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Angola's Fragile Stabilization

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Abstract

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This paper discusses the nature of Angola's disinflation strategy in recent years, with special emphasis on the most recent efforts by the Angolan authorities to stabilize the economy. Looking to the past, the paper stresses the costs of the disinflation strategy, as measured by the central bank sizable foreign exchange intervention and the increase in Angola's external liabilities that unfolded in the process. The paper also notes that non-oil fiscal deficits have remained very large. Looking to the future, the paper stresses the pressing need to reduce demand pressures stemming from sizable government spending on wages and salaries, goods and services, subsidies, and other current transfers to the economy. The prescribed fiscal consolidation effort is viewed as critical to curtail the non-oil fiscal deficit, reduce inflation expectations on a lasting basis, and avoid further foreign borrowing on commercial terms, including loans collateralized by future oil revenues.

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[1] The authors are with the IMF Monetary and Financial Systems Department and African Department, respectively. This paper was prepared during September–November 2003, while Mr. Gasha was working in the African Department's Southern African Division II. The authors would like to thank Anupam Basu, Juha Kahkonen, Alfredo Torrez, Marcio Ronci, Margaret Mashinkila, and Jorge Araujo, as well as all other IMF and World Bank colleagues who commented on earlier versions of this paper. Thanks are also due to Maria Mendez and Anh My Smith for their valuable research and secretarial assistance. The authors assume responsibility for any errors in the paper.

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I. INTRODUCTION

High inflation has been one of the major macroeconomic problems facing the Angolan authorities for more than a decade. While numerous anti-inflationary programs have been launched by the authorities with some positive results over the years, Angola's inflation has remained persistently high, hovering around 100 percent a year since 2001. Large fiscal imbalances, including sizable central bank operational deficits, have been an obstacle to price stabilization. At the same time, Angola's relatively low international reserves have, in principle, limited its scope for using the exchange rate anchor in fighting inflation. In the event, however, developments since early September 2003 seem to suggest that the authorities may have been using the exchange rate as a nominal anchor to stabilize the economy (Figure 1).

This paper presents the nature of the inflation problem facing the Angolan authorities. It also describes the main policy instruments supporting the apparent exchange rate-based stabilization (ERBS) program currently in place. The paper goes on to stress the main risks of the authorities' anti-inflation strategy, while proposing an alternative to the government's stabilization strategy.[2]

The paper has been written in the early stages of the stabilization program currently in place. As such, it does not include some recent policy proposals reportedly under consideration by the Angolan authorities, including the phasing out of large consumer subsidies in energy and adjustment of public utilities tariffs. The fiscal adjustment effort under consideration, however, would be consistent with the paper's main policy prescription, as well as with the experience of successful stabilization programs around the world.

A main conclusion from the paper is that, to date, inflation stabilization in Angola has been very costly, since it has weakened the country's net foreign asset position and worsened the debt burden through the very large non-oil fiscal deficits that have been incurred over the years. Also, key considerations for a successful ERBS program are absent in Angola. The country's gross international reserves are rather limited, thus severely weakening its ability to defend the peg. In addition, a change in the composition of deficit financing—favoring large external commercial borrowing—is a poor substitute for the fiscal adjustment prescribed in this paper. A more productive approach would be to launch a money-based stabilization (MBS) program accompanied by a medium-term fiscal adjustment strategy that would gradually reduce Angola's large fiscal deficits through an appropriate package of revenue-raising and expenditure-cutting measures. Launching such a medium-term fiscal strategy would require a large up-front fiscal retrenchment that would signal a decisive tightening of the fiscal stance aimed at changing inflation expectations.[3]

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[2] The appendix includes a table of selected economic and financial indicators for Angola.

[3] A review of the government's spending priorities will need to be implemented to secure adequate levels of spending on social programs and post-conflict reconstruction outlays.

Figure 1: Daily Exchange Rate, August 2002–November 2003
(In kwanzas per U.S dollar)
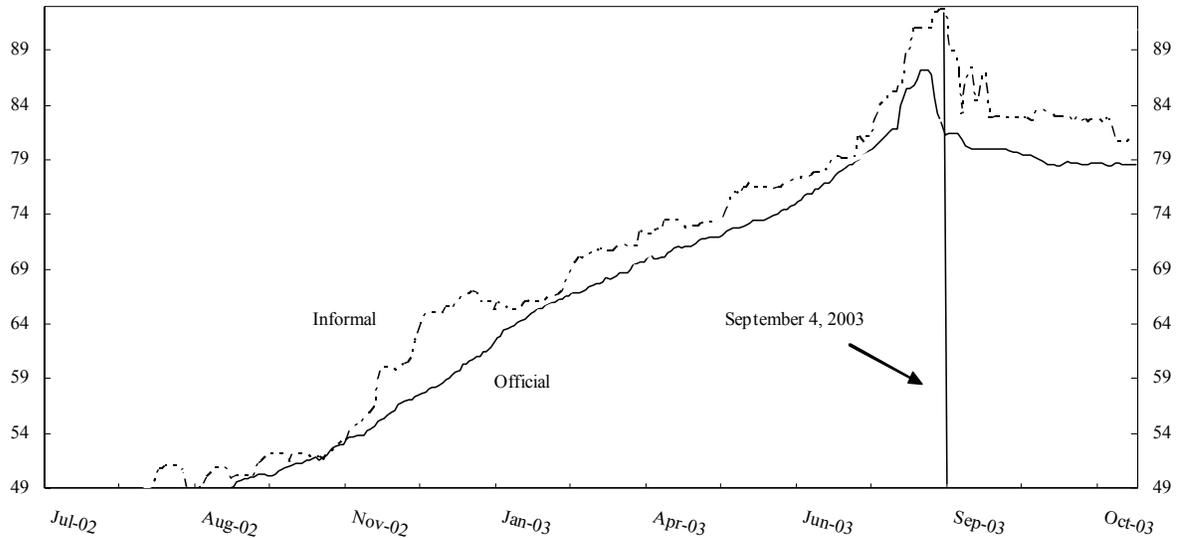
Source: Angola National Bank (BNA).

II. INFLATION, MONEY GROWTH, AND THE NON-OIL FISCAL DEFICIT

Since 2000, Angola has embarked on a gradual process of economic stabilization that has yielded some positive results. Average inflation has gradually fallen from 268 percent in 2000 to 106 percent in 2002 (Figure 2). Some basic statistics suggest that inflation volatility has significantly declined in recent years. Specifically, while in the period January 2000 – December 2001, the average and the standard deviation of inflation were 257 percent and 104 percent, respectively; for the period January 2002 – August 2003, the inflation rate fell to an average of 108.5 percent, while its standard deviation bottomed to 7.6 percent. In sum, a large disinflation was indeed achieved during 2000-02, but inflation has remained entrenched at more than 100 percent per year: a very high level by international standards.

The inflation process in Angola has its roots in large domestically-financed fiscal deficits, including large operational deficits of the central bank. In this sense, on the monetary side, insufficient control and surveillance over money growth have prevented further

