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Credibility Issues and the CFA Franc Arrangement

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Master Complémentaire in International and Development Economics

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**Credibility issues
and the CFA Franc
Arrangement**

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INTRODUCTION

“Notre Union monétaire peut-être considérée comme exemplaire. Certes elle exige de nous une discipline, mais celle-ci est beaucoup plus légère que celle qui s'imposerait si nous voulions surmonter isolément les difficultés d'une saine gestion monétaire. Nous avons démontré que nous savions, dans les moments difficiles, tirer les conséquences qui s'imposent, parfois à l'improviste, des liens entre le franc français et notre monnaie ; cela a été possible grâce à notre solidarité dans la coopération librement acceptée. »¹

Président Garango, 1968.

The main goal of this paper is to address basically the elements of credibility which are included in the CFA monetary arrangement. While both CFA franc zone and credibility issues in monetary policy are well documented in the literature, they are not simple concepts and, by consequence, their connection is not an easy task. The only description of the functioning of the CFA monetary arrangement would require more pages than the number of pages devoted to this analysis. The multi-dimensionality of this arrangement implies to be careful about the conclusion that can be derived from an only partial analysis. Its sources as well as its evolution might be explained by historical, political and economical factors which are heavily interconnected. All of those gave rise to a unique monetary cooperation with very specific features that raises several interesting questions from the economic point of view. Before stating the way the CFA arrangement is analysed from the prism of credibility in this paper, this introduction describes some of the main features of the CFA arrangement and their evolution on a chronological basis. Indeed, this overview will allow a better understanding of the way the subject is treated and the context from which the elements referred in the analysis are extracted.

Inherited from the colonial era, the Franc Zone was initially a monetary system connecting France and its colonies. The monetary zone was characterised by a common regulation of foreign exchange, the pooling of foreign exchange reserves and the free convertibility, at fixed parity, of the different currencies issued in the zone. The crucial element of the belonging to the Franc zone was the guarantee of French treasury to exchange the currencies used in the zone for French francs at a fixed rate. The CFA franc zone, major component of the worldwide Franc Zone, designates former French colonies in West and Central Africa, whose currencies, the CFA franc (the franc of the *Colonies Françaises d'Afrique*), have been linked to the French franc since 1948.

In the course of the 1950s and 1960s, when sub-Saharan member countries gained their independence, the monetary institutions of the last phase of French

¹ Citation from R. Julienne, *Vingt Ans d'Institutions Monétaires Ouest-Africaines : 1955-1975*, 1988, L'Harmattan.

colonial Africa became inappropriate. The wish to preserve monetary relation with France gave rise to a new framework of monetary cooperation in which France recognised the right for these sub-Saharan African countries to have at their disposal their own currency and their own central bank. Rather than creating national currencies, most of the former West African French colonies² chose to maintain the monetary colonial structure by creating the *Banque Centrale des Etats d'Afrique de l'Ouest* (BCEAO) to control the issue of their common currency, the CFA franc (which became franc of the *Communauté Financière d'Afrique*). A few years later, the same countries signed the Treaty of the West African and Monetary Union (WAMU), which establishes the dispositions governing their monetary integration. Simultaneously, the five countries³ of Central Africa adhered to a monetary union under the auspices of the *Banque des Etats de l'Afrique Centrale*, which has as mission to control the issue of their CFA franc (which became franc of the "Coopération Financière en Afrique centrale").

Although the two unions share many common features, the CFA zone includes two completely separate and independent monetary unions, each of which has its own central bank issuing a single currency. Both currencies are called CFA franc and are convertible with the Euro (and formerly with the French franc) at the same fixed rate. The convertibility for the CFA francs continued to be assured through a guarantee by the French treasury. The underlying institutions of the CFA monetary arrangement have changed little since current statutes were adopted in 1972-1973. At that time, the initial terms of the post independence monetary cooperation had been re-balanced in favour of African countries. The increasing dissatisfaction of member states was due a to lack of central bank finance for development projects and the sentiment that the monetary arrangement was biased in favour of France. The resulting revision of the monetary arrangement establishes most of the dispositions governing, up to now, monetary policy decision making within the two central banks and their relationship with France. The monetary cooperation between France and CFA zone member states relies on a complex set of mutual contractual obligations which can be divided into two categories⁴.

In the first category, one finds the four constitutional principles of the CFA zone which are quite similar to those governing the former colonial monetary zone. Their main objective is to achieve a complete financial integration among member states and they imply heavy obligation on the part of France. The France's guarantee of unlimited convertibility of CFA francs is probably the most specific feature of the monetary cooperation. It implies that French Treasury agrees to provide "Franc Zone central banks with as many French Francs as needed to ensure the smooth running of the zone's financial system"⁵. The fixed parity between CFA and French francs is another key feature of the CFA monetary arrangement. From 1948 to 1994, the exchange rate was fixed at 50 CFA francs against 1 French franc. This parity have been changed only once in 1994 to 100 CFA francs against 1 French franc. Since the accession of the Euro currency, the CFA franc is pegged to the euro at the same

² The 6 countries were Ivory Coast, Dahomey (Benin), HauteVolta (Burkina Faso), Mauritius, Niger and Senegal.

³ The 5 countries were Cameroon, Central African Republic, Chad, Congo and Gabon.

⁴ D. Fielding, *Macroeconomics of Monetary Union: An analysis of the CFA Franc Zone*, 2001, Routledge, London, p. 4

⁵ *Ibid.* p. 5

parity than before which corresponds to 655,957 CFA francs against 1 Euro. Although the practices of member states has not always been in harmony with the principle, the dispositions of the monetary arrangement provide also a free transferability of funds between member states. The last principle concerns the harmonization of the rules governing currency exchange.

The second category of obligations relates to the administrative structures to which member states bind themselves. Those are designed mainly to avoid that the French guarantee becomes a source of moral hazard from the party of member states. The key institutions are the two regional central banks, which implement monetary policy consistent with the exchange rate rule, finance, and regulate government and private banking activity. Each of both central banks holds a *compte d'opérations* at the French Treasury through which the unlimited guarantee of convertibility intervenes. To preserve itself from the risk of abuses of this overdraft facility, France imposed some policy rules stipulating that a minimum level of foreign reserves has to be maintained and that the direct central bank lending to governments has to be strictly limited. In addition, France has always participated to monetary policy decision making by sitting on governing boards of each central bank. These constraints limit the scope for discretion in the conduct of monetary policy which is implemented through a monetary programming exercise mainly driven by the foreign exchange objective. This latter is computed on an annual basis and predicts the need for credit at the union and country level. Therefore some discretion remains in the country specific credit allocation to the banking sector.

The devaluation of 1994 leads to some changes in the institutional environment of the CFA zone. The persistent balance of payments deficits in most of the larger CFA member states highlighted the lack of regulation of macroeconomic policy in both unions. The broadening of the regional cooperation through the replacement of the monetary union by economic and monetary union aimed to enhance necessary macroeconomic discipline and economic convergence across the zone. Since the devaluation, the CFA franc zone⁶ has linked France with 15 sub-Saharan African countries which are divided into two separate economic and monetary unions. The West African Economic and Monetary Union (WAEMU) which was established in January 1994 and supplements the WAMU is made up of eight countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo. The members of the Central African Economic and Monetary Community (CAEMC) established in March 1994 are Cameroon, the Central African Republic, Chad, the Republic of Congo, Equatorial Guinea and Gabon. The devaluation was also the occasion to tighten the rules governing central bank credits to governments and to pursue the move from direct instruments of monetary policy to indirect ones. Alongside foreign exchange objective and some credit controls, the interest rate becomes progressively the central monetary policy instrument.

The assessment of the CFA arrangement in terms of credibility requires to look more precisely at the theoretical elements underlying the credibility requirement in monetary policy. The first section of the paper is devoted to this theoretical approach of the credibility problem of low inflation monetary policy. When monetary policy is implemented in a discretionary way, policymaker can create more inflation

⁶ Although the Islamic Federal Republic of the Comoros, with the Central Bank of the Comoros, belongs to the CFA franc Zone, this paper does not take into consideration this country.

than public expects. This surprise inflation may provide some benefits such as output boost at short term, revenue from money creation and reduction of the government's nominal liabilities. Monetary authorities have some incentives not to follow the announced policy once the expectations about inflation have been formed. This describes basically the time-inconsistency of price stability policy. Because public understands incentives of policymaker to inflate, benefits of surprise inflation cannot emerge systematically in equilibrium. Public adjusts their inflation expectations according to such incentives and the only existence of the potential for creating surprise inflation leads to higher inflation rates in equilibrium. Thus, the crucial response is to reduce the potential for surprise inflation in order to lower inflation expectations. That can be achieved with enforced commitment constraining monetary behaviour such as monetary rule, independent central bank, etc... To be credible, some of these commitments have to be enforced by lowering potential to abandon the commitment.

According to the overview of the CFA arrangement, the necessary credibility required in the conduct of monetary policy could act as an economic justification for participating to the monetary cooperation. Indeed, the theoretical background highlights some interesting elements for the analysis of the CFA monetary arrangement from the credibility point of view. In these countries, the source of revenue to government from surprise inflation is probably the most important factor behind credibility problem in the conduct of monetary policy. Different institutional components of the monetary cooperation between France and African countries of the Franc zone might be interpreted in the light of credibility issues. By disaggregating the CFA arrangement, the following three main sources of credibility are found: the fixed exchange rate, the monetary union, and the supranational central bank. In the second core section of this paper, each of those is investigated theoretically, not only for their ability to address the credibility problem of monetary policy but also through the factors which determine the credibility in the commitment itself. Although the three sources of credibility are separately discussed for analytical reasons, they are obviously interrelated in the framework of this specific monetary cooperation. This interrelation is especially put in evidence when concerning credibility issues. Each of the three sub-sections includes a theoretical part which discusses the element of credibility and a practical part which analyses the specific form of this element in the CFA arrangement and its implications with regard to the credibility problem.

The last section of this paper is devoted to a brief empirical analysis of the pre-devaluation period. When addressing the CFA monetary arrangement and, in particular, the credibility of the arrangement, the devaluation is a crucial event which put some light on the weakness of this institutional environment. The devaluation could be considered as a precedent in terms of changing parity and could have affected the future credibility associated with the CFA arrangement. Although that does not seem the case, the analysis of the factors which lead to defect from the exchange rate rule is of particular interest to address more concretely the credibility of the CFA arrangement. Indeed, the huge external shocks experienced at that time put some pressures on the CFA member states which took advantages of the weakness in the rules enforcement of the arrangement to delay necessary adjustments. The internal factors which were partly responsive for the

unsustainability of the peg implied directly the potential sources of credibility discussed in the second section.

Although the magnitude and the complexity of the subject allow only a partial overview, I hope at least that the paper covers the subject in the right way and take into account all the crucial elements. I apologize for the potential misinterpretations of the authors that I used to develop and to support the analysis. Before leaving the reader to go through these three sections, I would like finally to thank my tutors for their precious advice and their infinite patience.

I. INFLATIONARY BIAS, RATIONAL EXPECTATIONS AND TIME-INCONSISTENCY PROBLEM

Credibility has not always been a crucial issue for the conduct of monetary policy and, in particular, for pursuing price stability. The emphasis on this current fundamental aspect of monetary policy comes from the rational expectations revolution. The introduction of rational expectations in the discussion on the effects of activist monetary policy highlights the relevance of the distinction between the expected or unexpected character of the policy implemented. Traditionally, an expansionary monetary policy was considered to boost the output in the short term beyond its natural level at the expense of an acceptable increase in price level. Based on adaptive expectations not affected by the predictions about future policy, this outcome remains the same whether the policy is anticipated or not. By contrast, the anticipated character of the policy matters when taking into account the existence of rational expectations such as in the neo-classical framework. In this model, an expected increase in money growth leads to an increase in wages requirements and prices, which offsets the short term increase in output due to the policy. When expectations of the higher price level are realized, the output will still be at the initial natural level. In other terms, the output does not rise and the price level is substantially higher. The ineffectiveness of anticipated activist monetary policy to boost output is based on the discussed assumption that wages and prices are fully flexible with respect to expected changes in the price level. The neo-Keynesian model criticises this hypothesis relying on the existence of several rigidities in the economy. In this model, anticipated policy preserves an ability to boost output at short term even if the effect is greater when the policy is unanticipated.⁷

If the outcomes of expected expansionary monetary policy differ in the three models, the effects of unanticipated expansionary monetary policy are the same, that are a short term increase in output level (or decrease in unemployment) combined with an increase in price level. Without any constraint on the conduct of monetary policy, policymakers have incentives to deviate surprisingly from their initial objective in terms of price stability by increasing money growth⁸. Other sources of benefits⁹ which involve governmental revenues can be derived from surprise inflationary policy. Inflationary finance results from surprise inflation which depreciates the real value of cash holdings previously determined by expectation of inflation. This depreciation allows government to issue more new money in real terms as a replacement. In the same way, the depreciation of part of the real value of nominally denominated interest bearing public debt through surprise inflation decreases the future real expenditures for interests and repayment of principal. The decrease of the real value of public debt and the revenue from money creation constitute both

⁷ F. S. Mishkin, *The Economics of Money, Banking and Financial Markets*, 2007, Pearson Edition, 8th Edition, Chapter 25, pp. 639-660

⁸ Prices level and inflation rate are generally considered to be ultimately determined by the evolution of the money supply. High money growth or excessive expansionary monetary policy constitutes the ultimate source of inflation.

