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**EXCHANGE RATE ARRANGEMENTS IN THE CFA FRANC ZONE:
ALTERNATIVES TO FIXED PARITY**

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ABSTRACT

The CFA franc, currency for 13 West and Central African countries (the CFA zone), has been tied to the French franc via a fixed exchange rate arrangement since 1948.

Proponents of the fixed parity rate argue that it provides price stability for the African countries, while opponents contend that it contributes to poor economic performance by sending incorrect signals to the domestic economy. Further, France's ability to maintain the current arrangement is uncertain in light of the approaching economic integration in Europe.

After reviewing the history of the CFA zone, this paper assesses the appropriateness of the fixed rate arrangement for the zone, with emphasis placed on recent events, especially the 1994 devaluation of the CFA franc. The paper then reviews alternative exchange rate arrangements for the CFA franc, and discusses their applicability in the setting of the CFA zone. The paper finds that a more flexible exchange rate arrangement, for example a peg to a common European currency, is appealing because it better reflects trade flows and may reduce exchange rate variability with non-CFA countries in West and Central Africa, thus aiding regional development.

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1. INTRODUCTION

The CFA franc zone is a group of 13 West and Central African countries joined in two monetary unions. The three central features of the zone are the convertibility of the CFA franc (the common currency of zone members), the pooled reserves system each union operates through the French Treasury, and the fixed parity rate between the CFA franc and the French franc. Prior to the 1980s, it was widely believed that membership in the zone would support economic growth and reduce the need for economic adjustment. The guaranteed convertibility of the CFA franc combined with its fixed parity to the French franc would provide a stable investment climate for both foreign and domestic investors, which in turn would contribute to economic growth and development (Devarajan and de Melo 1987a).

In the 1980s, however, poor economic performance of CFA zone countries relative to non-CFA zone countries in Africa led many to question the benefits of participating in the zone (Allechi and Niamkey 1994). By the 1990s, it was widely held that the CFA franc had become overvalued, contributing to poor economic performance. Because the rules of the zone precluded use of the nominal exchange rate as a policy instrument, governments were forced to rely on other policies to counter the impact of overvaluation. Many believed that the CFA zone countries had sufficient instruments available to depreciate the real exchange rate, but the use of these policies resulted in expenditure reduction in general, and investment reduction in particular (Devarajan and de Melo 1991). Though the countries of the zone elected to devalue the CFA franc in early 1994, the fixed parity with the French franc continues, and as long as it does, the nominal exchange rate remains unavailable as a tool for policy makers should the CFA franc again become overvalued.

Recent events indicate a high probability that the arrangements between the CFA zone and France will change in the near future. Not only was the 1994 devaluation the first adjustment to the parity rate in 46 years, but restrictions have recently been placed on the convertibility of the CFA franc. Further, moves toward monetary integration in Europe may limit France's ability to continue the current relationship. One recent study concluded that:

It is highly likely that the CFA Zone will undergo some profound reorganization in order to make the CFAF a stable but an adjustable currency in this period of structural adjustment. It is therefore timely to search for alternative exchange rate policies for the CFAF (Allechi and Niamkey 1994, p. 1159).

The purpose of this paper is to assess alternatives to the fixed parity rate between the CFA franc and the French franc. In the CFA zone, proponents of the fixed rate point to its ability to provide price stability by linking inflation levels of the African countries to the inflation level of France, while opponents of fixed parity argue that, because it fails to change in response to external shocks, the exchange rate sends incorrect signals to the domestic economy. There are a number of exchange rate arrangements that differ from the fixed parity rate by degrees of flexibility, and the appropriateness of each depends upon the economic setting in which it is used. This paper will evaluate these alternatives in the setting of the CFA franc zone.

The paper will proceed as follows. Section two will review the history, organization, and objectives of the CFA franc zone. The principles which govern the franc zone are the result of the unique relationship between France and her former colonies. This relationship will have a significant effect on how different exchange rate arrangements may perform in the zone. Section three will focus on the exchange rate, briefly defining exchange rate concepts to

provide a framework for a discussion of the recent performance of the CFA franc. It will also define the different types of exchange rates and how and why they are chosen.

Section four will examine the fixed parity rate of the CFA franc, recent overvaluation of the currency, and the 1994 devaluation in more detail. This section will then discuss whether a fixed parity rate is an appropriate exchange rate arrangement for the CFA zone. Section five will first address the implications of changing the exchange rate arrangement on other characteristics of the zone, i.e., monetary integration and currency convertibility. Second, it will survey the alternatives to a fixed parity rate and discuss their advantages and disadvantages in the setting of the CFA franc zone. Finally, this section will briefly discuss practical considerations for changing the exchange rate arrangement in West Africa. Section six will conclude.

2. THE CFA FRANC ZONE

2.1. Structure of the CFA Franc Zone

The CFA franc zone is a group of 13 countries, all but one of which are former French colonies, economically linked to France through membership in two monetary unions.¹ The West African Economic and Monetary Union (WAEMU) includes Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, Sénégal, and Togo; Cameroon, the Central African Republic, Chad, Congo, Equatorial Guinea, and Gabon are members of the Central African Economic and Monetary Community (CAEMC). Each union has a central bank, the *Banque Centrale des Etats de l'Afrique de l'Ouest* (BCEAO) for the WAEMU and the *Banque des Etats de l'Afrique Centrale* (BEAC) for the CAEMC, which is responsible for all foreign exchange transactions of the member countries.

Home to just more than 15 percent of Africa's population, the countries of the zone are among the poorest in the world. The majority of countries in the zone are classified as low-income by the World Bank, and per capita Gross National Product (GNP) declined in nearly all the countries of the zone from 1980 through 1992 (World Bank 1994).² Considered small, open economies, these countries rely on fuel, minerals, and primary products for the vast majority of their exports and are vulnerable to shifts in world prices for these commodities. France is still the main trading partner with these countries, though its share of trade with the

¹Equatorial Guinea is the only member not to have been a French colony.

²Throughout the CFA zone, growth rates have recovered since the 1994 devaluation of the CFA franc. This will be discussed in section 4.1.2.

zone has been decreasing in recent decades.³

2.1.1. Origins of the Zone

The CFA franc zone can trace its roots to the French colonial system.⁴ During the colonial era, goods from French territories could only be shipped to France, and only via French sea authorities. Further, colonial markets were open only to French goods, and colonial products could only be manufactured in France (Allechi and Niamkey 1993). To facilitate the financing of economic activity in the colonies, colonial banks were created. For example, the Bank of West Africa was established in 1901 and was responsible for issuing currency in French West Africa (Connors 1979). Colonial currencies traded with the French franc at even par, though circulation of colonial currencies was prohibited in France and vice versa.

France began to consolidate economic ties with her colonies in the years preceding World War II (Connors 1979). The original intent was to create a "temporary or provisional institution linking France and her colonies in order to survive the economic depression of the 1930s and subsequently to support the war effort through exchange control" (Allechi and

³For example, exports from the WAEMU to France averaged 35 percent of total exports annually from 1970 to 1975, but only 18 percent from 1990 to 1995. For the CAEMC, the figures are 31 percent and 21 percent, respectively. WAEMU imports from France averaged 43 percent and 27 percent of total imports for the same two periods, and for the CAEMC the figures are 52 percent and 39 percent, respectively (IMF 1975; IMF 1995).

⁴In the colonial era, the currency was called *le franc des Colonies Françaises d'Afrique*. Currently, CFA stands for *le franc de la Communauté Financière d'Afrique* in West Africa and *le franc de la Coopération Financière en Afrique centrale* in Central Africa (Boughton 1992).

Niamkey 1993, p. 3). During World War II, France followed protectionist policies, banning all trade and financial flows between her colonies and the rest of the world. At the conclusion of World War II in 1945, the franc zone was formally established as a currency area (Connors 1979).

