



Working Paper

43

DIFFERENCES IN ECONOMIC PERFORMANCE BETWEEN FRANC ZONE AND OTHER SUB-SAHARAN AFRICAN COUNTRIES

Christopher E. Lane and Sheila Page

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1. INTRODUCTION

The programmes of structural adjustment proposed and followed by sub-Saharan African countries in recent years have frequently used changes in the exchange rate as a tool and analysis has suggested that misaligned exchange rates have been one explanation of poor past performance. The countries which are members of the CFA franc zone have been barred from using this instrument, but they have had instead a convertible currency and the credibility associated with a fixed, and externally supported, exchange rate. The economies of the franc zone have conventionally been thought to benefit substantially from the economic stability associated with fixed exchange rates and low inflation particularly in comparison to their Anglophone neighbours (Ghana, Nigeria).

Recent economic developments have made this distinction more blurred: a combination of a weak dollar in 1986 and 1987, a sharp fall in oil prices in 1986 and declining beverage prices between 1986 and 1989 have profoundly shocked most franc zone economies. Although non-franc zone Africa (hereafter NFZ) has experienced broadly similar shocks, many economies have adjusted real exchange rates as a component of programmes of economic reform. The NFZ economies have experienced higher rates of economic growth and higher export growth rates during the past few years. Whether the current changes in economic performance represent the beginning of a new trend is the subject of some considerable debate which has brought the advantages claimed for the franc zone in its present form into question. In many respects the question of whether power to devalue and increased exchange rate flexibility would benefit franc zone countries runs parallel to the issue of whether orthodox adjustment policy (fiscal cutbacks, deregulation and devaluation) is working or can be successful in Africa.

In order to analyse how important this difference in policy has been to economic performance, this preliminary study considers whether the formal difference in exchange rate mechanism has been reflected in real exchange rate performance (section 4). This follows a brief summary of the characteristics of the franc zone and a review of previous research on the comparative economic performance of the franc zone (sections 2 and 3). Section 5 considers how far monetary or other policy has been used to support an effective exchange rate policy; then sections 6, 7 and 8 analyse the differences in economic performance by comparing growth, money and inflation, debt and the balance of payments to suggest which of these could, according to the relevant theory, be explicable in terms of the exchange rate regime. Section 9 examines issues of international competitiveness and is followed by a summary of current developments with particular reference to Côte d'Ivoire.

The study uses cross-country comparisons of all sub-Saharan African countries for which the relevant data are available (data sources and country coverage are summarised in Appendix 1). The period under review is, in general, from 1975 until 1988 for historical comparisons of performance. The beginning of the time series represents the first complete year of operations following reforms to the operations of the two African monetary unions in the franc zone.

In the franc zone, monetary and exchange rate policy during 1975-1988 remained essentially unchanged, in contrast to much of the rest of sub-Saharan Africa, providing useful policy continuity for the evaluation of the long term effects of franc zone membership but also creating difficulties in drawing comparisons with alternative African exchange rate regimes during the same period. During the 1980s most large economies in the rest of sub-Saharan Africa (Nigeria, Ghana, Zaire, Kenya) implemented liberalising economic programmes which included substantial reform of the method of exchange rate determination and payments restrictions. Consequently, franc zone comparisons in the 1970s are with regimes which stressed pegged exchange rates and overvaluation as a policy goal but increasingly in the 1980s the NFZ economy had a market-determined exchange rate which tended to devalue rapidly in nominal and real terms. During 1989 some significant monetary policy changes were announced in the West African Monetary Union (WAMU), but insufficient time has elapsed to evaluate their impact upon economic performance.

In NFZ Africa, Nigeria is by far the largest economy; using 1980 \$ GDP weights Nigeria has 63% of total NFZ output; 73% of Anglophone output. With 1987 \$ GDP weights Nigeria's importance in the NFZ is reduced to 28% following substantial real devaluation and a period of slow economic growth. In the franc zone, Côte d'Ivoire and Cameroon together account for half of total 1980 and 1987 output and individually half of the total output of each monetary union.

Equal weighting schemes exaggerate the contribution of small states, while income (or similar scalar) weighted schemes tend to reduce to comparisons between a few dominant countries. This report often uses equal weighting schemes for three reasons: first, in order to generalise about policy effectiveness in all franc zone countries there can be no *a priori* reason to weight particular countries more heavily; second each franc zone state has equal representation at the regional level of monetary unions and it would be difficult to quantify individual countries' contribution to policy making in other proportions; thirdly for statistical reasons it is easier to undertake and interpret significance tests upon equal weighted data.⁽¹⁾ Weighted comparisons use 1987 \$ GDP weights.

(1) Statistical tests based on the assumptions that the sample variance is an unbiased estimate of the population variance and that population is normally distributed.

2. THE FRANC ZONE

The main features of the franc zone are:

- Collective money and credit policy exercised through regional monetary unions, namely WAMU (West Africa Monetary Union) and CAMU (Central Africa Monetary Union) with French representation.
- A fixed exchange rate of 50 CFA to the French franc (unchanged since 1948), unrestricted capital movements throughout the Zone, and monetary union within the two regional groupings.
- Guaranteed convertibility of the CFA franc into French francs by the French Government through drawings on an 'operations account' (*compte d'opérations*) at the French Treasury and pooling a minimum of 65% of foreign exchange reserves in French francs.

In all three respects (monetary policy, fixed exchange rate and guaranteed convertibility) franc zone countries differ substantially from other African states and indeed most other developing countries.

The reforms implemented in 1974 increased the range of monetary policy instruments available to the monetary authorities (interbank money market established, new reserve requirements introduced); a new control on the volume and sectoral distribution of credit was introduced (prior authorisation); and the framework for determining credit policy was decentralised to a country level within the global credit target set at a regional level.

2.1 Franc zone economies

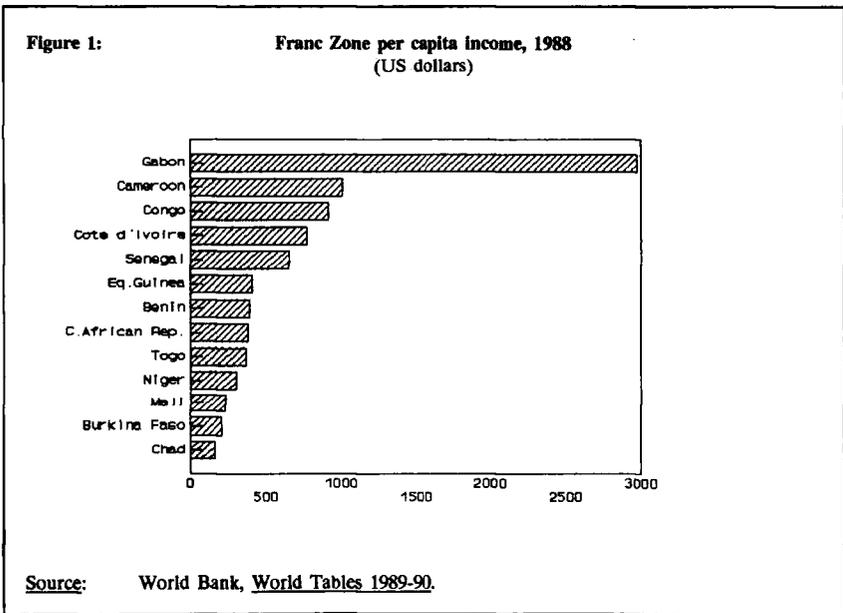
The African economies of the franc zone have very different economic structures, resource bases and levels of development from each other so that it is difficult to speak of a 'typical' franc zone country. The variation in income per head shows clearly the disparities amongst franc zone economies (figure 1).

We can identify four types of franc zone economy:

- (a) Non-oil commodity exporters (coastal): economic performance is primarily dictated by the world price of a few major exports (cocoa, coffee, groundnuts) but the economies are the most diversified in the franc zone. Includes: Côte d'Ivoire, Togo, Senegal and Cameroon (also an oil exporter).
- (b) Oil exporters (coastal): Gabon and Congo, whose exports are almost entirely petroleum, have high *per capita* incomes but undiversified economies.

Experienced sharp declines in income as the oil price declined from 1986 onwards.

- (c) **Resource Poor Economies (Sahel):** Niger, Chad, Burkina Faso and Mali are dominated by subsistence agriculture. Income is low and dependent upon unpredictable weather patterns. Sustained increases in output are constrained by the fragile ecological environment. The small formal sector means low levels of trade and possibilities for diversifying exports.
- (d) **Crisis Economies:** in Benin, Central African Republic and Equatorial Guinea GDP is low relative to historical potential due to severe political and/or economic mismanagement. Few economic statistics exist.



A common misperception is that the non-oil coastal exporters are typical examples of the relative economic success of all franc zone countries. Large economies such as Côte d'Ivoire, which had economic growth of 8.5% p.a. 1965-73 and 7.0% p.a. 1973-80 or Cameroon 8.9% p.a. 1973-80 and 7% 1980-87, have tended to represent franc zone dynamism and have been taken as typical for the franc zone, but Sahel countries such as Chad, Mali and Burkina Faso have remained with low growth and investment, and virtually no change of economic structure over the past 25 years.

3. PREVIOUS RESEARCH

Previous research on the costs and benefits of belonging to the franc zone has generally concluded that overall the arrangements provide a net economic gain. Although it is difficult to quantify the benefits of franc zone membership or to isolate them from other economic factors. Some studies suggest that the eagerness of neighbouring countries (for example Nigeria and Ghana at different times) to join one of the unions indicates the perceived net benefits of membership. The most evident benefit of membership to many neighbouring African countries, whose currencies are inconvertible and subject to extensive exchange restrictions, would probably be that of exchange convertibility. It is not sufficient however, to judge the WAMU arrangements as somehow 'better' or more conducive to development on the basis of neighbouring countries' perceptions because: entrants' perceptions may be misguided or selective and the effects of WAMU membership are not necessarily the same for each country member.

Devarajan and de Melo (1987) demonstrate significantly higher CFA-zone GNP growth rates than those in other SSA countries during the period 1960-82. However, CFA Zone growth is not significantly higher than all developing countries' growth either in aggregate or when comparing sub groups of large/small economies, poor/rich economies and oil exporters. They show a significant improvement in the relative growth performance of CFA-zone countries against most comparator groups of LDCs when comparing the 1973-82 and 1960-73 sub-periods. This result is consistent with a conclusion that the 1974 monetary reforms in the CFA-zone were helpful in minimising the costs of drastically higher oil prices to non-oil exporters.

