projects through seignorage. To the extent that there are other aspects of an economy which make investors wary, such as inadequate protection of property rights or inadequate infrastructure, investment will be deferred and no virtuous cycle will take place.

## REFERENCES

- Alesina A. and Drazen A. (1991), "Why are Stabilizations Delayed?", *American Economic Review* 81, 1170-1181.
- Atta J., Jefferis K. and Mannathoko I. (1996), "Small Country Experiences with Exchange Rates and Inflation: The Case of Botswana", *Journal of African Economies* 5, 293-326.
- Bank of Uganda, *Annual Report*, various issues.
- Banks A. (1993), *Cross-National Time-Series Data Archive*, SUNY Binghamton.
- Bayoumi T. and Ostry J. (1997), "Macroeconomic Shocks and Trade Flows within Sub-Saharan Africa: Implications for Optimum Currency Arrangements", *Journal of African Economies* 6(3), 412-444.
- Collier P. (1991), "Africa's External Relations: 1960-1990", *African Affairs* 90.
- Collier P. and J. Gunning (1996), "Restraint, Cooperation and Conditionality in African Trade Policy", forthcoming in Paul Collier and Catherine Pattillo (eds.), *Risk and Restraint: Reducing the Perceived Risks of African Investment*, Macmillan and St. Martin's Press.
- Cottarelli, C. (1993), "Limiting Central Bank Credit to the Government: Theory and Practice", *IMF Occasional Paper*, no.110, December.
- Cukierman A. (1992), *Central Bank Strategy, Credibility, and Independence*, Cambridge, MIT press.
- Deaton A. and Miller (1996), "International Commodity Prices, Macroeconomic Performance, and Politics in Sub-Saharan Africa", *Journal of African Economies* 5 (suppl.), 99-191.
- Eichengreen B. (1994), *International Monetary Arrangements for the 21<sup>st</sup> Century*, Brookings Institution, Washington DC.
- European Union (1997), *Green Paper on relations between the European Union and the ACP countries on the eve of the 21<sup>st</sup> century*.
- Ghosh A., Gulde A-M., Ostry J. and Wolf H. (1997), "Does the nominal exchange rate regime matter?", *NBER working paper* n° 5874.

- Grilli V., Masciandaro D. and Tabellini G. (1991), "Political and Monetary Institutions and Public Financial Policies in the Industrial Countries", *Economic Policy*.
- Guillaume D. and Stasavage D. (1999), "Making and breaking monetary policy rules: the experience of African countries", Center for the Study of African Economies, University of Oxford, Working Paper 99/2.
- Gulhati R., Bose S. and Atukorala V. (1983), "Exchange Rate Policies in Eastern and Southern Africa: 1965-1983", *World Bank Staff Working Papers*, n° 720.
- Gurr T., Jagers K. and Moore W. (1989), *Polity II Codebook*. Center for Comparative Politics, Department of Political Science, University of Colorado. Boulder. Polity III available through the Inter-University Consortium for Political and Social Research.
- Harvey C. and S.R. Lewis (1990), *Policy Choice and Development Performance in Botswana*, Macmillan Press, London.
- IMF (1963), "The CFA Franc System", *IMF Staff Papers* 10.
- IMF (1968), *Surveys of African Economies*, volume 1.
- IMF (1969), *Surveys of African Economies*, volume 2.
- IMF (1970), *Surveys of African Economies*, volume 3.
- IMF (1973), *Surveys of African Economies*, volume 5.
- Jenkins C. and Thomas L. (1997), "Is Southern Africa ready for regional monetary integration?", in Petersson L. (ed.), *Post-Apartheid Southern Africa*, 145-170.
- Julienne (1987), *Vingt Ans d'Institutions Monétaires Ouest-Africaines: 1955-1975*, Harmattan, Paris.
- Keefer P. and Stasavage D. (1998), "Delegation, Credibility, and Efficiency: the Role of Agency Independence in Policy Making", *mimeo*, World Bank.
- Kimei C. (1987), *Tanzania's Financial Experience in the Post-War Period*, Unpublished Ph.D. dissertation, Uppsala.
- Klein M. and Marion N. (1994), "Explaining the Duration of Exchange-Rate Pegs", *NBER Working Paper* n°4561.
- Kratz J. (1966), "The East African Currency Board", *IMF Staff Papers*, 13, 229-255.
- Kydland F. and Prescott E. (1977), "Rules Rather than Discretion: the Inconsistency of Optimal Plans", *Journal of Political Economy* 85, 473-491.
- Le Monde*, 30 November 1972.
- Lohmann S. (1998), "Federalism and Central Bank Independence: the Politics of German Monetary Policy, 1957-1992", *World Politics* 50, 401-46.
- De Loynes, J.B., personal papers, Bank of England archives.

- Moser P. (1996), "Checks and Balances, and the Supply of Central Bank Independence", *University of St. Gallen Mimeo*, August.
- Persson T. and Tabellini G. (1993), "Designing institutions for monetary stability", *Cargenie-Rochester Conference Series on Public Policy* 39, 53-84.
- Rogoff K. (1985), "The Optimal Degree of Commitment to an Intermediate Monetary Target", *Quarterly Journal of Economics* 100, 1169-1190.
- Sachs J. and Warner A. (1997), "Sources of slow growth in African economies", *Journal of African Economies* 6, 335-376.
- Schadler S. (1995), "IMF conditionality: experience under stand-by and extended arrangements, II", *IMF Occasional Paper* 129.
- Stasavage D. (1997), "The CFA Franc Zone and Fiscal Discipline", *Journal of African Economies* 6, 132-167.
- Tirongo M. (1998), *Exchange rate policy options for Namibia*, Unpublished D.Phil. thesis, University of Oxford.
- Walsh C. (1995), "Optimal Contracts for Central Bankers", *American Economic Review* 85, 150-167.

