

Exchange Rate Regimes and Competitiveness

Background Discussion

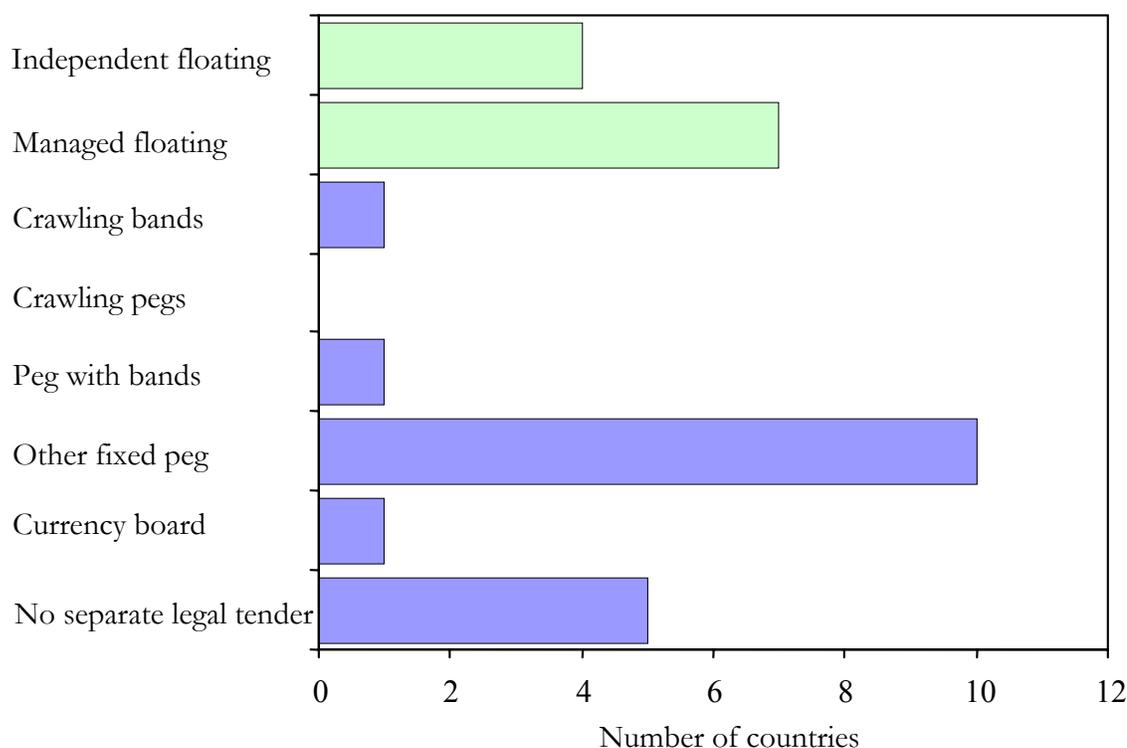
Oil-exporting countries have used a variety of exchange rate arrangements, as shown in Figure 9. At the end of 2001, about 18 of the 29 oil-producing IMF member countries (excluding the former Soviet bloc countries) used some form of fixed exchange rate regime, while 11 opted for either managed or independent floating. This suggests that, in practice, the choice of an exchange rate arrangement is not a straightforward exercise; instead, exchange rate policy has to be based on country-specific considerations, including the relative openness of the economy, in terms of both current and capital accounts, and the relative prevalence of real or nominal shocks. Exchange rate policy will also have to take into account the monetary policy and institutional framework in which it is set.¹⁸ This subsection describes first general considerations, then potential advantages of flexible exchange rates, and finally policies in support of fixed exchange rates.

General considerations

Exchange rate policy has an important role to play within a macroeconomic policy framework and can contribute to the maintenance of macroeconomic stability. For an oil-exporting country, the risk to macroeconomic stability comes mainly from changes in the international oil price, which lead to export revenue changes. These changes, unless accompanied by changes in foreign and domestic savings, result in balance of payments disequilibria that can be corrected only via

¹⁸For a recent reminder, see, for example, Laidler (1999), who uses the term *monetary order* to describe the set of arrangements comprising monetary policy, along with the framework of institutions, goals, and beliefs in which this policy is conducted.

Figure 9. Oil-Producing Developing Countries: Exchange Rate Regimes, 2001



Source: IMF, *International Financial Statistics and Information Notice System*.

real exchange rate adjustment. This adjustment, or the change in the relative price of tradables and nontradables, will take place regardless of the nominal exchange rate regime in place; however, the exchange rate regime determines whether adjustment will be preceded by a change in the nominal exchange rate or a change in the domestic price level.

