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ANGOLA

Selected Issues and Statistical Appendix

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Approved by the African Department

February 25, 2005

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LIST OF ACRONYMS

ASCORP	Angola Selling Corporation
bbl	barrel
BNA	Banco Nacional de Angola (Angola National Bank)
bpd	barrel per day
DNI	Ministry of Finance Tax Directorate
EIA	U.S. Energy Information Administration
EITI	Extractive Industries Transparency Initiative
ENDIAMA	Empresa Nacional de Diamantes de Angola (Angola National Diamond Company)
GDP	Gross Domestic Product
IFIs	International Financial Institutions
Kz	Kwanza
LNG	Liquified Natural Gas
LPD	Liquid Petroleum Gas
NIR	Net International Reserves
NPV	Net Present Value
PIT	Petroleum Income Tax
PSA	Production Sharing Agreement
PTT	Petroleum Transaction Tax
SODIAM	Sociedade de Comercialização de Diamantes de Angola (Subsidiary of ENDIAMA)
Sonangol	Sociedade Nacional de Combustível de Angola (Angola National Oil Company)
TRR	Tax / Receipts Ratio for Oil Revenues
UN	United Nations
UNITA	Unidade Nacional para la Independência Total de Angola
Upstream	Upstream, International Oil & Gas Newspaper
WEO	World Economic Outlook, IMF

I. Oil Sector and Government Revenues[1]

A. Introduction

1. Oil production in Angola currently accounts for about half of GDP and about 75 percent of government revenue. With oil production forecast to double over the next three years, projections for the government's fiscal position in the medium term will be crucially dependent on both the value of oil production and the proportion that will accrue to the government. However, in addition to the usual uncertainties associated with projections of the total value of oil output, the government's share has recently been subject to volatility. For instance, between 2000 and 2003, while both overall production levels and government tax revenue from oil were generally rising, data now available indicate that the government's share of total oil receipts declined from 53 to 43 percent.

2. This note examines the tax system of the Angolan oil industry and recent production and tax data, to try to estimate the effects of some identifiable factors which might have caused changes in the government's share in total oil receipts in Angola and to produce forecasts.[2] Although a structural model of the Angolan oil sector– such as the oil revenue model, developed for the independent Oil Diagnostic Study, published by the government in May 2004– would provide the best way of doing this, use of such a model requires comprehensive data on oil companies' costs and careful calibration of its results against outturn revenue data. In advance of fully articulated results from such an exercise, this note contributes a methodology to estimate the costs claimed by oil companies, using data about their combined tax liabilities, and suggests a way of using such data to forecast the average government share in oil receipts and future government oil revenues.[3] Illustrative forecasts of the government share and of future government revenues from oil are also shown.

3. The remainder of this note is organized in five sections: Section B contains a brief introduction to the Angolan oil industry; Section C describes the oil taxation system in Angola; Section D examines how production shifts between different production blocks have contributed to the fall in the government's share of total oil receipts; and Section E describes a methodology for estimating costs and deductions from tax date and hence for forecasting future oil revenues for the government. Section F concludes.

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[1] Prepared by Paolo Dudine.

[2] For a broad account of oil taxation in Angola, together with a detailed description of the role and activities of the national oil company Sonangol, see "Sources and Uses of State Oil Revenue" in *Angola: Selected Issues and Statistical Appendix*, IMF (2003).

[3] Initial outturns from an exercise using the oil diagnostic revenue model with provisional cost data indicate growing over-predictions of government revenue over time. The government has indicated that it will support further work to update the model and generate projections.

B. Oil Production in Angola

4. Angola's oil output is expected to double to 2 million barrels per day (bpd) around mid-2007. Moreover, with proven reserves of over 5 billions barrels,[4] Angolan oil production could continue at very high levels into the 2020s. In addition to oil, recent plans to extract natural gas and to build a LNG plant, as well as improved extraction of liquid petroleum gas (LPG), are expanding the range of activities of the Angolan natural resource sector.

5. Angolan oil has been flowing predominantly from offshore fields since production from shallow waters started off the cost of the Province of Cabinda in 1968. Although the development of shallow water fields sustained a doubling of output during the 1980s, it was not until the 1990s, with the application of new techniques of deepwater drilling, that a dramatic boost in production occurred; the newly discovered deep water fields pushed production from under 0.5 million bpd in 1990 to the current level of 1 million bpd, and has added considerably to reserves.

6. In 1976, the government set up a national oil company, the *Sociedade Nacional de Combustivel de Angola* (Sonangol) and in 1978 promulgated a law that made the government the sole owner of Angolan oil and Sonangol the sole concessionaire for its exploration and extraction. Subsequently, the continental shelf has been divided into a total of 35 blocks, most of which have been offered for bidding by international oil companies for the development of extraction activities. Seven production blocks are currently active: the onshore blocks FS and FST (the only onshore blocks now in service), the shallow water blocks off Cabinda (called "Block 0"), the shallow water block 2, deep water block 3, and the newer deep and ultra-deep water blocks 14, 15, and 17. Other blocks (such as blocks 31 and 32) are currently being explored and another (block 18) is expected to start production in 2007 (see Table I.1 for a summary).

Table I.1. Angola: Summary of Oil Industry, 2004

Block	Type	Production Started/Planned in	Production, 2004 (thousands of barrels per day)	First Commercial Discovery
Cabinda	Shallow water	1973	393	...
FS - FST	On-shore	...	13	...
2	Shallow water	...	39	...
3	Deep water	...	120	...
14	Deep water	2000	61	1997
15	Ultra-deep water	late 2003	134	1998
17	Ultra-deep water	2002	235	1997
18	Ultra-deep water	2007	...	1997

Source: Upstream, September 17 2004.

[4] Recent reports from oil companies suggests that actual reserves could be much higher than this figure for proven reserves which comes from *Angola Country Analysis Brief*, EIA (2005).

7. Future growth in output is expected to come primarily from new deep and ultra-deep water blocks, as production has peaked, or is close to peaking, in the more mature onshore and shallow-water fields (see Figure I.1). These newer blocks have provided the major contribution to production growth in the past three years, and their profitability has also been the major drive for investments to the industry (see Table I.2).

Figure I.1. Angola: Oil Production by Major Blocks, 2000 - 2008
(Millions of barrels per day)

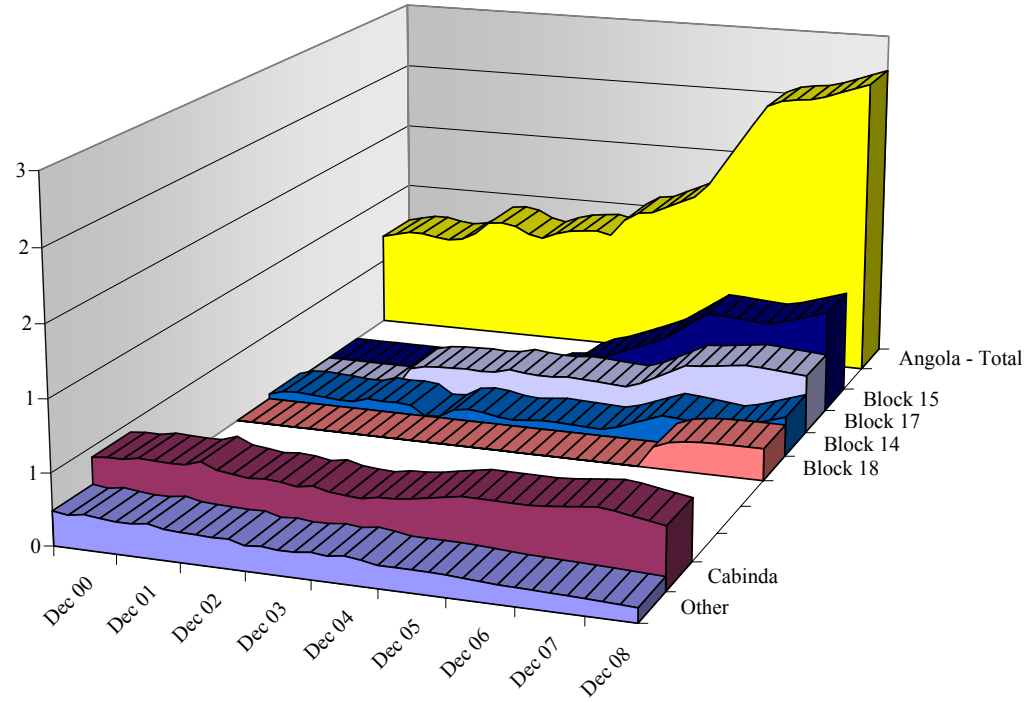


Table I.2. Angola: Major Current Investment Projects

Block	Project	Total Expected Investment (billions of U.S. dollars)	Expected Contribution to Production (thousands of barrels per day)	Declared Recoverable Reserves (millions of barrels)
14	Benguela/Belize	2.2	120 (late 2005)	...
15	Kizomba A Project	3.4	250 (2005)	1,070
15	Kizomba C Project	3.0	250 (2007)	...
17	Dalia Project	3.9	225 (mid 2006)	1,590
18	Great Plutonio	between 2 and 3	250 (late 2007)	...

Source: Upstream, 17 September 2004, and EIA.

C. Oil Taxation in Angola

8. There are two distinct oil tax regimes in Angola: (i) a **tax and royalty** regime and (ii) **production sharing agreements (PSA)**. The Angolan government also raises revenue from signature bonuses and exploration rights. The tax and royalty regime applies to operations in the area of Cabinda and in the onshore blocks FS-FST. In 2003, company operations in these blocks accounted for almost 47 percent of total production and for almost 48 percent of oil revenues accruing to the government. PSAs apply in all other blocks.

9. The Angolan **tax and royalty regime** provides revenue to the government through three taxes: the production tax (commonly known as royalty), the income tax (commonly referred to as Petroleum Income Tax, PIT), and the transaction tax (commonly referred to as Petroleum Transaction Tax, PTT).

Box I.1. Angola: Tax and Royalty Regime

To compute royalties, transaction, and income taxes the following rules and concepts apply:

1) Output value. As a first step, to compute the tax base towards all taxes (production, income and transaction taxes), oil output is valued monthly at an agreed average market price (*preço de referência fiscal*).

2) Production tax. The production tax (royalty) is an *ad valorem* tax levied on the value of production. The rate is 20 percent in the Cabinda blocks and 16.67 percent in blocks FS and FST. The tax is payable in kind or in cash.

3) Taxable income. Taxable income is computed as the value of production minus:

i) operating costs (including rents paid to third parties for exploration and development activities);

ii) amortization of exploration, development and installation costs.

The full costs of exploration, development, and installation of production sites are amortized over a period of six years.

4) Transaction tax (petroleum transaction taxes, PTT). Transaction taxes apply only to the Cabinda blocks and are levied on taxable income with a fixed 70 percent rate. Production and investment premiums are deductible towards this tax.

$$PTT = 0.7 * (\text{taxable income} - \text{prod. premium} - \text{inv. premium}).$$

Production premiums equal the value of output computed at a reference price. The reference price grows by 7 percent a year and differs from block to block (in 2004 the price for Cabinda A was US$ 18.217). Investment premiums are equal to 50 percent of the amounts invested and capitalized each year for the block Cabinda A, and they are calculated according to an agreed formula for the blocks Cabinda B and C.

5) Income tax (petroleum income tax, PIT). This is levied on taxable income and has a flat rate of 65.75 percent. Production and transaction taxes are deductible toward this tax.

$$PIT = 0.6575 * (\text{taxable income} - \text{production tax} - PTT).$$

Income taxes are payable within the same framework as transaction taxes.

10. The **production tax** is levied on the value of output produced by joint ventures. This tax guarantees revenue to the government even if production is not profitable for the ventures. **Income and transaction taxes** are instead levied on net income, which is total production minus operating costs and amortization. Because the production tax increases the marginal cost of extracting oil, income and transaction taxes are designed in part to offset the distortionary effects of the production tax. This is effected by allowing companies to deduct "production and investment premiums" (also called "production and investment incentives") in proportion to the level of production reached and the level of investments incurred (see Box I.1).

11. Companies operating under **Production Sharing Agreements** function as contractors to Sonangol (which operates as government concessionaire), by either forming consortiums or acting individually. If a consortium is formed, exploration and production are carried out through an operator, which may or may not be the company with the largest share in the consortium. Sonangol can itself participate in the consortium, which it now does through a production subsidiary (*Sonangol Pesquisa & Produção)*.

Box I.2. Angola: PSA Regime

In Angola, cost oil, profit oil and income taxes are computed in the following way:

1) Determination of cost oil. In any given year companies are allowed to recoup their costs up to a fixed proportion of gross revenues from a given field (this cap is normally set at 50%). Allowable costs include:

i) operating costs;

ii) amortization of exploration costs, development expenses, and costs for abandoning the field;

iv) production premium.

Operating costs are recoverable on a recurrent basis whereas exploration and development costs are recoverable over a period of four years. Companies are allowed to increase the initial value of amortizable costs by a certain percentage ("uplift"), which is, on average, 50 percent.[1] Recoverable costs in excess of the cap are rolled over to subsequent years. In most blocks, if recoverable costs are not fully amortized within five years since they were incurred, the cap increases.

2) Government's share of profit oil. Profit oil is computed as:

profit oil = value of production – cost oil

Profit Oil is split between the government and the oil companies according to formulas that change from block to block and that generally depend on either the water depth of the wells, or the cumulative production within a block, or the rate of return of the block.[2] Most commonly, the government's share varies from 20 percent of profit oil when the rate of return is below 25 percent, to 90 percent of profit oil when the rate of return is above 40 percent.

3) Income tax. Under a PSA, oil companies pay income taxes on their share of profit oil at a rate of 50 percent. No other deductions are allowed towards this tax.

*PIT = 0.5 * company's profit oil.*

[1] The practice of allowing an "uplift" on amortizable costs is a feature of PSA contracts in many countries; but Angola's 50 percent provision is unusually high.

[2] The rate of return is based on accounting profits and total accounting costs.

12. The companies participating in a consortium finance all the necessary investments and operating costs and then, when production starts, they recoup these costs by retaining a share of the oil produced ("cost oil"). What remains ("profit oil") is shared between the government and the companies (including Sonangol whenever participating as an operator) in proportions that depend, from block to block, on the cumulative production of the block, its internal rate of return, or the depth of the wells under the sea level. Sonangol, operating as "concessionaire", is responsible for marketing and remitting the government's share of total profit oil. Finally, companies pay income taxes on their share of profit oil (see Box I.2).

13. The main effect of implementing a PSA rather than a tax and royalty regime is that ownership of the oil and control of oil activities remains with the government; the tax provisions can be adjusted to be largely equivalent between the two systems. By setting a cap on recoverable cost oil, revenues are guaranteed to the government under a PSA even if extraction is not profitable for the consortium. From this point of view, the cap works as a royalty and creates the same distortions to incentives as a royalty.

D. Government Revenue Take: Past Estimates of TRR

14. The government's reported share of total oil receipts fell from 53 percent in 2000 to 43 percent in 2003 (see Table I.3). This section explores and quantifies possible explanations. Because no fully consistent disaggregated data are currently available for 2000 or 2001, the analysis focuses on the period from 2002 to the first half of calendar year 2004.

Table I.3. Angola: Government Revenue Take, 2000 - 2004
(in US$ millions)

	2000	2001	2002	2003	2004 1/
Value of oil production	7,414	6,144	7,739	9,007	*5,242*
Total government oil revenue	3,945	3,194	3,304	3,892	*2,257*
Implied goverment share (in percent)	53.2	52.0	42.7	43.2	*43.1*

Sources: Ministry of Finance web site http://www.minfin.gv.ao/dni/petroleo/exportacao_2004.pdf; Sonangol; and IMF staff estimates.
1/ First half of calendar year 2004 only.

15. The government's share in gross oil revenues has varied appreciably from block to block as well as over time. In 2002, for example, the share varied from 24 percent in the relatively new deep-water block 17 to 62 percent in the more mature deep-water block 3. By the first half of 2004, the government share had risen to 26 percent in Block 17 and fallen to 59 percent in Block 3. Possible factors behind these changes include differences in tax regimes, the precise structure of the profit-sharing agreements, the production costs and maturities of fields (which affects the level of investment and profitability), as well as variability in oil prices and quality.

16. The most frequently cited explanation of the large decline in the government's share of oil receipts, which subsequently will be called the Tax / Receipts Ratio (TRR), is the shift in production towards newer, deep-water fields. In addition to the effect of the PSA regime itself, lower TRRs in these fields may reflect:

(i) **High start-up costs.** In the early production life of new fields (or when re-investment is needed), there will be heavy investment costs to be amortized. These will contract taxable income. Moreover, because of the taxation system, the government's share of net revenues is lower at the early production life of new fields.

(ii) **Higher operating costs and tax allowances.** Deep-water exploration requires more extensive investment and higher operating costs than shallow-water or onshore fields, so that costs are likely to absorb a greater part of the gross revenue accruing to oil companies and to allow companies to claim higher tax allowances.

Table I.4. Angola: Price Differentials from Price of Brent Crude (Smoothed), 2004

Block	Field	Discount to price of Brent crude (in percent)
Cabinda	Average	4
Cabinda A	Nemba	parity
FS, FST	Soyo	1
Block 3	Canuku	1
Block 14	Benguela	7
	Kuito	15
	Landana	5
	Negage	5
Block 15	Hungo	7
	Xikomba	5
Block 17	Dalia	9
	Girassol	parity
Block 18	Plutonio	5

Source: World Bank.