⁹ T. Persson, G. Tabellini, *Monetary and Fiscal Policy (Volume 1: Credibility)*, 1994, The MIT Press, p. 101

sources of revenue for the government. The importance of such benefits depends on several variables: the deadweight losses associated with other forms of taxation compared to the lower one associated with inflation tax, the volume of government expenditure which affects the marginal deadweight loss from taxes, the extent of temporary government spending, the position of the money-demand function, and the outstanding real quantity of public debt in nominal value.¹⁰ Despite the increasing accent put on the importance of low and stable inflation objective in the design of monetary policy, discretionary conduct of such policy on a day-by-day basis will necessarily bring excessive inflation. The inability of monetary policymakers to consistently follow the announced policy over time in presence of these incentives ends up in a time-inconsistency problem leading to poor long term outcome in presence of rational expectations.

This outcome has been put in evidence by Barro and Gordon¹¹ through the example of inflation/output trade-off. Part of the important assumptions on which the model relies has been implicitly enunciated in the introductory discussion. The first fundamental assumptions concern the fact that changes in aggregate demand have real effects and that public inflation expectations affect aggregate supply. The latter requires the flexibility of wages and prices discussed earlier. Secondly, they assume the natural level of output lower than the socially optimal level because of imperfect competition in product and labour markets. A third determinant assumption refers to the increasing marginal costs of inflation. The last assumption concerns the control of the money growth by the policymaker and its impact on the aggregate demand.¹² Under such assumptions, policymakers have incentives to pursue expansionary monetary policy once public have formed their expectations about the money growth according to the target rate of inflation announced. In fact, if expected inflation is low, the resulting low marginal cost of inflation incites policymakers to deviate from the announced target rate of inflation as to achieve output level above its natural level at short term. As related before, an anticipation of this expansionary policy would lead to another result. Under perfect predictions, characterized by equality between inflation expectations and inflation observed, the unique equilibrium rate of inflation corresponds to a level of output equal to the natural level of output. In this case, the discretion of the policymaker would lead only to higher inflation equilibrium rate without any gain relative to the output level. The resulting inflation bias defined as the difference between the equilibrium inflation rate and the target one will depend on the inflation aversion of the policymaker and the responsiveness of inflation to changes in output¹³.

Assumption related to rational expectations implies that public inflation expectations are formed rationally and corresponds to the effective rate of inflation except for random disturbances. In other terms, inflation expectations will vary with the changes in observed inflation due to policymaker's deviation from their initial announcement. As long as the discretion allows the policymaker to choose inflation after public has chosen inflation expectations, the policymaker will automatically

¹⁰ R. J. Barro, D. B. Gordon, *A Positive Theory of Monetary Policy in a Natural Rate Model*, 1983, *The Journal of Political Economy*, Vol. 91, No. 4., p. 606

¹¹ *Ibid.* pp. 589-610

¹² Romer, chapter 10

¹³ W. Carlin, D. Soskice, *Macroeconomics : Imperfections, Institutions and Policies*, 2006, Oxford University Press, p.163

deviate from the announced target to achieve optimal level of output. Incentives to pursue surprise inflation will be anticipated by public when forming their expectations leading to the time inconsistency of the inflation rate announcement. The raising public inflation expectations increase wage requirements and prices, leading to higher inflation but not to higher economic output on average. In such a dynamic framework, the equilibrium rate of inflation will correspond to the rate for which the marginal cost of inflation balances the marginal benefits from surprise inflation. Ability of pursuing discretionary monetary policy induces a higher rate of inflation at equilibrium without moving the level of output from its natural level.¹⁴ Before addressing the problem of lower performance resulting from unexpected expansionary policy in presence of rational expectations, other credibility issues of monetary policy has to be enunciated.

Monetary authorities not insulated from political pressures are not expected to conduct monetary policies that are consistent with the objective of price stability. The ability of politicians to influence monetary policy as to achieve political or partisan purposes allows no doubt about the issue privileged in the previous discussion. Considering the willingness to retain power as fundamental objective pursued by politics even at the expense of poor economic outcomes, time inconsistency problems may be exacerbated. For instance, expansionary policy to stimulate the economy before elections is a good way to increase the chances of re-election¹⁵. Another source of credibility problem comes from the political rotation and is called the "Rotten descendant problem"¹⁶. The commitment of the current government to prudent macroeconomic policies may not be reaffirmed by successor, affecting all long term public expectations and the benefits from such commitment. By putting uncertainty on the respect of the announcement in subsequent periods, this problem constitutes another type of time-inconsistency problem.

To deal with these several problems to achieve optimal economic policies, the policymaker has interest to credibly commit not to pursue any inflationary policy. Rule is a solution to avoid inefficiently high inflation coming from discretionary monetary policy. By restraining future policymaker's actions on inflation, a binding rule enhances the necessary credibility of the commitment to anti inflation policy required by existing rational expectations. The policymaker is no more able to optimize after the public have formed their expectations. To be effective in lowering inflation expectations, the rule must be binding to avoid easy default or changes; but for that, no more credibility is accorded to the rule-based monetary policy. In the example relative to the trade off between inflation and output, the optimal performance (zero inflation and natural unemployment rate) obtained by following policy rule does not take into account the costs of erecting and enforcing the rule¹⁷. In addition, rule can not be designed taking into account all possible circumstances. This lack of flexibility may be a reason for failure in presence of huge unexpected shocks. Adherence to a

¹⁴ R. J. Barro, D. B. Gordon, *A Positive Theory of Monetary Policy in a Natural Rate Model*, 1983, The Journal of Political Economy, Vol. 91, No. 4., p. 606

¹⁵ S. Lohmann, *Why do Institutions Matter? An Audience-Cost Theory of Institutional Commitment*, Governance: An International Journal of Policy, 2003, Administration and Institutions, Vol 16, N°1, p. 97

¹⁶ D. Guillaume, D. Stavasage, *Making and Breaking Monetary Policy Rules: The Experience of African Countries*, 1999, Centre for the Study of African Economies, Oxford, p. 3

¹⁷ R. J. Barro, D. B. Gordon, *A Positive Theory of Monetary Policy in a Natural Rate Model*, 1983, The Journal of Political Economy, Vol. 91, No. 4., p. 607

nominal anchor is basically a rule that limits considerably the discretion in the conduct of monetary policy and stabilizes the inflation expectations of the public. By credibly constraining the fluctuations of a fundamental nominal variable such as the inflation rate, the exchange rate or the money supply, the policymaker is able to convince from its intentions to pursue anti-inflation policy and can limit the time-consistency problem.¹⁸

Depending on the characteristics of the existing political and institutional structure, two other elements¹⁹ may be envisaged to respond to the credibility required to conduct prudent monetary policy. The delegation of the monetary policies to an independent central bank constitutes a measure which may reduce the inflation bias by affecting the expectations. This measure enhances the credibility of the anti-inflation policy if the central bank is more inflation averse than the government and pursues consistent output target relative to the natural level one. Such credible behaviour is more likely to come from an independent central bank insulated from government incentives to pursue higher output target. The inability for the government to go back on its decision to delegate the monetary policy may also be a crucial issue for the benefits in terms of credibility derived from this measure. The third measure refers to the reputation of the monetary authorities observed through several periods. The additional credibility is the result of a long term process which affects progressively the public expectations about inflation. The skepticism of the public about the respect of the anti-inflation theory is probably more difficult to deal with in countries without a stable political and institutional environment.

¹⁸ F. S. Mishkin, *The Economics of Money, Banking and Financial Markets*, 2007, Pearson Edition, 8th Edition, p. 394

¹⁹ W. Carlin, D. Soskice, *Macroeconomics : Imperfections, Institutions and Policies*, 2006, Oxford University Press, p.165

II. CFA MONETARY ARRANGEMENT AND CREDIBILITY ISSUES

1. INTRODUCTION

The previous discussion of credibility issues in the conduct of monetary policy highlights some interesting elements for the analysis of the CFA arrangement with regard to the credibility problem. In these countries, the source of revenue to government from surprise inflation is probably the dominant factor behind credibility problem in the conduct of monetary policy. Different institutional components of the monetary cooperation between France and African countries of the Franc zone might be interpreted in the light of credibility issues. By disaggregating the CFA arrangement, the following three main sources of credibility were found: the fixed exchange rate, the monetary union, and the supranational central bank. Each of those is investigated theoretically not only for their ability to address the credibility problem of the monetary policy but also through the elements which determines the credibility in the commitment itself. The second part of each section is devoted to the description and the interpretation of the specific features of the CFA arrangement with regard to the theoretical background. Although the three sources of credibility are separately discussed for analytical reasons, they are obviously interrelated in the framework of this specific monetary cooperation. This interrelation will be put in evidence when concerning credibility issues.

2. FIXED EXCHANGE RATE

INTRODUCTION

Fixed exchange rate as a nominal anchor helps restrain monetary policy and contribute to price stability. This fixed exchange rate regime requires that monetary policy has as only objective to maintain that exchange rate. Different advantages come from such commitment to renounce to all discretion to use monetary policy for any other potentially inflationary objectives. The lack of flexibility resulting from such regime is one of the arguments against the abandon of the exchange rate instrument. Focusing on credibility of low inflation policy, the announcement that the exchange rate will be fixed at some level will be no more credible than any other exchange rate policy. The commitment needs to be enhanced by specific measures which increase the political cost to renege from the parity.

Firstly, the theoretical elements concerning the discussion briefly summarized in the previous paragraph will be developed in more details in this part. Secondly, this part attempts to identify the elements which determine the credibility derived from the exchange rate regime in the specific case of CFA monetary unions. The

external guarantee of convertibility and its implications are central elements of this institutional analysis.

EXCHANGE RATE PEG AS A NOMINAL ANCHOR

Adherence to a nominal anchor is a direct response to time-inconsistency problem discussed in the preceding part. This commitment limits substantially the discretion in the conduct of monetary policy and promotes in this way low and stable inflation expectations. The nominal variable is kept in narrow range requiring that monetary policy has as only objective to preserve the anchor. Different nominal variable such as inflation rate, money supply or exchange rate can be used to tie down the price level. This part discusses the case of exchange rate peg only.²⁰

Fixed exchange rate is considered as a strong nominal anchor with regard to the objective of price stability. Three main advantages²¹ come directly from fixing the value of the domestic currency to that of large, low-inflation country. Firstly, inflation rate for internationally traded goods in the domestic country corresponds to the inflation rate for these goods prevailing in the anchor country. Additional source of price stability is delivered by a credible commitment through the anchoring of inflation expectations to inflation rate in the anchor country. Secondly, as discretion comes with the problem of time inconsistency, a fixed exchange rate rule is an adequate way to cope with the lack of credibility of the economic policy regimes and to reduce the inflationary bias. By making such a commitment, the policymaker renounces to all discretion to use monetary policy for any other potentially inflationary objective. The common way to describe such a commitment is to say that the policymaker "ties his hands", and, by doing that, is more likely to affect efficiently inflationary expectations²². Thirdly, a special property of the exchange with respect to the other nominal anchor concerns the fact that it is easily observable "so the private sector can directly monitor any broken promises by the central bank"²³.