In the decade following World War II, the French colonies in Asia and North Africa left the zone, leaving the sub-Saharan African colonies to continue the arrangement with France. The CFA franc was created in 1945, and the rate established in 1948 remained unchanged until 1994. In West Africa, a public central bank was established in 1955 to replace the Bank of West Africa. The new bank, whose name changed to the BCEAO in 1959, was responsible for issuing currency and making commercial loans (Connors 1979). In Central Africa, the BEAC was also established in 1955 and served the same function as the BCEAO. By the end of 1960, all the French colonies in West and Central Africa had gained independence, and the present unions were established in 1962.⁵

Criticism of the zone in the decade following independence centered on what many felt was France's high degree of control over monetary policy in the zone (Devarajan and de Melo 1987b). Others felt that conservative monetary policies in the zone restrained economic growth and development. There was also resentment in Africa over French personnel in key administrative positions, and devaluation of the French franc in 1969 occurred with no forewarning to the African nations (van de Walle 1991). Critics maintained that the zone was

⁵Membership has not been a constant, however. Mauritania left the zone in 1972, while Mali, though always maintaining monetary links to France, only joined WAEMU in 1984. Equatorial Guinea joined the zone in 1985.

at the mercy of French monetary policy; devaluation of the French franc hurt countries in the zone, as it made imports from the rest of the world relatively more expensive (Allechi and Niamkey 1993).

In 1973, reforms granted a much greater degree of control of the zone's operation to the African governments. They gained greater control over credit policies and credit distribution, with the intent of better targeting key sectors for economic development. Further, the central banks themselves were moved from Paris to Dakar (BCEAO) and Yaoundé (BEAC), African governors were installed, and there was a significant decrease in French nationals on the Boards of Directors (van de Walle 1991).

2.1.2. Institutions of the Zone

Three basic principles, described below, govern the operation of the CFA franc zone: (1) the guaranteed convertibility of the CFA franc; (2) monetary integration among the countries of the two unions; and (3) the fixed parity rate between the CFA franc and the French franc. The central banks are responsible for all foreign exchange transactions by zone members. Each central bank has an operations account at the French Treasury into which it places 65 percent of its foreign exchange holdings (Clément 1994).⁶ These operations accounts are the foundation of the franc zone. The balance in these accounts can be negative or positive, resulting in a "unique scheme of financing balance-of-payments imbalances due to the French guarantee of access to needed foreign exchange" (Allechi and Niamkey 1994, p. 1148).

⁶Though there is only one operations account for each central bank, in practice the central banks do record individual accounts for each member country (Bhatia 1985).

The French Treasury charges interest to the central banks on negative balances but also pays interest on positive balances in the operations accounts. If the balance is negative for more than 30 days, access to credit is restricted and additional measures are taken as needed to balance the account.

Convertibility. Convertibility of the CFA franc into French francs is provided by the operations accounts, where the balances are maintained in French francs. Under this arrangement, CFA francs are not actually traded on currency markets. Rather, French francs are traded to meet the foreign exchange needs of the CFA countries. The equivalent amount of CFA francs is then transferred to banks in the franc zone (Allechi and Niamkey 1994). Convertibility in the franc zone is guaranteed because the French Treasury will cover overdrafts on the operations accounts (Boughton 1992).

Additionally, there are no foreign exchange costs for trade between countries of the zone, as CFA francs are freely transferable within the zone. However, limits were recently placed on the convertibility of the CFA franc: in 1991, a three percent service charge was assessed when converting CFA francs into French francs; and in 1993 the CFA franc was temporarily made nonconvertible outside the franc zone (Allechi and Niamkey 1994). Currently, the service charge has been reduced to two percent, and bank note transfers are limited to a maximum of 2.5 million CFA francs (Staatz 1996).

Monetary Integration. Each union operates a pooled reserves system in which members deposit 65 percent of their foreign exchange reserves with the French Treasury (Devarajan and de Melo 1987b). This feature of the CFA zone allows members countries to borrow against each others' foreign reserves. Only when one of the unions as a whole is

overdrawn does the French Treasury step in and take action (Allechi and Niamkey 1993). The central banks set monetary policy based on the overall asset position of the unions. All zone members face the same interest rate, though the central banks can impose country-specific credit constraints. Further, each country's government borrowing is limited to 20 percent of its previous year's fiscal receipts (Devarajan and de Melo 1987b).

Fixed Parity. The CFA franc maintains a fixed parity with the French franc, and its value can be changed only if all countries in the zone and France unanimously approve. The two currencies originally traded one for one, but after World War II the rate of 1.7 French francs to 1 CFA franc was established to account for higher inflation in France during the war. Subsequent adjustments increased the parity rate to two French francs to 1 CFA franc by 1948. In 1958, the French government made 100 old francs equal to one new franc, resulting in the parity rate of one French franc to 50 CFA francs (Connors 1979). There it remained until the recent devaluation, meaning the parity rate had been unchanged for 46 years, from 1948 to 1994.

2.2. Performance of the CFA Franc Zone

Devarajan and de Melo (1987a) provide the following summary of attitudes pertaining to the zone through the early 1980s:

In its early stages, the CFA zone was designed as a means of providing balance of payments credit to these emerging nations. In addition, it was felt that a common and stable exchange rate would attract foreign investment into these countries. Over the long run, membership in the zone has induced a sense of monetary and fiscal discipline, damping the 'stop-go' cycles observed in many developing countries. Nevertheless, despite the general consensus that the monetary union has been working fairly well and that its members have

probably fared better than they would have in its absence, concern has recently been raised that adjustments to macroeconomic imbalances have not been as prompt and complete as desirable, as sustained periods of real exchange rate appreciation have been observed among many zone members (p. 449).

2.2.1. Benefits of Membership

The expected benefits of membership can be summarized in four main points:

- ▶ A fixed exchange rate combined with a convertible currency would provide price stability and eliminate uncertainty, which in turn would encourage investment. Further, capital flight would be reduced and resource accumulation would be encouraged (Devarajan and de Melo 1987a).
- ▶ Rigorous monetary policy would maintain low rates of inflation (Allechi and Niamkey 1993). Monetary growth in the CFA franc zone is controlled three ways: (1) by the interest charged on overdrafts of the operations accounts; (2) by the restriction on credit expansion when the balance in the operations accounts falls below target levels; and (3) by limiting credit to the public sector in each country to 20 percent of the previous year's fiscal revenue (Boughton 1992).
- ▶ The absence of foreign exchange costs between member countries would aid increased regional trade (van de Walle 1991), though this has not been seen in practice. Officially recorded trade within the CFA zone has always been low. For example, just 7.5 percent of total official trade in the CFA zone was within the region from 1985-87 (Boughton 1992), and by 1994-95, official trade among the CFA zone members had increased only to 9.7 percent of total trade (IMF 1995).⁷
- ▶ Monetary union allows for a pooling of risk associated with fluctuations in the world export markets. Because the countries of the two monetary unions export varied products, and because the prices of these products are not closely correlated, reserve pooling helps to minimize the risk to one country of a fall in the world price of its principal export commodity (Honohan 1991).

⁷In 1994-95, trade within the WAEMU (12.8 percent of total trade) was significantly higher than trade within the CAEMC (5.4 percent of total trade). Trade between the two unions was negligible (IMF 1995).

2.2.2. *Costs of Membership*

Similarly, the anticipated costs of zone membership can be summarized in four general categories:

- ▶ Adjustment to the external environment is often slow, what some have termed *l'esprit de facilité*, or 'taking it easy' (Allechi and Niamkey 1993). Additionally, some members may be able to postpone adjustment should one country experience an economic boom, which would improve the position of the operations account as foreign exchange reserves are pooled (Devarajan and de Melo 1987a).
- ▶ The lack of adjustment of the nominal exchange rate results in periods of overvaluation. In addition, monetary restraint coupled with a fixed exchange rate forces the countries to rely on fiscal policies (e.g., export and import taxes) to simulate a devaluation (Devarajan and de Melo 1987a). These would be regarded as second-best policies for addressing the problem.
- ▶ The member countries have surrendered a degree of sovereignty, as France holds effective monetary control of the zone (Allechi and Niamkey 1993). Further, the need for policy coordination in the monetary unions limits the ability of individual countries to set national targets for an inflation-unemployment mix (Devarajan and de Melo 1987a). These authors also report that Mundell (1972) argued stability came at the expense of institutional development and monetary experience.
- ▶ The fixed parity rate leaves the franc zone vulnerable to movements in the value of the French franc. Devarajan and de Melo (1987a) argue that the maintenance of the fixed system after the French franc became a flexible currency in 1973 further exposed the franc zone to external shocks.