An increase in the price of oil leads to higher private and public oil revenue, usually received in U.S. dollars. The conversion of this dollar inflow into domestic currency puts pressure on the currency to appreciate. Policymakers are facing a dilemma: they can either let the nominal exchange rate appreciate, or the central bank can buy up foreign exchange and increase foreign reserves in order to avoid a nominal appreciation (as in a fixed exchange rate regime). However, this latter option creates excess liquidity in the economy, which, since sterilization efforts cannot be sustained for a long period (and the accompanying high domestic interest rates may be undesirable), would in turn lead to higher domestic spending and inflation.

A nominal appreciation means that consumers will find imported goods cheaper than goods produced at home, and producers will find it more profitable to produce for the domestic market than for export; as a result, the competitiveness of the non-oil tradable sector declines. Higher imports and lower non-oil exports close the balance of payments disequilibrium created by increased oil export earnings. In a fixed exchange rate regime, domestic inflation leads to a similar adjustment. A traditional three-goods model—oil, a tradable good (say, manufacturing), and a nontradable good (say, services)—can provide useful insights into how this comes about. Higher domestic spending from excess liquidity raises the price of services relative to manufacturing because the supply of manufactured goods can be expanded through imports (at prevailing international prices), whereas additional services can be produced only with the existing scarce domestic production factors. The increase in the price of services encourages the movement of factors of production away from manufacturing, with employers in the service sector bidding up wages in order to attract additional labor. In a new equilibrium, the output of services will be higher, and that of manufacturing lower, and the competitiveness of the non-oil tradable sector will have declined.

The predicted result of real exchange rate appreciation in response to an improvement in the terms of trade is not affected by the existing exchange rate regime. The essential element of the economy's adjustment relates to the *relative price change* (services versus manufacturing) that takes place regardless of the regime.¹⁹ Yet the exchange rate regime itself will influence how the adjustment in relative prices is brought about—an important consideration in weighing the relative merits of alternative exchange rate regimes.

Potential advantages of the flexible exchange rate regime

A flexible exchange rate regime offers potential advantages to a resource-dependent country: it can facilitate the economy's adjustment to terms-of-trade changes and help maintain macroeconomic stability. However, in practice, these potential advantages can be undermined by poorly designed or poorly implemented monetary and fiscal policies—a frequent occurrence in countries with weak institutions, low central bank credibility, and persistent fiscal pressures. A flexible exchange rate regime facilitates a relative price adjustment while allowing monetary policy to be geared toward controlling domestic inflation. Consider, in particular, a long-lasting or permanent oil price decline. Under such a scenario, the country's real exchange rate will depreciate. Whereas

¹⁹The decline in manufacturing in response to this price change is a phenomenon commonly called the Dutch disease (see Section 3). This is an unfortunate term because it gives an undeserved negative connotation to a resource allocation process that is economically quite rational and that, in and of itself, does not imply a decrease in the country's overall GDP.

in a flexible exchange rate regime this adjustment can be achieved through a nominal exchange rate depreciation, under a fixed rate regime this requires a decline in domestic money wages and prices.²⁰ In an economy with sticky wages and prices, the adjustment process may involve periods of unemployment and output losses.

Thus, in general, we would expect oil-exporting countries with flexible exchange rate regimes to enjoy greater output and price stability than countries with fixed rates. However, this relative advantage will be realized only if it is set within a coherent monetary policy framework, ideally supported also by a sound fiscal policy. Under a lax monetary policy, a nominal depreciation may trigger an inflationary spiral, which will tend to frustrate the necessary adjustment in relative prices. In those conditions, the process of adjustment may be just as drawn out and difficult as under the fixed exchange rate.

Policies in support of a fixed exchange rate regime

Maintenance of a fixed exchange rate constrains the country's monetary policy and may render adjustment to terms-of-trade changes more difficult. On the upside, such an arrangement, if set within a coherent monetary framework supported by strong institutional safeguards, can provide much-needed policy credibility and contribute to greater overall macroeconomic stability. A sound fiscal policy is particularly critical to ensuring the ongoing viability of a fixed exchange rate regime. In addition, structural policies aimed at enhancing the flexibility of goods and factor markets and creating an environment conducive to private sector development are important in facilitating the economy's adjustment to permanent changes in the terms of trade.