These benefits do not occur without some disadvantages²⁴, which are mainly derived from the rigidity of the nominal anchor approach. Firstly, in presence of capital mobility, the country can no longer "pursue its own independent monetary policy and use it to respond to domestic shocks that are independent of those hitting the anchor country"²⁵. In particular, pegging the exchange rate means the abandon of the exchange rate as an instrument to reach equilibrium in the real economy (domestic activity, current account, and rate of growth). The importance of this economic instrument depends on the amplitude of country specific shocks and on the ability of this country to use it appropriately. In general, absence of political or monetary institutions that allows a successful use of discretionary monetary policy or exchange rate instrument decreases sharply the potential benefits derived from this discretion. Secondly, the specific shocks hitting the anchor country are directly

²⁰ F.S Mishkin, *The Economics of Money, Banking, and Financial Markets*, 2007, Pearson, 9th Ed., p. 394

²¹ *Ibid.* p. 480

²² A. Cukierman, M. A. Kiguel, N. Liviatan, *How much to commit to an Exchange Rate Rule*, 1992, World Bank, Washington, p. 3

²³ T. Persson, G. Tabellini, *Monetary and Fiscal Policy (Volume 1: Credibility)*, 1994, The MIT Press, p. 17

²⁴ F.S Mishkin, *The Economics of Money, Banking, and Financial Markets*, 2007, Pearson, 9th Ed., pp. 482-484

²⁵ *Ibid.* p. 482

transmitted through the correspondence of interest rates. A third disadvantage concerns the risk of speculative attack associated to fixed exchange rate regime. The last important disadvantage to mention when addressing the question of exchange rate peg in developing countries refers to the elimination of signal from the foreign exchange market. A too expansionary monetary policy will be not directly detected through the changes in the value of the currency as it would be the case under floating exchange rate regime.

A determinant feature of the exchange rate peg is the strength of the commitment to the fixed parity. Without specific enforcement measures aimed at supporting the commitment, the announcement that the exchange rate will be fixed at some level will be no more credible than any other exchange rate regime. The direct political costs of reneging from the peg are crucial in determining the degree of commitment. Consequently, the strength with which the expectations will be affected by the decision to peg the exchange rate will depend on the monetary institutions designed to enhance the commitment. A fully fixed exchange rate can be backed in different ways²⁶ affecting the degree of credibility of the commitment. Prohibit the monetisation of budget deficits while maintaining the option of providing credit to the private sector is one way to ensure macroeconomic policies in agreement with the exchange rate rule. Another way is to issue money only to buy foreign exchange. Last supports to the fixed exchange rate regime can be full convertibility of the domestic currency or restrictions on the capital or current account. According to this ways to support the effectiveness of fully fixed exchange rate rule, Cukierman and the others²⁷ argue that the "stronger commitment corresponds to cases where the exchange rate is fixed, the monetary base is fully backed by foreign exchange and there is full convertibility of the domestic currency". Subsequently, the strength of the commitment affects the political cost incurred by policymakers of reneging the monetary rule and their further incentives to respect it. Finally, the degree of independence of the central bank and the conditions under which devaluation can take place are also elements determining the seriousness of the commitment.

The hard exchange rate peg associated to a stronger commitment corresponds to the definition of a currency board in which "the domestic currency is backed 100 % by a foreign currency and in which the note issuing authority, whether the central bank or the government, establishes a fixed exchange rate to this foreign currency and stands ready to exchange domestic currency for the foreign currency at this rate whenever the public requests it."²⁸ The prerogatives of the monetary authority are basically reduced to the strict issuance of money precluding all the traditional functions²⁹. Compared to a typical fixed exchange rate regime in which monetary authorities can still adjust interest rates or print money, currency board leaves almost no scope for discretion by binding the issuance of money to foreign exchange reserves. Thus, a currency board would be appropriated in countries where the institutional and political environment is not susceptible to conduct prudent

²⁶ A. Cukierman, M. A. Kiguel, N. Liviatan, How much to commit to an Exchange Rate Rule, 1992, World Bank, Washington, p. 14

²⁷ Ibid. p. 14

²⁸ F.S Mishkin, The Economics of Money, Banking, and Financial Markets, 2007, Pearson, 9th Ed., p. 485

²⁹ Lending to or accepting deposits from the government or the banks, prudentially supervising the banks, setting credit ceilings or interest rates, imposing exchange control or varying the nominal exchange rate constitutes traditional functions of the Central Banks.

macroeconomic policies.³⁰ A lack of monetary and fiscal discipline would inevitably lead to fall in foreign exchange reserves and the abandon of the exchange rate peg.

The ability of the policymakers not to deviate from the exchange rate rule depends not only on their intentions and the strength of their commitment but also on the specific shocks which affect the economy. Several reasons³¹ may force the policymaker to finally deviate from the announcement by devaluating the currency. In general, balance of payments problem is the source of the non sustainability of the exchange rate rule. The money creation to finance excessive budget deficits may be in some cases the cause of external difficulties. Adverse external shocks or unfavourable domestic political developments are in other cases the reasons behind the reneging from the peg. While an exchange rate rule helps to bring down inflation, the resulting loss of exchange rate instrument to deal with external imbalances involves some costs which might finally lead to the abandon of the peg.

FIXED PARITY IN THE CFA ARRANGEMENT

One of the fundamental principles of the CFA arrangement is the fixed parity between the French Franc and the CFA francs. In other terms, the arrangement of the Franc Zone includes the fixed parity of the exchange rate, making a nominal devaluation practically impossible. However, the peg is theoretically adjustable even if "the zone has a long record of unconditional fixity"³². The maintaining of the parity over more than 45 years is a unique realisation of the CFA arrangement when looking at the performance of the other international arrangements involving fixed exchange rate. For instance, the gold standard (the strongest possible commitment³³) and the fixed exchange rate regime under the Bretton Woods system³⁴ broke down in presence of shocks.³⁵ In order to avoid such a breaking down, the sustainability of the CFA zone required devaluation in 1994. Thus, the parity has been changed only once in 1994.

The structure of the African economies involved in this arrangement differs from what would be expected to sustain a fixed exchange rate regime for a long time. The export earnings of these countries rely heavily on agricultural commodities which are subject to large price fluctuations on the world market. These small open economies experienced sharp movement in their terms of trade. The frequent external shocks experienced by these countries which are sometimes aggravated by the transmission of shocks hitting the anchor country gives some doubt about the ability of these countries not to deviate from the parity. Nevertheless, the monetary cooperation between France and these African countries has enabled these

³⁰ P. Honohan, S. A. O'Connell, *Contrasting monetary regimes in Africa*, 1997, International Monetary Fund, Washington, p. 12

³¹ A. Cukierman, M. A. Kiguel, N. Liviatan, *How much to commit to an Exchange Rate Rule*, 1992, World Bank, Washington, p. 4

³² R. Veyrune, *Fixed Exchange Rate and the Autonomy of Monetary Policy: The Franc Zone Case*, 2007, IMF, p. 10

³³ Domestic money must be fully backed by gold.

³⁴ Central banks were not required to back money with foreign reserves and devaluations were accepted as part of the rules of the game (especially to deal with external imbalances).

³⁵ R. Ball, *The Institutional Foundations of Monetary Commitment : A Comparative analysis*, 1999, World Development, Vol. 27, N°10, p. 1826

countries to maintain the parity over a long time and to achieve lower inflation levels than those prevailing in neighbouring countries. The mechanisms which distinguish the CFA arrangement from other fixed exchange rate arrangement would explain in part this stability.

The institutional specificities of the CFA arrangement contributes largely to the sustainability of the fixed parity and consequently to the credibility of monetary policy. The article 2 of the cooperation agreement between France and UEMOA member states establishes that the currencies of the zone are fully convertible among them at the current fixed exchange rate³⁶. This kind of strict exchange rate peg, with full convertibility supported by a monetary system based on an explicit legislative commitment, corresponds to the general definition of a "Currency Board" regime³⁷. In practise, it is the French Treasury which guarantees unlimited convertibility of the CFA francs issues by the different central banks of the zone. Instead of being based only on the situation of the balance of payments of the zone, the degree of credibility is considerably enhanced by the absolute guarantee of convertibility at the current fixed exchange rate "granted" by the French Treasury, and that is independent of the level of foreign exchange reserves owned by each zone. In other terms, these countries benefit from high level of credibility in their commitment without supporting all the constraints necessarily associated with such a strong commitment.

The unlimited convertibility of CFA francs intervenes through the "compte d'operations" held by the central bank of each monetary union at the French treasury. These accounts are debited from transfers emanating from members states of the corresponding union and credited from transfers in their favour. Thus, French franc demand of the Zone's central banks will be met by the French Treasury whatever the position of the account. Countries have to pay a progressively increasing interest rate on the debit of the special account. In exchange of the unlimited overdraft facility, CFA zone member states have to pool 65 % of their foreign exchange reserves in the special account at the French treasury. French treasury compensates CFA zone members for any depreciation of the French franc (now the euro) against the Special Drawing Rights and pays interests to the central bank of the union on the credit position of the account. The country specific net foreign exchange position intervenes to determine the responsibility of each member states in its respective monetary union balance of payments position³⁸.

The overdraft facility and its counterpart, the pooling of reserves, improve the ability of these countries to respond to external shocks within the fixed exchange rate arrangement. Firstly, without the overdraft facility, these countries would be forced to own higher level of reserves in order to support the peg³⁹. Secondly, the pooling of reserves reduces the vulnerability of these reserves to specific external shocks. The economy of the union as a whole is less diversified than the economies of each member and thus the reserves of one country may balance the lack of reserves of another country which experiences external shock. The "compte d'operations"

³⁶ Accord de coopération entre la République Française et les Républiques membres de l'Union monétaire ouest africaine fait à Dakar, le 4 décembre 1973

³⁷ Fahrettin Yagci, *Choice of exchange rate regimes*, 2001, World Bank, Washington, p. 6

³⁸ In the case WAEMU, members with a net foreign debit position have to pay an interest as penalty.

³⁹ R. Veyrune, *Fixed Exchange Rate and the Autonomy of Monetary Policy: The Franc Zone Case*, 2007, International Monetary Fund, p. 4

mechanism gives these countries some scope for autonomy in the conduct of monetary policy without cancelling the credibility associated with this kind of hard peg. This ability of these countries to offset specific temporary external shocks is achieved by the involvement of the French treasury which becomes partly responsible for "paying the price of inappropriate policies"⁴⁰.

Because of the decoupling of the foreign reserve management and the convertibility commitment as an enforcement measure for credibility, some counterparts were required from French Treasury to limit the risk of moral hazard in the conduct of macroeconomic policies and, by doing that, to insure part of its involvement. In fact, member states and the Central banks could abuse "its open-ended nature so as to avoid adjustments that they would have otherwise been obliged to take"⁴¹ and considering it as a long term financing mechanism. Preventive measures including basic rules of the monetary arrangements, the so-called "safety clauses", were designed in order to preserve the exceptional character of this facility and to avoid a permanent or excessive debit position of the "Compte d'operations".

First disposition of the so-called safety clauses included in the conventions governing the "Operations account" concerns the ratio between foreign reserves of each central bank and their sight liabilities⁴². The foreign reserves should correspond to at least 20 % of the base money. The minimum ratio required to face demand of foreign reserves in other fixed exchange rate arrangement is generally higher than one prevailing in the CFA arrangement⁴³. When this ratio is lower than 20 % for 3 consecutive months, the central bank has to adopt appropriate measures like increasing interest rates or reducing amounts of refinancing. BCEAO treaty provides for a complementary disposition relative to the deterioration of the position of the "compte d'operations". In case of quick decrease of the credit, the Central Bank will have to aliment the account by drawing from its potential other foreign reserves, by asking for the transfer against CFA francs of the foreign currency held by public or private organisms⁴⁴, and by inviting member states to exert their Special Drawing Rights (SDR) on the International Monetary Fund. Nevertheless, the central bank can obtain the needed foreign currency through the overdraft of the "compte d'operations" if these measures are insufficient.