Guillaumont, Guillaumont and Plane (1988), utilising pooled cross-sectional data for sub-Saharan African (SSA) countries, argue that franc zone membership has a significant positive effect upon a 'catch all' economic policy variable. Consequently they conclude that franc zone membership has resulted in higher GNP growth rates after taking account of exogenous growth creating or inhibiting factors. This conclusion is particularly strong when comparing the GNP-weighted mean of franc zone countries with other SSA countries in the period 1970-81. Factors to which they attribute the policy-induced higher growth performance are: guaranteed exchange convertibility, monetary discipline and a less overvalued exchange rate during this period. However, these are not used as independent variables in the estimations carried out.

In respect of Côte d'Ivoire, the largest African franc zone economy, the World Bank (1988:p.14) summarises the prevailing opinion:

WAMU membership . . . seems to have served Côte d'Ivoire well. As a result of monetary discipline, the Ivoirian economy did not suffer from the major upheavals and hyper-inflation observed in other African countries as well as in some Latin American countries whose economies resemble that of Côte d'Ivoire in many respects.

An IMF board paper on the subject of monetary unions (IMF, 1982) considered indicators for economic performance (growth, savings, investment) and economic

instruments (budget deficit, money and credit) for African monetary union members and other sub-Saharan African countries. In conclusion it stated (p.133): ' . . . any differences that emerge (1975-80) cannot be attributed exclusively to membership in a monetary union'.

Recent French-based research concerning the effectiveness of the franc zone has been somewhat divided. The Ministry of Cooperation argued in 1989 that the floating exchange rate policy of Nigeria (adopted in 1986) often had negative effects on neighbouring Francophone countries by undercutting local production (Thill and Pelletier, 1989). Jacquemot and Assidon (1989, p.194) (again for the Ministry of Cooperation) argue that devaluation in NFZ Africa has not been a notably successful adjustment strategy:

It is those countries whose currency depreciation was lowest and also whose external debt service was lowest over the period 1980-1987, which were able to enter what we have called upward adjustment.

Vallée (1989) is most critical of the existing fixed CFA-French franc link and suggests that the implementation of economic adjustment programmes encounters more political and technical obstacles than would otherwise be the case. This conclusion echoes the earlier IMF paper which contends (p.112) that a lack of exchange rate action: in some cases may have resulted in the design of a more 'contractionary' program than would have been the case otherwise.

4. TRENDS IN REAL EXCHANGE RATES

The real effective exchange rate (REER) index is an indicator of the relative movements of exchange rates and costs/prices between one country and its partner or competitor countries. When employed with caution real exchange rates may indicate changes in international competitiveness and also the flexibility of the exchange rate to relative changes in domestic and foreign prices.

The REER index utilised in this paper is computed using a trade-weighted basket of nominal exchange rate indices adjusted for relative changes in consumer prices between the home country and competitor/partner countries (source IMF, International Financial Statistics). An increase in the REER represents a real appreciation and is best interpreted as an increase in domestic prices relative to foreign prices converted at the set of nominal exchange rates. This is likely to discourage export-oriented industries, and import-substituting industries and worsen the trade balance (after initial J-curve effects), all other things being equal.

This particular REER is an imperfect proxy for relative costs owing to the use of consumer prices as a deflator. Consistent and timely data for sub-Saharan Africa unit labour costs would make the REER reflect these cost differences more accurately. However, given that labour costs and consumer prices are likely to be correlated, large changes in REERs do indicate changes in international competitiveness. The REER is also of limited use in indicating exchange rate changes required owing to exogenous changes in the terms of trade.⁽²⁾

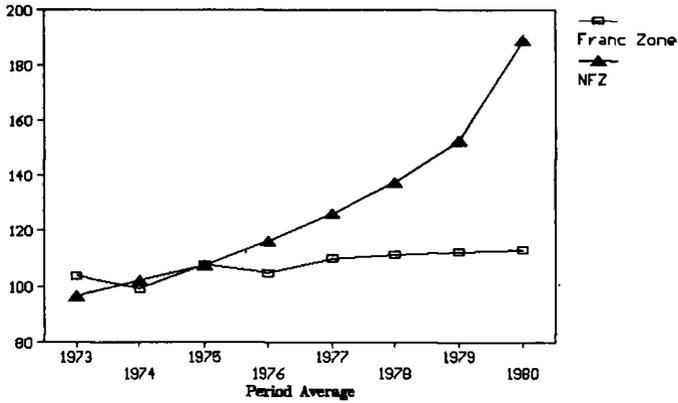
It is our view that in 1970-72 prior to the emergence of higher inflation globally and in the early days after the collapse of the Bretton Woods agreements franc zone and NFZ exchange rates were broadly comparable and at a realistic equilibrium level: the growth of merchandise exports was strong in most countries, particularly for Nigeria and faster than the growth of merchandise imports for each year; current account balances before transfers were negative but not grossly so (-3.4%, -5.6%, -4.3% of GDP 1970-72); and growth in franc zone and NFZ Africa was buoyant.

During the 1970s real exchange rates in NFZ appreciated substantially as domestic prices rose considerably faster than developed country trading partners' prices and exchange rates remained pegged to the US dollar, SDR and/or were occasionally devalued (figure 2). In the franc zone there was also a degree of real appreciation but considerably less than in NFZ owing to lower domestic inflation and, to a lesser extent, nominal devaluation of the French franc peg against other international currencies: *i.e.* franc zone members were pegged to a weaker currency than NFZ.

During the 1980s the overall position has reversed. The introduction of floating exchange rates in several NFZ countries has resulted on average in a real depreciation during the 1980-87 period despite increasing inflation in some countries (figure 3). For the franc zone the 1980-85 period was marked by a more gradual real depreciation

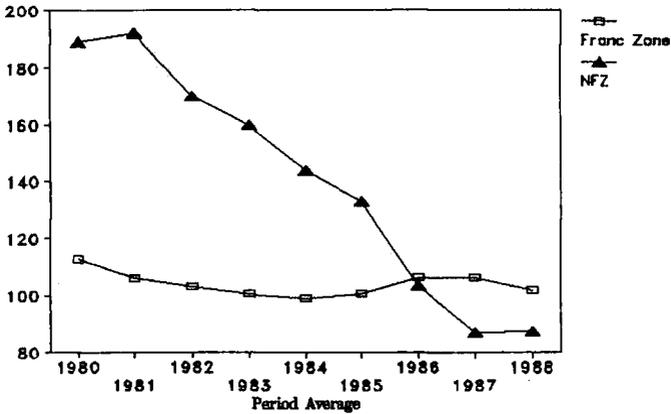
(2) A permanent fall in the terms of trade would require a real depreciation of the equilibrium exchange rate.

Figure 2: Real Exchange Rates - Franc Zone, 1973-1980
(1970-72 = 100)



Note: Sample - 10 franc zone, 18 NFZ Africa equal weighting.
Source: IMF, International Financial Statistics.

Figure 3: Real Exchange Rates - Franc Zone, 1980-88
(1970-72 = 100)



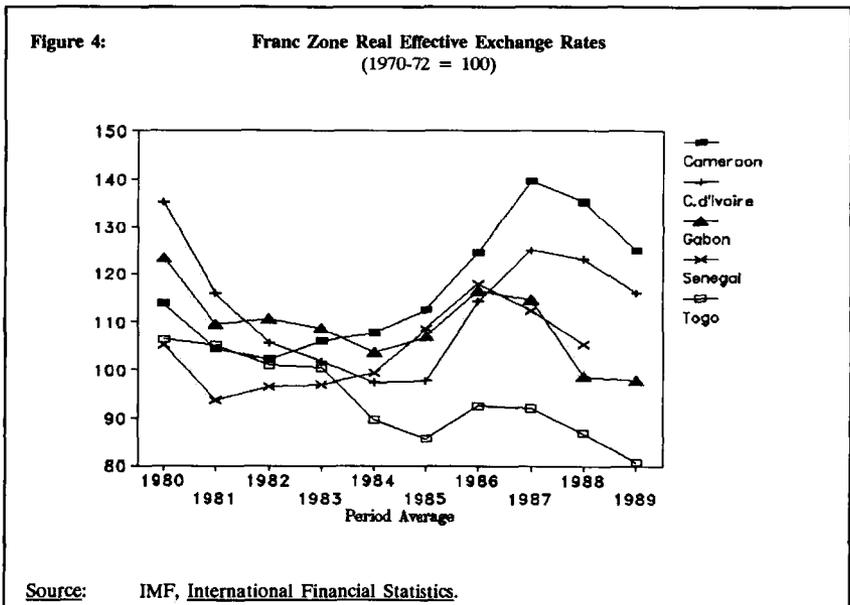
Note and source: As for Figure 2.

than the NFZ, largely owing to the strengthening of the US dollar. A real depreciation followed for some franc zone countries during 1987 and 1988 depending on the importance of dollar denominated trade and domestic inflation developments.

On the assumption that the base years 1970-72 are suitable and comparable, the recent NFZ real depreciation has returned exchange rates to a relatively competitive level *vis-à-vis* franc zone countries. We subsequently show partial evidence that the foreign exchange equivalent of costs in NFZ are now likely to be substantially lower than in the franc zone.

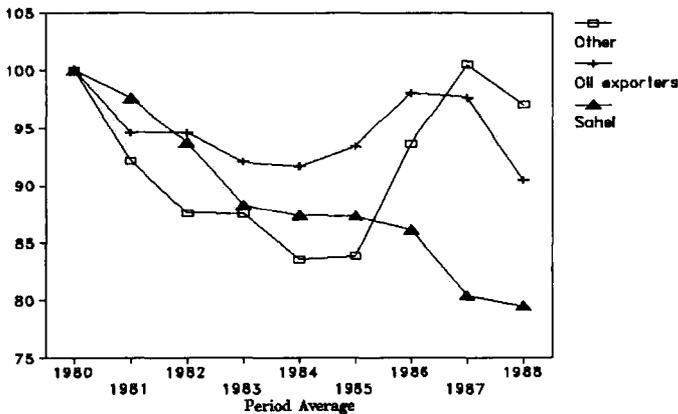
One theme that runs through this report is that descriptive statistics referring to the franc zone in its entirety can be misleading. This is highlighted by divergences in real exchange rate movements for franc zone countries. Differing trends in real exchange rates arise from differences in either trade composition or domestic inflation.

Figure 4 illustrates these differences at the country level. It is clear that franc zone arrangements are not sufficient to ensure stability of the real exchange rate. Devarajan and de Melo (1987) argue that franc zone arrangements allow sufficient flexibility in economic policy for markedly different adjustment paths to be taken. A substantial proportion of the variation between countries results from differing monetary policies followed under the general umbrella of monetary union supervision. In brief, there is no guarantee of uniform rates of inflation within the franc zone as money and credit expansion may vary from country to country. For example, Honohan (1990) argues that the relatively wealthy countries in WAMU tend to dominate the process of credit distribution.