Fiscal policy assumes an important role in macroeconomic stabilization under a fixed exchange rate regime. A potentially negative effect on the domestic economy from international oil price swings can be attenuated by a fiscal policy that is actively geared toward stabilizing domestic demand.²¹ Establishing a stable fiscal spending pattern is important for maintenance of macroeconomic stability when dealing with year-to-year swings in the terms of trade. However, in a scenario in which international oil prices or domestic oil production are on a long-term decline, maintaining fiscal spending at levels established in "good" times poses risks to fiscal sustainability and delays the needed adjustment in the

²⁰Reinhart and Rogoff (2002) find that, between 1971 and 2001, the CFA franc zone countries—commodity exporters with a hard exchange rate peg—experienced more frequent episodes of deflation than other countries.

²¹In sub-Saharan Africa, most of the income generated in the oil sector is shared by foreign oil companies and the domestic public sector. With the repatriation of the foreign portion of the income, the risk to domestic stability comes largely from procyclical fiscal expenditures. In these circumstances, fiscal policy needs to aim at stabilizing public expenditures.

economy. In that case, the adjustment needs to be driven by the supply side of the economy—flexible goods and factor markets can ease the adjustment necessary to reallocate production from services toward manufacturing. Under a fixed exchange rate regime, pursuit of structural policies aimed at enhancing the flexibility and resilience of the non-oil economy is essential.²²

B. Current Practice

In the group of SSA oil exporters, five countries—Cameroon, Chad, the Republic of Congo, Equatorial Guinea, and Gabon—are members, along with the Central African Republic, of CEMAC. They share a common currency, the CFA franc, which had been pegged to the French franc and, since the beginning of 1999, has been pegged to the euro. The exchange rate regimes of the other two oil exporters—Angola and Nigeria—are classified as a managed float.

CEMAC countries

CEMAC countries belong to a monetary union—the Union Monétaire de l’Afrique Centrale (UMAC)—in which the responsibility for monetary policy has been delegated to the regional central bank (BEAC).²³ CEMAC’s monetary arrangement leaves little scope for an independent monetary policy even at the regional level—it is essentially a rule-based system characterized by the peg to the euro, convertibility, limits on central bank lending to governments, and minimum legal levels of foreign reserves (Boxes 2 and 3). Any decision to realign the common currency has to be made jointly, which rules out unilateral actions by individual members for reasons of political expediency. Between 1971 and 2001, CEMAC oil producers’ GDP per capita growth averaged 2.4 percent, compared with a 0.9 percent average for all oil producers (Table 7). Inflation performance was also better for CEMAC oil producers: 8.4 percent versus 26.6 percent for the whole group. The record is less clear cut in terms of inflation variability as the average variability was lower for CEMAC oil producers (11.6) than for the group as a whole (47.8); however, the median value is slightly higher for CEMAC (9.4 versus 7.8 for the group as a whole).

²²This will be even more important in countries where the oil sector has some interaction in domestic factor markets.

²³According to its statutes (Article 1) “. . . the Bank issues the currency of the Union and guarantees its stability. Without undermining this objective, the bank provides support to the economic policies within the Union. The mission of the Bank is to define and conduct the monetary policy for the countries of the Union; to buy and sell foreign currency; to hold and manage the exchange reserves of member countries; to ensure smooth functioning of the payments system of the Union.”

Box 2. Oil Funds and Foreign Exchange Management in CEMAC Countries

In 2001, the BEAC (the common central bank of the Central African Economic and Monetary Community (CEMAC) countries) created a framework for two funds: one to help achieve the short-term stabilization of oil receipts and the other to accumulate long-term savings for future generations. Countries can pay 50 percent of their “excess” oil receipts into the *stabilization fund*—excess defined as revenue corresponding to the oil price exceeding its five-year average. Conversely, countries can make drawings from the fund corresponding to 50 percent of the shortfall. A country’s net balance in the stabilization fund must remain positive. Up to 10 percent of oil revenues can be deposited in the *savings fund*. To date, no country has made a deposit in either fund—an outcome that seems to reflect unresolved issues relating to the management of the funds and the types of assets that the funds could hold, as well as concern about low rates of return offered by the BEAC.