2.2.3. *Do the Benefits Outweigh the Costs?*

The general answer from literature reviewed here comparing relative economic performance of countries in the CFA franc zone to countries outside the zone is yes, until the mid-1980s, and no, thereafter.⁸ Devarajan and de Melo (1991) report that the CFA countries performed better economically during the 1960s and 1970s than did non-CFA countries in sub-

⁸The literature reviewed in this section is primarily Anglophone.

Saharan Africa. The authors show that the CFA countries enjoyed higher annual real growth rates, higher real total investment rates, lower average annual inflation rates, and an average annual export growth rate nearly four times greater than the non-CFA countries between 1973 and 1981.⁹ This period coincided with "an era when CFA countries, mostly export-led economies, were exporting to world markets at a price fair enough to generate sufficient export earnings to finance development projects. In addition, during that period exports were very competitive *vis-à-vis* the US dollar" (Allechi and Niamkey 1994, p. 1148).

By the late 1980s, however, the non-CFA countries were outperforming the CFA countries in nearly all categories¹⁰. Average annual growth rates of the CFA countries for the period 1986-89 fell by half relative to the early 1980s, and growth rates of the non-CFA countries now exceeded those of the CFA countries. Total investment fell throughout the continent in the late 1980s, though more so in the CFA countries. Finally, average annual export growth in the CFA countries fell from 3.0 percent in the period 1982-85 to 0.1 percent in 1986-89, while average annual export growth of the non-CFA countries rose from 0.1 percent to 5.0 percent for the same two periods (Devarajan and de Melo 1991).

Devarajan and de Melo (1991) attribute the disappointing performance of the CFA zone countries in the late 1980s to a lack of adjustment to a changing external environment. This period was characterized by world recession, deteriorating terms of trade for African

⁹Using World Bank data, the authors calculated unweighted averages using 11 countries for the franc zone and 20 countries for the SSA group. Unfortunately, they do not identify the countries in each group.

¹⁰The one exception was annual inflation, which fell from an average rate of 8.6 in 1982-85 to 1.0 in 1986-89 in the CFA zone, while increasing from 26 to 36 percent outside the zone.

countries, and a sharp appreciation of the French franc relative to the U.S. dollar (Allechi and Niamkey 1994). Even so, it is unclear if membership in the zone was directly responsible for the poor performance relative to the non-CFA countries.¹¹

While there may be no definitive answer to whether the benefits of zone membership outweigh the costs, what is clear is that the inability of the CFA countries to adjust to the changing external environment in the 1980s resulted in an economic downturn, while at the same time the non-CFA countries were experiencing revived economic growth. While structural adjustment programs were introduced in both CFA and non-CFA countries during the 1980s to improve economic performance, one critical difference is that the non-CFA countries were able to adjust their nominal exchange rates.

¹¹Several recent studies have attempted to measure the benefits and costs of membership in the CFA franc zone. Assane and Pourgerami (1994) found no significant difference in growth rates between CFA and non-CFA countries, though they tested only for the difference between the 1970s and the 1980s. They also argued that monetary union membership allowed the zone members to "avoid the additional costs resulting from rapid monetary expansion and inflation" (p. 439). On the other hand, Elbadawi and Majd (1996) found that during the late 1980s, the relatively poor economic performance of the CFA countries could be attributed to membership in the zone. While the non-CFA countries adjusted to the external environment in the 1980s through a combination of exchange rate, fiscal, and monetary policies (which included changes in the way the exchange rate was determined), the CFA countries were slower to react and were unable to adjust their nominal exchange rate.

3. THE EXCHANGE RATE

The exchange rate plays two roles in an economy: (1) it can help to achieve and maintain international competitiveness; and (2) it can act as a stable anchor for domestic prices (Aghevli, et al. 1991). The choice of an exchange rate regime, then, reflects a government's "preferences for domestic economic stability and for independence in determining the appropriate mix of macroeconomic targets (inflation vs. employment)" (Salinger and Stryker 1994, p. 7).

3.1. Exchange Rate Concepts

The nominal exchange rate is simply the value of one country's currency in terms of another (e.g., 100 CFA francs per one French franc), in other words, the price of foreign exchange. The exchange rate can be determined by market forces (the interaction of supply of and demand for foreign exchange), or the exchange rate can be set by a government, in which case the government would be required to defend an increase in the currency's value. If the price of foreign exchange were to decrease (an appreciation of the exchange rate), demand for foreign exchange might exceed supply and the government could be required to meet that increased demand with foreign exchange reserves.

3.1.1. The Real Exchange Rate

The nominal exchange rate measures the relative price of two currencies. The real exchange rate (RER), on the other hand, measures the relative price of two goods (Edwards 1994). The RER, then, can be seen as the measure of a country's competitiveness in

producing tradeable goods. A tradeable good is one that can be traded on international markets, i.e., imports, import substitutes, and exports. These are goods that either earn foreign exchange for the economy (exports), save foreign exchange (import substitutes), or require foreign currency for their purchase (imports). A non-tradeable good is produced for consumption in the domestic market, and is not traded internationally (e.g., certain types of services and labor). The RER does not affect the price of the latter directly. Rather, the value of non-tradeable goods relative to tradeable goods will determine where resources may be allocated within a country.

There are a number of ways to measure the RER. Edwards (1994) offers the following definition:

$$RER_1 = \frac{\text{Price of Tradeable Goods}}{\text{Price of Non-Tradeable Goods}}$$

Helmets (1988) provides an alternative definition that incorporates inflation differentials between countries to reflect the relative purchasing power of a currency:

$$RER_2 = \frac{E_n P_d}{\$1/P_w}$$

where E_n is the nominal exchange rate (expressed here in terms of the U.S. dollar), P_d is the domestic price level, and P_w is the world price level (or the U.S. price level in this example). Thus, the RER can increase while the nominal exchange rate remains unchanged, if the price level in the home country increases faster than does the price level in a major trading partner (the U.S. in this example). Likewise, the RER can remain unchanged even if there is an

increase in the nominal exchange rate. For example, if the price level in the home country rises relative to the price level in the foreign country by the same magnitude as the increase in the nominal exchange rate, the RER will not change.¹²

For countries that cannot change the value of the nominal exchange rate, for example those of the CFA franc zone, the RER is influenced primarily by controlling domestic inflation (Dibley, et al. 1996). This can be done with policies that either restrict aggregate demand or expand aggregate supply. Countries that can change the nominal exchange rate may devalue a currency to compensate for increases in inflation; however, this increase in the nominal exchange rate often causes domestic price levels to increase, negating the intended effect of the devaluation.¹³

3.1.2. Overvaluation

When at its equilibrium level, the RER clears the foreign exchange market (the supply of and demand for foreign exchange are equal), and the current account is balanced (i.e., the value of exports is equal to the value of imports). If the RER is below its equilibrium level, the demand for foreign currency exceeds its supply, and the currency is said to be overvalued. The result is that tradeable goods become relatively cheap compared to non-tradeable goods.

Overvaluation can be caused by a number of events: (1) an increase in domestic

¹²This definition can also measure the competitiveness of a country's tradeable goods, as domestic wage rates or the cost of other inputs can be used in place of domestic price levels to reflect the relative costs of producing similar types of goods across countries (Helmers 1988).

¹³The problem is exacerbated if wages are indexed, and the result can be a price-wage-exchange rate spiral, common to Latin America in the 1970s (Solimano 1993).

demand, for example through increased government spending; (2) a loss of export revenue, perhaps due to a fall in export-commodity prices; (3) a deficit in the current account, which can be caused by an increase in the cost of imports; and (4) an increase in domestic production costs (Dornbusch 1988). If overvaluation persists, resources in the economy will shift toward the production of non-tradeable goods, as they now earn more in the home country than do tradeable goods. The result is a decrease in the production of tradeable goods, and consequently a loss in foreign exchange earnings from their sale. At the same time, consumption of imports increases, as they are relatively less expensive, and the demand for foreign exchange increases. The outcome is excess demand for foreign exchange and a deficit in the current account.