Figure 2. Annual Inflation Rate, January 2000–August 2003

(In percent)
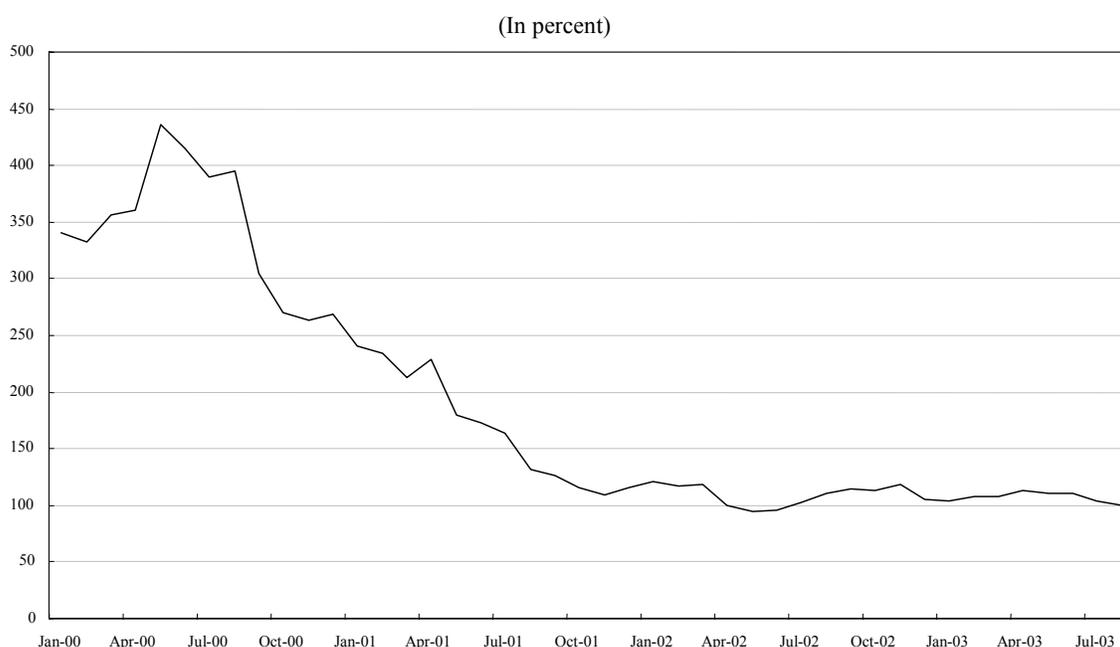
Source: Angolan authorities.

improvements in the stabilization effort. Statistical analysis[4] suggests that narrow and broad monetary aggregates are highly informative regarding the inflation process in the short- and long-run (Figure 3). Moreover, the growth of broad monetary aggregates (i.e., those including dollar denominated assets such as M2 and M3) seem to display a closer statistical relationship with inflation than that of narrow monies (reserve money).

The data also suggest that movements in the nominal exchange rate significantly impact the inflation process (Figure 4). The exchange rate pass-through coefficient increased from 0.12 during 1997-1999 to 0.33 during 2000-02, suggesting that one third of today's exchange rate depreciation translates into price increases. As suggested by Ize et al (2002) and Gasha (2003a), the levels of pass-through, the dollarization of the Angolan economy, and the significant share of imported goods in the consumer basket may largely explain the importance of the impact of exchange rate movements on domestic inflation.

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[4] See, for example, the inflation analysis by Gasha (2003) using standard and canonical time series statistical techniques.

Figure 3. Inflation and Money Growth Rates, January 2000─August 2003

(12-month growth rates in percent)
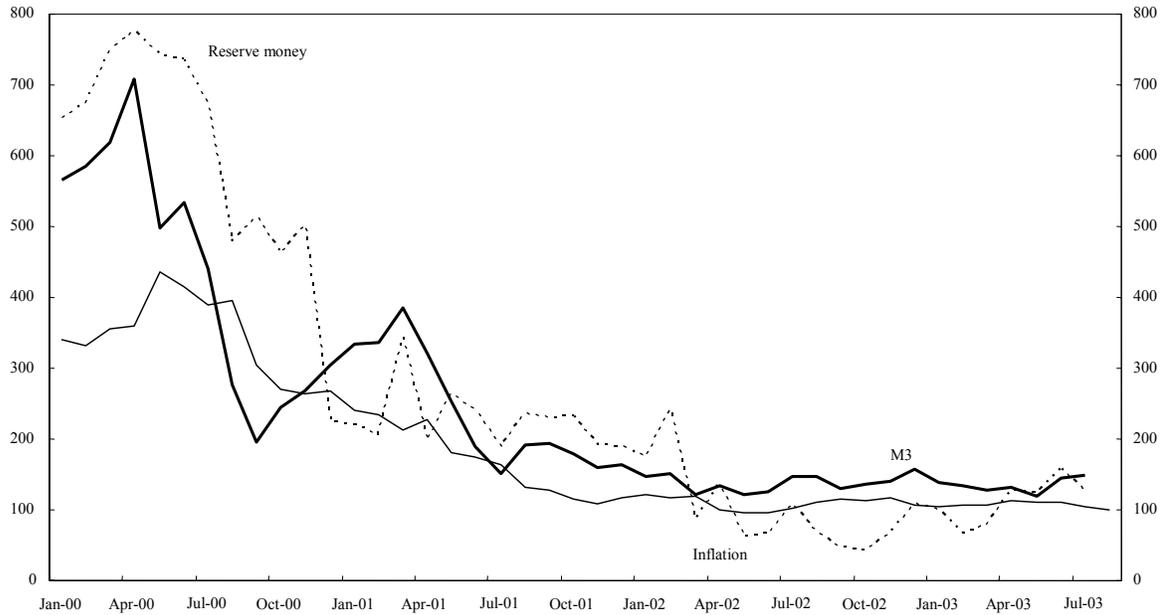
Source: Angolan authorities.

Figure 4. Inflation and Depreciation Rates, January 2000─August 2003

(12-month percentage change)

Source: Angolan authorities.

Mopping up the liquidity stemming from large fiscal deficits, controlling inflation, and safeguarding the foreign exchange position of the central bank have been difficult tasks for the A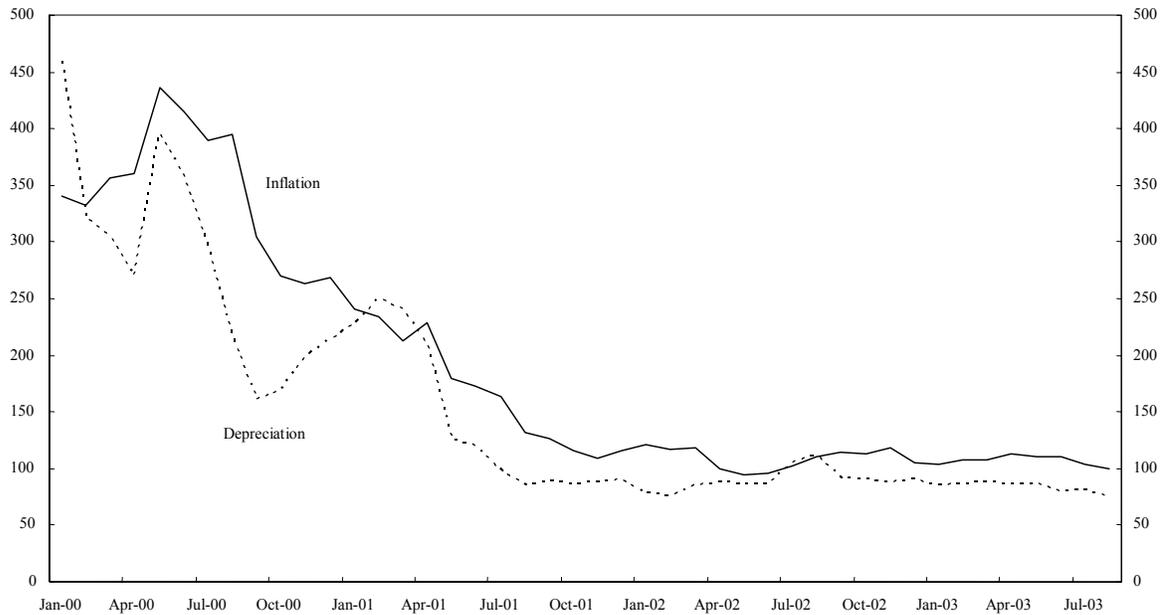ngolan authorities under the current circumstances. A key problem has been the **inconsistency between the number of policy instruments and objectives,** with the Angolan authorities relying on intervention in the exchange rate market as a means to simultaneously: (i) regulate liquidity in the economy, (ii) accumulate foreign reserves, and (iii) avoid an excessive depreciation of the kwanza. Yet, with only one policy instrument, all three policy goals could not be pursued simultaneously.