The low level of trade among African franc zone countries also permits price variations to persist across national borders. Coastal (non-oil) exporters have experienced the most significant appreciation since 1985 (Côte d'Ivoire and Cameroon) and have also followed the most expansionary monetary policy and had the highest inflation rates (figure 5). Sahel economies have been more closely associated with contractionary monetary policies and more depreciated real exchange rates.

Figure 5: Real Franc Zone Exchange Rates, 1980-88, by Country Grouping*
(1980 = 100)



Note: * see table 7.

Source: IMF, International Financial Statistics.

Despite the considerable differences in real exchange rate performance among franc zone countries, the variation of real exchange rates is, in general, substantially lower in sub-Saharan countries which are members of the franc zone (table 1). There is a significant difference between averages of coefficients of variation over the entire period and those over the latter period 1980-88 at 95% confidence level.

Malawi stands out as the only country in the sample with real exchange rate variance comparable to that of most franc zone countries over the entire 1973-88 period. Although other evidence suggests that the highest variance real exchange rates of the NFZ have undoubtedly been seriously misaligned during both the 1970s and 1980s an analysis of historical variance is unlikely to shed much light upon the appropriateness of real exchange rate levels over the past few years.

Table 1: Variation of Annual Real Exchange Rates

	<i>Coefficient of variation</i>		
	<i>1973-88</i>	<i>1973-80</i>	<i>1980-88</i>
Franc zone	.078	.064	.074
NFZ	.290	.157	.295

Note: Sample - 10 franc zone, 18 NFZ Africa equal weighting.

Source: IMF, International Financial Statistics.

5. INSTITUTIONS WHICH HAVE SUSTAINED A FIXED EXCHANGE RATE AND CONVERTIBLE CURRENCY

The institutional arrangements for the conduct of monetary policy and restrictions upon country fiscal policies are the two main reasons explaining the persistence of the fixed exchange rate with the French franc and convertibility over the entire post-war period, contrasting sharply with the lack of monetary and fiscal discipline elsewhere in sub-Saharan Africa.

5.1 Credit ceilings

The franc zone central banks differ crucially from many other central banks as they act not only as a lender of last resort but as an important source of refinancing (technically rediscounting) for the domestic banking sector. For example, the proportion of credit to the economy which is refinanced by the Central Bank in WAMU has averaged close to 40% since 1982.

Refinancing operations, which affect the size of the monetary base, have been the principal instrument to influence the level and, to a lesser extent, the composition of credit in the economy. Annually a country ceiling for total central bank credit is determined. The change in the level of the country ceiling usually defines the general monetary stance for the year in question.

Determination of a specific country ceiling is taken within the framework of the overall reserves of the union which, according to a rule in WAMU statutes, should not fall below 20% of its liabilities⁽³⁾ for more than three consecutive months without steps being taken to remedy the position. This coverage rule would be a strong constraint upon money creation when effectively applied, as occurred until 1986 in WAMU, because it includes virtually all liabilities which the central bank of a franc zone monetary union has discretionary powers to adjust in the short term. When the 20% ratio is breached, reductions of central bank refinancing should, in theory, feed through to reductions in bank credit thereby constraining the rate of money issue.

Since September 1986 however, the level of WAMU reserves has been consistently below 20% of sight liabilities, between December 1987 and December 1988 coverage declined from 12.6% to 7.1%. This development was a reflection of a deteriorating trading environment and also, an inability to impose effective restrictive policy in the (large) countries where it was most needed. In CAMU reserve coverage also deteriorated markedly in the mid 1980s but experienced some improvement in 1988. The 20% reserve coverage requirement is now breached consistently at a country level as well as at the WAMU level. Côte d'Ivoire for example has operated at less than 2% coverage for most of the 1980s.

(3) The major sight liabilities of the Central Bank consist of: notes and coins, sight deposits from banks and financial institutions and foreign currency liabilities.

Table 2 illustrates these problems: countries in WAMU which overshot the ceilings for central bank credit also had negative net foreign assets (and low reserves). Although WAMU as a whole was programmed to have a contractionary monetary policy between 1986 and 1988, the outcome was increasing divergence from the specified targets.

	<i>Ceiling</i> (CFA bn)			<i>Actual over ceiling</i> (per cent)			<i>Net Foreign Assets</i> (CFA bn)
	1986	1987	1988	1986	1987	1988	1988
Benin	55	56	56	5.6	11.7	41.3	-47
Burkina Faso	20	25	27	-2.6	0.8	-15.2	76
Côte d'Ivoire	524	507	486	3.6	24.9	31.5	-416
Mali	30	34	34	73.8	58.7	73.0	-19
Niger	38	40	45	1.9	7.6	-8.8	34
Senegal	188	181	168	8.0	10.8	44.7	-222
Togo	25	27	28	-11.2	-10.0	-15.9	40
	880	869	845	6.5	19.9	31.3	-554

Source: Franc Zone Secretariat (1989), pp. 77, 79 and 185.

The combination of distinct country monetary and refinancing policies allows a considerable degree of variation in monetary policy and hence in potential price and output developments in WAMU countries. Countries which overshot refinancing ceilings were those actually programmed to implement a contractionary refinancing policy. This lack of effectiveness explains why low coverage in countries such as Côte d'Ivoire did not lead to changes in policy. The weakness of refinancing policy has been connected with the allocation of credit to finance rural exports which operated without a effective ceiling until more binding ceilings were announced in 1989. At present there are no data to evaluate whether the recent reforms have been effective.

Total credit to Government is strictly limited to 20% of the previous year's fiscal receipts. In practice, this is treated as an automatic entitlement. In the absence of specific coordination of fiscal and monetary policy, the credit limit to government is usually insufficient to fund borrowing requirements but there are several routes to render the ceilings ineffective:

- (a) Reduce government transfers to parastatals and pressurise banks to lend to them without adequate collateral.
- (b) Delay payment to the private sector.
- (c) Increase foreign borrowing.

In the example of Cameroon (table 3) 'inflationary' Central Bank financing is a small proportion of total financing obtained. Substantial arrears accumulated in 1986/87 and 1987/88, net foreign financing was substantial and in 1989/90 the Government took over debts accumulated by parastatals.

	<i>1985/86</i>	<i>1986/87</i>	<i>1987/88</i>	<i>1988/89</i>	<i>1989/90</i>
Surplus/deficit(-) (commitment basis)	-49	-508	-214	-140	-93
Change in arrears (-) decrease	-20	250	90	-165	-88
Restructuring of public enterprises					-100
Surplus/deficit(-) (cash basis)	-69	-258	-124	-305	-281
Foreign financing	48	117	161	209	233
Domestic financing	21	141	-37	144	3
o/w central bank:	5	-5	-31	46	25

Source: IMF (1989).

The main conclusion of the previous discussion is that the coverage rules which helped maintain convertibility are no longer strictly observed, in particular by large franc zone economies (see below). Control of central bank credit to governments has been maintained, which we show subsequently to have a significant effect upon lowered rates of monetary growth, but other forms of refinancing have operated without effective restraint.

Two mechanisms help maintain convertibility in the franc zone with a fixed exchange rate and diminishing foreign reserves. Firstly, countries in each monetary union pool a minimum of 65% of reserves. Thus providing the monetary union in aggregate is in surplus, countries experiencing a loss of official reserves can draw upon others'

surpluses. Secondly, the French Treasury guarantees convertibility via an operations account held in France. Reserves in effect are borrowed from the French Government.

5.2 Use of the operations account

The operations account is the feature which distinguishes the foreign exchange operations of the franc zone from other African economies. It operates from the French Treasury which guarantees to exchange CFA francs for French francs and debits the relevant accounts accordingly. This provides a credible hard currency attribute to the CFA franc.

The deterioration in the operations account is shown in table 4 and has become particularly marked since 1986 in both monetary unions. As later sections show this coincides with a deterioration in the growth performance of the franc zone. Although data are unavailable for 1989, piecemeal evidence suggests overdrafts increasing at a substantial rate.

<i>Country</i>	<i>1983</i>	<i>1984</i>	<i>1985</i>	<i>1986</i>	<i>1987</i>	<i>1988</i>
Cameroon	62610	22240	47937	17087	-125462	-74363
Central African Republic	17673	23576	17666	20565	23612	28753
Congo	-445	-25327	-18617	-29136	-27098	-32541
Gabon	74537	91848	71400	33861	-19100	2626
Equatorial Guinea			-1890	558	-2845	-2066
Chad	9243	20455	10828	4598	10138	15394
Total CAMU	163618	132792	127324	47533	-140755	-62197
Benin	-23301	-22961	-26213	-26923	-36231	-44337
Burkina Faso	23702	35531	33964	52440	63457	74470
Côte d'Ivoire	-228699	-173091	-112746	-104627	-170185	-251203
Mali		-379	-8650	-16532	-16412	4719
Niger	8709	32164	37664	48096	55848	59557
Senegal	-99499	-94310	-144167	-102365	-89525	-129190
Togo	67202	93330	104415	97579	93007	67025
Total WAMU	-251886	-129716	-115733	-52332	-100041	-218960
TOTAL	-88268	3076	11591	-4799	-240796	-281157

Sources: Franc Zone Secretariat (1989) and IMF, International Financial Statistics.

The operations account is not however an unlimited overdraft account. French intervention is likely to occur in setting monetary policy as the account for an individual country moves increasingly into deficit. France has pressed strongly to improve the Ivorian operations account deficit before the end of 1990 as the severe deterioration in 1988 continued into 1989. Whilst the extent of previous French intervention in monetary policy decisions is not known, continued external pressure of this type for shifts in monetary policy can only lower confidence in the ability of WAMU authorities to maintain a fixed exchange rate regime.

Nine of the thirteen franc zone countries are severely indebted according to the new World Bank country debtor classification (World Bank, 1989) which uses payment arrears in relation to GDP as one of several indicators of indebtedness; furthermore, voluntary new lending is not available. Therefore countries with substantial overdrafts on the operations account would have been unable to maintain convertibility in the absence of French guarantees when pooled reserves were exhausted, i.e. in 1987 for the sum of both monetary unions.

Those countries which have benefited most in absolute terms from the operations account mechanism are commodity exporters Côte d'Ivoire, Senegal and Cameroon; the three largest economies in the monetary unions. Apart from France, countries financing this borrowing have been low income, the Sahelian economies of Burkina Faso and Niger and also coastal Togo. On the assumption that devaluation would improve the balance of payments in the medium term and aid accumulation of reserves it is the former countries (three large commodity exporters) which require devaluation and the latter require some compensating domestic price adjustment to maintain the existing real exchange rates.