(iii) **Oil quality.** Oil from the newer blocks is heavier and of poorer quality than the oil extracted from more mature fields (see Table I.3).

17. In order to explore further the decline in the aggregate TRR, it is helpful to consider this as the weighted average of the TRRs that originate in different blocks, using as weights the percentage contribution of each block to total oil receipts. Based on changes in the composition of the oil sector in recent years, changes in the TRR can be then be decomposed into:

i) a compositional effect arising from differences in TRRs **between** blocks and changes in the relative importance of different blocks over time because of changes in production or relative prices;

ii) changes in the TRR **within each block** because, for example:

a) when oil receipts increase in a block, deductions or cost oil become proportionally lower with respect to oil receipts (or stay constant if they are subject to a 'cap') . Hence, for a given level of operating costs and amortization, when production and/or oil prices increase in a block, the TRR of that block increases as well (or, in the limit, stays the same);

b) under a PSA, the tax structure depends on the internal rate of return, so that a change in the oil receipts in a PSA block has the potential to affect the TRR within that block.

18. Table I.5 analyses in a simple way how the decomposition explains the drop in the government's share of oil receipts between 2002 and 2003, and between 2003 and the first half of 2004. The table shows the TRR in each oil block for the periods and the share of each block in total oil receipts. It then calculates (in the penultimate column) the effect of changes **within blocks** on the overall total, assuming a fixed weight between blocks and (in the final column) the effect of changes **between blocks,** assuming a roughly constant TRR in each block.

Table I.5. Angola: Government Revenue Take (TRR) and Share of Production by Block, 2003 - 2004

	2002		2003		Contribution to Change in TRR	
	TRR	Share of blocks in total oil receipts	TRR	Share of blocks in total oil receipts	Weighted changes in TRR	Weighted changes in share of oil receiptss
Cabinda	47.0	48.4	52.0	46.5	2.35	-0.94
FS-FST	46.0	1.4	44.1	1.6	-0.03	0.12
Block 2	47.7	5.6	50.3	4.8	0.13	-0.42
Block 3 & Canuko	61.8	14.9	59.6	14.6	-0.33	-0.17
Block 14	27.2	7.7	20.2	6.6	-0.50	-0.25
Block 15	0.0	0.0	21.1	0.7	0.07	0.07
Block 17	24.2	22.0	22.7	25.2	-0.34	0.75
Total Angola	42.7	100.0	43.2	100.0	1.36	-0.85
	2003		2004 (until June) 1/		Contribution to change in TRR	
	TRR	Share of blocks in total oil receipts	TRR	Share of blocks in total oil receipts	Weighted changes in TRR	Weighted changes in share of oil receiptss
Cabinda	52.0	46.5	51.4	42.1	-0.25	-2.30
FS-FST	44.1	1.6	45.4	1.9	0.02	0.15
Block 2	50.3	4.8	51.7	4.5	0.07	-0.13
Block 3 & Canuko	59.6	14.6	58.6	13.8	-0.14	-0.48
Block 14	20.2	6.6	22.9	4.8	0.16	-0.38
Block 15	21.1	0.7	32.1	8.0	0.48	1.96
Block 17	22.7	25.2	25.9	24.8	0.80	-0.09
Total Angola	43.2	100.0	43.1	100.0	1.14	-1.29

1/ Data from the the web site of the Ministry of Finance; http://www.minfin.gv.ao/dni/petroleo/exportacao_2004.pdf
Sources: Ministry of Finance; and IMF staff estimates.

19. Between 2002 and 2003, the overall TRR increased by 0.5 percentage points. As shown in the last two columns of Table I.4, this reflected two opposing factors:

i) the weighted average of the TRR **within** blocks (assuming constant share between blocks) **increased** by 1.36 percentage points; while

ii) the change in the share of value added **between** blocks resulted in a **decrease** in the overall TRR of 0.85 percentage points.

Similarly, between 2003 and the first half of 2004, the overall TRR increased by 0.1 percentage points, reflecting the net effect of:

i) the weighted average of the TRR **within** blocks (assuming constant share between blocks) **increased** by 1.14 percentage points due to higher production and higher oil prices; while

ii) the change in the share of value added **between** blocks resulted in a **decrease** in the overall TRR of 1.29 percentage points.

20. The implication of these calculations is that the shift in production toward blocks with a lower TRR did substantially reduce the overall TRR: the change in the share of value added **between** blocks reduced the increase in the TRR by over 2 percentage points between 2002 and the first half of 2004.

21. The effect of changes in production share was however more than offset by the impact of increasing TRR within blocks. As indicated below, this rising TRR within blocks was itself largely caused by the rising average price of oil.

22. In the earlier years of the decade, the oil price was much lower. As a result, the impact of changes in the share of value added between blocks between 2000 and 2002 was likely to have been much larger, and may therefore explain a large part of the observed sharp decline in the overall TRR. However, insufficient data are currently available to test this proposition.

E. Government Revenue Take: Projections

23. Both changes in the TRR within blocks and changes in the composition of output need to be taken into account when forecasting the share of oil taxes in gross receipts. But the major element of indeterminacy comes from the need to project operating costs and amortization and their relationship to the selling price of oil from individual fields. This derives from the fact that only in the case of production taxes (royalties) is revenue dependent on gross rather than net receipts. Moreover, because of the cap on cost oil, the amount of costs that companies operating under PSA can deduct in a fiscal year depends on the amount rolled over from the previous year.

24. The most straightforward way to construct projections of government revenues would be to forecast future costs from data on past costs and incorporate them within a structural model reflecting detailed provisions of individual tax and PSA, as embodied in the tax revenue model designed for the oil diagnostic study. However, this can only be effective if recorded data on government revenues match estimates produced for the recent past by the structural model. An alternative approach adopted here is to take the observed past

relationships between oil revenues and the government's take to derive estimates of costs and the major revenue parameters and hence to project costs and revenues. In particular, since the marginal cost of extraction is likely to be very low, and since amortizations have a large component of history dependence, estimates of past costs can be readily extracted; using the formulas described in section B and data related to tax liabilities and production, it is then possible to project future tax liabilities or calibrate projections of the TRR.

25. In order to extrapolate information about costs and amortization, it is necessary to know the amount which companies paid under each category of tax. These tax data are then manipulated as described in Box I.3 using inversions of the formulae described in section B. The analysis is based on different and somewhat incomplete sources of data for the fiscal years: 2002, 2003, and 2004.[5] The implied levels of costs in each year are shown in the first three columns of Table I.6 and I.7.

Box I.3. Angola: Estimation of Past Costs

The formulas used for the estimates are based on the formulas described in Section B. In particular:

1) For Tax and Royalty regime; First of all, taxable income was estimated. By inverting the formula for the petroleum income tax (PIT), we have that:

taxable income = PIT / 0.6575 + PTT + royalty.

This allows operating costs and amortization to be derived by identity:

operating costs and amortization = value of production - taxable income.

Inverting the formula for the petroleum transaction tax (PTT), we have that:

production + investment premiums = taxable income – PTT / 0.7.

Finally, recalling that production premiums in Cabinda A equal the value of production computed at a reference price, it is possible to compute both production and investments premiums separately.

2) For PSA. Recalling that for companies operating under PSA the PIT is levied on profit oil with a rate of 50 percent, information about income tax liabilities can be used to compute the level of profit oil accruing to companies. Specifically:

*companies' share of profit oil = 2 * PIT.*

Total profit oil can then be computed from the identity:

total profit oil = government's profit oil + companies' profit oil.

In this formula, the government's share of profit oil must be the amount accruing to the government before the 10 percent retention by Sonangol. Cost oil is then:

cost oil = total production – total profit oil.

[5] International oil companies make payments on a monthly base in respect of production, income, and transaction taxes, generally with a delay of a month, directly to the National Bank of Angola. The Ministry of Finance, through its Tax Division (DNI) keeps a record of the taxes paid by the international companies, together with assessments made by Sonangol of its own liabilities for tax and of the remittances it is due to make to the government for the government's share in total profit oil. These data are shown on the Ministry of Finance web site by block, company, and type of tax for 2003 and January-September 2004. Data for 2002 were derived from internal documents.

Table I.6. Angola: Costs and PTT as Percentage of Total Production; Cabinda Blocks, and FS-FST Blocks, 2002 - 2008

				Projections			
	2002	2003	2004 1/	2005	2006	2007	2008
Prices 2/	23.7	28.2	36.2	30.2	30.8	31.4	32.0
Cabinda A							
Production (millions of barrels)	100	97	92	104	114	120	114
Implied Costs (in millions of US $)	980	963	1,129	1,452	1,593	1,202	1,179
Implied Costs ($/barrel)	9.8	9.9	12.3	13.9	14	10	10.3
Implied Costs / Value of Prod. (percent)	42.3	35.2	34.3	46.6	46.0	32.2	32.6
Implied Inv. Premium (in millions of US $)	0	-18	0	2,178	0	0	0
TRR (in percentage points)	45.1	50.8	55.3	42.0	42.3	51.4	51.2
Cabinda B							
Production (millions of barrels)	49	43	38	47	49	52	50
Implied Costs (in millions of US $)	357	234	360	385	407	436	430
Implied Costs ($/barrel)	7.3	5.5	9.4	8.2	8.3	8.4	8.6
Implied Costs / Value of Prod. (percent)	30.0	19.2	25.1	26.2	26.0	25.8	25.9
Implied Inv. Premium (in millions of US $)	0	0.2	6.3	1.5	1.8	1.3	1.0
TRR (in percentage points)	53.0	60.2	58.2	55.9	56.1	56.1	55.9
Cabinda C							
Production (millions of barrels)	10	8	3	6	4	3	3
Implied Costs (in millions of US $)	135	178	70	122	77	63	57
Implied Costs ($/barrel)	13.8	21.3	21.0	21.1	21.2	21.3	21.4
Implied Costs / Value of Prod. (percent)	55.5	75.4	64.1	77.2	76.0	74.9	73.8
Implied Inv. Premium (in millions of US $)	0	0	0	0	0	0	0
TRR (in percentage points)	36.3	23.1	30.4	21.9	22.6	23.3	24.0
FS-FST							
Production (millions of barrels)	5	5	6	5	5	4	4
Implied Costs (in millions of US $)	41	61	71	70	65	62	50
Implied Costs ($/barrel)	8.8	12.4	12.2	13.2	13.8	14.1	14.2
Implied Costs / Value of Prod. (percent)	39.0	41.8	32.2	41.9	42.9	43.0	42.5
TRR (in percentage points)	46.0	44.1	50.5	43.9	43.2	43.2	43.5

Sources: DNI; IMF staff estimates and projections.

1/ Estimates based on data for the period January - September 2004 published on the web site of the Ministry of Finance; http://www.minfin.gv.ao/dni/petroleo/exportacao_2004.pdf.

2/ Prices are used to compute cost oil / value of production and the TRR.

26. From these estimates can be derived ratios for the "total cost per barrel", "production and investments premiums relative to oil receipts", and "cost oil relative to total oil receipts". Moreover, for blocks 14, 15 and 17, estimates can be constructed of the internal rate of return.

27. In using these estimates to derive projections of costs for the period 2005 − 2008 the following assumptions were made:

(i) Because the blocks in the Cabinda Province and blocks FS-FST are mature blocks, costs were projected so as to maintain cost per barrel and total costs in line as much as possible with past figures. In this respect, in Cabinda A, because of the development of the Banzala field, costs are projected to first increase and then stabilize to levels estimated for 2002 − 2004. Similarly, costs are exceptionally high in 2005 in Cabinda C, because of the development of a condensate gas utilization scheme and of the Bomboco oil project.

(ii) Block 2 is a mature block: considerations similar to those in point (i) above apply for this block.

(iii) Block 3 Canuku is a relatively recent block. Investment costs are expected to have an impact in the near future.

Table I.7. Angola: Cost Oil and Government Profit Oil;
Blocks from 2 to 18, 2002 - 2008

				Projections			
	2002	2003	2004 1/	2005	2006	2007	2008
Prices 2/	23.7	28.2	36.2	30.2	30.8	31.4	32
Block 2							
Production (in millions of barrels)	18	16	15	15	15	14	12
Implied Cost Oil (in millions of US $)	172	150	186	195	204	184	166
Implied Costs ($/bbl)	9.3	9.2	12.7	13.0	13.4	13.5	13.6
Implied Cost Oil / Value of Prod.	39.3	35.0	32.8	40.3	40.7	40.3	39.8
Gov. Prof. Oil / Implied Prof. Oil	71.5	68.2	69.9	73.0	73.0	73.0	73.0
TRR (in percentage points)	47.7	50.3	52.2	50.3	52.2	52.4	47.3
Block 3 & Canuko							
Production (in millions of barrels)	51	46	43	39	33	29	25
Implied Cost Oil (in millions of US $)	313	370	365	385	367	348	322
Implied Costs ($/bbl)	6.2	8.1	8.4	10.0	11.0	12.0	13.0
Implied Cost Oil / Value of Prod.	27.1	28.0	22.6	32.0	34.6	37.0	39.3
Gov. Prof. Oil / Implied Prof. Oil	86.9	82.0	85.2	85.0	85.0	85.0	85.0
TRR (in percentage points)	61.8	59.6	65.1	57.1	55.0	54.2	52.2
Block 14							
Production (in millions of barrels)	24	22	18	20	50	63	86
Implied Cost Oil (in millions of US $)	332	401	346	386	961	1,215	1,651
Implied Costs ($/bbl)	13.7	17.9	19.5	19.2	19.1	19.2	19.3
Implied Cost Oil / Value of Prod.	55.9	67.6	60.7	71.5	69.7	68.8	67.8
Gov. Prof. Oil / Implied Prof. Oil	29.2	30.5	35.3	35.0	35.0	40.0	40.0
TRR (in percentage points)	27.2	20.2	25.2	28.8	28.8	29.7	29.7
Block 15							
Production (in millions of barrels)	...	3	36	36	113	197	231
Implied Cost Oil (in millions of US $)	...	34	633	2,486	2,854	3,240	3,054
Implied Costs ($/bbl)	...	9.8	17.4	22.0	14.5	14.0	12.0
Implied Cost Oil / Value of Prod.	...	57.9	48.6	73.6	47.6	45.1	37.9
Gov. Prof. Oil / Implied Prof. Oil	...	0.0	31.2	21.0	21.0	21.0	40.0
TRR (in percentage points)	...	21.1	32.1	29.2	29.2	33.3	39.8
Block 17							
Production (in millions of barrels)	71	79	80	80	78	119	161
Implied Cost Oil (in millions of US $)	1,017	1,393	1,565	1,805	2,380	3,373	3,543
Implied Costs ($/bbl)	14.4	17.7	19.4	23.0	20.0	21.0	22.0
Implied Cost Oil / Value of Prod.	59.7	61.3	54.0	76.5	65.2	67.2	69.1
Gov. Prof. Oil / Implied Prof. Oil	24.9	21.9	20.9	20.0	30.0	35.0	40.0
TRR (in percentage points)	24.2	22.7	26.9	26.1	27.9	28.8	29.7
Block 18							
Production (in millions of barrels)	...	...	...	...	...	73	73
Implied Cost Oil (in millions of US $)	...	...	...	...	...	1,456	1,463
Implied Costs ($/bbl)	...	...	...	...	...	20.0	20.0
Implied Cost Oil / Value of Prod.	...	...	...	...	...	63.7	62.5
Gov. Prof. Oil / Implied Prof. Oil	...	...	...	...	...	20.0	20.0
TRR (in percentage points)	...	...	...	...	...	26.1	26.1

Sources: DNI; IMF staff estimates and projections.

1/ Estimates based on data for the period January - September 2004 published on the web site of the Ministry of Finance; http://www.minfin.gv.ao/dni/petroleo/exportacao_2004.pdf.

2/ Prices are used to compute cost oil / value of production and the TRR.

(iv) Production in Block 14 and in Block 17 is expected to increase significantly in 2007. For this reason costs are projected to increase from 2006 to 2007 as a reflection of investments incurred before and during 2006.

(iv) Block 15 is a new block. Projected amortization for the period 2003 − 2007 implies an initial investment costs (before the uplift) of about US$8 billions. As a consequence, cost per barrel is projected to decrease.

28. The detailed projections of costs and the TRR in Table I.6 and I.7 are based on illustrative forecasts of production levels by block. Prices are set at their expected long term levels. Projections were also considered under different price scenarios.

29. The results are summarized in Table I.8 below. Scenario 1 assumes that oil prices will fall to their expected long-term level in real terms in 2005 and that they stay at that level.[6] Scenario 3 is based on the interim WEO projections, and Scenario 2 incorporates an intermediate projection of oil prices.

Table I.8. Angola: Projections of TRR, 2005-2008

		2004 1/	2005	2006	2007	2008
Scenario 1	Prices (US$ / barrel)	*36.2*	30.2	30.8	31.4	32.0
	TRR (percent)	*45.7*	38	36	37	39 2/
Scenario 2	Prices (US$ / barrel)	*36.2*	35.0	34.0	33.0	32.0
	TRR (percent)	*45.7*	40	37	39	38 2/
Scenario 3	Prices (US$ / barrel)	*36.2*	39.2	36.7	34.7	33.7
	TRR (percent)	*45.7*	41	39	39	39

1/ These figures are based on the stylized assumption that the outturns for the fourth quarter of 2004 are identical to the third quarter data. Data are published on the web site of the Ministry of Finance; http://www.minfin.gv.ao/dni/petroleo/exportacao_2004.pdf.