In the event, the BNA has been aggressively selling dollars to mop-up liquidity and limit the depreciation of the kwanza, at the cost of: (i) depleting its international reserves—despite the sharp increase in Angola's terms of trade since 1998—and (ii) heavy recourse to expensive oil-backed commercial borrowing and a build up of external debt payment arrears (Figure 5). Operationally, the practice has been to heavily intervene in the foreign exchange market whenever the depreciation of the nominal exchange rate accelerated and/or whenever there was a widening in the spread between the formal and the informal foreign exchange rate.[5]

The disinflation process of the last three years has also been very costly because it has not relied on prudent management of the **non-oil fiscal deficit** (defined as the overall fiscal deficit excluding oil revenues; Figure 6), which is a key indicator for assessing fiscal sustainability in natural resource-rich countries like Angola.[6] Specifically, in a context of buoyant oil prices and rising oil extraction, oil revenues have been used to finance permanent expenditure increases such as a large army and civil service, and sizeable government outlays in goods and services and transfers to the economy. These policies have led to large non-oil fiscal deficits and a permanent increase in government spending that would be difficult to reverse during periods of falling oil prices and/or when oil reserves are exhausted. Also, Angola's productive capacity is not being supported through an adequate build up of the economy's capital stock, broadly defined to include human as well as physical capital. The relatively low budgetary allocations for health and education during the last decade are noteworthy in this regard. Finally, financial wealth is not being accumulated for future generations despite the ongoing depletion of oil resources. Rather the large fiscal imbalances in place suggest that the cost of fiscal adjustment (e.g., a higher tax burden) may be shifted to future generations that would have to live with lower oil reserves or none at all.

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[5] Simple correlation between intervention (e.g., central bank sales of foreign exchange) and the official nominal exchange rates equals -0.34 and -0.35 with one lag. The correlation between the exchange rate premium in the informal market and intervention equals -0.57 and -0.10 with one lag.

[6] See for example, Tersman (1991), Bascand and Razin (1997), and Davoodi (2002) for analyses of Norway, Indonesia, and Kazakhstan, respectively.

Figure 5. External Terms of Trade and Costs of Disinflation, 1996–2002
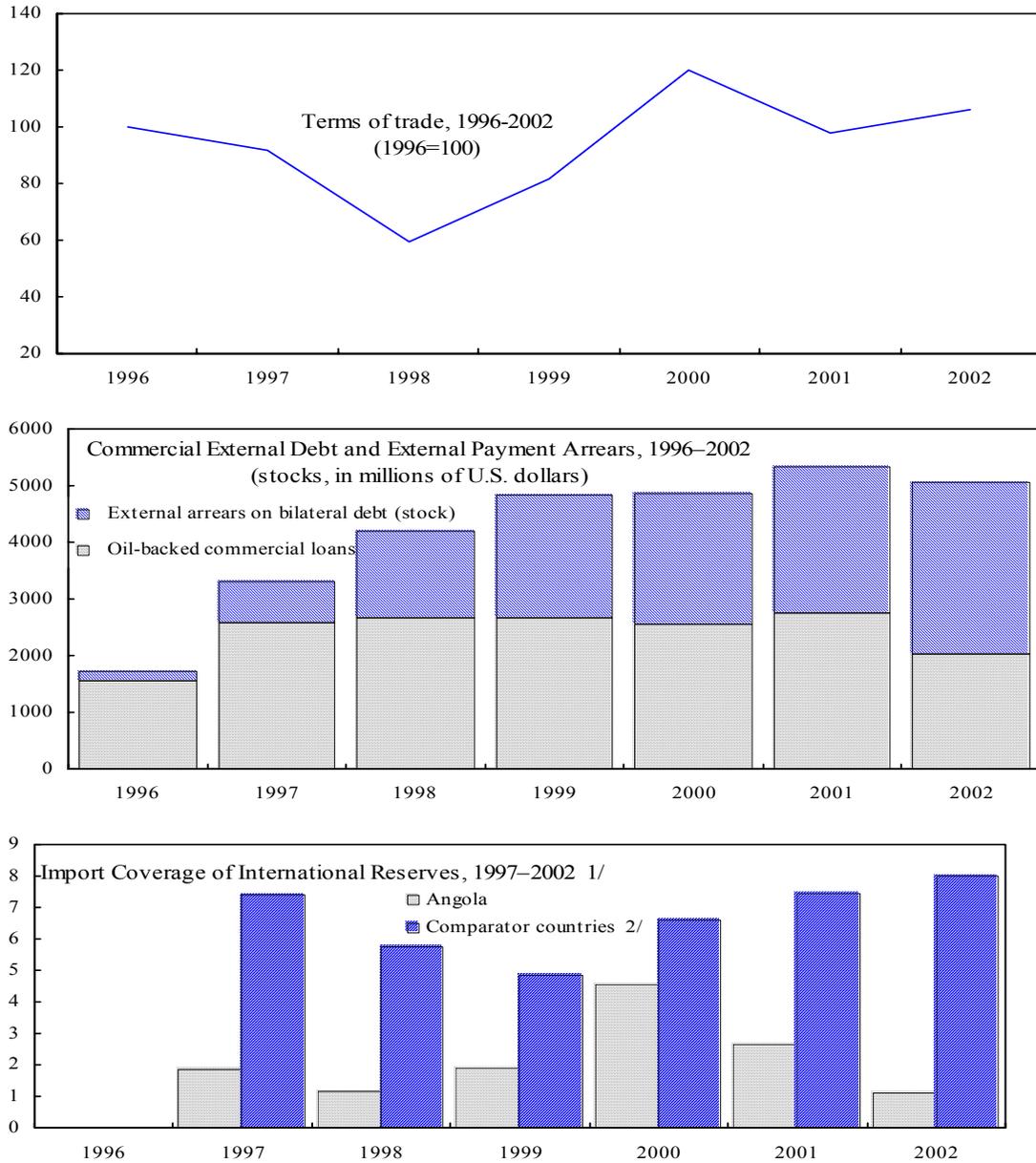
Sources: Angolan authorities; and IMF staff estimates.

1/ In months of imports of goods only.
2/ Includes Algeria, Burundi, Ghana, Guinea, Nigeria, Rwanda, and Zambia.

III. POLICY INSTRUMENTS IN GOVERNMENT'S DISINFLATION PROGRAM

Since early-September 2003, a strong anti-inflationary effort has been implemented by the Angolan authorities. The main features of the stabilization plan include: (i) a "hard kwanza" exchange rate policy; (ii) improved fiscal accounting, but with continued large foreign financing of the deficit; and (iii) enhanced control over commercial banks' liquidity in tandem with closer policy coordination between the Treasury and the central bank. The authorities' program is based on the view that disinflation could be attained by reducing the depreciation of the kwanza against the US dollar and strictly controlling banks' liquidity. The program also assumes that large foreign financing of the fiscal deficit does not affect inflation expectations.

A. A "Hard Kwanza" Exchange Rate Policy

A number of administrative measures were introduced in early September. These measures included: (i) the unification of the official and the informal foreign exchange markets, (ii) the revisiting of the operational guidelines of the official foreign exchange auction, and, notably, (iii) increases in central bank's weekly sales of foreign exchange through the auction.[7]

The unification of the foreign exchange markets is expected to have broadened the formal domestic market for dollars. Angolan residents are now free to purchase up to US$5,000 from commercial banks and foreign exchange bureaus <u>without</u> a previous authorization from the central bank.[8] Also, a **Dutch auction** in the official foreign exchange market replaced a

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[7] Also, a mechanism allowing importers to buy foreign exchange from commercial banks on account of future imports was re-established; the mechanism permits importers to gradually build-up dollar deposits with banks to finance commodity imports rather than having to purchase all dollars needed at once, at the time of the payment.

[8] In the past, access to foreign exchange by domestic residents was intermediated by commercial banks and/or bureaus of exchange operating under strict control by the central bank.