A second rule establishes a quantitative limit to the ability of Central Banks to support directly the government deficits. Through the diverse financing facilities, central bank of each union has to limit the total stock of credits to any national treasuries to 20 % of that country's previous year's fiscal receipts. In the absence of this kind of rule, governments could finance their deficits by direct borrowing without limit. The experience⁴⁵ derived from the various monetary regimes in African countries emphasizes the crucial impact of public demand for monetary finance on

⁴⁰ D. Stavasage, *The CFA Franc Zone and Fiscal Discipline*, 1997, Journal of African Economies, Oxford, Vol. 6, p. 142

⁴¹ Ibid. p. 145

⁴² Sight liabilities include notes and coins, sight deposits of banks, financial institutions and the Treasury and foreign currency liabilities.

⁴³ R. Veyrune, *Fixed Exchange Rate and the Autonomy of Monetary Policy: The Franc Zone Case*, 2007, International Monetary Fund, p. 6

⁴⁴ This procedure in which public entities are supposed to surrender their reserves to the central bank is commonly called « ratissage ».

⁴⁵ *Contrasting monetary regimes in Africa*, p. 7

long-term price stability achievement and thus the important issue addressed by this rule.

CONCLUSION

To conclude, the fixed parity of the CFA Franc over 45 years has been a key achievement of the CFA arrangement. This was mainly due to the French unlimited guarantee of convertibility which is the central element of the monetary cooperation between France and these African countries. This guarantee provides a greater flexibility than an exchange rate regime associated with similar level of credibility. In addition, policy rules imposed in exchange of this guaranty could be also additional source of credibility by providing rule-based mechanism in the conduct of monetary policy. The macroeconomic policy credibility of the CFA arrangement is influenced by other elements than the exchange rate rule. In particular, the application of this exchange rate rule in the context of monetary unions has potential impact on credibility.

3. MONETARY UNIONS

INTRODUCTION

An exchange rate peg as part of multilateral agreement such as monetary union increases the credibility of low inflation monetary policy. In this context, members of the monetary union are no longer able to move the parity unilaterally. In addition, an international arrangement palliates the lack of institutional and political structure required for a credible commitment. By contrast, monetary union is sometimes a source of moral hazard from member states in the conduct of macroeconomic policies. In some cases, this behaviour may subsequently endanger the stability of the arrangement. The elements which determine the risk of secession from the union are important to take into account according to their influence on the credibility of the commitment.

Firstly, the theoretical elements concerning the discussion briefly summarized in the previous paragraph will be developed in more details in this part. Secondly, this part attempts to identify the elements which determine the credibility derived from the monetary union in the specific case of CFA arrangement. The multi-issues form of cooperation with France and the lack of rules aimed to promote macroeconomic discipline are the main features of the CFA arrangement in this area.

MONETARY UNIONS AND THE CREDIBILITY ISSUES

The impact of exchange rate peg as part of a multilateral agreement on the credibility of low inflation policy is well described by the argument applied by F.

Giavazzi and M. Pagano⁴⁶ to the European Monetary System. This system implies fixed exchange rate between member states of the union. National monetary authorities are no longer able to move the parity unilaterally, therefore they have to convince other monetary authorities for any change in the parity. If a member state pursues an inflationary policy, the resulting loss of competitiveness can not be addressed by devaluation. Other member states will resist a devaluation of the domestic currency to improve the competitiveness of the expansionary country. In this context, the multilateral exchange rate agreement leads to higher cost from pursuing inflationary policy. The national monetary authorities lose the control over the exchange rate and reduce their incentive to pursue over expansionary policy.

Two elements from this argument are interesting for the case of common currency with fixed parity vis-à-vis anchor currency. Firstly, member states of the monetary union sharing the same currency have incentives not to pursue more inflationary policy than other member states. By giving up control over the exchange rate, this country is no longer able to solve the loss in competitiveness with respect to other members of the union by using the exchange rate instrument. Secondly, the fixed parity of the common currency requires the unanimous agreement of all member states to move the peg. A national inflationary policy will lead to the loss of competitiveness with respect to foreign countries. In absence of coincidence between the competitiveness shocks experienced by the member states of the union, the necessity to move the peg has low probability to be met simultaneously in all these countries. The credibility of fixed exchange rate and low inflation policy might increase therefore in monetary union with anchorage.

A quite similar argument supports the benefits in terms of credibility from international agreement. An international agreement palliates the lack of domestic institutional and political structure required for credible commitment. By increasing the number of actors involved in the monetary arrangement, a monetary union makes more difficult to renege on a rule because of the necessary agreement of all the parties.⁴⁷

Another relevant feature of monetary union concerns its impact on fiscal policy. Within fixed exchange rate regime, fiscal discipline is especially important because money financing of excessive deficits will lead to the exhaustion of reserves and, finally, to the abandon of the peg. The potential costs from such an issue, discussed in the previous part, would act as an incentive to pursue more strict fiscal policies. However, monetary union does not necessarily constitute an incentive to promote fiscal discipline. Firstly, fiscal imbalance under fixed exchange rate would be eased by the non immediate perception of the costs incurred by falling reserves and increasing external debt than under flexible exchange rate. Under flexible regime, the cost of excessive fiscal policy is directly perceptible through the movement of the exchange rate. By contrast, expansionary fiscal policy under fixed peg regime can be pursued until the absorption of the whole stock of reserve, after what the peg becomes unsustainable. By pooling foreign exchange reserves of the union member states, individual member state has at one's disposal more available reserves and

⁴⁶ F. Giavazzi, M. Pagano, *The Advantage of Tying One's Hands: EMS Discipline and Central Bank Credibility*, 1988, *European Economic Review*, N°32, pp. 1055-1082

⁴⁷ D. Guillaume, D. Stavasage, *Making and Breaking Monetary Policy Rules: The Experience of African Countries*, 1999, Centre for the Study of African Economies, Oxford, p. 5

more time before the inconsistency of the policy becomes apparent.⁴⁸ Secondly, by inducing moral hazard problems, monetary unions act as an incentive to borrow at home or abroad to finance excessive deficits by inducing moral hazard problems. Those are due to the implicit guarantee of bailout provided by the union in case of default and by the fact that expansionary country perceives all the short term benefits of this policy while endures only part of the potential consequences.⁴⁹ Thirdly, member states of monetary union are less able to finance fiscal deficits by money creation and face consequently harder budget constraint than sovereign countries⁵⁰. The reduction of seignorage revenue combined with usual underdeveloped tax system would leave no other options to finance incompressible government spending than to accumulate unsustainable debt.⁵¹

The potential beneficial effects of monetary union in terms of credibility are not likely to occur without expectations about the durable belonging of member states to the union. The credibility of the commitment depends on the presence of incentives for any government not to defect from the union. Some of these incentives correspond to the costs incurred by defection. For instance, the cost for creating a separate currency, the difficulty to pursue an independent monetary policy without sufficient level of foreign reserves or the increased debt servicing obligations weight in the decision of the member state.⁵² However, most decisive factors in terms of exit costs are political linkages which may take either of two forms. One concerns the existence of a "powerful state committed to using its influence to keep a monetary union functioning effectively on terms agreeable to all".⁵³ The second factor concerns the existence of "a broad constellation of related ties and commitments sufficient to make the sacrifice of monetary sovereignty, whatever the costs, basically acceptable by each partner"⁵⁴. Relevant sanctions or side payments acting as an incentive not to defect can come from the presence of a multi-issues form of cooperation parallelly to the specific monetary arrangement.

UNIONS WITHIN THE CFA ARRANGEMENT

The CFA arrangement concerns two monetary unions, the WAEMU and the CEMAC. Even if the central banks of each union issue their own currency, the same legal tender, the CFA franc, is shared by the members of the unions refereed as CFA Franc Zone. The fixed exchange rate regime is thus part as a multilateral agreement between the countries of each union and between these unions and France. The existence of the two monetary unions in the CFA zone has a direct impact on the maintaining of the peg because any changes in the parity require the unanimous agreement of all Zone members, including France.

⁴⁸ P. Masson, C. Patillo, *Monetary Union in West Africa : An agency of Restraint for fiscal policies*, 2001, IMF, Washington, p. 17

⁴⁹ Ibid. p. 17

⁵⁰ P. De Grauwe, *Economic of Monetary Union*, p. 206

⁵¹ Ibid. p.19

⁵² D. Guillaume, D. Stavasage, *Making and Breaking Monetary Policy Rules: The Experience of African Countries*, 1999, Centre for the Study of African Economies, Oxford, p. 5

⁵³ B. J. Cohen, *Are Monetary Unions Inevitable*, 2003, *International Studies Perspectives*, N°4, p. 278

⁵⁴ Ibid. p. 278

The arrangement governing the two monetary unions did not include specific rules to promote macroeconomic discipline and especially fiscal discipline. Although the statutory fiscal restraint limits member countries borrowing directly from regional banks, countries are also able to finance excessive budget deficits through other sources of financing. Firstly, the CFA rules do not provide a limit on the ability of the governments of member states to borrow abroad which depends more on the country creditworthiness or on the available concessional aid flows. Secondly, other domestic borrowings by governments from commercial banks are no more limited by the regional central banks. The third source of fiscal indiscipline refers to the pooling of reserves which allows some countries to rely on the reserves of other countries to finance excessive budget deficits. The resulting lack of discipline in the conduct of fiscal policy has been addressed more recently by the deepening of the regional cooperation in both CFA unions since 1994.

The integration process supported by the UEMOA treaty approved in 1994 brings "additional" tools to promote the macroeconomic convergence across member states. The new treaties provide for multilateral surveillance of national fiscal policies in order to ensure the compatibility of the national budgetary policies with the objectives of the common monetary policy.⁵⁵ In 1999, this process, modelled on procedures established in the Maastricht Treaty with regard to EMU member states⁵⁶, is put officially in place with the adoption of the Convergence, Stability, Growth and Solidarity Pact. The supervision will be ensured by a specific council created for this purpose in 1997. After a period of transition, by end of 2002, all the member states must fulfil the new range of criteria established by the pact for fear of sanctions. Criteria focusing on public finance control and convergence of budgetary policies are divided in three categories according to their priority. The key criterion concerns the ratio of basic budgetary balance to nominal GDP which must be greater or equal to zero. The respect of the first order range of criteria requires an inflation rate lower than 3 % a year, the interdiction to accumulate arrears and the elimination of the existing stock and a ratio of the internal and external debt to nominal GDP lower than 70 %. The second order range of criteria establishes limit to the wage bill at 35 % of fiscal revenue of 2002, a domestically financed public investment of at least 20 % of fiscal revenue of 2002, a ratio of current account deficit to nominal GDP of 2002 lower than 5 % and fiscal revenue greater or equal at 17 % of nominal GDP of 2002. The effective promotion of macroeconomic convergence would support the sustainability of the monetary arrangement and the credibility of the commitment.

The risk of defection from the union is a determinant element for the credibility of the commitment. The support or discipline by a dominant member state involved in the commitment as incentive not to defect is easily identifiable in the CFA franc arrangement. This role is backed by France which eased and supervised all the monetary arrangement. The involvement of an external actor with powerful historical influence in the region could have been decisive in the duration of the African countries participation in the monetary arrangement. The second factor which concerns the existence of other sources of benefits or costs as a result of a network of institutional linkages is no more difficult to identify. The involvement of France has always been far beyond the simple monetary cooperation adding not negligible

⁵⁵ Comité Monétaire de la Zone Franc, La Zone Franc, 1994, Banque de France, Paris, p. 146

opportunities which balances the costs of belonging to the union. CFA arrangement member states received "a number of side payment from cooperation with France in areas other than money, such as military affairs, aid, and intelligence support. (...). If side payments from France had not been so prominent, it seems doubtful whether the Franc Zone would have been so effective, as more government might have chosen to leave."⁵⁷

With regard to these arguments, the experiences of the member states which effectively defected from the union are of particular interest. Two of the three cases of exit from the Franc zone concerns West African countries. In 1962, the constraint on credit to governments and public enterprises was the official reason of the disputes with the regional central bank which lead to the decision of the fresh independent Malian government to create its own currency. However, the decision of the new government would have been also influenced by the strong support of France to the political party which finally lost the election. Consequently, this government wanted to end overall relations with France and thus, not only monetary cooperation. The comeback of Mali in the CFA arrangement followed a coup d'état against this government. With contextual differences, Mauritanian decision to exit from the Franc Zone was also accompanied by the willingness to take distance from France influence.⁵⁸

CONCLUSION

In conclusion, the monetary unions are undoubtedly an element that can not be ignored when discussing the credibility of the CFA monetary arrangement. It constitutes an integral part of the arrangement and acts as an incentive not to break the rule by increasing the number of parts involved. However, the indirect effects of monetary union through fiscal indiscipline gives some doubts about the sustainability of the exchange rate rule in absence of enforcement measures aiming to promote macroeconomic discipline. The apparition of "multilateral surveillance" after the devaluation would confirm the lack of discipline provided by the former institutional environment. Far beyond a simple monetary cooperation, the CFA arrangement is part of a broad multiple-issues form of cooperation which kept member states from exit of the unions.

