

Angola: Selected Issues and Statistical Appendix

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ANGOLA

Selected Issues and Statistical Appendix

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July 11, 2003

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I. A NOTE ON INFLATION¹

Executive Summary

1. **This note documents recent developments with inflation in Angola.** First, it briefly presents previous work that has been done on Angolan inflation. Second, it characterizes the inflation phenomenon and presents some basic statistics. And third, it analyzes the impact of monetary developments on inflation.
2. **Despite important progress towards stabilization in recent years, inflation remains quite high by international standards.** Indeed, inflation has fallen from 329 percent in 1999, to 116 percent in 2001 and to 106 percent in 2002. Nevertheless, the monthly average rate of inflation remains above 6 percent to date.
3. **Broader monetary aggregates including dollar denominated assets seem to display a closer relationship with inflation than reserve money.** Statistical evidence robustly suggests that both in the short- and in the long-run, M2 and M3 are more informative regarding inflation than reserve money, even when assuming different lag structures for the latter. This high information content of broader monetary aggregates has been found in other highly dollarized economies (such as Argentina, Peru and Turkey). **In this sense, targeting kwanza-denominated monetary aggregates might not be enough to reduce inflation. Increasing surveillance over broader aggregates might help in this regard.**
4. **Several years of high inflation rates have negatively affected economic conditions in the country:** real wages have been eroded, real money balances have declined and dollarization has reached very high levels.

A. Introduction

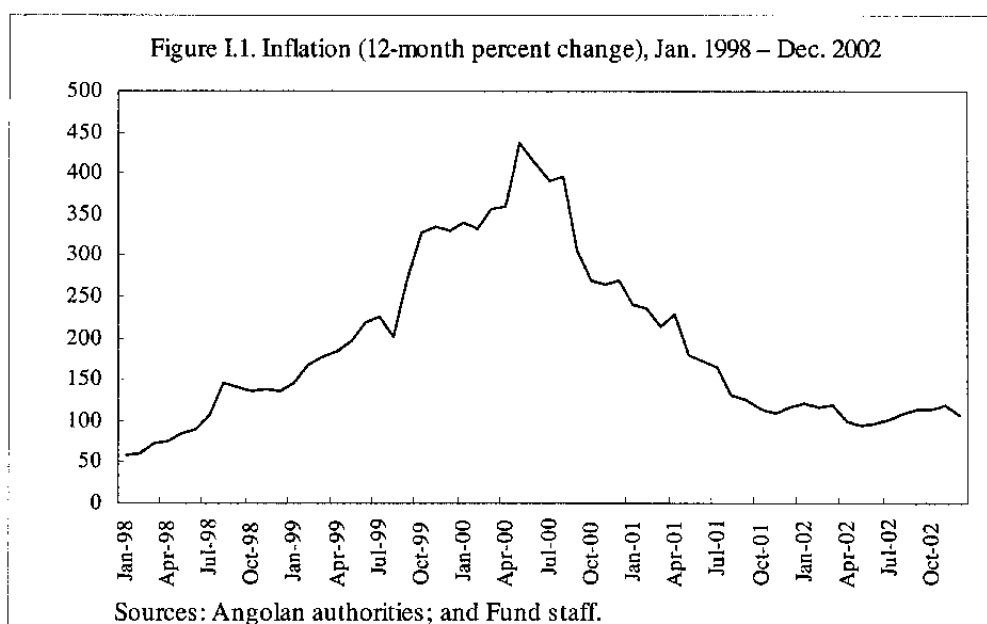
5. After several years of political conflict and poor economic performance, Angola has embarked on a gradual process of economic stabilization and reform that has yielded some advances. In particular, inflation has fallen from 329 percent in 1999, to 268 percent in 2000, 116 percent in 2000, and 106 percent in 2002 (Figure I.1). As suggested by some statistics, both the average and the volatility of the inflation rate have fallen (Table I.1). While, in 1999 and 2000, the average and the standard deviation of monthly inflation were 12.3 percent and 6.2 percent respectively, in 2001 and 2002, they fell to 6.5 percent and 3.1 percent, respectively.

¹ Document prepared by Jose Giancarlo Gasha. The paper was presented and discussed in a seminar at the Ministry of Finance in January 2003.

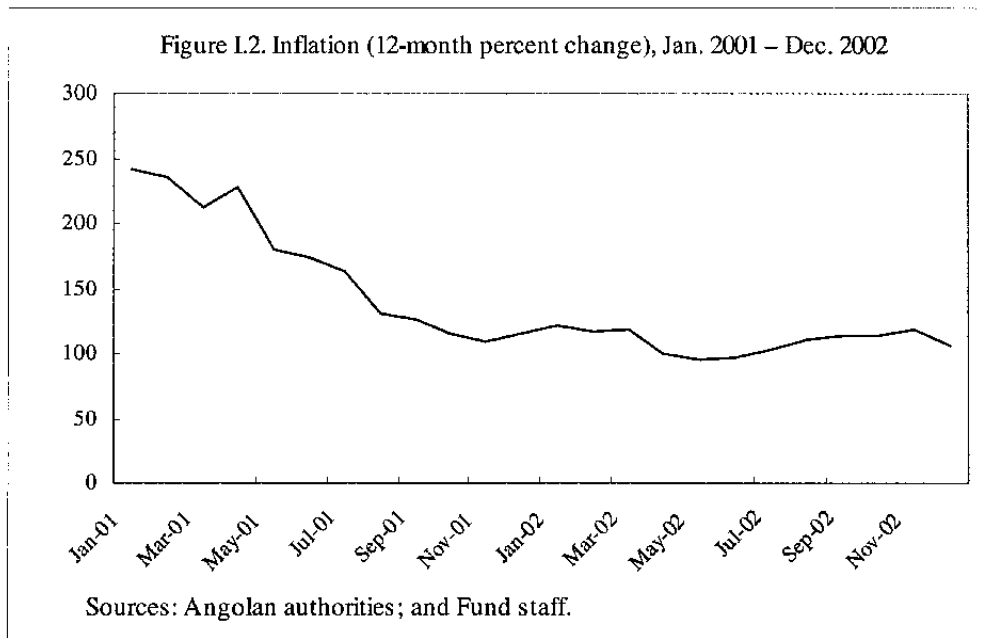
Table I.1. Inflation (in percent)

	Monthly		12-month change	
	Average	Standard Deviation	Average	Standard Deviation
Jan 1997 - Dec 2002	8.2	5.9	191.7	101.5
Jan 1997 - Dec 1998	5.8	5.8	103.9	33.8
Jan 1999 - Dec 2000	12.3	6.2	288.0	84.6
Jan 2001 - Dec 2002	6.5	3.1	139.3	46.7
Jan 2002 - Dec 2002	6.2	1.5	109.3	9.2

Sources: Angolan authorities; and Fund staff.



6. Although a large reduction has been achieved, inflation still remains relatively high with respect to international standards (Figure I.2.). For the period, January 2002 to December 2002, the average monthly rate of inflation has been 6.20 percent, while the average 12-month rate reached 109.30 percent. At the same time, the monthly rates of inflation in the last months of 2002 were consistently higher than those in 2001. For instance: 3.95 percent versus 7.30 percent in July; 3.41 percent versus 5.20 percent in September; 4.10 percent versus 6.16 percent in November.



7. The rest of the note is organized as follows. Section II describes previous analytical work done on Angolan inflation. Section III characterizes the inflation phenomenon and presents some basic statistics. Section IV elaborates on the costs of inflation. Section V presents a number of econometric tests used to analyze the basic relationships between inflation monetary, money growth, and exchange rate depreciation. A main finding from the analysis is that the broader the monetary aggregate, the stronger its link with inflation in the short- and the medium-run. Section VI discusses some policy issues. Finally, Section VII advances some final concluding remarks. The various annexes to the note present the technical details of the econometric work; the Angolan authorities' view on the inflation phenomenon as presented in an analytical paper furnished to staff;² and some general remarks on high inflation episodes in other countries around the world.

B. Previous Analysis

8. Inflation has long been recognized as the main macroeconomic problem in Angola. In particular, Aguilar (1994) found an important relationship between inflation and the parallel exchange rate, and a strong structure of expectations and inflation inertia. Regarding trends with relative prices, the author argued that while the prices of food and beverages grew faster than the general level, prices of housing, utilities and commuting grew at a slower pace on account of price controls and/or regulations. Interestingly, Aguilar found that the informal goods market was more (price)

² "Informe de Consultoria sobre Inflacion en Angola."

competitive than the formal one, which had important monopolistic structures supported by the government.

9. The inflation phenomenon has also been extensively documented in previous analysis by the staff. For instance, Ize et al. (2001, 2002) suggest that, despite some advances, inflation in Angola remains quite high. Ize's analysis suggests that: (i) excess kwanza issues, induced by large fiscal and quasi-fiscal deficits are at the root of the high inflation problem; and (ii) kwanza issues affect prices directly and indirectly via the exchange rate's depreciation.

10. Ize et al. propose a number of recommendations to secure macroeconomic stabilization, namely: (i) increased controls over fiscal or quasi-fiscal imbalances; (ii) reductions in the central bank's operational deficit; (iii) enhanced treasury and central bank coordination; (iv) and the establishment of a central bank policy of ex-ante sterilization of the government's and/or Sonangol's foreign exchange operations.

11. More recently, the staff's analysis in the context of the 2002 Article IV consultation, noted that the main source of inflation has been the insufficient control of public spending, including notably large extra budgetary expenditures. Against this background, the staff emphasized the need to implement a consistent stabilization program and introduce structural reforms based on prudent monetary policy supported by fiscal consolidation, a flexible exchange rate policy, and appropriate transparency and governance measures.

12. The Angolan authorities have also presented its view on the inflation phenomenon in "*Estudo sobre Política de Rendimentos e Preços*" prepared by "Consultores Internacionais, SA". Briefly, the document argues that inflation is being caused by a series of factors, mainly the monetization of the fiscal deficit, the behavior of import prices, goods market imperfections, and the insufficient local supply of goods and services. Fiscal deficits and their monetization are, very likely, the main causes of the inflation phenomenon. Nevertheless, it is not clear (at least not based on the information presented in the authorities document) how market imperfections, or import price formation, might sustain quite high and persistent rates of inflation.

13. The authorities also suggest that given that the growth of kwanza issuance has been declining over time, money has been losing importance when explaining inflation. As mentioned above, some evidence in our analysis suggests that broader aggregates that include dollar-denominated assets perform better than those that do not them when explaining inflation. Annex I presents a more extensive description of the government's document with comments.

C. Characterization of the Inflation Phenomenon

14. Table I.2 and Figures I.3-4 present some basic statistics and show the paths of inflation and the rates of growth of monetary aggregates (reserve money, money, M2 and M3) during the last few years. In particular, the data in Table I.2. suggest that inflation and the growth rates of monetary aggregates have been converging over time, although money growth, with the exception of reserve money (RM) growth, has been faster than inflation. For instance, while the average annual rate of inflation was 109 percent in 2002, RM, money (M), M2 and M3 grew by 101, 127, 133, and 135 percent, respectively. Also, the volatility of monetary growth rates (measured by the standard deviation of annual growth rates) has been higher than that of inflation. For example, while the inflation was 9.2 percent in 2002, that of reserve money and money were 58.5 percent and 15.3 percent, respectively. When looking at monthly rates, in 2002, on average, inflation and monetary aggregates' growth have had similar patterns. Interestingly the broader the measure, the closer the growth rate to inflation. Exchange rate depreciation has also decreased in recent years. Specifically, the 12-month nominal exchange rate depreciation declined from 214 percent in 2000 to 90 percent in 2002. While in 2000, the monthly average rate of depreciation was equal to 10 percent, in 2002 it was 5.6 percent.

Table I. 2. Inflation, Money Growth and Depreciation, Jan. 1997 - Dec. 2002 1/
(In percent)

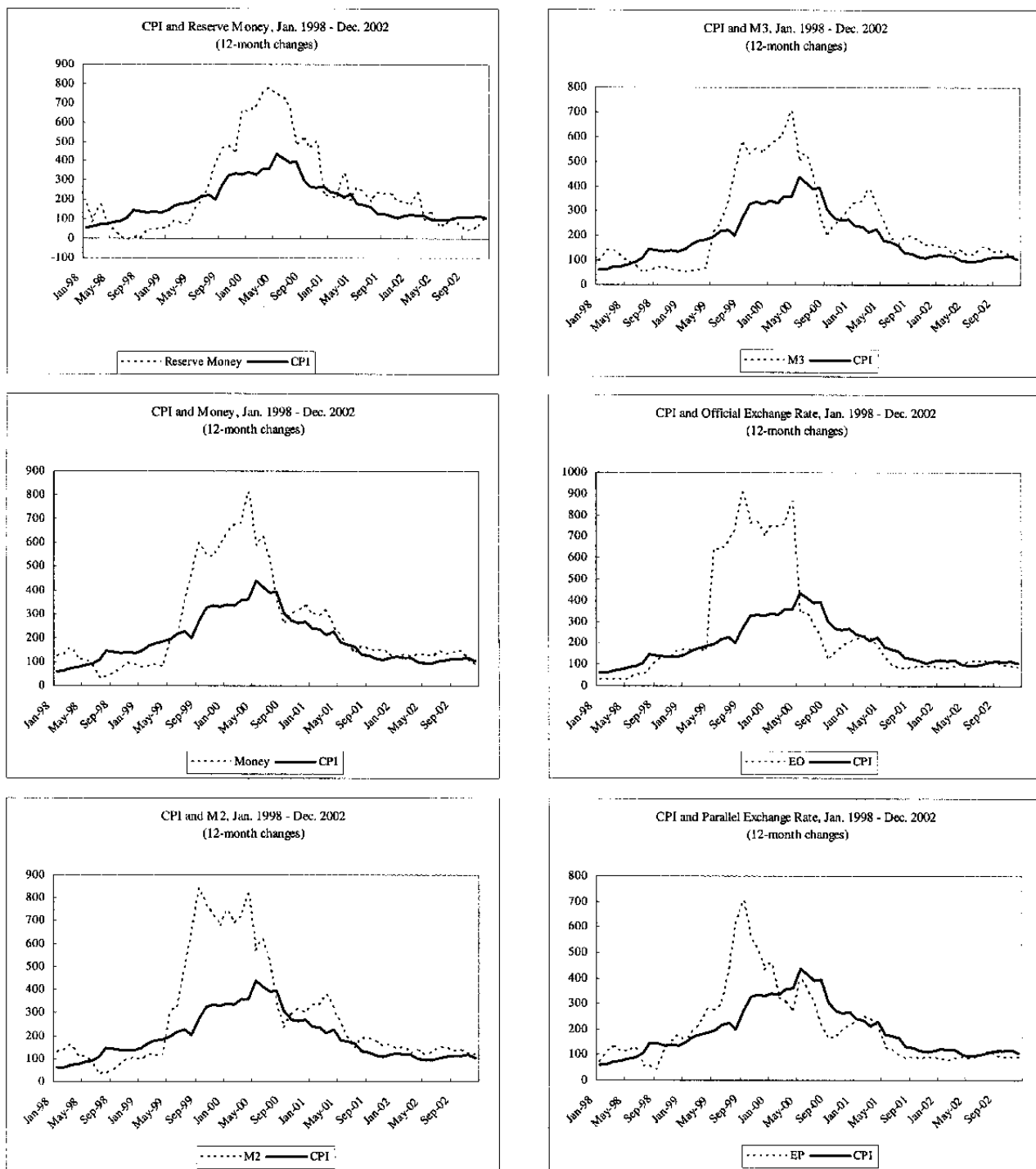
	Monthly Rates of Change									
	Jan 97 - Dec 02		Jan 97 - Dec 98		Jan 99 - Dec 00		Jan 01 - Dec 02		Jan 02 - Dec 02	
	Av	SD	Av	SD	Av	SD	Av	SD	Av	SD
Inflation	8.2	5.9	5.8	5.8	12.3	6.2	6.5	3.1	6.2	1.5
Reserve Money	11.5	21.9	8.8	20.9	15.9	22.4	9.8	22.7	7.2	15.1
Money	10.1	14.0	7.0	11.9	16.4	18.1	6.6	8.3	5.8	6.7
M2	10.8	15.4	7.5	12.0	17.1	21.8	7.8	7.0	6.9	5.5
M3	9.8	14.8	5.4	9.4	16.0	21.5	7.8	7.2	6.9	5.5
Official Exchange Rate	9.7	22.9	6.0	10.1	17.6	37.3	5.4	3.1	5.2	0.9
Parallel Exchange Rate	8.7	11.1	7.2	13.0	13.1	12.7	5.6	4.8	5.6	4.7

	12-month Rates of Change									
	Jan 97 - Dec 02		Jan 97 - Dec 98		Jan 99 - Dec 00		Jan 01 - Dec 02		Jan 02 - Dec 02	
	Av	SD	Av	SD	Av	SD	Av	SD	Av	SD
Inflation	191.7	101.5	103.9	33.8	288.0	84.6	139.3	46.7	109.3	9.2
Reserve Money	253.2	226.3	59.5	63.4	438.7	243.1	164.5	82.1	101.1	58.5
Money	249.2	200.4	90.3	39.4	414.0	222.0	163.9	62.1	126.9	15.3
M2	282.1	230.5	94.0	39.0	474.3	249.6	183.9	78.3	133.4	12.6
M3	240.3	177.7	85.3	31.8	371.0	201.9	187.0	79.9	134.7	13.7
Official Exchange Rate	252.5	260.1	73.5	51.0	477.9	284.6	116.5	48.1	98.6	13.3
Parallel Exchange Rate	201.1	149.0	106.5	42.0	333.4	150.4	116.1	54.5	89.8	9.9

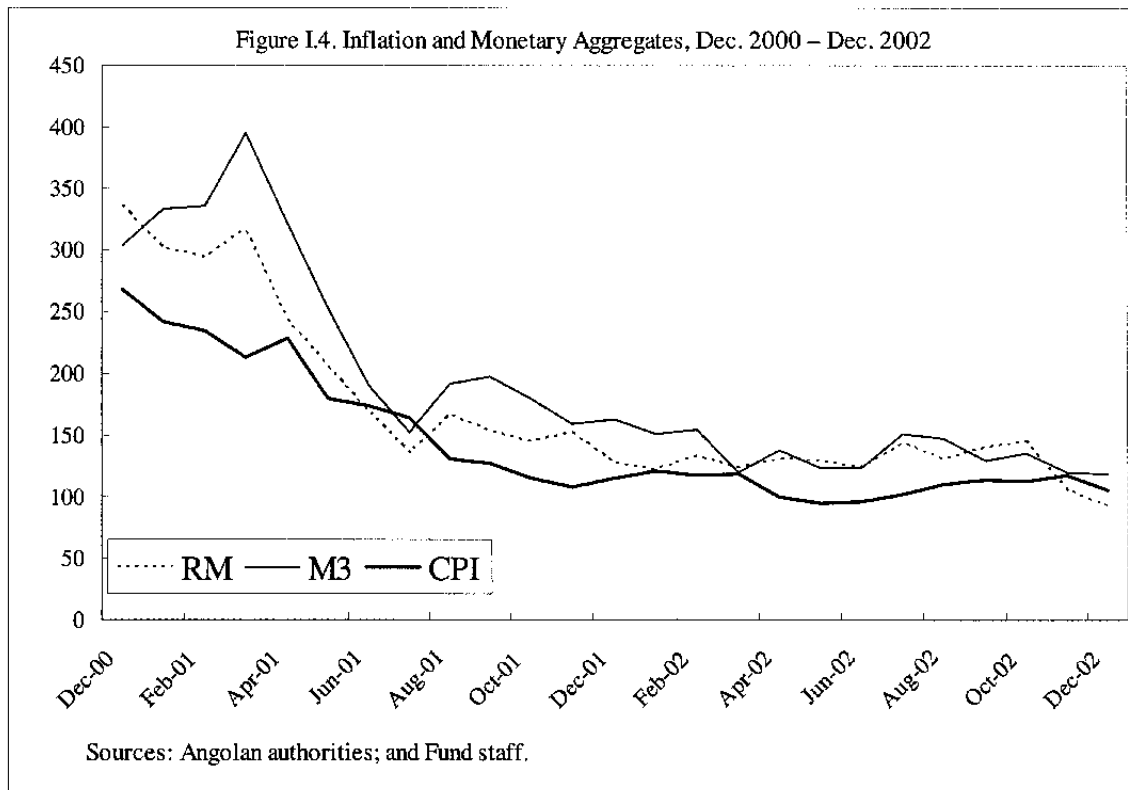
Sources: Angolan authorities; and Fund staff.

1/ Av stands for averages and SD denotes standard deviations.

Figure I.3. Inflation and Monetary Aggregates, 1998-2002



Sources: Angolan authorities; and Fund staff.



15. Table I.3 presents simple correlations between inflation and monetary aggregates. When looking at 12-month rates of growth, inflation and all monetary aggregates are highly correlated. Further, these correlations increased slightly when the sample period is restricted to the last three years. Note also that when looking at monthly rates, only broad aggregates (M2 and M3) seem to be relatively correlated with prices. Indeed, the correlation between inflation and reserve money growth is very low.³

16. Table I.3 also presents some results between inflation and exchange rate depreciation. Inflation and depreciation of the official (EO) and parallel (EP) exchange rates are relatively highly correlated. Monthly rates suggest that the correlation seems to have increased in the second half of the sample period (2000-02) when compared to the first half (1997-99).

³ Additional correlations were computed assuming different lags for the monetary aggregates, and the results were very similar to those in Table I.3. For instance, while the contemporary correlation between inflation and reserve money growth equals 0.0384 the correlation with one and two lags equal 0.0407 and 0.1168, respectively (the correlation turns negative and nonsignificant afterwards). For the other monetary aggregate similar results arise.

Table I.3. Correlations, Jan. 1997 - Aug. 2002

Correlations: 12-month rates of change			
	Jan. 97 - Aug. 02	Jan. 97 - Dec. 99	Jan. 00 - Aug. 02
Inf, RM	0.88	0.81	0.91
Inf, M	0.87	0.83	0.88
Inf, M2	0.82	0.85	0.85
Inf, M3	0.83	0.83	0.83
Inf, EO	0.67	0.89	0.68
Inf, EP	0.68	0.83	0.89
RM, EO	0.66	0.84	0.78
RM, EP	0.62	0.85	0.83
M, EO	0.83	0.90	0.92
M, EP	0.77	0.92	0.90
M2, EO	0.91	0.94	0.94
M2, EP	0.88	0.95	0.91
M3, EO	0.84	0.91	0.92
M3, EP	0.78	0.92	0.90
EO, EP	0.87	0.93	0.78

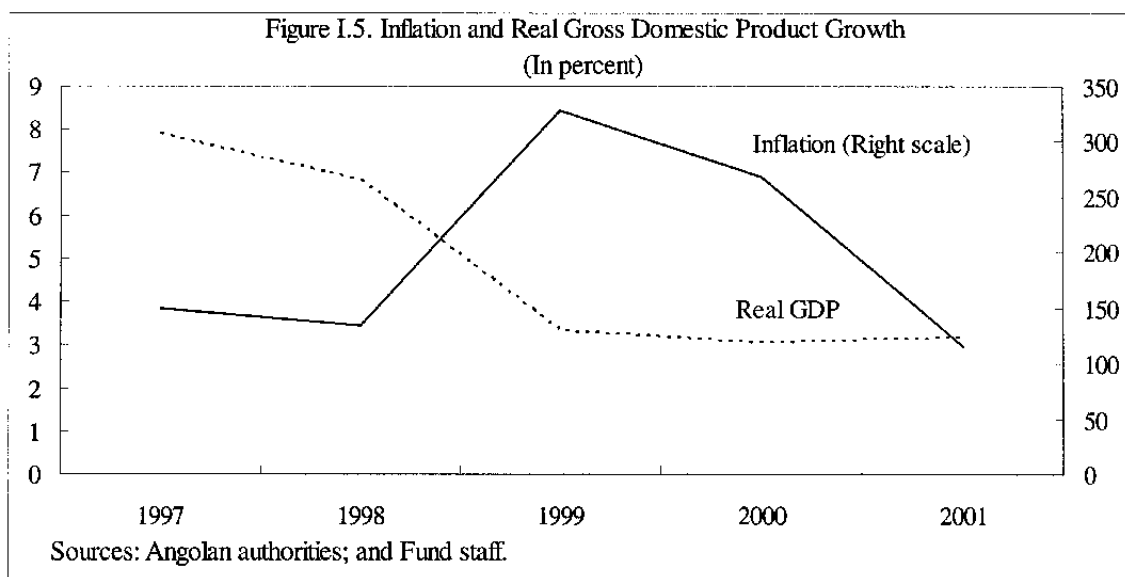
Correlations: monthly rates of change			
	Jan. 97 - Aug. 02	Jan. 97 - Dec. 99	Jan. 00 - Aug. 02
Inf, RM	0.11	0.15	0.04
Inf, M	0.30	0.29	0.32
Inf, M2	0.31	0.28	0.42
Inf, M3	0.33	0.30	0.41
Inf, EO	0.23	0.24	0.46
Inf, EP	0.36	0.25	0.62
RM, EO	0.09	0.12	-0.05
RM, EP	0.11	0.10	0.12
M, EO	0.68	0.74	0.54
M, EP	0.48	0.44	0.57
M2, EO	0.80	0.83	0.67
M2, EP	0.48	0.42	0.71
M3, EO	0.84	0.90	0.65
M3, EP	0.46	0.40	0.70
EO, EP	0.25	0.20	0.78

Sources: Angolan authorities; and Fund staff.

D. The Perils of Inflation

17. As suggested by a number of authors very high or even moderate inflation could be harmful to economic growth.⁴ While some of the costs of inflation could be triggered

⁴ For instance, Driffill et al (1990) or Briault (1995) provide surveys of the theoretical literature on the costs of inflation.

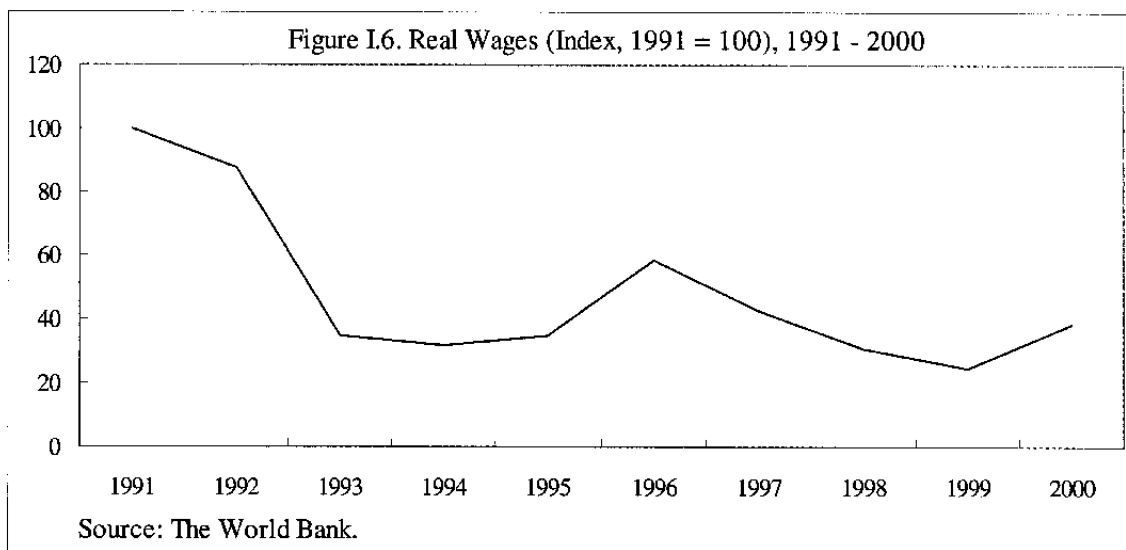


by high inflation rates, others could be the result of high variability and/or uncertainty over inflation trends. The literature suggests that high inflation rates could negatively affect economic growth by distorting relative prices signals and making the allocation of resources more difficult. For example, Ghosh and Phillips (1998) found a significant and fairly robust negative relationship between inflation and economic growth. Barro (1995) suggests that the long-term effects of inflation on living standards are substantial. He suggests that an increase in the long-term average inflation rate of about 10 percent per year would negatively affect the level of real GDP after 30 years by 4 to 7 percent.⁵

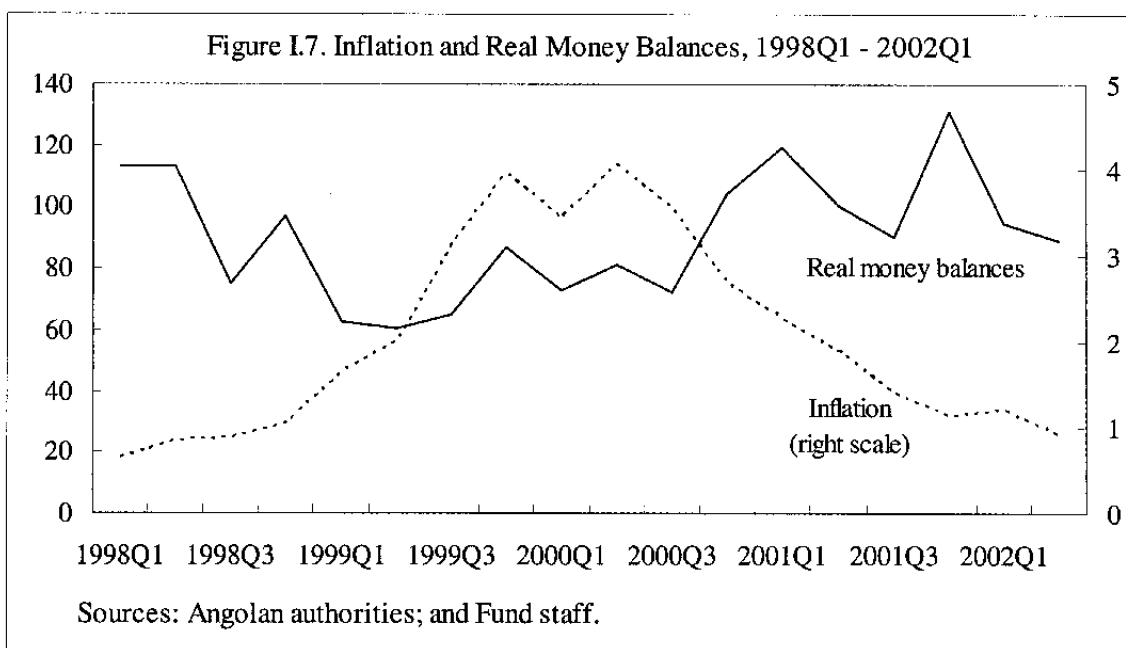
18. Although a detailed effort to assess the costs of inflation in Angola would require much more research, some indicators could help understand why a reduction in inflation would be welcomed. Figure I.5 plots inflation and real GDP growth rates for the last years. It suggests that inflation is negatively correlated with economic growth. Figure I.6 presents the evolution of real wages during the last decade suggesting that real wages have been reduced by more than half against the background of recurrent (hyper) high-inflation episodes.⁶

⁵ Barro (1995) argues that overall, the general idea is that “business and households are thought to perform poorly when inflation is high and unpredictable.”

