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## The role of the euro in Sub-Saharan Africa and in the CFA franc zone

Martin Hallet

### **EMU@10 Research**

In May 2008, it was ten years since the final decision to move to the third and final stage of Economic and Monetary Union (EMU), and the decision on which countries would be the first to introduce the euro. To mark this anniversary, the Commission is undertaking a strategic review of EMU. This paper constitutes part of the research that was either conducted or financed by the Commission as source material for the review.

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# **The role of the euro in Sub-Saharan Africa and in the CFA franc zone**

by

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## **Abstract:**

The paper analyses different aspects of the role that the euro is currently playing in sub-Saharan Africa (SSA) and in the CFA franc zone of West and Central Africa. As similar contributions on the role of the euro in other global regions, the paper served as background information for the analysis in European Commission (2008) on the international role of the euro for the assessment of 10 years of European Economic and Monetary Union ("EMU@10"). Chapter 1 of this paper examines the role of the euro as an international currency in Sub-Saharan Africa. Chapter 2 assesses the effects that the CFA franc's peg to the euro had on macroeconomic stability, trade integration and international competitiveness of the CFA franc zone. Chapter 3 looks at how the EU's multilateral surveillance framework served as a blueprint for multilateral surveillance in the CFA franc zone. Chapter 4 summarises and concludes.

JEL Classification: F33, E42, E62, O23

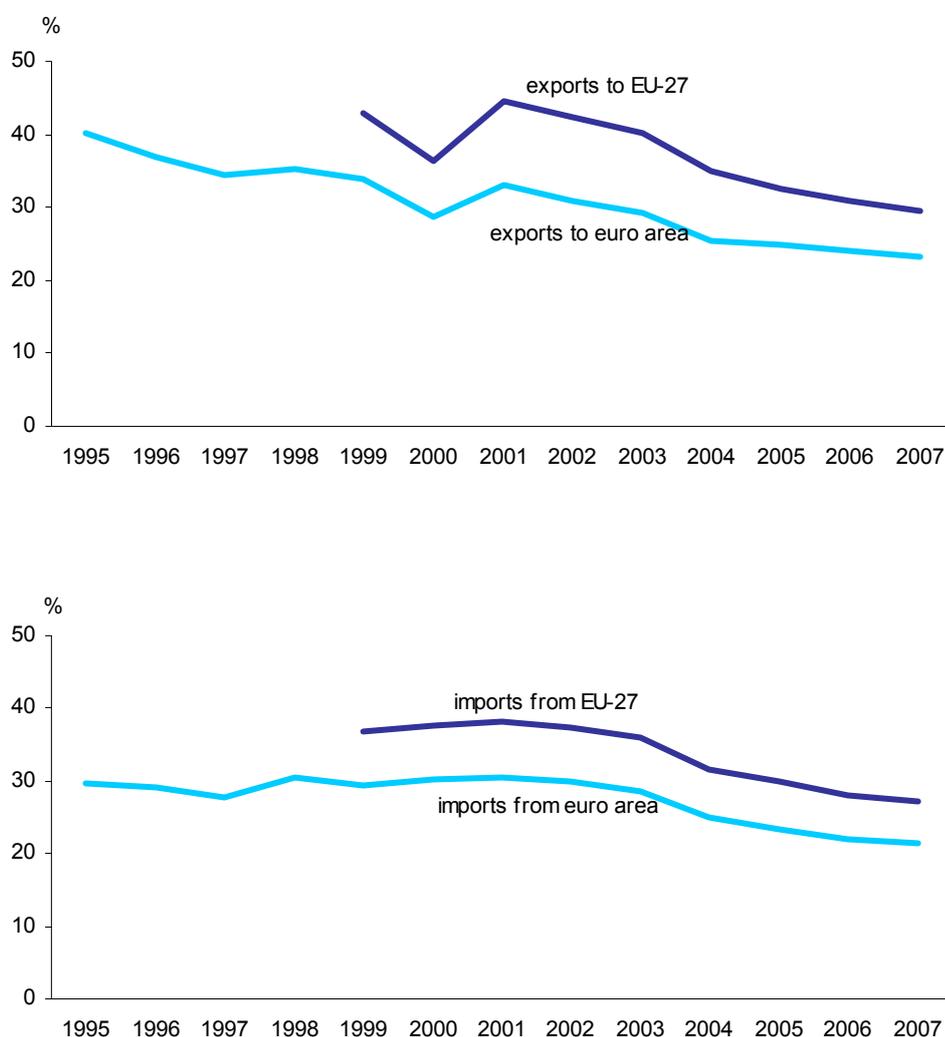
Keywords: Euro, Africa, CFA franc, monetary union, macroeconomic surveillance, Stability Pact.

## 1. The role of the euro in Sub-Saharan Africa (SSA)

A currency can take on a number of functions at international level, the most important being those of trade invoicing, foreign reserve currency, reference currency for exchange rate arrangements, financial currency and parallel currency (European Commission 2008, p.117f.). This chapter shows that the role of the euro in SSA largely reflects the fact that the euro area is still the most important economic partner for SSA, although with a declining longer-term trend and varying by regions across the continent. In general, however, information on the use of the euro in SSA is rather scarce, with the exception of South Africa which is the only country in the region with a developed financial sector that has full access to international capital markets. Some of the sources provide data only for Africa as a whole, i.e. including North Africa. As in northern African countries - due to their proximity to Europe - the euro might have a more important role than in SSA, this may give some upwards bias on the evidence on the role of the euro.

Information on *trade invoicing* is difficult to find for the whole of SSA. Some data are available for South Africa where 52% of goods exported in 2003 were invoiced in US dollar, 25% in South African Rand and 17% in euro (Kamps 2006). The importance of trade invoicing in SSA as a whole can therefore only be inferred from trade data by assuming that its trade with Europe is mostly invoiced in euro. Following the coercive trade relations in the colonial period, Europe has remained the main trade partner for SSA countries also in the post-colonial era and trade continues to increase in absolute terms. While trade with SSA represents only around 1.5% of total EU external trade, the EU is SSA's most important trade partner with an average share of about 30% of total SSA external trade, followed by Asia, which recently became an important trade partner for the region, mainly due to China's increasing importance in global trade. This latter trend went along with a reduction of the EU's share in SSA trade by around 10 percentage points between 1999 and 2007 (see Graph 1.1).

Graph 1.1: EU share of SSA trade in goods in % of total trade, 1995-2007



Source: IMF IFS database

*Foreign reserve holdings* in Africa are small from a global perspective and probably only around one fifth is held in euro. At the end of 2002 Africa held reserves of USD 69 billion, which corresponded to 3.1% of all estimated foreign reserve holdings in the world, up from USD 40 billion and 2.6% respectively at the end of 1998 (ECB 2003, p.47f.). Based on a survey of central bank reserve asset management carried out in summer 2002, participating African central banks reported that an average of 18% of their reserves was in euro which - if applied to the above figure on the total reserve - results in estimated USD 12.4 billion of foreign exchange reserves held in Africa in 2002.

The role of the euro as *reference currency for exchange rate arrangements* in SSA largely corresponds to countries' geographic distance to Europe and the historic ties

(see detailed table by SSA countries in Annex). In southern Africa the South-African Rand has the main role as a reference currency whereas in eastern Africa currency arrangements tend to be heterogeneous while giving little importance to the euro. However, the euro is an important reference currency in western and central Africa where a number of African countries are maintaining a fixed peg to the euro. Eight countries of the West African Economic and Monetary Union (WAEMU)<sup>1</sup> and six countries of the Central African Economic and Monetary Community (CEMAC)<sup>2</sup> have the CFA franc as a currency which is pegged to the euro. Although being two separate currency unions, they use the same exchange rate parity to the euro. Similarly, the Comores have a fixed peg of the Comorian franc to the euro. These fifteen countries are referred to as the African franc zone whose exchange rate arrangements are backed by the French Treasury within the limits of a number of safeguards. In addition, Cape Verde has an exchange rate cooperation agreement with Portugal since July 1998 which ties the Cape Verdian escudo to the euro. The convertibility of the escudo at a fixed parity is backed, although with a number of limits regarding size of withdrawal and time for repayments, by a Credit Facility by the Portuguese authorities. For these fixed pegs to the euro, in order to ensure the continuity of Member States' legal obligations undertaken prior to the introduction of the euro, a Community legal basis was created in 1998.<sup>3</sup>

The role of the euro as *financial currency* in Africa appears to have an increasing trend, although partly reflecting the appreciation of the euro. At the end of 2007 the stock of outstanding international debt securities in Africa, totalling USD 32 billion, was denominated for the first time slightly more in euro than in US dollar (see Graph 1.2). Long-term debt in SSA is denominated about half in US dollar and one fifth in euro (World Bank 2008). Outstanding loans by euro area banks to Africa and the Middle East were USD 76 billion at the end of 2007, denominated about half in US dollar and half in euro (ECB 2008).