2/ The TRRs differ as a consequence of different past profiles of oil prices.

30. Table I.8 shows that, under all of these price assumptions, the decline in the TRR (partially arrested in 2004 by the rise in the price of oil) will resume in 2005 and 2006, but may then level out or reverse. Because of the possibility of rolling-over unrecovered costs, the profile of the TRR will depends on the entire sequence of prices.

[6] The long-term oil price is derived from the interim WEO assumption for reference crude oil prices in 2010, adjusted for the average discount of Angolan oil and the expected inflation rate in the USA. This implies an Angola oil price of about US$30 per barrel in today's prices.

31. Three factors explain the pattern displayed in Table I.8: the composition of production, the amortization of costs, and the level of oil prices. Large changes in the composition of production, which will continue to decrease the aggregate TRR, will diminish around 2007 as the growth in production from blocks 14, 15, and 17 begins to stabilize. At the same time, large investment costs in these newer blocks will have been almost fully amortized, leading to TRRs which are nearer (although still well below) those in the mature fields. These two factors will raise the overall TRR in 2007 after the declines of 2004−06. At this point, however, prices will play a role. In scenarios 2 and 3 the price is assumed to fall after 2007, and the TRR does not increase. Only in scenario 1, where there is an increase in price, is the overall TRR expected to increase.

32. With the same methodology, it is possible to project overall government revenue from oil under alternative oil price assumptions. Table I.9 shows projections for the government's oil revenues for the period 2004 − 2008 for two different price scenarios: at the oil prices projected in the interim WEO and at the long-term oil price.

Table I.9. Angola: Projections of Government Revenue, 2005 - 2008

	2004 1/	2005	2006	2007	2008
Average Price of Angolan Crude (US$ / barrel)	*36.2*	39.2	36.7	34.7	33.7
Value of oil production (US$ millions)	*12,018*	16,763	21,508	26,034	26,352
Total government oil revenue (US$ millions)	*5,495*	6,873	8,388	10,153	10,277
Implied goverment share (in percent)	*45.7*	41	39	39	39
Average Price of Angolan Crude (US$ / barrel)	*29.4*	30.2	30.8	31.4	32
Value of oil production (US$ millions)	*9,757*	12,876	17,875	23,312	24,677
Total government oil revenue (US$ millions)	*4,014*	4,912	6,422	8,635	9,542
Implied goverment share (in percent)	*41.1*	38	36	37	39

1/ These figures are based on the stylized assumption that the outturns for the fourth quarter of 2004 are identical to the third quarter data. Data are published on the web site of the Ministry of Finance; http://www.minfin.gv.ao/dni/petroleo/exportacao_2004.pdf.

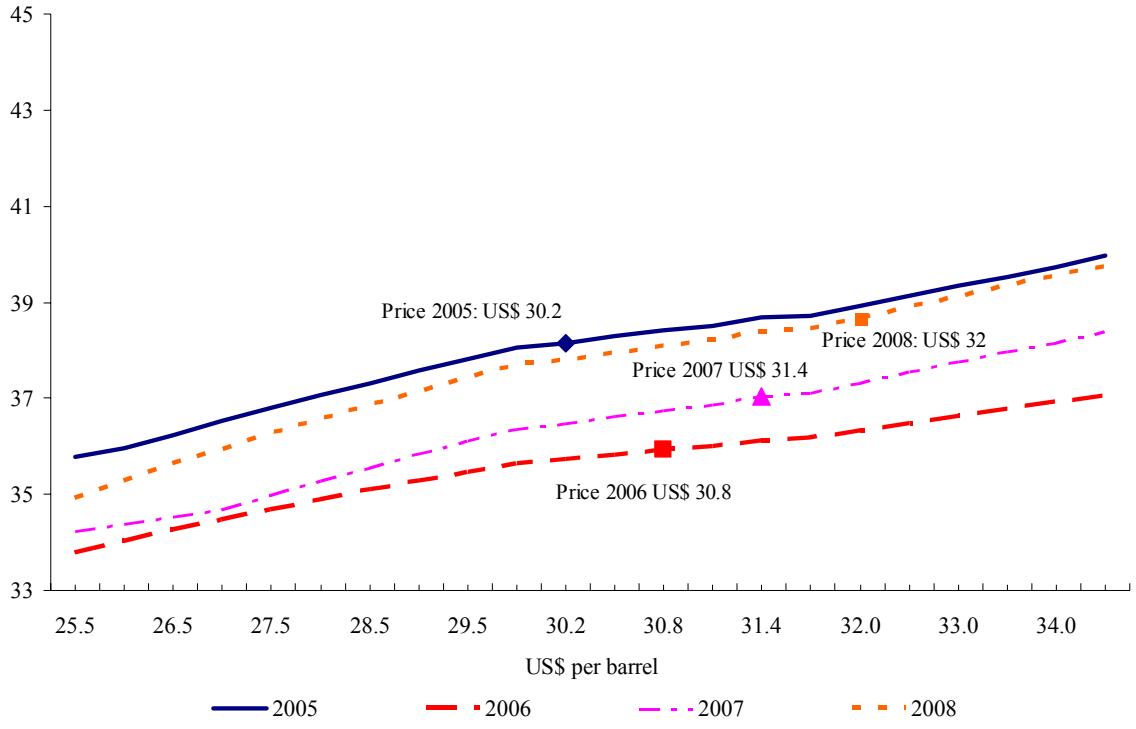
33. This same methodology can be used to compute the sensitivity of revenues and TRR to changes in prices or quantities. For example, if the projected average price of oil in 2005 is US$38.2 instead of US$39.2, the realized average TRR would be 40.9 percent instead of 41.4 percent. This implies that tax revenue for the government would decrease by US$60 for every US$100 decrease in total oil sales. Similarly, if realized production in 2005 was 1 percent higher than expected (in all blocks), the government take would increase by US$41 for every US$100 increase in total oil sales.

34. Another use of the methodology is to demonstrate graphically (Figure I.2) how the TRR in each of the years from 2005 to 2008 varies with the level of the price of oil. Because the costs that can be rolled over from one year to the next depend on oil receipts and hence on prices (the lower the price the higher the amount rolled over), the position of the line for

the TRR in 2007 –say– depends on the prices realized in 2005 and 2006. The assumption made in the figure is that the prices realized are those of the Scenario 2 of Table I.8, which means that:

- the curve for TRR in 2006 is conditioned on a price of US$ 30.2 per barrel in 2005;
- the curve for TRR in 2007 is conditioned on a price of US$ 30.2 and 30.8 in 2005 and 2006 respectively;
- the curve for TRR in 2008 is conditioned on a price of US$ 30.2, 30.8, and 31.4 in 2005, 2006, and 2007 respectively.

Figure I.2. Angola: TRR and Prices, 2005 - 2008



F. Conclusions

35. Angola's oil sector is expanding at an unprecedented pace. Together with the recent surge in oil prices, its expansion has led to a dramatic increase in government revenues from oil, from US$3.2 billion in 2001 to an estimated US$4.5 billion at an annual rate in the first half of 2004. However, in the same period the government **share** of oil receipts declined from 52 percent to an estimated 43 percent. Estimates in this section suggest that one major reason for this decline was a shift in production toward newer deep-water fields, where

amortization costs are large, although the impact of this development was diminished in 2004 by the effect of rising oil prices.

36. Data on recent production and revenue by block have been used to derive projections for the government's share in revenue from oil for the period 2005 − 2008 using basic tax formulas and parameters from PSAs. These imply that, under the price sequence considered, the government share of oil revenue will fall until 2006. Depending on oil prices, this share might then start to recover. Nevertheless, given the projected doubling in oil production over the next three years, total government revenues from oil are expected to rise strongly, under the most likely scenarios for oil prices.

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II. ISSUES IN THE DIAMOND SECTOR[7]

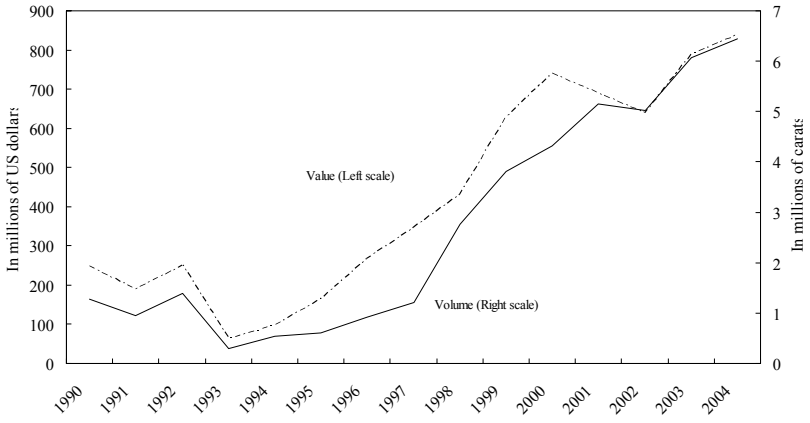
A. Introduction

37. **Angola is the fourth largest producer of rough diamonds in the world**. In 2003 production was recorded to have reached 6 million carats, valued at US$788 million, representing about 95 percent of the country's non-oil exports and about 10 percent of non-oil GDP[8]. Angola has considerable potential to increase output further and benefits from the high proportion of its production which is of gem quality[9].

38. **Angolan diamond reserves fall into one of two categories: primary, or *kimberlite* deposits, and secondary or *alluvial* deposits[10].** Angola's known stock is largely alluvial. Diamond deposits are mainly concentrated in the north-east (Lunda Provinces) with some also in the central and southern parts of the country. Over half of Angola's current production of diamonds comes from the Catoca mine in Lunda Sul.

39. **The Angolan diamond sector is currently being reformed through major legislative and institutional changes.** Between June and July 2003 the Angolan government issued several decrees that modified existing laws on diamond-related activities, reversing many of the changes applied in 1999. ENDIAMA[11], the parastatal diamond company, which is both a commercial operator and performs regulatory functions, is also

Figure II.1. Angola: Average Diamond Production Volume, 1990-2004



Sources: Angolan authorities; and staff estimates and projections.

[7] Prepared by Maria Mendez.

[8] This estimate does not include any allowance for smuggled output, which has recently been estimated at US$350 million per year (Minister for Geology and Mines, December 2004)

[9] Gem quality stones account for only 5 to 10 percent of world supply.

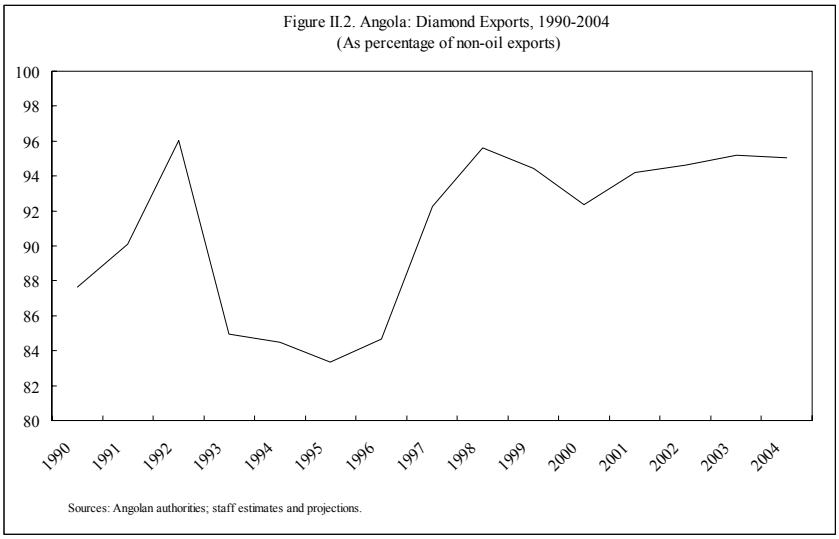
[10] Kimberlite deposits refer to diamonds that originate in a volcanic crust in the earth's surface. Alluvial diamonds are those stones washed out of weathered kimberlite deposits into river systems. At present, apart from the large Catoca mine, nearly all production in Angola is from alluvial deposits.

[11] Empresa Nacional de Diamantes de Angola, ENDIAMA.

undergoing substantial internal reorganization in respect to both roles. The following sections attempt to explain the current status of the diamond market in Angola and offer some perspectives on production, revenue, and policy issues that will become relevant in the near future.

B. Structure of the Sector

40. **Diamond production in Angola is mainly divided between a formal sector, with companies operating under licenses issued by ENDIAMA, and an informal sector, comprised of artisan diggers (*garimpeiros*)[12], many without a license.** There is also a semi-legitimate sector, where mining and buying ventures are permitted by provision of valid documents, not issued by ENDIAMA. Historical data for diamond production are poor and unreliable, reflecting the dispersed nature of the informal sector, governance issues surrounding the formal sector, and changes in ownership and control during the 27-year civil war. As a result there are discrepancies between official figures and estimates by outside agencies.



41. **Prior to 1999, around nine firms dominated the formal sector**. Tax regulations were loosely enforced and little information was available on diamond production or exports. In the informal sector, and in companies under rebel control, diamond revenues fueled the long-standing civil conflict between rebel group UNITA and the Angolan state. UN reports throughout the 1990s estimated that UNITA was responsible for 25 to 30 percent of all non-reported Angolan diamond exports, with revenues at times amounting to US$250,000 per day.

[12] *Garimpeiros* generally work in small teams, often diving into river beds, and are frequently dependent on middlemen for equipment, supplies, credit and the purchase of any diamonds collected.

Production

42. **ENDIAMA introduced a sector reorganization strategy in 2004.** Institutional changes outlined in the strategy include a government pledge to recapitalize the company and absorb all internal debt, which as of 2001 amounted to nearly US$300 million[13]. ENDIAMA has also formed a new subsidiary to develop mining ventures in its own right rather than being a passive shareholder in foreign-operated projects[14]. Operational objectives include the ending of informal mining by incorporating artisan diggers into the formal sector, and the substantial reduction of ENDIAMA's non-mining company holdings. Other legal measures adopted recently include Decree No. 36/03 of June 27th, 2003, establishing a differential treatment for licensing, whereby all alluvial diamond licenses will be authorized by the Ministry of Geology and Mining, while all kimberlite projects will be authorized by the Council of Ministers. Some of these changes have started to be implemented, though it is not clear whether the strategy outlined by ENDIAMA will be completed[15].

43. **The aims of the proposed phasing-out of *garimpeiros* (informal sector activity) appear to be to ensure optimal exploitation of diamond resources, improve the welfare of workers in the sector, raise Angola's credibility in international markets, and increase state revenue.** In 2003-04, operations were set in train under national security regulations to expel perhaps 100,000 foreign miners[16]. Prior to this, between 250,000 and 400,000 foreign and domestic *garimpeiros* were estimated to be working in Angola, producing at times perhaps one third of Angola's diamond output. In this period, legislation allowed artisan miners with official licenses to operate in designated areas determined by the Angolan government as not viable for industrial-scale companies. Often these were on the fringe of company operations. The assumption under ENDIAMA's new sector strategy is that informal sector production will in future be absorbed by licensed companies that will use more efficient extraction methods, ensure safety standards, pay taxes, and provide social services to their local community.

44. **Despite the declared objective of phasing out the informal sector, it is unclear whether current regulations actually preclude continued artisan operations.** As many mining areas in Angola are expected to remain uneconomic for companies to establish operations, there may be strong arguments for allowing the informal sector to survive. Indeed, ENDIAMA's marketing subsidiary SODIAM announced that rough purchases from

[13] ENDIAMA retained a large workforce through the civil war, despite having few operational functions.

[14] ENDIAMA, *Pesquisa & Produção* (P&P).

[15] The record of previous efforts to reorganize and reshape the sector has been poor in terms of implementation and longevity.

[16] *Operação Brilhante* (Operation Brilliant). The majority of expelled workers are presumed to have been of Congolese nationality, many of whom worked in or near mines controlled during the civil war by UNITA.

the remaining informal sector amounted to US$10 million in the first half of 2004 and confirmed the opening of 8 regional buying centers to collect output from the artisan diggers that remain operating. In the same vein, reports suggest that ENDIAMA will continue to allow Angolan nationals who have lived in diamond areas for more than 5 years to continue operating, even though it may no longer issue artisan mining licenses[17].

45. **The number of firms operating in the diamond sector has increased since 2002, probably reflecting some absorption of artisan mining.** As of July 2004 there were 264 national firms and 34 international firms operating in a total of 90 concessions (Table II.1 and Table II.2). However, only 8 of these concessions involve kimberlite deposits. All concessions include ENDIAMA as a passive participant. ENDIAMA also retains its original mandate to regulate and supervise all mining operations.

46. **The Angolan authorities project that output in 2005 will increase substantially, reflecting in part the recent approval of several new projects by the Council of Ministers, and the rising production in the vast Catoca mine[18]**. ENDIAMA has however reported that the recorded output of the informal sector has been decreasing[19]. ENDIAMA officials expect improved infrastructure conditions to allow firms to resume activities in paralyzed projects and/or begin prospecting previously isolated or unsafe areas.

Table II.1 Angola: Diamond Projects and Firms by Province

Province	Number of Firms		Concessions	
	National	Foreign	Alluvial	Kimberlitic
Huila	1	0	1	0
Cunene	2	1	2	0
Zaire	2	1	1	0
Moxico	1	0	1	0
Namibe	1	0	1	0
Kuando-Kubango	3	0	2	0
Lunda Norte	132	20	35	5
Lunda Sul	77	5	11	2
Bie	23	3	13	1
Malange	18	5	12	0
Kuanza Sul	4	1	3	0
Total 1/	264	34	82	8

Source: ENDIAMA.