4. CENTRAL BANK INDEPENDENCE

INTRODUCTION

Central bank independence is usually considered as a necessary condition to focus credibly on price stability. The ability of central bank to take its decisions sheltered from political pressures depends of the degree of independence conferred by the political authorities. Monetary union implies delegation of national monetary

⁵⁷ D. Guillaume, D. Stavasage, Making and Breaking Monetary Policy Rules : the Experience of African Countries, p. 22

⁵⁸ Ibid. p. 23

policy to a supranational central bank which acquires de facto a certain degree of independence. The degree of independence is difficult to measure and is most often quantified through legal independence factors which do not reflect necessarily the actual degree of independence.

Firstly, the theoretical elements concerning the discussion briefly summarized in the previous paragraph will be developed in more details in this part. Secondly, this part attempts to look at the importance of central bank independence in the constraint monetary environment of the CFA arrangement. In this framework, the little scope for autonomous monetary policy in a monetary union with anchorage is enlarged by the barriers to capital mobility and by the specificities of the monetary cooperation. Therefore the lack of independence of the supranational central bank remains a crucial issue.

INDEPENDENT CENTRAL BANK

The degree of independence of the central bank is of particular interest when addressing dynamic inconsistency problem and the need for credibility in monetary area. Central bank independence is presented as an important determinant of monetary policy actions and thus of the inflation rate. It is a way to restrain monetary policy by limiting the potential inflationary pressures exerted on monetary authorities. In general, it is assumed that "the degree of independence of the central bank from other parts of government affects the rates of expansion of money and credit and, through them, important macroeconomic variables, such as inflation and the size of the budget deficit" and, in particular, that "high level of central bank independence coupled with an explicit mandate for the bank to focus on price stability are important institutional devices for the assurance of price stability".⁵⁹

The degree of central bank independence matters only in "the presence of different emphasis on alternative policy objectives between the political authorities and the central bank"⁶⁰. Cukierman⁶¹ focuses on two main elements which lead central bank to be normally more conservative and more attentive to price stability than political authorities. One refers to the rate of time preference which differs between central bank and political authorities. The others relates to the trade-offs of the central bank and of political authorities between price stability and other objectives. Central bank will be expected to take a longer view of the political process and to care relatively more than political authorities about inflation objective.

The preservation of price stability induces usually the political authorities to delegate monetary policy to central bank. This partial commitment limits the ability for the government to use monetary policy for other goals such as high employment or budget financing. In other terms, "by delegating some of their authority to the central bank, political authorities try to reduce the set of circumstances under which price stability is sacrificed in order to achieve other objectives"⁶².

⁵⁹ A. Cukierman, *Central Bank Strategy, Credibility, and Independence: Theory and Evidence*, 1995, The MIT Press, p. 367

⁶⁰ *Ibid.* p. 349

⁶¹ *Ibid.* Chapter 18 (pp. 349-368)

⁶² *Ibid.* p. 350

Monetary union includes de facto the delegation of national monetary policies to supranational central bank. The union implies the complete surrender of the monetary authorities over domestic monetary policy. By joining a monetary union, government ties their hands by delegating to an "independent" agent their monetary policy. The degree of independence that this delegation entails may be an important contribution of monetary union in terms of credibility. Monetary union would enhance the credibility of monetary policy thanks to the divergent economic interest defended by the member states. Any claims or pressures from member states on the common monetary authority will not necessarily go in the same direction. Thus, the strategic influence of any single government is less likely to affect the supranational central bank decisions usually driven by the interests of the union as a whole.⁶³

The measurement of central bank independence is not an easy task. The degree of independence conferred to the central bank by law determines the formal level of independence. Usually, level of formal independence differs from actual independence because of a "myriad of other less structured factors such as informal arrangements between the bank and other parts of government, the quality of the bank's research department, and the personalities of key individuals and other economic policy making organs like the Treasury"⁶⁴. However, these informal factors are often more difficult to quantify than the elements underlying legal independence. The legal independence remains a key component by determining mainly the actual independence and by suggesting the degree of independence that legislators meant to confer on the central bank. The measure of central bank formal independence may be based on rules governing a variety of factors which can be divided into four groups⁶⁵: the appointment, dismissal, and the term of office of the governor; the way the conflicts between the central bank and the government are solved, the final objectives included in the mandate of the central bank; the legal restrictions on central bank lending to government. In least developed countries, legal independence factors seem to have lower impact than in developed countries. Other variables such as observed (opposed to legal) rate of turnover of the central bank governor are used as proxy measure for actual independence of the central bank.

SUPRANATIONAL CENTRAL BANK

The monetary policy in each union is delegated to a supranational central bank, which is respectively the BCEAO for West African countries and the BEAC for central African ones, mainly charged to maintain the fixed peg. The supranational character of the central bank should provide greater independence from national government than a national one would enjoy. Some degree of independence is required not only for the enforcement of the rules regulating the CFA arrangement but also for the remaining discretion in the conduct of monetary policy.

⁶³ P. Masson, C. Patillo, *Monetary Union in West Africa : An agency of Restraint for fiscal policies*, 2001, IMF, Washington, p. 17

⁶⁴ A. Cukierman, *Central Bank Strategy, Credibility, and Independence: Theory and Evidence*, 1995, The MIT Press, p. 367

⁶⁵ *Ibid.* p. 372

Theoretically, monetary union with anchorage limits considerably the scope for discretion in the conduct of monetary policy. This fact would normally be enhanced by the status of the monetary cooperation which provides common exchange regulation and free transferability of capital between Zone member states⁶⁶. In practise, "the conventions are not enforced, so the capital regulations in the zone are not uniform"⁶⁷. In addition, except for transfers and invisibles which remain free from restrictions in the zone, zone members impose capital control on intra-zone transactions. More precisely, the protection of the two unions was imputable to different elements⁶⁸ such as a tax on all extra zone transfers⁶⁹, the lack of efficiency of the banking system and some administrative barriers. By consequence, there was some discretion in the determination of interest rates which was intended to pursuing a voluntary policy of interest rate⁷⁰. Until the abandon of selective credit policy and the subsequent alignment of interest rates which occurred in 1989, preferential interest rates were used to support specific sectors through refinancing facilities provided by the central banks. Comparison between the average interest rate on WAEMU interbank market and the corresponding French interest rate illustrates well the relative isolation of the monetary union. The monetary market interest rate in WAEMU was almost permanently lower than what applied in France until 1984. The reverse is observed in following period characterised by a deterioration of the economic environment of the union⁷¹.

Another scope for discretion in the conduct of monetary policy comes from the imperfect capital mobility between member states of each union. For a long time, the monetary policy was based on the application of the two basic rules⁷² imposed to limit the risk of abuses from the overdraft facility. The discretionary part through which the monetary policy is implemented concerns the annual country specific credit allocation issued by the supranational central banks.⁷³ The estimation of two variables allows determining the amount of credit provided annually in each country: the country specific demand of credit based on specific inflation and real output objectives and the reserve position of the central bank. Since capital is not perfectly mobile across countries in the union, it is possible "to sustain different credit and inflation targets (different real interest rates) across the countries" and to view "credit allocation as country specific monetary programming exercises"⁷⁴. Although this quantitative limit on credits to both governments and banking sector is partly

⁶⁶ D. Fielding, *Macroeconomics of Monetary Union : An analysis of the CFA Franc Zone*, 2001, Routledge, London, p. 4

⁶⁷ R. Veyrune, *Fixed Exchange Rate and the Autonomy of Monetary Policy: The Franc Zone Case*, 2007, IMF, p. 10

⁶⁸ J.M. Parmentier, R. Tenconi, *Zone Franc en Afrique: Fin d'une ère ou renaissance?*, 1996, L'Harmattan, Logiques Economiques, p. 146-147

⁶⁹ In theory, this tax of 0,25 % aimed to maintain permanently rates slightly lower than those prevailing in France.

⁷⁰ *Ibid.* p. 148

⁷¹ *Ibid.* p. 145

⁷² The first one limits directly the ability of government to monetize their deficits at 20 % of their previous year's fiscal receipts. This limit does not take into account foreign or other domestic borrowing by governments. In addition to constraint the global financing of members states deficits, the sight liability rule which requires a minimum ratio of 20 % limits also the importance of refinancing credits to the private sector.

⁷³ S. Devarajan, M. Walton, *Preserving the CFA zone: Macroeconomic Coordination After the Devaluation*, 1994, World Bank, Washington, p. 2

⁷⁴ *Ibid.* p. 4

enclosed by the rule-based mechanisms, the central banks keep some scope for discretion by determining the amounts of credit allocated to each country. The role of the central bank is therefore not completely framed by the institutional constraints of the CFA arrangement. In addition, the enforcement of the existing rules depends entirely on the behaviour of the central banks.

The degree of actual independence of the central bank is not easily observable and depends on the variable used to measure it. However, an idea of the level of independence entailed by the central banks of the two monetary unions can be derived from the analysis of the legal framework which regulates their intervention. A basic analysis of Devarajan⁷⁵ reveals lack of independence of both central banks according to five usual criteria: statutory commitment to monetary stability (without other objective), limit on central bank credit to governments, reasonable turnover (more than five years) of the governors and board members, no mandatory government in approval of monetary policy and no exclusive nomination of the governor and board members nor application from members of the government. Only criteria about the limit on central bank credit to governments and about the weak turnover (6 years) are met by the BCEAO. The importance of maintaining the peg is only part of the mandate of the monetary authorities which, simultaneously, have to finance development and economic activity in the union leaving large scope for interpretation. The statutory Ivorian nationality of the governor keeps up doubt relative to the impartiality of the BCEAO taking into account the economic importance of this member state in the union. Finally, the composition of the governing board which is mainly dominated by finance ministry officials of the member countries does not insulate the decisions of the central bank from national political authorities.

The presence of French representatives in the governing board of each central bank may act as an additional constraint on the decisions taken by the central banks. This participation in the formulation of monetary policy was imposed by France to limit the risk of abuses of the guarantee of convertibility. In the first decade after independence, the monetary arrangement agreed "substantial delegation of control over monetary policy to the French government"⁷⁶. French government participated actively to the governing board of each central bank, holding one third of the seats and the director general position. By the early 1970s, member states began to protest against the main features of the monetary arrangement and especially against the fact that French government dominated decision making within the two central banks. The following reform of the monetary arrangement leads to major changes in the governance structure of the two central banks. France gave up "the director general position of each central bank and its participation on the two governing boards was reduced to 2 votes out of 16 for the BCEAO (...) while the other seats were given to finance ministry officials of the member countries."⁷⁷ In addition, an agreement between the two largest countries of the WAEMU, Ivory Coast and Senegal, gave Ivory Coast the right to designate the BCEAO governor in exchange for installation of the headquarters of the bank in Senegal. Up to now, the

⁷⁵ D. Stavasage, *The CFA Franc Zone and Fiscal Discipline*, 1997, Journal of African Economies, Oxford, Vol. 6, p. 155

⁷⁶ D. Guillaume, D. Stavasage, *Making and Breaking Monetary Policy Rules: The Experience of African Countries*, 1999, Centre for the Study of African Economies, Oxford, p. 20

⁷⁷ *Ibid.* p. 24

governance structure has not been changed substantially in the sense of greater independence.