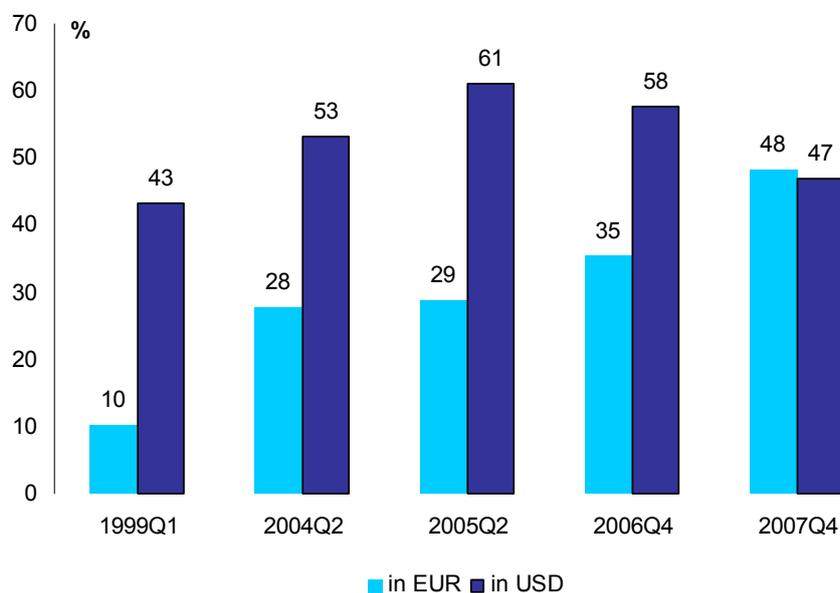
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<sup>1</sup> Benin, Burkina Faso, Ivory Coast, Guinea-Bissau (since 1997), Mali (since 1984), Niger, Senegal and Togo where CFA stands for “Communauté financière africaine”.

<sup>2</sup> Cameroun, Central African Republic, Chad, Republic of the Congo, Equatorial Guinea (since 1985) and Gabon where CFA stands for “Coopération financière en Afrique centrale”.

<sup>3</sup> The Council authorised a continuation of France's arrangements by Council Decision 1998/683/EC of 23 November 1998, Official Journal L320 of 28 November 1998, and of Portugal's arrangement with Cape Verde by Council Decision 1998/744/EC of 21 December 1998, Official Journal L358 of 31 December 1998. For further details see Lamine 2006.

Graph 1.2: Stock of outstanding international debt securities in Africa denominated in euro (end of quarter, in % of total)



Source: ECB, various issues

Evidence on the use of the euro as *parallel currency* in SSA is scarce and has to be inferred from transactions which can be presumed to be based to some extent on the use of cash money. Many households in SSA rely heavily on *remittances* sent home from their relatives in Europe. Jiménez-Martín et al. (2007) estimated that in 2004, out of the EUR 20 billion remitted by migrants in EU-27 to countries outside the EU, EUR 3.2 billion were flowing into SSA. According to data from the Central Bank of West African States (BCEAO), the euro area is the origin of about half of the remittances sent to WAEMU. In the Comores, most of the euro bills of estimated EUR 12 million in circulation in the Comores in 2005 and then exchanged into Comorian francs are deemed by the Central Bank to have come from visiting emigrants. *Travel and tourism* is another potential channel for the use of the euro as parallel currency in SSA. However, the main tourism destinations for Europeans in SSA are in eastern and southern African countries which have a weak affiliation to the euro. Countries in western and central Africa, where the euro could be more important for transactions by tourists, currently attract relatively few visitors from Europe. Projects to implement *official development aid (ODA)* from the EU could also be accompanied by some cash transactions in euro which may then further circulate. According to data from the OECD Development Assistance Committee (DAC), the European Community and EU Member States provided an annual average (between 2003 and 2006) of USD 15 billion of ODA to SSA (excluding South Africa). This is a share of 57% of all recorded ODA to SSA, similar to the EU's share in ODA worldwide, and more than 5% of SSA's Gross National Income.

Compared to other global regions, *perceptions on the role of the euro are strongest* in Africa. A survey carried out in 2004 asked staff of Commission delegations and representations in non-euro area countries on the use of the euro in their locations

(European Commission 2004). It inquired mainly about the ease of exchanging euro cash, the use of euro cash for payments, and public attitudes towards the currency. According to the results of the survey, awareness of the euro was much higher in Africa than in the Americas and the Asia/Pacific region. Africa was above average in terms of possibilities for buying, holding, selling and paying in euro cash. The share of African countries where prices are sometimes displayed in euro alongside the national currency was also relatively high (15%) compared to other non-EU regions. Moderate or high awareness of the euro in the general public in Africa was confirmed by 79% of the replies and this figure increased to 94% for the business sector (the averages were 72% and 94% respectively). Knowledge of the euro was generally found to be higher in those countries with the strongest economic links to the EU, notably members of the CFA franc zone and the Mediterranean states of northern Africa.

## 2. Economic effects of the CFA franc's peg to the euro

This chapter turns to the region in SSA where the role of the euro is most important, the CFA franc zone in western and central Africa, and analyses the economic effects of the CFA franc's peg to the euro. Section 2.1 presents some institutional background on the CFA franc zone and section 2.2 characterises the economic structures of these countries in order to provide the basis for an assessment of the economic effects of this exchange rate peg in section 2.3.

### 2.1. Institutional background

The CFA franc zone consists of two separate economic and monetary unions with formally two separate currencies both called the CFA franc which are pegged to the euro at the same fixed parity. Altogether, the 14 member countries of the West African Economic and Monetary Union (WAEMU) and the Central African Economic and Monetary Community (CEMAC) have nearly 130 million inhabitants.<sup>4</sup> While informal arrangements existed before, the franc of the French colonies in Africa was formally introduced in 1945 and later, after political independence and some further steps of monetary integration, followed by agreements of monetary co-operation signed in 1972/73 by these countries and France.<sup>5</sup> Monetary cooperation in the CFA franc zone is based on four main principles (cf. Banque de France 2002):

1. A fixed exchange rate parity between the CFA franc (FCFA) and the euro. The parity remained constant from 1949 until 1994 when it was devalued by 50% to 1 FF=100 FCFA which corresponds to 1 EUR=655.957 FCFA since the euro replaced the French franc (FF) at the beginning of 1999.
2. An unlimited guarantee by the French Treasury for the convertibility of the CFA franc into euro at the fixed exchange rate at the Paris Stock Exchange.
3. The centralisation of the members' net foreign reserves at the two central banks and the obligation to deposit half of these reserves in an operations account ("compte d'opérations") at the French Treasury.<sup>6</sup>
4. Free capital movements within the CFA franc zone and with France.

The operations account functions like a current account with overdraft facilities and makes the system similar to a currency board arrangement, thus providing little scope for an active monetary policy. The reserves deposited at the operations

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<sup>4</sup> The Comores, which are also part of the African franc zone, will not be considered here due to their specificities and limited size (580.000 inhabitants).

<sup>5</sup> In 1972 for the CEMAC where CFA stands for "Coopération financière en Afrique centrale" and in 1973 for the WAEMU where CFA stands for "Communauté financière africaine".

<sup>6</sup> For WAEMU, this 50% rule applies since September 2005. For CEMAC it was decided at the beginning of 2007 to gradually reduce the minimum 65% share of foreign reserves to be deposited in the operations account to 60% as of July 2007 and to 50% by 2009 (excluding the foreign exchange counterpart of Funds for Future Generations set up by most CEMAC countries). As the remuneration of foreign reserve holdings at the operations account can be financially attractive (ECB money market rate plus 100 basis points), the amount exceeding the minimum will only be remunerated by the ECB money market rate.

account pay some interest at rates based on ECB interest rates and, in case they turn into debit, interests are to be paid to the French Treasury. The French Treasury also gives a guarantee on the value of these reserves against a depreciation of the euro vis-à-vis the Special Drawing Rights (SDR). However, a number of safeguards triggering action by the two central banks are applied in order to ensure the exceptional character of foreign exchange interventions and to avoid a permanent reduction or deficit of the operations account. Given the safeguards and the comparatively small size of the CFA franc zone economies, which currently represent about 4½% of France's GDP, the risks to France's public finance remain within certain limits.