⁶ As documented for instance by Fischer et al. (2002).

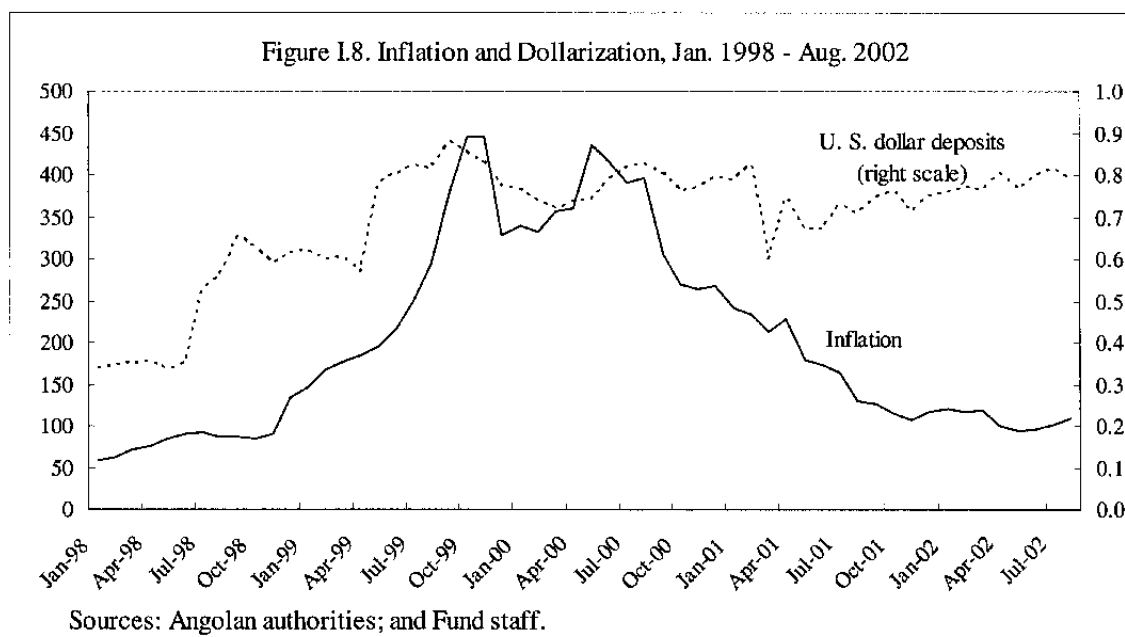


19. Yet, another indicator suggesting how harmful inflation has been to the Angolan economy is given by the evolution of real money balances. Figure I.7 shows that real money balances are negatively affected by inflation: whenever inflation has increased real balances had declined. Real money balances have experienced some recovery in recent years given some degree of stabilization.



20. High levels of dollarization have also been the result of high and persistent inflation. U.S. dollars are apparently a main medium of exchange in Angola. As suggested by the literature, dollarization may be costly, not only because of its revenue-loss implications (in terms of seigniorage), but also because it may generate a loss of monetary and exchange rate independence. Figure I.8 shows that the degree of

dollarization of the Angolan economy is high, with about 80 percent of demand deposits being dollar-denominated. Dollarization was exacerbated during 1999 and 2000 as inflation increased. In the last years, however, dollarization levels have stabilized at very high rates. Simple correlation coefficients between inflation levels and dollarization equals 0.60.



E. Empirical Analysis: Money, Exchange Rate and Prices

Data and techniques

21. Some statistical analysis of the impact of monetary developments on inflation is summarized in this section; further technical detail is included in Annex III. The empirical analysis has been performed using monthly data from January 1997 to August 2002. Given the hyperinflation experienced by the country prior to 1997, data before January 1997 were not considered. Standard and canonical time series techniques have been used in the analysis. Unit root and structural break tests, cointegration test, error correction-models, vector auto regression and impulse response and variance decomposition analysis have been applied to the data⁷. The consumer price index (CPI), reserve money (RM), money (M), M2, M3, the parallel exchange rate (EP), the official exchange rate (EO), in levels, monthly changes or yearly changes were variables used in the econometric tests.

⁷ It should be noted that these techniques are intended to be used, primarily, to perform long-run analysis. A six year sample period it is assumed to be of sufficient length in the Angolan case.

22. The main results of the statistical/econometric analysis (details are extensively discussed in Annex III), are the following:

- There exists stable long-run relationship among prices, monetary aggregates and the exchange rate in Angola. Our results suggest that, over the long-run broader monetary aggregates (such as M2 or M3) display a stronger relationship with inflation. For example, while the parameter of reserve money in the price equation equals 0.34, the parameter for M2 equal 0.56 (see Table I.8 in Annex III).
- The changes in broad monetary aggregates seem to (statistically) cause inflation. Indeed, the broader the aggregate, the stronger the causality evidence. In terms of causality in the opposite direction, only reserve money growth seems to be caused by inflation.
- Statistical evidence suggests that exchange rate depreciation causes inflation a-la-Granger. Exchange rate movements may have an important effect on prices given the significant level of pass-through and the high degree of dollarization of economy.
- In terms of the relationship between monetary aggregates and exchange rate, the former seem to (weakly) cause the latter. In addition, exchange rate movements seem to affect monetary aggregates. This might be the result of monetary interventions in response to exchange rate depreciations.
- Over the business cycle (i.e., short-term), the growth of monetary aggregate seems to have a significant effect on inflation. As in the long run, broad monetary aggregate have a stronger relationship with inflation than narrow monies⁸. For example, while the elasticity of prices with respect to reserve money equals 0.04, the elasticity with respect to M3 equals 0.09 (see Table I.10 in Annex III).

23. Moreover, as suggested by authors, dollarization raises the issue of the appropriate monetary aggregate in the conduct of monetary policy in floating exchange rate regimes. For instance, Berg and Borensztein (2000) find that broad aggregates that include foreign currency deposits are more informative about inflation development than those that do not.⁹ In the same vein, in a highly dollarized economy like Angola,

⁸ In the case of Angola, M2 and M3 include foreign currency deposits. Because of the high share of foreign currency deposits, broad aggregates are of course influenced by changes in the exchange rate. As suggested in section C, the levels of foreign currency holdings have been steadily increasing. For instance, the share of foreign currency deposits in M2 has increased from 65 percent in December 2001, to 68 percent in December 2002, to 73 percent in March 2003.

⁹ The authors analyze the cases of Argentina, Bolivia, Peru, the Philippines, and Turkey.

some of our results suggest that broader aggregates (M2, M3) might be more informative about inflation than narrower ones.

F. Policy Discussion

24. The following guidelines for policy discussion could be inferred from the analysis:

Monetary & fiscal policies should be closely coordinated given the links between monetary growth induced by large fiscal and quasi-fiscal imbalances, and relatively high and persistent rates of inflation. In that sense, reinforcing control over budgetary and extra-budgetary deficits should help. The central bank needs accurate information about fiscal developments to improve its intervention in the money market and mop up excessive liquidity caused by the fiscal stimulus.

Increasing surveillance over broad monetary aggregates is needed given that broad money aggregates are more informative about inflation than narrow monies. To date, central bank intervention in foreign exchange markets has been the primary tool used to manage excess liquidity. An additional instrument to manage monetary aggregates, in the margin could be reserve requirements, especially those on dollar-denominated bank deposits.

The BNA has been trying to achieve both monetary and exchange rate targets using only one instrument: foreign exchange interventions. Credit ceilings, previously imposed, have not been binding, and therefore, are of no use. In this context, a more active use of alternative instruments such as reserve requirements and a further development of a BNA bills market may be important in managing liquidity and monitoring the exchange rate, simultaneously.

U.S. dollars are a main medium of exchange in Angola. The rapid depreciation of the kwanza, and the prevalence of negative real interest rates on kwanza-denominated assets further contributes to the dollarization of the economy. In this sense, given the significant share of imported goods in the consumer price basket and the important pass-through effect between exchange rate and prices, excessive exchange rate depreciation should be avoided in order to control inflationary pressures.

G. Conclusions

25. After experiencing episodes of hyperinflation and high inflation, Angola is engaged in a process of stabilization and structural reforms that has delivered some results. In particular, inflation has been reduced, but not yet to international levels. Further efforts to bring inflation down to international levels would help improve the overall macroeconomic outlook, avoiding further real wages erosion, or negative effects on growth.

26. Measures to reduce inflation need to focus on strengthening control over budgetary and extra-budgetary deficits, and over monetary aggregates. The reduction in the growth rates of narrow monetary aggregates, has delivered some reduction in inflation. Nevertheless broader monetary aggregates which include dollar denominated assets are more correlated to inflation. Thus, policies aimed at improving surveillance over those aggregates should help reduce inflation further.

Authorities' View on Inflation

1. Chapter C in the government's paper titled "Study of Pricing and Profitability Policies" (Estudo Sobre Política de Rendimentos e Preços) contains an analysis of inflation in Angola. The chapter describes recent inflation trends and discusses the sources and effects of inflation.
2. Regarding inflation's sources and effects, the chapter presents a number of hypotheses. It argues that although monetary financing of central government deficits was the main source of inflation in Angola, things changed after 1999. The paper highlights an important fiscal tightening since 1999, which reduced the central government deficits and changed the composition of deficit financing. The paper argues that since 1999 the main sources of inflation have been: (i) the high level of extra budgetary spending; (ii) the quasi-fiscal operations of the central bank, and (iii) the monetization of large capital inflows which are caused by growing oil export revenues accruing to Sonangol, and by large imports of funds by multinational oil corporations used to pay taxes.
3. The paper also acknowledges that high inflation is a regressive tax on the population and that it is highly volatile, thus leading to the formation of adverse inflation expectations and inflation inertia. The paper then proposes a number of ideas on how to address the inflation problem in Angola:
 - First, the paper argues that inflation is the result of an under-supply of goods and services in the market. Imports of capital to pay oil corporations' taxes, together with commodity import privileges accruing to these enterprises to furnish their operational and investment needs, depress the demand and supply of domestic goods and services, and generates unemployment. To correct this situation, the paper recommends that all capital inflows be intermediated by the domestic banking system which would, in turn, lend on those funds for productive domestic activities leading to an increase in aggregate supply. According to the paper, the current practice of central bank monetization and sterilization of capital inflows complicates monetary control and induces increases in aggregate demand without a corresponding increase in aggregate supply.
 - Second, the paper refers to a number of market imperfections as additional inflationary sources. Statistics on the high concentration of import permits in Angola are revealed: less than 6 percent of the total number of authorized importers handle more than 70 percent of total commodity imports in the country. Also, Angola's direction of trade on the import side is highly concentrated with six countries mainly Portugal, Spain, South Africa, and Brazil. The high import concentration (i.e., among few authorized importers and suppliers) results in very large sales mark-ups in prices which are even further compounded by the bureaucratic red-tape (and bribing) behind the existing import system in Angola.

- Third, the paper notices that revenue from seigniorage accruing to the BNA is way above the “1.5 percent of GDP limit recommended by the IMF.” At current seigniorage rates equivalent to about 12 percent of GDP in Angola according to the authorities, the paper acknowledges the high risks of entering an “uncontrollable” inflation path, leading to important macroeconomic imbalances.
- Fourth, the paper expresses concern about the relatively high ratio of currency in circulation to nominal GDP in Angola. It argues that, despite recent declines in the ratio, these notes and bills in the hands of the public are a potential source of inflation. Given the current weaknesses of the Angolan banking system (in terms of low interest rates paid on deposits) no easy solutions to this problem exist. Notably, the paper claims that currency in the hands of the informal economy poses no inflationary threat to the economy, as these money balances are used in “productive” activities.
- Finally, the paper argues that the composition of government spending, generally in low-productive activities, does not increase the economy’s aggregate supply, but increases aggregate demand, with the resulting inflationary impact.

4. A number of issues are worth raising on the authorities’ views on inflation and recommendations:

- First, the authorities’ analysis seems to confuse inflation with step-up increases in domestic prices (vis-à-vis international commodity prices) due to market imperfections such as the monopolistic behavior of companies in the import and domestic distribution channels.
- Second, the authorities’ argument that inflation since 1999 has not been caused by central government deficits, but rather by growing quasi-fiscal deficits (including large extra budgetary expenses and central bank losses), ignores the fact that money is a fungible commodity. In general, the fiscal impulse stemming from fiscal or quasi-fiscal deficits would have similar impacts on inflation, especially at very high inflation rates as in Angola.
- Third, the authorities implicitly assume that money demand in Angola could be determined independently of the level of inflation and the real interest rate when they argue that banking sector intermediation of financial flows (currently accruing to the central bank) would yield an increase in aggregate supply, rather than putting pressure on prices and the exchange rate, as is now the case. Somehow, they believe that the level of real money balances held by the population could be altered through institutional changes orchestrated by the government or the domestic banking sector.
- Fourth, the authorities’ conclusion that very high rates of seigniorage revenue could lead to high rates of inflation seems reasonable. For one, seigniorage revenue levels

in Angola are relatively high when compared to levels in other African economies (see Table I.4, below). The most common measure of seigniorage is the ratio of the change in reserve money divided by nominal GDP, rather than the change in money divided by nominal GDP as measured in the authorities' paper. Yet, under either definition, seigniorage in Angola is rather high by international standards, although it has declined somewhat in recent years.

Table I.4. Seigniorage: Angola and Other African countries, 1996 - 2002

	Angola	Botswana	Cameroon	DRC	Namibia	Nigeria	South Africa
1996	10.45	0.34	0.84	3.20	0.62	0.40	0.55
1997	4.72	0.67	1.40	1.50	0.60	0.30	0.47
1998	3.40	0.67	0.47	61.32	0.12	1.17	0.23
1999	9.99	0.47	0.38	51.53	1.33	1.55	0.88
2000	4.79	0.20	1.59	-4.47	-0.25	2.83	0.27
2001	4.60	0.39	...	1.27	0.26	2.55	0.68
2002	3.72	0.25	...	...	...	3.35	0.60
<i>Memorandum item</i>							
Average (1996 - 2002)	5.95	0.43	0.93	19.06	0.45	1.73	0.53

Source: IMF, *World Economic Outlook* database.

1/ Seigniorage is defined as the change in reserve money divided by nominal GDP.

Some International Inflationary Experiences

1. On a general note, high and persistent inflation has been extensively documented and studied. In a recent example, Fischer et al. (2002) characterize a number of high inflation episodes and present a number of findings. Notably: (i) higher inflation tends to be more unstable; (ii) the relationship between fiscal balance and seigniorage is strong (both in the short- and the long-run); (iii) inflation inertia decreases as inflation rises; and (iv) in general, high inflation is associated with poor macroeconomic performance.

2. Even though the inflation mechanism is complex, extensive theoretical and empirical research has been devoted to it. As suggested by Fischer et al (2002) consensus seems to prevail on several points: (i) money and inflation are highly correlated in the long-run; (ii) fiscal imbalances usually explain (trigger) high inflation; and (iii) inflation may be the unintended consequence of inappropriate monetary policies targeting unemployment, exchange rates, and/or interest rates.

3. Even though a number of high inflation episodes have taken place in Africa, the inflation phenomenon has been studied much less than in other regions. Yet, one recent study by Reinhart and Rogoff (2002) examines the experiences of some African countries with inflation. They report that from 1970 to 2001 five countries (Democratic Republic of Congo, Angola, Ethiopia, Uganda and Zambia) have had an average annual rate of inflation higher than 40 percent. They suggest that, aside from political conflicts, inflation and fiscal problems seem to be related.

4. A number of market economies have experienced in recent history high and persistent inflation, and in some rare cases, hyperinflation.¹⁰ Based on Calvo and Vegh (1992) and Fischer et al. (2002), some quantification of inflation episodes is presented below (Table I.5). We also present the type of stabilization programs that were implemented (Table I.6).

5. A main message from the literature is that, aside from the nominal anchor used in the stabilization program, key elements common to successful programs were: (i) the control of fiscal imbalances; and (ii) policy credibility to reduce inflationary expectations.

¹⁰ Fischer et al. (2002) define high inflationary episodes those with inflation rates above 100 percent per annum. Hyperinflation is defined a-la-Cagan: "as beginning in the month the rise in prices exceeds 50 percent and as ending in the month before the monthly rise in prices drops below that amount, and stays below for at least a year".

Table I.5. Selected High Inflation and Hyperinflation Episodes

Country	Date of Episode		High Inflation Episodes 1/					
			Dur. (months)	During High Inflation 2/			12 Month After 2/	
				Start	End	Cumulative	Average	Highest
Angola	Jan-91	Jun-97	78	287,726,172	21.0	84.1	1.8	3.0
Argentina	Jul-74	Oct-91	208	3,809,187,961,396	12.4	196.6	1.4	3.0
Bolivia	Aug-81	Aug-86	61	5,220,261	19.5	182.8	0.7	2.4
Brazil	Apr-80	May-95	182	20,759,903,275,651	15.4	80.7	1.7	4.4
Chile	Oct-71	May-77	68	127,958	11.1	87.5	3.0	4.2
Congo Dem. Rep.	Feb-88	Jul-89	18	202	6.3	20.4	3.1	5.9
Ghana	May-82	Feb-84	22	243	5.8	23.4	0.3	4.9
Guinea-Bissau	Sep-86	Feb-88	18	146	5.1	25.0	4.6	12.6
Israel	Dec-78	Mar-86	88	109,187	8.3	27.5	1.7	3.3
Mexico	Dec-85	Aug-88	33	724	6.6	15.5	1.3	2.5
Peru	Dec-86	Mar-92	64	25,392,223	21.5	397.0	3.5	4.8
Sierra Leone	Feb-89	Dec-91	35	689	6.1	19.9	2.5	5.9
Somalia	Mar-83	Jun-84	16	140	5.6	19.6	2.7	9.0
Uganda	Feb-84	Dec-88	59	9,071	8.0	37.9	3.8	6.9

Country	Date of Episode		Hyperinflation Episodes 1/					
			Dur. (months)	During High Inflation 2/			12 Month After 2/	
				Start	End	Cumulative	Average	Highest
Angola	Dec-94	Jun-96	19	62,446	40.3	84.1	9.5	38.1
Argentina	May-89	Mar-90	11	15,167	58.0	196.6	12.0	27.0
Bolivia	Apr-84	Sep-85	18	97,282	46.6	182.8	5.7	33.0
Brazil	Dec-89	Mar-90	4	693	67.8	80.8	14.8	21.5
Congo Dem. Rep.	Nov-93	Sep-94	11	69,502	81.3	250.0	12.9	26.2
Nicaragua	Jun-86	Mar-91	58	11,895,866,143	37.8	261.2	1.8	20.3
Armenia	Oct-93	Dec-94	15	34,158	47.6	437.8	2.4	7.8
Serbia	Feb-93	Jan-94	12	156,312,790	228.2	175092.8	1.0	12.4
Ukraine	Apr-91	Nov-94	44	1,864,715	25.0	285.3	10.9	28.4

1/ Based on Fischer et al (2002).

2/ Monthly inflation statistics.

Table I.6. Stabilization Programs

Some Experiences on Exchange Rate-Based Stabilization Programs 1/					
Country	Beginning and Ending Dates	Exchange Rate Arrangements	Initial	Inflation Rate	
				Lowest	Date Achieved
Israel	Jun 85 - Sep 86	Fixed, crawling peg	1128.9	50.1	Jun-86
Brazil	Feb 86 - Nov 86	Fixed	286.0	76.2	Nov-86
Mexico	Dec 87 - Dec 94	Fixed, crawling peg, band	159.0	6.7	Sep-94
Uruguay	Dec 90 - present	Band	133.7	24.4	Dec-96
Argentina	Apr 91 - 01	Currency Board	267.0	-0.3	May-96

Some Experiences on Money-Based Stabilization Programs 1/					
Country	Beginning and Ending Dates	Money/ER Arrangement	Initial	Inflation Rate	
				Lowest	Date Achieved
Chile	Apr 75 - Dec 77	Monetary anchor	394.3	63.4	Dec-77
Argentina	Dec 89 - Feb 91	Liquidity cut/floating rate	4923.3	287.3	Feb-91
Brazil	Mar 90 - Jan 91	Tight monetary policy	5747.3	119.5	Jan-91
Rep. Dom.	Aug 90 - present	ER unification and floating	60.0	2.5	Nov-93
Peru	Aug 90 - present	Monetary anchor/Dirty Floating	12377.8	10.2	Sep-95

1/ Based on Calvo and Vegh (1999).

Unit Roots, Structural Breaks, and Cointegration

1. Individual unit-root and structural break tests were performed for each variable. Also, following Perron (1997), tests for contrasting unit roots and possible structural breaks of unknown dates were performed. Table I.7 presents the results of some of the test. Note that in all but two cases, no statistical evidence for rejecting the hypothesis of unit root was found. All variables, in levels (i.e., logarithms), were found to be integrated of order one, and no (strong) evidence of structural breaks were found for the period considered.¹¹

Table I.7. Unit Root/Structural Break Tests

Unit Root/Structural Break Test							
Break in:	CPI	RM	M	M2	M3	EP	EO
Intercept	-5.70** (1999.07)	-4.63	-4.51	-4.39	-4.41	-3.51	-9.15*** (1999.03)
Slope	-3.02	-3.46	-3.4	-3.25	-3.04	-2.98	-2.98
Both	-4.16	-5.16	-4.22	-4.36	-4.06	-4.13	-8.59*** (1999.03)

Notes:

1. Variables are in logarithms.
2. Test suggested in Perron (1997) when the date of possible break is unknown.
3. *, **, *** indicates 10%, 5% or 1% of significance respectively.
4. When evidence of structural break is found, the date is presented in parenthesis.

2. Cointegration tests among these I(1) variables were then performed following the standard Johansen (1991) procedure. Some of the results are presented in Table I.8. For the tests, the following ordering is used: CPI, the monetary aggregate, and parallel exchange rate (all in logarithms). In addition, a linear trend and one lag was considered.¹²

¹¹ See Perron (1997) or Dickey-Fuller (1979).

¹² Other specifications for the deterministic components and different number of lags were also considered, and the results were quite similar to those presented. Akaike and Schwarz criteria were used for the lag selection.

Table I.8. Cointegration: Money, Exchange Rate and Prices

Cointegration Tests				
Statistic	RM	M	M2	M3
Trace	9.6171***	12.5173***	10.8049**	11.3196**
Max-Eigen.	9.4120***	12.0547***	10.3450**	10.6249*
Cointegrating Vectors	1	1	1	1
Cointegrating Coefficients				
	1	1	1	1
L CPI				
L Monetary Aggregate	0.3470*** (0.0488)	0.5443*** (0.0789)	0.5651*** (0.0898)	0.4849*** (0.0690)
LEP	0.6084*** (0.0542)	0.3859*** (0.0877)	0.3192*** (0.1066)	0.4610*** (0.0755)

Notes:

1. Variables are in logarithms.
2. The following ordering is considered: CPI
Monetary Aggregate, EP.
3. Linear trend and one lag have been used in the tests.
4. *, **, *** indicates 10%, 5% or 1% of significance respectively.
5. The cointegrating coefficients reported are those of prices as a function of monetary aggregates and exchange rates.
6. Standard errors are reported in parenthesis.

3. Regardless of the monetary aggregate considered evidence suggest that there exists a long/medium run stable (cointegrating) relationship among prices, monetary aggregates, and the parallel exchange rate. Note that one cointegrating relationship has been found in each case. Results suggest that, in the long/medium run broader monetary aggregates (such as M2 or M3) display a stronger relationship with inflation. For example, while the parameter of reserve money in the price's equation equals 0.34, the parameters in M2 and M3, equal 0.56 and 0.48, respectively.

Causality analysis

4. In order to further assess the relationship between money, the exchange rate and prices some simple econometric exercises are performed. First, the bivariate causality test (a-la-Granger¹³) for the variables (in differences) is presented in Table I.9.¹⁴

¹³ As usual, causality test primarily suggest statistical precedence.

¹⁴ The test were performed including one lag as suggested by the Akaike and Schwarz information criteria. Results including two lags yield similar results.

Table I.9. Causality: Money, Exchange Rate and Prices

Causality Test - Granger: 12-Month Rates of Changes		
Hypothesis (No Causality)	Jan. 97 - Aug. 02	
	F-Statistic	Probability
RM, CPI	11.3551	0.0000
CPI, RM	2.5750	0.0846
M, CPI	17.9145	0.0000
CPI, M	0.5333	0.5900
M2, CPI	16.4325	0.0000
CPI, M2	0.0752	0.9277
M3, CPI	17.1162	0.0000
CPI, M3	1.0029	0.3742
EP, CPI	7.5938	0.0013
CPI, EP	1.0643	0.3528
EP, RM	6.9059	0.0023
RM, EP	2.1444	0.1180
EP, M	6.9627	0.0022
M, EP	3.8319	0.0284
EP, M2	8.3341	0.0007
M2, EP	1.8529	0.1676
EP, M3	6.6650	0.0028
M3, EP	2.3844	0.1028

5. Monetary growth seems to Granger-cause inflation. Moreover, the statistical relationship seems to be stronger, the broader the measure. In terms of causality in the opposite direction, only reserve money growth seem to be caused by inflation. Note also that exchange rate depreciation seems to Granger-cause inflation.

6. Concerning the relationship between monetary aggregates and exchange rate, the former seem to (weakly) cause the latter. Exchange rate movements seem to affect monetary aggregates. This might be the result of monetary interventions in response to exchange rate depreciations.

Error-correction results

7. Table I.10 presents some of the results for the error-correction models derived from the cointegrating relationships discussed before.¹⁵ Note that consistent with previous results, inflation seems to be more responsive to broad monetary measures than to narrow ones. Indeed, while the elasticity of prices with respect to reserve money equals 0.04 and is barely

¹⁵ Error-correction (business cycle/short-run) results might be the most relevant ones for our analysis.

significant, the elasticity with respect to M3 equals 0.09 and is statistically significant. As mentioned before, in the case of Angola, M2 and M3 include foreign currency deposits. Because of the high share of foreign currency deposits, broad aggregates are influenced by changes in the exchange rate. The levels of foreign currency holdings have been steadily increasing. For instance, the share of foreign currency deposits in M2 has increased from 65 percent in December 2001, to 68 percent in December 2002, to 73 percent in March 2003.

Table I.10. Error-Correction Results

Dependent Variable				
CPI				
Predetermined Variables				
CPI (-1)	0.3085*** (0.1193)	0.2941** (0.1289)	0.2835** (0.1278)	0.2578** (0.1214)
Reserve Money	0.0399 (0.0267)			
Reserve Money (-1)	-0.0094 (0.0334)			
Money		0.0719* (0.0405)		
Money (-1)		-0.0585 (0.0621)		
M2			0.0801** (0.0400)	
M2(-1)			-0.0465 (0.0559)	
M3				0.0862** (0.0440)
M3(-1)				0.0088 (0.0424)
Parallel Exchange Rate	0.1569* (0.0931)	0.1556* (0.0985)	0.1303 (0.0901)	0.1312 (0.0886)
Parallel Exchange Rate (-1)	0.0143 (0.0643)	0.0213 (0.0588)	0.0191 (0.0587)	-0.0076 (0.0639)
Error Correction (-1)	-0.1246*** (0.0479)	-0.1480*** (0.0471)	-0.1378*** (0.0427)	-0.1324*** (0.0454)
R-Squared	0.5278	0.5532	0.5537	0.5521
No. Obs.	66	66	66	66

Notes:

1. Variables are differences of logarithms.
2. *, **, *** indicates 10%, 5% or 1% of significance respectively.
3. Standard errors are shown in parenthesis.

8. At the same time, while money becomes more important the broader its measure, the relative impact of exchange rate depreciations on inflation declines. In addition, inflation persistence seems to be of some importance, as suggested by the coefficient and significance of lagged inflation. Lags of money growth and exchange rate depreciation are relatively unimportant.

9. Finally, as suggested by the error correction term coefficients any deviation from equilibrium would have a half-life of about 4-5 months.¹⁶

Impulse response and variance decomposition

10. In order to complement the statistical and causality results, a simple VAR model was used to analyze the relationship between money, exchange rate, and prices. Impulse responses and variance decompositions were also assessed. In this case, 12-month rates of change for the period 1998-2002 were used. In order to assess the robustness of the results with alternative monetary aggregates were considered. Key results are the following:

- Inflation significantly reacts to monetary impulses. Again, the broader the monetary aggregate, the larger and the more lasting its impact on inflation. As shown in Figures I.9 and I.10, M3 impulses produce larger effects on inflation than reserve money impulses. Note that inflation, as suggested by the analysis presented above, reacts to changes in the exchange rate, and that, it also (weakly) reacts to its own innovations.
- Monetary innovations affect the exchange rate. As is the case with inflation, the broader the aggregate, the larger and more lasting the effect on the exchange rate (Figures I.9 and I.10). The exchange rate also reacts to its own impulses, but not to inflation innovations. Monetary aggregates react to exchange rate impulses, and to its own innovations, but do not react to inflation ones.
- The variance decomposition analysis tells us a similar story. As shown in Figures I.11 and I.12 both reserve money and M3 importantly explain the variance of prices. In the case of M3, its importance in the inflation variance is relatively higher than that of reserve money on inflation. The exchange rate is also important in explaining the inflation variance. Exchange rate variance is mainly explained by itself and money, in that order. Money variance is explained primarily by itself, and secondly by exchange rate movements.

¹⁶ Half-life is computed according to $\text{Ln}(0.5)/\text{Ln}(1+\phi)$, where ϕ is the adjustment coefficient.