To correct for overvaluation, a country can devalue its currency (increase the value of the nominal exchange rate). The basic goal of any devaluation is to increase the price of tradeable goods relative to non-tradeable goods. The desired result is twofold: first, to shift domestic consumption toward domestically produced goods by making imports more expensive; and second, to increase domestic production of tradeable goods, as their price is now higher in domestic currency terms. All else equal, the RER will increase in value (depreciate), demand for foreign exchange in the home country will decrease (as fewer imports will be purchased), the supply of foreign exchange will increase (as more goods are exported), and the RER will move toward its equilibrium level.¹⁴

¹⁴In practice, devaluations are usually supported by additional policy reforms, or they are frequently one component of a structural adjustment program. This combination of policies can make it difficult to isolate the effects attributable specifically to devaluation. Further, factors outside the control of a government can negate the intended effects of a devaluation (Dibley, et al.

Alternatively, a government can try to simulate the effects of a devaluation, either with expenditure-reducing policies (fiscal and monetary policies), expenditure-switching policies (trade and exchange rate policies), or some combination of the two.¹⁵ The goal of expenditure-reducing policies is to lessen domestic consumption and investment, thereby restoring balance to the current account. This can be done either by reducing government expenditure or by forcing the private sector to spend less. Expenditure-switching policies, on the other hand, attempt to reduce the demand for foreign exchange by shifting economic activity between the tradeable and non-tradeable sectors (Helmert 1988).

3.2. Exchange Rate Management

The type of exchange rate employed by a country will have a bearing on which policies will be more effective in achieving a country's economic objectives. In choosing an exchange rate arrangement, a country must weigh two different sets of concerns. First, the choice of an exchange rate arrangement depends on three things: (1) policy makers' objectives; (2) the source of shocks to the economy; and (3) the structural characteristics of the economy in question (Aghevli, et al. 1991). Second, with both a fixed parity rate and a clean float, a government cannot use the nominal exchange rate as a policy instrument to achieve either internal or external balance. The options that lie between these extremes, for instance a crawling peg or a managed float, allow a government to alter the nominal exchange rate to

1996).

¹⁵See Helmers (1988) for a more complete discussion of these policies.

appreciate or depreciate the value of the RER.

3.2.1. Types of Exchange Rate Arrangements

Exchange rate arrangements are typically divided into two categories, fixed and flexible. Generally, fixed exchange rate arrangements involve pegging the value of the exchange rate either to one other currency or to a basket of currencies. Flexible exchange rates permit the nominal exchange rate to either adjust to a predetermined indicator (a crawling peg) or be determined by market forces (currency floating). In recent years, however, the distinction between fixed and flexible rates has become blurred. As Quirk (1996) points out, "unless the entire international system is fixed, individual countries cannot be said to have unambiguously fixed exchange rate regimes" (p. 44). For example, even though the CFA franc is fixed to the French franc, it is not fixed against the U.S. dollar, and its movements against the dollar are dictated by the French franc to dollar exchange rate.

Gutián (1994, p.16) offers the following definitions for different exchange rate arrangements:

Basically Fixed Regimes: Pegged Exchange Rates

- ▶ *Vis-à-vis a single currency*: economies that peg to major international currencies with no or rare parity adjustments; economies that announce a prearranged schedule of exchange rate adjustments against the currency of the peg (the exchange rate changes, but at a fixed pace).
- ▶ *Vis-à-vis a currency basket*: economies that peg to a basket of currencies of their main trading partners or to standardized currency composites such as the European currency unit (ECU) or the SDR.

- ▶ *Within pre-established margins*: economies that peg to a single currency or a currency basket within certain (typically narrow) margins.
- ▶ *Fixed but adjustable peg*: the arrangement that prevailed under the Bretton Woods par value system [see section 3.2.2 below].

Basically Flexible Regimes: Adjustable and Flexible Exchange Rates

- ▶ *Indicators*: economies that adjust their currencies automatically to changes in selected indicators, such as developments in the real effective exchange rate.
- ▶ *Managed float*: economies that adjust their exchange rates frequently on the basis of judgements made following developments in variables such as reserves and the payments position.
- ▶ *Independent float*: economies that let markets and market forces determine the exchange rate for their currencies.

3.2.2. Choosing an Exchange Rate Arrangement

Between 1945 and 1973 (the Bretton Woods period), fixed exchange rates were standard practice worldwide, with most currencies fixed to the U.S. dollar by an adjustable peg (Fischer 1988). However, fixed rates became increasingly difficult to maintain as world capital markets developed in the 1960s. Exchange rate adjustments became more frequent to account for inflation differences, and as devaluations appeared imminent, capital flight would ensue. After 1973, most major currencies were floated while developing countries maintained fixed rates. This changed in the 1980s with the introduction of structural adjustment programs, when many developing countries began to add flexibility to their exchange rate regimes.¹⁶

¹⁶Little et al. (1993) arrange the post-1973 era into three periods: (1) an 'exchange rate interregnum period' (1974-1979) when most developing countries maintained fixed rates while

In the post-Bretton Woods period, the focus of the debate concerning exchange rate choice in the developing world was whether these countries should peg their currencies to a basket or the currency of a major trading partner (Devarajan and de Melo 1987b). Aghevli et al. (1991) reveal that in 1976, 63 percent of developing countries pegged their exchange rate to the currency of an industrial country. But by 1989, only 38 percent of developing country currencies were pegged to a single currency. For the same two years, the number of countries fixing their exchange rate with a currency basket increased from 13 percent to 23 percent. Further, the number of countries employing flexible exchange rates increased from 14 percent to 34 percent.¹⁷

The increase in the number of basket and floating arrangements was partly in response to a desire to minimize the adverse effects caused by fluctuations between the major currencies since the implementation of floating exchange rates in 1973 (Aghevli, et al. 1991). Examples of adverse effects include uncertainty about the profitability of investment in the traded goods sector, and problems in managing foreign exchange reserves, public finances, and external debt. In addition, high domestic inflation rates have been a factor in the increase in the number of flexible arrangements in developing countries. Flexibility allows the nominal exchange rate to adjust for inflation differentials, which can help to maintain a constant RER.

developed countries floated their currencies; (2) a 'regime transition period' (1980-1983) when adjustment programs often included changing the exchange rate arrangement; and (3) a 'flexible peg period' (1983-present) when nominal and real exchange rate adjustment is frequent.

¹⁷The remaining countries, 10 percent of the total in 1976 and 5 percent in 1989, pegged their currencies to the SDR (special drawing rights), a reserve asset created by the International Monetary Fund (Aghevli, et al. 1991).

Further, flexibility relaxes the political burden of devaluation, as a government is not forced to take full responsibility for changing the value of a currency, as is usually the case with a fixed peg arrangement.

Corden (1993) presents two approaches for determining exchange rate policy: the *real targets approach* (discussed in section 5.2) and the *nominal anchor approach*. The nominal anchor approach advocates fixing a country's exchange rate to the currency of a low-inflation country. This is the approach that has been followed in the CFA franc zone. Corden warns, however, that a commitment to a fixed exchange rate arrangement can be risky without both discipline and credibility. The discipline to maintain a fixed rate requires strong monetary and fiscal policies to ensure that real adjustment is not prevented, and a government's commitment to such policies plays a large role in determining the credibility of the arrangement.¹⁸ As Williamson (1993) notes, should discipline falter, a devaluation may be needed to realign the RER, which in turn can lead to a loss of credibility of the exchange rate regime.