Figure 6. Measuring Fiscal Stance in an Oil-Rich Economy, 1996–2002
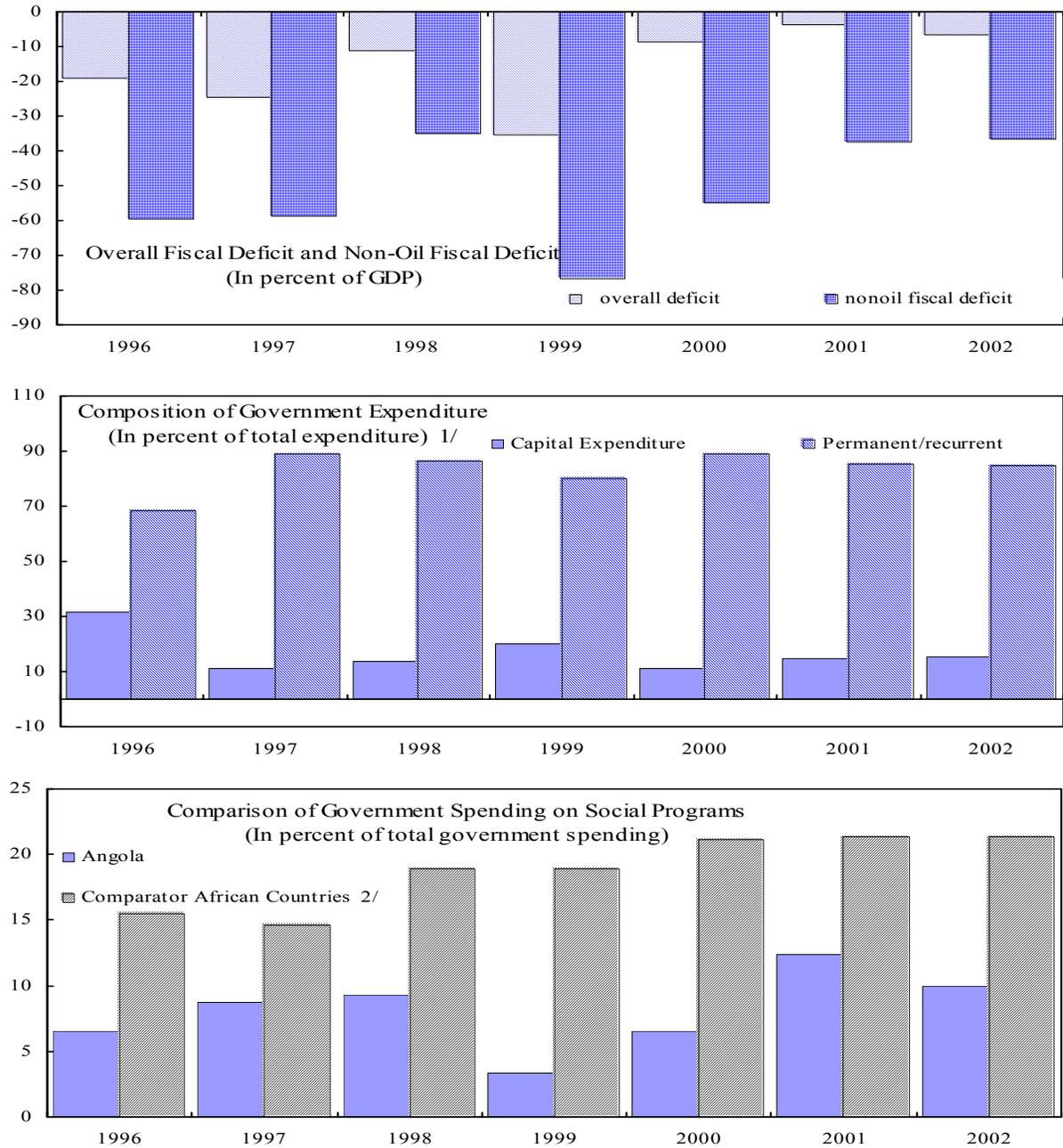
Sources: Angolan authorities; and IMF staff estimates.

1/ Excluding fiscal discrepancy estimated by IMF staff.
2/ Includes Cameroon, Chad, Republic of Congo, Equatorial Guinea, Gabon, Mozambique, Nigeria, and South Africa.

First-Price auction and reduced the spread between the official and the informal exchange rate.[9] Finally, large central bank intervention in the foreign exchange market has been used recently to achieve an appreciation of the nominal exchange rate. According to BNA data, foreign exchange intervention in September topped at US$230 million: an all-time high for monthly sales during the last five years. By end-September, the cumulative intervention in 2003 (US$1.4 billion) had already equaled the cumulative intervention for the whole 2002 (see Figure 7).[10]

As noted in Figure 1, a large appreciation of the nominal exchange rate in both the official and the informal markets took place in early-September. The (average) nominal exchange rate in the official market fell from kw86.7 per US dollar at end-August to kw81.4 per US dollar on September 5, 2003, and it has hovered at around kw78.6 per dollar since then. While the informal market exchange rate also fell, the spread between the official and the informal rates has remained at around 4 percentage points.

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[9] Under the First-price foreign exchange rate auction, bidding took place in private (i.e., using sealed bids) and foreign exchange awards were made at the highest price bids covering the total auction size. Strategic bidders could corner the auction (i.e., garnering the lion's share of the foreign exchange sold by the BNA) by bettering the market consensus (i.e., making a slightly more aggressive bid than other market participants). The strategic bidder could then restrict the supply of dollars into the informal foreign exchange market so that the price in this market would be higher than the auction's price. Under the Dutch foreign exchange auction, the central bank collects sealed bids, arranges them by price, and awards all the foreign exchange at a single price that "just "clears the market. The Dutch auction is termed second-price auction because the winning bidder pays, not his or her bid, but only the relatively lower market clearing bid (which is likely to be more representative of the market consensus). Aggressive bidders could still corner the auction. However, profits from cornering are kept on check by the unification of the foreign exchange market, as foreign exchange buyers who are unwilling to pay the auction price would be unwilling to pay a higher price in the informal foreign exchange market.

[10] The record indicates that the practice of large foreign exchange intervention against the background of insufficient fiscal adjustment heightened following the oil price hike of 2000 (see Hodges (2002), chapter 5).

Figure 7. BNA's Monthly Foreign Exchange Intervention, January 2000–September 2003
(Net; in millions of U.S. dollars)
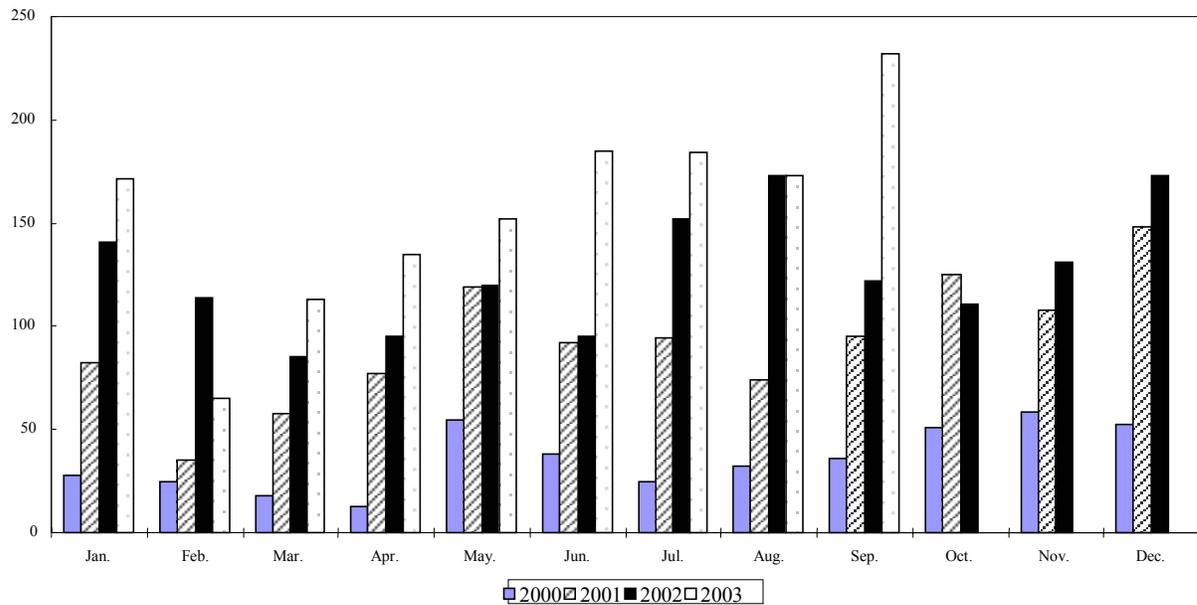
Source: Angolan authorities.