6. FRANC ZONE COMPARATIVE PERFORMANCE: RESERVES, DEBT AND BALANCE OF PAYMENTS

6.1 Reserve coverage

To test the hypothesis that the pooling of reserves allows lower coverage levels for franc zone countries than other sub-Saharan African countries (NFZ) we compared their months of import coverage. If it could be shown that the rate of return on reserves invested in franc zone economies was higher than the return from holding reserves in foreign currency then lower holdings of reserves are likely to confer a net economic benefit.

For gross reserves franc zone countries did hold significantly lower levels (at 95% confidence level) in relation to imports of goods and services than NFZ for each year during the period 1975-79. From 1983 onwards the franc zone-NFZ difference in reserve coverage has been small and statistically insignificant with an equal weighting scheme. This change arose from substantially increased reserve holding in a few small franc zone economies: by 1987 Togo had 8.0 months import coverage, Niger 5.9 months and Burkina Faso 4.7 months. Table 5 shows the months of import coverage for franc zone and NFZ country groups for selected years. The t-statistic tests whether the mean reserve coverage is significantly different in the two groups.

Table 5:		Reserve Coverage (months of imports), selected years, equal weights				
		1975	1978	1981	1984	1987
Franc zone		1.8	1.0	0.9	1.9	2.2
NFZ		3.7	2.9	2.3	1.6	2.2
t-statistic (difference in means)		2.44*	2.35*	1.20	0.37	0.17
Note:	* means significantly different at 95% confidence level.					
Source:	World Bank, <i>World Tables 1989/90</i> .					

The large franc zone economies however function on extremely low levels of reserves, at end-1987 for example Côte d'Ivoire 0.03 months, Congo 0.04 months, Cameroon 0.30 months and Senegal 0.10 months. Maintenance of a convertible currency with such low levels of reserves is possible only owing to the French guarantee via the operations account.

6.2 Convertibility, debt and the operations account

We hypothesise that several factors may have encouraged franc zone economies to accumulate higher levels of foreign debt than NFZ economies: first, restrictions on public domestic borrowing could have increased the demand for foreign financing; second, the French guarantee of convertibility of the CFA franc may have raised the creditworthiness of franc zone borrowers relative to NFZ for commercial lenders which could result in lower interest rates and hence increased demand or greater supplies of loanable funds; third, the operations account may induce 'casual' balance of payments support and prevent or delay the implementation of measures which reduce foreign financing requirements.

However, our conclusion is that foreign debt accumulation does not appear to have been increased substantially by guaranteed convertibility with a fixed exchange rate. *Per capita* debt in the franc zone is nearly double that of the rest of Africa but so is the *per capita* GNP. Comparing debt to GNP ratios for 1988 we observe a considerable range in both the franc zone and NFZ (table 6) which results in a rejection of the hypothesis that the average debt to income ratio in the franc zone differs from the NFZ average (at 95% confidence level).

Table 6: Foreign Official and Commercial Debt/GNP, 1988

<i>Franc zone</i>	%	<i>Other Africa</i>	%
Congo	243.9	Mozambique	294.0
Côte d'Ivoire	164.7	Zambia	289.3
Mali	117.7	Mauritania	226.9
Togo	97.3	Somalia	203.5
Gabon	83.3	Madagascar	177.8
Niger	80.3	Liberia	151.1
Senegal	80.3	Zaire	148.2
Central African Republic	61.8	Tanzania	127.3
Benin	60.8	Sudan	104.0
Burkina Faso	48.1	Malawi	103.1
Chad	40.0	Nigeria	99.6
Cameroon	37.3	Sierra Leone	77.1
		Kenya	71.1
		Burundi	67.0
(Mexico	60.4)	Ghana	55.2
		Ethiopia	54.2
		Mauritius	45.4
		Zimbabwe	43.5
		Uganda	42.5
		Botswana	41.7
		Lesotho	40.0
		Rwanda	29.7

Source: World Bank, *World Debt Tables 1989/90*.

One noticeable difference in debt-income ratios is that middle income countries in the franc zone tend to have amongst the highest ratios (Congo, Côte d'Ivoire and Gabon) whereas the few middle income countries in the NFZ have low ratios (Botswana, Zimbabwe). However, Cameroon stands out as an important exception to this rule suggesting that other country specific circumstances are more important than exchange rate arrangements and associated institutions. Stock:flow ratios such as debt to income or exports can also be unreliable indicators of relative propensities to accumulate debt as changes in the flow variable may lead to errors in interpretation. For example, the highest debt to income ratios (Mozambique, Zambia, Mauritania and Congo) are as much a product of declining income as rising debt stocks. For low income sub-Saharan countries the vast majority of foreign borrowing is from official sources.

We next test the hypothesis that NFZ countries had a greater propensity to borrow from the IMF for purposes of balance of payments support because they did not have access to an operations account-type facility which substitutes for IMF funds nor substantial French co-financing. Table 7 shows that NFZ countries did tend to borrow proportionately more from the IMF as a percentage of GDP than franc zone countries. Considering subgroups of franc zone countries, both Sahel and oil exporters (excluding Cameroon) had considerably lower levels of borrowing than NFZ from 1975 to 1989. The differences are less marked for NFZ against other large non-oil exporters (Côte d'Ivoire, Senegal, Cameroon and Togo). From this we can very tentatively conclude that franc zone Sahel and oil exporting economies are less likely to have balance of payments crises than NFZ countries (see also next section). Those franc zone countries with IMF programmes may utilise a lower proportion of quota if significant French co-financing is on offer.

Table 7: Stocks of Outstanding IMF Credits

	1975-78	1979-82	1983-86	1987-89
Value \$ millions:				
Franc zone	130	420	1066	1203
NFZ	773	2176	4324	4662
Percentage of GDP:				
Franc zone	0.7	1.2	3.2	2.7
NFZ	1.4	3.4	6.8	6.6
Nigeria	0.0	0.0	0.0	0.0
Franc zone sub-groups:				
Oil exporters ^(a)	0.5	0.4	0.2	1.9
Sahel ^(b)	0.7	0.6	2.6	2.2
Other ^(c)	1.0	2.3	5.9	4.1

Notes: (a) Gabon, Congo and Cameroon.
 (b) Senegal, Mali, Burkina Faso, Chad, Niger and Benin.
 (c) Togo, CAR and Côte d'Ivoire.

Source: World Bank, *World Tables 1989/90*, and IMF, *International Financial Statistics*.

To the extent that the Fund plays a catalytic role in mobilising assistance, the absence of IMF programmes in countries such as Benin and Burkina Faso may have reduced the supply of official finance and hence the growth of their outstanding official debt stock. A relevant example is Burkina Faso where the Sankara government (1983-87) refused negotiations with the IMF (Englebert, 1990).

The importance of the operations account should however be kept in proportion to its size. Although operations account deficits with the French Treasury are in principle unlimited, the alleged practice of French intervention over domestic monetary policies in franc zone Africa has limited the volume of borrowing from this source. Consequently estimated overdraft borrowing from the French Treasury is less than 3% of the total African franc zone debt stock (\$34.6 billion end-1988).

6.3 Direct foreign investment and current account balance

In order to test the hypothesis that franc zone membership involved higher capital inflows owing to exchange rate stability we tested two variables: the ratios of current account balances before official transfers and of net direct foreign investment to GDP. Insofar as capital inflows were productively invested higher proportions to GDP would suggest higher growth rates were attainable.

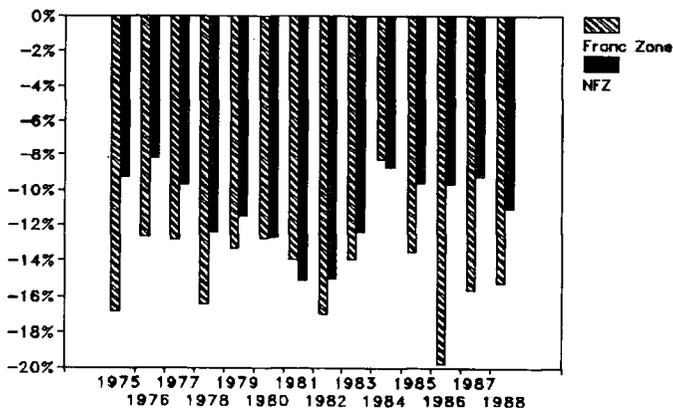
There is weak evidence to show that franc zone countries had larger current account deficits than NFZ Africa, in all but two years between 1974 and 1988 equal weighted deficits were higher, and only marginally lower in 1981 and 1984 (figure 6). However the variation within each grouping precludes significant conclusions. In table 8 the mean ratios of the current account to GDP are compared over four periods, with the t-statistics demonstrating that the group means were not significantly different. In part this is due to the high variance of the current account deficit to GDP ratio within the franc zone. The second half of table 8 shows the widely differing ratios between oil exporters, Sahel countries and other franc zone economies which arise, *inter alia*, from changes in the oil price and differing levels of official transfers.

The largest divergences in current account deficits appeared from 1986 onwards when the franc zone oil exporters swung sharply into deficit. Transfers to Sahel economies, particularly labour remittances, appear to have sustained current account deficits of between 15 and 20%. Comparing the largest NFZ economy (Nigeria) with the three largest franc zone economies plus Togo in the non-oil grouping shows remarkably low net inflows to the former.

Examination of net direct foreign investment (DFI) flows shows that higher current account deficits have not been sustained by higher levels of direct foreign investment in the franc zone. In fact, DFI was only higher in the franc zone in 6 out of 15 years to 1988 (table 9). A recent trend of note is the persistent low level of DFI in the franc zone during the 1980s whilst the NFZ has seen substantial increases in DFI in 1987 and 1988.

Figure 6:

Ratio of Current Account to GDP
(equal weights, expressed as percent)



Source: World Bank, World Tables 1989/90.

**Table 8: Current Account before Official Transfers to GDP,
Equal Weighted**

	1975-78	1979-1982	1983-85	1986-88
Franc zone	-14.7%	-14.2%	-11.9%	-16.7%
NFZ	-10.3%	-14.2%	-10.5%	-10.3%
t-statistic (difference in means)	(-1.31)	(-0.02)	(-0.45)	(-1.61)
Nigeria	-2.1%	-1.8%	-0.6%	-1.0%
Franc zone sub-groups (see table 7):				
Oil exporters	-15.3%	-4.3%	-3.8%	-23.0%
Sahel	-17.2%	-15.0%	-17.8%	-19.6%
Other	-10.6%	-15.9%	-9.1%	-12.1%

Source: World Bank, World Tables 1989/90.

Table 9: Direct Foreign Investment (US\$ millions)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
FZ	162	334	135	102	330	316	374	178	300	231	170	135	244	117	96
NFZ	564	510	556	671	498	695	-426	675	596	481	337	537	200	1200	981
Net Direct Foreign Investment as % of GDP															
	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
FZ	1.23	1.70	0.86	0.65	1.77	1.32	1.02	0.55	0.93	0.56	0.44	0.83	0.99	0.46	0.57
NFZ	2.55	-1.24	1.13	1.05	1.25	2.57	1.34	0.98	0.80	0.56	0.74	0.44	-0.02	0.99	1.25

Source: World Bank, World Tables 1989/90.