Figure I.9. Impulse Response: Reserve Money, Exchange Rate and Prices

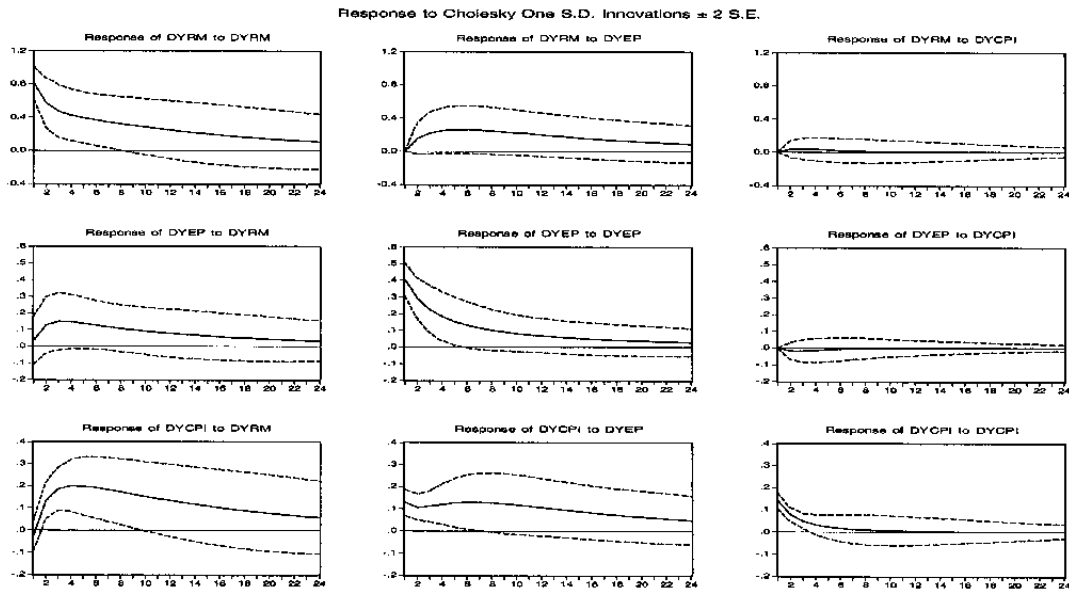


Figure I.10. Impulse Response: M3, Exchange Rate and Prices

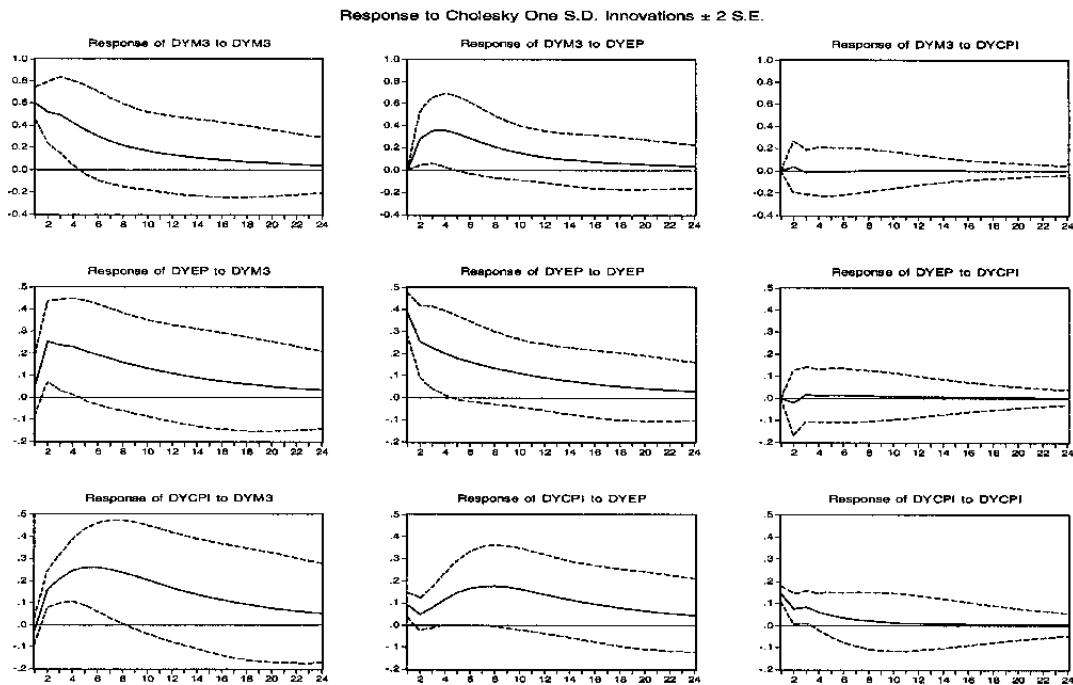


Figure I.11. Variance Decomposition: Reserve Money, Exchange Rate and Prices

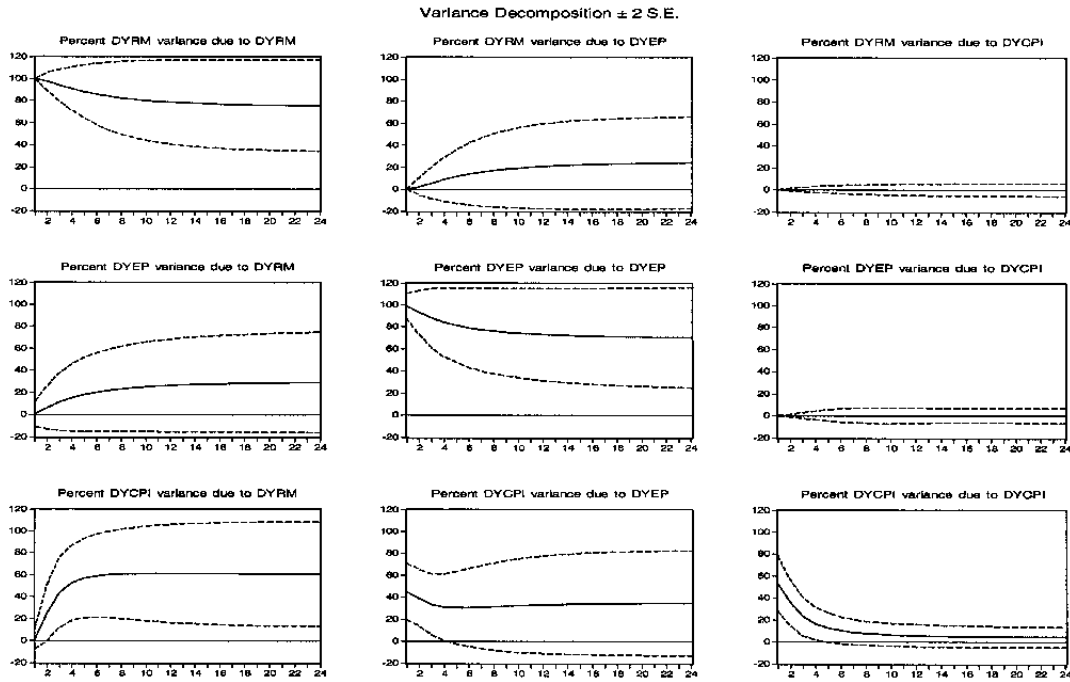
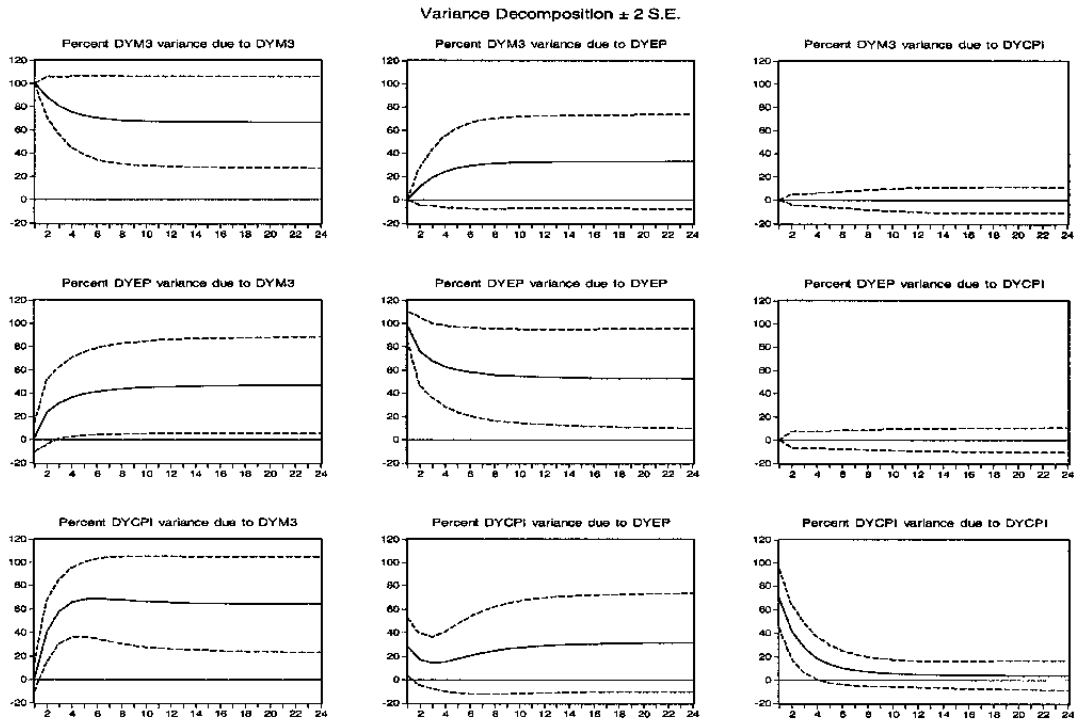


Figure I.12. Variance Decomposition: M3, Exchange Rate and Prices



Pass-through

11. Movements in the exchange rate have some impact on the inflation rate. In order to further assess the importance of these effects, simple pass-through exercises are presented. Regressions of inflation on parallel exchange rate depreciation are shown. Monthly rates of change for the period January 1997 to August 2002 have been used. Results for the two sub periods, 1997 to 1999 and 2000 to 2002 are also presented in Table I.11.

Table I.11. Exchange Rate Pass-Through

Jan. 97 - Aug. 02	Jan. 97 - Dec. 99	Jan. 00 - Aug. 02
0.14	0.12	0.33

12. For the whole period, the level of pass-through equals 0.14. When dividing the sample in two sub periods, the results suggest that the pass-through have increased in the latter period. While the estimate equals 0.12 between 1997 and 1999, it equals 0.33 for the last three years. As suggested by Ize et al. (2002), evidence suggest that dollarization is increasing in the Angolan economy. This and the increasing openness of the economy may be part of the explanation of the importance of exchange rate movements on inflation.

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II. CENTRAL BANK OPERATIONS AND MACROECONOMIC STABILIZATION IN ANGOLA¹⁷

Executive Summary

27. This note argues that monetary creation in Angola results not only from an expansion of central bank credit to the government, but also from a number of financial operations undertaken by the *Banco Nacional de Angola* (BNA) on behalf of the government, as well as from the operational deficit of the BNA. In recent years, the financial operation of BNA have contributed to more than 60 percent of the annual increase in base money. The monetization of unrealized valuation gains conceals (in an accounting sense) the substantial and persistent operational deficits incurred by the BNA, which ultimately lead to an expansion of base money.

28. The paper goes on to argue that macroeconomic stabilization in Angola would entail strict control over central bank credit to the government, an ending of the quasi-fiscal expenditures undertaken by the central bank on behalf of the treasury, and a reduction of the BNA deficit. Moreover, to enhance monetary policy credibility and transparency, the implementation of regular audits of central bank financial statements and the use of International Accounting Standards in the compilation of the central bank balance sheet should be sustained and strengthened.

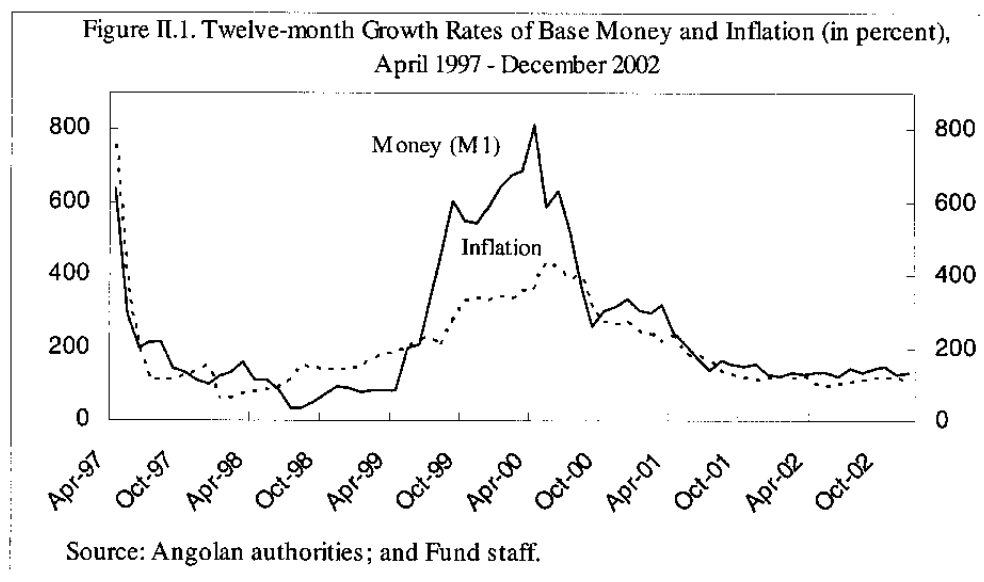
29. To date, there has been some progress in relation to the external audits of the central bank. The results of those audits and their likely impact on central bank operations are summarized in section III. Before doing that, however, the paper describes the sources and uses of base money, with particular focus on the operational deficit of the BNA and on the quasi-fiscal operations undertaken on behalf of the government during 2000-02.

A. Sources and Uses of Base Money

30. Angola's institutional framework for the conduct of monetary policy is underpinned by the Central Bank Law of 1997, which states that the BNA has as its principal objective to preserve the value of the national currency (Article 3). As there is no specific target for inflation, it can be said that the BNA has a fairly high degree of goal independence. However, Article 20 of the law states that the central bank should closely collaborate with the Ministry of Finance in the annual financial programming. In terms of instruments, the central bank law specifies that the bank has the right to issue bonds (Article 18), impose reserve requirement on financial institutions (Article 27), and operate in the foreign exchange markets (Article 47). The BNA has, furthermore, the possibility of opening a credit line to the treasury. This is, however, limited to 10 percent of the treasury's current revenues of the previous year, and has to be settled before the end of the year by cash or interest bearing bonds (Article 31). The BNA also has the right to, on an exceptional basis, extend credits to financial institutions for a maximum of three months (Article 25).

¹⁷ Document prepared by Magnus Alvensson and Alfredo Torrez.

31. Despite the BNA's mandate to seek price stability, inflation rates in Angola have been high or very high since 1997. Statistical analysis has shown that changes in monetary aggregates explain most of the inflation in Angola (Figure II.1).¹⁸ As in the case of other African central banks, the BNA's ability to influence monetary developments is constrained to its capacity to influence the behavior of the narrow base money. To identify the most important expansionary factors affecting the monetary base, this section looks at the uses and sources of base money during 2000-2002.



32. During 2000-2002, the annual growth of the monetary base (currency in circulation and kwanza-deposit of commercial banks at the central bank) has been well above one hundred percent. In these three years, the BNA has injected close to Kz 30 billion (equivalent to US\$1,113 million) into the economy, or, on average 3.9 percentage points of GDP. The expansionary sources varied, although a continuous expansion due to the central bank operations was consistent throughout the period (Table II.1).

¹⁸ See the accompanying paper on inflation in Angola (Chapter I).

Table II.1. Angola : Monetary Base Flows, 2000-2002 1/

	2000	2001	2002
	(Kwanza billion)		
Base money 2/	2.93	10.01	16.95
Sources	2.93	10.01	16.95
Government	-9.06	13.91	25.73
Central bank operations	2.74	6.97	8.55
Net foreign assets	6.45	-11.82	-17.30
Other claims and liabilities	2.80	0.94	-0.03
Growth of base money (in percent)	218	234	118

Sources: National Bank of Angola (BNA); and Fund staff estimates

1/ Flows after adjustment for valuation changes on foreign-currency denominated stocks

2/ Includes currency in circulation and Kwanza-deposits of commercial banks in the BNA

33. In 2002, base money expanded by 118 percent. Currency in circulation increased by Kz 13.8 billion and the kwanza deposits of commercial banks at the BNA by Kz 3.2 billion. The main sources were:

- **Credit to the government.** Government financial needs to finance growing fiscal imbalances caused a major expansion of base money during the last two years. In 2002, the BNA's net loans to the government (to cover for budgetary expenses, to service foreign currency-denominated government liabilities and public salary supplements) reached Kz 25.7 billion or 151 percent of the expansion of the base money. This amount, included US\$326 million (Kz 19 billion) for expenditures denominated in foreign currency, and Kz 6.7 billion in domestic currency. It is noteworthy to indicate that in 2001 the government had a similar share in the creation of monetary base (139 percent).
- **Central bank operations.** The operational deficit of the central bank, including interest payments on *Títulos de Banco Central* (central bank bills—*TBC*), is another important source of base money growth.¹⁹ The deficit, which, in 2002 reached Kz 10.5 billion (US\$180 million), had an expansionary impact on base money of Kz 8.5 billion after the sale of Kz 2.0 billion in central bank bills (Table II.2). The high interest rate and short maturities on central bank bills, however, in practice nullified the sterilization efforts attempted by issuing the bills, as the interest

¹⁹ The deficit of the central bank covers the profits and loss account of the BNA, and other operational activities of the central bank (including the use of non-realized valuation gains).

payments corresponded to the face value of the bills with a short time lag. The table below shows the operational deficit of the BNA that includes profits and loss statement, changes in net worth, provision, depreciation, and pending and nonfinancial assets. The gross deficit of the operations of BNA, which in 2002 reached 2.2 percentage points of GDP, reflect high personnel costs (including the absorption of the state owned bank in liquidation –Caixa de Agricultura e Pecuaria-CAP), large interest payments on the TBCs, and low commissions on operating services (including zero interest on government loans).²⁰ To cover for the high expenditures, the BNA had to transfer part of the unrealized valuation changes on foreign currency denominated stocks to the profit and loss accounts. In fact, it would appear at first sight that the central bank is breaking even over the last three years.

Table II. 2. Angola: Financial Operations of the BNA (Flows), 2000-2002

	2000	2001	2002
	(Kwanza million)		
Revenues ^{1/}	5,457	6,981	18,993
Of which: transfers from valuation gains	146	3,750	10,676
Expenditures ^{1/}	5,457	6,811	18,847
Of which:			
Transfers from valuation losses	1,300	1,273	1,996
Interest on Central bank bills	104	1,899	1,729
A. Profits/losses excluding valuation gains and losses ^{2/}	-1,154	2,307	8,534
B. Changes in cumulated profits/losses	-140	1,450	-2,310
I. Total loss (A+B)	-1,294	3,757	6,224
II. Net worth, provisions, depreciation and valuation gains	2,339	2,795	4,008
III. Pending and transit accounts, and non financial assets	1,880	1,564	302
IV. Total operational deficit of the BNA (I+II+III)	2,926	8,116	10,534
V. Minus: sale of BNA bills	-183	-3,102	-1,986
VI. Net deficit of the BNA operations	2,743	5,014	8,549
In terms of GDP total operational deficit of the BNA	3%	2%	2%

Sources: BNA's balance sheets (1999-2002) and staff estimates.

^{1/} See details in Appendix I.

^{2/} Minus (-) means profits and plus (+) losses.

However, by removing the unrealized valuation gains, the financial statements reveal that the operational deficit of the central bank significantly contributed to the growth of base money (see Box II.1). In 2002, the contribution was Kz 8.5 billion; or over 50 percent of base money growth, and in 2001 it was Kz 7 billion or 69 percent of base money growth.

²⁰ However, on net basis the operational deficit of BNA was equivalent to 1.7 percentage points of GDP.

- **Foreign exchange position.** The expansion of base money in 2001 and 2002 was partly offset by the deterioration of the foreign currency position of the BNA. During 2002, the central bank lost US\$207 million in international reserves corresponding to a money contraction of Kz 16.7 billions.²¹ The increase in medium and long term foreign liabilities of the BNA and of commercial banks' reserve requirements led to a further reduction in the monetary expansion. The combined effect of all foreign currency denominated accounts in the balance sheet amounted to a contraction of Kz 17.3 billion in 2002, corresponding to 102 percent of gross expansion of base money.
- **Other claims and liabilities.** Claims on other sectors of the economy and on other financial institutions such as CAP, liabilities to Sonangol (the national oil company), caused a net contraction of 0.2 percent of the monetary base during 2002. This was a sharp decrease in relation to 2001 when the financial support to CAP and a rise in the liabilities of Sonangol triggered an expansion of 9.4 percent of the growth of base money.

Box II.1. Treatment of Valuation Gains/Losses in the Monetary Data

In accordance with the *Monetary and Financial Statistics Manual*, flows from changes in the exchange rate and the prices of financial instruments are not considered transactions. Therefore, they must be identified and classified separately, for example, under capital and reserves, as unrealized profits and losses. In Angola, these accounts were classified as profit and loss. By excluding the valuation accounts from the income statement it is possible to show BNA's net income generated from the assets it holds and the liabilities it acquires.

In accordance with international practices regarding the treatment of exchange revaluation and the monetary policy objectives of central banks, valuation gains and losses should be clearly identified, for measurement purposes, under capital and reserves (gains and losses). However, the monetization of these gains needs to be closely monitored owing to the effects they have on liquidity. In particular, if the central banks wish to achieve their primary objectives (with respect to stability of the currency and inflation), they will have to take sterilization measures every time unrealized gains are monetized. Gains linked to valuation changes (unrealized gains/losses) should not be used or distributed to the government until they are actually realized through the sale of the respective underlying assets (or payment of the underlying liabilities).

²¹ This equals US\$356 million in gross reserves and a decline in short-term foreign liabilities of US\$149 million (see Annex II).

B. BNA Quasi-Fiscal Expenditures

34. Another important factor behind the rapid growth in base money is the quasi-fiscal expenditures (QFE) carried out by the BNA during 2000-2002. In general, central bank quasi-fiscal operations have long been recognized as a source of central bank insolvency, inefficient resource allocation, non-transparent public funds, fiscal imbalance and inflation. The variety of QFE is also well documented in the literature.²²

35. Despite the change of the central bank law in 1997, and the liberalization of the exchange rate in 1999, many quasi-fiscal activities of the BNA continue, either as result of the existing stock of liabilities built up prior to the reforms, or simply because the quasi-fiscal activities did not cease. Improved accounting practices at the BNA, and technical assistance carried out by the Statistics, and Monetary and Financial Systems Departments of the IMF, have facilitated the identification of substantial quasi-fiscal expenditures by the BNA during 2000-2002.

36. BNA's quasi-fiscal expenditures have generally fallen under two broad categories: (i) the servicing of old on-balance-sheet government obligations to residents (public sector salary supplements and CAP-related expenditures), and (ii) the servicing of off-balance sheet items related to foreign debt and other foreign-currency denominated liabilities of the central government (Table II.3).

Table II. 3. Angola: Quasi-fiscal expenditures (Flows), 1999-2002

	1999	2000	2001	Sep.02	2002
	(Kwanza million)				
CAP-related expenditures	86	213	373	37	-195
Public sector salary supplements	25	81	95	966	-201
Payments on external debt	720	1,000	1,899	51	-3,620
Total quasi-fiscal expenditures 1/	832	1,295	2,367	1,053	-4,015
Percent of GDP	5	1.5	1.1	0.2	-0.8

Source: BNA's balance sheet and staff estimates.

1/ All quasi-fiscal expenditures were transferred to credit to the government by end-2002 (Kz 4.0 billion).

37. A brief description of the main sources of the quasi-fiscal activities of the BNA follows.

²² See, for example, G. A. Mackenzie and Peter Stella, "Quasi-Fiscal Operations of Public Finance Institutions", IMF Occasional Paper No. 142 (Washington: IMF, 1996), or Alfredo Leone, "Institutional and Operational Aspects of Central Bank Losses," IMF Paper on Policy Analysis and Assessment 93/14 (Washington: IMF, 1993).

- **Expenditures related to the liquidation of the state-owned bank CAP.** CAP ceased its operations in 2000, but was only liquidated in 2002. Since 1996, however, the BNA has covered, on behalf of the government but without debiting the government, all of the bank's operational expenses, including severance payments and retirement benefits. In addition, it is also understood that a large share of former CAP employees were transferred to the payroll of the central bank.
- **Public sector salary supplements.** Food subsidies provided to certain public sector employees have been paid by the BNA through debit cards for purchasing goods (at predetermined stores).
- **Expenditures to service foreign currency-denominated government liabilities.** These liabilities have not been included in the BNA's balance sheet, thus making it difficult to obtain full information regarding their size and maturity. Yet, the origin of these liabilities is likely to be: (i) liabilities denominated in foreign currency to various clients, which originated from kwanza demand deposits converted into US dollars during the exchange control period in the mid 1990's; (ii) promissory notes issued by the central bank on account of the government's external debt; and (iii) other commitments undertaken by the central bank on behalf of the ministry of finance.

38. By end-2002, the BNA had transferred the outstanding amount of quasi-fiscal expenditures accumulated over the years to credit to the government. This "regularization" of accounts reached Kz 4 billion. It is expected that the government will issue a domestic interest-bearing bond to cover this loan.

39. In the last quarter of 2002, however, the BNA engaged in a number of foreign currency transactions on behalf of the government amounting to over Kz 25 billion. Close to Kz 7 billion kwanza were debited the government as foreign currency denominated debt. The remaining part was denominated in local currency, leaving the BNA to bear the exchange rate risk of Kz 17 billion (US\$280 million). The financial terms of the new credits to the treasury are not yet clearly defined.

C. Audits and Transparency of BNA's Accounts

40. Credibility is an important aspect of central bank independence, and it is underpinned by access to accurate information. The BNA has over the years engaged in economic activities and accounting practices that have effectively reduced confidence in the bank's financial position. These include, as discussed above, the servicing of off-balance sheet liabilities and the use of unrealized profits from exchange rate fluctuation to boost the financial results of the bank. Moreover, the plethora of, for example, overseas correspondent accounts added to the uncertainty over the management and size of the country's international reserves.

41. A series of independent external audits of the BNA's accounts was initiated in 2000. In mid-2001, the results of the audit of the 1999 accounts were presented by the auditors to the authorities. Specifically, in the management letter the auditors identified a number of weaknesses. Deficiencies in various control mechanisms, in both management of the budget and of exchange and interest rates risks, expose the BNA to higher than necessary costs. Lack of timely and accurate information, in particular relating to the BNA's correspondent accounts abroad led to inefficient management of foreign assets and liabilities. There was uncertainty regarding the correct level of gross reserves, and the BNA had to regularize net foreign asset position in order to be consistent with foreign correspondents' outstanding balances. The opportunity cost of idle deposits abroad could be high and the BNA risks servicing foreign debt that really belongs to the treasury (or does not exist at all). The auditors also pointed towards poor coordination between the BNA and the Angolan Treasury. Due to the inconsistent use of date on payment executions, the bank bears the exchange rate risk of treasury payments in foreign currency.

42. The weaknesses identified by the auditors in the operations of the BNA have triggered a number of policies and set agendas for further reform, which are summarized below (for details see Annex III):

- The control and accountability systems will be improved during 2003 in order to clarify and discipline the financial operations of each budgetary unit of the bank.
- The number of correspondent accounts and denomination of currencies in foreign banks will be reduced further.
- The accounting of BNA's foreign assets and liabilities has been improved, in December 2002, through the recording in the balance sheet of a number of adjustments. In addition, the authorities have initiated a process of verifying all foreign liabilities of the BNA and they are working out a strategy for the handling of currently unknown liabilities.
- The dollar deposit accounts of the government with the BNA have been rationalized and the guidelines elucidated.
- The BNA will not, in principle, engage in further quasi-fiscal operations.

However, some areas still require reforms:

- An adequate system for dealing with interest and exchange rate risks, and notably, the need to enforce the protocol that was signed in September 2002 between the Ministry

of Finance and the BNA, which will set out the new financial relations between these institutions, particularly, the policy and regulations of credit to the government.²³

D. Conclusions

43. International experience indicates that in most economies with high inflation, there is little independence of monetary policy. The central bank is forced to lend money to the government to cover large budget and extra-budgetary (including quasi-fiscal) deficits, so that money is “hostage” to the fiscal deficit. In this sense, an important step towards macro stabilization is the establishment of an independent monetary authority whose main objective is price stability. The standard wisdom is that a strong central bank, combined with responsible fiscal policies, can provide long-term price stability.

44. Despite its main objective of preserving the value of the national currency, the BNA has in practice had limited independence for decades. Heavy recourse by the treasury to central bank financing has led to sharp fluctuations in the net domestic assets of the central bank, declines in international reserves, and undesirable and unexpected base money growth. The central bank law regulates the amount of credit that can be extended to the treasury that is 10 percent of current fiscal revenues of the preceding year. In practice, however, there has been no enforcement of this law.

45. In addition, the central bank of Angola has engaged in activities that have further weakened its independence. The BNA functioned for many years as a commercial bank, extending credits and foreign currency guarantees to private and public enterprises. The servicing of off-balance sheet liabilities is a legacy of those activities. Furthermore, the BNA has continued to finance the now defunct CAP, partly out of its own resources, and has also continued to pay for public sector salary supplements. Only recently did the BNA debit the government for this. These quasi-fiscal imbalances and the sizeable operational deficits of the bank have led to a deteriorating financial position of the BNA, and thus, reduced its ability to pursue an independent monetary policy aimed at price stability.

46. The limited operational and financial autonomy of the BNA has been at odds with the accepted wisdom of having central banks that are independent, focused, and well-equipped for the conduct of monetary policy. There is a need for permanent institutional change in monetary management and an improved financial position to lower inflation. Indeed, in order to prevent a reversion to money-financed budget deficits, it is important to give the central bank enough authority to be able to refuse demands for credits that may come from the

²³ In September 2002, the government and the BNA signed an agreement (*Protocolo de Entendimento*), which sets out the new financial relations between the treasury and the BNA. However, two months after the signature of the agreement, the BNA was forced again to provide liquidity to the government and service foreign debt. Unlike past practices, no quasi-fiscal operations were used, instead direct credit to the government was provided.

treasury. In other words, adhere to the central bank law (paragraph 31). In tandem, independent central banks must be open to scrutiny, and should be in a position to answer questions about its past, current, and future performance. Moreover, a credible central bank must have a solid financial foundation to be able to back up its policy stance and operations without the need to print money or draw on fiscal resources.