B. Improved Fiscal Accounting with Large Foreign Financing of Deficit

Against the background of rising public sector deficits in 2001-02, efforts were undertaken in early 2003 to improve the transparency of the authorities' fiscal framework. A revised 2003 fiscal budget, approved by parliament on July 16, 2003, replaced the budget approved in late 2002, which by March 2003 had already become obsolete in terms of its exchange rate and inflation assumptions. Moreover, the revised 2003 budget consolidated budgetary and extrabudgetary operations, including off-budget transfers to the military and the quasi-fiscal operations carried out by Sonangol on behalf of the government.

The revised 2003 budget improved the quality of the fiscal indicators by broadening the coverage of government operations and it also foresaw a decline in total government expenditure from an estimated 48 percent of GDP in 2002 to 42 percent in 2003, including the phasing out of price subsidies for gasoline and public utilities (which amounted to 3.3 percent of GDP in 2002). However, the revised budget did not deliver a tighter fiscal stance compared with 2002. In particular, the budget targeted a large fiscal deficit, equivalent to 8.9 percent of GDP (including an operational deficit of the central bank of some 1 percent of GDP), to be financed by substantial recourse to net external financing, external grants, and the use of signature oil bonuses. Sizable amortization payments (including some US$1.7 billion, equivalent to 9.3 percent of GDP) were to be financed through a new oil-backed international commercial bank loan. While the authorities have relied heavily on foreign financing to avoid the need for central bank inflationary financing, there were doubts about whether such borrowing was consistent with debt sustainability.

C. Enhanced Control over Commercial Banks' Liquidity and Better Policy Coordination Between Treasury and BNA

Tightening monetary conditions in the margin has been another anti-inflationary tool in the government's program. In this regard, throughout 2003, the authorities have increased banks' reserve requirements and reviewed regulations on banks' foreign exchange positions. Also, reserve requirements on foreign currency deposits have been set in kwanzas with the effect that changes in the exchange rate immediately change the banks' needs for reserve money.

New legal reserve requirements came into effect in early-March and mid-July 2003. In March, reserve requirements on foreign currency deposits were increased from 5 percent to 10 percent, and those on domestic currency were reduced from 30 to 10 percent. Since foreign currency deposits account for more than 70 percent of total deposits, liquidity is likely to have declined at the margin. Reserve requirements on domestic and foreign currency deposits were raised to 15 percent on July 11, 2003. The increase in banks' reserve requirements has been reinforced by the imposition of a 100 percent reserve requirement on all government deposits held with commercial banks.[11]

In addition, new regulations on commercial banks' foreign exchange positions impacted domestic commercial banks' holdings of foreign exchange. Banks are now required to ensure that, on a daily basis, their open position does not exceed the equivalent of 15 percent of their own funds. In the past, the open position was established in absolute values (US$500,000), with the exception of up to US$2 million to be used to preserve the value of the banks' capital. At the time of implementation, BNA estimated that banks would need to sell more than US$60 million to the BNA to comply with these measures.

Better policy coordination has been also a priority in the government's stabilization efforts. The new policy environment was elaborated in the *Protocol on the Management of Fiscal and Monetary Policy* of September 2002, which calls, inter alia, for a consolidation of the Treasury's Single account with the central bank and better public expenditure management. Notably, the latter feature includes commitments by the Ministry of Finance and by the government in general, not to undertake new expenditure programs, including transfers to public enterprises and/or extrabudgetary operations, once the budget has been approved by parliament. In addition, the Tribunal of Accounts is expected to be more proactive in the reviewing and auditing of public expenditure allocations; this is to be done through ex ante screening of payment orders and ex post verification of government outlays.

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[11] However, bank deposits of the Social Security Institute and other autonomous government agencies are not subject to the 100 percent reserve requirement, thus providing additional liquidity to commercial banks.

IV. SHORTCOMINGS IN GOVERNMENT'S DISINFLATION STRATEGY

The authorities' approach to macro stabilization does not take into account a number of important factors. **First,** limiting the depreciation of the kwanza would limit inflation of tradable goods, but not necessarily inflation of nontradables, which in the last three years has been higher than that of tradables. **Second,** the large fiscal deficits of recent years, as well as heavy reliance on external financing, have short- and long-term risks that may be undermine the government's disinflation program.

A. Inflation Rates for Tradable and Nontradable Goods

Our estimates suggest that inflation for nontradables has been above 100 percent and it has been higher than the inflation for tradable goods during the last three years (Figure 8).[12] For example, at the beginning of 2002, the 12-month inflation rate of nontradables was 139 percent, compared to an inflation rate of 121 percent for tradable goods. The inflation differential for tradable and nontradable goods has persisted during the last 18 months, albeit at around 9-10 percentage points.

In Angola, tradable goods include mainly imports of capital goods, intermediate and final consumption goods. These commodities are heavily traded in the formal and informal sector of the economy with their prices being heavily determined by actual and expected rates of depreciation of the kwanza. In turn, the domestic market for nontradable goods is heavily influenced by public expenditure on wages and salaries, goods and services, and transfers to the economy. Staff estimates are that total (re)-current expenditure by the government has been equivalent to 35-40 percent of GDP during 1999-2003, thus representing an important demand for nontradable goods.

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[12] The inflation rates for tradable (Pt) and nontradable (Pnt) goods have been estimated from the CPI inflation rate assuming that: (i) the real exchange rate equals the ratio of these two indices (Pnt/Pt), and (ii) inflation of tradables equals the rate of the devaluation. Data limitations prevented any further specification of the price formation mechanism for nontradables, which in a highly dollarized economy could be heavily influenced by the variability of the exchange rate and inflation inertia.

Figure 8. Tradable and Nontradable Goods' Inflation Rates, January 2001–September 2003
(Annual percentage change)
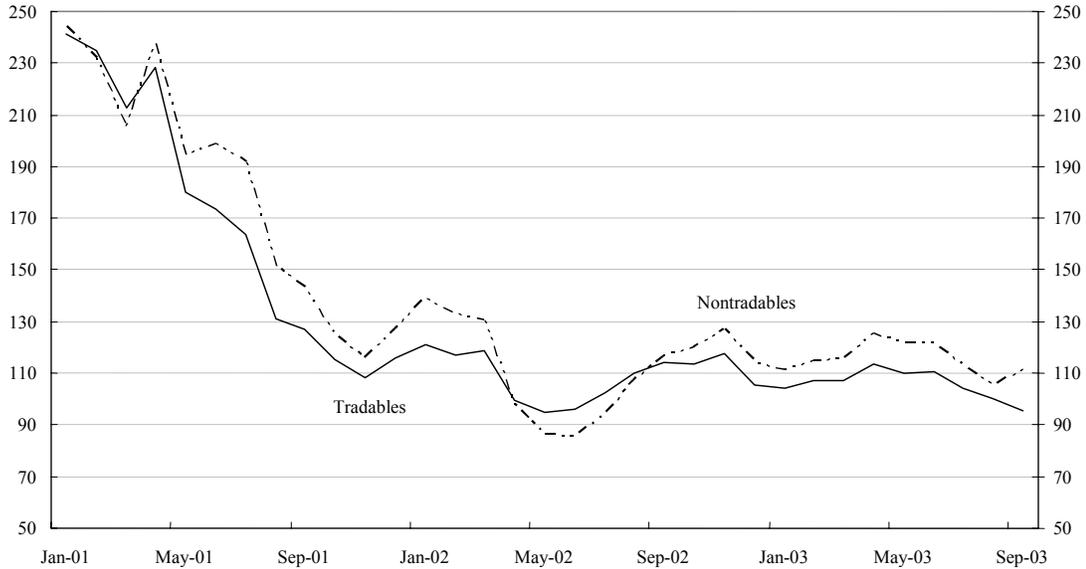
Sources: Angolan authorities; and IMF staff estimates.