This comparative tour of elements of the balance of payments of sub-Saharan African economies has not allowed very substantive conclusions to be drawn concerning different performance or trends between franc zone and other economies. If anything, the lesson learnt is that differences between defined groups within the franc zone are as important as differences with other economies. If we are to force a conclusion, it might be that franc zone countries are able to incur higher current account deficits which are financed by higher levels of foreign borrowing. Higher levels of borrowing in turn could be associated with the difficulties created by franc zone arrangements in domestic public borrowing and owing to the fact that the franc zone has more middle-income countries which are, historically at least, more favoured recipients of commercial funds. No evidence was found of higher levels of foreign investment in the franc zone. Since 1986, the differences in balance of payments have become more evident: franc zone countries have substantially higher current account deficits, foreign investment has fallen and the level of reserves has fallen.

7. THE FRANC ZONE: MONETARY AND INFLATION PERFORMANCE

7.1 Monetary growth

On the assumption that rapid monetary growth eventually feeds through to higher levels of inflation we have compared the rates of growth of monetary aggregates (broadly defined and as a means of payment) in the franc zone and NFZ.

Table 10 shows that monetary growth in the FZ was consistently lower than in the NFZ from 1977 to 1988, with a minor exception in 1981 for broad money. The variance of NFZ monetary growth rates is however relatively high such that the sample means are significantly different only in the last four years of the sample from 1985 to 1988. In these latter years clearly divergent trends have occurred with broad money growth in the FZ falling from 20% in 1984 to 1% in 1988 whilst NFZ growth has been consistently above 40% per annum. For narrow money (cash and sight deposits) the relative change in performance has been even more marked and franc zone monetary growth is significantly different at 99% confidence for each year 1985-88. However, a few very high monetary growth countries artificially raise the NFZ average and variance.

Table 10:	Annual Broad Money Growth ^(a) (proportion, equal weights)														
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	
FZ	0.21	0.32	0.18	0.17	0.11	0.18	0.23	0.12	0.10	0.20	0.09	0.04	-0.03	0.01	
NFZ	0.17	0.26	0.27	0.22	0.23 ^c	0.22	0.22	0.20	0.19	0.23	0.34 ^d	0.37 ^c	0.37 ^d	0.30 ^d	
Floater ^e	0.24	0.32	0.34	0.28	0.24 ^c	0.35	0.34	0.33 ^c	0.34 ^d	0.44	0.51 ^d	0.77 ^d	0.59 ^d	0.67 ^d	
	Narrow Money Growth ^(b)														
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	
FZ	0.19	0.30	0.16	0.16	0.12	0.14	0.22	0.12	0.07	0.17	0.04	0.02	-0.05	-0.09	
NFZ	0.19	0.24	0.29 ^c	0.18	0.21	0.21	0.24	0.17	0.17	0.24	0.33 ^d	0.39 ^d	0.35 ^d	0.28 ^d	
Floater ^e	0.26	0.35	0.35	0.28	0.22	0.34 ^c	0.38	0.32	0.39 ^d	0.46 ^c	0.56 ^d	0.76 ^d	0.51 ^d	0.40 ^d	
Notes:	(a) Excluding Mozambique and Lesotho. (b) Excluding Mozambique, Liberia and Lesotho. (c) Difference significant at 95% confidence level. (d) Difference significant at 99% confidence level. (e) Ghana, Nigeria, Sierra Leone, Uganda, Zaire and Zambia.														
Source:	World Bank, <u>World Tables 1989/90</u> .														

To isolate the high monetary growth NFZ countries we defined the comparator group to the franc zone as countries which have implemented floating exchange rate regimes during the 1980s (Ghana, Nigeria, Sierra Leone, Uganda, Zaire and Zambia). In these cases monetary growth is significantly lower in the franc zone for most of the 1980s (for narrow and broad money in all but one year during 1982-88). In effect countries which implemented floating rates can be categorised as countries with weak monetary control as significant divergences in monetary growth arose several years before the exchange rates in question were floated.

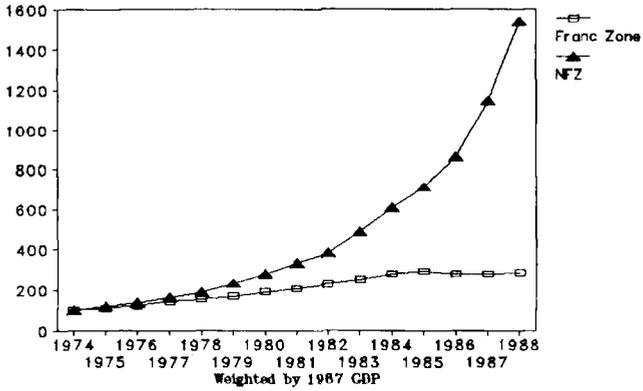
7.2 Inflation

GDP deflators (*i.e.* economy-wide price deflators) show clearly opposite trends in the two main groupings (table 11). Franc zone rates have fallen from 10% average 1975-78 to 8% p.a. 1983-85 and -1% p.a. during 1986-88. NFZ rates have accelerated from 15% p.a. in 1975-78 to 31% p.a. in 1986-87, although a few high inflation countries tend to distort the NFZ average. At 95% confidence level franc zone inflation was significantly different from NFZ during 1983-85 and at 99% during 1986-1988 despite high variance in the NFZ sample.

	1975-78	1979-82	1983-85	1986-88
Franc zone	10.5	11.1	8.2	-1.4
NFZ	15.9	19.0	24.2 ^(a)	31.0 ^(b)
Franc zone sub-groups (see table 7):				
Oil exporters	7.6	19.7	6.4	-8.8
Sahel	10.3	8.5	8.0	-2.1
Other	10.9	8.1	9.0	1.4
Notes: Excluding Mozambique.				
(a) Difference significant at 95% confidence level.				
(b) Difference significant at 99% confidence level.				
Source: World Bank, <u>World Tables 1989/90</u> .				

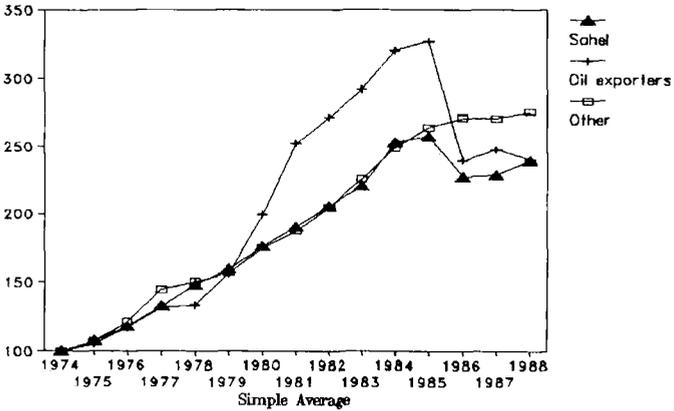
Figure 7 highlights the long term divergence of inflation rates by comparing 1987 GDP-weighted GDP deflator indices in the franc zone and NFZ. In figure 8 we see that inflation rates are fairly uniform within the franc zone: until 1984 non-oil coastal exporters rarely diverged on average from Sahel economies; the CAMU oil exporters (Gabon and Congo) sustained substantially higher price levels until oil price declines

Figure 7: GDP Deflator Indices (1974 = 100)



Source: World Bank, World Tables 1989/90.

Figure 8: GDP Deflator Index - Franc Zone Sub-Groups* (1974 = 100)



Note: * see table 7.

Source: World Bank, World Tables 1989/90.

in 1986 had a profound deflationary impact. Although price levels have stabilised since 1986 it is clear that non-oil coastal economies have stabilised at a higher price level than other franc zone economies providing an explanation for more appreciated real exchange rates (shown in figures 4 and 5).

As controlling inflation is a clear macroeconomic policy objective a primary conclusion of this study is that the franc zone did make a difference to rates of inflation experienced because the rate of growth of monetary aggregates is more amenable to control and because the experience of lower inflation has been fairly uniform across franc zone economies.

8. COMPARATIVE PERFORMANCE IN OVERALL GROWTH AND EXPORT GROWTH

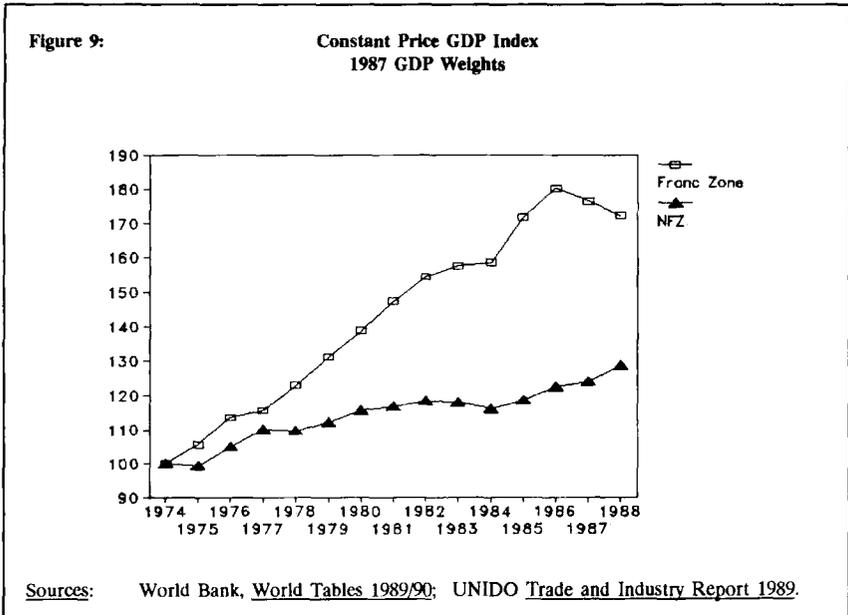
8.1 GDP growth

The important development in franc zone against NFZ growth rates has been the relative decline in franc zone growth rates beginning in 1986 which parallels the deterioration of the current account balance highlighted in the previous section. Table 12 shows annual figures (1975-1989) for equal weighted and 1987 GDP weighted country groupings. For equal weighted data franc zone growth was significantly higher than NFZ in 1982, significantly lower in 1987 and projected lower in 1989.