CONCLUSION

The lack of formal independence of the central banks appears as evidence when looking at the legal framework regulating central banks activities. Despite the fact that the central banks are supranational, no disposition guarantees the independence of the central banks from individual countries and especially the more influential ones. Some authors⁷⁸ argue that the “two CFA central banks have enjoyed far less independence from member governments in practise than has often been assumed (...).” The role played by the central banks in the conduct of monetary policy remains important despite of the specific constraint resulting from the CFA arrangement. The enforcement of the policy rules as well as the implementation of the monetary policy would require probably greater independence to preserve from decisions inconsistent with the sustainability of the monetary arrangement.

⁷⁸ S.M. Fouda, D. Stasavage, *The CFA franc Zone After the EMU: Status Quo, Reform or Dissolution*, 2000, *World Economy*, N°23, p. 225

III. THE CREDIBILITY OF THE ARRANGEMENT AND THE DEVALUATION OF 1994

1. INTRODUCTION

The limitations of temptation to pursue expansionary monetary policy leading to excessive inflation may be considered as a crucial objective of the monetary cooperation between France and CFA member states. Evolution of the level of price in the two monetary unions confirms the key achievement of price stability in the zone and the subsequent credibility of the arrangement. As a result of the fixed peg, this relative price stability is mainly due to the nominal anchor provided by the CFA franc's fixed parity vis-à-vis the French franc. From 1960 up to now, inflation rate as well as inflation variability have been persistently lower in CFA zone than in other non-CFA Sub-Saharan African Countries.⁷⁹ While this low inflation occurred simultaneously with good growth performance until the end of the 1970s, CFA member states experienced huge difficulties in the next decade which finally lead to the substantial devaluation of 1994.

Contrarily to what happens in the 70's, the relative price stability supported by the CFA arrangement does not occur with simultaneous good economic performance. In the twenty years following independence, the long run growth of output and foreign investment in the CFA franc zone could be attributed to the monetary stability and low inflation derived from the fixed exchange rate, the restraint on monetary and fiscal policy and the convertibility of the CFA franc. In particular, the inflationary and fiscal performance of the CFA zone members 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."⁸⁰ In the course of the 80's, two important sources of loss in competitiveness have played a major role in the deterioration of the economic environment of the CFA member states. This period of changing world economic environment contrasts with the former positive effect of zone membership on economic performance. The deteriorating economic performances are not only imputable to the monetary arrangement even if it might have limited the ability of these countries to adjust to the adverse economic environment.

By looking more precisely at the situation in two countries, Ivory Coast and Togo, the objective of this part is to address the pre-devaluation period in order to try to understand the main elements which lead to the change in parity. Attention to Ivory Coast is justified by the importance of this country in the GDP of the WAEMU while Togo could be representative of the smaller countries of the union. While external factors discussed in the first part are more apparent and obviously determinant, internal factor discussed in the second part and directly linked to the

⁷⁹ E. B. Yehoue, *The CFA Arrangement: More than Just an Aid Substitute?*, 2007, IMF, p.6

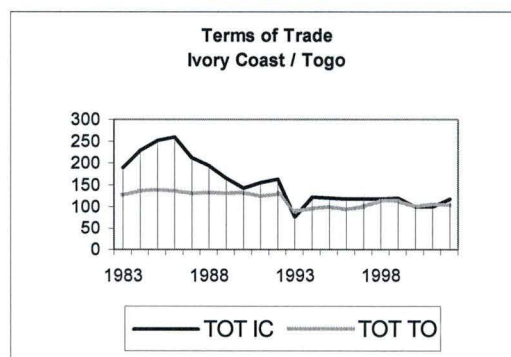
⁸⁰ D. Guillaume, D. Stavasage, *Making and Breaking Monetary Policy Rules: The Experience of African Countries*, 1999, Centre for the Study of African Economies, Oxford, p. 21

specificities of the arrangement might have played non negligible role in the crisis of the early 1990s. The way such problems have been addressed in the post-devaluation period is briefly described in order to conclude.

2. ADVERSE EXTERNAL ECONOMIC ENVIRONMENT

From the second half of the 80's to the devaluation, the combination of an accelerated deterioration of the terms of trade and the appreciation of the French Franc vis-à-vis the US Dollar has been undermining the stability of the CFA arrangement. Between 1985 and 1993, the cumulated decrease of terms of trade in the whole zone was around 35 % with variation between countries according to the evolution of the price of their major export commodities. In Ivory Coast where the main cash crops are coffee and cocoa, the deterioration achieved 60 % over this period. The situation was less critical in Togo where the terms of trade remained relatively stable during the whole 80's.

CHART 1



Source: World Bank Tables

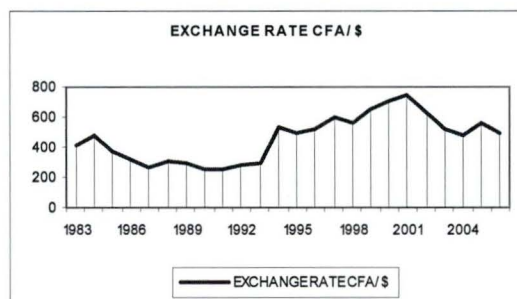
Although the deterioration of terms of trade increased dramatically from 1986 in most of the countries of the zone, it was not a new phenomenon for these countries which have already experienced negative shocks in the 1970's. The difference concerns more the change in the behaviour of the French franc vis-à-vis the dollar which at that time had balanced some of the loss in competitiveness experienced by members states⁸¹. The real stability of the zone during the previous turbulence was maintained by the weakness of the French franc which sustained frequent devaluations.

By contrast, the fixed parity with the French franc aggravated the problem in the 1980's because of the sharp appreciation of the French Franc vis-à-vis the dollars and the "Franc-fort" policy pursued from 1987. By determining the parity between the CFA franc and the dollar because of the fixed parity, changes in the parity FF/\$ had affected the competitiveness of the zone member states. As shown in chart 1 which depicts the evolution of the parity between CFA franc and US dollar,

⁸¹ I. Elbadawi, N. Majd, Adjustment and Economic Performance Under a Fixed Exchange Rate: A Comparative analysis of the CFA Zone, 1996, World Development, Vol 24, N° 5, p. 940

the CFA franc had appreciated from 1984 to 1987, after what the parity stabilised until the devaluation of 1994.

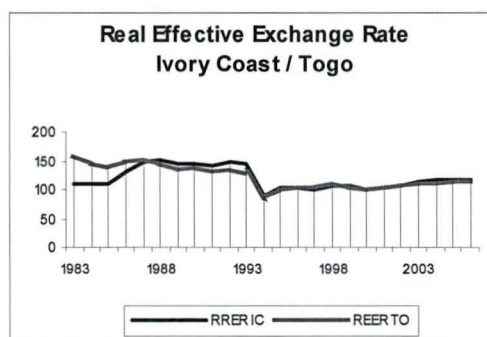
CHART 2



Source: International Financial Statistics

A simple look at the evolution of the real effective exchange rate gives more information about the impact of this parity on the competitiveness of the member states. By taking into account the evolution of the real parity between CFA franc and the currencies of main trading partners, the real effective exchange rate expressed in terms of relative consumer prices indicates the potential loss of competitiveness due to the exchange rate policy. The evolution of this variable is shown in chart 3 for Ivory Coast and Togo.

CHART 3



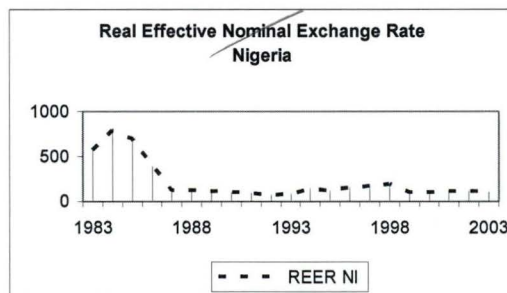
Source: International Financial Statistics

An increase in the index corresponds to an appreciation of the real effective exchange rate. In Ivory Coast, the appreciation of the CFA franc in real terms between 1984 and 1993 was approximately of 31 %. Such evolution describes a loss in competitiveness of Ivory Coast vis-à-vis its trading partners. By contrast, there was no appreciation in Togo which even faced a slight depreciation of the real effective exchange rate over the same period. However, the real effective exchange rate of both countries was overvalued in the years before 1994. The same was true for the zone as a whole.⁸² Evidence about the overvaluation of the real effective exchange rate provides strong support that the devaluation was justified for most of the countries as well as for the zone as a whole.

⁸² S. Roudet, M. Saxegaard, C.G. Tsangarides, *Estimation of Equilibrium Exchange Rates in the WAEMU: a Robustness Approach*, 2007, IMF, p. 35

The appreciation of the French franc vis-à-vis the dollars was not the only reason which might explain the appreciation of the real effective exchange rate in most of the CFA countries. In fact, the simultaneous important depreciation of the currencies of the other SSA countries was partly responsible for this appreciation. The evolution of the real effective exchange rate in the non franc zone countries such as Nigeria may illustrate the way these countries respond to the adverse economic environment of the mid-80 and, in particular, the deterioration of the terms of trade.

CHART 4

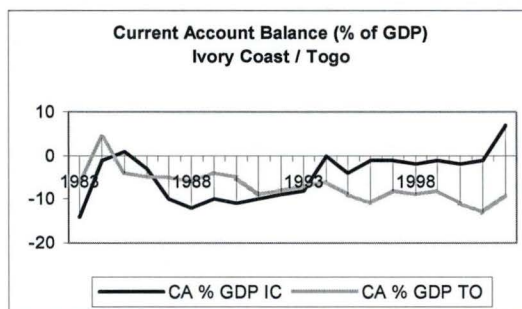


Source: International Financial Statistics

The Chart 4 shows clearly the important depreciation of the real effective exchange rate in Nigeria from 1984 to 1987. This evolution had contributed to the loss of competitiveness observed in the CFA franc zone. The exchange rate adjustment privileged in Nigeria and other countries of SSA was not available in the CFA franc countries which agreed with France to maintain the parity despite of the huge adverse external shocks experienced at that time.

The deterioration of the terms of trade associated with the overvaluation of the exchange rate lead to large current account and balance of payments deficits. Chart 5 shows the ratios of the current account balance to GDP in Ivory Coast and in Togo.

CHART 5

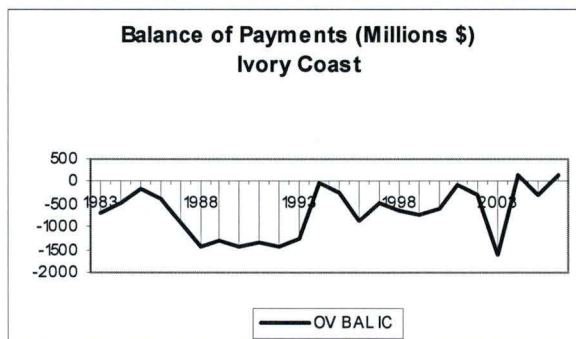


Source: World Bank Tables

In Ivory Coast, the current account balance was systematically in deficits from the mid-1980s supporting the impact of the worsening economic environment. From 1987 up to 1993, the ratio has been far above the 5 % threshold of deficit which can

be considered as being dangerous.⁸³ In Togo, the relation between what we observed previously and the evolution of current account balance is less clear. In fact, this country endured a progressive deterioration of the current account balance with some recoveries from 1985 up to now. In 1988, for instance, the improvement was due to the positive evolution of the export sector and in particular phosphate activities⁸⁴. Obviously, these current account deficits were directly transmitted to the position of the balance of payments which began similarly a period of huge deficits from the mid-1980s.

CHART 6



Source: International Financial Statistics

The increasing deficits of balance of payments in the late 1980's lead to important deterioration of the net foreign exchange position of the BCEAO. Despite the deteriorating situation of some countries, the global external position was not necessarily worsened thanks to the existing pooling of reserves. For instance, the increase of foreign exchange assets in some countries in 1989 allowed substantial improvement of the global position while larger countries such as Ivory Coast faced deterioration of their positions⁸⁵. However, the deep imbalances facing most part of the countries were not sustainable and required adjustments.

The difficulties experienced by the CFA member states at that time are of particular interest when focusing on the ability of these economies to adjust to external shocks in the constraining framework of the arrangement.