1/ As provided by ENDIAMA.

[17] Global Witness and Partnership Africa-Canada (2004).

[18] Catoca's shareholders in 2002 included ENDIAMA (33 percent), Alrosa (33 percent), Daumonty Financing, and Oderbrecht.

[19] Remarks by Chairman Avanaldo de Souza. ENDIAMA recorded sales of 1 million carats by the informal sector in 2000.

Table II.2 Angola: Foreign Firm Participation in the Diamond Market, 2004.

No.	Firm	Country of Origin	Project
1	Alrosa	Russia	Catoca, Luo
2	Oderbrecht	Brazil	Catoca, Luzamba
3	Daumonty	Israel	Catoca
4	ITM Mining, Ltd.	Bermudas	Chitotolo, Mufuto Norte, Calonda, Cuango
5	SPE	Portugal	Mufuto Norte, Calonda, Lucapa
6	Trans Hex Group	South Africa	Luarica, Fucauma
7	ESCOM Mining	Portugal	Luo
8	Spade Business, Ltd/Rulth	Cyprus	Cunene
9	Investors Equity	Canada	Chiumbe
10	PDRC - Planet Diamonds	Canada	Chiumbe
11	Consolidated Mining	South Africa	Dando Kuanza
12	Masupatsela Investment	South Africa	Dando Kuanza
13	Ever bright Investmnet	South Africa	Tomboco, Luia, Alto Kuanza
14	Dayspring Management Services (PTY)	South Africa	Lumuanza
15	Petra Diamonds	South Africa	Alto Cuilo
16	Frannor Investment and Finance (PTY)	South Africa	Luangue
17	Global Capital Group	USA	Vale du Kuvo
18	Planet Diamond Resources Corporation\	Canada	Vale du Kuvo
19	Matikara, Ltd	South Africa	Cacuilo, Cacolo
20	Debon Logistics	The Netherlands	Caungula
21	Cristal Mining Corporation	British Virgin Islands	Cangandala
22	Metals and Minerals Resources Corporation	South Africa	Tchinguvo
23	Foreign Diamonds Corporation	The Netherlands	Nhefo
24	Amic Asian Mining Inv. Company	Canada	Tchegi
25	Africa Integrated Resources	South Africa	Mumbue
26	Southnera Resources Ltd.	Canada	Camafuca-Camazambo
27	Blue Diamond Inc. Holding, Ltd.	British Virgin Islands	Cangandala
28	Nafar Mining, B.V	The Netherlands	Luremo/ Catoba
29	Prime, Ltd.	South Africa	Capenda
30	GEE - Ten Ventures, Inc.	Canada	Canzama
31	VZG	Russia	Cacuala
32	Twins, Ltd.	Cook Islands	Luremo/ Catoba
33	ISPAT, Mineral Resources Ltd.	British Virgin Islands	Cuale
34	Metalex Ventures, LTd.	Canada	Chitamba

Source: ENDIAMA.

47. **ENDIAMA is set to return to prospecting and exploration activities under its new subsidiary, ENDIAMA P&P[20].** In addition, there are reports that De Beers might return to exploration activities, suspended in 2001, after settlement of a major legal dispute between the state and the mining conglomerate. Other elements of ENDIAMA's sector reorganization strategy include plans to conduct a geological survey of Angolan territory to establish potential mining areas (60 percent of Angola has not yet been surveyed), the

[20] Prospective financing includes joint-venture partners BHP Billiton and Escom's subsidiaries: Angola Mining Finance, Ltd and Angola Mining Services Ltd. Banco BFA is also expected to provide financing.

opening by SODIAM of selling offices abroad, and a market analysis concerning Angola's potential for cutting and polishing operations[21].

Marketing

48. **Following several oscillations in policy regarding arrangements for marketing diamonds extracted in Angola, the Angolan government decided on December 1999 to establish a single-channel marketing system for exports.** This was in part designed to limit tax evasion and to respond to international pressure to eradicate conflict diamonds[22]. A law enacted in January 2000 transferred ENDIAMA's right to market diamonds, or to issue licenses for that purpose, to its 99 percent-owned subsidiary SODIAM, operating through a newly created joint-venture company ASCORP (Angolan Selling Corporation), which was accorded a market monopoly to buy and sell diamonds[23]. This attempt at consolidation was accompanied by other measures to transform the sector. One example was Angola's decision to become the first subscriber to the Kimberley Process in 2000[24]. Additionally, Angola is being encouraged by donors to implement the Publish What You Pay campaign and to join the Extractive Industries Transparency Initiative (EITI).

49. **For the period 2000-2003, the state—through ASCORP—was the sole official channel for the sale of diamonds to the international market.** However, despite support from intensified internal controls, reports indicate that smuggling was still extensive.[25] Nevertheless, ASCORP publications report a tripling of government diamond revenues between 1998 and 2001. After a decade of negative balances, ENDIAMA reported profits

Table II.3 Angola: ENDIAMA's Financial Results, 2001-2003

(In millions of US dollars)

Year	2001	2002	2003
Profit	-2.191	1.877	2.976

Source: ENDIAMA

[21] SODIAM selling offices were opened in Tel Aviv in July 2004 and in Antwerp in November 2004. Offices are expected to open in Dubai and New York in 2005. It is reported that work has been started on the cutting and polishing plant planned by the Leviev group.

[22] UN resolutions in 1999 determined Angolan diamonds as "conflict diamonds" and sanctions on Angolan diamond production were established.

[23] ASCORP was designed as a joint effort between SODIAM and two foreign companies, WELOX owned by the Lev Leviev Group and Tais, owned by Belgium's Sylvan Goldberg.

[24] The Kimberley Process, a coalition of industry and nongovernmental organizations and government, established an international certification scheme for rough diamonds backed by the UN General Assembly to help outlaw trade in "conflict diamonds".

[25] Economist Intelligence Unit and Global Witness. This seems in part to have reflected the low prices paid by ASCORP relative to comparable international prices.

in 2002 and 2003 (See Table II.3).

50. **ASCORP's monopoly of rough diamond buying in Angola was rescinded in July 2003.** Resolution No. 21/03 of July 8th 2003 allowed SODIAM to establish joint ventures with other firms to market diamonds. Small-scale producers and *garimpeiros* (often through middlemen) now have access both to ASCORP and to other companies operating in partnership with SODIAM, forming a semi-open market regulated by the state. However, the largest producers can only sell their rough diamonds through SODIAM itself.

Box II.1. The World Diamond Market.

Diamonds are mined commercially in over 20 countries. The value of world production of rough diamonds was estimated to be US$6.8 billion in 1999, amounting to approximately120 million carats. About 80 percent of all diamonds mined are used for industrial purposes. De Beers mines approximately 55 percent of world production, mainly in partnership with the South Africa, Botswana and Namibia governments.

Diamonds may be sold rough or polished. There is evidence of intra-Africa trading of rough diamonds, but the majority of production is flown to Antwerp and other trading centers such as Tel Aviv, New York, and Bombay. Implementation of country of origin and country of provenance is getting stronger as a result of the Kimberley Process.

Industrial diamond sales occur at an estimated ten times, or "sights" per year. Polished diamonds are traded and sold on to jewelry manufacturers, or are set in jewelry by the polishing company. The total timeframe from point of extraction to the final sale to the consumer is estimated to be about two years. The main cutting and polishing centers are currently India, Belgium, Israel, Thailand, and the USA, with China rapidly raising its operations.

C. Revenue from the Diamond Sector

51. **Reported government revenue from the diamond sector in Angola remains extremely low when compared to the industry's reported production[26].** The total value of output as reported by the Ministry of Geology and Mines was US$638 and US$788 million for 2002 and 2003, respectively. Related fiscal income as reported by ENDIAMA amounted to US$45 million in 2002 and US$112 million in 2003 (See Table II.4)[27]. This low ratio of government revenue to production is also a feature of some other diamond-producing countries in sub-Saharan African, where the dispersed nature of production from alluvial diamond sources inhibits high rates of tax collection. However, in Botswana and South Africa, where there are consolidated industries organized around a few large-scale producers, ratios of tax collected to total assessed production are higher. Angola shares characteristics with both large- and small-scale producing countries.

52. **The diamond tax system in Angola consists of a combination of tax levies, royalties, and export duties as well as corporate taxes.** Taxes of between US$1 and US$3 per hectare are payable for surface (prospecting) rights. Subsequent mining rights are rewarded on payment of a bonus, reflecting the scale of the potential project. Royalties are then applied to the gross value of production at a rate currently set at 5 percent. Export duties are levied at a currently reported rate of 3.5 percent. In addition, mining companies are subject to a corporate tax rate of 35 percent, a withholding tax of 15 percent, and a capital income tax of 10 percent, although they are provided with substantial tax holidays and special dispensations, such as exemption of mining equipment and supplies from import duties and accelerated depreciation of fixed assets and exploration equipment. SODIAM as of 2003 also collected a 1.5 percent

Table II.4 Angola: Diamond Sector Fiscal Contribution Value, 2001-2003
(In millions of US dollars)

	2001	2002	2003
Formal sector	36.21	37.50	108.25
Catoca	14.42	15.28	40.18
Chitotolo	5.00	5.80	15.78
SDM	7.00	6.29	30.89
Mufuto	4.93	5.90	8.95
Calonda	2.81	2.41	6.38
Lucapa	1.50	1.58	2.49
Luarica	...	...	2.76
Others	0.54	0.23	0.82
Informal sector	9.19	7.12	3.71
Total	45.40	44.62	111.97

Source: ENDIAMA.

[26] The Ministry of Finance does not produce estimates of the proportion of tax payments attributable to the diamond sector, although the Ministry of Geology and Mines and ENDIAMA (2004) issue a table on diamond sector fiscal contribution. (see Table II.4)

[27] This reported revenue does not seem to include payments by companies for receipt of mining rights or profits earned by SODIAM and ASCORP as a result of high marketing margins.

commercial fee. The Ministry of Geology and Mines is responsible for industrial taxes and royalties while export duties are collected by customs.

D. Policy issues

53. **Recent changes in the legal framework could potentially result in a major change in the structure of the diamond sector.** The Angolan government has indicated its intention to absorb *garimpeiros* of Angolan origin into licensed companies with responsible fiscal and social policies. However, the success of this effort will depend in large part on the responses of local communities. Similar efforts in other countries have been limited by the absence of alternative income sources for those not able to find company jobs.

54. **The alluvial nature of the majority of Angolan diamond deposits proves a challenge for government revenue collection.** While formal sector extraction from large kimberlite deposits allows considerable potential for raising government revenue, both at production and selling stage, the alluvial deposits are disperse and currently mined extensively by the informal sector as well as by licensed companies, which inhibits imposition of an effective taxation system either at the level of production or income or of sale. There may, therefore, be a need to maintain a mixture of tax regimes to ensure an effective trade-off in all sectors between incentives for exploration and prospecting, and the maximization of government revenue.[28]

55. **Although arrangements within the current tax regime provide various means for the public sector to capture the sizeable rents available from diamond extraction, it is difficult to assess whether these are being applied effectively.** In principle, the spectrum of instruments available is extensive, including sales of exploration and mining rights, taxes on prospecting rights, payments of royalties, levies on export, monopsony arrangements and commissions for purchasing rough diamonds, and the taxation of income. However, the limited transparency of the sector inhibits an assessment of the current optimality of taxation arrangements. It is also difficult to assess how onerous or fairly applied is the rest of the current tax regime, although Angola seems to be subject to relatively light tax rates in international terms, particularly taking into account tax holidays and exemptions. Information about the margins earned by SODIAM and ASCORP and payments for mineral rights are not published.

56. **While the partial opening of marketing arrangements is a positive step towards a more competitive environment for diamond mining, the perception of Angola as a high-risk location continues to deter investors.** This reflects several factors. One problem has been the instability and ambiguity in the legal framework surrounding mining activities and a pervasive lack of transparency, including in the ownership of firms (including in diamond marketing) and revenues. The continued dominance of ENDIAMA, and its intrinsic

[28] Oomes at al. (2003).

conflicts of interest, has also perpetuated concerns about restricted access and privileged treatment. Another deterrent has been the involvement of Angolan parastatals in arbitration conflicts with foreign firms due to contract breaking. In addition, the prices being paid by SODIAM to large producers are currently considered to be well below international market value and can be changed arbitrarily. Other risks include the legacy of the sector's war-time history of corruption and the security forces' close involvement in its operations.

57. **There is considerable potential to make the diamond sector more attractive to foreign and local investors, while preserving national interests.** At the heart would be transparent and stable legislation, which provided a clear separation between regulators and operating companies in the sector, ensured consistency in taxation and marketing arrangements, and clarified that special privileges would not be accorded to individual citizens or companies. To avoid conflicts of interest, and to permit ENDIAMA to exploit its commercial potential, its licensing, regulatory, marketing, and advisory functions might be transferred to other agencies or the current regulating ministries. Its role as a passive shareholder might also be separated from its active operational roles. All taxation would be executed by an appropriate, independent, fiscal authority while legislation might also ensure that contractors of ENDIAMA would not be accorded special tax privileges. Parastatals and their subsidiaries or associated companies would in general be subject to clear commercial rules, including transparency and auditing requirements. Establishment of an independent regulatory function might also enable data collection to be improved.

58. **One particular concern that might be addressed by legislation or regulation is the openness of the current bidding system for concession rights.** To maximize potential state revenue, and encourage all potential operators, bids for all new licenses need to be conducted in a fully competitive and transparent manner. This is particularly important in Angola, given evidence of privileged political or military access in the past and perceptions that the emphasis on 'Angolanization' of the sector is encouraging foreign companies to continue engaging such domestic partners, and to grant them substantial equity rights, independent of their level of expertise or provision of capital.

59. **The authorities indicated in 2000-01, during the operation of Fund staff-monitored programs, that a diagnostic study of the sector would be undertaken[29].** It was understood that this would enable a systematic approach to be adopted for the whole sector, embracing production, marketing, regulatory, depletion and taxation issues and both formal and informal operations. One prospective world development casting a shadow on the sector is the potential impact of synthetic diamond production.

[29] It is reported that the first phase of such a study has since been completed.

E. Conclusions

60. **While the diamond sector already provides a large proportion of Angola's reported non-oil exports and revenue and of its non-agricultural employment, it has considerable untapped potential.** Over half the country remains to be surveyed. A large part of current diamond production is probably still being smuggled abroad. There is currently little 'downstream' activity.

61. **Numerous governance issues remain to be addressed.** A systematic appraisal of the sector might focus particularly on the separation of roles currently being played by ENDIAMA. Its sizeable potential conflicts of interest impede improvements being made to the transparency and openness of the sector and hence to its attractiveness to potential investors. The sector would gain in particular from clear and fair rules of entry under guarantees of a stable regulatory environment. In the granting of licenses and the application of tax provisions, clear commitments to fairness of treatment and transparency would reassure investors and ensure that government revenue could be maximized. More information should be published about revenue payments made by the sector and the earnings of parastatals and associated companies. There are also outstanding social issues, including prospects for *garimpeiros* of Angolan origin.

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III. INFLATION AND THE "HARD-KWANZA" POLICY[30]

A. Introduction

62. Angola has made important progress in reducing inflation since 1999, after two decades of high- or hyper-inflation. Between 1999 and the peace agreement of April, 2002, consumer price inflation fell from over 300 percent to around 100 percent, around which level it oscillated for over a year. Inflation then again decelerated sharply, following the adoption of a stabilization program in September, 2003. By December 2004, the 12-month inflation rate had fallen to 31 percent. [31]

63. This note attempts to briefly characterize the policies adopted since September 2003, which have many of the characteristics of an exchange-rate-based stabilization program. It assesses its mechanisms and effects, explores possible costs, and advances some statistical/econometric analysis for updating previous work.

64. The note is organized as follows. Section B reviews the main policies implemented since September 2003. Section C summarizes recent developments on inflation, money and exchange rate. Section D and E present preliminary results that help to explain the path of inflation and the main variables potentially driving it. Section F discusses some policy issues. Section G advances some conclusions and remarks.

B. The "Hard Kwanza Exchange Rate Policy"

65. A major anti-inflationary initiative was put in place in Angola in September 2003 following a number of administrative measures affecting monetary policy implementation earlier in the year. No official account of the aims or mechanisms of this initiative has been issued, but a number of inferences can be drawn from associated announcements and developments:

- The government specified in the annual budget a target reduction for inflation to 20 percent by the end of 2004 (compared with an actual 77 percent rate at end-2003).

- An intermediate objective of stabilizing the exchange rate, although without a specific target rate, would also appear to have been set; indeed, the initiative became

[30] Prepared by Jose Giancarlo Gasha.

[31] See Gasha (2003) for a fuller account of Angola's history of inflation and associated policies.

known as the "hard-kwanza" policy in light of the virtual cessation of currency depreciation which accompanied its implementation.[32]

- Increased emphasis was placed on controlling the liquidity of the banking system on a weekly basis, using operations in government or central bank securities or sales of foreign currency.

- The policy was to be underpinned by reducing the reliance of the central government on domestic finance, either through cuts in the fiscal deficit or increased foreign financing. In the event, the only major fiscal measures taken were to reduce the cost of fuel subsidies by raising retail prices towards (rising) market levels. However, higher oil revenues substantially reduced the fiscal deficit.