Relative price data compiled by the Angolan National Institute of Statistics (INE) corroborates the underlying inflation pressures and the related price misalignments for some goods and services in the economy's nontradable sector (Table 1). Specifically, despite price controls on electricity tariffs and energy products, the price index for "housing, electricity, and energy products" has risen sharply throughout 2003, compared to price trends in 2002. Also, the monthly inflation rates for "other goods and services" peaked in 2002 and remained rather high in 2003. Price misalignments are notable for the case of health, transportation, and communication, whose inflation rates have been generally below the growth of the overall consumer price index (CPI). Step-wise/discrete price increases for these services has (statistically) increased the volatility of their monthly inflation rates when measured by their standard deviations.

B. Short- and Long-Term Fiscal Deficits Matter

Key in the authorities' approach to stabilization is that a fiscal deficit heavily financed by external borrowing rather than money growth <u>is not</u> inflationary. The view is that the substitution of debt issue for taxation and/or money creation raises the efficiency of fiscal policy, as private agents heavily discount (ignore) future tax liabilities—including the inflation tax—to repay the increased debt. However, one should recognize that short- and long-term fiscal deficits matter. Specifically, one could argue that prospective high interest

payments—derived from costly foreign borrowing and/or expected domestic financing of future deficits—would keep inflation expectations high, and might even bring inflation forward.

Theoretical and empirical research suggests that large prospective deficits affect today's economic conditions and expectations, and, in cases, explain balance of payments crises. For example, the Burnside et al (1998) analysis shows that in the absence of political will to raise taxes and cut spending, governments have to resort to seigniorage revenues to pay for their actual and contingent liabilities. In a world of forward looking agents this makes the balance of payments crisis inevitable. Burnside et al (1998) calibrates his model to the Korean and Thai economies showing that the collapse of the peg happened *after* the economic agents learned that future deficits would rise but *before* the government implemented a new monetary policy.

V. POLICY OPTIONS

This section discusses the key measures that would be needed under an ERBS program to be successful. As these preconditions are lacking, the section goes on to propose instead a money-based stabilization (MBS) program supported by a strong fiscal adjustment.

A. ERBS with Overshooting of Exchange Rate

International experience suggests that successful ERBS programs have been founded on a credible exchange rate peg accompanied by tight financial policies.[13] Technically, a fixed parity that is consistent with external competitiveness and backed by an adequate level of foreign exchange reserves would serve as a nominal anchor of the price system. The fixed exchange rate would also provide a basis for enforcing discipline to the monetary and fiscal policies because the issuing of credit will have to be limited so as not to create a drain on international reserves.

The first choice necessary to embark on an ERBS program is the **setting of the new nominal exchange rate parity**. The new rate must be sufficiently depreciated to reflect the competitive position of the economy and to make the rate viable even with any subsequent inflation. More fundamentally, **it might well be necessary to overshoot the real exchange rate at the beginning of the program**.

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[13] See, for instance, Calvo and Vegh (1999) and Detragiache and Hamann (1999).

Table 1. Relative Price Structure, December 2001–October 2003

	Dec-01			Dec-02			June 2003			October 2003		
	Monthly Inflation Rate	Standard Deviation 1/	12-month Inflation Rate	Monthly Inflation Rate	Standard Deviation 1/	12-month Inflation Rate	Monthly Inflation Rate	Standard Deviation 1/	12-month Inflation Rate	Monthly Inflation Rate	Standard Deviation 1/	12-month Inflation Rate
Overall Consumer Price Index	6.7	4.2	116.1	6.2	1.5	105.6	6.4	1.1	110.7	5.1	2.0	90.3
Food & non-alcoholic beverages	6.0	2.2	100.7	6.8	1.9	118.8	6.9	1.7	131.0	5.5	2.3	99.3
Alcoholic beverages & tobacco	…	…	…	5.7	2.1	93.0	6.6	2.0	96.4	5.3	2.4	91.4
Clothing & Shoes	6.5	2.7	113.2	7.7	3.3	141.8	4.6	1.5	112.2	4.1	1.4	75.9
Housing, electricity, & energy products	9.4	12.7	175.3	4.9	4.1	75.7	7.3	3.5	100.9	5.8	3.9	105.3
Consumer durables	3.3	0.9	47.2	6.7	2.9	117.3	6.3	1.9	112.6	5.4	2.0	90.6
Health	6.0	2.7	101.0	4.6	1.4	72.3	5.2	1.3	82.4	4.3	2.2	68.8
Transportation	4.5	6.2	67.4	4.0	6.0	56.8	4.2	6.8	54.5	2.9	5.4	55.3
Communications	…	…	…	8.6	6.3	164.8	4.4	3.7	95.5	4.4	2.9	62.7
Leisure and culture	…	…	…	6.2	3.9	105.3	5.7	2.7	83.6	4.6	2.6	75.6
Education	5.7	3.6	93.8	3.8	2.7	56.0	8.7	7.6	101.1	6.1	6.7	95.8
Hotels & restaurants	…	…	…	7.9	8.6	141.6	5.4	1.8	85.1	4.1	2.3	70.5
Other goods and services	5.9	2.2	98.0	6.7	2.6	117.9	5.1	1.4	83.7	4.8	2.6	75.7

Sources: Angolan authorities; and IMF staff estimates.

1/ Standard deviation of monthly inflation rates.

In setting the new parity, the authorities must assess the prospects of successfully defending the new rate, the magnitude of the domestic price adjustments that result from the initial devaluation, external competitiveness considerations, as well as possible balance-sheet effects. The deeper the devaluation (i.e., the larger its initial overshooting), the greater the prospects of defending it (which is analogous to the sustainability of the balance of payments position).[14] Yet, the deeper the depreciation, the greater the initial price adjustment, the steeper the initial decline in real wages, the greater the possibility of negative balance-sheet effects, and therefore the greater the political difficulties in supporting the program.

Without exception, **the international experience shows that the sustainability of the new parity would depend critically on the degree of fiscal adjustment and the tightness of credit policies.** Reducing large fiscal deficits is critically important, not only for its monetary consequences but also as a way to mark a decisive change in fiscal policy. Table 2 presents some experiences with stabilization programs. As suggested by Calvo and Vegh (1999), stabilization programs that did not end in crises (for the period covered in their study) were those in which: (i) a credible peg was put in place and (ii) significant fiscal adjustment was indeed undertaken. As the collapse of Argentina's currency board arrangement dramatically illustrates, fiscal discipline is a permanent requirement of a successful ERBS program.

Table 2. Six Developing Countries: Some Experiences on Macroeconomic Stabilization Programs

| Country | Beginning and Ending Date | Exchange Rate Arrangements | Inflation Rate | | | Ended in Crisis? |
			Initial	Lowest	Date achieved	
Israel	Jun 85–Sep 86	Fixed, crawling peg	1128.9	50.1	Jun-86	No
Brazil	Feb 86–Nov 86	Fixed	286.0	76.2	Nov-86	Yes
Mexico	Dec 87–Dec 94	Fixed, crawling peg, band	159.0	6.7	Sep-94	Yes
Peru	Aug. 90–Dec 99	Monetary anchor/dirty float	12,378	10.2	Sep-95	No
Dominican Rep.	Aug. 90–Dec 99	ER unification & floating	60.0	2.5	Nov-93	No
Argentina	Apr 91–Dec 01	Currency Board	267.0	-0.3	May-96	Yes

Source: Based on Calvo and Végh (1999), with updates as of mid-2003.

The Angolan authorities' approach to stabilization since early September did not include either an overshooting of the nominal exchange rate or, to the best of our knowledge, a

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[14] The defensibility of the new parity could also be measured by the amount of foreign exchange reserves needed to back the whole kwanza money supply at the new exchange rate parity.

sizeable fiscal adjustment.[15] Also, recent policies have delivered a 10 percent appreciation on the nominal exchange rate vis-à-vis the US dollar since early September 2003. At current inflation rates, the kwanza appreciated by about 17 percent in real terms against the US dollar during 2003, which followed a cumulative real appreciation of 40 percent in 2000-02 (see Figure 9).