## 2.2 Economic structures and performance

A number of structural characteristics, some of them presented in Table 2.1, are essential to understand the economic effects of the CFA franc zone's peg to the euro. The structures of markets and institutions are important within a monetary union with a view to macroeconomic adjustment mechanisms and trade effects. At the same time they help define the country-specific agenda for structural reforms to improve the functioning of an economic and monetary union.

Table 2.1: Structural indicators of FCFA zone countries, 2007 (or latest available year)

	Population (million)	GDP (at market prices in million €)	GDP per capita (in €)	Agriculture, value added (% of GDP)	Rank in HDI* 2007/08 (177 countries)	Rank in CPI** 2008 (180 countries)
	(1)	(2)	(3)=(2)/(1)			
<b>Cameroon</b>	18.5	15 084	814	19	144	141
<b>Central African Republic</b>	4.3	1 251	288	56	171	151
<b>Chad</b>	10.8	5 177	481	23	170	173
<b>Republic of Congo</b>	3.8	5 586	1 483	5	139	158
<b>Equatorial Guinea</b>	0.5	7 250	14 285	3	127	171
<b>Gabon</b>	1.3	7 784	5 852	5	119	96
<b>CEMAC</b>	39.2	42 132	1 074	13	145	148
<b>Benin</b>	9.0	3 966	439	32	163	96
<b>Burkina Faso</b>	14.8	4 944	335	33	176	80
<b>Ivory Coast</b>	19.3	14 299	742	23	166	151
<b>Guinea-Bissau</b>	1.7	261	154	64	175	158
<b>Mali</b>	12.3	5 014	407	37	173	96
<b>Niger</b>	14.2	3 047	215	40	174	115
<b>Senegal</b>	12.4	8 147	656	15	156	85
<b>Togo</b>	6.6	182	28	43	152	121
<b>WAEMU</b>	90.3	39 860	441	27	167	113
<b>CFA franc zone</b>	129.5	81 992	633	20	156	131

\*Human Development Index by United Nations Development Programme (UNDP)

\*\* Corruption Perceptions Index by Transparency International

Source: World Bank World Development Indicators, except HDI and CPI for which regional rankings are calculated as simple averages

CEMAC countries tend to have a weak manufacturing basis of less than 10% of total value added as their economies are dominated by oil production, agriculture and non-traded services. With the exception of the Central African Republic all CEMAC countries are oil producers with limited and sometimes maturing oil reserves. On

average, oil accounts for about 80% of merchandise exports, 60% of budget revenues and a third of GDP. Important export crops are cocoa, coffee, palm oil, sugar and cotton. Chad and the Central African Republic are both landlocked countries. As they share their eastern borders with Sudan, they are suffering from cross-border spillovers from the Darfur conflict through refugees and rebel groups. Poverty and human development indicators vary largely between the countries. As is not surprising for poor resource-rich countries, governance is very weak and corruption widespread.

Economic structures in WAEMU are more developed and diversified than in the CEMAC. Agriculture accounts for about 20% of GDP only in oil-producing Ivory Coast and in Senegal while it is far more important in the other WAEMU countries. Important export crops of WAEMU countries are cocoa, coffee, nuts and cotton whose world prices are volatile and make the WAEMU economies sensitive to terms of trade changes. The cotton sector, which is important in several WAEMU countries, has been suffering for many years from a decline in world market prices and inefficient government interventions. Metals and diamonds are also important exports for some of the countries. Mali and Niger are both landlocked countries depending strongly on the seaports of their neighbours. Most indicators point to weak governance and widespread corruption, although the situation is generally somewhat better than in CEMAC.

The recent growth performance in the two monetary unions was not strong enough to make significant progress in the reduction of poverty (see Table 2.2). Growth in CEMAC countries is largely driven by oil production. Equatorial Guinea is seeing a strong expansion in oil production for many years already. Chad started oil exports in 2004 with the termination of the oil pipeline through Cameroon which had stimulated growth already before its finalisation through the related construction works. Technical problems in oil production as well as a very weak business environment are weighing on Chad's growth perspectives. The maturing of oil reserves has also become a drag on growth in some other oil-producing CEMAC countries. In the Central African Republic growth is highly volatile as it largely depends on results in the agricultural sector and the underlying climatic conditions. As a result, real growth in CEMAC as a whole exceeded that of sub-Saharan Africa only until 2004 and was lower since 2005. Growth performance in WAEMU was below SSA average in most of the last ten years. Economic performance clearly suffered from the conflict in Ivory Coast given its regional importance both as its largest economy and as a transit transport route. In Guinea-Bissau and in Togo political instability also took a toll on economic growth with a slightly improving outlook. In the remaining WAEMU countries growth performance was better on average although volatile.

Table 2.2: Annual percentage change in real GDP, 1997-2009

	1997-2002	2003	2004	2005	2006	2007	2008p	2009p
<b>Cameroon</b>	4.5	4.0	3.7	2.3	3.2	3.5	3.8	4.6
<b>Central African Republic</b>	2.8	-7.6	1.0	2.4	4.0	4.2	3.5	4.5
<b>Chad</b>	5.2	14.7	33.6	7.9	0.2	0.2	0.4	5.0
<b>Republic of Congo</b>	2.7	0.8	3.5	7.8	6.2	-1.6	9.1	12.1
<b>Equatorial Guinea</b>	50.1	14.0	38.0	9.7	1.3	21.4	7.4	4.6
<b>Gabon</b>	0.0	2.4	1.1	3.0	1.2	5.6	3.9	7.0
<b>CEMAC</b>	6.0	5.4	12.3	5.0	2.5	5.3	4.5	6.1
<b>Benin</b>	5.1	3.9	3.1	2.9	3.8	4.6	5.1	5.7
<b>Burkina Faso</b>	5.7	7.3	4.6	7.1	5.5	3.6	4.5	5.6
<b>Ivory Coast</b>	1.0	-1.7	1.6	1.8	0.7	1.6	2.9	4.7
<b>Guinea-Bissau</b>	-2.1	-0.6	2.2	3.2	1.8	2.5	3.2	3.1
<b>Mali</b>	5.0	7.2	2.4	6.1	5.3	3.1	4.8	5.2
<b>Niger</b>	4.1	7.7	-0.8	7.4	5.2	3.2	4.4	4.5
<b>Senegal</b>	4.0	6.7	5.9	5.6	2.3	4.8	4.3	5.8
<b>Togo</b>	0.0	5.2	2.4	1.3	4.1	2.1	2.5	3.5
<b>WAEMU</b>	3.2	3.9	2.9	4.4	3.2	3.2	4.0	5.1
<b>Sub-Saharan Africa</b>	4.1	5.0	7.0	6.2	6.3	6.7	5.9	6.2

Source: IMF Regional Economic Outlook for Sub-Saharan Africa, October 2008; p=projection

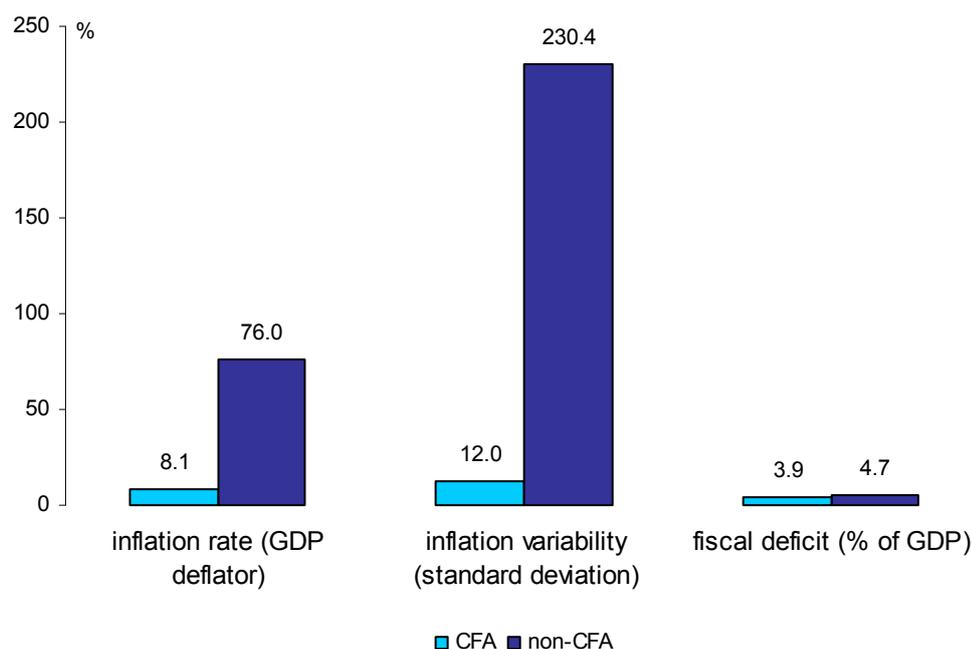
### 2.3 Economic effects of the peg to the euro

When analysing the economic effects of the CFA franc's peg to the euro, three perspectives need to be distinguished: (1) being member of a monetary union, (2) having an exchange rate pegged to an external anchor currency, and (3) the choice of the euro as anchor currency. While this section should mainly look at the third issue, it is in practice difficult to clearly separate it from the first two issues. Following the main costs and benefits of fixed exchange rate arrangements and monetary unions, some of the main macroeconomic effects are summarised before turning to the effects on trade.