Table 12:		Real GDP Growth Rates (%)															
		(i) equal weighted data															
		1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	
FZ		5.6	7.2	1.3	2.8	3.2	3.9	3.4	6.6	0.2	0.4	7.0	3.7	-2.7	2.3	1.7	
NFZ		0.8	4.7	5.2	2.8	2.6	2.3	3.2	0.6	1.4	1.4	3.9	4.0	3.8	3.6	2.9	
t-statistic		1.46	0.87	-1.40	0.00	0.21	0.68	0.09	2.96	-0.55	-0.40	1.60	-0.13	-4.29	-0.84	-2.12	
Nigeria		-3.3	9.5	6.1	-5.5	7.2	3.4	-5.7	-0.2	-6.2	-7.4	7.6	2.3	-4.2	4.7	2.9	
FZ sub-groups (see table 7):																	
Oil																	
exporters		14.8	18.7	-11.3	-9.1	6.2	10.6	5.0	14.4	4.3	6.9	2.3	-6.4	-8.6	0.4	2.6	
Sahel		5.7	6.4	4.3	3.7	0.2	-0.6	2.8	5.1	-0.1	-4.9	10.4	9.4	-3.4	6.6	1.2	
Other		4.9	4.3	3.3	8.3	5.2	6.6	3.3	4.0	0.8	-0.1	7.0	4.7	0.1	-0.8	1.9	
		(ii) 1987 GDP weights															
FZ		5.6	7.6	1.9	6.3	6.7	5.7	6.2	4.8	2.1	0.6	8.4	4.8	-2.1	-2.3	1.7	
NFZ		-0.7	5.6	5.0	-0.4	2.4	3.1	1.0	1.3	-0.4	-1.5	2.2	3.3	1.2	3.7	2.9	
Note:		1989 figures are projections.															
Sources:		World Bank, <u>World Tables 1989/90</u> ; UNIDO, <u>Trade and Industry Report 1989</u> .															

Historically franc zone GDP growth rates (constant prices in local currency) have been higher than NFZ whether using equal weighted or GDP weighted data. For example, using 1987 GDP weighted data franc zone growth was higher than NFZ for all but one

year during the 1975-86 period. During the period 1987-89 NFZ growth rates have been higher using either equal or 1987 GDP weights. However, owing to the high variance of annual growth rates average franc zone growth was only significantly different from NFZ (equal weighted 95% confidence) in 1982. Figure 9 shows that the cumulative effect of the difference in growth rates is substantial.

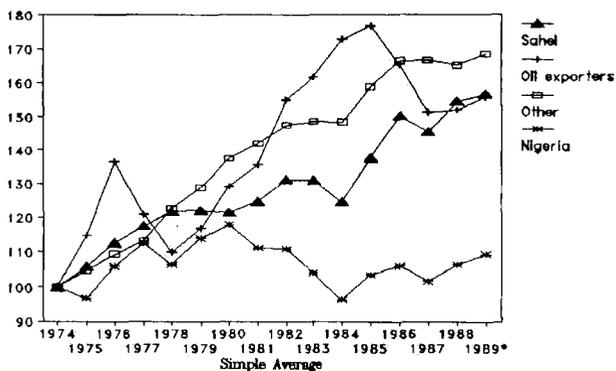


In 1987 and 1988 franc zone growth was lower than in the NFZ and significantly so in 1987 at 99% confidence for equal weighted data. Estimates and forecasts suggest this continued in 1989 and 1990. The change in relative growth rates appears to result from slower franc zone growth particularly in large franc zone economies rather than faster growth in the NFZ.

Figure 10 shows the trends in our identified franc zone sub-groups. All have grown considerably faster than Nigeria but progress has been far from even. The most steady trend growth has been achieved by the more diversified coastal non-oil exporters in contrast to weather determined booms and slumps in Sahel countries and oil price determined growth changes in the two oil exporters.

Figure 10:

Constant Price GDP Index
Franc Zone Sub-Groups and Nigeria**
 (1974 = 100)



Notes: * 1989 figure projected; ** see table 7.

Source: World Bank, World Tables 1989/90; UNIDO, Trade and Industry Report 1989.

8.2 Longer-term trends

A least squares dummy variable approach⁽⁴⁾ was employed to test the impact of franc zone membership on GDP and GNP growth over periods of several years. Although not a particularly sophisticated estimation approach it is probably sufficient to draw general conclusions. The time period for actual data was divided into 1974-80 and 1981-87 using data from 33 sub-Saharan countries (excluding Mozambique).

The model estimated is:

$$Y_{it} = \sum_{i=1}^{33} a_i D_{it} + b_0 T + b_1 D^*_{it} T + v_{it}$$

Where i refers to country, t time, Y log income, D country dummy, D^* franc zone dummy, T time, v error.

⁽⁴⁾ See Maddala (1977, pp.322-331) for a summary of pooled cross-section and time series estimation techniques.

D_{it} is a dummy variable which takes the value of zero unless the observation belongs to the i th country. The model has a separate intercept for each country, a growth rate b_0 and a franc zone growth differential b_1 . For brevity the 33 country dummies are not reported in the results.

The results in table 13 show that the franc zone dummy is positive in each regression but only differs significantly from zero in the latter period 1981-87, at 95% confidence for real GNP and 88% confidence for real GDP, as indicated by the t-statistics (in brackets).

<i>Dependent Variable*</i>	<i>Time Index</i>	<i>FZ Dummy</i>	<i>obs</i>	<i>R²adj</i>	<i>SEE</i>	<i>DW</i>
Log GNP (1974-80)	0.0929 (7.35)	0.0109 (0.52)	231	1.000	0.097	1.763
Log GNP (1981-87)	0.0412 (4.07)	0.0329 (1.96)	231	1.000	0.078	1.809
Log GDP (1974-80)	0.0308 (7.70)	0.0024 (0.34)	231	1.000	0.097	1.798
Log GDP (1981-87)	0.0187 (6.08)	0.0079 (1.55)	231	1.000	0.074	1.849

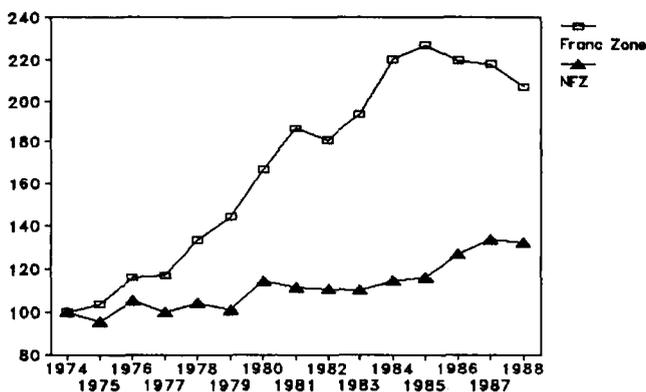
Note: * all constant prices.

From these results we can conclude that there was a period in the early and mid-1980s when franc zone economies grew significantly faster than NFZ economies but that preliminary data suggest a reversal of this pattern in the late 1980s. In the mid- and late 1970s franc zone countries grew faster on average, but the variance of experience was such that there were franc zone countries which did as well as the NFZ average and *vice versa*.

8.3 Export growth

One factor which might explain the somewhat better growth record of franc zone countries is a faster growth rate of exports of goods and non-factor services arising from clearer price signals being sent to exporters through more stable real exchange rates. Over long periods of time franc zone exports have grown more rapidly (figure 11) although high within-group variance of growth rates prevent significant conclusions being drawn from annual data.

Figure 11: Constant Price Exports Goods and non-Factor Services
1987 \$ GDP Weighting
(1974 = 100)



Source: World Bank, *World Tables 1989/90*.

Employing constant price local currency data export growth was most significantly different in the 1975-78 period (at 90% confidence) when franc zone export growth was higher. Growth is however on average lower in the franc zone during the 1986-88 period particularly when oil exporters are included or GDP weights employed. Therefore the most significant declines in export growth have been in large or oil exporting franc zone economies (see table 14).

The effect of faster export growth can be seen clearly in the shares of world export markets for primary commodity exports. Table 15 (Akiyama and Larson, 1989) provides data for selected countries and products. In general, the franc zone countries have maintained shares more consistently than other African countries: for example Côte d'Ivoire increased its share of world cocoa exports from 12% in 1969-71 to 30% in 1987 whilst neighbouring Ghana experienced almost the exact reverse from 31% to 12%. For other products (e.g. palm oil, groundnut oil) however the franc zone market share has slumped dramatically (Akiyama and Larson, 1989).

Without a more detailed analysis, caution needs to be taken in ascribing faster export growth rates to the stability of fixed exchange rates. It could also be plausibly argued that commodity export growth was faster owing to more remunerative producer prices (only in part a function of the exchange rate), superior extension services, transport networks and marketing.

Table 14: Constant Price Export Growth Equal Weights**(i) Equal Weights Excluding Oil Exporters**

	1975-78	1979-82	1983-85	1986-88
Franc zone	10.2%	3.9%	6.5%	0.1%
NFZ	3.6%	2.5%	2.7%	5.7%
t-statistic (difference in means)	1.83	0.51	0.92	-1.13

(ii) Equal Weights - All Economies

	1975-78	1979-82	1983-85	1986-88
Franc zone	9.5%	6.8%	6.6%	-2.8%
NFZ	3.6%	1.9%	3.0%	3.7%
t-statistic (difference in means)	1.84	1.54	1.00	-1.20

(iii) 1987 GDP weights - All Economies

	1975-78	1979-82	1983-85	1986-88
Franc zone	7.5%	10.9%	8.0%	-3.0%
NFZ	1.2%	2.2%	1.6%	4.6%

Note: Excludes Mozambique and Uganda.

Source: World Bank, World Tables 1989/90.

Table 15: Shares of World Export Markets for Cocoa, Coffee and Cotton, Selected Countries, 1969-71 to 1987 (%)

Countries	1969-71			1979-81			1987*		
	Cocoa	Coffee	Cotton	Cocoa	Coffee	Cotton	Cocoa	Coffee	Cotton
Cameroon	7.9	1.9	-	7.3	2.7	-	6.3	2.7	-
Côte d'Ivoire	12.2	6.3	0.3	22.9	6.5	0.8	30.1	5.4	1.6
Egypt	-	-	7.8	-	-	3.8	-	-	1.8
Ethiopia	-	2.5	-	-	2.2	-	-	1.9	-
Ghana	31.0	-	-	16.6	-	-	11.6	-	-
Kenya	-	1.6	-	-	2.0	-	-	2.3	-
Mali	-	-	0.5	-	-	0.9	-	-	1.3
Nigeria	17.6	-	-	9.7	-	-	4.1	-	-
Sudan	-	-	5.7	-	-	2.3	-	-	2.6
Uganda	-	5.8	-	-	3.9	-	-	3.3	-
Zimbabwe	-	-	0.9	-	-	1.2	-	-	1.2
Brazil	11.7	33.7	8.0	17.3	25.1	1.5	16.0	24.8	2.3
Colombia	-	12.1	-	-	16.2	-	-	16.5	-
Indonesia	0.2	2.6	-	0.4	6.1	-	2.0	6.7	-
Malaysia	0.2	-	-	2.1	-	-	8.4	-	-

Note: * estimated.