The rules of the monetary union stipulate that foreign assets be kept partly with the BEAC (35 percent) and partly in the BEAC’s operations account with the French Treasury. As foreign exchange reserves, these funds would need to be held in short-term liquid assets. Thus, at the moment, it is not clear how, under the current rules, long-term investment objectives of the savings fund—including the possibility of holding longer-term, higher-return-yielding assets, including equities and bonds—can be reconciled with the pooling of reserves. Furthermore, the requirement to pool reserves seems to rule out a separate investment of foreign exchange owned by a country’s fund for future generations.

The greatest risk to the stability and continued viability of the CFA franc peg comes from weak fiscal policy and, in the case of oil exporters, from procyclical fiscal policy, in particular. Part of the risk stems from the rules themselves—for example, linking the government’s credit ceiling at the central bank to its fiscal revenues effectively means that when oil prices are relatively high—and so, presumably, is government revenue—the government will be able to borrow more from the central bank. This occurred in the second half of the 1970s, when the CEMAC countries benefited from the increases in their terms of trade while at the same time allowing their outstanding borrowing from the BEAC to rise.

In recent years, with relatively favorable international oil prices, excess demand pressures stemming from expansionary fiscal spending have been a concern in most CEMAC countries, despite the fact that no oil producer except Chad has been in violation of the convergence criterion for the basic fiscal balance

Box 3. CEMAC Monetary Arrangement

The arrangement is underpinned by the following elements:

- Convertibility of the CFA franc is guaranteed by the French Treasury.
- Transfers are free within the zone.
- Foreign exchange reserves are centralized at two levels: at the regional central bank (the BEAC), and at the French Treasury. Member countries have to maintain at least 65 percent of their foreign exchange reserves in the operations account of the French Treasury.

The BEAC's overriding policy objective is to maintain the stability of the common currency, with a subordinate objective of providing support to the economic policies within the union. There is little scope for independent monetary policy—the maintenance of the peg to the euro means that the monetary policy stance in the region is essentially determined by the actions of the European Central Bank.

Monetary policy is supported through a number of safeguards. Lending by the BEAC to central governments is capped at 20 percent of government fiscal receipts collected in the preceding year.¹ The BEAC is required to maintain 20 percent foreign exchange cover of its sight liabilities, a limit designed to act in practice as a barrier against open-ended access to the operations account that the bank maintains with the French Treasury. Corrective measures—increase in interest rates and reduction in the refinancing of commercial banks—are envisaged should the floor be breached for three consecutive months.

To ensure consistency between its monetary policy and national economic and fiscal policies, the BEAC conducts an annual financial programming exercise, designed to set specific targets of credit for each government consistent with a target level of net domestic assets and gross foreign assets of the BEAC. The programming exercise is complemented by an annual macroeconomic surveillance exercise, which is part of an agenda of intensified regional surveillance and integration. In the surveillance exercise, CEMAC's Executive Secretariat evaluates the member countries' policies relative to the following targets: nonnegative basic balance; a level of domestic and foreign debt not exceeding 70 percent of GDP; nonaccumulation of domestic and external arrears; and annual inflation of no more than 3 percent.

¹This rule will cease to be in effect on January 1, 2004, with the planned elimination of the BEAC's monetary financing of government deficits, which will be phased in over ten years.

(nonnegative) since 1999. In 2001, the inflation convergence criterion of 3 percent was breached by Equatorial Guinea (12.0 percent) and Chad (12.4 percent). The net foreign position of the CEMAC as a whole deteriorated as well, with net foreign assets declining from CFAF 274 billion to CFAF 133 billion in that year.