The peg to the French franc and, since 1999, to the euro as exchange rate anchor is usually found to have had favourable effects in the region in terms of macroeconomic stability. From 1960 to 2004 the CFA franc zone clearly outperformed other sub-Saharan African countries in terms of macroeconomic stability as inflation rates and their variability were significantly lower while the difference is less marked on fiscal performance (see Graph 2.1). The arrangement with the French authorities allowed importing credibility and benefiting from a full convertibility of the currency which implies substantial economic benefits. The CFA franc also provides a stable monetary institutional framework which participating countries, many of them suffering from political instability and weak governance, might have difficulties to establish independently. On the other hand, as in any monetary union, the countries of the CFA franc zone individually do not dispose of monetary and exchange rate policies as instruments for adjustment in the case of an asymmetric shock to the extent that these instruments could have provided an

effective policy response. Taking the literature on the optimal currency area ("OCA") as a reference, the CFA franc zone countries would hardly qualify for an OCA given their low product diversification, low labour mobility or weak financial sector. However, the potential benefits from trade deserve a closer look as to whether the CFA franc zone could be considered being closer to an OCA.

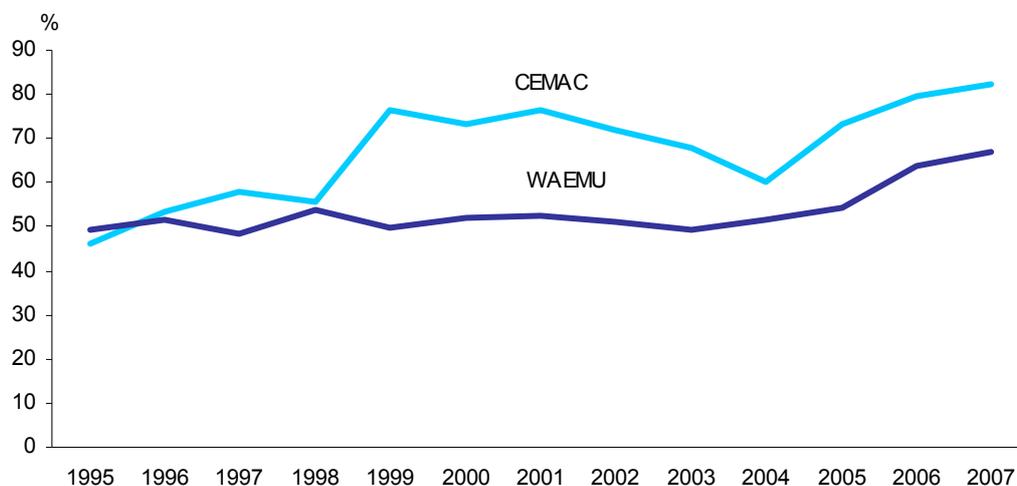
Graph 2.1: Averages of inflation rate, inflation variability and fiscal deficit in CFA franc countries and non-CFA franc countries in Sub-Saharan Africa, 1960-2004



Source: Yehoue 2007, p.24ff.

Trade openness, which is deemed to be positively related to the benefits from exchange rate stability, is lower for the CFA franc zone than would be expected from the structures and small size of their economies. Measured by the sum of exports and imports relative to GDP in 2007, it was 67% for WAEMU and 83% for CEMAC (see Graph 2.2). There was a gradual increase in openness in WAEMU in recent years mostly resulting from the import side, while the volatile trend of CEMAC's trade openness is mainly driven by oil exports and oil prices.

Graph 2.2: Exports and imports relative to GDP of the CFA franc zone, 1995-2007

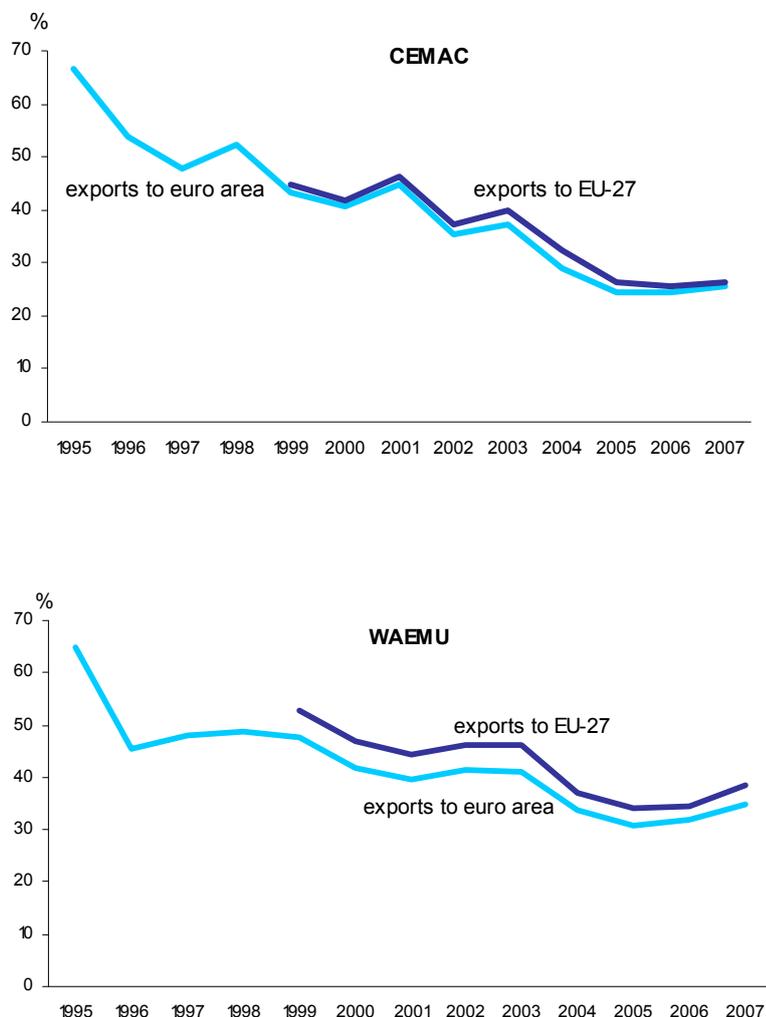


Source: IMF IFS database

As regards trade-creating effects, the peg to the euro can be expected to have supported trade between the euro area and the CFA franc zone.<sup>7</sup> But even if Europe still has the largest share in CFA franc zone trade, it has diminished significantly (see Graph 2.3). Europe's share in total exports of the CFA franc zone declined between 1995 and 2005 by as much as 40 percentage points for the CEMAC and by around 30 percentage points for the WAEMU and has only slightly recovered in the last years. Most of this long-term trend, which might have been even stronger in the absence of the peg to the euro, can be attributed to the adjustment from previous colonial economic ties and the increasing importance of Asia as trade partner. CFA franc zone trade with the EU is mostly focussed on the euro area while SSA countries which are not in the CFA franc zone show more diversification of trade partners among the 27 EU Member States. Today, only one quarter of all imports into the CFA franc zone are French products, with a declining trend from almost three quarters in the early 1960s. Due to variations in specialisation and geography, the export side is much more heterogeneous, with euro area countries being the main export destination only for six CFA franc countries whereas for the others these are the US, India, South Africa or their larger African neighbours (Djoufelkit 2006). New trade agreements between the EU and the various regional economic communities in SSA may help reinvigorate trade links between the two continents.