Source: Akiyama and Larson (1989).

9. TRADEABLE GOODS PRICES, REAL WAGE LEVELS AND INTERNATIONAL COMPETITIVENESS

The crux of the debate on relative economic performance in Africa concerns the incentives which are presented to producers; is it profitable to produce goods for export and to compete with goods which compete with imports? Or is the price and cost structure such that it is more profitable to produce goods which cannot be traded internationally or even to move production to other more competitive areas such as Indonesia (coffee) or Malaysia (cocoa)?

To answer these questions fully requires clear information on real factor prices (land, labour and capital) which take the often complex system of tariffs and subsidies into account. In fact official studies are currently being undertaken in Côte d'Ivoire and Senegal.

The previous discussions do give some indications that franc zone economies are now more uncompetitive than neighbouring NFZ countries: (i) real exchange rates have appreciated substantially against NFZ countries; (ii) franc zone growth rates are lower; (iii) export growth rates in the franc zone are lower although the terms of trade deterioration are similar to the NFZ. Further indirect evidence comes from smuggling. A recent French Ministry of Cooperation report highlighted the difficulties of the franc zone competing with neighbouring Ghana and Nigeria: smuggling into the franc zone is an increasing problem. In Cameroon for example a high level delegation is considering ways to stem the large flow of tariff-dodging Nigerian imports of petroleum and consumer goods. Purchase of smuggled imports in CFA francs is a monetary leakage from the franc zone, and to the extent that new purchases are not from franc zone countries has a contractionary effect upon money supply and directly on output because of reduced demand for home goods.

9.1 Labour costs

With a fixed exchange rate the main route to increasing competitiveness is to reduce relative costs, particularly those of labour. Figure 12 shows real wages per employee in manufacturing for eight franc zone countries including Côte d'Ivoire and Cameroon and 14 NFZ countries including Nigeria and provides some evidence that labour costs have been increasing in the franc zone relative to the franc zone. There are however measurement problems in obtaining comparable series. Some franc zone countries have kept legislated minimum wages low; for example, they have been constant in Senegal and Côte d'Ivoire since 1985, but public sector wages have rarely been consistent with this policy. Attempts to cut wages are met with political unrest as described below for Cote d'Ivoire and Gabon. If wages are downwardly inflexible, as appears may be the case, then a domestic solution to high costs in the formal sector (or overvalued exchange rates) would seem unlikely. The experience of other African countries which have devalued sharply has been a considerable fall in the real wage, although this is most applicable to countries which have undergone a prolonged period of devaluation.



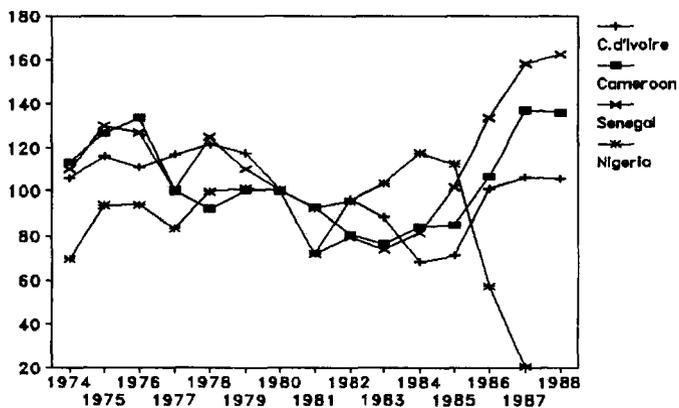
9.2 Manufacturing and industrial prices

To assess the competitiveness of domestic production against imports we compared the domestic GDP deflators (at factor cost) for manufacturing (where available) and industrial production with cif import prices after adjusting for exchange rate changes. On the assumption that imports contain a reasonably large proportion of manufactured and industrial goods this index should provide a fairly good indication of real relative price movements. Figure 13 shows striking evidence for three large franc zone economies and for Nigeria of a very substantial change in relative real manufacturing prices particularly since 1986 when the CFA franc appreciated against the dollar and the Nigerian currency was floated with an auction-based system. The evidence for industrial prices in 31 countries (figure 14) confirms this conclusion of substantial changes in real relative prices and indicates a movement towards overvaluation in the franc zone.

9.3 Agricultural producer prices

For commodity exports the situation is more complicated as exporters face a given world price and the local purchase price is controlled by marketing boards. Most franc zone countries were forced in 1989 to lower producer purchase prices as a belated response to commodity price falls (Cameroon, Côte d'Ivoire, Senegal).

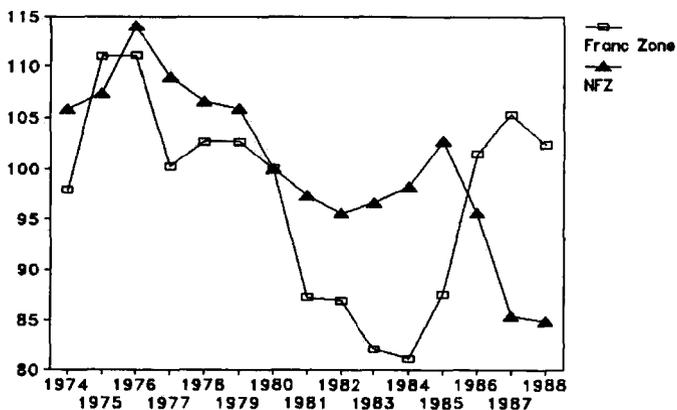
Figure 13: Real Manufacturing Prices
(1980 = 100)



Note: Manufacturing prices deflated by import prices (all \$).

Source: World Bank, World Tables 1989/90.

Figure 14: Real Industrial Prices
(1980 = 100)

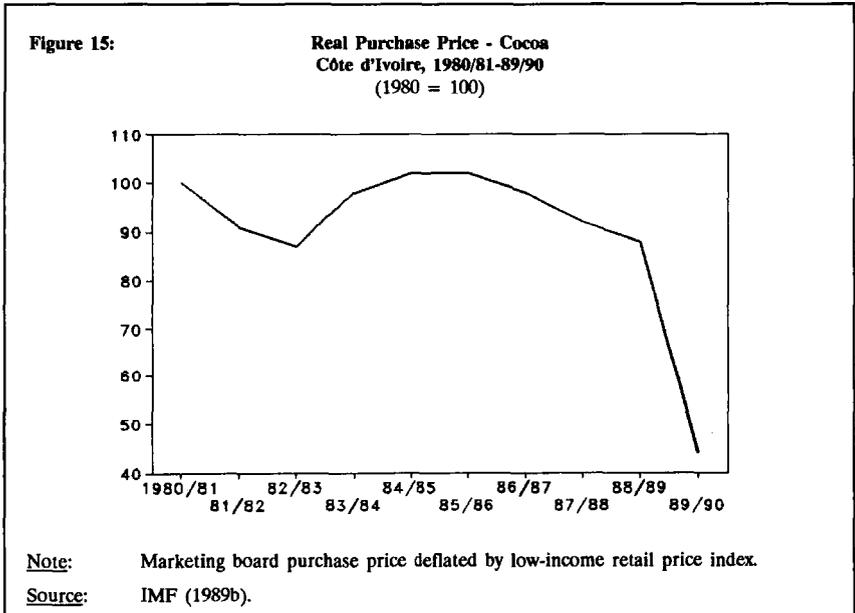


Note: Industrial prices deflated by import prices (\$).

Source: World Bank, World Tables 1989/90.

Although the crop purchase price is now below the world sale price, and marketing boards no longer require central bank financing to purchase crops, the incentive for farmers to produce for export is correspondingly reduced (if there is no expectation of price recovery). What determines farmers' incentive to produce is the value of the crop purchase price in relation to the domestic price level.

The example of real cocoa prices in Côte d'Ivoire (figure 15) shows that the substantial fall in prices paid to producers in 1989 is not mirrored elsewhere in the economy. Although domestic price levels are falling in most franc zone countries the extent of the deflation is far short of the recent 50% fall in producer purchase prices which would be required to fully restore price incentives. However the reduction of producer purchase prices is an essential adjustment in response to falling world prices.



In the long term, the decline of commodity export prices should divert production to other more profitable activities but for many countries, particularly those in the Sahel region, it is difficult to identify potentially more profitable areas. For commodity exporters the combination of high local costs and a fixed exchange rate has strengthened the relative dependence upon commodity exports (see also Akiyama and Larson, 1989) as foreign based firms have substantially reduced investment levels (e.g. Côte d'Ivoire, Congo).

In conclusion, there is some indication of wage-price flexibility in the agricultural export sector following decisions to slash producer purchase prices in several countries but the evidence points to relatively high cost production elsewhere in the economy and real wage rigidity in these sectors. Whilst there has been adjustment to falling export prices there has been no counterbalancing movement to improve incentives for export.

10. CURRENT DEVELOPMENTS

10.1 The political reaction

The most striking evidence of deep seated economic problems in the franc zone has been recent political unrest: in Côte d'Ivoire, IMF-inspired austerity policies, which included public sector salary cuts of 15 to 40%, led to a wave of public sector strikes and student riots in February and March 1990. This added to the widespread discontent of farmers who had seen producer price cuts for coffee and cocoa of up to 50% in 1989. President Houphouët-Boigny responded by legalising opposition parties and introducing some palliative economic measures. In Gabon, President Omar Bongo faced similar problems of student action and public sector strikes whilst at the same time struggling to implement an IMF-backed adjustment policy. In Benin, the discontent of (unpaid) public sector workers is likely to terminate the Government of President Kérékou which now faces multi-party elections in 1991.

10.2 The Côte d'Ivoire test case

Because of Côte d'Ivoire's economic size and political importance in the franc zone, the litmus test for devaluation in the franc zone is whether or not it can implement an adjustment programme which tackles its major economic imbalances with a fixed exchange rate. If it cannot do so, a change in the CFA franc exchange rate seems likely as a method to realign prices and costs. This is not however inconsistent with a policy of maintaining a fixed exchange rate with the French franc.

An internationally recognised adjustment programme is necessary to enable continued progress in foreign debt rescheduling and debt reduction in Côte d'Ivoire. Secondly, it is a likely necessary requirement for continued French support of convertibility for the CFA franc. Côte d'Ivoire is something of a test case because its problems of indebtedness, slow growth, banking failure and high costs exemplify those of the franc zone more generally. A key factor in the adjustment programme is continued recovery of the cocoa price from its 30 year low (in real terms) in 1989. In 1990 there has been an initial recovery which correspondingly improves economic prospects.