Table II.4. BNA Revenues and Expenditures, 2000-2002

	2000	2001	2002
(Kz million)			
Revenues	5,457	6,981	18,993
80 - Interest earnings	360	423	242
82 - Fees	377	553	126
83 - Profits in financial transactions	4,664	5,673	18,378
83000 Valuation Profits foreign currency deposits	145	3,745	10,676
83001 Valuation profits cash- foreign currency	1	5	4,170
83009 Foreign exchange profits	4,519	1,924	3,532
84 - Repositions and provisions	0	0	0
89 - Other profits and interest	55	331	247
Expenditures	-5,457	-6,811	-18,847
70 - Costs and paid interest	-117	-1,925	-1716
71 - Fees	-10	-153	-8
72 - Losses in financial transactions	-3,608	-2,708	-13,082
72000 Valuation losses foreign currency liabilities	-1,300	-1,273	-1,996
72001 Valuation losses cash-foreign currency	0	0	-9070
72009 Foreign currency losses	-2,308	-1,435	-2,016
73 - Personnel	-503	-1,366	-3,301
74 - Suppliers	-262	-493	-612
75 - Cost of the bills and coins	-25	-25	-50
76 - Taxes and other fees	-3	-12	-40
77 - Other costs and losses	-930	-36	-34
Surplus (+) Deficit (-)	0	169	146
Revenues excluding nonrealized valuation gains	5,311	3,231	8,317
Expenditures excluding valuation losses	-4157	-5538	-16851
Adjusted Surplus (+) Deficit (-)	1,154	-2,307	-8,534

Sources: BNA's balance sheets (1999-2002) and staff estimates.

Table II.5. Net Foreign Assets and Net International Reserves, 1999-2002

	1999	2000	2001	2002	Flow 2002
	(US\$ million)				
Net foreign assets	2,261	986	484	267	-217
Net International Reserves	2,277	1,039	531	324	-207
Gross reserves	2,767	1,198	732	375	-356
Short-term foreign Liabilities	-490	-159	-201	-52	149
Other Foreign assets (net)	-16	-53	-47	-57	-9
BNA-foreign assets - ME	0	0	0	0	0
Foreign Liabilities	-16	-53	-47	-57	-9
Commercial banks' foreign currency deposits in the BNA	108	112	32	36	4

Source: Banco Nacional de Angola

Table II.6. Progress with BNA's Institutional Development Matrix

Target Areas	Issues ^{1/}	Status as of April 2003
I. Control		
1.1. Budget management and control of costs	The BNA lacks a system of budget management by functions. This lack does not allow an efficient implementation of cost policies and projects.	The BNA has a general annual budget that includes all directorates of the bank. However, there is no clear separation of each cost unit. Therefore, it is difficult to assess what unit is under- or over-spending in relation to what was budgeted for. There is a plan to improve this budgetary system during 2003.
1.2 Control of interest rate and exchange rate risks	The BNA lacks policies and procedures aimed at managing potential credit and exchange rate risks. Therefore the management of official international reserves becomes more difficult.	There has not been any improvement in this area, due to lack of coordination between the Ministry of Finance and the BNA. In general, there is no policy on the management of foreign assets. Implementation of the September 2002 protocol may help in the future.
II. Foreign Exchange Operations		
2.1 The BNA's foreign correspondent accounts	Foreign correspondent accounts are not readily available to the BNA. Problems exist regarding: (i) up-to-date information on account balances; (ii) some accounts subject to legal action/disputes; (iii) excessive number of BNA correspondent accounts.	The number of foreign correspondent banks has been reduced to six banks, which include four very active accounts. It is expected that the number of banks and accounts will be reduced further. There is also an ongoing reconciliation of the foreign correspondent accounts between the Direcção de Gestão de Reservas, (DGR), the Accounting Directorate, and the foreign banks' statements. Some banks are reluctant to close down accounts because they want to maintain business with Angola.

Table II.6. Progress with BNA's Institutional Development Matrix

Target Areas	Issues ^{1/}	Status as of April 2003
2.2 Gross international reserves	The BNA's bank deposits overseas lack (i) adequate registry with central bank; (ii) timely reporting about credits and debits; (iii) close monitoring so as to minimize opportunity cost of idle bank deposits overseas.	80 foreign correspondent accounts were closed down during 2002.
2.3 Buying and selling of foreign exchange	The system lacks timely accounting controls.	There is now in place a control system, which secures timely recording of buying and selling of foreign currency.
2.4 The BNA's foreign liabilities	There is a poor registry system. Not all liabilities appear on the balance sheet. Liabilities lacked documentation on their outstanding values and source.	The result of a working group on the reconciliation of quasi-fiscal operations, provided data for the recording of all central bank foreign liabilities. Thus, the BNA's balance sheet as of December 31, 2002 includes all the BNA foreign obligations.
III. Financial Operations with the Government		
3.1 Treasury single account	<p>Poor coordination between the BNA and Ministry of Finance in the emission of payment orders (POs). The ministry issues POs without up-to-date information on available bank balances. Lack of timely information about executed POs.</p> <p>The BNA assumes exchange rate risk when paying POs. POs are paid in dollars using the exchange rate prevailing at the time of issuance rather than the one in place at the time of cashing the PO.</p>	The BNA does not undertake (POs) anymore. The POs are processed now by a commercial bank, the Banco de Poupança e Crédito (BPC).

Table II.6. Progress with BNA's Institutional Development Matrix

Target Areas	Issues ^{1/}	Status as of April 2003
3.2 Gross BNA credit to government	Financial conditions of new credits to the Ministry of Finance and other ministries are not stated.	This practice has continued, in spite of the September 2002 protocol between the ministry of finance and the BNA. During late 2002, a particularly large amount of credit was provided to the government without formal financial conditions.
3.3 External debt	The BNA's balance sheet contains foreign liabilities which appear to be financial obligations of the Angolan state, not of the central bank.	The BNA's balance sheet as of December 2002 includes a number of regularizations undertaken with a view to present a reconciled foreign liabilities' position of the BNA. Due to this, an amount of US\$149 million of foreign liabilities were paid/regularized in December 2002.
3.4 Government dollar deposit accounts with BNA	There are multiple dollar accounts with the BNA without guidelines as to which type of government operations should be handled by each account.	During 2002, the government reduced its foreign-currency denominated accounts in the central bank to two accounts, which are handled under precise government guidelines issued by the DGR.

^{1/} As reported in the external auditor's management letter in the 1999 audit of the BNA.

III. INTERNATIONAL RESERVE ADEQUACY IN ANGOLA²⁴

Executive Summary

47. Vulnerability to fluctuations in the world market price for oil and high dependence on imports make reserve adequacy an important factor for stable economic development and management in Angola. This note reviews the holdings of gross international reserves by Angola and compares them to reserve holdings in a number of African countries which have exchange rate regimes similar to Angola's.²⁵ The main findings are the following:

- When facing possible balance of payments shocks affecting the goods markets (i.e., the commodity export and import markets), Angola has been consistently less insulated than similar countries in the region. In particular, Angola's reserve coverage in terms of months of imports of goods has been one third of the average levels recorded in other African countries with similar exchange rate regimes.
- Angola's current reserve position, equivalent to 1.1 month of imports by end-December 2002, is particularly worrisome given the economy's high dependence on imported consumption, intermediate and capital goods. These high import penetration ratios have resulted in inelastic production structures which heighten Angola's vulnerability to balance of payments shocks, and may impair the economy's ability to reallocate resources within and across the tradable and nontradable sectors in the event of an external shock.
- When facing possible shocks to capital markets, Angola has been consistently less insulated than its peers according to all measures of reserve coverage assessed using estimates for monetary aggregates, external debt service and/or short-term external debt stocks.
- Given Angola's difficult macroeconomic environment, characterized by high inflation and large fiscal deficits, the possibility of borrowing from abroad might be more costly when reserves are low, despite the existence of substantial oil resources.

A. Reserve Adequacy: General Considerations

48. As a result of numerous currency and financial crises across the world, a number of theoretical and empirical papers have focused on assessing the economic factors behind those crises. In general, the analysis has concluded that the roots of recent crises lay with the following: (i) inconsistencies between "fundamentals" and fiscal and/or monetary policies

²⁴ Document prepared by Jose Giancarlo Gasha.

²⁵ Angola's exchange rate regime has been classified by the IMF as a "managed floating with no preannounced path for the exchange rate." This classification is published in the monthly issues of the IMF's *International Financial Statistics*.

(the so-called “first generation” models such as Krugman (1979)); (ii) self-fulfilling expectations about a country’s unsustainable balance of payments position (the “second generation” approach such as in Obstfeld (1986)); and (iii) contagion from crises elsewhere, along with possible investors’ herding behaviors (“third generation” literature (Calvo,1995)).

49. An idea implicit in the theoretical and empirical research has been that balance of payments crises are triggered by macroeconomic imbalances which can be ultimately quantified in terms of liquidity, solvency, and external competitiveness indicators for the country under stress. In particular, central banks’ international reserve holdings have been usually viewed as an adequate *liquidity indicator*, thus measuring the country’s ability to back up their short-term external liabilities and needs when facing shocks. Reserve holdings—and their fluctuation over time—are also viewed as an instrument that could be used to minimize the economy’s adjustment costs (in terms of output losses and unemployment) in the upshot of a balance of payments shock. In addition, the analysis has yielded an extensive discussion over the “optimal level” of international reserve holdings and ways to estimate those optimal reserve targets.

50. As suggested by some authors,²⁶ the choice of an “optimal” level of reserve holdings should take into account a number of factors including: (i) the economy’s vulnerability to balance of payments to shocks; (ii) the consequences of running out of reserves; (iii) the opportunity costs of holding reserves; and (iv) the speed with which a country is prepared to adjust its balance of payments when the need arises.

51. The policy prescriptions from the literature are rather straightforward. First, greater vulnerability to balance of payments shocks requires a bigger reserve accumulation. Second, the worse the economic consequences from international reserves depletion, the higher should be the country’s target for the reserve stock. Third, higher opportunity costs of holding reserves call for a lower reserves target or norm. Fourth, faster adjustment to shocks permits economizing in reserves. The caveat, however, is that economic adjustment could be more or less costly in terms of output losses and unemployment depending on: (i) the composition of an import cutback needed to restore the external balance (for example, abruptly cutting essential imports of intermediate or capital goods could be very painful for a country, so a higher level of reserves may help avoid such a costly adjustment); (ii) the short-run elasticity of exports; and (iii) the country’s ability to borrow from abroad to finance its current account deficits.

B. The Case of Angola

52. This section examines Angola’s gross international reserves holdings vis-à-vis holdings in other African countries with similar exchange rate regimes.²⁷ Table III.1 presents a number of indicators usually used for assessing international reserve adequacy for Angola and peer African countries.

²⁶ For instance, see Williamson (1988).

²⁷ The sample comprises countries, which have, according to the latest *IFS* classification (December, 2001), a managed float with no preannounced path for the exchange rate regime.

Table III. 1. Angola: Indicators of International Reserve Adequacy, 1997-2002

		A. Ratio of International Reserves to Imports 1/						
		1997	1998	1999	2000	2001	2002	Average 3/
Angola		1.83	1.17	1.91	4.57	2.65	1.12	1.74
Average Other Countries 2/		7.42	5.77	4.86	6.59	7.46	7.99	6.70
		B. Ratio of International Reserves to Currency in Circulation						
		1997	1998	1999	2000	2001	2002	Average 3/
Angola		1.02	0.85	4.16	6.79	2.85	1.05	1.99
Average Other Countries 2/		2.13	1.62	1.36	1.92	2.07	2.60	1.95
		C. Ratio of International Reserves to Broad Money						
		1997	1998	1999	2000	2001	2002	Average 3/
Angola		0.26	0.23	0.70	1.25	0.56	0.24	0.40
Average Other Countries 2/		0.62	0.49	0.40	0.47	0.50	0.54	0.51
		D. Ratio of International Reserves to Scheduled Debt Service						
		1997	1998	1999	2000	2001	2002	Average 3/
Angola		0.30	0.12	0.31	0.59	0.34	0.19	0.25
Average Other Countries 2/		3.62	3.39	3.26	3.57	4.39	5.79	4.09
Average (exc. Rwanda)		2.11	1.71	0.96	1.48	1.88	2.75	1.88
		E. Ratio of International Reserves to Short Term Debt 4/						
		1997	1998	1999	2000	2001	2002	Average 3/
Angola		0.20	0.08	0.20	0.41	0.28	0.18	0.19
Average Other Countries 2/		8.94	6.58	4.21	10.20	14.86	18.32	10.58
Average (exc. Algeria)		2.16	1.54	1.06	2.88	3.12	3.11	2.20

Notes:

1. Imports of goods only.
2. Includes Algeria, Burundi, Ghana, Guinea, Nigeria, Rwanda and Zambia.
3. Average are computing without considering 2000. As explained in the text unusual positive term of trade shock induced an important accumulation of reserves in Angola.
4. All debt with remaining maturity of one year.

Source: International Financial Statistics, Countries' Databases.

Angola is not well shielded against shocks to goods markets

53. A standard measure of a country's insulation against shocks to the good markets is the ratio of gross international reserves **scaled by imports of goods and services**. According to this measure, Angola's reserve coverage has been consistently lower than the average coverage for similar African countries.

54. Angola's reserves coverage improved significantly after the implementation of a stabilization program in 1997 and 1998. In particular, Angola's reserves rose from less than 2 months of imports in 1998 (about US\$347 million) to 4.6 months (about US\$1.2 billion) in 2000. Subsequently, however, large increases in total import levels, combined with a depletion of gross international reserves, resulted in a significant reduction in the reserve import coverage. By end-2002, Angola's international reserves had reached an all-time low equivalent to one month of imports of goods (about US\$375 million).²⁸

55. Although a country's "optimal" level of reserve coverage might change overtime, practitioners consider a reserve coverage of between 30 to 40 percent of total imports to be generally adequate.²⁹ At Angola's current import levels (of about US\$4 billion), this rule of thumb would mandate reserve holdings ranging between US\$1.2 to US\$1.6 billion, values which are well above the current BNA's reserves holdings of 375 million.

56. It should be noted that, in general, most indicators for Angola improved in 2000 due to an important accumulation of reserves, which in turn resulted from an unusual positive shock to the terms of trade. Indeed, the price of oil rose from US\$17.6 to US\$27.2 a barrel, a 55 percent increase that year.

Angola's coverage against shocks to the capital account is also limited

57. Another motive for having high international reserve holdings should be to protect a country from financial shocks such as deposit outflows and market contagion, while also permitting debt obligations to be serviced on a timely basis.

58. The ratio of **official reserves to currency in circulation** reflects the monetary authorities' ability to withstand pressure on the exchange rate stemming from a flight away from local currency (but not away from banks). As the data in Part B of Table III.1 suggest, Angola's official reserve coverage of currency in circulation compared less favorably to the average of the sample at the beginning of the sample period, but improved significantly in

²⁸ Due to data limitations, the import coverage estimates presented for Angola and the rest of African countries is measured against imports of goods only. Measured against goods and services, the import coverage for Angola would fall to 0.6 months by end-2002.

²⁹ See for instance, Williamson (1988).

2000. Nevertheless, Angola's situation has significantly deteriorated in the last few years. This deterioration reduced its reserve coverage to below the regional average again. By 2002, while the regional average reached 2.60, the Angolan coverage was only 1.05.

59. To measure a country's ability to confront a flight from liquid assets in domestic currency including the banking system, **international reserves are scaled by broad money** (the sum of money and quasi-money in domestic currency). According to this measure, Angola compared less favorably to other African countries during the period 1997 to 1999, but it significantly improved its position in 1999 and 2000. Nevertheless, this improved coverage was short-lived and Angola's ratio of international reserves to broad money fell to less than half the average ratio for other similar African countries by 2002.

60. Angola's relative improvement observed around 2000 mirrored a large reserve accumulation, while broad money (measured in dollar terms) increased proportionally less. Subsequently, while broad money increased by about 60 percent in 2001/2002, official reserves declined steadily from US\$732 million at end-2001 to US\$375 million by end-2002.

61. **Scheduled external debt service (both short- and long-term)** also plays a role in evaluating reserves holdings. In a crisis, external debt service would put a strain on reserves, as rolling-over debt and new credits would be difficult. Greater reserve holdings should, in principle, facilitate external debt repayment and rolling-over of old debts.

62. Table III.1, panel D, suggests that Angola's coverage of **official reserves to external debt service** has been consistently lower than the mean coverage for comparator African countries during 1997 to 2002. Even in 2000, when Angola's ratio of international reserves to external debt service reached a peak of 60 percent, this coverage was less than one sixth of the average for other African countries in our sample. By end-2002, Angola's coverage fell to 19 percent, while coverage in comparable African countries was close to 600 percent.

63. It should be noted that in the case of Angola, since the mid-1990s, most contracted debt has been guaranteed by oil (oil-backed loans). In this sense, the collateralized repayment arrangement of these loans reduces the reserves holdings' needs and the accumulation of arrears related to this oil-backed loans.

64. Panel E in Table III.1 shows the ratio of **official reserves to the stock of short-term external debt** for Angola and comparator African countries.³⁰ As with other indicators, 1998 seemed to be a particularly difficult year with reserves covering only 8 percent of the short-term obligations. Towards 2000, the coverage reached a peak of 41 percent due to the large accumulation of reserves. While in 1999 short-term external debt was US\$2.4 billion, it increased to US\$2.9 billion in 2000. In 2001 and 2002, short-term external liabilities remained at the similar levels (US\$2.5 and US\$2.1 billion respectively). Nevertheless, the subsequent decline of international reserves, reduced the reserve coverage to 28 percent and 18 percent in 2001 and 2002 respectively.

³⁰ Includes all debt with a remaining maturity of one year.

C. Eventual Benefits of Additional Reserve Holdings

65. Our analysis so far suggests that Angola's reserves holdings compare less favorably than average holdings in comparator African countries. However, increasing Angola's reserve holdings should take into account the benefits and costs of such an action.

66. First, reserve holdings imply a cost. For debtor countries like Angola, the opportunity cost of reserves is best measured by the difference between the interest rate paid on external debt and that received on reserve assets. In the last several years, the average interest rate paid on the external debt has been 8.5 percent.³¹ At the same time, the implicit rate of return on Angola's official reserve holdings has been around 1.5 percent. Thus, the opportunity cost of holding reserves is about 7 percent.

67. However, recent economic research for Africa and Latin American countries suggests that an increase in reserve holdings benefit a country by lowering the interest rate spreads it faces in the international money market. For instance, some research for South Africa³² suggests that an increase in the ratio of reserves to imports might induce a reduction in the sovereign risk spread between 43 and 88 basis points.³³

68. In addition, staff analysis in the context of the Article IV consultation for Uruguay,³⁴ suggests that higher holdings of reserves, *ceteris paribus*, reduce country risk, increase investor confidence, and thus might reduce interest rates. For example, it is suggested that the elasticity of spread with respect to imports coverage is around minus one half. That is, a one percent increase in the ratio of reserves to months of imports might reduce the spread by 50 basis points. These numbers would, therefore, suggest that additional reserves might help Angola reduce its external financing costs.

69. Further benefits of additional reserve holdings arise from Angola's oil dependency, which makes the economy highly vulnerable to developments in volatile world oil markets. In a nutshell, 60 percent of Angola's GDP is generated in the oil sector; oil exports represent 90 percent of total exports; and oil tax revenues have averaged 81 percent of total government revenues during the last five years. Any drastic turbulence in world oil markets could therefore have severe consequences to Angola's output and employment.

70. Another benefit stemming from a higher reserve norm for Angola relates to the conduct of monetary policy. First, given the relatively high levels of pass-through and

³¹ Despite the fact that Angola's loans are oil backed, the spread versus international interest rates remains wide.

³² See Vocke (2003).

³³ The study pooled data for four inflation-targeting countries: South Africa, New Zealand, Poland and Thailand.

³⁴ See for instance, Bailen et al (1999).

dollarization (as commented by Gasha (2003)), any significant increase in the price of the dollar might negatively affect the rate of inflation. Less reserves imply less degrees of freedom for stabilizing the price of foreign currency via foreign exchange interventions. Second, lower levels of reserves might increase the need for large adjustments in the levels of imports. Given the high dependence on essential imported goods, any sizable increase in import prices (or reduction in import supply) would negatively affect aggregate supply and total output.

71. Finally, higher reserve holdings would give the Angolan authorities more flexibility to balance financing needs with macroeconomic adjustment in the event of an external shock. Indeed, the apparent slow speed of adjustment (derived from the high dependence on imports, the large impact of exchange rate movements on prices, and the rather high cost of external borrowing) suggests that if a shock buffets the Angola's economy, the adjustment process might be particularly difficult. Moreover, given its current weak macroeconomic situation, Angola's access to international capital markets might not be adequate. In general it is more difficult to borrow when reserves are most needed. Even though the existence of oil resources helps the country access capital markets, these funds might be accessible at higher costs than otherwise the case with larger reserves.

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IV. FISCAL SUBSIDIES IN ANGOLA³⁵

72. This note provides a first assessment of the nature of existing subsidies in Angola. It reviews some of the main challenges faced by Angola's policymakers in launching a credible subsidy reform.

Executive Summary

The main conclusions that arise from the analysis are the following:

- It is difficult to evaluate the fiscal impact of price subsidies policies in a context where a very large percentage of public spending is executed outside Angola's integrated financial management information system.
- However, given the magnitude of price subsidy arrears accumulated by the treasury, particularly to Sonangol (the national oil company), it seems evident that the Angolan fiscus cannot adequately support the government's subsidy policy at its current level.
- The financial health of public utility companies—especially in the electricity sector—has been compromised not only by inconsistent implementation of tariff adjustments, but also by delays in receiving subsidies or transfers due from the treasury. Lack of investment, as well as technical and commercial inefficiencies, have also negatively affected the public utility companies. For the electricity firms, Empresa de Electricidade de Luanda (EDEL) and Empresa Nacional de Electricidade (ENE), the poor state of the grids, illegal connections, and inefficient revenue collection systems have generated losses of up to 73 percent for EDEL and 55 percent for ENE of revenues received as a percentage of total electricity distributed in 2002. In the case of the water utility company, EPAL, it reports losses of up to 85 percent of total water produced and distributed in 2002.
- Existing water and energy subsidies in Angola are likely to be regressive, benefiting non-poor more than poor households. A much larger proportion of extremely poor households consumes water from "traditional" sources, like unprotected wells and rain water, than their moderate poor and non-poor counterparts. Likewise, the extremely poor disproportionately rely on sources of lighting such as kerosene and firewood, while electricity is the prevalent energy source for non-poor households.
- The establishment of transitory targeted social safety nets is a prerequisite to a successful reform effort, to help mitigate the financial impact generated by the subsidy reform on the poorest sections of the population. For example, in the case of

³⁵ Document prepared by Jorge Araujo (The World Bank), Jose Giancarlo Gasha, and Gonzalo Pastor (IMF).

electricity a particularly low tariff (*tarifa social*) targets consumption below 150 kilowatts per month. Nevertheless, the segments of the population most in need are not necessarily those who benefit the most from this scheme given that their consumption is usually way below the threshold.

- An incipient governmental initiative to phase-out subsidies is underway. As the staff's analysis suggests, the "cost-recovery target" may change with the level of production; and with the underlying price of inputs. In this sense, a "fixed" target (applicable at variable levels of production) might imply losses to the firms. The non-optimal setting of targets might produce: (i) firm losses, thereby affecting the companies' financial viability; (ii) eventual pressures on the fiscal deficit if subsidies are granted; and, in turn, (iii) pressures on inflation stemming from large fiscal deficits.

73. The remainder of this paper is organized as follows. Section I provides an overview of the current policy on subsidies in place in Angola. Section II describes the main challenges faced by the government in implementing price subsidy reforms and also presents a number of general recommendations on how to achieve success in such reforms, including the introduction of social protection mechanisms. Annex I includes a technical discussion on the determination of cost-recovery public tariff targets for gasoline and electricity.

A. Subsidies in Angola: A Summary Description

74. In Angola, subsidies fall into two categories:

Operational subsidies, which are used to financially sustain chronically loss-making public companies whose social rate of return presumably exceeds their private rate of return. In 2002, operational subsidies totaled US\$54 million, equivalent to 0.5 percent of GDP.

Price subsidies, which are generally granted to compensate public utilities providers for charging below-market prices on key utilities such as fuel, electricity, water supply, and public transportation. In 2002, price subsidies totaled US\$300 million equivalent to 2.8 percent of GDP.³⁶

75. In sum, subsidies totaled US\$354 million in 2002, about 3.3 percent of GDP.

³⁶ Some privately owned public transportation companies are included amongst such providers.

Operational subsidies

76. According to data provided to the staff by the National Treasury Directorate (DNT), the total amount paid out in operational subsidies during the 2002 fiscal exercise was Kz 2.4 billion. The greatest beneficiaries of operational subsidies were companies pertaining to the communications sector, with RNA, TPA, and *Jornal de Angola* being the largest recipients (Table IV.1).

Table IV.1. Operational Subsidies, as Reported by DNT, Fiscal Year 2002

Company	Sector	Amount paid in 2002 (in Kz)	Share in Grand Total (In percent)
Centro de Imprensa Aníbal de Melo (CIAM)	Communications	24,579,693	1.0
Angola Press (Angop)	Communications	292,537,109	12.2
Televisão Pública de Angola (TPA)	Communications	686,760,598	28.6
Gráfica Popular	Communications	75,331,296	3.1
Rádio Nacional de Angola (RNA)	Communications	818,750,062	34.1
Correios	Communications	73,108,851	3.0
FERRANGOL	Industry	2,980,210	0.1
Caminhos de Ferro de Benguela (C.F.B.)	Transport	74,180,689	3.1
Jornal de Angola	Communications	312,409,972	13.0
Caminhos de Ferro de Luanda (C.F.L.)	Transport	43,124,589	1.8
Grand Total		2,405,248,825	100.0

77. It is worth noting, however, that some expenditures classified as re-capitalization payments in the state budget are close in nature to operational subsidies, and should in principle, be reclassified as such. This seems to be the case of transfers to TAAG Airlines, Empresa de Diamantes de Angola (ENDIAMA, the diamond concessionaire), and Sociedade Comercial e Industrial de Angola (SOCIANG, an industrial company)³⁷. These payments are shown in Table IV.2 below:

³⁷ These payments reportedly refer to: (i) in the case of TAAG, the costs of leasing one aircraft; (ii) in the case of ENDIAMA, the expenses associated with the hiring of a security company; and (iii) in the case of SOCIANG, which is said to be nearly bankrupt, the salaries and benefits due to its staff.

Table IV.2. Operational Subsidies, Classified as Re-Capitalization Payments, Fiscal Year 2002

(In kwanzas)

Company	Total Paid	In arrears	Total Accrued
TAAG	188,548,215	27,000,000	215,548,215
ENDIAMA	130,630,640	43,200,000	173,830,640
SOCIANG	19,089,187	-	19,089,187
Total			408,468,042

78. Adding the recapitalization payments effected to ENDIAMA, SOCIANG, and TAAG to the amount of operational subsidies, the grand total becomes Kz 2.7 billion, or approximately US\$62 million (equivalent to 0.6 percent of GDP).

Price subsidies

79. There are currently three categories of price subsidies in Angola: (i) subsidies on fuel prices; (ii) subsidies on electricity; and (iii) subsidies on water tariffs.³⁸

80. Intermittent price adjustments over time have resulted in significant price differentials between domestic retail prices and world market prices for all main fuels consumed in Angola (Table IV.3). For example, as of December 2002, domestic fuel prices (expressed in dollars) were on average 70 percent lower than international prices. The price gap was particularly important for gasoline, light fuel, LPG gas, and gas oil.

³⁸ The extent to which poor households indeed benefit from such subsidies depend on their consumption patterns. In Angola, water, electricity, and fuel price subsidies are likely to be *regressive*, disproportionately benefiting the non-poor. Preliminary results from the 2000-01 Household Budget Survey (see APAP (2002)) indicate that kerosene and firewood account for 75 percent of energy consumption for extreme poor households, while electricity is the main source of lighting for 50 percent and 66 percent of moderately poor and non-poor households respectively. In addition, almost 35 percent of extreme poor households consume water from unprotected wells, rain and river water. These sources are insignificant to non-poor households, who consume water mostly from in-door and outside taps, and outside tanks. See Box 1 for a discussion of social safety nets to protect the poor in the event of a subsidy removal.

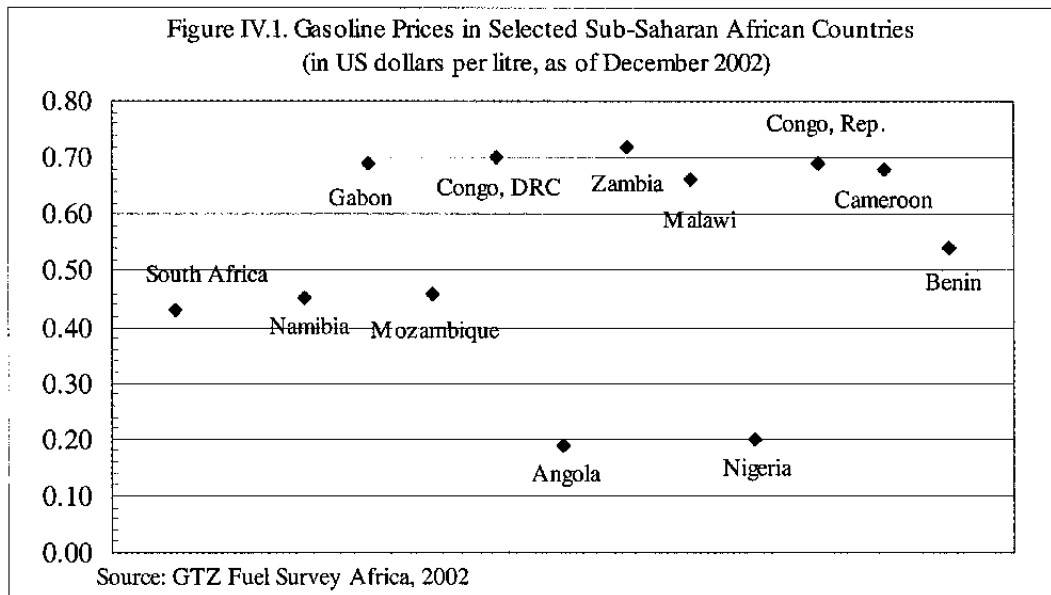
Table IV.3. Angola: Prices of Petroleum Products

(In kwanzas, as of January 2003)

	Measurement Unit	World Market Price (1)	Domestic Price (2)	Domestic Price Misalignment (in percent) (3)=(2)/(1)
LPG gas	Kilogram	47.53	10.2	21.5
Gasoline	Liter	47.34	12.0	25.3
Kerosene	Liter	28.95	7.8	26.9
Gas oil	Liter	26.22	8.0	30.5
Light fuel	Kilogram	21.38	6.4	29.9
Asphalt	Kilogram	13.38	4.5	33.6

Source: Angolan authorities and Fund staff estimates.