<sup>7</sup> Frankel (2008) considers the introduction of the euro in 1999 to be a "natural experiment" of the trade-creating effects of a *de facto* monetary union between euro area and CFA franc countries. Controlling for other variables, his econometric analysis suggests that the euro boosted bilateral trade between the relevant African and European countries by as much as 76%, although his results over time raise questions on their robustness.

Graph 2.3: EU share of CEMAC and WAEMU exports in goods in % of total exports, 1995-2007



Source: IMF IFS database

The benefits from economic integration within each of the two monetary unions of the CFA franc zone, and even more so between them, remained remarkably low. Although they have created a customs union each, there are high transport costs and many de facto barriers to trade such as excessive administrative burden, exceptional tariffs, taxes, bribe-taking, and others which continue to increase the cost of transactions (see Table 2.3). As a consequence, intra-regional trade in CEMAC is less than 5% of its total trade. WAEMU intra-regional trade remained relatively stable at about 10% of total trade from 2000 to 2006 which is still higher than in any other integration area in Africa.<sup>8</sup> For comparison, in 2006 EU Member States traded on average two thirds of their total trade with other EU partners.

<sup>8</sup> Actual trade might be higher as official statistics do not include informal trade or smuggling.

WAEMU has evolved from a free trade area (in 1996) to a customs union (in 2000) which reduced and streamlined tariffs into four bands of 0%, 5%, 10% and 20%, but actual implementation is lagging behind and non-tariff barriers remain substantial. The Economic Community of West African States (ECOWAS), which includes all WAEMU countries and seven other West African countries, decided to form a customs union on the basis of these WAEMU tariffs, but implementation is being delayed. In addition, ECOWAS pursues plans to create a single currency by the end of 2009 which would absorb the WAEMU (see Box). Factor market integration in the CFA franc zone is also low as the financial sector is weak in most countries of the CFA franc zone and labour markets rather separated. Migration is somewhat more important in WAEMU, whereas the free movement of persons in CEMAC is agreed in principle but still needs to be fully implemented.

Table 2.3: Indicators on trading across borders, 2008 (simple regional averages)

	unit	CEMAC	WAEMU	SSA	OECD
Documents for export	number	8	8	8	4
Time for export	days	44	33	35	11
Cost to export	US\$ per container	2888	1799	1879	1069
Documents for import	number	10	8	9	5
Time for import	days	56	39.25	41	11
Cost to import	US\$ per container	3182	2392	2279	1133
Average rank		151	131	133	33

Source: World Bank Doing Business Survey 2009

A possible misalignment of the exchange rate parity with a detrimental effect on external competitiveness does not sufficiently explain the weak trade effects of the CFA franc zone's peg to the euro. The devaluation of the CFA franc in 1994 was mainly decided with the objective of restoring competitiveness following a number of years of real exchange rate appreciation, terms of trade deterioration, and a banking crisis as the losses of state-owned enterprises were often covered with bank loans that eventually encountered increasing problems of performance. Between 2000 and 2006 the CFA franc zone saw a real effective exchange rate (REER) appreciation of 14%, mostly due to two factors: first, the appreciation of the euro vis-à-vis the US dollar and, second, the increasing trade with Asian countries whose currencies are pegged to the US dollar (Djoufelkit 2007). However, the average REER in 2006 was still about 13% below its pre-devaluation level in 1993 with most CEMAC countries being closer to the pre-devaluation level than most WAEMU countries. The REER appreciated further since then because of the stronger inflationary effects of rising food and energy prices compared to main trade partners. Calculations by IMF staff show that the REER at the end of 2005 were slightly above the long-run equilibrium rate based on macroeconomic fundamentals, although not statistically significantly so (Abdih/Tsangarides 2006). A further result of these calculations is that the CFA franc went indeed through a period of

overvaluation before 1994, thus suggesting that the devaluation was warranted. However, these results are sensitive to the econometric techniques used (Roudet/Saxegaard/Tsangarides 2007).

Yet, the REER can only inform about short-term price competitiveness, neglecting a number of economic determinants of the long-term internal and external equilibrium. A broader set of competitiveness indicators, including labour costs, export patterns and market shares, confirms that price and cost competitiveness seems to be of less importance than the general conditions of the business environment (Ramirez/Tsangarides 2007). This is an indication that structural reforms are at least as important for sustained growth and competitiveness in the CFA franc zone as are macroeconomic policies.

Altogether, these results show that the fixed peg of the CFA franc to the euro provides an important anchor for monetary policy, even if it implies that monetary and exchange rate policies are not available to support a smooth adjustment in the event of regional or country-specific shocks. It helped the region in providing considerably higher macroeconomic stability than in most other regions of SSA. The CFA franc also provides a stable monetary institutional framework which several participating countries might have difficulties to establish independently in an environment of weak governance. While still being the most important trade partner, the relative importance of trade integration with the EU has declined significantly since the mid-1990s, thus gradually weakening the case for using the euro as the only anchor from a pure trade perspective. However, the possible trade benefits of moving away from the euro as only peg currency need to be carefully balanced against other possible costs of changing the related institutional arrangements.

The low trade integration within and between the two monetary unions of the CFA franc zone differs from the EU experience which closely linked the progress between monetary and trade integration for mainly two reasons. First, economic integration increases the benefits of monetary integration and allows a smoother economic adjustment to asymmetric shocks in the absence of the nominal exchange rate instrument. Second, regional trade integration can suffer from disruptions when there is no monetary policy coordination which may result in exchange rate volatility and misalignments. Hence, for the long-term perspectives of the CFA franc zone, structural reforms will be important to enhance trade integration and to reduce the likelihood and effects of asymmetric shocks. Most of all, substantial improvements in governance, the general business environment and infrastructure will be required to advance integration and product diversification and to enhance the functioning of adjustment through product, labour and capital markets.

### **Box: Towards an ECOWAS monetary union?**

The Economic Community of West African States (ECOWAS, with currently 15 members) pursued the idea of monetary integration already since its foundation in 1975. The Treaty for an ECOWAS Monetary Cooperation Programme of 1987 was a first concrete effort to advance monetary integration by improving payments systems and currency convertibility. In 1999, ECOWAS agreed to a so-called "two track" approach to create, in a first stage, a single currency (to be named "ECO") in a West African Monetary Zone (WAMZ) among most of its non-WAEMU countries\* and then, in a second stage, to merge it with the WAEMU to an ECOWAS monetary union. As progress towards the WAMZ remained slow, ECOWAS leaders asked the Convergence Council in June 2007 to make recommendations for accelerating the process in a "single track" approach to create an ECOWAS monetary union by the end of 2009.

The European experience of monetary integration, which emphasises the need for a high degree of economic integration and macroeconomic convergence before adopting a single currency, provides a useful background for assessing the potential costs and benefits of the "single track" approach. The main challenge in ECOWAS is that the Nigerian economy, accounting for more than 60% of ECOWAS' GDP and being characterised by oil production, has very different terms of trade shocks compared to the other members which, due to their low diversification, are themselves highly vulnerable to terms of trade shocks. Cluster analysis by Tsangarides/Qureshi (2008) confirms that Nigeria, and to some extent also Ghana, differs substantially from other ECOWAS members for a set of economic variables that emerges from the optimum currency area literature. With current economic structures in the region adjustment to country-specific shocks under a single monetary and exchange rate policy in ECOWAS could therefore be costly in terms of losses in output, employment and price stability. In addition, rather low intra-regional product, capital and labour market integration as well as an insufficient convergence of economic policies are constraining the availability of alternative mechanisms for a smooth adjustment to shocks and also limiting the potential benefits of a single currency. The "single track" approach also raises the question of the choice of an exchange rate or monetary policy anchor which could affect the current arrangements of the WAEMU.

\* The five countries are The Gambia, Ghana, Guinea, Nigeria and Sierra Leone. Liberia, because of its post-conflict priorities for economic stabilisation, and Cape Verde, given its exchange rate arrangement with Portugal, chose to not participate.

### 3. The EU as a blueprint for macroeconomic surveillance in the CFA franc zone

In 1994 both WAEMU and CEMAC introduced – in conjunction with the devaluation of the CFA franc – institutional changes that aimed at complementing the already existing monetary union with an economic union. Central elements of this economic union were the creation of a common market and economic policy coordination, including a system of multilateral surveillance of macroeconomic policies (hereafter referred to as "macroeconomic surveillance"). The two main factors explaining these decisions were the economic and financial difficulties in the CFA franc zone since the mid-1980s as well as the demonstration effect of substantial progress in economic and monetary integration in the EU in the early 1990s by completing the Single Market and adopting the Maastricht Treaty. Section 3.1 will further explain this historical background, section 3.2 will present the mechanisms that were introduced, and section 3.3 will look at what the results have been so far.