66. Evidence of the importance attached to the exchange rate and banks' liquidity includes aggressive sales of dollars by the National Bank of Angola (BNA). The practice seems to have been to intervene heavily in the foreign exchange market whenever either (i) the depreciation of the nominal exchange rate accelerated; or (ii) there was a widening in the spread between the formal and the informal foreign exchange rate; or (iii) both. Staff estimates that, in the year from September 2003, the BNA sold about US$1.2 billion more foreign currency than required for normal financing activities. These sales occurred despite the low level of Angola's foreign currency reserves and a rise in the real exchange rate, which itself probably in part reflected an autonomous upward shift in the equilibrium real exchange rate arising from higher actual and expected real oil prices. The sales were financed mainly by heavy recourse to oil-backed commercial borrowing and further accumulation of external debt payment arrears.

67. The policy change was initiated in September 2003 by a number of administrative measures. These included: (i) the unification of the official and the informal foreign exchange markets, (ii) the revisiting of the operational guidelines of the official foreign exchange auction, and, notably, (iii) increases in the central bank's weekly sales of foreign exchange through the auction. The BNA also resumed domestic open market operations, using very short term instruments (at 28 and 63 days) at increased nominal interest rates (in excess of 50 percent), and conducted government securities operations of slightly longer maturities (91 and 182 days).

68. Previous measures taken in 2003 included changes in banks' minimum reserve requirements and regulations on banks' foreign exchange positions. Reserve requirements on foreign currency deposits were also amended to require deposits at the central bank to be made in kwanzas rather than foreign currency, causing the banks' needs for reserve money to vary with the exchange rate.

[32] See Gasha and Pastor (2004) for a detailed account of events and measures.

69. The changes in banks' minimum reserve requirements were effected in two steps. In March 2003, reserve requirements on foreign currency deposits were increased from 5 percent to 10 percent, and those on domestic currency were reduced from 30 percent to 10 percent. This equalization of the rates probably reduced liquidity at the margin since foreign currency deposits accounted for more than 70 percent of total deposits. Reserve requirements on both domestic and foreign currency deposits were then raised to 15 percent in July, 2003. The increase was reinforced by the imposition of a 100 percent reserve requirement on all government deposits held with commercial banks.

70. The changes in regulations on commercial banks' foreign exchange positions require banks to ensure that, on a daily basis, their open position does not exceed the equivalent of 15 percent of their capital. Previously, the limit on open positions was established in absolute values (US$500,000), with the exception that up to US$2 million could be used to preserve the value of the banks' capital.

71. On the fiscal side, the "hard kwanza" policy package has been characterized by efforts to improve fiscal control, and since May 2004, to reduce the structural fiscal deficit. Benefiting from high oil prices, the fiscal deficit has declined from 7.9 percent of GDP in 2003 to 4.6 percent in 2004.

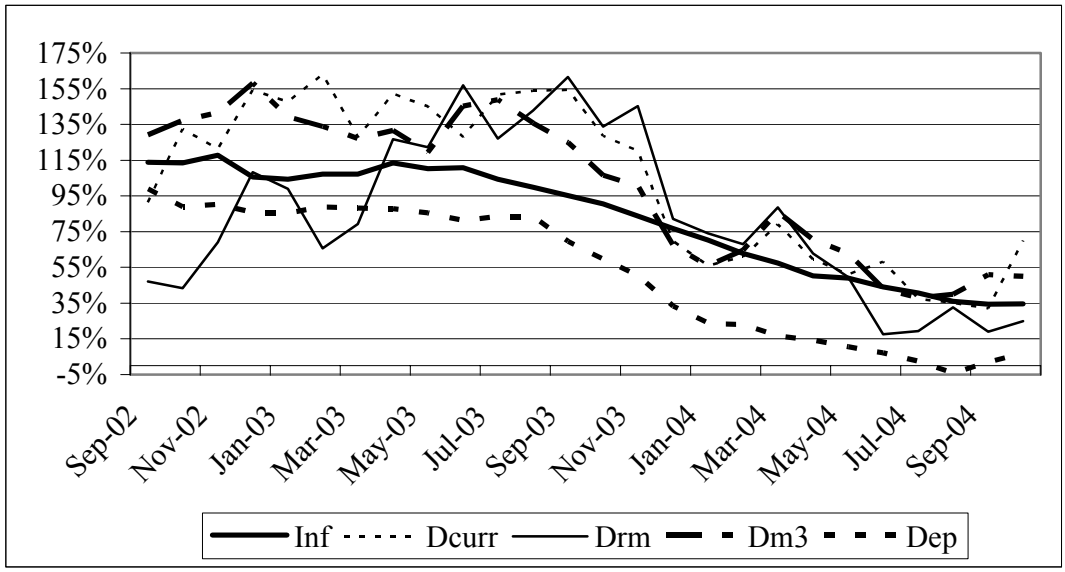
72. In terms of financing, the period since September 2003 has been characterized by: (i) a significant reduction in BNA credit to the central government; (ii) increasing use of domestic debt instruments; and (iii) increasing reliance on foreign sources. While in 2003, foreign and domestic financing amounted to 3.5 and 2.2 percent of GDP respectively, in 2004 they equaled 6.0 and -5.1 percent respectively.

C. Recent Developments

73. Since the start of the "hard kwanza" policy in September 2003, when 12-month consumer price inflation was 95 percent, inflation has declined rapidly. By December, 2004, it had fallen on a 12-month basis to 31 percent. At the same time, the rate at which the exchange rate has depreciated has declined sharply, from around 70 percent at an annual rate to less than 10 percent, while monetary developments to October were characterized by a continuous reduction in money growth. Reserve money and broad money M3 grew by 160 and 125 percent, respectively, in the twelve months to September 2003, but their growth slowed to 25 and 50 percent in the twelve months to October 2004. One consequence of these developments, which may in part reflect the impact of high oil prices, has been a sharp real appreciation of the exchange rate since September 2003.

74. Figure III.1 presents the path of inflation (inf), nominal depreciation (dep), currency growth (dcurr), reserve money growth (drm), and growth in broad money M3 (dm3) on a 12-month basis.

Figure III.1. Angola: Inflation, Depreciation, and Money Growth



Sources: BNA, IMF staff.
Note: inf = inflation, dcurr = currency in circulation growth, drm = reserve money growth, dm3 = M3 growth, dep = nominal depreciation.

D. Empirical Analysis: Money, Exchange Rate, and Prices

75. Table III.1 presents some basic statistics for inflation, depreciation of nominal exchange rate and three measures of money growth (currency in circulation, reserve money and broad money). The sample covers the period September 2002 – October 2004, and the variables are presented in terms of 12-month changes in the relevant levels. Basic statistics are calculated for the five variables for the whole period, and for the period pre and post September 2003, which marks the beginning of the current stabilization approach.

Table III.1. Angola: Inflation, Money Growth and Depreciation

Sample	Inf	Dep	Dcurr	Drm	Dm3
Sep 02 - Oct 04					
Average	82.1	52.5	103.1	83.3	100.3
Standard Deviation	29.9	36.9	45.1	45.4	40.4
Sep 02 - Sep 03					
Average	108.0	86.0	140.2	103.8	136.3
Standard Deviation	6.3	6.6	19.5	40.0	10.5
Oct 03 - Oct 04					
Average	56.2	19.0	66.0	62.9	64.3
Standard Deviation	19.2	19.1	29.5	42.2	22.0

Sources: BNA and IMF staff.
Note: inf inflation, dcurr = currency in circulation growth, drm = reserve money growth, dm3 = M3 growth, dep = nominal depreciation.

76. Inflation, nominal depreciation and the three measures of money growth all significantly declined, on average, from September 2003. In particular, the depreciation of the kwanza declined, from an average of 86 percent during the first period, to 19 percent during the second period. Interestingly, though, the volatility of all the variables has increased, in particular those of inflation and depreciation.

77. Further insight may be gained when computing simple correlations among these variables. Table III.2 presents the correlations for the two sub periods.[33]

Table III.2. Angola: Simple Correlations

SubPeriod: September 2002 - September 2003

	Inf	Dcurr	Drm	Dm3	Dep
Inf	1.000				
Dcurr	0.730	1.000			
Drm	0.862	0.816	1.000		
Dm3	0.765	0.804	0.866	1.000	
Dep	0.916	0.815	0.846	0.816	1.000

SubPeriod: October 2003 - October 2004

	Inf	Dcurr	Drm	Dm3	Dep
Inf	1.000				
Dcurr	0.539	1.000			
Drm	0.763	0.372	1.000		
Dm3	0.205	0.686	0.295	1.000	
Dep	0.439	0.044	0.629	-0.308	1.000

Sources: BNA, IMF staff.
Note: inf inflation, dcurr = currency in circulation growth
drm = reserve money growth, dm3 = M3 growth, dep = nominal depreciation.

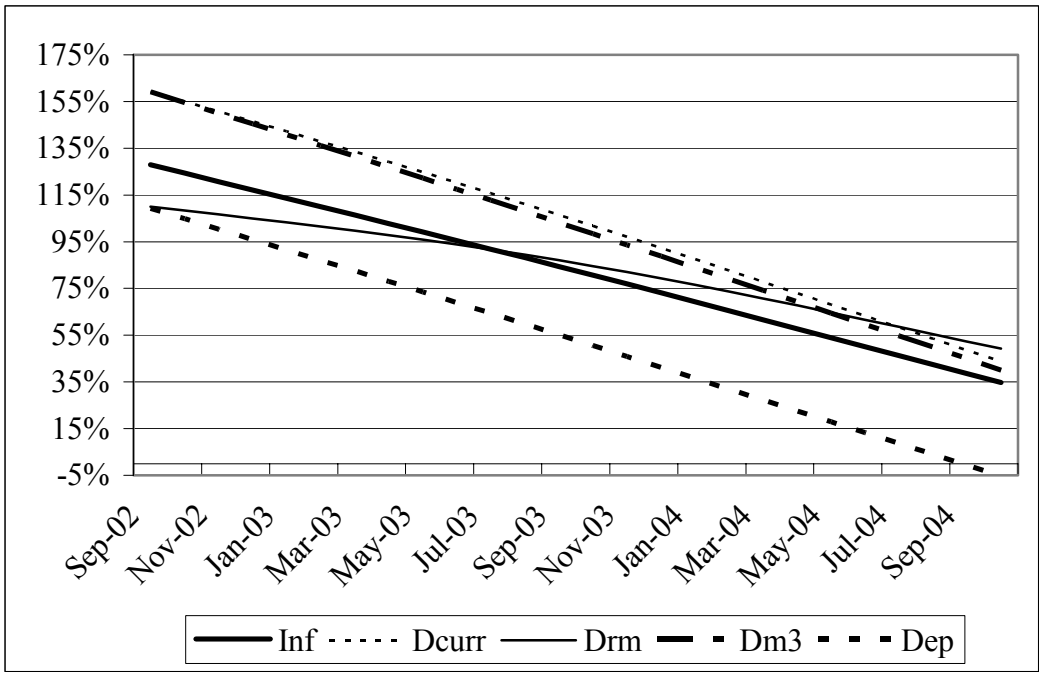
78. The correlation of inflation with growth in all monetary aggregates and depreciation decreases from one period to the other. The most significant declines are observed in the correlations between inflation and (i) depreciation and (ii) M3 growth (which include dollar-denominated deposits). It is expected that since the implementation of the "hard kwanza" policy, given that the exchange rate has been stabilized by means of sizeable intervention, the remaining inflation has to be explained by other variables. While also declining, inflation is still strongly correlated to growth in currency in circulation and reserve money (which may be more strongly influenced in the first period by the inclusion of foreign currency deposits held as required reserves).

79. Figure III.2 depicts the trends of the five series for the whole sample period (derived from the Hodrick-Prescott filter). Although converging, all monetary aggregates are still

[33] The series for computing these correlations have been filtered using a Hodrick-Prescott filter (Hodrick and Prescott, 1997), and are thus stationary.

growing faster than prices. Only the nominal exchange rate has been increasing, on a trend basis, at a much lower pace than prices.

Figure III.2. Angola: Trends of Inflation, Depreciation, and Money Growth



Sources: BNA, IMF staff.
Note: inf = inflation, dcurr = currency in circulation growth, drm = reserve money growth, dm3 = M3 growth, dep = nominal depreciation.

80. The implications of this simple analysis are that the shift in policy stance after September 2003 succeeded in breaking, at least temporarily, the inflationary process that has long affected Angola. A tighter monetary stance, aggressive foreign exchange intervention, and a shift in expectations about the authorities' resolve, supported by efforts to reduce the fiscal deficit, against the background of strengthening oil prices, stabilized the exchange rate and limited the rate of increase of prices.

E. Sources and Uses of Base Money

81. In order to gain some further insights about the main sources of money creation, Table III.3 provides a breakdown of sources and uses of base money for the periods August 2002-August 2003, and September 2003-September 2004[34].

[34] As in Alveson and Torrez (2003).

Table III.3. Angola: Sources and Uses of Base Money 1/
(Billions of Kz.)

	Aug. '02 - Aug. '03	Sep. '03 - Sep. '04
Uses		
Base money	32.91	17.51
Currency in circulation	20.63	10.07
Sources	32.91	17.51
Government	19.68	-1.97
Loans and bills	21.88	0.41
Other claims	-0.32	-0.94
Domestic deposits	-3.96	-9.82
Government foreign currency deposits	2.08	8.39
Central bank operations	1.11	9.00
Central bank operational surplust/deficit	1.12	9.59
Central bank reg, transit, non financial assets	2.45	14.68
Central bank bills	-5.11	0.43
Others	2.65	-15.70
Foreign exchange	11.81	10.34
NIR	12.72	6.56
Other foreign assets	-2.30	3.57
Banks foreign currency deposits	1.39	0.22
Other claims and liabilities	0.31	0.13
Claims on financ.corp, priv sector (-) deposits	0.34	0.13
Liabilities to sonangol	-0.03	0.00

Source: BNA

1/ In domestic currency

82. The numbers suggest some interesting developments since the implementation of the "hard-kwanza" policy package in September 2003. First, money creation declined sharply subsequent to the policy shift, decreasing from Kz. 32.91 billions in the first period to Kz. 17.51 billions in the second period. Second, the sources of money creation changed significantly. Credit to the central government was the main source of money expansion during the first period, but it fell in the second period, reflecting in part the central government's heavy foreign currency borrowing, which enabled it to build its foreign currency deposits at the BNA. At the same time, the central bank's operating deficit significantly increased in importance as a source of money expansion. Third, there has been a decrease of money base expansion coming from the net accumulation of reserves, despite the government's foreign currency borrowing, reflecting sizeable interventions in the foreign exchange market to stabilize the kwanza.

F. Policy Issues[35]

83. Whether by design, or as a by-product of the way the policy has been implemented, and the increase in oil prices, the most significant feature of the intensified anti-inflationary strategy adopted since September 2003 has been the virtual stabilization of the nominal exchange rate. This has been a major factor in limiting price increases for tradable goods. However, growth in the monetary aggregates, while slowing, has been faster than would be consistent with achievement of the inflation objective, and the real exchange rate has appreciated significantly, implying that the policy has been much less effective in reducing the inflation rate of non-tradables. There have also been financial costs incurred as a result of sizeable and expensive foreign exchange intervention, which has increased Angola's external liabilities.

84. The policy package seems to have focused primarily on the monetary aspects of the inflationary phenomenon, while placing relatively less weight on fiscal consolidation. Implicit in the strategy seems to have been the view that the substitution of debt issue for taxation and/or money creation would reduce the inflationary impact of fiscal deficits, as private agents heavily discount future tax liabilities—including the inflation tax—to repay the increased debt. However, there are clear limitations to this process. Specifically, prospective high interest payments—derived from costly foreign borrowing and/or expected domestic financing of future deficits—are likely to keep inflation expectations high, and might even bring inflation forward. Theoretical and empirical research suggests that large prospective deficits affect today's economic conditions and expectations, and can, in some cases, explain balance of payments crises.[36]

85. As suggested by a number of authors, the international experience shows that successful stabilization programs are characterized, regardless of the monetary arrangement, by a significant fiscal adjustment (See for instance, Calvo and Vegh, 1999).

G. Conclusions

86. Angola has made significant progress towards macroeconomic stabilization, which is a notable achievement after nearly three decades of high inflation. The exchange rate has stabilized and inflationary expectations seem to have been substantially reduced. With high oil prices permitting fiscal consolidation, further reductions in inflation – towards single figure rates – should be within reach.

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[35] For a more extensive discussion on policy alternatives including a money-based program with sizable fiscal consolidation, see Gasha and Pastor (2004).

[36] See for instance, Burnside et. al (1998) and Woodford (2001).

87. The achievement of low and stable inflation is a central ingredient for developing the economy's potential. However, to continue to exercise anti-inflationary policy in the manner applied under the "hard kwanza" policy may impose high costs on the economy. Under the "hard kwanza" policy, the rise in the real exchange rate (part of which may have reflected the rise in oil prices) reduced the competitiveness of the non-oil economy, while the sizeable foreign exchange intervention was expensive and increased Angola's external liabilities.

88. To allow greater flexibility for the exchange rate in the future, given the low level of foreign exchange reserves, a more fully-defined money-base approach may offer a better way forward. On the fiscal side, credible and sustainable fiscal adjustment, coupled by a change in the composition of deficit financing, would be key to the stabilization process.