81. Furthermore, in the case of gasoline, Angola's retail prices are among the lowest in the sub-Saharan region (Figure IV.1). This intercountry price differential is likely to have led to important resource misallocation, informal trade, and smuggling into higher-price countries.



Subsidies on electricity tariffs

82. Angola has three separate electricity production and distribution systems in the north, the center and the south of the country, plus a few isolated local systems. The main systems are owned by a state company, the ENE, although distribution within Luanda is the

responsibility of a separate state enterprise, the EDEL. Total installed generating capacity is about 600 mw, of which some 400 mw is hydroelectric, but available generating capacity is probably now less than 300 mw because of damage to power plants and the poor condition of transmission and distribution lines. Transmission and distribution losses have been high for decades because of the poor state of the grids and illegal connections. In addition to the difficulties created by the war, the electricity companies have suffered from shortages of skilled personnel, lack of commercial autonomy, uneconomic government-set electricity tariffs, illegal connections by consumers and inefficient revenue collection systems.³⁹ Losses derived from current technical and commercialization schemes are significant. For instance, in 2002 EDEL reported losses of up to 73 percent of revenues received as percentage of total distribution of electricity, while ENE reported losses of up to 55 percent as well.

83. Fixed tariffs and increasing cost recovery levels produce a widening gap that generate large losses: state-owned enterprises depend precariously upon state subsidies and cannot generate adequate resources for maintenance and investment. As of May 2003, while the average cost for EDEL equals US\$0.125 per kilowatt-hour, the current tariff equals US\$0.05. For ENE the cost-recovery tariff equals Kz 3.0 per kilowatt-hour, the fixed tariff equals Kz 1.94 per kilowatt-hour.

Subsidies on water tariffs

84. As suggested by the results of the 2000–01 household budget survey, there are very low levels of expenditure on maintenance and investment for the extension of water main systems in the urban areas with rapid growth of the urban population, this has led to a situation where only about 56 percent of the population of Luanda and 32 percent of the population of other urban areas obtain piped water from the mains.

85. A main cause of this problem has been the low level of investment in water systems in Luanda, due to the low budgetary allocations and a level of official tariffs that has been so low that the public water company, EPAL, could neither assure adequate maintenance nor extend the water supply system to the expanding un-served peri-urban areas. The authorities informed the staff that the dollar-equivalent of the average tariff as of January 2003 was US\$0.33/m³, compared to an estimated cost-recovery level of US\$0.87/m³.

86. The poor state of connections, illegal commercialization of water, and ineffective and inefficient commercialization practices have generated large losses: according to the authorities, only the equivalent of only between 2 and 15 percent of total production and distribution of water is received as revenue.

³⁹ Differently from water tariffs, which are set by provincial governments, electricity tariffs are fixed by decrees by the Minister of Finance. Once a decree is issued by the Minister of Finance with the new tariff structure, tariffs will remain fixed in kwanza terms until a new decree is issued. EDEL and ENE cannot change tariff policy on their own.

B. Challenges of Price Subsidy Reform

87. This section describes a number of subsidy reform initiatives currently under review by the Angolan government. Further considerations and preconditions for a successful subsidy reform are presented.

Government initiatives under consideration

88. Policy initiatives have two basic components: (i) setting new target prices for fuel, electricity tariffs, and water tariffs which are currently under consideration by the authorities; and (ii) draft proposals handling payment of arrears. These are due to unpaid government transfers to public enterprises in lieu of goods supplied at subsidized prices, and interenterprise arrears between Sonangol and the main electricity companies operating in Angola.

New fuel prices

89. Draft legislation considering new target prices for petroleum products is under review. The types of fuel covered under the draft legislation are the same as those discussed between the staff and the authorities in the staff-monitored program (SMP) in 2001. These included LPG (gas), gasoline, kerosene, gas oil, light and heavy fuel, and asphalt. Under the SMP, the adjustment of fuel prices was a structural measure. The memorandum of economic and financial policies included a schedule for increasing fuel prices every two months between January 2001 and November 2001.

90. As shown in Table IV.4, the draft legislation under consideration proposes increases for all sales fuel prices, albeit to levels which are below those proposed under the 2001 SMP (columns 5-7 in Table IV.4). For example, the proposed price of gasoline is US\$0.42 per liter compared to US\$0.52 for November 2001 under the SMP. On the other hand, the proposed prices for LPG and light fuel are higher than those foreseen under the SMP. In the case of LPG and kerosene the draft legislation proposes a consumer subsidy on grounds of the widespread use of these fuels by low-income families.

Table IV. 4. Angola: Fuel Prices Under Government Proposal and SMP

(In dollars per liter)

	Price ex-refinery 2/ (1)	Tax (+)/ subsidy (-) (4)	Distribution margin (2)	Reselling margin (3)	Proposed sales price PVP 1/ (5)	Actual sales price (6)	SMP target price (7)
LPG gas	0.3328	-0.10	0.13	0.05	0.41	0.22	0.36
Gasoline	0.2286	0.09	0.09	0.02	0.42	0.26	0.52
Kerosene	0.2276	-0.09	0.09	0.04	0.27	0.17	0.30
Gas oil	0.1534	0.06	0.06	0.02	0.29	0.18	0.42
Light fuel	0.1855	0.02	0.07	0.00	0.28	0.14	0.24
Heavy fuel	0.1153	0.01	0.05	0.00	0.18	0.15	0.18
Asphalt	0.1123	0.01	0.05	0.00	0.17	0.10	0.17
Memorandum item:							
Average price oil/barrel 3/	26.1						

Source: Authorities' information and staff's estimates.

1/ *Precio de Venta al Publico* under government's proposal

2/ Includes cost of crude oil and transformation costs.

3/ Price of oil assumption under government's proposal.

New electricity and water tariffs

91. A schedule to move towards the cost-recovery levels is under government consideration.⁴⁰ For example, EDEL has suggested a chronogram that would drive the tariff to its cost-recovery level of US\$0.125 per kilowatt-hour progressively until August of 2004. EPAL, the water supply company, has suggested December 2003 as the date to reach the cost-recovery level of US\$0.87 per cubic meter of water.

92. The Ministries of Finance (MINFIN) and Energy and Water (MINEA) prepared a reform agenda (*Proposta de Saneamento*) for ENE and EDEL that was approved by the Standing Commission of the Council of Ministers on July 29, 2002. The reform agenda

⁴⁰ It is worth mentioning that, so far, in the case of utilities, the cost-recovery targets do not include any investment needs. This might be an important issue given the quite limited access of the population to services, which raises the need for important investment.

contained a diagnostic study of the current financial situation of the two companies and an action plan for the short- and medium-term. The MINFIN/MINEA memorandum points out the financial crises currently faced by ENE and EDEL. Four elements are reportedly at the root of the problem: (i) delayed price subsidy payments by the state to ENE and EDEL; (ii) non-adherence to the agreed policy of regular tariff adjustments; and (iii) companies' technical and commercial losses.

93. Indeed, subsidy arrears from the Treasury to EDEL and ENE are significant, reducing the financial strength of the companies. Such subsidy arrears also help explain the recently observed build-up of cross-arrears between EDEL, ENE and Sonangol. As of June 2002, cross-arrears between EDEL and ENE and ENE and Sonangol were more than Kz 1bn, or US\$24 million dollars.

94. The MINFIN/MINEA memorandum proposed the following actions to address the cross-arrears problems:

- The total accumulated arrears from the state to ENE and EDEL up to October 2000 are to be canceled⁴¹.
- The resulting balance up to December 2001 was to be paid by the state to the two companies within 45 days of the approval of the memorandum.
- Subsidy payments due between January and June 2002 were to be regularized, and timely in payments would become the norm henceforward.
- Accumulated debts by the state to Sonangol, ENE and EDEL up to October 2000 were to be cancelled.
- All remaining cross debts (between the state, Sonangol, ENE, and EDEL) up to December 2001 were to be eliminated.
- A calendar for the regularization of the remaining cross-arrears between Sonangol, EDEL, and ENE was to be negotiated between the three companies.

95. The exact status of implementation of these measures is unknown. However, subsidy payments by the state to ENE, EDEL and Sonangol had not been regularized by the second half of 2002. In fact, subsidy arrears to Sonangol accelerated from August 2002 onwards, reflecting deeper cash management and budget execution problems in the year.

Further considerations for a credible subsidy reform

96. In terms of the scope for future subsidy reforms, the received wisdom is that **subsidies should not be provided on an across-the-board basis**. Rather, they should be dealt with on a case-by-case situation, with the caveat that their aggregate amount should not be an element of pressure on the overall fiscal accounts.

⁴¹ In accordance with Resolution No. 22 (December 4, 2001) of the Standing Commission of the Council of Ministers.

97. Sound **mechanisms for protecting the poor** from possible deleterious effects of curtailing price subsidies are still absent. This has led to the adoption of ad hoc attempts at social protection initiatives, such as using higher gasoline prices to cross-subsidize LPG and kerosene, while reducing overall fuel price subsidies⁴². For instance, public utility companies usually apply a rate known as *tarifa social* in order to alleviate the cost for the poorest segments of the population. ENE applies this discounted tariff to all domestic consumption below 150 kilowatt-hour per month. While the basic normal tariff as of May 2003 equals Kz 2.36, the *tarifa social* equals Kz 1.00. Nevertheless, according to executives from public utility companies, the poorest segments of the population are not necessarily those who benefit the most, given that their consumption is well below the threshold.

98. Also, **operational subsidies should be reviewed on a case-by-case basis**. In the case of companies that are essentially inactive, such as SOCIANG and FERRANGOL, liquidation may be the most adequate option rather than further subsidization.

99. **Price subsidies are more complex** in nature as they have direct and indirect effects on households' incomes and overall resource allocation. For example, they are likely to have second-order **distributive and allocative effects** by increasing the costs of other goods or services.

100. **The existence of informal markets must also be recognized and taken into consideration**. As suggested by the authorities, the limited access to utilities has generated informal markets in which prices are significantly higher, and which are usually used by the poorest segments of the population. For example, while in the formal market an average consumption of 150 kilowatt-hour of electricity costs US\$7.5, in the informal market, it increases to US\$25. In the case of water, while an average consumption of 8 m³ in the informal market cost Kz 6,000; in the formal market the same consumption costs Kz 125.

101. Finally, it must be noted that a fuller analysis of Angola's subsidy policies requires a major overhaul of **Angola's public expenditure management system**. Since about 40 percent of general government spending is executed outside the budgetary process (i.e., Angola's integrated financial management information system)⁴³, subsidy reform efforts could fail because of the lack of information and rigor in the budget execution process.

⁴² As noted by Gupta *et al*, 2000, *Equity and Efficiency in the Reform of Price Subsidies. A Guide for Policymakers*, Washington, D.C., International Monetary Fund, "subsidies for kerosene have been defended because they tend to benefit the poor and they can reduce reliance on firewood and protect forests" (p. 17). The authors point out that this claim is not always supported by empirical evidence, as this kind of "commodity targeting" can lead to "errors of inclusion" proportional to the share of kerosene and LPG consumed by the nonpoor.

⁴³ Known in Portuguese as the Sistema Integrado de Gestão Financeira, or SIGFE.

Box IV 1. Temporary Social Protection Mechanisms

The international experience with energy subsidy reform, particularly in Eastern Europe and Central Asia, and in the former Soviet Union, highlights the use of four distinct compensatory mechanisms Subbarao, K. *et al*, 1997, "Safety Net Programs and Poverty Reduction. Lessons from Cross-Country Experience", Washington, D.C., The World Bank.

- a) *Lifeline rates*, or block pricing, in which a discounted rate is charged for a small block of energy consumed (as in the case of the *tarifa social* in Angola).
- b) *Vouchers*, which are distributed to eligible beneficiaries, enabling them to purchase a given amount of energy at a fixed price.
- c) *Targeted cash compensations*, which do not involve price manipulations and sets income thresholds that serve as milestones for the levels of benefit accrued to different households.
- d) *Targeted in-kind payments, or tied cash transfers*, in which the targeted consumers' bills are paid directly to the utility company by the social assistance office in charge of the benefit.

All of these mechanisms have their pros and cons. In general, targeted cash compensations have the advantage of being a non-distortionary instrument: they work like lump-sum negative taxes. Contrary to in-kind benefits, cash transfers foster consumer sovereignty. From a fiscal point of view, budgetary costs of cash transfers can be more easily known. The success of such an option, however, critically depends on the ability to perform means tests, i.e., setting "an income threshold above which benefits are phased out" (Gupta *et al*, *op.cit.*, p. 7). On the down side, the real value of cash transfers can be harmed by inflation, and if the appropriate administrative structures are not in place, their distribution can be vulnerable to abuses and corruption.

Lifeline rates, vouchers, and tied cash transfers are distinct forms of price-subsidy targeting, which aims to benefit the most vulnerable groups. Although they still have a distortionary impact on consumer and producer choice, they may minimize political disruption, since the *perception* of a subsidy removal will be less marked.

In all cases, the *temporary* nature of the social protection mechanisms must be emphasized: such benefits should eventually be incorporated into existing or new "regular" social assistance programs. (Gupta *et al*. note the difficulty in phasing out such schemes).

Determining the Target Tariff

1. This annex provides a first attempt to estimate cost curves (total, average and marginal) for Sonangol and ENE, in order to propose methodological steps for setting optimal cost-recovery public utilities tariffs.
2. As suggested by the literature, for the enterprises such as public utilities a condition of natural monopoly may exist. Given the fixed costs, the size of the plant necessary to achieve efficiency may be so large relative to the market that a competitive situation could not exist. Moreover, if production is in the range where marginal and average costs are decreasing, demand could be such that the public enterprise is providing the service but losing money. In order to avoid the decapitalization of the firm and/or negatively affect its financial viability some space for subsidies or cost-recovery pricing might exist.
3. As the analysis suggest, the “cost-recovery target” may change with the level of production; and with the underlying price of inputs. When average costs are decreasing, a higher production level, implies, a lower cost-recovery target. Whenever the price of inputs increases, the costs tend to increase (cost curves shift to the right), implying higher cost-recovery targets for any level of production. In this sense, a “fixed” tariff may cause losses to the firm whenever the actual level of production is lower than the specific production level the fixed tariff is consistent with, or whenever there is a change in input prices.
4. The non-optimal setting of targets might produce: (i) firm losses, and therefore affect its viability; (ii) eventual pressures on the fiscal deficit (if subsidies are granted) and; (iii) pressures on inflation because of (ii).
5. The next subsections present the cases of Sonangol (for gasoline) and ENE.

Sonangol – Gasoline: An Estimation of Costs Functions

6. Using monthly data on total acquisitions (in kilograms)⁴⁴ and total costs (US\$/kg) for Sonangol for the period January 2000 to December 2002, the following cost function, in US dollars was estimated.⁴⁵

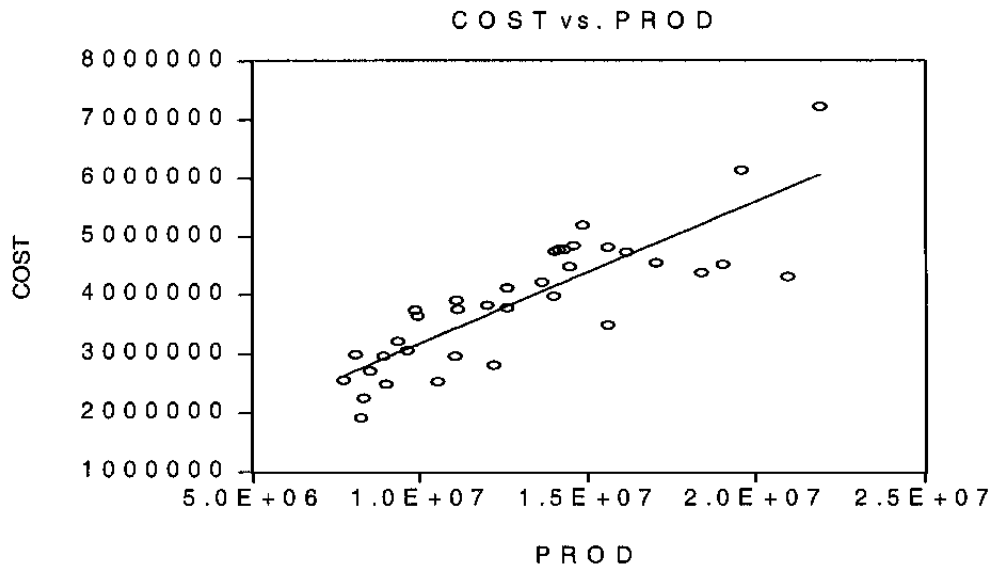
$$C = 770,064 + 0.24.Y \quad (1)$$

⁴⁴ Data furnished by the authorities were provided in different units of account with their respective conversion factors into liters.

⁴⁵ Sonangol acquires gasoline from two main sources: the domestic refinery and imports.

where, C represents total costs and Y acquisitions of gasoline. The following graph presents the estimated relationship.

Figure IV.2. Sonangol: Total Cost Curve



7. Based on the estimated curve, average cost (AvC) and marginal cost (MgC) curves may be derived. The following are the corresponding curves:

$$AvC = \frac{770,064}{Y} + 0.24 \quad (2)$$

$$MgC = 0.24 \quad (3)$$

8. The following table presents average cost on recovery target for different levels of gasoline acquisitions, assuming a price of oil of US\$24 per barrel. Per liter price values are presented in parenthesis. Notably, the data suggest that the average cost on recovery target decreases from US\$0.34 to US\$28 on the level of production increases from 8 to 20 million kilograms of gasoline. Marginal costs of production remain unchanged at US\$0.24 per kilogram of gasoline (or US\$0.18 per liter) given the cost function assumed in the analysis.

Table IV.5. Sonangol: Average and Marginal Costs^{1/}

Production (mill. of kg)	Average Cost or Cost Recovery Target (US\$/kg, l)	Marginal Cost (US\$/kg, l)
8	0.34 (0.25)	0.24 (0.18)
10	0.32 (0.24)	0.24 (0.18)
12	0.30 (0.23)	0.24 (0.18)
14	0.30 (0.22)	0.24 (0.18)
16	0.29 (0.22)	0.24 (0.18)
18	0.28 (0.21)	0.24 (0.18)
20	0.28 (0.21)	0.24 (0.18)

1/ Assuming oil price at US\$24 per barrel.

9. Given, these estimated curves, for a set level of quantity purchased by Sonangol, the “optimal” cost-recovery target price can be estimated. For example, for the December 2002 quantity of 14,599,917 kilograms, the average cost or cost recovery target would be US\$0.30 per kilogram of gasoline (or US\$0.22 per liter) while the marginal cost of production is US\$ 0.24 per kilogram.⁴⁶ This price is equivalent to US\$0.24 per liter.

10. At the December 2002 price of oil of US\$26 per barrel, the corresponding average and marginal cost curves will imply the following values for different levels of production.

Table IV.6. Sonangol: Average and Marginal Costs for a Higher Oil Price^{1/}

Production (mill. of kg)	Average Cost or Cost Recovery Target (US\$/kg, l)	Marginal Cost (US\$/kg, l)
8	0.36 (0.27)	0.26 (0.19)
10	0.34 (0.26)	0.26 (0.19)
12	0.33 (0.25)	0.26 (0.19)
14	0.32 (0.24)	0.26 (0.19)
16	0.31 (0.23)	0.26 (0.19)
18	0.31 (0.23)	0.26 (0.19)
20	0.30 (0.23)	0.26 (0.19)

1/ Assuming oil price at US\$26 per barrel.

⁴⁶ It is worth noting that in the estimation, it is assumed that the price of inputs are constant, which is not necessarily the case, in particular, for the oil price. Therefore, regular corrections for variations in the oil price are necessary for average and marginal cost estimates. An average price of US\$24 per barrel was assumed in the estimation, while the price at December 2002 was US\$26 per barrel.

11. As mentioned above, with a price of oil of US\$26 per barrel, for the December 2002 level of production of 14.5 millions of kilograms, the “cost-recovery target” suggested would be US\$ 0.32 per kilogram of gasoline or US\$ 0.24 per liter. The cost recovery target changes with the level of production and the underlying price of oil. A “fixed” tariff may cause losses to the firm whenever the actual level of production is lower than the specific production level the fixed tariff is consistent with. For instance, a ex-refinery price of US\$0.22, suggested by the authorities, would be consistent with a level of production close to 22 million kilograms which is higher than the December 2002 level of 14.5 million.

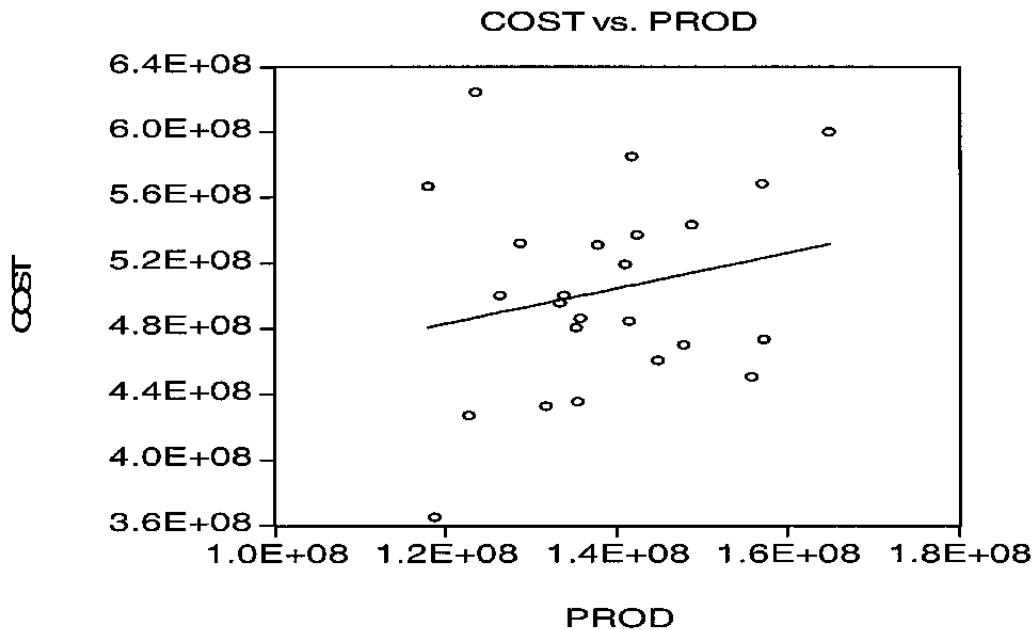
ENE: An Estimation of Costs Functions

12. Cost functions, in terms of real kwanza of December 2002, were estimated using monthly data on total production (kilowatt-hours) and total costs (kwanza per kilowatt-hour) for the period January 2001 to December 2002.

$$C = 354,000,000 + 1.07.Y \quad (1)$$

where, C represents total costs and Y production of electricity. The following chart plots the estimated relationship.

Figure IV.3. ENE: Total Cost Curve



13. Based on the estimated curve, average cost (*AvC*) and marginal cost (*MgC*) curves may be derived as follows:⁴⁷

$$AvC = \frac{354,000,000}{Y} + 1.07 \quad (2)$$

$$MgC = 1.07 \quad (3)$$

14. Given, these estimated curves, for a set level of quantity of electricity traded, the “optimal” cost-recovery target price can be estimated. For instance, for the December 2002 quantity of 164,893,000 kilowatt-hours, the cost recovery target would be Kz 3.13 per kilowatt-hour (compared to the Kz 3.00 per kilowatt-hour currently targeted by the authorities).

15. The following table presents average cost (recovery target) for different levels of electricity production.

Table IV.7. ENE: Average and Marginal Costs

Production (mill. Kwh)	Average Cost (Kz/Kwh)	Marginal Cost (Kz/Kwh)
100	4.47	1.07
125	3.79	1.07
150	3.34	1.07
175	3.01	1.07
200	2.77	1.07
225	2.58	1.07
250	2.43	1.07

16. As suggested by the cost curves and reflected in Table IV.7, the average cost (recovery target) would decrease with the level of production, while the marginal cost (for the estimated curve) would be constant at 1.07 Kz per kilowatt-hour.

⁴⁷ It is important to note that average costs include billing and collection costs. Therefore, improvements in commercial practices may lower the cost curves and help smooth the tariff adjustment process, insofar as the cost-recovery level could be reached through lower target tariffs.

V. ANGOLA: SOURCES AND USES OF STATE OIL REVENUE⁴⁸

102. This note reviews the sources and uses of state oil revenue in Angola. It describes the operation of production-sharing agreements (PSAs), in general, and the specifics of oil revenue flows in Angola. The note also discusses the challenges facing the Angolan authorities, and the national oil company (Sonangol) itself, regarding the management of oil revenues. These challenges are the result of the burden imposed on the national oil company to deliver non-commercial objectives that may impair on its profitability and the efficient management of Angola's oil revenue. Two observations emerge from the analysis:

- A significant portion of Angola's oil revenue is represented by the state's profit oil, rather than by tax payments from international oil companies (IOCs) to the state. Angola's state profit oil, plus Sonangol's taxes on its equity participation and signature bonuses, totalled some US\$8.7 billion during 1998-2002, more than one-half of total general government oil revenue for the period.
- Sonangol has a large number of non-commercial objectives that compete with its profit-maximizing goals and translate into significant quasi-fiscal operations undertaken on behalf of the government and a large number of Sonangol's subsidiaries across the economy. A way forward should be to stop all quasi-fiscal operations and review whether Sonangol's investments are profitable and/or could be undertaken by the private sector instead.

A. Production-Sharing Arrangements (PSAs): General Lines

103. PSAs were developed by Indonesia in the 1960s, and have become the dominant fiscal regime for oil and gas investments in developing/transition countries. PSAs can be contrasted with the other main type of fiscal regime: oil taxes and royalties.⁴⁹

104. Under PSAs, the host state typically owns the oil and oil installations, and it contracts IOCs to provide capital and expertise, and thus to take risk. PSAs attempt to compensate IOCs adequately for their capital and risk, through a share in production, but retain the reward above that level for the host state. The host state generally retains a significant degree of control over the operations of the IOC contractor.

105. Tax and royalty regimes, by contrast, are designed to yield adequate tax revenue to the host state and leave the rest of the reward with the IOCs. Under tax and royalty

⁴⁸ Document prepared by Magnus Alvensson, Sishir Bhattacharai, and Gonzalo Pastor.

⁴⁹ For a more detailed treatment of the workings of PSAs and tax/royalty regimes. See Daniel Johnston, International Petroleum Fiscal Systems and Production-Sharing Controls (Tulsa, Oklahoma: PennWell Books, 1994).

regimes, IOCs own and control oil operations, subject to state regulation but not to direct intervention.⁵⁰

106. PSAs were created as an instrument of “resource nationalism.” They were designed to reverse a perceived inequity in revenue shares between host states and oil companies during the colonial era. In recent decades, the design of tax and royalty regimes has caught up with PSAs and can provide the state with just as much control over the use the oil.

107. PSAs are arrangements for sharing production of the host state’s oil between the host state and IOCs operating a given concession. IOCs individually or in a group will form a venture to explore potential oil fields under that concession, develop any commercially viable discoveries, and extract oil (or gas) from them. Sometimes the host state will also participate directly in the equity of the venture, usually through the national oil company (NOC).

108. Frequently, IOCs pay **signature bonuses** at the time of agreeing the PSA.⁵¹ This brings forward the host state’s revenue by many years. Without signature bonuses, the host state would have to wait for revenue until oil production commences (which may, indeed, never happen if the commercial discoveries made are inadequate). Signature bonuses are essentially payments by IOCs to governments, although the payment is sometimes channelled through the NOC. In addition, other bonuses can be paid annually from the time commercial discoveries are made, or from the time production starts.

109. When production commences, the operating venture receives a portion of the oil to compensate it for its costs (“**cost oil**”). Production above this level (“**profit oil**”) is divided between the operating venture and the host state. The division of profit oil between the venture and the host state will be calculated according to a formula, which generally assigns a percentage to the host state that increases the more that IOCs have been remunerated for their capital and risk. The **host state’s profit oil** is essentially government revenue, but it may be channeled through the NOC. The operating venture’s profit oil will be divided among the partners according to their **equity shares** (including profit oil to the NOC if it is an equity partner).

110. In general, **IOCs pay taxes on their profit oil** to the host government (although sometimes the NOC will be liable for all profits tax and occasionally no profits tax is levied). Sometimes, partners will also pay a royalty to the host government based primarily on the volume of oil rather than on profits.

⁵⁰ While different in principle, the practice is, however, that PSAs and tax/royalty regimes can be, and often are made equivalent in their fiscal impact on the state and investor. Also, practitioners would argue that it would be an oversimplification to say that under tax and royalty regimes direct participation or intervention of the state does not exist, while it does under PSAs.

⁵¹ Signature bonuses may also be paid under tax royalty regimes.

B. Angola's Oil Revenue

111. Angola receives revenue from its PSA operations in several main forms: (i) signature and other bonuses, (ii) the government's profit oil, (iii) Sonangol's profit oil from equity participations, and (iv) IOC's taxes on their profit oil. Furthermore, joint ventures or association contracts between Sonangol and oil companies yield important amount of royalties to the Angolan Treasury. These joint ventures include, in particular, the Cabinda Gulf Oil Company, which became a subsidiary of Chevron in 1984, and Petrofina and Texaco, which have been producing onshore in the Kwanza and the Congo basins.

112. In general, the Angolan PSAs and other contracts provide for a stable fiscal regime for IOCs defined at the time of signature, and legal protection against subsequent adverse changes in fiscal legislation (although Angola is not yet a signatory of international conventions that would make these rights enforceable outside Angola). Respect for this legal and contractual framework appears to have been important for Angola's ability to attract substantial volumes of foreign direct investment in its oil sector, as will its continued observance (particularly as new legislation applicable to the oil industry is introduced).

113. Table V.1 shows the share of each of the various elements in total government receipts. For the period 1998-2002, estimates show that total state oil revenue was about US\$15.1 billion, of which signature and other bonuses accounted for US\$1.3 billion. According to these data, Sonangol handled—in its capacity of representative/ concessionaire for the Angolan state in the oil business and as a direct equity partner in oil extraction—more than 50 percent of the total oil revenue (including bonuses) accruing to the government. The rest of the revenue (US\$6.4 billion) was taxes paid by IOCs to the state on account of their oil activities in the country.