Table 7. Economic Performance of Oil Exporters, 1971–2001¹

	Total	Peggers		All	Floaters	
		All	CEMAC		All	Angola
GDP per capita growth, period annual average, percent						
Average						
1971–2001	0.9	1.0	2.4	0.9	-1.8	0.7
1971–81	1.1	1.3	2.0	0.9	-3.7	-1.2
1981–91	-0.6	-1.6	0.1	0.6	0.5	2.9
1991–2001	2.0	3.0	5.2	0.9	-1.9	0.0
Median						
1971–2001	0.7	1.0	1.0	0.7	-1.8	0.7
1971–81	1.6	2.7	3.2	1.2	-3.7	-1.2
1981–91	0.1	-0.1	0.5	0.4	0.5	2.9
1991–2001	1.0	1.6	0.0	0.5	-1.9	0.0
Inflation, period annual average, percent						
Average						
1971–2001	26.6	9.5	8.4	49.5	356.2	22.0
1971–81	13.2	11.1	10.3	16.0	40.1	15.8
1981–91	19.1	9.6	7.9	31.8	10.1	19.7
1991–2001	49.0	7.6	6.8	104.2	1050.1	31.2
Median						
1971–2001	10.5	7.3	7.5	21.7	356.2	22.0
1971–81	12.1	11.0	10.7	14.5	40.1	15.8
1981–91	9.2	4.5	5.8	14.9	10.1	19.7
1991–2001	7.9	4.4	6.8	15.9	1050.1	31.2
Deviation of inflation rate						
Average						
1971–2001	47.8	8.6	11.6	100.1	940.4	18.8
1971–81	13.6	7.5	10.0	21.8	38.1	10.4
1981–91	65.0	7.7	12.5	141.5	1419.4	22.5
1991–2001	7.6	3.8	3.0	12.7	86.5	5.1
Median						
1971–2001	7.8	6.8	9.4	14.5	940.0	18.8
1971–81	5.7	6.3	4.8	5.4	38.1	10.4
1981–91	7.4	5.1	13.0	16.4	1419.4	22.5
1991–2001	2.7	1.7	2.7	4.8	86.5	5.1

¹A group comprising 38 oil-producing developing countries.

Angola and Nigeria

Viewed over the longer 1971–2001 period, the economic performance of Angola and Nigeria was inferior to that of the CEMAC countries (Table 7). Annual per capita GDP growth averaged –1.8 percent for Angola and 0.7 percent for Nigeria; inflation 356 percent and 22 percent, respectively; and the standard deviation of inflation 940 percent and 19 percent, respectively.

An expansionary fiscal policy bias and fiscal dominance have tended to complicate the conduct of monetary policy and reduce the effectiveness of the exchange rate as a policy instrument in both countries. Monetary conditions have been considerably unsettled in Angola, which experienced an average inflation rate in excess of 1,000 percent in 1991–2001. Nigeria fared better, with inflation averaging 31.2 percent between 1991 and 2001. However, in this period, the central bank faced difficulties in meeting its monetary and inflation objectives. Its monetary policy was generally accommodative of expansionary fiscal policies and demand pressures. As a result, liquidity exceeded targeted levels, and base and broad money objectives were persistently breached.

Although the exchange rate regimes of the two countries are classified as floating, the authorities in both countries have often attempted to manage their exchange rates. In Angola, the official intervention in 2001 reflected a policy of de facto exchange rate–based stabilization. In Nigeria, past attempts to tightly manage the exchange rate were reflected in sharp changes in international reserves and the widening premium in the parallel exchange rate.

Parallel foreign exchange rate markets have been active in both countries. In Angola, the informal market has been used by residents seeking to acquire dollars and dispose of illegal diamond receipts. Since the foreign exchange market was significantly liberalized in 1999, the spread between the official and informal markets has remained below 10 percent. Nigeria has been making progress in liberalizing the multiple exchange rate regime that has been in place since 1994. In response to the rapid decline in international reserves in the first half of 2002, the Nigerian authorities introduced, in July 2002, a Dutch auction system for the primary sale of foreign exchange by the central bank. The objectives of the new system are to safeguard international reserves while allowing the exchange rate to adjust to market conditions. The official exchange rate has depreciated significantly since the auctions have been in place, and the spread between the official rate and the parallel rate has narrowed considerably (to less than 10 percent by end-2002).

C. Discussion and Recommendations

The choice of exchange rate regime is primarily a political decision and cannot easily be based on economic arguments alone. For instance, some participants in the Douala workshop suggested that fixed exchange rates gave the opportunity to eliminate one of the many sources of uncertainty in African economies.

The real exchange rate volatility and appreciation in SSA oil-producing countries, which partly explain the disappointing performance of the non-oil sectors, show that fiscal and monetary policies have not been well adapted to support the chosen exchange rate regime. Structural reforms, as well as improvements in infrastructure and management of public utilities, would also enhance the competitiveness and viability of the non-oil tradable sector in the region.

While structural reforms take time, policymakers should adopt immediately fiscal and monetary policies to safeguard macroeconomic stability and a competitive real exchange rate. In particular, a stable fiscal framework that is delinked from oil market developments would end the boom-bust cycles observed in the past. As outlined in Sections 3 and 4, such a framework would aim at stabilizing expenditure by saving windfall earnings abroad and reducing assets in times of revenue shortfalls. Moreover, foreign savings reduce the need for the domestic sterilization of foreign exchange inflows.