Fiscal adjustment has not materialized. Notably, the gap between current domestic energy prices and cost-recovery targets (which are increasing with respect to oil international prices) remains substantial thus resulting in growing consumer subsidies on energy products. The elimination of energy price subsidies and subsidies of public utilities (water and electricity) had been considered in the 2003 revised fiscal budget, but this has not happened so far.

Figure 9. Real Exchange Rate Index, December 2001 - September 2003
(December 2001 = 100)
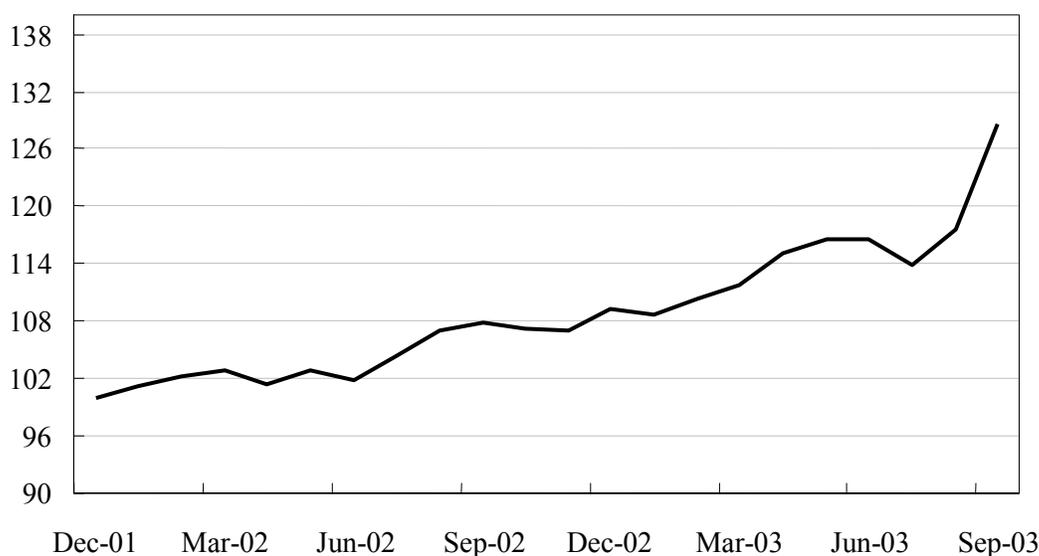
All in all, the initial conditions for launching an ERBS program in Angola are not strong. International reserve import coverage is limited, exchange rate overshooting is absent, and the prescribed fiscal adjustment has not been carried out. Also, the current exchange rate fixity is at odds with the standard policy prescription which states that a flexible rate is the preferred exchange system for an economy in which real shocks—such as export price

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[15] Latest available information published in the website of the Ministry of Finance (www.,minfin.gv.ao) shows a sizeable accumulation of domestic arrears (some kwanzas 41 billion, equivalent to 4.5 percent of annual GDP) during the first half of 2003.

volatility and/or uncertainties over the availability of foreign financing—dominate (e.g., see Calvo and Mishkin (2003) and Caramazza and Aziz (1998)).

B. A MBS Program for Angola

An alternative to the ERBS program could be a money-based stabilization (MBS) program. According to the international experience, a successful MBS program should be part of a broader and more comprehensive reform effort aimed at breaking inflationary expectations, reducing the rate of inflation to low and stable levels, and changing the long-term prospects of the economy. To this end, **the program should pursue tight fiscal and monetary policies and wide-ranging structural reforms, while letting the nominal exchange rate to be market-determined**. Close coordination of monetary and fiscal policies would be fundamental at all times to avoid excessively high real interest rates (stemming from a strict monetary policy) as the latter could crowd-out private investment and abort a post-stabilization economic take-off.

Monetary policy would play a vital role in securing disinflation. Operationally, this policy would imply a resumption of active **open market operations** with central bank bills (TBCs) and the setting of **ceilings on the expansion of net domestic assets of the central bank**, as well as a tight monitoring of the net domestic financing of the general government deficit.[16] Active open market operations should provide an additional monetary tool to pursue the BNA's parallel needs of mopping up excess liquidity and accumulating international reserves. To do this effectively, however, without placing additional pressure on nominal interest rates, would require fiscal restraint. A reduction of interest rates would lower the interest bill of the consolidated public sector (i.e., including the operations of the general government and the central bank's operational deficit).[17]

Fiscal consolidation over the short- and long-term is a necessary condition for lasting stabilization. In the very short-run, upfront fiscal adjustment could come through substantial price hikes of energy products that would eliminate consumer subsidies and yield additional tax revenue.[18] Over the longer-term, the key would be to develop a **medium-term fiscal**

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[16] Forecasting the behavior of the money demand during the disinflation process would not be an easy task, however, given the high degree of dollarization of the Angolan economy. Yet, within the targeted monetary expansion, the reduction in net central bank credit to government would need to provide sufficient room for an adequate increase in credit to the nongovernmental sectors.

[17] In 2002, the central bank was an important source of base money expansion. Its large operational deficit, that was financed through money creation, mirrored large spending on wages and pensions, as well as interest paid on central bank bills (see Alvesson and Torrez (2003)).

[18] Stabilization programs in Peru and Bolivia illustrate the use of sharp increases in petrol and diesel taxes as key revenue-rising measures at the time of the launching of their

strategy to address the fiscal deficit problem through increases in total government revenue and a prioritization of public expenditure.

On the revenue side, the medium-term fiscal strategy would require a reform of the tax system and the tax administration. The reform of the tax system should aim at simplifying the system by emphasizing fewer taxes with high yields, eliminating exemptions and special tax regimes, and broadening the tax base (Box 1). A strong tax administration with low administrative costs would also be essential to increase revenue over the medium-term. On the expenditure side, the medium-term strategy would need to implement a substantial reduction in the recurrent public expenditure to GDP ratio, while securing public investment in the areas of health and education, reconstruction and demobilization.[19]

A comprehensive approach to structural reform should also accompany the MBS program. The main challenge would be to foster economic diversification in an economy overwhelmingly dependent on oil. In addition to price stability, factors supporting strong growth in the non-oil economy should include: (i) the development of a healthy banking system; (ii) the setting up of a business regulatory framework supportive of market competition, including adequate property rights legislation; (iii) an adequate provision of basic infrastructure such as power, water supply and transport; and (iv) substantial investment in human capital. Privatization of state enterprises could also play a useful role toward fiscal consolidation and structural reform. To a limited extent, the government may be able to raise revenue from the sale of state-owned assets. More importantly, the transfer of state enterprises to private owners would remove political pressures on the state to provide subsidies to loss-making enterprises and, as a result, foster a hardening of state-enterprises' budget constraints.

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disinflation programs (see Kiegel and Liviatan (1996). The stabilization experience in Britain in the early 1980s also illustrate the use of increases in energy prices as a corrective measure in the very short-run (see Walters (1986)).

[19] Angola's total government expenditure to GDP ratio is more than twice the average of other countries in the region, while budgetary allocations for health and education (as a percent of total government expenditure) have been well below the average for other African countries since 1992.

Box 1. Agenda for Fiscal Reform

Revenues from new tax measures

- Ensure that production sharing arrangements (PSAs) yield adequate returns to the budget

- Pay all energy royalties and bonuses into the state budget

- Align diamond taxation to international practices

- Limit the number of economic free zones where taxes are exempted

- Excise duties: limit coverage to a narrow range of products with substantial tax revenue potential; eliminate import duty exemptions

- Introduce value added-tax (VAT)[1]

- Corporate income tax: unify tax rates, eliminate exemptions and special allowances

- Other: consider the implementation of a land tax; review local governments' revenue and spending accountability practices

Revenues from elimination of subsidies and other expenditure cuts

- Eliminate energy consumer subsidies

- Reduce the government's wage bill and goods and services spending

Other measures

- Eliminate quasi-fiscal operations by Sonangol and the BNA

- Complete the Oil Diagnostic Study and actively use the study's oil revenue model to assess oil tax liabilities to the budget

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[1] Currently, the taxation of goods and services in Angola is characterized by the absence of a general sales tax and by a proliferation of exercises on the production and importation of various goods.