3. INTERNAL ADJUSTMENTS

Without possibility to rely on external adjustment in order to cope with the external terms-of-trade shocks and to cushion the adverse impact on competitiveness, internal adjustments was the only remaining way to address these adverse external shocks. More precisely, the counterpart of maintaining the fixed parity of the exchange rate was to pursue tight monetary and fiscal policies. The aim

⁸³ G. Giorgioni, K. Holden, The crisis of the CFA Franc zone : the case of Côte d'Ivoire, 2002, Economic Modelling , N°19, p. 536

⁸⁴ Comité Monétaire de la Zone Franc, La Zone Franc : Rapport 1989, 1989, Banque de France.

⁸⁵ Comité Monétaire de la Zone Franc, La Zone Franc : Rapport 1989, 1989, Banque de France

of such deflationary policies was to produce a real depreciation of the CFA franc. In this context, it is interesting to observe in what extent the existing monetary arrangement was sufficient to avoid circumvention of the monetary rules and more generally to promote the required discipline. The restrictive monetary policy was implemented mainly through the quantitative control on credit. On the fiscal side, the control of government expenditures in a context of lowering fiscal receipts seems a key issue to avoid excessive fiscal deficits which would affect the sustainability of the parity.

The key instrument to limit monetary expansion is the direct quantitative control on credit operated by the central bank. Central bank lending to government and banking sector is limited by country specific ceilings calculated on the basis of foreign exchange objective and on prediction of some economic variables. This total stock of credit is limited by the 20 % sight liability rule which provides for minimum level of foreign reserves. As already seen, credit from central bank to governments is statutorily limited to 20 % of previous year fiscal receipts. Consequently, this channel can not really be used to follow specific and, in particular, restrictive monetary policy. The implementation of such policy will rely more on the limit on credits from central bank to the banking sector.⁸⁶ Whether the way in which these ceilings are determined is crucial, the respect of these ceilings when credits are allocated to governments and banks is also decisive for the efficiency of the monetary policy.

The 20 % sight liability rules and the associated "safety clauses" do not seem to have efficiently limited the total stock of central bank lending. From 1980 to 1994; the ratio of gross foreign assets to sight liabilities in BCEAO was persistently below the 20 % statutory minimum level while the increase in the discount rate did not seem effective.⁸⁷ In the late 1980's, the credit to the banking sector of the WAEMU member states, with some differences across countries, outweighed systematically from large amount the ceilings authorized. For the WAEMU as a whole, the excess of credits to banks varied between 30 and 40 % of the maximum ceilings⁸⁸. This was probably due to the credit for the cash crops sector (for which the ceilings were only indicative until 1989) and to the difficulties of the banking sector.

TABLE 2
Credits from CB to Banking Sector
Ivory Coast / TOGO

Credits to banking sector : Ivory Coast (Millions \$ of CFA francs)		
	Utilisation	Ceiling
1989	509441	349900
1990	534005	360800
1991	530883	540000
1992	542829	460000

Credits to banking sector : Togo (Millions \$ of CFA francs)		
	Utilisation	Ceiling
1989	7029	16700
1990	6002	4500
1991	9002	7500
1992	7977	7500

⁸⁶ J.M. Parmentier, R. Tenconi, *Zone Franc en Afrique : Fin d'une Ere ou Renaissance*, 1996, L'Harmattan, Logiques Economiques, p. 121

⁸⁷ D. Guillaume, D. Stavasage, *Making and Breaking Monetary Policy Rules: The Experience of African Countries*, 1999, Centre for the Study of African Economies, Oxford, p. 26

⁸⁸ Comité Monétaire de la Zone Franc, *La Zone Franc : Rapport 1990, 1990*, Banque de France.

1993	517268	410000	1993	7902	7500
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Source: Comité monétaire de la Zone Franc

The credit ceiling in Ivory Coast represents almost 60 % of the credits allocated to the union as a whole. Consequently, excess in credit allocation in this country was responsible to most part of the exceeding at the union level. In the early 1990's, credit ceiling to the banking sector was not respected in Ivory Coast as well as in Togo. From these observations, it seems that the monetary programming was not really constraining and lacked credibility for the implementation of monetary policy.

The rule based determination of ceilings on credits from central bank to governments implies that the ceilings vary with the evolution of fiscal receipts in each country. In period of positive external shocks, this correlation did not act as an incentive to respond to temporary increase in commodity prices by reducing the stock of borrowing at the central bank. In period of external shocks, this restriction would act as a constraint on fiscal policy in the absence of other sources of financing. Before early 1990's, the credit allocation to governments of WAEMU did not outweigh largely the predetermined ceilings and the statutory rule was relatively respected. Ivory Coast and Togo are the two countries considered as having benefited more from the direct financing facility⁸⁹.

TABLE 2
Credits from CB to Governments
Ivory Coast / TOGO

Credits to government : Ivory Coast (Millions \$ of CFA francs)			Credits to government : Togo (Millions \$ of CFA francs)		
	Utilisation	Ceiling		Utilisation	Ceiling
1989	130068	136300	1989	16629	11500
1990	135184	136600	1990	16779	17700
1991	146541	120600	1991	16792	17200
1992	166202	120600	1992	18332	18200
1993	213918	120600	1993	21132	17900

Source: Comité monétaire de la Zone Franc

As shown in above table 2, the excess of credit allocation to government relative to the maximum authorized amount became particularly important in the early 1990's. Most of the countries in the WAEMU were in exceeding over this period. The excess of direct borrowing from central bank in Ivory Coast achieved more than 50 % of the ceiling in 1992 and more than 75 % of the ceiling in 1993. The situation was more contrasted in Togo with only small excess of credits.

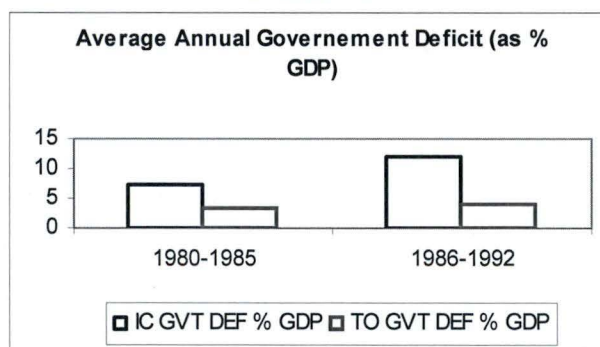
The common non respect of the monetary rules by the franc zone members during that period gives some doubts on the sustainability of the arrangement in period of external pressures and thus on its credibility. Central banks are directly

⁸⁹ D. Stavasage, The CFA franc Zone and Fiscal Discipline, 1997, Journal of African Economies, Oxford, p. 136

responsible of the lack of discipline in refinancing facility. The constraint on CFA member states provided by the arrangement failed to be effective in this period of required adjustments. However, it seems that “although some monetary expansion and inflation did ensue, the rules imposed by franc zone membership prevented Côte d’Ivoire from falling into the cycle of deficit spending, followed by monetization of the deficit, followed by high inflation or hyperinflation, (...)”⁹⁰ These latter problems affected many developing countries experiencing similar difficulties during this period.

The fiscal constraint derived from the limit to government borrowing from central bank concerns only one source of budget financing. In absence of restrictions relative to the other sources of financing, temptations to pursue temporarily less restrictive fiscal policy in order to respond to the negative terms of trade shock might be important. In the recessionary context of 1980’s, cutting spending and increasing taxes was politically difficult although this policy made part of the internal adjustment strategy. Chart 7 depicts the average annual government deficit as a percentage of GDP for two sub-periods, the first half of the 1980s and the adjustment period 1986-1992.

CHART 7



Source: D. Stavasage (1997)

Chart 7 depicts the average annual government deficit as a percentage of GDP in Togo and Ivory Coast for two sub-periods, the first half of the 1980s and the period of external shocks 1986-1992. The government deficit increases in both countries between the two sub-periods. The situation was particularly worrying in Ivory Coast where the government deficit achieved on average 12 % from the mid-1980s. This was especially due to the heavy reliance for revenue on taxes on international trade and to the difficult contraction of the main component of expenditures which is the public sector wage bill. Also, the important public investment program engaged after the commodity boom of the end-1970s in Ivory Coast lead finally to an increase in foreign debt because of the following collapse of commodity prices. The lower amplitude of external shocks in Togo could explain the better situation of the public finance in this country over the two sub-periods. Compared to the other Sub-Saharan countries while controlling for the amplitude of terms of trade shocks, the fiscal discipline seems to have been weaker in CFA

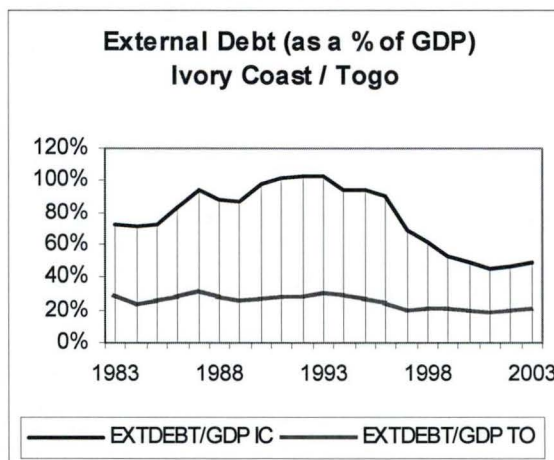
⁹⁰ R. Ball, *The Institutional Foundations of Monetary Commitment: A Comparative Analysis*, 1999, World Development, Vol. 27, N°10, p. 1829

member states over the whole period.⁹¹ However, some countries such as Burkina Faso, Mali, Benin, and Burkina Faso improved their fiscal performance between the two sub-periods.

In the second half of the 1980s, French aid to CFA states increases considerably and contributes to maintain artificially the sustainability of the arrangement. Over the period 1986-1993, France's non-project aid, especially budgetary support, increases substantially.⁹² The budgetary aid to CFA governments was provided by French government not only directly through non-project finance but also "indirectly through the operations accounts mechanism, and this aid during the 1980s and early 1990s was most often extended as part of an open-ended commitment to preserve short term political stability in key CFA states rather than as a tool for promoting effective macroeconomic stabilisation"⁹³.

Apart from the direct financing from central bank and French aid, the growing government deficits were financed by three other sources of financing⁹⁴. Firstly, a more important source of domestic financing concerned the indirect finance from central banks which results from the financing of state-owned enterprises and other public entities by commercial and development banks. Secondly, the government accumulated arrears in payments in the form of deferred payment (or no) payment to domestic suppliers and non-payment of wages and salaries to civil servants and public sector employees. As shown in chart 8, the last important source of government financing was the foreign borrowing. An increase in external debt expressed in percentage of GDP occurred from the mid-1980s.

CHART 8



Calculated from data's from World Bank Tables

Once again, the situation in Ivory Coast was more critical because of the combination of an initial important level of external debt and higher amplitude of external shocks. The reversal in the increasing trend of the foreign borrowing

⁹¹ D. Stavasage, *The CFA franc Zone and Fiscal Discipline*, 1997, *Journal of African Economies*, Oxford, p. 136

⁹² E. B. Yehoue, *The CFA Arrangement: More than Just an Aid Substitute?*, 2007, IMF, p.14

⁹³ S.M. Fouda, D. Stasavage, *The Franc Zone After EMU: Status Quo, Reform, or Dissolution*, 2000, *The World Economy*, Vol. 23, N° 2, p. 226

⁹⁴ *Ibid.*

intervened only after the devaluation of 1994. The foreign debt of Togo followed the same path than in Ivory Coast but at an average level between 20 and 30 % of GDP which is obviously more sustainable.

As depicted by these observations, the CFA arrangement did not act as a constraint on member states which failed to respond to the external shocks. The overall macroeconomic indiscipline in the CFA zone coupled with the external shocks had led to a deteriorating financial situation in most of member states. The required discipline was not at all supported by the policy rules provided by the monetary arrangement. The lack of rules enforcement could be due to the governance structure of the central banks which lacked the kind of independence required to avoid excess lending. The weakness of the arrangement in promoting fiscal discipline appears also as a determinant internal factor contributing to the non sustainability of the exchange rate rule. It became more and more evident that the internal adjustment strategy aimed to stop the degradation of the economic situation had to be changed. This policy could have been also the principal cause of the decline in output growth in the late 1980s and early 1990s. Following the failure of internal adjustments, the lack of domestic policy instrument to cope with adverse external shocks obliged CFA member states and France to envisage for the first time the resort to devaluation. The decision to adjust the exchange rate peg was more and more inevitable according to the worrying financial position of the zone as well as its weak economic performance.