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IV. External Vulnerability and Debt Sustainability[37]

A. Summary

89. The recent increase in oil prices has substantially reduced the size of Angola's external debt relative to GDP and exports. Nevertheless, the country's heavy dependency on oil exports, its low international reserves, and its commitments to repay large oil-backed loans mean that its external position will remain vulnerable over the next few years. [38] While 'baseline' economic projections indicate that Angola's external debt ratios are likely to fall within the thresholds of sustainability within 2-3 years, stress tests indicate that external shocks within this period could lead to potentially serious external liquidity problems and that Angola's vulnerability to further shocks could continue into the next decade.

90. To address this external vulnerability, Angola could consider ways of improving the overall composition of its debt. A shift towards concessional finance from IFIs and donors could help to make the structure and servicing of its debt more compatible with its needs for reconstruction and development. By using part of its recent oil revenue windfall to regularize its relations with creditors or to start to phase out its expensive oil-backed loans, it could also help to strengthen its overall creditworthiness.

B. Background

91. At end-2004, the level of Angola's external debt is estimated, including arrears and late interest, at US$9.5 billion, and its official foreign currency assets are estimated at about US$2.2 billion.[39] Since end-2001, both external debt and foreign assets have risen substantially in U.S. dollar terms, reflecting large fiscal deficits in 2002-03 and a build-up in the government's foreign currency deposits in 2004. US$3.8 billion was disbursed in oil-backed commercial loans during this period and new credit lines were opened from China, Israel, India and Portugal, in addition to an existing line with Brazil. External debt rose in total by US$2.2 billion. Nevertheless, as a result of rising oil prices and production, the ratio of external debt to GDP declined from 81.3 percent at end-2001 to 48.6 percent at end-2004.

92. Angola's exports of goods and services are predominantly from the oil sector (over 90 percent of total exports). Even when deductions are made from exports for associated oil sector outflows (largely in the form of services, profit remittances accruing to foreign oil companies, and payments for imports), net exports are thus highly sensitive to changes in oil

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[37] Prepared by Marcio Ronci.

[38] The average maturity of oil-backed loans is 5 years.

[39] All the debt included here is public or publicly guaranteed and is a liability of either the central government or the national oil company, Sonangol.

prices or production. Largely in consequence, the ratio of external debt service to exports (net of oil-related imports) declined from 40 percent in 2002 to an estimated 23.4 percent in 2004.

93. The composition of external debt at end-2004 was fairly widely spread. Of Angola's estimated medium and long-term debt of US$9.5 billion (including arrears and late interest), 4 percent was owed to multilaterals, 32 percent to Paris Club members, 21 percent to other official bilateral creditors, 37 percent to commercial banks, and 6 percent to suppliers. About a third of the debt was in arrears, mostly owed to official bilateral creditors. Angola has been servicing regularly its multilateral and commercial debt, and has restructured its arrears with Brazil, Germany, Poland, and Portugal.[40] A deal to regularize Angola's debt with Portugal was signed on August 5, 2004, restructuring about US$1.8 billion of debt, including nearly US$1.0 billion of official debt. The deal involved a cash payment of US$258 million to the Portuguese authorities, in return for a reduction in its outstanding debt to US$698 million and a rescheduling of repayments over 28 years at an interest rate of 1 percent a year, and a setting-aside of US$500 million for settlement of all outstanding arrears with commercial banks and private suppliers. Angola drew on US$750 million from the 2004 oil-backed commercial loan to finance these transactions.

C. Outlook

94. The baseline scenario (Figure IV.1 and Table IV.1) suggests that, while Angola's external debt is currently very high relative to resource flows, it is likely to be sustainable in the long term. The net present value (NPV) of debt-to-GDP is projected to decline from 130 percent at end-2004 to 60 percent by 2012[41] and NPV of debt-to-net exports to decline from 300 percent in 2005 to 150 percent by 2012. This scenario assumes rescheduling of arrears on nonconcessional terms. [42] Oil prices are based on the interim WEO projection, implying that the average price for Angola's oil will decline from US$39.2 per barrel in 2005 to US$36.7 in 2006, and will reach a price of US$ 30.5 (in today's dollars) in 2009 and beyond. Annual growth in oil production from 2005 − 2009 will average 18 percent. Oil companies' share of oil export receipts is assumed at about 60 percent.

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[40] A settlement with Russia was reported to have been concluded in 1997.

[41] Several empirical studies suggest critical debt thresholds lie between 30-60 percent for the NPV of debt-to-GDP ratio, 100-300 percent for the NPV of debt-to export ratio, and 15-35 percent for debt-service-to-export ratio. Countries with a record of high and persistent debt or default are likely to need to progress to the lower ends of each of these ranges. (See **Debt Sustainability in Low-Income Countries-Proposal for an Operational Framework and Policy Implications** prepared by Staffs of the Fund and World Bank, February 2004).

[42] The pre-cutoff bilateral debt arrears with the Paris Club creditors are assumed to be rescheduled on Houston terms (paid in 15 years with 3 years of grace) at end-2005 and the post-cutoff debt paid off in 5 years with one year of grace.

95. A fall in international oil prices or a disruption in oil production could nevertheless reverse the projected improvements, putting pressure on the low levels of foreign currency assets. Also, Angola's external debt arrears increase the perceived risks for creditors and consequently Angola's borrowing costs.

96. Several stress tests are outlined in Figure IV.2 and Table IV.2. These suggest that the current high level of debt will leave Angola in a vulnerable debt situation over the next few years, which may lead to liquidity problems. Under the most extreme stress test (in which the projected growth in export value is set at its historical average minus half a standard deviation), the debt dynamics would clearly not be sustainable until 2020: NPV of debt-to-GDP would, in this case, remain well above 150 percent and debt service-to-net exports would be in the range of 40-70 percent until 2015. This scenario is particularly fragile as official reserves are assumed to stay close to only about 2 months of imports (and below 4 months of non-oil related imports) during the projection period.[43] Less extreme stress tests indicate that debt sustainability could be achieved at an earlier date, but that vulnerability would nevertheless be high in the short term.

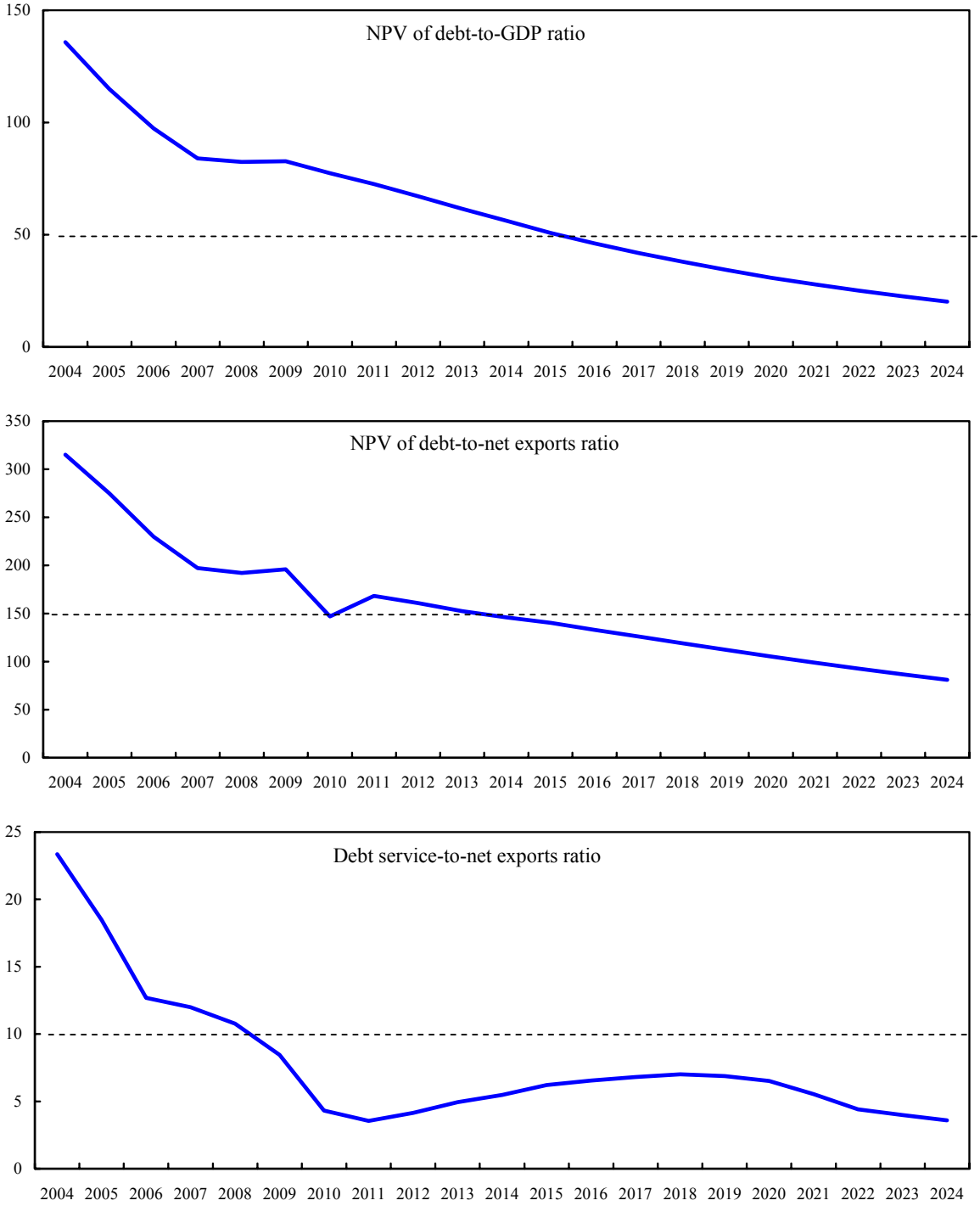
97. A particularly relevant stress test shown in these examples involves the possibility of a significant fall in Angola's oil prices during the remainder of this decade, after which oil prices would remain at their projected long-term level in real terms. This scenario would be equivalent to an immediate reduction in oil receipts of about 20 percent. The test indicates that Angola would remain vulnerable, in such a circumstance, for some time. Liquidity problems would be potentially severe in the short term, with the debt service-to export ratio again rising over 30 percent and remaining high through 2011. The NPV of debt-to-net exports would be well above 150 percent until 2014.

98. In the case of such adverse external shocks, much of Angola's debt would continue to be serviced as most commercial loans and lines of credit are met by earmarked oil shipments. As a result, these debt service payments would crowd out non-oil related imports and budget expenditure. There could therefore be severe implications for non-oil sector growth.

99. Angola's external vulnerability could be reduced by addressing the composition as well as the level of its external debt. One option could be to try to borrow on more concessional terms and longer maturities. The remaining external debt in arrears might also be restructured (possibly with some debt relief). Also, Angola could use part of the current oil revenue windfall to regularize its relations with creditors in advance of formal negotiations or to start to phase out its expensive oil-backed loans. Apart from the direct cost reduction achieved by a shift in the composition of debt, or by restructuring, the decline in external vulnerability thus achieved might reduce the spreads of any new commercial loans; and a regularization of Angola's relations with official bilateral creditors would allow increased access to export credit agencies.

[43] Other oil producing African countries have on average 7 months of total imports.

Figure IV.1. Angola: Indicators of Public and Publicly Guaranteed External Debt Under Baseline Scenario, 2004-2024 1/
(In percent)



Source: Staff projections and simulations.
1/ Assuming rescheduling of arrears on non-concessional terms (Houston terms), and including new borrowing.

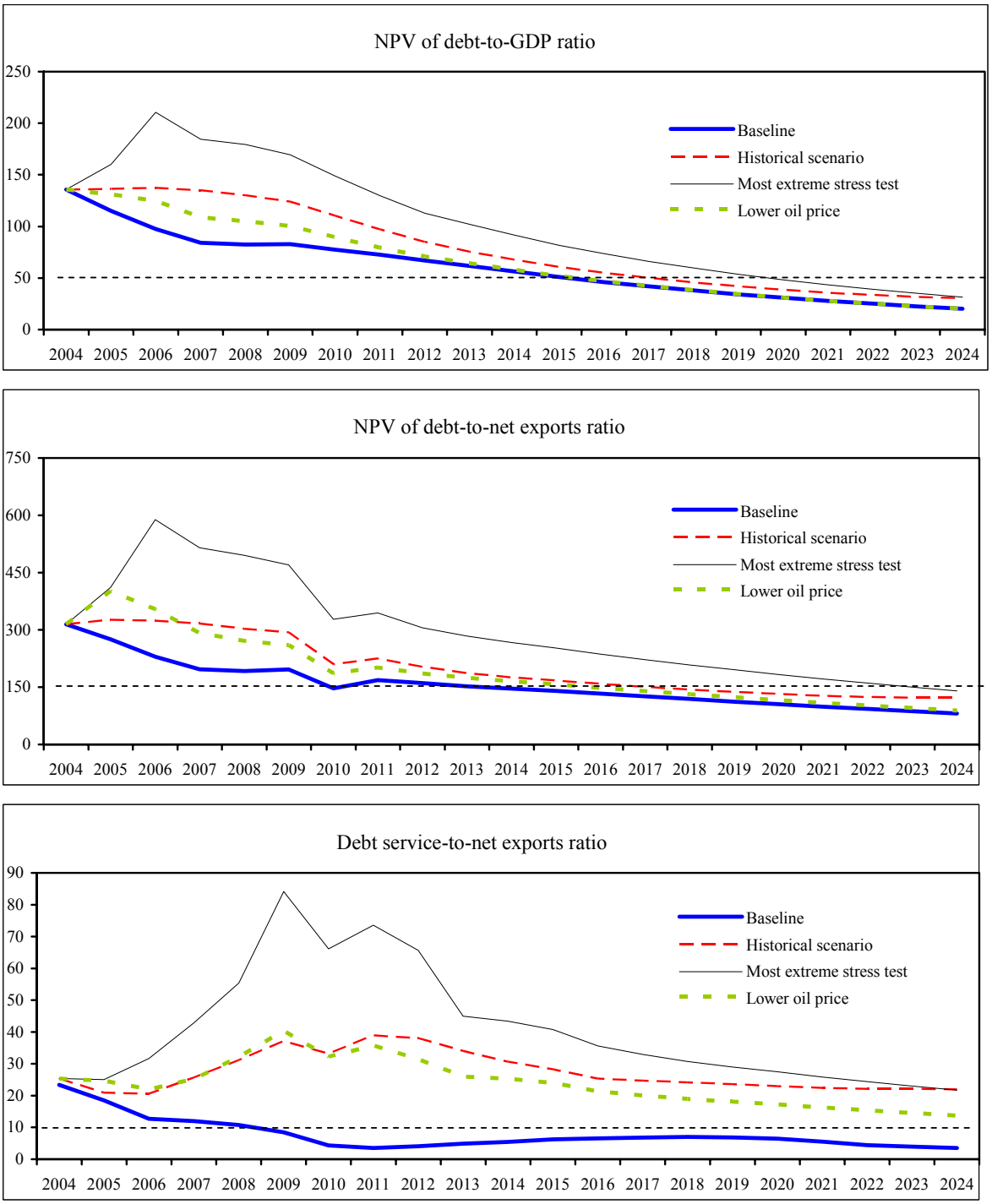
Table IV.1. Angola: External Debt Sustainability Framework, Baseline Scenario, 2001-2024 1/
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 5/	Standard Deviation 5/	Estimate		Projections							
	2001	2002	2003			2004	2005	2006	2007	2008	2009	2004-09 Average	2014	2024	2010-24 Average
External debt (nominal) 1/	98.9	81.0	69.9			48.6	37.6	28.8	22.2	20.3	20.7		17.5	5.0	
Change in external debt	**-1.0**	**-17.8**	**-11.1**			**-21.3**	**-11.1**	**-8.8**	**-6.6**	**-1.9**	**0.4**		**-1.1**	**-0.5**	
Identified net debt-creating flows	**4.8**	**-13.4**	**-16.6**			**-10.7**	**-9.8**	**-12.2**	**-8.2**	**-2.0**	**-0.7**		**1.8**	**1.1**	
Non-interest current account deficit	8.8	-1.9	3.3	5.9	12.3	-8.6	-6.7	-6.4	-4.8	-4.0	-4.1		0.7	0.9	1.2
Deficit in balance of goods and services	-1.6	-13.5	-6.6			-18.3	-14.7	-18.4	-21.5	-21.9	-23.5		-2.3	-0.3	
Exports	76.5	79.1	70.2			71.3	73.6	77.6	80.1	77.4	75.2		64.1	46.7	
Imports	74.9	65.6	63.7			53.0	58.9	59.2	58.7	55.5	51.7		61.9	46.5	
Net current transfers (negative = inflow)	-1.0	-0.3	-0.7	-1.0	0.7	-0.5	-0.6	-0.5	-0.4	-0.1	-0.1		-0.1	-0.1	-0.1
Other current account flows (negative = net inflow)	11.4	11.9	10.5			10.2	8.6	12.4	17.1	18.1	19.6		3.1	1.3	
Net FDI (negative = inflow)	-12.3	2.2	-4.0	-10.6	12.7	1.6	0.4	0.2	0.3	2.3	3.5		1.2	0.3	0.8
Endogenous debt dynamics 2/	8.3	-13.7	-15.8			-3.7	-3.5	-5.9	-3.7	-0.4	-0.1		-0.1	-0.1	
Contribution from nominal interest rate	6.0	3.3	1.9			1.8	2.0	1.6	1.3	1.1	1.1		0.9	0.2	
Contribution from real GDP growth	-3.2	-11.8	-2.2			-5.6	-5.5	-7.6	-5.0	-1.5	-1.2		-1.1	-0.3	
Contribution from price and exchange rate changes	5.4	-5.2	-15.6			…	…	…	…	…	…		…	…	
Residual 3/ 6/	**-5.7**	**-4.4**	**5.5**			**-10.6**	**-1.3**	**3.4**	**1.6**	**0.1**	**1.2**		**-2.9**	**-1.6**	
o/w exceptional financing	-3.7	-3.2	-2.4			2.3	-1.1	0.0	0.0	0.0	0.0		0.0	0.0	
NPV of external debt	...	...	176.4			135.8	114.9	97.4	84.0	82.5	82.8		56.3	20.2	
In percent of net exports	...	...	511.2			315.0	275.0	229.8	197.2	192.1	195.9		145.9	81.1	
Debt service-to-net exports ratio (in percent)	141.1	40.0	39.0			23.4	18.5	12.7	12.0	10.8	8.4		5.5	3.6	
Total gross financing need (millions of U.S. dollars)	2,465	1,830	1,755			602	343	(252)	204	1,074	1,121		2,409	3,087	
Non-interest current account deficit that stabilizes debt ratio	9.8	15.9	14.4			12.7	4.4	2.3	1.8	-2.1	-4.5		1.8	1.4	
Key macroeconomic assumptions															
Real GDP growth (in percent)	3.1	14.4	3.4	5.7	4.5	11.2	13.8	24.5	20.5	7.1	6.3	13.9	6.3	6.3	6.3
GDP deflator in US dollar terms (change in percent)	-5.2	5.6	23.8	6.6	23.7	27.0	7.5	-2.1	-2.6	-1.4	-0.9	4.6	3.0	3.0	3.0
Effective interest rate (percent) 4/	5.9	4.0	3.1	5.1	1.3	3.7	5.1	5.3	5.3	5.4	5.7	5.1	5.6	4.2	5.6
Growth of exports of G&S (US dollar terms, in percent)	-16.5	24.8	13.8	15.4	33.1	43.5	26.2	28.5	21.2	2.0	2.3	20.6	6.1	6.1	6.1
Growth of imports of G&S (US dollar terms, in percent)	16.7	5.7	24.3	9.8	13.0	17.7	36.0	22.5	16.2	0.0	-2.0	15.1	6.6	6.1	9.0
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	3.7	-0.1	1.2
Memorandum items:															
Nominal GDP (billions of US dollars)	8.9	10.8	13.8			19.5	23.9	29.1	34.2	36.1	38.0		59.8	148.1	
Exports (in billions of U.S. dollars)	6.8	8.5	9.7			13.9	17.6	22.6	27.4	27.9	28.6		38.4	69.2	
Net exports (in billions of U.S. dollars)	2.0	4.5	4.8			8.4	10.0	12.4	14.6	15.5	16.1		23.1	36.9	