In the CFA zone, the commitment of the French government to support the institutional arrangements of the zone has maintained the credibility of the CFA franc. Yet the inability of the CFA countries to change the nominal exchange rate appears to have contributed to the economic downturn in the late 1980s. Nevertheless, the CFA countries and France have elected to keep the fixed parity arrangement between the CFA franc and the French franc, even while the majority of developing countries have added varying degrees of flexibility to their exchange rate regimes. Before assessing the alternatives to the fixed rate in the CFA

¹⁸For example, credit creation must be restrained, and wage and price rigidities (e.g., wage indexation) must not prevent real adjustment.

zone, the recent impact of the fixed rate on the economies of the CFA zone members will be examined, and the decision to keep the fixed parity rate will be assessed.

4. THE FIXED PARITY ARRANGEMENT OF THE CFA FRANC

The two principal benefits of pegging to a single currency are: (1) the facilitation of trade among the countries whose currencies are linked by reducing uncertainty in the value of the currency (which also aids investment, particularly between the countries involved); and (2) the promotion of domestic price stability in the country pegging its currency, as the fixed nominal exchange rate acts as an anchor for domestic price levels. The latter depends on the willingness of a government (or the governments of the CFA countries and France in the case of the franc zone) to support the exchange rate through appropriate fiscal and monetary policies (Crockett and Nsouli 1977).

The primary drawback for a developing country is getting caught by the strengthening of a developed country's currency (Dornbusch 1988), which is what occurred in the franc zone in the 1980s. Additional drawbacks include: (1) a loss of flexibility in defining domestic monetary and fiscal policy (Salinger and Stryker 1994); and (2) a possible barrier to regional trade efforts, as different countries in a region may peg their currencies to different developed country currencies, increasing exchange rate variation between the developing countries (Crockett and Nsouli 1977). This section will show that in the late 1980s, even though the CFA zone had achieved price stability, external conditions changed so that the drawbacks increased relative to the benefits.

4.1. Recent Performance of the CFA Franc

The economic and financial situation of the CFA franc zone seriously declined after 1985, initially driven by external shocks and inadequate policy adjustments by member

countries (Clément 1994).¹⁹ By the late 1980s, the CFA franc had become seriously overvalued, and "both operations accounts were rapidly accumulating deficits, putting a tremendous pressure on the French Treasury" (van de Walle 1991, p. 392). Additionally, internal structural problems (e.g., demographic pressures, rapid urbanization, and poor economic management) constrained productivity growth in the zone (relative to France), further contributing to overvaluation (Dioné, et al. 1996).

4.1.1. Overvaluation

The overvalued CFA franc particularly hurt the countries of the zone in two areas, production and investment. Van de Walle (1991) states that during the late 1980s overvaluation was "in the process of demolishing the production apparatus in these countries, resulting in deep economic recession" (p. 394). Local products were unable to compete with imported goods, and agricultural production shifted away from tradeable goods, such as rice and cocoa. Further, the overvaluation encouraged the use of imported inputs as factors of production, further hurting domestic production incentives. The strong currency also discouraged foreign investment, as investors began to doubt the ability of the zone to maintain convertibility of the CFA franc in the face of overvaluation. Further, capital flight became a

¹⁹A deterioration in the terms of trade for the CFA countries was caused by a fall in the world price for their primary export goods. At the same time, many non-CFA countries in West Africa were devaluing their exchange rates, or adding flexibility to them, as part of structural adjustment programs. These programs improved the external competitiveness of the non-CFA countries, increasing the competition faced by the CFA countries in world export markets. Further, the French franc began to appreciate relative to other world currencies, meaning the CFA franc also appreciated relative to other currencies. The result was that imported goods became cheaper in the CFA countries, and demand for them increased.

problem as the overvaluation endured (van de Walle 1991).

Because changing the parity rate of the CFA franc was considered a last resort, the zone countries were forced to rely on other policies to change the RER and simulate the effects of a devaluation (e.g., export subsidies and import taxes). Van de Walle (1991) argues that these policies created "incredible incentives for fraud and rent seeking, particularly when the high level of over-valuation necessitates greater distortion of the market prices" (p. 395). He also argues that the failure to reduce overvaluation of the CFA franc was political in nature, as governments lacked the financial discipline to achieve a depreciation of the RER. Not only were those individuals who benefitted from cheap imports primarily urban workers, whose support was important to the government, but the maintenance of overvaluation provided revenue to the state via financial policies implemented to simulate the effects of a devaluation (e.g., import taxes in rice).

4.1.2. The 1994 Devaluation

Faced with these deteriorating economic conditions, the members of the franc zone devalued the CFA franc on January 12, 1994, doubling the parity rate of 50 CFA francs per French franc to 100 CFA francs per French franc. The devaluation was accompanied by extensive fiscal, wage, monetary, and structural measures, and it received substantial financial support from the International Monetary Fund (IMF) and other aid agencies (Clément 1994).

IMF Director Michel Camdessus welcomed the reforms with the following statement:

This courageous action, taken in close collaboration with the IMF, and the envisaged supporting measures should greatly facilitate re-establishment of the competitiveness of these countries, the restoration of economic growth, and the

solution of their balance of payments difficulties (IMF 1994a, p. 17).

In the CFA franc zone, the devaluation was expected to prompt a shift of resources to more dynamic sectors of the economy, and the agricultural sector in particular was expected to benefit (Clément 1994). The reliance on imports in the Sahel, prompted by the overvaluation, had discouraged productivity increases in rural areas. By increasing the price of tradeable goods relative to non-tradeable goods, the devaluation would therefore increase incentives for domestic production (Staatz, et al. 1994). Further, agriculture employs large segments of the population in the zone, and a sizable increase in the incomes of small farmers producing export and food crops was anticipated. With improved profitability in the agricultural and other export and import-substitution sectors, "existing capacity would be utilized, growth and employment would be revived, and private investment would be encouraged" (Clément 1994, p. 12).²⁰

Early indications are that the devaluation has succeeded in part because inflation has been controlled. Though annual inflation did exceed 30 percent across the zone in 1994, the initial jump following the devaluation was not matched by large increases in wages, and annual inflation was expected to fall below 10 percent in 1995 (*The Economist* 1995). In the Sahelian countries of Chad, Mali, Niger, and Sénégal, 1994 inflation rates ranged from 24 percent in Mali to 43 percent in Chad, but by 1995, inflation rates had fallen to between eight and 12 percent in all four countries. A key reason inflation was controlled was that import taxes on

²⁰Some of the accompanying measures were designed to soften the blow of the devaluation on those groups hardest hit (Clément 1994).

imported foods, such as rice, were reduced. Further, urban workers experienced a fall in real wages as governments limited nominal wage increases following the devaluation (Tefft, et al. 1996).²¹

Additionally, real growth rates appear to be recovering in the CFA countries, rising by an average of 1.5 percent in 1994 after declining by an average of 1.0 percent in the four years preceding the devaluation (Clément 1995). In Côte d'Ivoire, the initial growth recovery has been fueled by an increase in exports while consumption has shifted toward locally produced goods. Agricultural production has also increased, primarily nontraditional exports and local foodstuffs (IMF 1994b). The International Monetary Fund (1996) reports that growth rates continued to increase in 1995, averaging 5.6 percent in the WAEMU countries and 3.9 percent in the CAEMC countries, and *Le Monde* (1996) reports that these levels were expected to be maintained in 1996.

Thus, it would appear that the devaluation has been successful in achieving its stated aims, as growth rates have recovered and inflation has been controlled. As well, the size of the 1994 devaluation was intended to eliminate the need for future adjustments of the parity rate for a long time (Clément 1994). Yet adherence to the fixed parity rate has hindered the ability of the CFA countries to adjust to changing external conditions in a timely manner. As long as the fixed parity remains in place, external shocks and slow productivity growth can again cause an overvaluation of the CFA franc. The remainder of this section will assess the appropriateness of the fixed parity rate for the CFA countries.

²¹Tefft et al. (1996) also report that the nominal (and in some cases real) incomes of farmers producing tradeable goods rose following the devaluation, as expected.