4. DEVALUATION AND CHANGES

Recommended by the International Economic Institutions for several years, the devaluation of 1994 was the ultimate response to the huge degradation of the economic environment of the CFA member states. As part of a global strategy of adjustment, the devaluation would allow restoring the competitiveness of the exportations and the overall growth process of the member states. It marked the end of forty-five years of fixed parity between the CFA franc and the French franc as the central element for the conduct of economic policies in these unions. From 50 CFA francs for 1 French Franc, the parity went to 100 CFA francs for 1 FF corresponding to 100 % devaluation in domestic currency or to 50 % devaluation in foreign currency. The determination of the new parity was a difficult exercise according to the number of countries involved, each of these countries being not affected in the same proportion.

One of the arguments which supports the important change in the parity is of particular interest when focusing at the credibility issue. The level of the exchange rate adjustment is justified to eliminate expectations about future adjustments and to preserve in this way the benefits derived from the nominal anchor. To enhance the external adjustment and to restore the credibility of the arrangement, accompanying macroeconomic and structural measures⁹⁵ were put in place to limit the risk of failure of the adjustment and the subsequent recourse to other devaluations.

⁹⁵ J.A.P. Clement and others, *Les Conséquences de la Dévaluation du FCFA*, 1995, IMF, pp. 45

A last interesting point to highlight concerns the treatment in the post devaluation period of the domestic factors, which contributed to the deterioration of the economic situation of the CFA member states. The deepening of economic integration across countries within unions was considered as a way to palliate the absence of economic convergence between member countries. A day before the devaluation, the replacement of the West African Monetary Union by the WAEMU formalized the willingness of these countries to enlarge their economic cooperation. Among the objectives of the new union, the surveillance in the conduct for macroeconomic policy and in particular fiscal policy would confirm the importance of these factors for the stability of the arrangement. As already discussed, the Pact of Convergence, Stability, Growth and Solidarity launched in 1999 established more concretely the procedure of multilateral surveillance of fiscal policies. By establishing convergence of criteria and possibility of sanctions, these rules could have an effect on national fiscal policy of member states. The relative strong fiscal performance observed after the devaluation might be attributable to "the adjustment measures taken by the zone in 1994 by devaluating its currency by 100%, and by transforming its former monetary unions into monetary and economic unions, where the coordination now goes beyond monetary policy to encompass fiscal policy as well"⁹⁶.

TABLE 3
Convergence criteria
Ivory Coast

IVORY COAST - CONVERGENCE CRITERIA								
	1997	1998	1999	2000	2001	2002	2003	2004
First Order								
Basic budgetary balance (% GDP)	-0,6	-0,2	-1,3	-0,1	1,3	-0,4	0	1,2
Inflation rate (%)	5,6	4,5	0,8	2,5	4,4	3,1	3,4	n.a.
Ratio of the int. & ext. debt (% GDP)	191,9	129,7	103,4	103,4	102,2	86,7	81,5	75,9
Second Order								
Wage bill (% of fiscal receipt)	36,7	36,4	37	42,1	41,4	41,5	47,4	45
Public investment (% fiscal revenue)	21,7	26,7	17,6	9,5	7,2	11,6	11,7	10,9
Current account deficit (% GDP)	-2,1	-2,9	-1,5	-2,5	-0,9	6,4	4,7	4,6
Fiscal revenue (% GDP)	17,9	15,1	14,9	14,3	14,8	15,5	14,1	15

Source: BCEAO

By the end of 2002, most of member countries had not yet fulfilled all the different criteria established by the multilateral surveillance framework even if some positive trends can be observed. As depicted by table 3, the key criterion corresponding to the ratio of basic budgetary balance to nominal GDP, which must be greater or equal to zero, was positive from the end of 2002 in Ivory Coast. Table 4 shows a similar good performance in Togo from 2001. The respect of the first order range of criteria requires also an inflation rate lower than 3 % a year. While the inflation rate in Togo fulfilled the criteria from 2003, Ivory Coast inflation rate did not follow a specific positive trend, with inflation rate permanently above 3 % from 2001. In both countries, the ratio of internal and external debt to GDP converges quickly to

⁹⁶ E. B. Yehoue, The CFA Arrangement: More than Just an Aid Substitute?, 2007, IMF, p.11

the objective of 70 %. While it may be delicate to interpret the determinants of this evolution, the relative fulfilment of the first order range of criteria confirms the positive path taken by these countries.

TABLE 4
Convergence criteria
Togo

TOGO – CONVERGENCE CRITERIA								
	1997	1998	1999	2000	2001	2002	2003	2004
First Order								
Basic budgetary balance (% GDP)	-1,5	-3,7	-1,7	-2,7	1,2	0,1	1,5	0,1
Inflation rate (%)	9,5	1	0	1,9	3,9	3,1	-0,6	<=0
Ratio of the int. & ext. debt (% GDP)	91	111,5	114,1	130,3	125,8	112,6	102,7	99,7
Second Order								
Wage bill (% of fiscal receipt)	50,4	51	51,2	53,9	45,1	44,7	36,8	38,7
Public investment (% fiscal revenue)	5,4	9,6	4,5	8,4	6,5	7,4	8	9,5
Current account deficit (% GDP)	-13,8	-13,8	-11,3	-12,7	-14,2	-11,7	-8,1	-8,2
Fiscal revenue (% nom. GDP)	11,5	12,3	11,6	11	12,6	11,2	13,2	12,2

Source: BCEAO

The second order range of criteria establishes limit to the wage bill at 35 % of fiscal revenue of 2002, a domestically financed public investment of at least 20 % of fiscal revenue of 2002, a ratio of current account deficit to nominal GDP of 2002 lower than 5 %, and fiscal revenue greater or equal to 17 % of nominal GDP of 2002. Although these criteria are generally not fulfilled, some positive trends are observed in the two tables. In particular, the ratio of current account to GDP is positive in Ivory Coast from 2002 to the end of the period. Table 4 depicts a relative convergence to the different objectives, which are, however, far from being fulfilled. The domestically financed public investment remains very low in both countries. Ivory Coast presents more worrying trend especially in the evolution of the public investment and the wage bill, which move away from the objectives. These contrasted results of the multilateral surveillance process could lead to voice some doubts about the improvements in the macroeconomic discipline of these countries. However, compared to the situation in the early 1990s, the considerable improvements appear as evident and the institutional framework of the multilateral surveillance supports undoubtedly that trend.

In the same direction, the decision to eliminate any government borrowing from the central bank by December 2001 confirms the commitment of WAEMU member states to more discipline in the conduct of macroeconomic policies. This objective was not achieved because of the deteriorating finance public experienced by most of the countries at that time. While the utilisation rate was reduced from 104 % in 2000 to 75 % in 2001, Niger and Togo were the only two countries in excess with respect to the ceilings in 2001. In 2002, the direct credit from the BCEAO to the governments reform lead to their consolidation. In practise, only part of these consolidated credits were paying off because some countries such as Ivory Coast had difficulties to honour their commitment. In addition, the current foreign reserves to sight liabilities ratio contrasts sharply with the level observed in the period

preceding the devaluation. While the ratio fell below the statutory limit in 1993 (at 17 %), the mechanical effects of the devaluation carried the ratio to 81,4 % by the end of 1994. During the following years, the ratio continued to increase, reaching 102,4 % in 1999 and remaining largely above 100 % from 1999 up to now. This accumulation of foreign reserves as intermediary objective of the monetary policy brings the CFA arrangement closer to a currency board. The monetary environment described by the evolution of the two basic rules of the CFA arrangement confirms the changes in the conduct of monetary policy that occurred in the post devaluation period.⁹⁷ Although the governance structure of the central bank was not addressed by the reforms, the attempt to move from direct to indirect instruments of monetary policy from the early 1990s had probably brought some additional credibility to the arrangement. Nevertheless, the economies of these countries remain heavily vulnerable to external shocks and the credibility of the arrangement could still be affected because of the lack of flexibility it implies.

⁹⁷ Comité Monétaire de la Zone Franc, La Zone Franc : Rapport 2001 - 2005, Banque de France.

CONCLUSION

The analysis of the monetary cooperation between CFA countries and France confirms the interest for this arrangement in terms of credibility issues. The multiple potential sources of credibility as well as their interaction make the CFA arrangement a unique case study in this field.

By reducing government discretion, the institutions underlying the monetary arrangement might enhance policy credibility through several channels. The most original feature of this arrangement relates to the French unlimited guarantee of convertibility for the CFA franc. Without facing the constraints associated with hard peg, the CFA member states benefit from the same kind of high credibility. While the guarantee reinforces directly the credibility of the arrangement, the two policy rules imposed by France to limit the risk of abuses from the overdraft facility may act as an additional source of credibility by limiting considerably the scope for discretion in the conduct of monetary policy. The first one limits directly the ability of government to monetize their deficits at 20 % of their previous year's fiscal receipts. This limit does not take into account foreign or other domestic borrowings by governments. In addition to limit the global domestic financing of member states deficits, the sight liability rule, which requires a minimum level of reserves, restraints also the importance of refinancing credits to the private sector. In exchange of its involvement, France imposes its participation to the monetary policy decision making by sitting on the governing boards of the two central banks. In addition, the delegation of monetary policy to supranational central banks could provide greater independence from pressures exerted by individual governments. This could compensate for the lack of formal independence depicted by the legal framework governing central banks intervention.

In practise, the CFA arrangement did not always act as a constraint on member states. The pre-devaluation period illustrates the several weaknesses of the arrangement. While inflation performance remained a key achievement of the CFA arrangement mainly due to the nominal anchor, the lack of rules enforcement did not induce these countries to pursue the kind of sound macroeconomic policies required by the deteriorating external economic environment. The violation or easy circumvention of the statutory rules may be imputable to the lack of independence of the central banks. The frequent outweigh of the credit ceilings as well as the foreign reserves persistently below the minimum level renders the inability to prevent excess lending. Part of the internal factors which exacerbated the deterioration of member states financial situation are caused by the absence of rules promoting fiscal discipline. Even when considering effective monetary rules, those do not limit all borrowing opportunities available for government financing. Larger member states began to rely heavily on external borrowings which become source of additional difficulties. In addition, rather than using its influence to promote the necessary tight monetary and fiscal policy, France contributed to delay inevitable adjustments by providing budgetary aid, both directly through non-project assistance and indirectly through overdraft facility. While the failure of the internal adjustment strategy becomes more and more apparent, the worrying economic and financial position of most CFA member states requires finally adjusting the peg.

The devaluation was the occasion to implement some changes in the institutional environment underlying the CFA arrangement. The deepening of economic integration across countries within unions was considered as a way to palliate the absence of economic convergence between member countries. The provision for multilateral surveillance of fiscal policies would confirm the crucial role played by lack of fiscal discipline in the period preceding the devaluation. The decision to eliminate any government borrowing from the central bank by December 2001 reaffirms the commitment of WAEMU member states to more discipline in the conduct of macroeconomic policies. The devaluation period was succeeded by a period of relative monetary tranquillity characterized by some improvements in the balance of payments of the most indebtedness countries. Another devaluation has never been envisaged, what restores the credibility of the exchange rate rule. The credibility is also reinforced by the effective move from direct to indirect instruments of monetary policy and the interest rate is considered as the prime monetary policy instrument. The absence of changes in the governance structure of both central banks preserves an important weakness of the monetary arrangement. The arrival of the Euro did not change the parity although it changes the anchor country which became the Euro Zone. The strength of the Euro as well as the opportunities associated with this anchor constitute new challenges for CFA member states. The regionalisation process is an additional challenge for these countries which could have positive impact on their monetary cooperation.

To conclude, the involvement of France in the CFA arrangement is undoubtedly beneficial for the CFA members by its ability to weaken the inevitable trade off between credibility and flexibility. However, the monetary cooperation has not always been used to pursue the kind of policies which are consistent with the reasons supporting its existence. As argued in the paper, the institutional weaknesses of the CFA arrangement were partly responsible for these detrimental behaviours. In addition, the specific French relations with these African countries which go far beyond the simple monetary cooperation had probably influenced some key decisions in the monetary area. The scope of this paper was not to investigate the influence of French interests on the CFA arrangement although those would probably reveal another very interesting lecture of the problematic.

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