Source: Staff simulations.

1/ Includes both central government's and Sonangol's external debt.
2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.
3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.
4/ Current-year interest payments devided by previous period debt stock.
5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.
6/ Includes central government foreign currency deposit in 2003 and 2004.

Figure IV.2. Angola: Indicators of Public and Publicly Guaranteed External Debt
Under Alternative Scenarios, 2004-2024
(In percent)



Source: Staff projections and simulations.

Table IV.2. Angola: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2004-24
(In percent)

	Est.	Projections								
	2004	2005	2006	2007	2008	**2014**	2015	2016	2023	2024
NPV of debt-to-GDP ratio										
Baseline	136	115	97	84	82	**56**	51	46	23	20
A. Alternative Scenarios										
A1. Key variables at their historical averages in 2004-23 1/	136	136	137	135	130	**68**	61	55	32	30
A2. New public sector loans on less favorable terms in 2004-23 2/	136	115	98	84	83	**59**	54	49	26	24
B. Bound Tests										
B1. Real GDP growth at historical average minus one standard deviation in 2004-05	136	129	135	116	114	**78**	70	64	31	28
B2. Export value growth at historical average minus one standard deviation in 2004-05 3/	136	132	145	127	123	**60**	53	48	23	20
B3. US dollar GDP deflator at historical average minus one standard deviation in 2004-05	136	149	149	129	126	**86**	78	71	34	31
B4. Net non-debt creating flows at historical average minus one standard deviation in 2004-05 4/	136	118	104	90	88	**57**	51	46	23	20
B5. Combination of B1-B4 using one-half standard deviation shocks	136	160	211	184	179	**92**	82	73	35	31
B6. One-time 30 percent nominal depreciation relative to the baseline in 2004 5/	136	159	135	116	114	**78**	71	64	31	28
B7. Lower oil prices 7/	136	131	125	109	105	58	52	47	23	20
NPV of debt-to-net exports ratio										
Baseline	315	275	230	197	192	**146**	140	133	87	81
A. Alternative Scenarios										
A1. Key variables at their historical averages in 2004-23 1/	315	326	324	317	303	**176**	167	159	123	122
A2. New public sector loans on less favorable terms in 2004-23 2/	315	276	231	198	194	**154**	149	142	100	94
B. Bound Tests										
B1. Real GDP growth at historical average minus one standard deviation in 2004-05	315	275	230	197	192	**146**	140	133	87	81
B2. Export value growth at historical average minus one standard deviation in 2004-05 3/	315	411	589	515	495	**267**	252	236	150	140
B3. US dollar GDP deflator at historical average minus one standard deviation in 2004-05	315	275	230	197	192	**146**	140	133	87	81
B4. Net non-debt creating flows at historical average minus one standard deviation in 2004-05 4/	315	283	245	211	205	**147**	141	134	87	81
B5. Combination of B1-B4 using one-half standard deviation shocks	315	374	484	422	407	**232**	220	206	132	123
B6. One-time 30 percent nominal depreciation relative to the baseline in 2004 5/	315	275	230	197	192	**146**	140	133	87	81
B7. Lower oil prices 7/	315	402	354	292	272	**165**	157	148	95	89
Debt service-to-net export ratio										
Baseline	23	18	13	12	11	**5**	6	7	4	4
A. Alternative Scenarios										
A1. Key variables at their historical averages in 2004-23 1/	23	21	21	26	31	**31**	28	25	22	22
A2. New public sector loans on less favorable terms in 2004-23 2/	23	19	15	13	14	**17**	16	14	11	10
B. Bound Tests										
B1. Real GDP growth at historical average minus one standard deviation in 2004-05	23	19	16	18	19	**21**	20	18	13	13
B2. Export value growth at historical average minus one standard deviation in 2004-05 3/	23	25	32	43	55	**43**	41	36	23	22
B3. US dollar GDP deflator at historical average minus one standard deviation in 2004-05	23	19	16	18	19	**21**	20	18	13	13
B4. Net non-debt creating flows at historical average minus one standard deviation in 2004-05 4/	23	19	17	19	21	**21**	20	18	13	13
B5. Combination of B1-B4 using one-half standard deviation shocks	23	23	27	36	45	**37**	35	31	20	19
B6. One-time 30 percent nominal depreciation relative to the baseline in 2004 5/	23	19	16	18	19	**21**	20	18	13	13
B7. Lower oil prices 7/	23	25	22	25	32	25	24	21	15	14
Memorandum items:										
Exports (in billions of U.S. dollars)	13.9	17.6	22.6	27.4	27.9	38.4	40.7	43.2	65.2	69.2
Net exports (in billions of U.S. dollars)	8.4	9.9	12.4	14.6	15.5	23.1	23.7	24.9	35.1	36.9

Source: Staff projections and simulations.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assumingan offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.
7/ Assumes oil prices of US$30.2 per barrel in 2005 and US$30.6 per barrel in 2006.

Table 1. Angola: Basic Data, 1999 - 2003

Macroeconomic Indicators	1999	2000	2001	2002	2003
	(Annual percentage change, unless otherwise indicated)				
National income and prices					
Nominal GDP (in billions of kwanzas)	17.2	91.7	197.1	471.6	1,031.4
Real GDP growth	3.2	3.0	3.1	14.4	3.4
GDP deflator	551	418	108	109	111
Consumer price index (annual average)	248	325	153	109	98
Consumer price index (end of period)	329	268	116	106	77
Government budget					
Total revenue	896	478	93	115	103
Total expenditure	1,186	284	80	143	100
	(In percent of GDP)				
Total revenue	46.4	50.2	45.1	40.5	37.5
Of which : oil	40.7	44.9	35.9	31.0	28.2
Total expenditure	81.5	58.6	49.0	49.8	45.5
Overall balance (commitment basis)	-35.2	-8.4	-4.0	-9.3	-7.9
Overall balance (cash basis)	-24.4	17.1	-5.1	-1.5	-7.3
Primary balance (commitment basis)	-26.1	-2.9	1.0	-6.0	-6.1
	(Annual percentage change, unless otherwise indicated)				
Money and credit 1/					
Net domestic assets	-362	-327	54	48	22
Broad money	533	304	163	158	67
Velocity (Non-oil GDP/average M2)	3.2	3.7	3.4	3.0	3.7
Interest rate (three-month time deposits; in percent, end of period)	35.5	46.0	56.1	41.0	46.0
External sector					
Exports, f.o.b.	45.9	53.6	-16.2	25.5	14.2
Crude oil	46.4	57.8	-16.7	30.3	13.0
Other	43.1	29.1	-12.9	-7.6	25.0
Imports, f.o.b.	49.5	-2.2	4.6	18.3	45.7
Terms of trade	49.3	56.8	-13.9	1.4	4.2
Official exchange rate (dollar terms, end of period)	5.6	16.8	31.9	58.7	79.1
Nominal effective exchange rate	-74	-73	-60	-47	-47
Real effective exchange rate 2/	-19	20	13	2	18
	(In millions of U.S. dollars, unless otherwise indicated)				
Overall balance of payments	-126	295	-842	-551	-29
External payment arrears (end of period) 3/	...	...	4,153	4,298	4,201
Gross international reserves (end of period)	496	1,198	732	375	636
In months of imports of non-oil goods and services	2.3	5.0	2.1	0.9	1.2
	(In percent of GDP, unless otherwise indicated)				
Current account balance	-27.8	8.7	-14.9	-1.4	-5.2
Debt (including arrears and late interest)	. . .	. . .	81	81	70
Debt service ratio 4/	176	75	141	40	39
Debt service-to-government revenue ratio 5/					
Use of Fund resources					
Fund arrangement	None	None	None	None	None
Quota (millions of SDRs)	286	286	286	286	286

Sources: Angola authorities; and staff estimates.

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

2/ Increase = appreciation.

3/ Excludes late interest.

4/ Scheduled debt service in percent of exports of goods and services, excluding oil related expenses.

5/ 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 1. Angola: Basic Data (concluded)

Social and Demographic Indicators	Angola	Year	Sub-Saharan Africa	Year
Population (millions)	13.5	2003	703	2003
United Nations Human Development Index	0.40	2000	0.47	2000
Labor force growth (annual percentage change)	2.9	1994-2000	2.6	1994-2000
Population growth (annual percentage change)	3,0	2003	2,1	2003
Fertility rate (births per woman)	7.0	2002	5.1	2002
Access to sanitation (percent of total population)	44	2000	54	2000
Internally displaced people (millions)	3.9	2001	...	...
Child malnutrition (in percent of children under 5 years)	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 an improved water source (percent of total population)	38	2000	58	2000
Urban population (percent of total population)	34	2000	33	2002
Measles immunization (percent of age group)	74	2002	58	2002
Life expectancy at birth (years)	47	2002	46	2002
Illiteracy (percent of population age above 15 years)	33	2001	38	2000
Labor force in agriculture (percent of total)	75	1996	65	1996
Infant mortality (per 1,000 live births)	154	2003	103	2002
School enrolment (percent of total)	23	1999	42	1999
GNI per capita (PPP, U.S. dollars)	1,890	2003	1,770	2003
Area (thousands of square kilometers)	1,247	2000	23,603	2000
Daily calorie supply per capita	1,903	1997	2,237	1997

Sources: Angolan authorities, *Poverty Reduction Strategy* , 2004; World Bank, *World Development* Indicators, 2003; and United Nations Development Program, Human Development Report, 2001.

Table 2. Angola: Gross Domestic Product by Sector of Activity, 1999-2003

	1999	2000	2001	2002	2003
	(In billions of kwanzas)				
Agriculture, forestry, and fishing	1.1	5.2	16.1	38.1	84.9
Mining	11.4	60.9	113.1	273.5	545.4
Oil and LPG 1/	10.0	55.1	100.9	251.0	498.5
Diamonds	1.4	5.9	12.1	22.5	46.9
Manufacturing	0.6	2.6	7.6	17.6	39.3
Electricity and water	0.0	0.0	0.1	0.2	0.4
Construction	0.5	2.5	7.1	16.4	36.8
Trade and commerce	2.6	13.1	30.4	67.1	146.8
Nontradable services	0.8	6.1	18.4	50.3	155.9
Import duties	0.2	1.2	4.3	8.5	22.0
GDP at market prices	17.2	91.7	197.1	471.6	1,031.4
	(Real growth rates in percent)				
Agriculture, forestry, and fishing	1.3	9.3	18.0	13.3	11.7
Mining	5.8	2.0	1.0	18.2	-0.3
Oil and LPG 1/	1.0	0.4	-1.0	20.6	-2.1
Diamonds	39.5	13.3	19.5	-2.1	20.0
Manufacturing	7.2	8.9	9.8	10.2	12.0
Electricity and water	1.3	0.8	10.0	10.0	10.0
Construction	5.0	7.5	8.5	10.0	12.5
Trade and commerce	4.4	3.4	6.0	11.6	9.9
Nontradable services	-7.5	1.5	1.0	2.5	1.9
Import duties	-10.0	0.0	2.5	5.0	10.0
GDP	3.2	3.0	3.1	14.4	3.4
Non-oil GDP	4.6	6.6	9.4	7.9	9.8

Sources: Angolan authorities; and staff calculations.
1/ Liquefied petroleum gas.

Table 3. Angola: Production of Selected Manufactured Products, 1999-2003
(In metric tons, unless otherwise specified)

	1999	2000	2001	2002	2003
Food, beverages, and tobacco					
Dry fish	6,125	5,818	6,917	10,070	12,201
Frozen fish	41,534	49,580	57,821	43,886	36,173
Canned fish	…	3	1	1	…
Edible oil	…	…	1,523	1,967	…
Wheat flour	57,493	68,991	20,306	20,978	38,168
Maize flour	…	…	212	…	…
Yam flour	…	…	…	…	…
Bread	87,517	105,016	313,747	…	264,034
Pasta	163	195	21	11	12
Salt	38,517	47,170	26,675	21,626	21,280
Beer (in thousands of liters)	160,942	193,131	82,031	79,989	191,961
Other alcoholic beverages (in thousands of liters)	12,195	11,472	9,760	5,870	5,367
Nonalcoholic beverages (in thousands of liters)	4,125	2,900	82,031	56,043	88,776
Tobacco	748	897	316	627	662
Textiles, clothing, and leather					
Fabric (in thousands of square meters)	316	378	…	…	…
Clothing and accessories	18	21	…	…	…
Leather shoes	25	30	403	458	212
Chemicals and plastics					
Paints	1,073	1,287	64	1,023	…
Soap	8,565	10,278	2,579	307	4,610
Plastic containers	10	12	463	44	148
Gasoline	128,113	111,379	107,244	104,631	95,913
Diesel	493,019	468,422	501,704	461,014	407,542
Kerosene	30,394	30,249	31,177	36,857	43,908
Butane gas	30,483	29,604	31,487	34,340	29,983
Asphalt	6,074	9,696	9,296	6,733	7,760
Fuel oil	646,819	595,253	552,820	590,676	639,319
Fuel (extra heavy)	51,980	65,130	76,068	69,047	76,927
Jet fuel	338,465	320,743	330,876	352,489	324,841
Nafta	105,176	107,085	89,051	75,408	…
Oils and lubricants	…	…	…	…	…
Construction material					
Pipe	1,705	2,046	3,680	465	184
Zinc sheet	753	903	4,287	…	3,379
Cement	206,750	200,625	465,542	312,750	500,620
Electric products					
Electric cables	55	66	…	…	…
Batteries	2,785	3,342	…	…	…
Refrigerators	…	…	…	622	5,782

Source: Ministry of Planning.

Table 4. Angola: Oil Production by Oil Field, 1999-2003

	1999	2000	2001	2002	2003
	(Thousands of barrels per day)				
Total production	746	748	741	894	875
Cabinda	460	445	460	431	405
Block 1	1	2	2	1	0
Block 2	83	72	63	50	45
Block 3	174	148	138	139	125
Block 4	11	8	4	1	0
Block 14	1	61	57	66	61
Block 17	0	0	4	193	216
Congo	16	11	12	13	13
Kwanza	0	0	0	0	0
	(In millions of barrels)				
Total production to date 1/	4,133	4,406	4,676	5,003	5,322
Cabinda	2,694	2,857	3,025	3,182	3,330
Block 1	31	31	32	32	32
Block 2	337	363	386	405	421
Block 3	694	748	798	849	894
Block 4	32	35	36	36	36
Block 14	1	23	44	68	90
Block 17	0	0	1	72	151
Congo	245	249	260	265	262
Kwanza	93	93	93	93	93

Source: Ministry of Petroleum.