Table V.1. Angola: State Oil Revenue Receipts, 1998-2002

(In millions of U.S. dollars)

	1998	1999	2000	2001	2002	1998-02
Signature & other bonuses	41.0	900.0	13.5	327.7	64.7	1,346.8
IOCs Oil Taxes 1/	578.8	800.9	1,865.0	1504.4	1,612.5	6,361.6
Sonangol's oil taxes 1/	333.9	639.8	1,243.1	728.0	626.0	3,570.8
Govt. profit oil 2/	343.1	534.6	1,010.8	991.0	1,030.0	3,909.5
Total oil revenue	1,296.8	2,875.3	4,132.4	3,551.0	3,333.2	15,188.7

Sources: Angola's Ministry of Finance; Sonangol; and IMF staff estimates.

1/ Includes tax payments made to the treasury on account of oil income tax, oil transactions tax, and the oil production tax and royalties.

2/ After Sonangol retains 10 percent of government profit oil.

Signature and other bonuses

114. Total **signature bonuses** paid by IOCs to the Angolan government during 1982-1999 are estimated at around US\$1.2 billion (Table V.2). Bonus payments have increased significantly in recent years as IOCs compete aggressively for a limited number of oil fields. Also, the size of these payments can be interpreted as an indicator of the perceived attractiveness of the blocks in question.

Table V.2. Signature Bonus Payments, 1982 and 1996-2001
(In millions of U.S. dollars)

Block	Year Paid	Amount
Block 1	1982	3.5
Block 18	1996	9.0
Block 21	1998	41.0
Block 31	1999	300.0
Block 32	1999	300.0
Block 33	1999	300.0
Block 34	2001	232.0

Sources: Angola's Ministry of Finance; and IMF staff estimates.

115. Along with the signature bonuses, the newer blocks pay **additional bonuses** such as an exploration bonus, commercial discovery bonus, first oil bonus, and in some cases an annual production bonus. In more recent contracts, some bonus payments are being delegated for approved social and development projects. Compared with the signature bonuses, these others are quite small in magnitude. They range between US\$25 and US\$35 million per year.

116. Exploration bonuses are payable either in one lump sum—in the year that exploration commences or in the year that the contract is signed—or it is payable in annual installments (usually over four years), the first installment being due in the year the contract is signed.

117. Because information on blocks that have had commercial discoveries is difficult to source, therefore the payment dates for the commercial discovery bonuses are not always known. Production bonuses, also a feature of PSAs, have, however, not been factored into the calculation for the total bonuses as it is difficult to pinpoint when the payments are actually made.

118. The alleged lack of transparency about the signature and other bonus payments related to **block 34** was clarified during the 2003 Article IV consultation discussions (Box V.1). Notably, the magnitude of the bonus payments was reconciled with the inflows into the government's offshore oil bonus bank account (Conta Bonus Petrolifero). The highlights of the authorities' explanation were as follows: (i) the two bidding rounds surrounding the bonuses payment for block 34, and (ii) the discounts applicable to

payments due from Norsk Hydro and Shell. After accounting for (i) and (ii), the inflows into the Conta Bonus Petrolifero relating to block 34 totaled US\$278.6 million in 2001.

Box V.1: Bonus Payments for Block 34

The authorities explained that the international bidding process on Angolan oil blocks usually involved major international oil companies (IOCs). Sonangol's strategy is to limit the number of companies for each concession/block. Usually, the IOC with the most profitable (for the Angolan state) and sounder bid becomes the operator of the block. These bids include bonus payments and understandings about prospective investments. As there is uncertainty about the ultimate productivity of any block, the bidding process generally leads to a situation in which different bidders offer different prices for equivalent property shares. Also, what usually happens is that Sonangol's share in the block is "carried" by the IOCs (i.e., the IOCs effectively lend Sonangol funds for its equity participation, to be repaid directly from Sonangol's future equity from the block.)

In the case of block 34, there were two bidding rounds. The first round selected the operator of the block (Norsk Hydro), and fixed its participation in the concession (30 percent) and its contribution to the overall signature bonus payment (which totaled US\$232 million according to the authorities). The second round divided the remaining concession among interested parties (Phillips, Braspetro, and Shell). Sonangol did not participate in the bidding process, although its share in block 34 was predetermined at 20 percent.

The bidding process yielded bonus payments (signature and other bonuses) of US\$327.7 million, which were later adjusted downward by US\$49 million: Norsk Hydro's payment was reduced by US\$19 million, due mainly to technological services provided to Sonangol; Shell's payment was reduced by US\$30 million as Sonangol settled an old debt to this company stemming from the operation of block 16 (see table below). All in all, the final inflows into the offshore bank account, Conta Bonus Petrolifero, were US\$278.6 million.

Block 34: Bidding Process and Final Payment into *Conta Bonus Petrolifero*
(In millions of U.S. dollars, unless otherwise indicated)

	Share in Block (In percent)	First Bid	Second Bid	Total Bid	Adjustments	Final Payment
Norsk Hydro	30	87.0	0.0	87.0	-19.0	68.0
Phillips	20	58.0	38.2	96.2		96.3
Braspetro	15	43.5	28.7	72.2		72.2
Shell	15	43.5	28.7	72.2	-30.0	42.2
Sonangol	20	0.0	0.0	0.0		0.0
Total	100	232.0	95.6	327.7	-49.0	278.6

Source: Sonangol.

Oil Taxes and Royalties

119. Angola's oil tax regime, applicable to Sonangol and IOCs, centers on the levying of the oil income tax (**PIT**), the oil transactions tax (**PTT**), and the oil production tax. The **PIT** is levied on profit oil. It has a basic rate of 50 percent and a variable surtax of 15.75 percent. Its tax base is reduced by applicable production incentives (in practice, adjusted to production costs) and investment incentives (a fraction of historic investment costs).

120. The **PTT** is a tax on gross profit, adjusted for tax incentives (i.e., production and investment incentives), arising from production in the Province of Cabinda under joint exploration arrangements with Sonangol; the tax rate is 70 percent. Finally, the *oil production tax* is a royalty on the value of oil, paid by IOCs operating in joint venture with Sonangol. Enterprises' tax payments on account of the oil income tax and the oil transactions tax are deductible from the calculation base. The tax rate on oil businesses in Cabinda Province is 20 percent; the tax rate is about 17 percent in other provinces.

Government profit oil and Sonangol's role

121. The most important primary legislation in Angola relating to the upstream oil and gas sector is Law No. 13/78 (General Law of Petroleum Activities). This law establishes the legal framework for upstream petroleum activities. In Article 1 the law makes clear that the state owns all the petroleum mineral rights, including offshore. In Article 2, the law provides that the state oil company, Sonangol, is the sole concessionaire with the rights for all exploration and production activities. Sonangol grants concessions to contractor groups (of IOCs and sometimes also Sonangol itself as an equity partner) that explore, develop, and produce oil on Sonangol's behalf. Rights previously awarded to other companies were transferred to Sonangol after independence.

122. Sonangol handles a substantial portion of oil fiscal revenue. Under PSAs, signature and other bonuses are payable by the contractors to Sonangol. The state's share of profit oil is also lifted by Sonangol directly, while contractor groups lift the volumes of cost and profit oil accorded to them under the PSAs. The legislation allows for up to 10 percent of the state profit oil to be retained by Sonangol to meet its costs as state concessionaire in the oil business. In practice, Sonangol takes the full 10 percent, but it claims that this still does not cover associated costs.

123. In the older PSAs the state's share of profit oil increases in steps with cumulative production. The detailed terms vary significantly, especially with respect to the sharing when (cumulative) production is still relatively low. This may reflect perceptions of how costs and risks could vary in different blocks. When cumulative production exceeds 100 million barrels, the state's share in all these contracts reaches its maximum. In some contracts, the shares for any production range vary with water depth.

124. In more recent agreements, the terms for sharing profit oil are related progressively to the achieved rate of return in the development area. Generally, the threshold rates of return are specified in money-of-the-day terms. In the rate of return calculation, explorations costs are not to be included. The details of the sharing vary from contract to contract. It is noteworthy that Sonangol always receives some share of the

profit oil even when the achieved return is low. Sonangol's share increases in proportion with the rates of return.

Sonangol's profit oil from equity

125. Law No. 13/78 also provides that Sonangol can become an equity field participant. Sonangol has an exploration and production company for this purpose and participates in the development of several blocks (frequently "carried" by IOCs). The government is responsible for making decisions on this subject, and in recent licensing rounds it was decided that it was in the nation's strategic interest that Sonangol should participate in deepwater blocks. It should be emphasized that these investments by Sonangol bear substantial opportunity costs in terms of public services and investments forgone (see Section C below).

126. Sonangol's involvement in the industry as an equity partner has increased over the years, with its portfolio currently including stake holdings in numerous oil fields, including deepwater and ultra-deepwater blocks.⁵² As a partner in a joint venture or in a PSA, Sonangol receives a share of the profit oil in proportion to its extent of participation in the project. Sonangol's profit oil is taxed under the oil income tax regime at a rate ranging between 50 percent and 65.75 percent, the same tax rate as that levied on IOCs.

C. Sonangol's Noncommercial Objectives

127. This section takes a first step toward assessing whether the state's role in the oil sector is managed in a way in which the Angolan Treasury and/or the overall economy forgoes revenue. In this regard, this section stresses the impact of noncommercial objectives imposed on Sonangol. These objectives include an array of **quasi-fiscal and subsidiary operations** that are not transparent; create a conflict of interest (when Sonangol as concessionaire gives preference to oil service and supply companies in which it owns a stake); and divert Sonangol from its core activities, and possibly incur losses. Most important, Sonangol's subsidiary operations add to the opportunity costs of using oil revenue to finance Sonangol's equity participation in PSAs rather than covering the delivery of government social programs in health and education, for example.

Sonangol's quasi-fiscal operations

128. Sonangol has in some areas functioned as a treasury outside the Ministry of Finance, carrying out fiscal expenditures that subsequently have been netted out against oil tax obligations. Sonangol's role as producer and distributor of petroleum products, and its access to foreign exchange, has enabled it to apply pressure so as to circumvent the regular payment system in order to gain expediency and, also, during the time of the civil

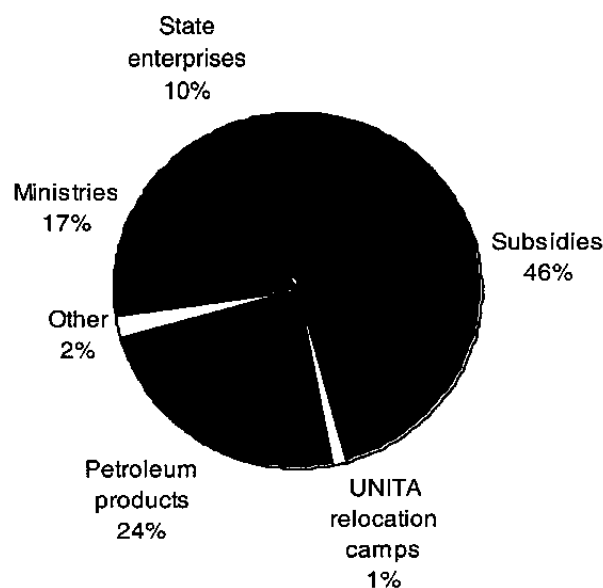
⁵² According to some estimates, Sonangol holds equity shares in a total of 26 oil blocks or development areas that are the remnant of blocks. For example, Sonangol has a 20 percent equity participation in block 34, which is a substantial commitment compared with earlier experience. Other shareholders in the block are Shell (15 percent), Norsk Hydro (30 percent), Petrobras (15 percent), and Phillips Petrol (20 percent).

war, opacity. In the case of servicing foreign debt, the oil-guaranteed loans stipulate that the loans be serviced by direct delivery of oil, making Sonangol inevitably an agent of the treasury.

129. Reliable data on the breakdown of quasi-fiscal expenditures by Sonangol prior to 2002 are hard to come by. In 2001, the authorities' data indicate that Sonangol carried out quasi-fiscal expenditures on the order of Kz 1.6 billion and paid foreign debt on behalf of the government corresponding to approximately US\$1 billion. However, during the same year Sonangol incurred tax arrears about Kz 13.5 billion (14 percent of overall expenditures, or 6 percent of GDP), indicating that the real level of quasi-fiscal expenditures was much higher. Similarly, in 2000 Sonangol paid foreign debt on behalf of the government in the amount of US\$1.5 billion. However, a breakdown sufficient to identify the quasi-fiscal expenditures by Sonangol during 2000 has not been provided.

130. In 2002, the first year in which detailed data on Sonangol's quasi-fiscal expenditures were provided, the overall level of expenditures carried out by Sonangol was estimated at Kz 28 billion (12 percent of overall government expenditures, or 6 percent of GDP). In addition, Sonangol paid US\$1.2 billion in debt service on government loans. Figure V.1 shows the breakdown of quasi-fiscal expenditures (excluding debt service on behalf of the government) during 2002, as indicated by the 2002 fiscal declaration of Sonangol.

Figure V.1. Distribution of Quasi-Fiscal Expenditures by Sonangol during 2002



131. The main areas of Sonangol's quasi-fiscal expenditures are subsidies on petroleum products, delivery of petroleum products to various state entities, and goods and services provided directly to state-owned enterprises and ministries. A short description of these operations follows:

- **Subsidies.** Sonangol is the sole operator in both the production and distribution of refined petroleum products. The consumer level prices of these products (gasoline, kerosene, gas oil, etc.) are centrally determined, and Sonangol is compensated ex post by the difference between the cost of production and distribution, and the price charged at the retail level.
- **Delivery of petroleum products.** Sonangol also, on account of the government, provides various state entities with petroleum products. Most important are the government-owned electricity, water and transport companies.
- **State enterprises.** Sonangol has assumed certain financial responsibilities vis-à-vis the state-owned airlines companies, TAAG and SONAIR, consisting of, purportedly, service contracts on airplanes and payments of aircraft.
- **Government ministries.** During 2002, Sonangol had expenditures corresponding to US\$95 million on account of the Ministry of Foreign Affairs and the Ministry of Territorial Administration. Expenditures on behalf of the Ministry of Foreign Affairs have been justified by the existence of readily available foreign exchange abroad. The Ministry of Territorial Administration is responsible for relations between the central government and the provinces.

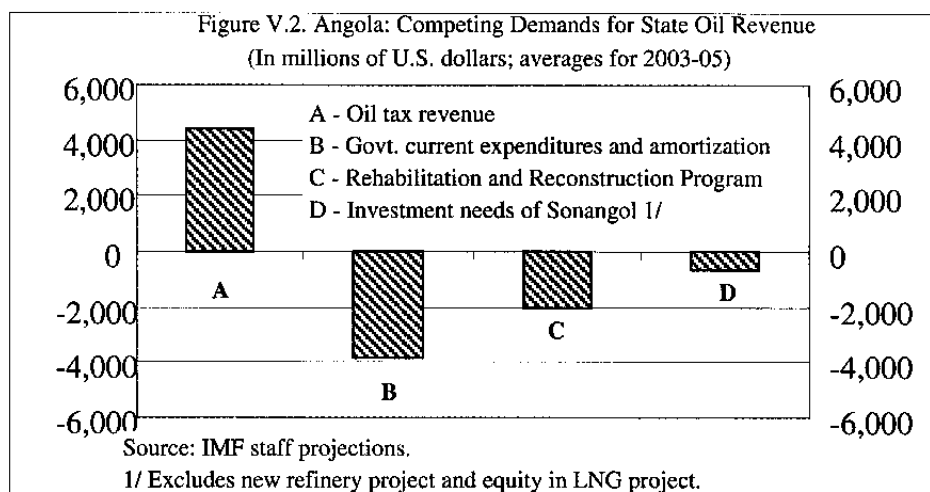
132. The practice of regular and substantial quasi-fiscal expenditures by Sonangol has created problems and weaknesses for the overall budget execution system. Primarily, the lack of control by the treasury over all expenditures undermines fiscal discipline and transparency, and distorts the allocative efficiency of public expenditures. Furthermore, as Sonangol unilaterally withholds tax payments to make up for the quasi-fiscal expenditures, this also creates uncertainty about the revenue situation and the treasury's cash position, making overall short-term macroeconomic policymaking more difficult. Finally, unregulated balances between the treasury and Sonangol, often without agreement on whether the amounts should be denominated in local or foreign currency, have, in light of the high levels of inflation, created disagreements between the two entities on the real value of the liabilities.

133. In the revised budget for 2003, the government, for the first time, included expenditures that are planned to be executed through Sonangol. The purpose is to give the treasury more control over the overall level of expenditures and over the allocation of public resources. It is of great importance that the activities of Sonangol be bound by the budget allocations. The next step to improve the budgetary system is to transfer, ex ante, the resources needed by Sonangol to carry out government activities, and to refrain from compensating the company for expenditures not included in the budget.

134. The annex to this note describes Sonangol's numerous inter- and intra-industry interests. These interests range from asset ownership in the oil industry (i.e., oil extraction and services) to business interests in the air and sea shipping industry, insurance and retail banking, construction services, the telecommunications, and helicopter services.

135. A common approach has been to incorporate/link these subsidiary activities to Sonangol's E.P.-Holding⁵³ either fully or on an affiliated basis. This practice, however, creates conflicts of interest whenever Sonangol, as concessionaire, gives preference to oil service and supply companies in which it owns a stake. Problems reportedly exist in the area of preferential treatment to Sonangol's subsidiaries and joint ventures in the procurement of goods and services to oil companies operating in Angola. This situation could have substantial revenue implications (i.e., reduced government profit oil and petroleum income tax) given the cost-raising effect of preferential procurement practices. The tax and pricing arrangements of the Sonangol subsidiaries/joint ventures are unclear.

136. Sonangol equity opportunity costs are not insignificant (Figure V.2). The data show that striking the right balance between the company's investment requirements and other government spending would be a difficult task for years to come.⁵⁴ Indeed, there is not enough oil revenue to finance (i) Sonangol's equity participation in the oil and non-oil economy, (ii) sectoral investment needs for the reconstruction of the economy, (iii) the provision of basic public services, and (iv) the servicing of the external debt. In this regard, it would be important for the government to view proposed expenditures as part of a consolidated set of priorities rather than allowing decisions to be driven by those participants, such as Sonangol, who happen to be at the front end of the revenue chain.



137. The clash of multiple objectives for oil revenue raises a number of policy issues. Notably, it could be argued that under appropriate terms and conditions most oil-producing countries like Angola should have no problem in attracting private sector

⁵³ Sonangol E.P.-Holding stands for Sonangol Empresa Publica or Sonangol Public Enterprise or Group.

⁵⁴ According to experts, these trade-offs would become even more pronounced if Sonangol were to go ahead with its planned construction of an oil refinery at Lobito and taking of an equity stake in the liquefied natural gas (LNG) plant at Soyo.

investment in the oil sector. Also, the development of PSAs has made it possible for governments to efficiently collect a major share of oil rents from the IOCs without investing themselves (through the NOC). In this regard, the Angolan authorities should take advantage of those contract modalities and, therefore, use their economic development efforts—and economic resources—to the foster growth of the non-oil economy, from which most of the Angolan population derives their livelihoods.

138. While the reform process might take some time, the good news is that Sonangol has taken some first steps to improve the transparency and accounting of its core and noncore (subsidiary) operations. Key areas of reform include the following: (i) enhanced reporting and the prospective external auditing of Sonangol's upstream operations, and (ii) the reform of Sonangol E.P.-Holding's operations and the introduction of international accounting standards (IAS). In particular, throughout 2003, Sonangol will be working toward accounting consolidation of all its upstream operations.⁵⁵ Although there are a number of legal and technical constraints to be removed, the expectation is that Sonangol will be able to generate consolidated financial accounts of its upstream operations by end-2003. Sonangol's Action Plan for Accounting and Auditing indicates that the external auditing of those consolidated accounts could take place in the first quarter of 2004.

139. Also, Sonangol's business strategy for the next decade assumes the transfer of businesses that are currently owned by Sonangol E.P.-Holding to Sonangol's subsidiaries and the introduction of IAS for the whole business group. The plans are for Sonangol E.P.-Holding to no longer be directly involved in economic development issues, but rather to become a "financial house," in charge of overseeing the group's business interests (conducted by Sonangol's subsidiaries). Sonangol EP-Holding will be involved in major strategic decisions and capital budgeting. Part of the strategy of establishing subsidiaries on an arms-length basis is to enable Sonangol EP-Holding to dispose of noncore assets. The legal framework underpinning Sonangol's business strategy is the New Accounting Law (Novo Plano Geral de Contabilidade) or Law No. 82/01 of November 16, 2001. In summary, the law establishes new obligatory accounting guidelines/standards for the preparation of companies' financial statements. The new guidelines are in line with IAS.

⁵⁵ Upstream operations are conducted by Sonangol Pesquisa e Produção (P & P) (Block 14) and Sonangol E.P.-Holding (Blocks 0, 2, 3, and Congo basin: FST (TFE/Sonangol/Texaco) as well as by FS (TFE/Sonangol)).

Sonangol's Web of Interests: A Summary Description

I. Sonangol's Group Subsidiaries

Subsidiary name	Area of expertise
Sonangol Distribuidora	Distribution of petroleum products
Sonangol P & P	Research and Development
Sonair SARL	Provision of air transportation services, mainly for oil sector
Mercury telecom	<ul style="list-style-type: none"> In charge of Sonangol's telecommunications activities Projected expansion to become public telecom operator
Sonangol USA	Trading of Angolan oil and oil derivatives for US market
Sonangol Ltd	Based in London U.K., represents Sonangol in trade deals
Sonangol Shipping	<ul style="list-style-type: none"> Company handles sea transport of crude oil Operating since 2000-2001
Sonaship	Company handles sea transport of oil derivatives
ESSA	In charge of professional development and training of staff

II. Sonangol's Other Business Interests

i. Oil production sector

Company name	Area of expertise	Sonangol's share in company's capital (in percent)
Sonils	Provide logistic support for oil companies	30
Petromar	Building and maintenance of equipment used in production, storage, and distribution of oil and derivatives	60
Sonamet	Production of structures for oil industry (platforms; oil transportation systems)	40
Sonastolt	Support oil drilling activities	45

Company name	Area of expertise	Sonangol's share in company's capital (in percent)
Sonawest	Data base, processing and storing data on seismic activities	49
Sonatide	Management and supply of ship for supporting oil industry	51
Sonamer	Deep-water drilling activities	49
Sonasing	Treatment and storage of oil for export	50
Wapo Angola	Provision of diverse services to oil industry	35
TECHNIP Angola	Engineering services for oil enterprises	n.a.
Sonadiets	Technical support, servicing, and training of staff	30
Sonasurf	Supplying of sea vessels to oil industry	49
Sonastolt	Technical support for oil drilling companies	45
Base do Kwanda	Logistical support to oil production and oil services sectors	60

ii. Oil distribution sector

Company name	Area of expertise	Sonangol's share in company's capital (in percent)
Enco (S. Tomé e Príncipe)	Distribution of petroleum and its derivatives	40.0
Sonangalp	Distribution of petroleum and its derivatives	51.0
Sopor (Portugal)	Distribution of petroleum and its derivatives	49.0
Enacol (Cabo Verde)	Distribution of petroleum and its derivatives	32.5
Sonangol Congo (DRC)	Distribution of petroleum and its derivatives	60.0

iii. Other business interests

Company name	Area of expertise	Sonangol's share in company's capital (in percent)
Banco Africano de Investimentos	Banking	17.5
Banco de Comércio e Indústria (BCI)	Banking	1.0
Bricomil	Civil construction	12.5
Manibito	Leasing of sea ships	33.3
Sodispal	Retail trading and support to agro industry	51.0

Source: Sonangol group's internet site (www.sonangol.co.ao).

Table 1. Angola: Basic Data, 1998-2002

Macroeconomic Indicators	1998	1999	2000	2001	2002 Prel.
	(Annual percentage change, unless otherwise indicated)				
National income and prices					
Nominal GDP (in billions of kwanzas)	2.5	17.0	88.9	208.9	489.6
Real GDP growth	6.8	3.3	3.0	3.2	15.3
GDP deflator	35	549	408	128	103
Consumer price index (annual average)	107	248	325	153	109
Consumer price index (end of period)	135	329	268	116	106
Government budget					
Total revenue	13	896	478	93	115
Total expenditure	-5	1,186	286	79	143
	(In percent of GDP)				
Total revenue	31.6	46.8	51.7	42.5	39.0
<i>Of which: oil</i>	23.4	41.1	46.2	33.9	29.9
Total expenditure	43.0	82.4	60.8	46.3	47.9
Overall balance (commitment basis)	-11.4	-35.5	-9.0	-3.7	-9.0
Overall balance (cash basis)	0.2	-24.7	17.6	-4.9	-1.4
Primary balance (commitment basis)	-2.9	-26.4	-3.4	1.0	-5.8
	(Annual percentage change, unless otherwise indicated)				
Money and credit ^{1/}					
Net domestic assets	53	-362	-327	54	49
Broad money	57	533	304	163	158
Velocity (Non-oil GDP/average M2)	4.2	3.2	3.6	3.4	2.9
Interest rate (three-month time deposits; in percent, end of period)	37.5	35.5	46.0	56.1	41.0
External sector					
Exports, f.o.b.	-29.2	45.6	53.6	-17.5	27.7
Oil	-33.2	45.3	58.5	-18.5	32.0
Non-oil	19.8	47.4	20.2	-8.7	-6.8
Imports, f.o.b.	-19.9	49.5	-2.2	4.6	16.7
Terms of trade	-27.9	50.9	59.9	-14.5	-0.7
Official exchange rate (dollar terms, end of period)	0.7	5.6	16.8	31.9	58.7
Nominal effective exchange rate ^{2/}	-49	-74	-73	-60	-47
Real effective exchange rate ^{2/}	-3	-50	29	13	7

Table 1. Angola: Basic Data, 1998-2002 (concluded)

Macroeconomic Indicators	1998	1999	2000	2001	2002 Prel.
(In millions of U.S. dollars, unless otherwise indicated)					
Overall balance of payments	-1,186	-126	295	-842	-658
External payment arrears (end of period)	3,741	4,397	4,530	4,825	5,259
Gross international reserves (end of period)	203	496	1,198	732	375
In months of imports of goods and services 3/	203.0	496.0	1,198.0	732.0	375.0
(In percent of GDP, unless otherwise indicated)					
Current account balance	-29.0	-28.1	9.0	-15.1	-5.8
Debt service ratio 4/	56.5	44.4	36.3	41.2	26.4
Use of Fund resources					
Purchases	0.0	0.0	0.0	0.0	0.0
Repurchases	0.0	0.0	0.0	0.0	0.0
Credit outstanding	0.0	0.0	0.0	0.0	0.0
Fund arrangement	None	None	None	None	None
Quota (millions of SDRs)	207	286	286	286	286
Social and Demographic Indicators					
	Angola	Sub-Saharan Year	Africa	Year	
Population (millions)	13.3	2000	659	2000	
United Nations Human Development Index	0.40	2000	0.47	2000	
Fertility rate (births per woman)	6.6	2000	5.2	2000	
Access to sanitation (percent of total population)	44	2000	54	2000	
Child malnutrition (in percent of children under 5)	31	2001	...	...
DPT immunization (percent of age group)	22	1999	58	1999	
Arable land (percent of total land area)	2.4	1998	6.5	1998	
Access to safe water (percent of total population)	38	2000	55	2000	
Urban population (percent of total population)	34	2000	34	2000	
Measles immunization (percent of age group)	46	1999	53	1999	
Life expectancy at birth (years)	47	2000	47	2000	
Illiteracy (percent of population age 15+)	58	2000	39	2000	
Infant mortality (per 1,000 live births)	128	2000	91	2000	
School enrolment (percent of total)	23	1999	42	1999	
GNP per capita (constant 1995 U.S. dollars)	2,187	2000	1,690	2000	
Area (thousands of square kilometers)	1,247	2000	23,603	2000	

Sources: Angolan authorities; World Bank, *World Development Indicators*, 2002; and UNDP, *Human Development Report*, 2002.

1/ As a percent of broad money at the beginning of the period.

2/ Increase = appreciation.

3/ Imports of goods and nonfactor services.

4/ Medium- and long-term debt service due in percent of exports of goods and services or government revenues in millions of U.S. dollars.

Table 2. Angola: Gross Domestic Product by Sector of Activity, 1998-2002

	1998	1999	2000	2001	2002 Prel.
(In billions of kwanzas)					
Agriculture, forestry, and fishing	0.3	1.1	5.2	16.7	38.3
Mining	1.1	11.4	59.5	124.1	298.8
Oil and LPG 1/	1.0	10.0	53.9	111.9	271.6
Diamonds	0.1	1.4	5.7	12.2	27.1
Manufacturing	0.2	0.6	2.6	7.9	18.0
Electricity and water	0.0	0.0	0.0	0.1	0.2
Construction	0.2	0.5	2.5	7.4	16.5
Trade and commerce	0.5	2.6	12.9	32.6	74.7
Nontradable services	0.3	0.8	6.1	20.0	42.9
Import duties	0.0	0.0	0.0	0.1	0.2
GDP at market prices	2.5	17.0	88.9	208.9	489.6
(Real growth rates in percent)					
Agriculture, forestry, and fishing	5.2	1.3	9.3	18.0	10.0
Mining	10.7	5.8	2.0	1.0	20.6
Oil and LPG 1/	3.5	1.0	0.4	-1.0	22.1
Diamonds	90.2	39.5	13.3	19.5	6.6
Manufacturing	4.9	7.1	8.9	9.8	8.6
Electricity and water	14.5	1.3	0.8	10.0	8.0
Construction	10.0	5.0	7.5	8.5	7.0
Trade and commerce	5.0	4.4	3.4	6.0	9.7
Nontradable services	0.0	-7.5	1.5	1.0	2.5
Import duties	-30.0	-10.0	0.0	2.5	3.0
GDP	6.8	3.3	3.0	3.2	15.3
Non-oil GDP	9.8	4.8	6.8	9.6	7.6

Sources: Angolan authorities; and staff calculations.

1/ Liquefied petroleum gas.