#### 3.1 Historical background

In 1994, the devaluation of the CFA franc and a new institutional framework of economic integration were agreed to solve an ongoing economic crisis. Between 1985 and 1992, the terms of trade of the CFA franc zone deteriorated by about 45% due to both the development of commodities markets of the zone's main export goods and the depreciation of the US dollar, in which many of these goods are traded, against the French franc. This had a major negative effect not only on export revenues but also on tax revenues which depend to a large extent on the export sector through taxes and state-owned companies. In order to cover these deficits, commercial banks were politically pressured to provide loans to the private sector, and external loans were used to ensure the continuation of public investment projects. Several banks entered into insolvency and the servicing of external debt became increasingly difficult. As various attempts of structural adjustment failed to provide a solution, evidenced by the suspension of IMF programmes in most CFA franc countries, the devaluation of the CFA franc in 1994 accompanied by a new institutional framework of economic integration were identified as the best way out of the crisis.

The new 1994 treaties of WAEMU and CEMAC also provided a calendar for implementing a customs union, in line with what had been agreed before. This included a common external tariff and the elimination of tariffs within each of the two unions with some exceptions and safeguards. Some degree of tax harmonisation, in particular on value added taxes, was also agreed. Furthermore, the treaties specified the main bodies of WAEMU and CEMAC which are respectively:

- The Conference of the Heads of State as the supreme decision body;

- The Council of Ministers to examine the broad orientations of members' economic policies in order to ensure consistency with the common monetary policy. The work is prepared by an Inter-state Committee.
- The Central Bank with the exclusive right of monetary emission and to conduct monetary policy, called BCEAO for WAEMU, located in Dakar/Senegal, and BEAC, located in Yaoundé/Cameroon for CEMAC. The Boards have members representing both the member countries and France;
- The Commission as the guardian of the treaties with a role of coordination and initiative, located in Ouagadougou/Burkina Faso for WAEMU and in Bangui/Central African Republic for CEMAC;
- The Banking Commission as the responsible institution for banking supervision, a responsibility which was brought to the central level as a reaction to the banking crisis in the early 1990s;
- Court of Justice and Court of Auditors.

### **3.2 Mechanisms of surveillance**

Procedures of macroeconomic surveillance in the CFA franc zone are clearly inspired by those in the EU. The legal bases in the WAEMU Treaty and in the Agreement governing the Central African Economic Union (CAEU) were both adopted in early 1994 and are similar to Articles 98 to 104 of the Treaty establishing the European Community as agreed in Maastricht in 1991 (see detailed correspondence in Table 3.1). There is a reference to the general objectives of the Community and the principles of an open market economy with free competition favouring an efficient allocation of resources. Member States shall regard their economic policies as a matter of common concern and shall coordinate them within the Council. The Councils adopt broad economic policy guidelines (BEPGs) with recommendations. The Commissions assess progress on policy coordination and the convergence of economic performance on the basis of information provided by the Member States. In case of non-compliance of a Member State with the BEPGs, the Councils make recommendations and can make them public. More detailed rules of macroeconomic surveillance can be adopted by the Councils. Member States are to avoid excessive deficits, which is monitored by the Commissions on the basis of a number of criteria with reference values. A more detailed procedure for the correction of an excessive deficit is defined in the Treaties.

Table 3.1: Correspondence of Treaty articles on macroeconomic surveillance

	EC Treaty	WAEMU Treaty	CAEU Agreement
Reference to objectives and market economy	99.1	63	11
Economic policies as matter of common interest	99.2	64	49
Broad economic policy guidelines	99.3	63 + 65	49 + 50
Recommendations in case of non-compliance with BEPGs	99.4	72	61
Detailed rules of macroeconomic surveillance possible	99.5	65.2	8 (more general)
Member States to avoid excessive deficits	104.1	65.2	55
Commission to monitor budgetary discipline on the basis of quantifiable criteria	104.2	65.2	50
Procedure for the correction of an excessive deficit	104.3-14	72-75	59-61

Source: Author's compilation based on Treaty texts as mentioned

Since January 2002, macroeconomic surveillance in the CFA franc zone is based on four quantitative convergence criteria of "first order":

- Basic budget balance relative to GDP of close to zero or positive as the "key criterion";<sup>9</sup>
- Annual average inflation rate below 3%;
- Ratio of public debt (domestic and external) to GDP below 70%;
- Non-accumulation of domestic and external arrears in the current budget.

At a meeting in April 2008, CFA franc zone Finance Ministers decided to complement the inflation criterion with a core inflation rate by excluding food items for CEMAC and non-processed food and energy items for WAEMU from the calculations. A "corrected" basic budget balance would use the average of oil revenues of the last three years for CEMAC countries and add budget support and HIPC resources for WAEMU countries. Finally, oil-producing countries should also provide – with a view to the medium-term sustainability of fiscal policies - data on the evolution of the coverage of current expenditure (excluding interest payments) by non-oil budget revenues.

In addition, several convergence criteria of "second order", which differ between the two monetary unions, are monitored. The second order criteria are meant to provide some medium-term orientation and their non-respect does not trigger recommendations. In WAEMU these are the wage bill not exceeding 35% of budget revenues, public investment financed on own resources accounting for at least 20% of budget revenues, a current account deficit of less than 5% of GDP, and budget revenues of at least 17% of GDP. In CEMAC these are indicators classified as general performance (real GDP growth, current account deficit, foreign assets), analytical indicators (investment ratio, wage bill in the budget, REER, exports and imports) and indicators of economic policy (primary and total budget balance, money, credit).

<sup>9</sup> The basic budget balance is defined as the difference between total revenues (excluding grants) and total expenditure (excluding net loans and public capital expenditure financed by external loans).

As the respect of some of the criteria require a calendar, rolling multi-annual national convergence programmes for an indicative period of three years have to be elaborated by member countries. For example, the arrears criterion was accompanied by the obligation to clear the stock of arrears existing in 2000 until the end of 2004. The Commissions publish reports on the respect of the convergence criteria and other indicators as well as on the relations with the international financial community. The reports also draw conclusions and give country-specific recommendations. However, reporting by some of the countries encounters problems due to delays in the submission of national convergence programmes and the lack of reliable data.

Both WAEMU and CEMAC Treaties foresee various types of sanctions in case of non-compliance. These include the publication of a declaration by the Council, the withdrawal of benefits to the Member State concerned, a recommendation to the Development Bank to review its interventions, and the suspension from calls for tender. On the other hand, a Member State can also receive financial support for the implementation of corrective measures. In September 2007, the WAEMU Council of Ministers attributed the insufficient progress in convergence to the currently ineffective sanctions mechanisms and gave its Commission a mandate to evaluate the effective conditions of convergence of the national economies in 2008 and to make proposals on possible sanctions to strengthen the application of the Stability Pact.

Similar to the EU's Stability and Growth Pact, WAEMU introduced in 1999 the "Pact on Convergence, Stability, Growth and Solidarity between Member States of the WAEMU". It further specified and consolidated the surveillance mechanisms of the WAEMU Treaty and distinguishes between a convergence phase (from 1 January 2000 to 31 December 2002), during which Member States would approach the criteria progressively, and a stability phase (from 1 January 2003 onwards), during which Member States would need to respect the convergence criteria of first and second order. As all Member States would have had to respect all criteria of first and second order by the end of 2002, which proved to be impossible, the start of the stability phase was postponed to 2006 (and then restricted to the convergence criteria of first order) and again, for the same reason, to the end of 2008. The WAEMU Stability Pact specifies the procedures for the presentation and evaluation of multi-annual national programmes and, in case deviations from the convergence criteria occur in the stability phase which are not due to an exceptional situation, the positive and negative sanctions if the recommendations for corrective measures are not implemented. Exceptional situations are recognised in the cases of *force majeure*, a decline in real GDP growth of three percentage points below the three-year-average, and a deterioration of the external environment that has a significant effect on budget revenues.