4.2. Assessment of the Fixed Parity Rate

Williamson (1991) has developed a set of four qualifications that, if all are met, would identify a country as a good candidate for a fixed exchange rate regime.²² First, a country's economy must be small and open, and thus meet the requirements for membership in a larger currency area. The economies of the zone are small and open, and they are members of a larger currency area, so this qualification is satisfied.²³ Second, at least 50 percent of a country's trade must be with the country to whose currency it is pegging. Williamson deems 60 percent more than adequate, but 40 percent not enough. While the CFA countries certainly met this qualification when the CFA franc was established, they do not meet it now. Bilateral trade with France accounted for only 23 percent of WAEMU's total trade and 27 percent of CAEMC's total trade for the period 1990-95 (IMF 1995).

Third, the country must pursue macroeconomic policies that will result in a domestic rate of inflation that matches the rate of inflation in the country to whose currency it is pegging. This qualification is met by the CFA zone countries; the average inflation rate for all zone countries from 1980 to 1989 was 4.2 percent, compared with 6.5 percent for France (Boughton 1992). And as previously noted, inflation levels in the zone after the 1994 devaluation appear to be returning near pre-devaluation levels. Fourth, the country must have institutional arrangements in place that can guarantee the credibility of the fixed rate

²²In evaluating the franc zone's ability to meet these qualifications, each union will be viewed as a single country. That is, this section will assess whether the CFA countries should continue to collectively peg to the French franc.

²³The requirements for membership in a larger currency area will be discussed in section 5.1.2.

arrangement. The CFA countries meet this requirement via the convertibility guaranteed by the French Treasury, though recent changes regarding the convertibility of the CFA franc have lessened the currency's credibility.

Thus, the CFA zone countries meet only three out of Williamson's four qualifications for use of a fixed exchange rate, when applying these qualifications to the fixed arrangement between the CFA franc and the French franc. The primary reason why the fixed rate no longer appears to be appropriate for the CFA countries is that their trade has become more diversified, and the fixed rate no longer provides as much benefit as in the past of facilitating international trade. Masson (1994) includes France in his assessment of the degree of interdependence in the CFA zone, and found that, when including France, the level of trade among franc zone members as a percentage of total trade decreased from already low levels.²⁴

External conditions have also changed significantly since the establishment of the CFA zone, and as the African countries' trade has diversified, movements in the French franc have, at times, hurt their competitiveness in world export markets. As discussed earlier, the shift in the terms of trade against these countries in the 1980s was aided by the appreciation of the French franc against the dollar. The next section will assess exchange rate alternatives to the fixed parity of the CFA franc.

²⁴For the years 1982-85, Masson reports that trade among the African member countries was 8.6 percent of their total trade, 37.8 percent when including trade with France, but only 2.3 percent when adding France's total trade to the denominator.

5. EXCHANGE RATE OPTIONS FOR THE CFA FRANC ZONE

The fixed parity rate is one of three distinct characteristics of the CFA zone, and one of the main advantages regarding the fixed rate has been that the guaranteed convertibility of the CFA franc gives the currency credibility. Thus, the choice of exchange rate arrangement takes on added significance due to the other characteristics of the zone. Indeed, the "choice is between (1) maintaining a fixed parity *cum* an automatic fiscal/monetary discipline with convertibility as in the CFA zone and (2) adhering to more flexible exchange rate regimes" (Elbadawi and Majd 1996, p. 940).

Yet it is unclear if that guarantee would be extended should the fixed parity give way to a more flexible exchange rate arrangement (and the guarantee would be unnecessary under a clean float, as the foreign exchange market would guarantee convertibility). Allechi and Niamkey (1994) submit that "France may be unwilling to provide budgetary assistance to countries with which its trade share is deteriorating over the years" (p. 1158). Monetary integration in Europe, currently scheduled for 1999, contributes additional uncertainty regarding France's ability to maintain the present structure of the CFA franc zone.

Therefore, of primary concern is how the institutional structure of the zone might change should the fixed parity rate cease to be used. Will France continue to guarantee the convertibility of the CFA franc through the operations accounts at the French Treasury? If the institutional structure of the zone does change, will the African countries continue membership in the monetary unions? Finally, how will the impending economic integration in Europe affect the functioning of the zone?

5.1. Future of the CFA Franc Zone

Monetary integration in Europe will by itself most likely require a change in the arrangement between France and the CFA zone. If the European countries retain separate currencies and central banks within the union, the possibility that France would continue the convertibility guarantee is much greater than if a single central bank is created for a European monetary union (Allechi and Niamkey 1993). Regarding the future of the CFA franc zone, Jacques Chirac, the French president, recently pledged only not to allow the CFA franc to be devalued when France adopts the European currency (French 1996). On the other hand, the possibility that the CFA franc zone, in its present form, will cease to exist must be considered.

5.1.1. European Monetary Integration

Writing in *Le Soleil*, Kasse (1996) develops three scenarios regarding the future of the CFA zone in the context of European economic integration. In the first scenario, the institutional arrangement between the CFA and French francs is retained by indirectly linking the CFA franc to the Euro (the European currency after 1999). Kasse writes that even if the Bank of France were replaced by a Central Bank of Europe, the French Treasury would continue to function in its current role, and thus its commitment to the convertibility of the CFA franc could be retained. A Central Bank of Europe would merely assume the role of the Bank of France, and the franc zone would become, indirectly, a 'Euro zone'.

Kasse cautions, though, that should the operations accounts of the BCEAO and the BEAC negatively affect a central European bank, such a bank could prohibit transfers from the French Treasury to the operations accounts. This possibility, however, seems unlikely given

the small size of the African economies with respect to the European economies. For instance, the combined GDP of the African members of the franc zone amounts to only 3.7 percent of the GDP of France alone (World Bank 1994).²⁵

In the second scenario, a 'Euro zone' takes the place of the franc zone by directly placing the institutions of the franc zone within the structure of the European Union. However, Kasse warns that this scenario may cause prolonged financial hardship on the CFA countries, as they would be required to meet the criteria for convergence in the European Union. These criteria include long-term price stability and a number of qualifications regarding public finances and interest rates (Kasse 1996). For example, a ceiling of three percent has been placed on deficits as a ratio to GDP, and long-term inflation rates of entering countries cannot exceed the three lowest rates of current members by more than two percentage points (Masson 1994).²⁶ Masson states that "the existence of such criteria clearly reflects the view that fiscal policy can interfere very seriously with the operation of monetary policy and should be used to prevent countries with unsustainable fiscal policies from entering EMU and interfering with its operation" (p. 184).

Kasse's third scenario describes two situations in which the franc zone ceases to exist: (1) the zone breaks up and each country is free to pursue its own financial and monetary policies; and (2) the zone breaks up with the member countries joining larger efforts at economic integration in Africa. These two different possibilities introduce the question as to

²⁵Based on 1992 figures, not including Equatorial Guinea.

²⁶Masson (1994) also reports that using 1992 data, only three European countries (France, Denmark, and Luxembourg) met all the criteria for convergence.

whether the countries of the franc zone should remain linked to one another, even if the link with France is broken. Two reasons support a positive response: (1) ending monetary integration could have serious consequences, for example the costs associated with establishing new currencies and central banks for 13 countries; and (2) maintaining the union can help regional integration efforts with non-CFA countries in West and Central Africa.

5.1.2. The Zone as a Currency Area

One way of evaluating the CFA zone is in terms of a currency area, a concept introduced by Mundell (1961). A currency area is a group of countries which share a common currency, or whose currencies are linked together via a system of fixed exchange rates with guaranteed convertibility among the member currencies. A currency area is defined as a region characterized by high degrees of the following criteria: factor mobility, economic interdependence, sectoral diversification, and wage and price flexibility (Masson 1994). The basic idea behind a currency area is that these four criteria are able to act as substitutes for, or simply reduce the need of, exchange rate adjustment. For example, a terms-of-trade shift might increase demand for a good in one country of a currency area, leading to inflation in that country, while decreasing demand for the same good in another country of the area, increasing unemployment there. If factor mobility exists, adjustment through a movement in the supply of labor could replace exchange rate adjustment.