Table 3. Angola: Production of Selected Manufactured Products, 1996-2000
(In metric tons, unless otherwise specified)

	1996	1997	1998	1999	2000
Food, beverages, and tobacco					
Dry fish	7,926	8,097	6,396	6,125	6,132
Frozen fish	12,211	27,222	56,844	41,534	41,583
Canned fish	363	1,166	936	...	...
Edible oil	21	561	...	...	...
Wheat flour	27,408	51,957	45,994	57,493	68,991
Maize flour	92,829	90,073	113,798	...	...
Yam flour	...	259,963	259,963	...	...
Bread	34,931	150,099	70,008	87,517	105,016
Pasta	629	540	129	163	195
Salt	2,739	2,587	6,242	7,803	9,363
Beer (in thousands of liters)	79,742	114,855	129,737	160,942	193,131
Other alcoholic beverages (in thousands of liters)	7,961	16,235	12,461	12,195	11,472
Nonalcoholic beverages (in thousands of liters)	1,565	20,189	33,861	4,125	2,900
Tobacco	697	577	324	748	897
Textiles, clothing, and leather					
Fabric (in thousands of square meters)	2,569	3,264	252	316	378
Clothing and accessories	14	13	14	18	21
Leather shoes	23	186	20	25	30
Chemicals and plastics					
Paints	212	3,074	858	1,073	1,287
Soap	4,825	10,672	6,852	8,565	10,278
Plastic containers	164	1,027	8	10	12
Gasoline	111,367	114,647	101,695	128,113	111,379
Diesel	462,816	466,336	455,691	493,019	468,422
Kerosene	17,181	19,743	28,311	30,394	30,249
Butane gas	32,726	32,631	28,521	30,483	29,604
Asphalt	7,796	8,600	5,407	6,074	9,696
Fuel oil	696,197	680,577	662,801	646,819	595,253
Fuel (extra heavy)	44,638	46,081	53,035	51,980	65,130
Jet fuel	301,555	292,286	284,792	338,465	320,743
Oils and lubricants	13,500	13,500	...	...	...
Construction material					
Zinc sheet	932	829	602	753	903
Cement	170,000	219,000	194,500	206,750	200,625
Electric products					
Electric cables	32	65	44	55	66
Batteries	2,796	3,696	2,228	2,785	3,342

Source: Ministry of Planning.

Table 4. Angola: Oil Production and Reserves by Oil Field, 1998-2002

	1998	1999	2000	2001	2002 Prel.
	(Thousands of barrels per day)				
Total production	739	746	748	740	903
Cabinda	421	460	445	460	442
Block 1	0	1	2	2	1
Block 2	98	83	72	63	52
Block 3	193	174	148	137	135
Block 4	8	11	8	4	1
Block 14	0	1	61	57	67
Block 17	0	0	0	4	192
Congo	18	16	11	12	12
Kwanza	1	0	0	0	0
	(In millions of barrels)				
Total production to date 1/	3,860	4,133	4,406	4,676	5,006
Cabinda	2,526	2,694	2,857	3,025	3,186
Block 1	30	31	31	32	32
Block 2	307	337	363	386	406
Block 3	630	694	748	798	847
Block 4	27	32	35	36	36
Block 14	0	1	23	44	68
Block 17	0	0	0	1	72
Congo	239	245	249	260	265
Kwanza	93	93	93	93	93
New discoveries 2/	3,200	1,571	...	...	...
Proven reserves 1/ 3/	3,424	3,157	4,149	...	...
	(In percent)				
Production-reserves ratio	7.9	8.6	6.6	...	...

Source: Ministry of Petroleum.

1/ At year's end.

2/ Includes reserves not yet developed.

3/ Reserves already developed and ready for production.

Table 5. Angola: Oil Balance, 1998-2002

	1998	1999	2000	2001	2002 Prel.
Crude oil					
					(In millions of barrels)
Production	270	272	273	270	330
Domestic refinery	13	14	...	...	...
Exports 1/	251	254	256	254	313
Net change in stocks 2/	6	5	...	...	...
Derivatives					
					(In thousands of metric tons)
Supply	1,818	1,956	1,975	...	...
Domestic production	1,705	1,860	1,771	...	...
Imports	113	96	204	...	...
Uses	1,818	1,956	1,975	...	...
Domestic sales	950	1,003	1,045	...	...
Diesel (gas oil)	360	395	428	...	...
Gasoline	105	117	103	...	...
Fuel oil	63	54	80	...	...
Jet fuels	300	314	316	...	...
Kerosene	51	53	45	...	...
Gas (liquefied petroleum gas)	57	54	52	...	...
Other	14	16	21	...	...
Exports 3/	889	832	791	...	...
Net change in stocks	-21	121	139	...	...

Sources: Ministry of Petroleum, Sonangol (state-owned oil company), National Bank of Angola, and staff estimates.

1/ As reported in balance of payments. Other sources differ slightly.

2/ Includes pipeline losses and field consumption, as well as any discrepancies.

3/ As reported in balance of payments; excludes natural gas liquids.

Table 6. Angola: Mining Production, 1998-2002

	1998	1999	2000	2001	2002 Prel.
	(In units indicated)				
Crude oil					
In millions of barrels	270	272	273	270	330
In thousands of barrels per day	739	746	748	740	903
Liquefied petroleum gas					
In thousands of barrels	1,292	1,185	1,626	...	...
Diamonds (recorded exports)					
In thousands of carats	2,716	3,806	4,313	5,159	5,022
	(Annual percentage change)				
Crude oil	3.6	1.0	0.3	-1.2	22.1
Liquefied petroleum gas	-21.4	-8.3	37.2	...	...
Diamonds (recorded exports)	91.7	40.1	13.3	19.6	-2.6

Sources: Ministry of Petroleum; Endiama; and staff estimates.

Table 7. Angola: Prices of Petroleum Products, 1998-2002
(End-of-period data)

	1998	1999	2000	2001	2002			
					March	June	Sep.	Dec.
(Kwanzas per liter, unless otherwise indicated)								
Gasoline	0.195	0.259	4.000	8.200	12.000	12.000	12.000	12.000
Kerosene	0.110	0.130	2.000	5.000	7.800	7.800	7.800	7.800
Diesel (gas oil)	0.100	0.132	2.000	5.600	8.000	8.000	8.000	8.000
Fuel oil (light) 1/	0.072	0.096	1.610	4.050	6.400	6.400	6.400	6.400
Fuel oil (heavy) 1/	0.050	0.066	1.080	2.980	6.600	6.600	6.600	6.600
LPG 2/	0.290	0.373	4.000	7.000	10.200	10.200	10.200	10.200
(U.S. dollars per liter, unless otherwise indicated)								
Gasoline	0.20	0.26	4.00	0.29	0.32	0.28	0.24	0.20
Kerosene	0.11	0.13	2.00	0.18	0.21	0.18	0.16	0.13
Diesel (gas oil)	0.10	0.13	2.00	0.20	0.22	0.18	0.16	0.14
Fuel oil (light) 1/	0.07	0.10	1.61	0.14	0.17	0.15	0.13	0.11
Fuel oil (heavy) 1/	0.05	0.07	1.08	0.10	0.18	0.15	0.13	0.11
LPG 2/	0.29	0.37	4.00	0.25	0.28	0.23	0.21	0.17
(Annual percentage change in kwanza terms)								
Gasoline	77	33	1,444	105	200	122	46	46
Kerosene	358	18	1,438	150	290	160	56	56
Diesel (gas oil)	100	32	1,415	180	300	167	60	43
Fuel oil (light) 1/	106	33	1,577	152	298	118	58	58
Fuel oil (heavy) 1/	108	32	1,536	176	511	213	121	121
LPG 2/	625	29	972	75	155	104	46	46

Sources: Ministry of Finance; and staff estimates.

1/ Kwanzas per kilogram.

2/ Liquefied petroleum gas.

Table 8. Angola: Consumer Price Index in Luanda, December 1998- December 2002

	Weights (In percent)	1998 Dec.	1999 Dec.	2000 Dec.	2001 Dec.	2002 Dec.
		(Index, 1994=100)				
Food	74.1	687,936	3,551,097	11,211,201	22,494,154	...
Clothing and footwear	5.5	1,118,106	5,189,397	21,449,166	45,733,912	...
Housing, energy, and utilities	5.5	12,427,724	28,392,677	157,756,442	434,224,606	...
Furniture and appliances	4.7	1,281,243	7,030,728	22,640,068	33,328,443	...
Health	1.8	1,027,571	4,280,701	12,507,254	25,114,567	...
Transport and communications	3.9	2,069,372	19,112,411	65,726,749	110,006,860	...
Education	2.7	1,489,966	6,154,172	24,173,556	46,954,715	...
Other goods and services	1.9	815,566	3,921,049	10,718,197	21,217,743	...
Total	100.0	1,185,076	5,083,630	18,723,608	40,456,100	...
		(Percent change over previous year)				
Food		116	416	216	101	119
Clothing and footwear		166	364	313	113	142
Housing, energy, and utilities		172	128	456	175	76
Furniture and appliances		184	449	222	47	117
Health		83	317	192	101	72
Transport and communications		78	824	244	67	57
Education		87	313	293	94	56
Other goods and services		102	381	173	98	118
Total		135	329	268	116	106

Source: National Institute of Statistics.

Table 9. Angola: Average Exchange Rates, December 1998- December 2002
(Kwanzas per U.S. dollar, unless otherwise indicated)

	Reference Rate ^{1/}	Monthly Change (In percent)	Parallel Market Rate	Monthly Change (In percent)	Informal Market Premium (In percent)
1998					
December	0.617	...	1.019	...	65.1
1999					
December	5.509	...	5.624	...	2.1
2000					
January	5.77	4.8	5.99	6.4	3.7
February	5.90	2.2	5.90	-1.3	0.1
March	5.91	0.2	5.91	0.1	0.0
April	6.28	6.3	6.33	7.1	0.8
May	7.42	18.1	7.91	24.9	6.6
June	9.52	28.4	9.86	24.7	3.5
July	10.82	13.7	11.08	12.4	2.4
August	12.06	11.5	12.61	13.8	4.5
September	12.75	5.7	13.31	5.6	4.4
October	13.44	5.4	14.68	10.3	9.3
November	14.47	7.7	15.54	5.8	7.4
December	16.09	11.2	17.65	13.6	9.7
2001					
January	17.91	11.3	19.92	12.9	11.2
February	19.55	9.2	19.85	-0.3	1.5
March	19.61	0.3	20.53	3.4	4.7
April	19.42	-0.9	20.80	1.3	7.1
May	19.54	0.6	21.51	3.4	10.1
June	19.81	1.4	23.37	8.6	18.0
July	20.63	4.2	23.44	0.3	13.6
August	21.74	5.4	23.44	0.0	7.8
September	23.40	7.6	25.26	7.8	8.0
October	25.12	7.4	27.27	7.9	8.6
November	27.46	9.3	28.42	4.2	3.5
December	30.50	11.1	33.56	18.1	10.0
2002					
January	32.87	7.8	35.65	6.2	8.4
February	34.62	5.3	34.93	-2.0	0.9
March	36.38	5.1	37.27	6.7	2.5
April	38.06	4.6	38.71	3.8	1.7
May	40.11	5.4	40.75	5.3	1.6
June	42.18	5.2	43.10	5.8	2.2
July	44.55	5.6	45.40	5.3	1.9
August	46.41	4.2	49.09	8.1	5.8
September	48.46	4.4	50.27	2.4	3.7
October	50.57	4.4	51.54	2.5	1.9
November	53.14	5.1	54.11	5.0	1.8
December	57.09	7.4	62.37	15.3	9.2

Source: National Bank of Angola.

1/ Monthly averages of buying and selling daily average exchange rates in the interbank foreign exchange market.

Table 10. Angola: Balance of Payments, 1998-2002
(In millions of dollars; unless otherwise noted)

	1998	1999	2000	2001	2002 Est.
Current account	-1,867	-1,710	796	-1,431	-644
Trade balance	1,464	2,047	4,881	3,355	4,649
Exports, f.o.b.	3,543	5,157	7,921	6,534	8,359
Oil sector	3,091	4,491	7,120	5,803	7,677
Diamonds	432	629	739	689	638
Other	20	37	62	43	44
Imports, f.o.b.	-2,079	-3,109	-3,040	-3,179	-3,709
Services (net)	-2,514	-2,442	-2,432	-3,316	-3,856
Receipts	122	153	267	203	230
Payments	-2,635	-2,595	-2,699	-3,518	-4,086
Income (net)	-969	-1,372	-1,681	-1,561	-1,527
Of which: Interest due 1/	-504	-569	-597	-539	-393
Current transfers (net)	152	56	28	91	89
Financial and capital account	304	1,664	-450	954	-13
Capital transfers (net)	8	7	18	4	23
Direct investments (net)	1,114	2,472	879	2,146	1,312
Of which: Oil bonuses	51	935	0	450	0
Medium- and long-term loans	-974	-291	-766	-618	-831
Disbursements	593	1,501	1,610	1,619	1,048
Amortizations	-1,567	-1,791	-2,376	-2,237	-1,879
Other capital (net)	156	-524	-580	-577	-518
Net errors and omissions	377	-80	-51	-365	0
Overall balance	-1,186	-126	295	-842	-658
Net international reserves (- increase)	319	-530	-631	508	207
Exceptional financing	868	656	336	334	451
Debt rescheduling and debt forgiveness	68	0	202	40	16
Arrears, net (+ increase) 1/	800	656	134	294	435
Memorandum items:					
Current account (in percent of GDP)	-29.0	-28.1	9.0	-15.1	-5.8
Exports of goods and services (in percent of GD)	56.9	87.2	92.4	71.1	76.7
Imports of goods and services (in percent of GD)	73.2	93.7	64.7	70.7	69.6
Debt service ratio 2/	56.5	44.4	36.3	41.2	26.4
Gross international reserves (end of period)	203	496	1,198	732	375
In months of imports of goods and services 3/	0.4	1.0	2.1	1.1	0.6
In months of debt service 3/	1.0	2.0	5.2	3.9	2.0

Source: National Bank of Angola.

1/ Including late interest from 1999 onwards.

2/ Medium- and long-term debt service due in percent of exports of goods and services.

3/ In months of next year's imports or medium- and long-term debt service. In 2002, using current year's data.

Table 11. Angola: Foreign Exchange Reserves, 1998-2002
(In millions of U.S. dollars, unless otherwise specified; end of period)

	1998	1999	2000	2001	2002
Net foreign assets (banking system)	241	1,034	1,815	1,495	1,590
National Bank of Angola	-242	405	986	484	267
National Bank of Angola (net international reserves) 1/	-231	408	1,039	531	324
Foreign assets	203	496	1,198	732	375
Gross reserves	203	496	1,198	732	375
Gold	0	0	0	0	0
Sight deposits	141	452	651	346	74
Time deposits	62	43	547	386	301
Foreign liabilities (-)	-445	-91	-212	-248	-108
Short term	-434	-88	-159	-201	-52
Medium and long term	-11	-3	-53	-47	-57
Commercial banks (net)	483	628	829	1,011	1,323
Foreign assets	682	747	878	1,169	1,450
Foreign liabilities (-)	-199	-119	-49	-157	-127
Memorandum items:					
National Bank of Angola					
Change in net international reserves	-321	639	631	-508	-207
Change in gross reserves	-193	293	702	-466	-356
Import coverage (of gross reserves) 2/	0.8	2.0	4.5	2.4	1.0

Source: National Bank of Angola.

1/ Excludes medium- and long-term assets and liabilities.

2/ In months of following year's imports.

Table 12. Angola: Direction of Merchandise Exports, 1998–2002 1/

	1998	1999	2000	2001	2002 Est.
	(Shares in percent of total)				
Africa	0.3	1.0	0.2	0.2	0.1
<i>Of which</i> : South Africa	0.1	0.7	0.1	0.0	0.0
European Union	17.0	17.0	17.3	26.4	28.7
<i>Of which</i> : Portugal	0.6	0.2	0.6	1.7	0.8
USA	64.1	53.2	44.6	47.9	42.0
Other	18.6	28.8	37.8	25.5	29.2
	(Percent change from previous year)				
Total 1/	-19.3	26.4	67.6	-15.5	13.9
Africa	-82.0	322.5	-61.5	-38.3	-1.7
<i>Of which</i> : South Africa	-93.7	1018.3	-69.5	-86.5	8.5
European Union	-2.8	26.0	71.2	28.6	23.7
<i>Of which</i> : Portugal	-47.0	-55.5	372.4	126.7	-47.1
USA	-17.4	4.9	40.6	-9.3	-0.1
Other	-31.7	95.8	119.9	-43.0	30.1
Memorandum item:					
Total in percent of BNA's estimate of total exports	98.1	85.2	93.0	95.2	84.8

Source: IMF, *Direction of Trade Statistics*.

1/ Data provided by partner countries.

Table 13. Angola: Commodity Composition of Exports, 1998-2002
(In millions of U.S. dollars; unless otherwise indicated)

	1998	1999	2000	2001	2002 Est.
Total exports	3,543	5,157	7,921	6,534	8,359
Crude oil	3,018	4,406	6,951	5,690	7,561
Volume (millions of barrels)	251	254	256	251	310
Price (U.S. dollars per barrel)	12	17	27	23	24
Refined petroleum products	62	75	132	93	95
Volume (thousands of metric tons)	666	720	734	675	642
Price (U.S. dollars per metric ton)	93	105	180	137	149
Liquefied Natural Gas	11	9	37	20	20
Volume (thousands of barrels)	1,094	624	1,475	1,068	1,015
Price (U.S. dollars per barrel)	10	15	25	19	20
Diamonds	432	629	739	689	638
Volume (thousands of carats)	2,765	3,806	4,319	5,159	5,022
Price (U.S. dollars per carat)	156	165	171	134	127
Other	20	37	62	43	44
Memorandum items:					
Total exports (percent change)	-29	46	54	-18	28
Total exports (in percent of GDP)	55	85	89	69	75
Petroleum (in percent of total exports)	87	87	90	89	92
Diamonds (in percent of total exports)	12	12	9	11	8
Other (in percent of total exports)	1	1	1	1	1

Source: National Bank of Angola.

Table 14. Angola: Origin of Merchandise Imports, 1998–2002 1/

	1998	1999	2000	2001	2002 Est.
(Shares in percent of total)					
Africa	12.0	11.5	19.6	11.7	11.7
<i>Of which</i> : South Africa	9.6	9.4	15.6	10.0	9.9
European Union	51.7	44.1	46.6	39.9	38.2
<i>Of which</i> : Portugal	20.2	14.4	17.1	14.6	15.4
USA	17.5	12.4	11.0	9.0	11.2
Other	18.9	32.0	22.8	39.4	39.0
(Percent change from previous year, unless otherwise indicated)					
Total 1/	-11.6	0.4	-2.6	54.3	9.0
Africa	6.7	-3.8	65.8	-7.5	8.5
<i>Of which</i> : South Africa	3.1	-1.9	61.3	-1.4	8.5
European Union	-12.5	-14.4	3.0	32.0	4.4
<i>Of which</i> : Portugal	-11.1	-28.4	15.4	32.3	14.7
USA	26.2	-28.6	-13.5	26.1	34.9
Other	-35.0	70.2	-30.6	166.3	7.9
Memorandum item:					
Total, c.i.f. in percent of BNA's estimate of imports, fob	107	72	72	106	99

Source: IMF, *Direction of Trade Statistics*.

1/ Data provided by partner countries.

Table 15. Angola: Composition of Imports, 1998-2002

	1998	1999	2000	2001	2002 Est.
(In millions of U.S. dollars)					
Total imports, f.o.b.	2,079	3,109	3,040	3,179	3,709
Consumer goods	1,080	2,077	1,950	2,174	...
Intermediate goods	233	182	245	304	...
Capital goods	766	850	844	702	...
(Percent change)					
Total imports, f.o.b.	-20	50	-2	5	17
Consumer goods	-26	92	-6	11	...
Intermediate goods	-20	-22	35	24	...
Capital goods	-11	11	-1	-17	...
(In percent of GDP)					
Total imports, f.o.b.	32	51	34	34	33
Consumer goods	17	34	22	23	...
Intermediate goods	4	3	3	3	...
Capital goods	12	14	10	7	...
(Shares in percent of total)					
Consumer goods	52	67	64	68	...
Intermediate goods	11	6	8	10	...
Capital goods	37	27	28	22	...

Source: National Bank of Angola.

Table 16. Angola: Services, 1998–2002

	1998	1999	2000	2001	2002 Est.
(In millions of U.S. dollars)					
Services (net)	-2,514	-2,442	-2,432	-3,316	-3,856
Transport	-262	-348	-295	-379	...
Insurance	-59	-45	-28	-65	...
Government	-240	-401	-429	-342	...
Other	-1,953	-1,647	-1,680	-2,529	...
Total receipts	122	153	267	203	230
Transport	55	47	16	13	...
Insurance	9	16	35	28	...
Government	0	0	0	0	...
Other	58	90	216	161	...
Total payments	2,635	2,595	2,699	3,518	4,086
Transport	317	395	311	392	...
Insurance	68	61	63	93	...
Government	240	401	429	342	...
Other	2,011	1,738	1,896	2,690	...
(Percent change)					
Total receipts	-12	26	75	-24	14
Total payments	1	-2	4	30	16
(In percent of GDP)					
Services (net)	-39	-40	-27	-35	-34
Total receipts	2	3	3	2	2
Total payments	41	43	30	37	36

Source: National Bank of Angola.

Table 17. Angola: Monetary Survey, December 1998- December 2002

	1998	1999	2000	2001	2002			
	Dec.	Dec.	Dec.	Dec.	Mar.	Jun.	Sep.	Dec.
	(In billions of kwanzas)							
Net foreign assets (banking system)	0.2	5.8	30.5	47.8	59.3	75.1	91.6	93.3
National Bank of Angola (BNA)	-0.2	2.3	16.6	15.5	22.5	28.5	35.4	15.7
<i>Of which:</i> gross reserves	0.1	2.8	20.1	23.4	31.9	39.3	40.1	22.0
<i>Of which:</i> foreign liabilities – short-term	-0.3	-0.5	-2.7	-6.4	-7.4	-8.4	-2.1	-3.0
Commercial banks	0.3	3.5	13.9	32.3	36.8	46.5	56.1	77.6
<i>Of which:</i> foreign assets	0.5	4.2	14.8	37.3	43.0	54.2	61.0	85.1
<i>Of which:</i> foreign liabilities – short-term	0.0	-0.5	-0.8	-5.0	-6.2	-7.7	-4.8	-7.4
Net domestic assets	0.4	-1.8	-14.7	-6.1	-12.6	-16.9	-23.0	14.4
Net domestic credit	0.4	1.2	-13.5	-1.2	-4.3	-5.1	-8.5	26.7
Credit to government (net)	0.3	0.7	-15.7	-9.4	-15.1	-19.7	-28.2	2.0
Claims on government	0.3	4.0	1.1	0.6	1.9	2.5	2.8	28.4
Government deposits	0.0	-3.3	-16.8	-10.1	-17.1	-22.3	-30.9	-26.4
Credit to the economy	0.1	0.5	2.2	8.2	10.8	14.6	19.7	24.7
State companies	0.0	0.1	0.3	0.9	0.8	0.9	1.2	1.4
Other items (net)	0.0	-3.1	-1.2	-4.8	-8.4	-11.7	-14.5	-12.4
Broad money (M3)	0.6	3.9	15.8	41.7	46.7	58.2	68.6	107.6
Money and quasi money (M2)	0.5	3.9	15.8	41.4	46.3	57.7	67.8	107.0
Money	0.4	3.1	13.3	30.2	32.2	38.5	45.8	69.4
Currency outside banks	0.2	0.7	3.0	8.2	6.4	7.1	8.2	20.9
Demand deposits	0.3	2.4	10.3	22.0	25.8	31.4	37.7	48.6
<i>Of which:</i> foreign currency deposits	0.2	1.8	8.2	16.5	17.8	23.0	27.3	37.4
Quasi money	0.1	0.9	2.5	11.2	14.1	19.2	22.0	37.5
<i>Of which:</i> foreign currency deposits	0.0	0.1	1.3	7.3	9.2	12.3	15.5	28.1
Central bank bonds	0.1	0.0	0.0	0.3	0.4	0.5	0.7	0.6
	(Cumulative percentage change from beginning of year, unless otherwise indicated)							
Net foreign assets	-16	3,338	429	57	24	57	92	95
Net domestic assets	111	-559	696	-59	108	178	279	-337
Net domestic credit	132	215	-1,191	-91	250	321	596	-2,292
Net credit to the government	299	134	-2,331	-40	60	109	198	-121
Credit to the economy	-2	477	309	276	32	77	139	201
Broad money (M3)	57	533	304	163	12	40	64	158
Currency outside banks	63	302	346	177	-22	-14	-1	154
Foreign currency deposits	368	1,084	307	151	13	46	79	172
Memorandum items:								
Official exchange rate (selling; kwanzas per U.S. dollar)	3.0	5.6	16.8	31.9	37.1	43.5	49.5	58.7
Accumulated inflation (year to date, in percent)	135	329	267	113	27	49	80	112
Velocity (GDP/M2)	5.0	4.3	5.6	5.0	...	...	...	4.6
Gross international reserves (U.S. dollars)	47	496	1,198	732	859	902	809	375
Net international reserves (U.S. dollars)	-54	408	1,039	531	660	708	768	324
Commercial banks' net foreign assets (U.S. dollars)	112	628	829	1,011	993	1,069	1,134	1,323

Sources: National Bank of Angola; and staff estimates.

Table 18. Angola: Interest Rates, December 1998 - December 2002 1/
(In percent per annum)

	1998	1999	2000	2001				2002			
	Dec.	Dec.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
Demand deposits	10.0	10.0	15.8	10.6	10.7	10.8	10.2	10.1	10.0	10.1	10.0
Time deposits (days' maturities)											
0-90	37.5	35.5	46.0	39.3	50.0	49.6	56.1	46.4	60.1	29.1	41.0
91-180	40.0	55.0	55.0	32.5	66.9	73.1	50.0	32.9	50.0	28.4	59.7
181-364	45.0	57.0	57.0	...	45.3	...	...	57.0	57.0	57.0	...
365 +	...	...	...	...	...	...	...	...	...	...	...
Lending rates (days' maturities)											
0-180	45.0	118.3	89.6	96.0	99.8	98.0	97.6	99.2	98.4	96.7	99.7
181-364	55.0	...	102.8	99.2	73.4	88.0	91.7	107.3	90.2	101.8	104.6
365 +	57.5	...	120.0	...	...	83.4	110.0	68.9	108.1	102.3	102.8
Discount rate	58.0	120.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
Central bank bills											
14-day	...	...	112.5	112.2	113.8	115.5	...	35.2	19.5	5.5	...
28-day	...	79.1	115.2	115.3	119.9	120.6	...	67.6	21.8	77.4	102.7
63-day	...	...	120.1	123.0	127.0	126.5	...	126.9	58.1	103.5	107.9

Source: National Bank of Angola.

1/ Between April 1998 and May 1999, lending rates were stipulated as ceilings and deposit rates as floors. Rates from this period are maxima and minima; thereafter data are averages of representative rates.

Table 19. Angola: Summary of Government Operations, 1998-2002
(In billions of kwanzas)

	1998	1999	2000	2001	2002 Est.
Total revenue	0.8	8.0	46.0	88.9	190.8
Oil	0.6	7.0	41.1	70.8	146.4
Non-oil	0.2	1.0	4.9	18.1	44.5
Income taxes	0.1	0.3	1.4	5.3	12.5
Taxes on goods and services	0.1	0.3	1.6	5.8	14.6
Taxes on foreign trade	0.1	0.2	1.2	4.4	10.6
Other	0.0	0.2	0.7	2.6	6.8
Total expenditure	1.1	14.0	54.054	96.7	234.7
Current expenditure	0.9	8.7	39.9	70.1	174.2
Personnel	0.2	0.7	5.3	16.0	53.2
Goods and services	0.4	4.6	23.6	33.6	92.9
Interest payments due	0.2	1.6	5.0	9.8	15.6
Transfers	0.0	1.8	6.0	10.7	12.5
Capital expenditure	0.1	2.2	5.6	12.5	33.6
Quasi-fiscal expenditures	...	...	4.4	1.9	1.0
Central bank operational deficit	...	...	0.1	0.2	10.7
Discrepancy (unexplained)	0.0	3.1	4.1	11.9	15.1
Overall balance before grants (accrual basis)	-0.3	-6.0	-8.0	-7.8	-43.8
Change in payment arrears (net)	0.3	1.8	23.7	-2.3	36.8
Domestic	0.1	0.5	20.4	-7.5	32.0
External interest	0.2	1.3	3.3	5.2	4.8
Overall balance before grants (cash basis)	0.0	-4.2	15.7	-10.1	-7.1
Financing	0.0	4.2	-15.7	10.1	7.1
Onetime oil field concession bonuses	0.0	2.6	0.0	4.3	13.6
Grants	0.1	0.7	2.0	4.7	0.0
External financing (net)	-0.3	0.3	-4.3	-10.3	-24.2
Disbursements	0.1	2.5	10.5	25.7	40.8
Amortization	-0.4	-2.2	-14.9	-36.1	-61.5
Short-term borrowing, net	0.0	0.0	0.0	0.0	-3.5
Domestic financing (net)	0.2	0.6	-13.4	11.5	17.6
Memorandum item:					
Primary balance (commitment basis)	-0.1	-4.5	-3.1	2.0	-28.2

Sources: Angolan authorities; and staff estimates.

Table 20. Angola: Summary of Government Operations, 1998-2002
(In percent of GDP, unless otherwise indicated)

	1998	1999	2000	2001	2002 Prel.
Total revenue	31.6	46.8	51.7	42.5	39.0
Oil	23.4	41.1	46.2	33.9	29.9
Non-oil	8.2	5.7	5.5	8.7	9.1
Income taxes	2.1	1.6	1.5	2.5	2.5
Taxes on goods and services	2.4	1.9	1.8	2.8	3.0
Taxes on foreign trade	2.2	1.3	1.4	2.1	2.2
Other	1.5	0.9	0.8	1.2	1.4
Total expenditure	43.0	82.4	60.8	46.3	47.9
Current expenditure	36.5	51.1	44.8	33.6	35.6
Personnel	9.2	4.2	5.9	7.7	10.9
Goods and services	17.7	27.1	26.6	16.1	19.0
Interest payments due	8.6	9.1	5.6	4.7	3.2
Transfers	1.1	10.6	6.7	5.1	2.6
Capital expenditure	5.9	12.9	6.3	6.0	6.9
Quasi-fiscal expenditures	...	...	5.0	0.9	0.2
Central bank operational deficit	...	...	0.1	0.1	2.2
Discrepancy (unexplained)	0.6	18.4	4.6	5.7	3.1
Overall balance before grants (accrual basis)	-11.4	-35.5	-9.0	-3.7	-9.0
Change in payment arrears (net)	11.7	10.8	26.6	-1.1	7.5
Domestic	3.9	3.2	22.9	-3.6	6.5
External interest	7.7	7.6	3.7	2.5	1.0
Overall balance before grants (cash basis)	0.2	-24.7	17.6	-4.9	-1.4
Financing	-0.2	24.7	-17.6	4.9	1.4
Onetime oil field concession bonuses	0.8	15.4	0.0	2.1	2.8
Grants	2.5	4.0	2.3	2.3	0.0
External financing (net)	-12.8	2.1	-4.8	-4.9	-4.9
Disbursements	4.2	14.9	11.8	12.3	8.3
Amortization	-17.7	-12.8	-16.8	-17.3	-12.6
Short-term borrowing, net	0.0	0.0	0.0	0.0	-0.7
Domestic financing (net)	9.2	3.3	-15.1	5.5	3.6
Memorandum item:					
Primary balance	-2.9	-26.4	-3.4	1.0	-5.8

Sources: Angolan authorities, and staff estimates.