What has been achieved? The cocoa purchase price has been reduced from 400 CFA/kg to 200 in the 1989/90 season, and the coffee price halved from 200 CFA/kg in line with world prices. This is likely to eliminate the financing requirement of the state marketing board and stop government arrears rising. In the longer term it may exert downward pressure on the prices of domestically produced goods. Some moves have been made to reduce government wage expenditure by cuts implemented in March 1990, although it is not yet clear whether these will be offset by targeted subsidies. Consumer price inflation is falling and beginning to be reflected in real exchange rate depreciation. Annual inflation fell from 8.5% in the first quarter 1988 to 2.5% over the following year (low income index). The Governor of WAMU, Mr Ouattara, has been appointed head of a task force to identify new adjustment measures but has become the target of newly emerging political opposition.

What remains to be achieved? The fiscal situation continues to dominate the problems with an actual deficit of 8.5% of GDP in 1988 plus an increase in total arrears of a further 5% of GDP and little or no improvement estimated in 1989. It remains to be seen whether measures taken will cut the deficit sufficiently and be reflected in improved balance of payments *etc.* Banking sector solvency problems still appear serious, particularly for the large Agricultural Development Bank, and a WAMU Banking Commission is due to report in the second quarter 1990 on measures to deal with bad loan portfolios. Interest rates have edged up from 8.0% average early 1989 to 10.5% but unrecorded private capital flight is still thought to be substantial. These policies are constrained to a certain extent by the previous banking sector problems. There is still substantial intervention in price setting and regulation of the economy which inhibits the process of price re-adjustment. Trade policy reforms of the mid-1980s which aimed to raise import and export prices⁽⁵⁾ appear to have failed because of enterprise specific preferential tariffs and exemptions for imports and selective application of export subsidies.

Thus there is considerable scope for policy reform which could have the effect of a real exchange rate devaluation in Côte d'Ivoire, but failure to implement some or most of these policies is likely to precipitate nominal exchange rate changes.

⁽⁵⁾ By imposing import tariffs and placing subsidies upon preferred exports an effective real exchange rate change depreciation can be engineered without actually changing the exchange rate.

11. CONCLUSIONS

Over the 1975-88 period a range of economic performance indicators tended to show more favourable average values for franc zone groupings than NFZ groupings, although generally these differences became less pronounced during the mid-1980s and reversed in the late 1980s. The performance differences appear more pronounced in the limited range of financial indicators available (where sub-Saharan African coverage is wide, accurate and timely). Thus the franc zone has lower rates of inflation, lower rates of growth of monetary aggregates and lower real exchange rate volatility. These can be seen as the most direct benefits of franc zone membership as superior performance is linked to specific institutional arrangements. In particular, the statutory restraints upon domestic credit to government appear to have been a major factor in lower rates of monetary growth relative to other countries in sub-Saharan Africa. Insofar as there is an inflation-growth trade-off lower rates of inflation can be seen as an explanation of somewhat higher growth rates in the franc zone, but the link is tenuous.

The franc zone is a far from homogenous block, and many of our conclusions on relative performance are tempered by caveats excluding certain groups. Evidence on reserve usage shows larger, more affluent economies tend to have reaped proportionately more of the benefits from pooling reserves, a view supported by Honohan (1990), who argues that the larger countries have monopolised the distribution of subsidised credit. These same economies also have had higher rates of inflation and have more appreciated real exchange rates than other franc zone countries.

There are a number of statistical issues which make us hesitant about drawing firm conclusions on the relative performance of real economic variables. Firstly, data are highly variant within both comparator groups but particularly for NFZ Africa. The high variance prevents firm conclusions being drawn upon individual sets of annual data. The absence of comparable institutional linkages in NFZ Africa makes further subdivision somewhat arbitrary into categories which are effectively 'good' and 'poor' performers. There are very real difficulties in defining a control group of countries: NFZ Africa is markedly different in the 1980s from the previous decade, if only because many countries are following economic adjustment programmes incorporating reforms to exchange rate arrangements. The better results for the franc zone in earlier periods may merely reflect exceptionally poor performance by the comparators.

A second reservation is that conclusions can be substantially modified by the type of weighting scheme used to aggregate countries and the base year exchange rates utilised for scalar variables.

Subject to these caveats, with most weighting schemes and base years the emergent long run or cumulated trend has shown a somewhat better performance in franc zone Africa. GNP/GDP growth appeared to be slightly higher in the franc zone in the 1980-87 period, but the data suggest this was not big in earlier years and has been reversed in 1988. Franc zone exports have clearly grown faster over the entire period but the trend of superior performance was reversed in during the 1986-88 period.

One conclusion which the data strongly support is that past performance is not a good guide to future performance. Since the mid-1980s the franc zone has undergone substantial shocks of commodity price decline and dollar fluctuations. Use of the operations account, a useful indicator of macroeconomic imbalances, has increased to an unprecedented extent as a result of these shocks and the increasingly severe foreign indebtedness in the franc zone. Large neighbouring countries (Ghana and Nigeria) have abandoned currency pegs (which led to overvalued currencies) and experienced sharp real devaluations. These have highlighted the high cost of franc zone goods (particularly industrial or manufactured goods) led to high wage levels and encouraged smuggling. The convertibility and stability of the value of the CFA franc encourage a leakage of demand and higher current deficits.

The recent reversal for many comparative performance trends analysed in this paper, because of franc zone decline and NFZ improvement, suggests that the permanently fixed exchange rate is no guarantee of relative economic success; in fact overvalued fixed exchange rates are seen as a key factor in the relative decline of NFZ Africa in the 1970s and early 1980s. In this context the 'taboo status' of devaluation in the franc zone can be a constraint to economic policy-making. Exchange rate credibility is not necessarily enhanced by refusing to consider devaluation. Despite continued rejections of devaluation by senior French and West African politicians in 1989 and 1990 devaluation rumours have persisted and large volumes of CFA francs continue to leak out of the franc zone into neighbouring countries.

Perhaps the question that should be under investigation is not 'did the franc zone do better?' but rather 'could the franc zone have done or can the franc zone now do better?'. An important disadvantage of the comparative methodology of this paper is that it cannot reveal whether another policy would have been better than either the franc zone or NFZ policies.

Is there a range of policy measures which can be taken to improve economic performance whilst maintaining a fixed exchange rate? For some countries, such as Côte d'Ivoire, the economic situation and external pressures have become so critical that it is now a choice of implementing effective reforms or facing devaluation against the French franc or alternatively a more fundamental reassessment of how the exchange rate is determined. Whilst French repudiation of the franc zone seems unlikely, the convertibility guarantee through the operations account gives the French authorities the lever to alter exchange rates unilaterally and a powerful voice in economic policy making in franc zone countries.

The range of adjustment measures that could be taken to avoid precipitating a devaluation will vary from country to country according to the precise nature of macroeconomic imbalances and structural constraints. The range of politically feasible measures must be determined by the relative strengths of interest groups and the perceived costs and benefits of reform. Thus the research agenda is a detailed one of evaluation of relative costs and prices of factors of production in franc zone countries and potential measures to adjust to lower export revenues and lower cost neighbours.

This is not to argue that all economies will respond vigorously to changes in relative prices. Recent research by the World Bank in Senegal (World Bank, 1989b) marks

acceptance of the multitude of other constraints which exist in poor countries. But devaluation remains a potential response to some of the existing imbalances. The countries most able to benefit from devaluation are the coastal commodity exporters which have more dynamic, diverse and flexible economic systems and historically have had the fastest rates of export growth in the franc zone. They also appear in general to be the countries with the most severe currency overvaluation (excluding Togo), on the basis of real exchange rate trends, relative wage costs and relative prices of domestic production.

It would not be the first change in parity. In 1948 there was a 17% revaluation of the CFA franc shifting from 58.82 to 50 CFA to the franc which occurred in response to French inflation during the reconstruction period after the Second World War. The relative price inflation in franc zone countries since 1948 has not been uniform. Therefore different degrees of real devaluation are now required; either domestic price or nominal exchange rate adjustments must differ.

This could in principle be achieved by a uniform devaluation accompanied by one-off inflationary credit expansions in countries which require more moderate or no devaluation. The fairly strong counter-inflationary record of both regional central banks might ensure that credit expansion creates a once and for all price rise, although the risk of initiating an inflationary spiral would undoubtedly be present. Alternatively differential rates of devaluation could be implemented whilst maintaining full fixed convertibility between the various CFA currencies, *i.e.* eliminating the one for one conversion rate. This would probably increase transactions costs in areas which are substantial net exporters of banknotes, *i.e.* labour importers such as Côte d'Ivoire. Differential devaluation could also be achieved by introducing a parallel currency reform, with a new CFA franc corresponding to different quantities of old CFA francs according to the degree of overvaluation.

Domestic debtors would be the principal gainers from devaluation but considering the high proportion of non-performing loans in franc zone commercial bank portfolios (estimated at 25% in the West African Monetary Union countries) it is likely that bank restructuring would, in any case, involve relief to debtors (extensive bank restructuring in Benin, Senegal and Cameroon).

Although a shift in the level of the peg would seem the most likely option, there are other alternatives including a linkage with the ECU or whatever emerges as the prototype European currency. As franc zone trade has diversified away from France towards other European Community members many of the fixed rate of exchange benefits with the franc have been eroded. In the longer run the external guarantee of the CFA franc could be removed.

The disadvantage of a one-off devaluation, categorically rejected as an option by both African central bank governors, would appear to be the loss of nominal constancy or stability. When the distinction between real and nominal is not greatly important this loss of stability could impose costs upon the franc zone countries. When real divergences are important enough to affect economic performance, as appears to have been the case more recently, then allegiance to a fixed nominal rate has no rational basis.

APPENDIX 1. DATA AND COUNTRY COVERAGE

The main source employed for historical time series of economic data is the World Bank World Tables 1990-91, supplemented by International Financial Statistics (IMF). Confidential IMF documentation allows analysis for specific franc zone countries on actual data for 1988 and estimates for 1989. To limit the data requirements the country coverage was confined to all sub-Saharan African countries with more than one million inhabitants (1987). Owing to lack of data Angola, Namibia, Guinea and usually Mozambique were also excluded from the analysis. South Africa was also excluded from country coverage for the reason that it is a non-typical sub-Saharan country.

The selected countries are:

Franc zone Africa (12 countries)

of which: the West African Monetary Union, WAMU (7) - Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, Senegal, Togo.
 the Central African Monetary Union, CAMU (5) - Cameroon, Central African Republic, Congo, Gabon, Chad.

Non-franc zone Africa (22)

Botswana, Burundi, Ghana, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mauritania, Mauritius, Mozambique, Nigeria, Rwanda, Sierra Leone, Somalia, Sudan, Tanzania, Uganda, Zaire, Zambia, Zimbabwe.

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