In order to enhance coordination, Finance Ministers of the franc zone and France meet twice per year in spring and autumn at the margins of the meetings of the International Monetary and Financial Committee and the Development Committee. The Convergence Committee of the Franc Zone as a technical coordination body prepares reports to Finance Ministers on issues of relevance to both monetary unions and on the results of macroeconomic surveillance. Based on the 2006 report, the

conclusions of the franc zone Finance Ministers' meeting of September 2006 in Paris identified the main difficulties of the surveillance mechanisms: a lack of political impetus, the insufficiency of statistical indicators, the lack of financial and human resources, the lack of organisational homogeneity at national level, and the deficit in communication. Ministers also welcomed the work on correcting the basic budget figures for grants, HIPC resources and oil cycles and asked to speed up the work for creating a Harmonised Index of Consumer Prices (HICP). CEMAC members were asked to finalise their three-year convergence programmes.

### 3.3 Results

The results on the fiscal criteria (see Table 3.2) need to be seen against the background of the macroeconomic and structural characteristics of the CFA franc countries as described above in chapter 2. CEMAC member countries' compliance with the convergence criteria in recent years tended to be good on the three fiscal criteria. Apart from some improvements in tax administration, this is largely due to a generally prudent fiscal management of the windfall gains from high oil prices which more than compensated for a stagnation or reduction in oil production in some of the countries. However, an additional indicator shows that full coverage of current expenditure (excluding interest payments) by non-oil revenues is only achieved by Cameroon and the Central African Republic (CAR). In spite of some reduction in the budget deficits compared to 2006, WAEMU countries are less performing on the fiscal criteria, with only Benin having a slightly positive basic budget balance. Political instability (in Guinea-Bissau, Ivory Coast and Togo) and economic difficulties in specific sectors (in particular electricity and cotton) contribute to the problems in fiscal performance in WAEMU countries. In the whole CFA franc zone, several policies introduced to cushion the impact of rising food and oil prices will have a negative impact on the budget balance in 2008. The global economic slowdown and the related decline in commodity markets starting in the second half of 2008 will be felt in the budgets. Revenue losses from aligning common external tariffs and new trade agreements with the EU also create particular challenges in the coming years in managing the "fiscal transition" of replacing custom revenues with other tax revenues.

The level of public debt in the CFA franc zone largely corresponds to the countries' status regarding debt relief. All countries of the CFA franc zone, except for Gabon and Equatorial-Guinea because of their higher income, are in principle eligible to debt relief under the Highly Indebted Poor Countries (HIPC) initiative and the Multilateral Debt Relief Initiative (MDRI). Benin, Burkina Faso, Cameroon, Mali, Niger and Senegal already benefited from full debt relief (i.e. reached "completion point"), while the Central African Republic, Chad, Guinea-Bissau and the Republic of Congo have not yet reached completion point, and Ivory Coast and Togo still need to reach "decision point".

Table 3.2: Compliance with first order convergence criteria in the CFA franc zone (estimations for 2007)

	Basic budget balance relative to GDP	Annual average inflation rate	Public debt relative to GDP	Payment arrears in current budget (in million €)
<i>benchmark</i>	<b>&gt;=0</b>	<b>&lt;=3%</b>	<b>&lt;=70%</b>	<b>=0</b>
<b>Cameroon</b>	5.5	1.1	19.5	0.0
<b>CAR</b>	0.5	1.1	85.4	12.2
<b>Chad</b>	4.5	-9.0	29.5	6.3
<b>Congo</b>	14.1	2.6	72.9	n.a.
<b>Eq.-Guinea</b>	22.5	5.5	1.2	0.0
<b>Gabon</b>	11.8	4.8	32.1	0.0
<b>CEMAC</b>	<b>10.7</b>	<b>1.7</b>	<b>28.1</b>	<b>18.4</b>
<b>Benin</b>	0.7	1.3	22.8	0.0
<b>Burkina Faso</b>	-5.2	-0.2	22.1	0.0
<b>Ivory Coast</b>	-0.2	1.9	75.2	388.1
<b>Guinea-Bissau</b>	-12.5	4.6	368.7	16.3
<b>Mali</b>	-2.5	1.4	24.3	0.0
<b>Niger</b>	-4.0	0.1	22.0	0.0
<b>Senegal</b>	-2.7	5.9	19.7	0.0
<b>Togo</b>	-1.4	1.0	92.1	68.9
<b>WAEMU</b>	<b>-2.0</b>	<b>2.4</b>	<b>45.9</b>	<b>473.4</b>

Source: CEMAC and WAEMU Commissions

Inflation in the region tends to vary considerably over time and across countries as it depends, in addition to the macroeconomic policy-mix, on the policy response to food and energy price developments. Indeed, an important factor for the variation across countries is the pass-through of global into domestic prices (Böwer et al. 2007, p.21). In 2007, inflation rates were on average below the 3% benchmark and higher only in some of the countries. In the CEMAC countries this was mostly due to increases in indirect taxes and fuel prices. As in CEMAC the inflationary effects of high capital inflows arising from oil revenues and other commodity exports are difficult to manage by the limits to a more active monetary policy and a slow progress in structural reforms, the main burden of stabilisation falls on fiscal policies, notably on the non-oil fiscal balances. Inflation in the WAEMU was generally low as a result of prudent fiscal policies in some of the countries and a less buoyant economic activity in others.

The outlook for 2008 is towards inflation by far exceeding 3% in most countries of the CFA franc zone in view of the increases in food and energy prices which have a high weight in these countries' consumer price baskets. However, bearing in mind that most commodities are internationally traded in US dollar and compared to other regions in Africa, the appreciation of the euro and the CFA franc vis-à-vis the US dollar helped to mitigate some of the inflationary effects of higher food and energy prices. The steep decline in commodity prices in the second half of 2008 will help reduce inflationary pressures, but this might take some time to show up in headline inflation as second-round effects are still at work.

In conclusion, as macroeconomic surveillance is an important element of economic policy coordination in monetary unions to ensure an adequate policy-mix and to avoid negative spill-overs between participating countries, applying similar rules of

macroeconomic surveillance in the CFA franc zone as in EMU should be an adequate approach. However, there are important differences between EMU and the two monetary unions of CFA franc zone that would suggest a somewhat different framework of macroeconomic surveillance in the CFA franc zone. Contrary to developments in the EU, monetary integration preceded economic integration in the CFA franc zone with the consequence that economic integration is still rather incomplete and evolving only slowly in terms of actual implementation. In conjunction with a lower economic diversification, a weaker business environment and higher market rigidities in the CFA franc zone, country-specific shocks are both likelier to occur and to give fiscal policies a stronger role as adjustment mechanisms.

In addition, the high dependency of most CFA franc economies on commodity exports with volatile world prices is likely to lead to stronger pro-cyclical fiscal behaviour and a weaker operation of automatic stabilisers (Temprano Arroyo 2002, p.55). Due to the windfall gains from high oil prices, the fiscal criteria are now easily achieved by most CEMAC countries and no longer providing information on the fiscal stance or the medium-term sustainability of their fiscal policies. Weakening oil markets accompanying the global economic slowdown will thus be a challenge for the fiscal policy of CEMAC countries which did not build in some safety margins that can provide stabilisation in bad times.

These structural differences would suggest somewhat different fiscal rules in the CFA franc zone to those in EMU that would provide more flexibility in bad times and more restraint in good times. In practice this could also explain the rather reluctant implementation of surveillance mechanisms and the insufficient respect of convergence criteria in several of the countries while oil-exporting countries can easily meet the fiscal criteria in times of high oil prices. Instead, the mixed record of compliance with the convergence criteria in the CFA franc zone recently led to considerations of reinforcing sanction mechanisms. However, the experience of EMU shows that rather than applying sanctions it is more essential to make good use of preventive elements such as full ownership of fiscal programmes, support by public opinion, and peer pressure in the relevant common bodies. Finally, as the experience of EMU also shows, the quality and comparability of statistics is crucial for a successful surveillance and coordination of economic policies. According to an assessment of the Convergence Committee of the Franc Zone, the reliability and comparability of statistics is insufficient and should be improved. The implementation of recently agreed regional statistics programmes would therefore be important progress.

#### 4. Summary and conclusions

The role of the euro in Sub-Saharan Africa (SSA) is broadly in line with the general observation that the euro area is still the most important economic partner for SSA with some variation across the continent. The role of the euro is strongest in western and central Africa, notably in the CFA franc zone whose currencies have a fixed exchange rate which is pegged to the euro. However, the share of the euro area in SSA's foreign trade has shown a declining trend due to the longer-term adjustment

from colonial economic ties and the more recent increasing importance of SSA's trade with Asia.