VI. CONCLUDING REMARKS

High inflation has been a major concern for the Angolan authorities for years. As documented in this paper, annual inflation has come down from hyperinflation levels in the mid-1990s to an apparent 100 percent inflation plateau of 2001–2003. Yet, the costs of this disinflation have been rather large in terms of the sizable central bank foreign exchange intervention and the increase in Angola's external liabilities that unfolded in the process. The non-oil fiscal deficit has also remained very large, with the increase in external terms of trade experienced since 1998 financing large increases in government programs which may be difficult to dismantle whenever the oil price increase reverses and/or Angola's oil production dwindles. In addition, the record to date shows that polices fostering an accumulation of human capital have remained limited and no financial assets are being accumulated for the benefit of future generations.

The paper has also documented that, since early September 2003, the Angolan authorities have embarked in a renewed inflation stabilization effort based on an apparent commitment to a greater exchange rate fixity against the U.S. dollar than in the past. In this context, a main challenge ahead would be to control inflation in home/nontradable goods; address the large fiscal deficit, and, fundamentally, persuade the public in general that the stabilization program would be lasting and successful.

This paper has been written in the early stages of the renewed government stabilization program (September–November 2003) and targets a candid discussion of the risks and challenges posed by that program. The authors understand that new measures are currently under active consideration by the Angolan authorities, including notably the phasing out of consumer subsidies and public utilities. Such a fiscal-adjustment effort would be consistent with this paper's main policy prescription, as well as with the experience of successful stabilization programs around the world. As such, it is a most welcome development.

The existing literature has documented that lack of credibility of the government's stabilization plan—usually associated with insufficient fiscal retrenchment and inflation inertia—make ERBS programs unsustainable, eventually leading to an abandonment of the peg (usually after a speculative attack) and the resumption of high inflation and macroeconomic instability. Typically, the initial economic expansion is reversed after the plan is abandoned and a severe contraction follows.

While it is still too early to say whether Angola will replicate failed ERBS experiments, this paper has stressed some of the vulnerable points in the recent disinflation strategy. ***First,*** in the absence of a credible fiscal adjustment, attempts to peg the exchange rate to the U.S. dollar may prove unsustainable at the current levels of gross international reserves. Also, large fiscal deficits, including sizable central bank operational deficits, complicate efforts to reduce inflation in the economy's nontradable sector, in particular. To the best of our knowledge, fiscal adjustment has not been forthcoming in Angola, as manifested by the enduring sizable energy price subsidies despite earlier commitments to phase them out during the second half of this year.

Second, the Angolan exchange rate-based stabilization program has not included an exchange rate overshooting that could guide expectations for an appreciation of the kwanza and a reduction in domestic interest rates. While the "hard kwanza" policy may have indeed centered its efforts on disinflation, the competitiveness of the non-oil exports and import-competing industries may also deteriorate significantly under this policy unless there is strong productivity growth in these sectors (which is highly unlikely in the short run). Also, the fixity of the nominal exchange rate is at odds with the standard policy prescription, which calls for added nominal exchange rate flexibility for economies in which real shocks—such as export price volatility and/or uncertainties over the availability of foreign financing—dominate. Flexible nominal exchange rates, supported by adequately tight fiscal and monetary policies, could, in addition, help counter the dollarization of the economy by reducing the volatility of real exchange rates.

Third, changes in the composition of deficit financing are unlikely to deliver lasting macroeconomic stabilization. Heavy recourse to costly external deficit financing without reducing the size of the public sector deficit is unlikely to break inflationary expectations, since as individuals would anticipate further monetary financing to cover the higher government interest payments and the amortization of the principal.

Finally, the international experience suggests that the success or failure of any stabilization plan depends crucially on the private sector's belief in the program's economic and political sustainability. Therefore, in final analysis, fiscal adjustment may not be enough to ensure the program's success if, for some reason, the private sector believes that policymakers eventually will abandon the plan. Therefore, policymakers must be able to convince the public that the policy will be sustained.

In sum, framing a lasting disinflation strategy remains the key task for policymakers in Angola. Low and stable inflation are key ingredients for developing the economy's potential during the next decades. This paper's argument is that price stabilization would require a comprehensive approach in which monetary policy, supported by a front-loaded fiscal retrenchment, would provide the anchor for price stability. Tight fiscal policies are critical to facilitate a decline in nominal interest rates and support an effective resumption of the central bank's open market operations. The stabilization plan would also require that the authorities steer their monetary and fiscal policies within a medium-term framework that would provide confidence to market players. Finally, policies aimed at increasing the economy's competitiveness would be important in raising Angola's potential output, which, in itself, would increase the chances of the stabilization plan's success.

Table 1. Selected Economic and Financial Indicators, 1999-2002

	1999	2000	2001	2002 Est.
(Annual percentage change, unless otherwise indicated)				
National income and prices				
Real GDP	3.3	3.0	3.2	15.3
Oil sector	1.0	0.4	-1.0	22.1
Non-oil sector	4.8	6.8	9.6	7.6
GDP per capita (in U.S. dollars)	470	664	690	793
GNI per capita (in U.S. dollars)	364	538	576	685
Consumer price index (annual average)	248	325	153	109
Consumer price index (end of period)	329	268	116	106
External sector				
Exports, f.o.b. (based on U.S. dollar values)	45.6	53.6	-17.5	27.7
Oil	45.3	58.5	-18.5	32.0
Non-oil	47.4	20.2	-8.7	-6.8
Imports, f.o.b. (based on U.S. dollar values)	49.5	-2.2	4.6	16.7
Export volume	1.4	1.6	-2.6	23.1
Import volume	57.2	3.4	5.6	11.7
Terms of trade	50.9	59.9	-14.5	-0.7
Nominal effective exchange rate	-74.3	-72.9	-60.1	-47.2
Real effective exchange rate 2/	-49.7	29.1	13.4	7.0
Money and credit (end of period) 3/				
Net domestic assets	-362	-327	54	49
Broad money	533	304	163	158
Interest rate (three-month time deposits; in percent)	36	46	56	41
Velocity (GDP/Average M2 - kwanza denominated)	22	28	21	20
(In percent of GDP, unless otherwise indicated)				
Fiscal accounts				
Total revenue	46.8	51.7	42.5	39.0
Of which: oil	41.1	46.2	33.9	29.9
Grants	4.0	2.3	2.3	0.0
Total expenditures	82.4	60.4	46.3	47.9
Overall balance (accrual basis)	-35.5	-8.6	-3.7	-9.0
Non-oil fiscal balance	-76.7	-54.9	-37.6	-38.8
Overall balance (cash basis)	-24.7	17.6	-4.9	-1.4
External sector				
Current account balance (including transfers; deficit -)	-28.1	9.0	-15.1	-5.8
Debt-service ratio 4/	44.4	36.3	41.2	26.4
(In millions of U.S. dollars, unless otherwise indicated)				
Gross domestic product (current prices)	6,088	8,864	9,472	11,204
Net international reserves	408	1,039	531	324
Gross international reserves (end of period)	496	1,198	732	375
In months of next year's imports of goods and services	1.0	2.1	1.1	0.5
Memorandum items:				
Official exchange rate (kwanzas per U.S. dollar; end-of-period)	5.6	16.8	31.9	58.7
Gross domestic product (in billions of kwanzas)	17	89	209	490
Oil production (thousands of barrels per day)	746	748	740	903
Price of Angola's oil (U.S. dollars per barrel)	17.6	27.2	24.2	24.3

Sources: Staff Report for the 2003 Article IV Consultation (SM/03/251) July 14th, 2003.

1/ Based on the authorities' revised budget, and staff estimates and projections.
2/ End of period. A positive sign denotes appreciation.
3/ As percentage of beginning-of-period M3.
4/ Medium- and long-term debt service due in percent of exports of goods and services.

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