Table 21. Angola: Summary of Government Operations, 1998-2002

(In millions of U.S. dollars, unless otherwise indicated)

	1998	1999	2000	2001	2002 Prel.
Total revenue	2,034	2,852	4,586	4,029	4,367
Oil	1,506	2,504	4,098	3,209	3,349
Non-oil	528	348	488	820	1,017
Income taxes	133	94	135	241	286
Taxes on goods and services	156	118	160	263	334
Taxes on foreign trade	143	80	123	199	242
Other	96	55	69	117	155
Total expenditure	2,771	5,016	5,387	4,383	5,370
Current expenditure	2,352	3,112	3,972	3,180	3,986
Personnel	592	258	526	725	1,217
Goods and services	1,139	1,652	2,354	1,523	2,126
Interest payments due	552	556	496	445	357
Transfers	69	645	596	487	286
Capital expenditure	381	785	561	568	770
Quasi-fiscal expenditures	...	...	442	86	22
Central bank operational deficit	...	...	5	9	246
Discrepancy (unexplained)	39	1,119	407	540	347
Overall balance before grants (accrual basis)	-737	-2,164	-801	-354	-1,003
Change in payment arrears (net)	752	659	2,361	-106	842
Domestic	255	195	2,032	-341	731
External interest	497	464	330	235	111
Overall balance before grants (cash basis)	15	-1,504	1,560	-460	-161
Financing	-15	1,504	-1,560	460	161
Onetime oil field concession bonuses	51	935	0	195	312
Grants	164	243	203	213	0
External financing (net)	-824	125	-427	-468	-553
Disbursements	273	904	1,049	1,167	934
Amortization	-1,139	-780	-1,485	-1,638	-1,408
Short-term borrowing, net	0	0	0	0	-79
Domestic financing (net)	594	201	-1,336	519	402
Memorandum items:					
Exchange rate (average)	0.4	2.8	10.0	22.1	43.7
Price of Angola's oil (in U.S. dollars per barrel)	12.0	17.6	27.2	24.2	24.3
Oil production (millions of barrels)	270	272	273	270	330
Oil production (millions of U.S. dollars)	3,235	4,806	7,441	6,542	8,015
Oil revenues/oil production (in percent)	46.6	52.1	55.1	49.0	41.8

Sources: Angolan authorities; and staff estimates.

Table 22. Angola: Functional Distribution of Government Expenditure, 1998-2002

	1998	1999	2000	2001	2002 Prel.
	(In billions of kwanzas)				
General public services and other economic affairs	0.2	0.5	3.9	26.9	77.9
Defense and internal security	0.4	4.4	8.0	15.0	35.3
Education	0.1	0.3	1.7	6.5	14.0
Health	0.0	0.2	1.8	5.5	9.3
Social security, welfare, and housing	0.0	0.2	4.9	6.9	13.4
Energy, agriculture, mining, and transportation	0.0	0.2	1.8	7.2	12.1
Interest payments (committed)	0.2	1.6	5.0	0.2	4.9
Unclassified	0.1	6.6	27.1	28.5	67.8
Total	1.1	14.0	54.1	96.7	234.7
	(In percent of GDP)				
General public services and other economic affairs	7.7	3.1	4.4	12.9	15.9
Defense and internal security	14.5	25.8	9.0	7.2	7.2
Education	2.6	1.5	1.9	3.1	2.9
Health	1.4	1.2	2.0	2.6	1.9
Social security, welfare, and housing	0.9	1.2	5.5	3.3	2.7
Energy, agriculture, mining, and transportation	1.5	1.3	2.0	3.4	2.5
Interest payments (committed)	8.6	9.1	5.6	0.1	1.0
Unclassified	5.8	39.1	30.4	13.6	13.8
Total	43.0	82.4	60.8	46.3	47.9
	(In millions of U.S. dollars)				
General public services and other economic affairs	493	188	388	1,220	1,782
Defense and internal security	934	1,572	793	680	808
Education	167	92	169	295	320
Health	89	73	179	249	213
Social security, welfare, and housing	60	73	486	313	307
Energy, agriculture, mining, and transportation	99	80	180	326	277
Interest payments (committed)	552	556	496	9	112
Unclassified	376	2,381	2,696	1,291	1,551
Total	2,771	5,016	5,387	4,383	5,370

Sources: Angolan authorities; and staff estimates.

Table 23. Angola: Population Statistics, 1997-2001 1/

	1997	1998	1999	2000	2001
(In thousands)					
Population	12,240	12,595	12,960	13,340	13,731
Urban	5,273	5,436	5,604	5,778	5,957
Rural	6,967	7,159	7,356	7,562	7,774
(Change in percent)					
Population	2.9	2.9	2.9	2.9	2.9
Urban	3.1	3.1	3.1	3.1	3.1
Rural	2.8	2.8	2.8	2.8	2.8
(In percent of total)					
Age group					
0-19	59.6	58.0	58.0	58.0	...
20-44	31.0	29.5	29.5	29.5	...
45 +	9.4	12.5	12.5	12.5	...

Sources: National Institute of Statistics; and staff estimates.

1/ Population figures are projected from the 1970 census. In mid-1996, a nationwide survey yielded a population estimate of 15.3 million.

Table 24. Angola: Summary of Tax System as of June 30, 2003
(all amounts in kwanzas, unless indicated otherwise) ^{1/}

Tax	Nature of Tax	Exemptions and Deductions	Rates	
I. Central government				
1. Taxes on net income and profits				
1.1 Individual				
1.1.1 Earned income tax (<i>Imposto sobre o Rendimento do Trabalho</i>) Law 10/99 of October 29, 1999, rcpals Law 12/92 of June 19, 1992	Tax on labor income in money or in kind, whether contractual or not, fixed or variable, periodic or occasional, regardless of source, place, currency, or form of calculation and payment.	<i>Not defined as taxable income:</i> maternity, death, occupational accident and disease, unemployment, and funeral allowances; old age, disability, and survivors' pensions; retirement bonus; cash shortage allowance; per diem, vacation, and thirteenth-month allowances; representation, travel, relocation, family, and housing rental allowances; severance pay; social security contributions; and remuneration of casual agricultural and domestic employees.	(a) and (b) Monthly Income (In Kz)	Tax Due (In percent)
			Up to 2000	Exempt
			2001-5000	2% of excess over 2,000
			5,001-10,000	60 + 4% of excess over 5,000
			10,001-15,000	260 + 6% of excess over 10,000
			15,001-20,000	560 + 8% of excess over 15,000
			20,001-30,000	960 + 10% of excess over 20,000
			30,001-50,000	1,960 + 12.5% of excess over 30,000
			Over 50,001	4,460 + 15% of excess over 50,000
			Updated by Exec. Dec. 16/01 of April 12, 2001	
			(b) Self-employment income Kz 20% (Article 1(3)(b) of the Code)	
		<i>Exemptions:</i> diplomatic personnel (if bilateral reciprocity applies); staff of international organizations, as established in agreements ratified by the competent Angolan authority; staff of NGOs pursuant to Agreements with prior approval from the Ministry of Finance; handicapped individuals and maimed war veterans with at least 50% incapacity; individuals more than 60 years old and military personnel; Monthly remuneration up to Kz 2,000.		
1.1.1.1 Employees	Tax on all remuneration received by			

Table 24. Angola: Summary of Tax System as of June 30, 2003
(all amounts in kwanzas, unless indicated otherwise) ^{1/}

Tax	Nature of Tax	Exemptions and Deductions	Rates	
	employees, including allowances and bonuses.			
	b. Income of partners in firms, members of boards of directors or other corporate managing bodies, fiscal boards, general shareholder meeting bureaus, and other corporate bodies.			
1.1.1.2	Self-employed			
	Tax on income earned during the base year from self-employment in a predominantly scientific, artistic, or technical profession, or from services not subject to another tax.			
1.1.2	Capital income tax (<i>Imposto sobre a Aplicação de Capitais</i>) Legislative Instrument 36/72 of May 1, 1972, amended by Law 14 /92 of July 3, 1992	Annual tax on income from financial investments indicated in Sections A and B. <i>Section A</i> covers interest on loans, credit contract fees, and late payment fines and charges. <i>Section B</i> covers (at the regular rate) interest paid by firms to their partners; compensation paid to firms for suspension of activities and other miscellaneous capital income; and (at the reduced rate) profits distributed by partnerships and corporations; capital income of cooperative members; interest on debentures; profits from limited partnerships and from shares issued with preferential subscription rights; returns of any kind from the assignment of copyrights on literary, artistic, or scientific works, including films, patents, equipment, and know-how in the industrial, commercial, or scientific sector; and any other income arising from the mere investment of capital and not included in Section A.	<i>Exemptions:</i> <i>For Section A</i> , income of financial institutions and cooperatives; interest on installment sales (including late interest); and interest on loans made by life insurance companies to the insured. <i>For Section B</i> , profits distributed by holding companies; profits already taxed in other firms where they were generated; interest on demand deposits; interest on certain government debt; and interest on time deposits with the banking system. <i>Tax incentive:</i> exemption, for a period of three-five years, for profits distributed to partners in firms entitled to the exemption set forth in Art. 14 of the Industrial Tax Code (C.I.I.) for a like period.	15 percent regular rate. 5 percent reduced rate on some Section B income.

Table 24. Angola: Summary of Tax System as of June 30, 2003
(all amounts in kwanzas, unless indicated otherwise) ^{1/}

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.2 Corporate			
1.2.1 Industrial tax (<i>Imposto Industrial</i>) Legislative Instrument 35/72 of April 29, 1972, amended by Law 18/92 of July 3, 1992; Law 7/96 of April 19, 1996; Executive Decree 84/99 of July 11, 1999; Law 5/99 of August 6, 1999	<p>Tax on profits, whether incidental or recurrent, imputable to any commercial or industrial activity not subject to earned income tax; to agricultural, forestry, and cattle-raising activities; to mediation or representation in the execution of contracts of any kind; and to agents of industrial or commercial enterprises doing business in Angola or abroad and having domicile, main offices, or effective management power or a fixed establishment in Angola.</p> <p><i>Group A</i> — actual profits: state enterprises; companies; corporations; commercial firms with capital exceeding 35 UCFs^{2/}; credit institutions; insurance institutions; individuals or companies with domicile, main offices, or effective management power in Angola or abroad and with a fixed establishment in Angola; taxpayers with average sales above 1,538 UCFs in the last three years; and Group B taxpayers electing to be included in Group A.</p> <p><i>Group B</i> — presumptive profits: taxpayers not included in Groups A or C and who engage in occasional industrial or commercial activities.</p> <p><i>Group C</i> — estimated potential profits: individual taxpayers meeting all the following conditions: (a) self-employed in a commercial or industrial activity included in the schedule; (b) work alone or with no more than three family members or other persons; (c) do not keep reliable books; (d) own no more than two motor vehicles;</p>	<p><i>Exempt:</i> workers' production cooperatives; building cooperatives engaged in construction directly or in the lending of money to members for that purpose; consumer, agricultural and cattle-raising cooperatives dealing exclusively with their members; instructional, cultural, leisure, physical education, or sports associations; firms that administer only their own properties; foreign maritime and air transport companies, if reciprocal privileges are given to Angolan companies in their countries; commercial and industrial income subject to the special tax regime; and the National Bank of Angola.</p> <p><i>Tax incentives:</i> allowed for those engaging in new agricultural, forestry or cattle-raising activities for a period of up to ten years, and also to agricultural, forestry, cattle-raising, and fishing activities with annual sales below 269 UCFs.</p> <p>Income from the establishment of new industries in Angola is also eligible for the exemption, as well as income from commercial activities in areas designated as key to economic development, for a period of 3-5 years.</p> <p>All or part of the profit from activities carried out to implement social assistance, welfare and other social projects</p>	<p>35 percent regular rate.</p> <p>20 percent on income exclusively from agricultural, forestry, and cattle-raising activities.</p> <p>The Ministry of Finance may authorize a 50 percent reduction of the rates for companies that locate in economically disadvantaged areas and set up industries using local resources, for up to ten years.</p>

Table 24. Angola: Summary of Tax System as of June 30, 2003
(all amounts in kwanzas, unless indicated otherwise) ^{1/}

Tax	Nature of Tax	Exemptions and Deductions	Rates
	and (c) whose current sales do not exceed 269 UCFs.		
1.2.1.1 Art. 32 – New wording – Law 7/96 of April 19, 1996	No. 2 now reads as follows: “For capital assets totally amortized in the period preceding the entry into force of said decree, the maximum amounts shall be taken into account only if compliance is demonstrated with the procedures established in Article 4(2) as well as the provisions of Article 5(3)(b) of said legislative instrument.”		
1.2.1.2 Prepayment of the industrial tax – Law 5/99 of August 6, 1999	The provisional payment referred to in Article 78 of the C.I.I. regarding taxpayers in groups A and B is now monthly for the amount representing 10 percent of total sales volume, services rendered, etc. Income received in the preceding month.		35 percent
1.2.1.3 Taxation of contract work Law 7/97 of October 10, 1997	A special tax regime covering contract and subcontract work and services rendered is applicable to individuals or companies, whether or not they have headquarters, actual control, effective management power, or a fixed establishment in Angola, operating occasionally or permanently, provided they are not subject to the earned income tax. Taxable base The taxable base includes (a) in the case of construction, improvement, repair or maintenance of fixed assets X10 percent of the value of the contract, regardless of its form; (b) in all other cases, 15 percent of that amount.		35 percent

Table 24. Angola: Summary of Tax System as of June 30, 2003
(all amounts in kwanzas, unless indicated otherwise)^{1/}

Tax	Nature of Tax	Exemptions and Deductions	Rates				
1.2.1.2	Revaluation of assets Decree 6/96 of January 26, 1996; Order 6/99 of January 22, 1999, repealing orders 53/96 of June 3, 1996 and 1/99 of January 8, 1999 Order 7/99 of January 22, 1999; Order 37/00 of February 3, 2000 Order 38/01 of February 9, 2001	Allows for the revaluation of tangible fixed assets which are and are expected to remain in service, duly recorded in the following accounts: buildings, construction for specific purposes, facilities, manufacturing and other equipment, means of transportation, furniture, fixtures, and other fixed assets. Revaluation will be made by applying the indexation coefficients established by decree of the Minister of Finance. The base and maximum values, procedure, reserve, tax system, rendering useless or destruction and sale of assets, and revaluation, amortization, and inventory tables are specified.		Exchange Rate			
				Year	Kz/US\$	Index	Coefficient
				1994	529.6230	81.4805	515.2174
				1995	5,920.0000	11.1778	46.0931
				1996	209,099.0000	35.3208	1.3050
				1997	272,871.0000	1.3050	1.0000
				Exchange Rate			
				Year	Kz/US\$	Index	Coefficient
				1997	272,871.0000	1.3050	2.3491
				1998	641,000.0000	2.3491	1.0000
				Exchange Rate			
				Year	Kz/US\$	Index	Coefficient
				1998	0.64100	2.34910	8.78838
1999	5.63335	8.78838	1.00000				
Exchange Rate							
Year	Kz/US\$	Index	Coefficient				
1999	5.63335	8.78838	3.01506				
2000	16.98487	3.01506	1.00000				
1.2.2	Tax regime for the mining industry Law 1/92 of January 17, 1992; Decree Law 4-B/96 of May 31, 1996 (D.R. 22/96 – Supplement)	The mining industry is subject to the following: (a) industrial income tax on its earnings; (b) royalties on the value of its mineral resources; and (c) surface tax.		b) Precious stones and metals	5 percent		
				Semiprecious stones	4 percent		
				Metallic minerals	3 percent		
				Other mineral resources	2 percent		
				c) First and second years	1 US\$/sq. km.		
				Third year	3 US\$/sq. km.		
				Fourth and fifth years	4 US\$/sq. km.		
1.2.3	Special tax regime for the oil industry						
1.2.3.1	Oil production tax (Imposto de produção de petróleo)	Tax on the value of the oil, paid by oil companies operating in joint venture with SONANGOL.	Enterprises operating under risk contracts may deduct from the tax calculation base, as investment cost, up to 50 percent of the oil produced.	a - Cabinda province:	20 percent.		
				b - Other provinces			

Table 24. Angola: Summary of Tax System as of June 30, 2003
(all amounts in kwanzas, unless indicated otherwise) ^{1/}

Tax	Nature of Tax	Exemptions and Deductions	Rates
Decree 41 356 of November 11, 1957 (B.O. 49 of December 4, 1957); Decree 68/70; Law 167.13/78 of August 26, 1978		Production tax (1.2.3.1) and transactions tax (1.2.3.3) paid are also deductible from the calculation base.	(In percent) Basic rate 12 ½ Surcharge <u>4 1/6</u> Total 16 2/3
1.2.3.2 Oil income tax (<i>Imposto de rendimento de petróleo</i>) Decree 41 357 of November 11, 1957 (B.O. 49 of December 4, 1957); Law 13/78 of August 26, 1978	Tax on the profits of oil companies.	<i>Tax incentives:</i> the tax base is reduced by a production incentive (in practice, adjusted to production costs) and an investment incentive (a fraction of the historic investment costs).	(In percent) Basic rate 50.00 Surtax <u>15.75</u> Total 65.75
1.2.3.3 Oil transactions tax (<i>Imposto de transações sobre o petróleo</i>) Decree 5/85 of March 28, 1985; Decree 29/86 of December 30, 1986	Tax on gross profit, adjusted for tax incentives, arising from production in the province of Cabinda under joint exploration arrangements with SONANGOL.		70 percent.
2. Social security contributions Law 18/90 of October 27, 1990; Decree 27/91 of July 5, 1991; Decree 7/99 of May 28, 1999	Contributions to social security intended to guarantee the physical subsistence of citizens unable or with diminished capacity to work, and that of their surviving family members upon their death.		Employer share: 8 percent of wages Employee share: 3 percent of wages.
3. Taxes on goods and services			
3.1 Sales tax	There is no sales tax.		
3.2 Excise tax (<i>Imposto de consumo</i>)	A set of specific and ad valorem taxes on		5-30 percent.

Table 24. Angola: Summary of Tax System as of June 30, 2003
(all amounts in kwanzas, unless indicated otherwise) ^{1/}

Tax	Nature of Tax	Exemptions and Deductions	Rates
Decree 24/89 of May 27, 1989, amended by Decrees 70/91 of May 15, 1992, and 13/93 of April 14, 1993	the production and importation of specified goods, such as beer, liquefied gas, industrial alcohol, jewelry, household durable goods, beverages, electronics, automobiles, etc.		
3.2.1 Excise tax – Government authorized by legislature: Resolution 6/96 (D.R. 21 of May 24, 1996);	Levied on the following: (a) the production and importation of goods, including raw materials and semifinished products to be used in production, regardless of their origin; (b) auctions or sales carried out by customs and other public services;	<i>Exemptions:</i> (a) goods exported by the producer or by legally recognized entities established for this purpose; and (b) goods manufactured as a result of activities performed through artisanal processes. <i>Not subject:</i> (a) unprocessed agricultural and livestock products; (b) forestry primary products; (c) unprocessed fishing products; and (d) unprocessed mineral products.	General rate Schedule I Taxed goods Schedule II Subsidized rates
3.2.2 Law 9/99 of October 1, 1999	(c) the use of goods or raw materials other than in the production process and which benefited from tax exemption; and (d) expansion of the tax base to include telecommunications, hotel and similar services, consumption of water and electricity.		10 percent 15 – 50 percent 5 percent
3.2.3 Decree 75/97 of October 24, 1997 New Excise Tax Schedule			
3.2.4 Decree 41/99 of December 10, 1999 approving and regulating the excise tax. Repeals Decrees 24/89 of May 27, 1989, 75/97 of October 24, 1997, 13/93 of April 14, 1993, and 20-M/92 of May 15, 1992.	Goods produced in Angola are defined as those which are produced or manufactured in the country or those whose production process was completed in the national territory.		
4. Taxes on international transactions			
4.1 Import duties	A tariff code with average ad valorem rates of 12 percent, as well as a number of specific taxes.	<i>Exempt:</i> purchases by government, oil companies, armed forces, nonprofit organizations, diplomatic missions and their staff, international organizations, tax-exempt economic projects, seeds and wheat.	Generally, the tariff is ad valorem with rates of 100 percent, determined on the basis of the classification of the good as essential, necessary, useful, superfluous, or luxury.
4.2 Export duties	Various specific and ad valorem taxes on exported goods.	Crude oil and coffee are exempt.	Average rate of approximately 4 percent.

Table 24. Angola: Summary of Tax System as of June 30, 2003
(all amounts in kwanzas, unless indicated otherwise) ^{1/}

Tax	Nature of Tax	Exemptions and Deductions	Rates
5. Other taxes			
5.1 Urban real estate tax (<i>Imposto Predial Urbano</i>) Legislative Instrument 4044 of October 13, 1970	Tax on urban real estate. The calculation base is the actual or potential rental value, and the person liable for the tax is the person entitled to the rent.	<i>Exempt:</i> buildings (a) occupied by a taxpayer subject to the industrial tax (see 2.2) and paying no rent not exceeding a specified limit; (c) made available free of charge to public services, charitable institutions, schools, museums, and the like; (d) used solely as places of worship; (e) belonging to embassies and consulates, on a reciprocity basis; and (f) belonging to nonprofit professional and economic organizations. <i>Tax incentive:</i> new housing construction may qualify for exemption for a period of 5-15 years, depending on housing policy priorities.	30 percent of the actual or potential annual rental value.
5.1.1 Art. 17 and 28 (Amended by Law 6/96 of April 19, 1996)	<p data-bbox="522 878 590 899">Art. 17</p> <p data-bbox="522 906 926 1068">1. When a building or part thereof is rented for a lesser amount than the last annual rental contract, or for less than its rental value if it has not been rented previously, it is deemed not to be rented for tax collection purposes.</p> <p data-bbox="522 1101 926 1235">4. If the previous rent was outdated, the new rent should be compared with the rent of a building, or part thereof, under a rental agreement, which best serves as a comparator.</p> <p data-bbox="522 1268 590 1289">Art. 28</p> <p data-bbox="522 1295 926 1377">3. The rent... may never be less than amount established for government buildings under the current legislation.</p>		

Table 24. Angola: Summary of Tax System as of June 30, 2003
(all amounts in kwanzas, unless indicated otherwise) ^{1/}

Tax	Nature of Tax	Exemptions and Deductions	Rates																										
5.2	Gift and inheritance tax (<i>Imposto sobre as sucessões e doações</i>) Legislative Instrument 230 of July 18, 1931, amended by Law 15/92 of July 3, 1992	A progressive tax on unrequited transfers and on inheritance of money, government securities, stocks, corporate and bank credit instruments, and any movable or immovable property, as well as housing or water rights, perpetual easements, and unrequited waiver of annuities.	<p><i>Exempt:</i> acquisitions by the government, municipal services, charitable institutions, museums, libraries, schools. Also exempt are acquisitions of literary and artistic property and pensions, as well as gifts not exceeding 2 UCFs to descendants, ascendants, or spouses.</p> <p>Schedule of tax rates (in percent):</p> <table> <thead> <tr> <th></th> <th>Up to 11 UCFs</th> <th>Above 11 UCFs</th> </tr> </thead> <tbody> <tr> <td>Between spouses; to descendants or ascendants</td> <td>10</td> <td>15</td> </tr> <tr> <td>Between any other persons</td> <td>20</td> <td>30</td> </tr> </tbody> </table> <p>Calculation: these rates are applied as average rates up to the ceiling of the lower bracket and as marginal rates above said ceiling.</p>		Up to 11 UCFs	Above 11 UCFs	Between spouses; to descendants or ascendants	10	15	Between any other persons	20	30																	
	Up to 11 UCFs	Above 11 UCFs																											
Between spouses; to descendants or ascendants	10	15																											
Between any other persons	20	30																											
5.3	Real estate transfer tax (<i>Sisa sobre a transmissão de imobiliários por título oneroso</i>) Law 230 of July 18, 1931, amended by Law 15/92 of July 3, 1992	A tax on transfers of real property through sale, barter, lapse of rights, etc. (gifts are subject to the gift and inheritance tax; see 5.2), and of assets, inheritance rights, long-term leases (20 years or more), water rights, exploration rights, or perpetual easements.	<p><i>Exempt:</i> acquisitions by the government, municipal services, and charitable institutions, certain court-ordered transfers, eminent domain expropriation, and housing sold by the Government Employees Provident Fund (<i>Cofre da Previdência dos Funcionários Públicos</i>).</p> <p>10 percent of the amount of the transfer.</p>																										
5.4	Stamp tax (<i>Imposto do selo</i>) Decree-Law 1647/45 of May 29, 1945; Decree 7/89 of April 15, 1989; Decree 18/92 of May 15, 1992; Executive Decree 34/95 of July 21, 1995; and Executive Decree 85/99 of June 11, 1999.	A tax on documents and operations listed in the stamp tax general schedule.	<p><i>Exempt:</i> verbal contracts.</p> <p>Sample rates:</p> <table> <tbody> <tr> <td>Capital increases</td> <td>0.5 percent</td> </tr> <tr> <td>Housing leases</td> <td>0.7 percent of agreed rent</td> </tr> <tr> <td>Commercial leases</td> <td>0.7 percent of agreed rent</td> </tr> <tr> <td>Sales contracts</td> <td>0.5 percent</td> </tr> <tr> <td>Acknowledgment of debt</td> <td>3.0 percent; 100/page</td> </tr> <tr> <td>Liquidation of Companies</td> <td>0.5 percent</td> </tr> <tr> <td>Bank draft</td> <td>0.5 percent</td> </tr> <tr> <td>Gifts</td> <td>0.4 percent</td> </tr> <tr> <td>Loan guarantees</td> <td>0.3 percent</td> </tr> <tr> <td>Dividends</td> <td>1.0 percent</td> </tr> <tr> <td>Postal money orders</td> <td></td> </tr> <tr> <td>Up to Kz 80</td> <td>0.5 percent</td> </tr> <tr> <td>Above Kz 80</td> <td>0.4 percent</td> </tr> </tbody> </table>	Capital increases	0.5 percent	Housing leases	0.7 percent of agreed rent	Commercial leases	0.7 percent of agreed rent	Sales contracts	0.5 percent	Acknowledgment of debt	3.0 percent; 100/page	Liquidation of Companies	0.5 percent	Bank draft	0.5 percent	Gifts	0.4 percent	Loan guarantees	0.3 percent	Dividends	1.0 percent	Postal money orders		Up to Kz 80	0.5 percent	Above Kz 80	0.4 percent
Capital increases	0.5 percent																												
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Table 24. Angola: Summary of Tax System as of June 30, 2003
(all amounts in kwanzas, unless indicated otherwise)^{1/}

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.4.1 Art. 114-A Stamp tax schedule (Amended by Law 4/96 of April 12, 1996) (Amended by Decree 31/99 of October 15, 1999 Revised – D.R. 49/99 of December 3, 1999 – new Wording	<i>Banking operations:</i> I. Foreign drafts, gold certificates (<i>guias ouro</i>) issued and public funds or negotiable securities sold; II. Foreign banknotes and coins, traveler's checks and checks in foreign currency payable to individuals; III. Interest charged by banking institutions, specifically by discounting treasury bills and notes for loans, for credit accounts being liquidated, and all late payment interest, premiums, and interest on acceptances, bills receivable on behalf of others, domestic drafts issued, or any other transfers, and generally all commissions charged.	<i>Exempt:</i> banking operations between banking institutions, between exchange houses, or between the latter and the former, however, when bills of exchange are used for payment abroad, they will be exempted only when they pertain exclusively to transactions carried out by banking institutions. However, sales of foreign banknotes and coins by exchange dealers to banks and banking houses, as well as sales of gold bars carried out through the same banks and banking houses, will be subject to the stamp tax referred to in this article, as they are considered analogous to the operations indicated in numerals I and II.	I. 1.5 per mil of the amount involved. II. 0 percent of the amount involved. III. 1 percent of the amount involved.
5.4.2 Art. 133 of the schedule (Amended by Law 4/96 of April 12, 1996)	Receipts or quitclaims		1 percent
5.4.3 Motor Vehicle circulation tax (<i>Taxa de Circulação</i>) D.L. 3837 - Executive Decree 43/97 of October 10, 1997;	Levied on all motor vehicles in the country or which may be put on the road in the country in future.	<i>Exempt:</i> vehicles belonging to government departments, administrative bodies, and economic coordination agencies. Vehicles belonging to foundations and associations in the public interest, as well as others exempted from the payment of any taxes by special legislation. Vehicles with canceled registration.	<i>Motorcycles</i> Up to 125 cc engine capacity 90 Over 125 cc engine capacity 105 <i>Light automobiles</i> Up to 1,500 cc engine capacity 210 Over 1,500 cc up to 1,800cc 315 Over 1,800 cc engine capacity 420 <i>Heavy automobiles</i> Up to 10,000 kg tare weight 525 Over 10,000 kg tare weight 720
5.4.4 Executive Decree 39/99 of January 27, 1999;			
5.4.5 Executive Decree 2/00 of January 14, 2000			
5.4.6 Executive Decree 6/01 of February 13, 2001			
II. Provincial governments	There are no provincial taxes.		
III. Municipalities	There are no municipal taxes.		

Table 24. Angola: Summary of Tax System as of June 30, 2003
(all amounts in kwanzas, unless indicated otherwise)^{1/}

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.5 Ministry of Finance Executive Decree 66/95 of December 15, 1995	Establishes the amounts and modalities for allocating the receipts of direct and indirect taxes charged and collected to local and state government budgets.		
Executive Decree 8/98 of February 6, 1998 amends Executive Decree 66/95 of December 15, 1995	Expands the number of rates and taxes allocated to the local and state government budgets.		
Executive Decree 80/99 of May 22, 1999 repeals Executive Decree 8/98 of February 6, 1998			

Source: Angolan authorities.

^{1/} According to the authorities there were no changes relative the summary presented in last year's Article IV report.

^{2/} "Fiscal correction Units" (UCFs)—through which taxable values are periodically indexed. 1 UCF=Kz 5 (Executive Decree 01/00 of January 7, 2000).