The fixed peg of the CFA franc to the euro provides the West and Central African countries with an important anchor for monetary policy, even if it implies that monetary and exchange rate policies are not available to support a smooth adjustment to regional or country-specific shocks. Most of all, it has helped the region in achieving considerably higher macroeconomic stability than in most other regions of SSA. The CFA franc also provides a stable monetary institutional framework which several participating countries – many suffering from weak governance – might have difficulties to establish independently. The guarantee of convertibility backed by the French Treasury further facilitates external transactions and lends credibility to the arrangement. While still being the most important trade partner, the relative importance of trade integration with the EU has declined since the mid-1990s for the same reasons as for the rest of SSA, thus gradually weakening the case – from a pure trade perspective – for using the euro as the only anchor. Still, the possible trade benefits of moving away from the euro as only peg currency need to be carefully balanced against other possible costs of changing the related institutional arrangements. Concerns were also expressed that the strong appreciation of the euro in the last years is reducing the competitiveness and growth perspectives of the CFA franc zone. However, available analyses suggest that so far the real effective exchange rate is still broadly in line with fundamentals so that external price competitiveness seems not at risk. For the long-term perspectives of the CFA franc zone structural reforms will be important in order to foster trade and to reduce the likelihood and impact of asymmetric shocks. Most of all, substantial improvements in governance, the general business environment and the provision of infrastructure will be required to advance product diversification and integration and to enhance the functioning of adjustment through product, capital and labour markets.

In the context of the devaluation in 1994, rules of macroeconomic surveillance very similar to those established in the EU were introduced and gradually implemented. Main convergence criteria are a balanced budget (excluding grants), a debt-to-GDP ratio below 70%, an inflation rate below 3%, and the avoidance of budget arrears. Until now, overall compliance with these criteria was insufficient in several of the CFA franc countries. Contrary to developments in the EU, monetary integration preceded economic integration in the CFA franc zone and economic integration is still rather incomplete. Weak economic structures and a high dependence on commodity exports increase the likelihood of asymmetric shocks and of pro-cyclical fiscal behaviour. Compared to EMU, fiscal policies in the CFA franc zone should therefore take on a stronger role as adjustment mechanism and be given more flexibility in bad times and more restraint in good times. Reinforcing preventive elements such as ownership of fiscal programmes, supported by public opinion and peer pressure, could help to improve the results of macroeconomic surveillance in the CFA franc zone.

## References

- Abdih, Yasser and Charalambos G. Tsangarides (2006): FEER for the CFA Franc; *IMF Working Paper* 06/236, Washington D.C.
- Banque de France (2002): *La Zone Franc*; Paris, Note d'information n° 127.
- Banque de France (2005): *Rapport Zone Franc - 2005*; Paris.
- Böwer, Uwe; André Geis and Adalbert Winkler (2007): Commodity Price Fluctuations and their Impact on Monetary and Fiscal Policies in Western and Central Africa; *ECB Occasional Paper Series No. 60*
- Djoufelkit, Hélène (2006): Zone franc et compétitivité-prix des systèmes productifs nationaux; Agence Française de Développement, *JUMBO rapport thématique* n° 14.
- Djoufelkit, Hélène (2007): Évolution des TCER de la zone franc: 1993-2008; Agence Française de Développement, *JUMBO rapport thématique* n° 20.
- European Commission – DG ECFIN (2004): *Survey on the use of euro cash outside the EU - Results of a survey of Commission delegations carried out during February 2004*; Brussels.
- European Commission - Directorate-General for Economic and Financial Affairs (2008): *EMU@10 - successes and challenges after 10 years of Economic and Monetary Union*; Brussels/Luxembourg (= European Economy 2/2008)
- European Central Bank (various years): *Review of the international role of the euro*; Frankfurt a.M.
- Frankel, Jeffrey (2008): *The estimated effects of the euro on trade: Why are they below historical evidence on effects of monetary unions among smaller countries?* Paper for the Dubrovnik Economic Conference XIV, 26-27 June 2008, and NBER Conference on Europe and the Euro, 17-18 October 2008.
- Jiménez-Martín, Sergi; Natalia Jorgensen and José María Labeaga (2007): *The volume and geography of remittances from the EU*, FEDEA, Madrid, financed by the European Commission.
- Kamps, Annette (2006): *The euro as invoicing currency in international trade*; ECB Working Paper Series No 665, Frankfurt a.M.
- Lamine, Baudoin (2006): Monetary and exchange rate agreements between the European Community and Third Countries; *European Economy - Economic Paper* No. 255, September 2006
- Ramirez, Gustavo and Charalambos G. Tsangarides (2007): Competitiveness in the CFA Franc Zone; *IMF Working Paper* 07/212, Washington D.C.

Roudet, Stéphane, Magnus Saxegaard and Charalambos G. Tsangarides (2007): Estimation of Equilibrium Exchange Rates in the WAEMU: A Robustness Approach; *IMF Working Paper* 07/194, Washington D.C.

Temprano Arroyo, Heliodoro (2002): Latin America's integration process in the light of the EU's experience with EMU; *European Economy – Economic Papers* N° 173.

Tsangarides, Charalambos G. and Mavash Saeed Qureshi (2008): Monetary Union Membership in West Africa: A Cluster Analysis; in: *World Development* Vol. 36, No.7, pp.1261-1279.

World Bank (2008): *Global Development Finance - Volume II: Summary and Country Tables*; Washington D.C.

Yehoue, Etienne B. (2007): The CFA Arrangements – More than Just an Aid Substitute? *IMF Working Paper* WP/07/19.

## Annex: Exchange rate arrangements in Sub-Saharan Africa

Country	official currency	peg currency	IMF classification of de facto exchange rate arrangement (as of 31 July 2006)
Angola	Kwanza		Managed floating with no pre-determined path for the exchange rate
Benin	CFA Franc	Euro	Exchange arrangements with no separate legal tender
		basket of SDR (i.e. incl. euro) and Rand	
Botswana	Pula		Crawling pegs
Burkina Faso	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Burundi	Franc		Managed floating with no pre-determined path for the exchange rate
Cameroon	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Cape Verde	Escudo	Euro	Other conventional fixed peg arrangements
Central African Republic	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Chad	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Comoros	Franc	Euro	Other conventional fixed peg arrangements
Congo (Republic of the)	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Côte d'Ivoire	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Democratic Republic of the Congo	Franc		Independently floating
Djibouti	Franc	US dollar	Currency board arrangements
Equatorial Guinea	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Eritrea	Nakfa		Other conventional fixed peg arrangements
Ethiopia	Birr		Other conventional fixed peg arrangements
Gabon	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Gambia	Dalasi		Managed floating with no pre-determined path for the exchange rate
Ghana	Cedi		Managed floating with no pre-determined path for the exchange rate
Guinea	Franc		Managed floating with no pre-determined path for the exchange rate
Guinea-Bissau	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Kenya	Shilling		Managed floating with no pre-determined path for the exchange rate
Lesotho	Loti	Rand	Other conventional fixed peg arrangements
Liberia	Dollar		Managed floating with no pre-determined path for the exchange rate
Madagascar	Ariary		Managed floating with no pre-determined path for the exchange rate
Malawi	Kwacha		Managed floating with no pre-determined path for the exchange rate
Mali	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Mauritania	Ougiya		Other conventional fixed peg arrangements
Mauritius	Rupee		Managed floating with no pre-determined path for the exchange rate
Mozambique	Metical		Managed floating with no pre-determined path for the exchange rate
Namibia	Dollar	Rand	Other conventional fixed peg arrangements
Niger	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Nigeria	Naira		Managed floating with no pre-determined path for the exchange rate
Rwanda	Franc	US dollar	Other conventional fixed peg arrangements
Sao Tome and Principe	Dobra		Managed floating with no pre-determined path for the exchange rate
Senegal	CFA Franc	Euro	Exchange arrangements with no separate legal tender
		basket incl. euro (37.7%)	
Seychelles	Rupee		Other conventional fixed peg arrangements
Sierra Leone	Leone	US dollar	Other conventional fixed peg arrangements
Somalia	Shilling		Independently floating
South Africa	Rand		Independently floating
Sudan	Pound		Managed floating with no pre-determined path for the exchange rate
Swaziland	Lilangeni	Rand	Other conventional fixed peg arrangements
Tanzania, United Republic of	Shilling		Independently floating
Togo	CFA Franc	Euro	Exchange arrangements with no separate legal tender
Uganda	Shilling		Independently floating
Zambia	Kwacha		Managed floating with no pre-determined path for the exchange rate
Zimbabwe	Dollar		Other conventional fixed peg arrangements

Source: Author's compilation based on IMF and other sources