Regarding the CFA zone's ability to meet the above criteria, Boughton (1992, p. 35) states that "there are positive aspects on each front, but on none of these economic grounds would the zone appear to be a natural candidate for a common currency area." What this

analysis fails to recognize, however, is that the establishment of the franc zone predates the concept of a currency area. Indeed, the zone was formed to facilitate France's economic activity with its colonies, and therefore was not guided by the principles of a currency area. A more natural configuration of a currency area, according to its definition, would include non-Francophone countries of West and Central Africa.²⁷ The franc zone countries could aid other regional economic efforts, such as those of the Economic Community of West African States (ECOWAS), by maintaining monetary links and supporting moves toward regional integration with non-Francophone countries. The break up of the union could only handicap such efforts.

There are costs, though, to maintaining the monetary unions. Throughout the CFA zone, the level of overvaluation of the CFA franc just prior to the 1994 devaluation ranged anywhere from 20 to 60 percent, depending on the country (Allechi and Niamkey 1994). The implication is not only that the devaluation may have hurt some countries more than others, but also that whatever exchange rate arrangement is chosen may not determine the appropriate price for every country.²⁸ However, as will be discussed shortly, a more flexible exchange rate for the zone can minimize exchange rate variability between countries. This could also help reduce exchange rate variability with non-CFA countries, such as Ghana, which currently

²⁷For example, regional trading networks were extensive in West Africa before European intervention, and these are not reflected by the boundaries of the zone.

²⁸Allechi and Niamkey (1994) found that, when testing for gains from the pooled reserves system, there were more losers than gainers in the franc zone. Those countries with positive account balances tended to support those with negative balances. Further, they found that as the proportion of trade with France decreases, the losses increase. As countries trade more outside the zone, exchange transactions increase. For those countries with positive balances, the exchange risk outweighed interest payments, and net gains decreased.

employ more flexible exchange rates.

5.2. Alternative Exchange Rate Arrangements

Williamson (1991) states that "the objective of exchange rate management is to keep the actual exchange rate reasonably close to the target, in order to give the correct price signals to a market economy" (p. 399). He adds that how a country chooses to manage the exchange rate will depend upon its situation, but that how the target rate is determined and adjusted over time is important. The intent, then, is to determine the RER that will allow a country to achieve its goals, then manage the nominal exchange rate to maintain the target RER. He raises two issues for the target rate: (1) it should not cause economic incentives to change erratically over time; and (2) it should adjust to account for persistent real shocks and to ensure external equilibrium can be achieved.

Section three discussed the *nominal anchor* approach to exchange rate management. The alternative to this approach is the *real targets* approach. The real targets approach advocates using the nominal exchange rate as a policy tool to attain economic objectives, especially when the current account is in deficit. This approach depends on three assumptions: (1) nominal wages and the price of non-tradeable goods must not adjust fully to account for a nominal devaluation, meaning that the economy must experience a real devaluation; (2) real devaluations must lead to substantive changes in the long run, for example increased exports; and (3) shocks faced by the country, whether external or internal, must be different from

shocks faced by the anchor country, should the currency be pegged (Corden 1993).²⁹

Evaluating the CFA zone according to these three assumptions reveals that the real targets approach may be appropriate for the CFA countries. Section 4.1.2 reported that the 1994 devaluation did lead to a real devaluation (as wage and price increases did not match the magnitude of the devaluation), and that the devaluation also induced a supply response, especially in the agricultural sector, and in particular for import-substitutes within the zone (Dioné, et al. 1996). Therefore, the first two qualifications for the real targets approach are met. Finally, the economic shocks facing the CFA countries are much different from those facing their trading partners, primarily industrial countries. For example, the CFA countries mainly export primary products, and a world price decrease in these commodities would not hurt industrial countries as it would the CFA countries. The question then becomes how to manage the exchange rate, based on the setting of the CFA franc zone.

5.2.1. Pegging to a Basket

This exchange rate arrangement has the same advantages as a single currency peg, and it attempts to minimize the disadvantages by accounting for the fact that few countries trade exclusively with one other country. By not pegging to a single currency, a country can minimize adverse effects resulting from movements in the exchange rate of any one of its trading partners. Thus, a basket peg provides macroeconomic stability by minimizing changes in the RER.

²⁹For developing countries, these shocks have primarily been terms of trade deterioration, capital inflow reduction, and trade liberalization (Corden 1993).

Crockett and Nsouli (1977) identify four alternatives for use as basket pegs: an export-weighted index, an import-weighted index, a bilateral trade index, and an index based on the SDR. They argue that a basket peg based on an import-weighted index is the most useful for developing countries. An export-weighted index would not be as effective because most developing countries export primary commodities, and world prices for these goods are independent of trade patterns. As imports are more diversified, an import-weighted index will be more representative of the patterns of trade. The authors add that pegging to the SDR can be practical as its value is well known and may reduce exchange rate variability between developing countries.³⁰

How might this exchange rate be applied to the CFA zone? The first step would be to decide on an index for the zone. Based on the preceding argument, the appropriate choice would be an import-weighted index. Examining the source of imports in the CFA zone for 1995, one finds that France was the source of only 26.4 percent of total imports into the WAEMU, but that 46.1 percent of all imports originated in Western Europe (including France).³¹ For the CAEMC, import origins were 36.4 percent from France and 66.8 percent from Western Europe (IMF 1995). The fact that imports to the WAEMU are more diversified than imports to the CAEMC countries suggests that different peg rates for the two unions should be considered.

³⁰In a study covering all nearly all developing countries in the mid-1970s, the authors found that an SDR peg more closely followed an import-weighted peg than did existing single currency pegs, except in the franc zone.

³¹Other imports sources include West Africa (including other CFA countries) 20.9 percent, Asia (including Australia) 15.7 percent, and North America 5.1 percent (IMF 1995).

The figures above also suggest that should a basket peg be adopted, it would be appropriate for both unions to adopt pegs to a basket of European currencies.³² Or, in light of European integration in 1999, an arrangement pegging the CFA franc to the Euro would be appropriate according to Williamson's percentage of trade qualification. But Kasse (1996) warns that pegging to the Euro, because it is in essence a single currency peg, could present the same problems as the peg to the French franc, i.e., overvaluation. He discusses the option of moving to a managed float relative to the Euro while maintaining the operations accounts in the French Treasury as a tool for managing the exchange rate.

5.2.2. Crawling Pegs

Under a crawling peg arrangement, a currency is adjusted at frequent intervals by relatively small amounts, though the actual size and timing of the adjustments are random, in the sense that they are unannounced (Dornbusch 1988). The goal of a crawling peg over the long run is to fix the RER by adjusting the nominal exchange rate for inflation differentials, whether against a single currency or a basket of currencies. The frequency with which these adjustments occur provides some certainty to the value of the exchange rate. In other words, even though traders may not know exactly when the exchange rate will move, they know that it will not get too far out of line with an indicator such as the consumer price index.

The primary benefits of a crawling peg are: (1) it limits speculative activity

³²For the CAEMC countries, this would unequivocally meet Williamson's requirement that 50 percent of all trade be with the countries to which a currency is being pegged. For the WAEMU countries, 50 percent would be exceeded if imports from other CFA countries (which would be using the same peg) were included.

surrounding the exchange rate; and (2) it depoliticizes the process of exchange rate management by eliminating the temptation to delay adjustment (Dornbusch 1988). However, though a crawling peg prevents a rise in the general price level from affecting a country's international competitiveness, external shocks can still cause appreciation of the RER. Thus, a crawling peg arrangement may still require additional policies to maintain its effectiveness (Dornbusch 1988).

One of the fears of ending the fixed arrangement between the CFA and French francs has been that the anchor for inflation provided by the arrangement would be lost. The anticipated result is higher rates of inflation in the African countries, leading to frequent adjustments of a crawling peg. However, Corden (1993) found that, for a sample of ten countries that switched from a fixed rate to a flexible rate, seven were able to maintain inflation rates reasonably close to the rate before the switch through conservative monetary and fiscal policies. Therefore, a crawling peg can be an appropriate rate for the CFA zone, provided monetary and fiscal discipline is maintained. An additional argument in favor of a crawling peg is that the countries that might make up a basket peg, should one be adopted, may have uneven inflation rates, and some adjustment of the exchange rate may be necessary to account for that.

5.2.3. Currency Floating

Floating exchange rates can either be dirty (managed by the government) or clean (wholly determined by market forces). With a dirty float, a government frequently adjusts its exchange rate based upon developments in its current account balance or payments position

(Gutián 1994). Generally, a stable floating exchange rate can be attained if the foreign exchange market allows capital to shift easily between domestic and foreign assets, via sufficient depth, forward exchange facilities, and markets for stocks and securities (Salinger and Stryker 1994).³³ Yet because such capital markets do not exist in most developing countries, floating exchange rates have generally not been regarded as viable alternatives for them.

However, the number of developing countries implementing floating exchange rates has recently increased, primarily in response to severe balance of payments problems (Quirk 1994). Many developing countries simply do not have the reserves needed to defend a fixed exchange rate. Indeed, one of the main benefits of a floating exchange rate "is that it minimizes the need for foreign exchange reserves" (IMF 1993, p. 377). Quirk (1994) offers additional reasons for the increase in floating exchange rates: lack of information necessary to determine a basket or crawling peg; macroeconomic instability (e.g., rapid inflation can prevent timely adjustment of less flexible exchange rates); and political considerations (i.e., a government relinquishing responsibility for the management of the exchange rate by floating it).³⁴

In a practical sense, introduction of floating exchange rates in developing countries has

³³Quirk (1994) also states that floating exchange rates do not lead to greater exchange rate instability, but rather instability depends on the quality of domestic economic policies.

³⁴A 1987 IMF review found that the balance of payments position for countries adopting floating exchange rates in the mid-1980s improved after the float was implemented. Further, inflation and output were similar before and after the change of exchange rate arrangement (Quirk 1994).

focused on the degree of centralization of the system for determining the nominal exchange rate. For example, will auctions or private sector (interbank) markets be used, and will non-bank foreign exchange dealers be allowed to participate in the latter (Quirk 1994)? The significance of floating exchange rates for the CFA zone is perhaps most relevant in the scenario where each of the member countries is faced with the decision of which exchange rate arrangement to use, should the franc zone cease to exist.

5.3. Exchange Rate Choice in the CFA Franc Zone and Areas for Future Research

There are two scenarios which stand out as probable successors to the current fixed parity arrangement of the CFA franc. First, the institutional arrangements of the zone can be maintained via the operations accounts at the French Treasury, while introducing flexibility into how the CFA franc is valued. The main concerns with this scenario are the willingness of France to extend the convertibility guarantee should the fixed rate be abandoned, and the effects of economic integration in Europe in 1999.

Second, the CFA franc zone may cease to exist, with the member countries either pursuing independent monetary and fiscal policies or continuing in some sort of economic union (perhaps including neighboring non-Francophone countries). Williamson (1991) states that countries that are close competitors should consider pegging to a common basket. At the very least, this favors some degree of regional economic cooperation to reduce exchange rate variability between the CFA and non-CFA countries. In West Africa, for example, the WAEMU countries are also members of ECOWAS, whose goals include promoting regional trade and development. Reducing exchange rate variability with neighboring countries, such

as Nigeria and Ghana, can facilitate the achievement of these goals.³⁵

Future research should focus on the preceding scenarios. For example, should the CFA zone continue, how might exchange rate flexibility affect key economic variables? Investment is an important contributor to economic growth, and understanding how alternative exchange rate policies can affect investment is important. Investment can be increased by getting prices right with an appropriate RER. On the other hand, exchange rate instability and strict exchange controls can lead to decreased investment (Guillaumont and Jeanneney 1991). Characteristics unique to the CFA zone will determine which exchange rate policy may be most appropriate.

Regarding the second scenario, research can focus on what policies might be needed to achieve fiscal and monetary discipline, should some sort of monetary union continue without the support of the French Treasury. Or, future research can investigate how other countries have successfully managed the switch to more flexible exchange rates, should the CFA zone countries be forced to abandon the zone altogether. For example, Ghana's experience with a floating exchange rate can provide some guidance for the CFA countries.

In 1983, Ghana introduced an economic reform program. After an initial devaluation of the cedi, Ghana's currency, the government attempted to manage the nominal exchange rate. By 1986, this approach was abandoned and a dual auction system was introduced, with a

³⁵Movement of the Ghanaian cedi/CFA franc exchange rate following the 1994 devaluation highlights the need for policy coordination between countries in West Africa. The effects of the CFA franc devaluation on the exchange rate lasted less than one year, due to the continued depreciation of the cedi. By 1996, the exchange rate was at a level higher than before the devaluation (Dembélé, et al. 1996).

fixed rate maintained for government transactions. The following year, the dual auction system was abandoned and a single auction market was used for all foreign exchange transactions. In 1989, foreign exchange bureaus were introduced to help unify the parallel exchange market with the official market, and in 1990 the bureaus were granted access to the official auctions. This led to the development of an interbank market, and by 1992 the auction market had been replaced by the interbank market (van Til 1994).

In describing Ghana's transition to a floating exchange rate regime, van Til (1994) states that a primary reason for its early success was that the transition was carefully planned and controlled. He further offers the following points to consider when altering the exchange rate arrangement, based on the Ghanaian experience: (1) how gradually reforms are implemented will depend on the external resources available to support the adjustment process; (2) coordination between exchange rate adjustment and trade liberalization is essential; and (3) "political and social consensus on the need for and speed of macroeconomic and structural adjustment" must dictate the reform process (p. 151).

However, Dembélé et al. (1996) point out that while the change to a flexible exchange rate in Ghana did stimulate production in tradeable goods, recent events have highlighted the need for fiscal and monetary discipline to avoid the inflation that has led to the recent rapid depreciation of the Ghanaian cedi. A closer look at the successes and failures of exchange rate management in Ghana since 1980 can offer the CFA countries some important lessons.

6. CONCLUSION

Examination of the CFA franc zone has tended to focus on whether membership in the monetary unions is useful, or if the fixed exchange rate in combination with the convertibility guarantee is beneficial for the African countries. Few, if any, studies have specifically addressed whether or not the African countries should continue to collectively peg to the French franc. This paper has attempted to analyze this question, present some insights into how the CFA franc zone may change in the near future, and provide an understanding of potential alternatives to the fixed parity arrangement between the CFA and French francs.

There are two approaches to exchange rate management: the nominal anchor approach and the real targets approach. The nominal anchor approach has been followed in the CFA franc zone, and has been successful in maintaining low inflation rates. However, it advocates a fixed nominal exchange rate, with a commitment to maintain that rate with as little change as possible. In the CFA zone, expenditure-reducing policies were relied on to limit demand when the currency was overvalued. On the other hand, the real targets approach advocates fixing the RER at a level that can achieve a country's economic objectives. Under this approach, shown to be a practical alternative for the CFA countries, the nominal exchange rate arrangement is more flexible, with a variety of exchange rate arrangements from which to choose.

The choice of an exchange rate for any country depends on policy makers' objectives, the source of economic shocks, and the structural characteristics of the country's economy. The last is the easiest to define, and the first is often the most difficult. The three foundations of the CFA zone are unique in the developing world, and changes in any one of the three will

affect the other two. This paper provided an overview of the issues surrounding the fixed parity between the CFA franc and the French franc, and briefly discussed how a change in the fixed parity rate might affect monetary integration and currency convertibility.

There are a number of scenarios that can play out in the CFA zone in the near future. A peg to a common European currency or a basket of European currencies is appealing because it better reflects actual trade flows. Further, it may reduce exchange rate variability with non-CFA countries, and may increase the likelihood that the convertibility guarantee can continue when monetary integration takes place in Europe. Nonetheless, at some point in the near future, the CFA franc will likely become more flexible, ending the fixed parity arrangement with the French franc. When this occurs, will France be willing or able to guarantee the convertibility of the CFA franc without fixed parity? And will the CFA zone continue to exist, or will monetary integration and cooperation end in the CFA countries?

7. REFERENCES

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