1/ At year's end.

Table 5. Angola: Oil Balance, 1999-2003

	1999	2000	2001	2002	2003
	(In millions of barrels)				
Crude oil					
Production	272	273	270	326	319
Domestic refinery	14	14	16	16	16
Exports 1/	254	256	255	311	302
Net change in stocks 2/	5	3	-1	-2	0
	(In thousands of metric tons)				
Derivatives					
Supply	1,956	1,975	...	...	...
Domestic production	1,860	1,771	...	...	...
Imports	96	204	...	...	...
Uses	1,956	1,975	...	...	...
Domestic sales	1,003	1,045	...	...	...
Diesel (gas oil)	395	428	...	...	...
Gasoline	117	103	...	...	...
Fuel oil	54	80	...	...	...
Jet fuels	314	316	...	...	...
Kerosene	53	45	...	...	...
Gas (liquefied petroleum gas)	54	52	...	...	...
Other	16	21	...	...	...
Exports 3/	832	791	...	...	...
Net change in stocks	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, 1999-2003

	1999	2000	2001	2002	2003
	(In units indicated)				
Crude oil					
In millions of barrels	272	273	270	326	319
In thousands of barrels per day	746	748	741	894	875
Liquefied petroleum gas					
In thousands of barrels	623.8	1,475.1	1,068.1	636.4	635.6
Diamonds (production)					
In thousands of carats	3,806	4,313	5,159	5,500	6,063
	(Annual percentage change)				
Crude oil	1.0	0.3	-1.1	20.7	-2.2
Liquefied petroleum gas	-8.3	136.5	-27.6	-40.4	-0.1
Diamonds (recorded exports)	37.6	13.3	19.6	6.6	10.2

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

Table 7. Angola: Prices of Petroleum Products, 1999-2003
(End-of-period data)

	1999	2000	2001	2002	2003
	(Kwanzas per liter, unless otherwise indicated)				
Gasoline	0.3	4.0	8.2	12.0	12.0
Kerosene	0.1	2.0	5.0	7.8	7.8
Diesel (gas oil)	0.1	2.0	5.6	8.0	8.0
Fuel oil (light) 1/	0.1	1.6	4.1	6.4	6.4
Fuel oil (heavy) 1/	0.1	1.1	3.0	6.6	6.6
LPG 2/	0.4	4.0	7.0	10.2	10.2
	(U.S. dollars per gallon, unless otherwise indicated)				
Gasoline	0.98	1.28	1.09	0.77	0.57
Kerosene	0.49	0.83	0.66	0.50	0.37
Diesel (gas oil)	0.50	0.85	0.74	0.52	0.38
Fuel oil (light) 1/	0.36	0.68	0.54	0.41	0.31
Fuel oil (heavy) 1/	0.25	0.70	0.40	0.43	0.32
LPG 2/	1.41	1.09	0.93	0.66	0.49
	(Annual percentage change in kwanzas terms)				
Gasoline	33	30	105	46	0
Kerosene	18	69	150	56	0
Diesel (gas oil)	32	71	180	43	0
Fuel oil (light) 1/	33	88	152	58	0
Fuel oil (heavy) 1/	32	181	176	121	0
LPG 2/	29	-23	75	46	0

Sources: Ministry of Finance; and staff estimates.

1/ Kwanzas per kilogram.

2/ Liquefied petroleum gas.

Table 8. Angola: Consumer Price Index in Luanda, December 1999- December 2003
(CPI level expressed in millions)

	Weights 1999 (In percent)	1999 Dec.	2000 Dec.	2001 Dec.	Weights 2002 1/ (In percent)	2002 Dec.	2003 Dec.
Food and non-alcoholic beverages 2/	74.1	3.6	11.2	22.5	46.1	218.8	394.4
Food, beverages, and tobacco 2/	...	...	...	...	4.0	193.0	354.1
Clothing and footwear	5.5	5.2	21.4	45.7	6.0	241.8	379.4
Housing, water, energy, and utilities 3/	5.5	28.4	157.8	434.2	12.3	175.7	293.7
Furniture and appliances	4.7	7.0	22.6	33.3	6.5	217.3	354.3
Health	1.8	4.3	12.5	25.1	3.4	172.3	232.7
Transport 4/	3.9	19.1	65.7	110.0	6.5	156.8	298.2
Communications 4/	...	...	...	...	1.1	264.8	441.3
Leasure, recreation, and culture	...	...	...	...	2.5	205.3	340.7
Education	2.7	6.2	24.2	47.0	2.1	156.0	266.5
Hotel, cafes, and restaurants	...	...	...	...	4.4	188.1	309.7
Other goods and services	1.9	4	11	21	5.1	217.9	334
Total	100.0	5.1	18.7	40.5	100.0	205.6	363.0 5/
			(Percent change over previous year)				
Food and non-alcoholic beverages 2/		416	216	101		119	80
Food, beverages, and tobacco 2/		...	...	...		93	83
Clothing and footwear		364	313	113		142	57
Housing, water, energy, and utilities 3/		128	456	175		76	67
Furniture and appliances		449	222	47		117	63
Health		317	192	101		72	35
Transport 4/		824	244	67		57	90
Communications 4/		...	...	...		165	67
Leasure, recreation, and culture		...	...	...		105	66
Education		313	293	94		56	71
Hotel, cafes, and restaurants		...	...	...		88	65
Other goods and services		381	173	98		118	53
Total		329	268	116		106	77 5/

Source: National Institute of Statistics.

1/ Starting in January 2002, the method of calculation for the CPI was updated on the basis of a consumer and expenditure survey carried out between February 2000 and February 2001. Accordingly, the weighting scheme has been updated, the number of items included in the basket has been increased to 224 (from 159 previously), and the index is now divided into 12 major categories (instead of 8 previously).

2/ Before January 2002, these two categories were both under "Food, beverages, and tobacco".

3/ Before January 2002 this category did not include water.

4/ Before January 2002 these two categories were both under "Transport and communication".

5/ Uses updated weights.

Table 9. Angola: Average Exchange Rates, December 1999- December 2003
(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)
1999					
December	5.509	…	5.624	…	2.1
2000					
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
2003					
January	60.64	6.2	66.12	-5.7	9.0
February	64.75	6.8	65.96	-0.2	1.9
March	67.49	4.2	70.16	6.4	3.9
April	70.22	4.1	72.70	3.6	3.5
May	73.23	4.3	75.64	4.0	3.3
June	76.43	4.4	78.08	3.2	2.2
July	80.88	5.8	83.36	6.8	3.1
August	85.63	5.9	89.89	7.8	5.0
September	80.47	-6.0	85.27	-5.1	6.0
October	78.64	-2.3	82.23	-3.6	4.6
November	78.41	-0.3	81.46	-0.9	3.9
December	78.48	0.1	83.23	2.2	6.0

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, 1999-2003

	1999	2000	2001	2002	2003
	(In millions of U.S. dollars)				
Current account	**-1,710**	**795**	**-1,329**	**-150**	**-720**
Of which: Oil-sector	1,645	318	1,362	3,856	1,971
Trade balance	2,048	4,880	3,457	4,568	4,028
Exports, fob	5,157	7,920	6,636	8,328	9,508
Crude oil	4,406	6,951	5,792	7,548	8,533
Refined oil products and gas	85	169	113	105	147
Diamonds	629	739	689	638	788
Other	37	61	43	36	40
Imports, fob	-3,109	-3,040	-3,179	-3,760	-5,480
Oil-sector	-1,152	-1,127	-1,178	-1,393	-2,022
Non-oil sector	-1,957	-1,913	-2,001	-2,367	-3,458
Services (net)	-2,442	-2,432	-3,316	-3,115	-3,120
Receipts	153	267	203	207	201
Payments	-2,595	-2,699	-3,518	-3,322	-3,321
Oil-sector	-1,892	-1,968	-2,643	-1,550	-1,654
Non-oil sector	-703	-731	-875	-1,772	-1,667
Income (net)	-1,372	-1,681	-1,561	-1,635	-1,726
Receipts	-1,222	-1,525	-1,466	18	12
Payments	. . .	. . .	. . .	-1,652	-1,739
Of which: oil sector	-923	-1,131	-1,051	-1,100	-1,264
Of which: Interest due 1/	-569	-597	-539	-354	-268
Current transfers (net)	56	28	91	32	99
Financial and capital account	**1,664**	**-450**	**954**	**-552**	**1,103**
Capital transfers (net)	7	18	4	0	0
Direct investments (net)	2,472	879	2,146	1,643	1,652
Of which: Oil sector	935	0	450	1,672	3,505
Medium- and long-term loans	-291	-766	-618	-162	298
Disbursements	1,501	1,610	1,619	1,279	1,890
Amortizations	-1,791	-2,376	-2,237	-1,441	-1,592
Other capital (net)	-524	-580	-577	-2,033	-847
Net errors and omissions	**-80**	**-50**	**-467**	**150**	**-388**
Overall balance	**-126**	**295**	**-842**	**-551**	**-5**
Net international reserves (- increase)	-530	-631	508	207	-325
Exceptional financing	656	336	334	344	330
Debt rescheduling and debt forgiveness	0	202	40	10	268
Arrears, net (+ increase) 1/	656	134	294	334	63
Memorandum items:					
	(In percent of GDP; unless otherwise indicated)				
Current account	-27.8	8.7	-14.9	-1.4	-5.2
Exports of goods and services	86.3	89.6	76.5	79.1	63.2
Imports of goods and services	92.7	62.8	74.9	65.6	63.7
External debt (in billion of dollars)	. . .	. . .	7.3	8.7	9.7
External debt	. . .	. . .	81.3	81.0	69.9
Debt service ratio 2/	44.4	36.3	141.1	40.0	39.0
Gross international reserves (end of period)	496	1,198	732	375	660
In months of imports of goods and services 3/	1.0	2.1	1.2	0.5	0.8
In months of imports of non-oil sector goods and services 3/	2.3	5.0	2.1	0.9	1.2
In months of debt service 3/	2.0	5.2	4.9	2.4	5.4
	(In percentage change)				
Export of goods	46	54	-16	25	14
Import of goods	50	-2	5	18	46
Export volumes	1	2	-1	21	-3
Import volumes	49	-2	3	14	32
Terms of trade	49	57	-14	1	4

Source: National Bank of Angola.

1/ Includes late interest.

2/ In percent of exports of goods and services, excluding oil related expenses.

3/ In months of next year's imports or medium- and long-term debt service. In 2003, using current year's data.

Table 11. Angola: Foreign Exchange Reserves, 1999-2003
(In millions of U.S. dollars, unless otherwise specified; end of period)

	1998	1999	2000	2001	2002	2003
Net foreign assets (banking system)	241	1,034	1,815	1,495	1,594	1,825
Net international reserves 1/	-231	408	1,039	531	324	649
Gross reserves	203	496	1,198	732	375	660
BNA	203	496	1,198	732	375	634
Gold	0	0	0	0	0	0
Sight deposits	141	452	651	346	74	92
Time deposits	62	43	547	386	301	542
Government deposits abroad 2/	0	0	0	0	0	26
Foreign liabilities (short term)	-434	-88	-159	-201	-52	-11
Other net foreign assets (BNA)	-11	-3	-53	-47	-56	-18
Other foreign assets (medium and long term)	0	0	0	0	0	2
Other foreign liabilities (medium and long term) (-)	-11	-3	-53	-47	-56	-20
Commercial banks (net)	483	628	829	1,011	1,327	1,194
Foreign assets	682	747	878	1,169	1,454	1,284
Foreign liabilities (-)	-199	-119	-49	-157	-127	-90
Memorandum items:						
National Bank of Angola						
Change in net international reserves	-321	639	631	-508	-207	300
Change in gross reserves	-193	293	702	-466	-356	259
Import coverage (of gross reserves) 3/	0.4	1.0	2.1	1.2	0.5	0.8

Source: National Bank of Angola.
1/ Excludes medium- and long-term assets and liabilities.
2/ Estimates
3/ In months of following year's imports.

Table 12. Angola: Direction of Merchandise Exports, 1999–2003 1/

	1999	2000	2001	2002	2003
	(In millions of U.S. dollars)				
Total 1/	4,394	7,364	6,220	7,085	8,693
Africa	44	17	11	10	80
Of which: South Africa	32	10	1	1	56
European Union	746	1,276	1,641	2,030	1,282
Of which: Portugal	10	47	106	56	3
USA	2,337	3,285	2,979	2,978	4,097
Other	1,267	2,786	1,589	2,067	2,067
	(Shares in percent of total)				
Africa	1.0	0.2	0.2	0.1	0.9
Of which: South Africa	0.7	0.1	0.0	0.0	0.6
European Union	17.0	17.3	26.4	28.7	14.8
Of which: Portugal	0.2	0.6	1.7	0.8	0.0
USA	53.2	44.6	47.9	42.0	47.1
Other	28.8	37.8	25.5	29.2	23.8
	(Percent change from previous year)				
Total 1/	26.4	67.6	-15.5	13.9	22.7
Africa	322.5	-61.5	-38.3	-1.7	676.6
Of which: South Africa	1,018.3	-69.5	-86.5	8.5	3,805.5
European Union	26.0	71.2	28.6	23.7	-36.8
Of which: Portugal	-55.5	372.4	126.7	-47.1	-95.5
USA	4.9	40.6	-9.3	-0.1	37.6
Other	95.8	119.9	-43.0	30.1	0.0
Memorandum item:					
Total as percent of staff's estimate of total exports, f.o.b (Table 10)	103.9	113.4	114.3	103.8	111.5

Source: IMF, Direction of Trade Statistics.

1/ Data provided by partner countries.

Table 13. Angola: Commodity Composition of Exports, 1999-2003
(In millions of U.S. dollars; unless otherwise indicated)

	1999	2000	2001	2002	2003
Total exports	5,157	7,920	6,636	8,328	9,508
Crude oil	4,406	6,951	5,792	7,548	8,533
Volume (millions of barrels)	253.6	256.1	255.2	311.5	302.4
Price (U.S. dollars per barrel)	17.4	27.1	22.7	24.2	28.2
Refined petroleum products	75	132	93	95	132
Volume (thousands of metric tons)	720.3	733.5	675.0	673.5	681.8
Price (U.S. dollars per metric ton)	104.6	179.8	137.3	141.7	193.1
Liquefied Natural Gas	9	37	20	10	16
Volume (thousands of barrels)	623.8	1,475.1	1,068.1	636.4	635.6
Price (U.S. dollars per barrel)	15.0	25.0	18.8	15.7	24.6
Diamonds	629	739	689	638	788
Volume (thousands of carats)	3806.0	4318.9	5158.9	5022.3	6063.1
Price (U.S. dollars per carat)	165.3	171.2	133.5	127.1	130.0
Coffee	4.0	1.2	0.6	0.4	0.8
Volume (thousand metric tons)	3006.8	1290.3	855.0	611.7	918.5
Price (U.S. dollars per metric ton)	1339.3	908.3	687.0	593.5	836.5
Other	33	60	42	36	39
Memorandum items:					
Total exports (percent change)	45.9	53.6	-16.2	25.5	14.2
Total exports (in percent of GDP)	83.8	86.7	74.3	77.2	68.8
Petroleum (in percent of total exports)	87.1	89.9	89.0	91.9	91.3
Diamonds (in percent of total exports)	12.2	9.3	10.4	7.7	8.3
Other (in percent of total exports)	0.6	0.8	0.6	0.4	0.4

Source: National Bank of Angola.

Table 14. Angola: Origin of Merchandise Imports, 1999–2003 1/

	1999	2000	2001	2002	2003
	(In millions of U.S. dollars)				
Total, c.i.f. 1/	2,239	2,184	3,464	3,105	4,470
Africa	257	426	477	519	629
Of which: South Africa	211	340	418	454	550
European Union	987	1,017	1,341	1,449	2,334
Of which: Portugal	323	373	493	595	810
USA	278	241	304	410	541
Other	717	501	1,342	727	966
	(Shares in percent of total)				
Africa	11.5	19.5	13.8	16.7	14.1
Of which: South Africa	9.4	15.6	12.1	14.6	12.3
European Union	44.1	46.6	38.7	46.7	52.2
Of which: Portugal	14.4	17.1	14.2	19.2	18.1
USA	12.4	11.0	8.8	13.2	12.1
Other	32.0	22.9	38.8	23.4	21.6
	(Percent change from previous year)				
Total 1/	0.4	-2.5	58.6	-10.4	44.0
Africa	-3.8	65.4	12.1	8.7	21.3
Of which: South Africa	-1.9	61.3	22.9	8.5	21.2
European Union	-14.4	3.0	31.9	8.1	61.0
Of which: Portugal	-28.4	15.4	32.3	20.6	36.2
USA	-28.6	-13.5	26.1	34.9	32.1
Other	70.2	-30.1	167.9	-45.8	32.8
Memorandum item:					
Total as percent of staff's estimate of total imports, f.o.b. (Table 10)	87.8	87.6	132.9	100.7	99.5

Source: IMF, Direction of Trade Statistics.

1/ Data provided by partner countries.

Table 15. Angola: Composition of Imports, 1999-2003

	1999	2000	2001	2002	2003
	(In millions of U.S. dollars)				
Total imports, fob	3,109	3,040	3,179	3,760	5,480
Consumer goods	2,077	1,950	2,174	2,193	3,472
Intermediate goods	182	245	304	437	580
Capital goods	850	845	701	1,130	1,428
	(Percent change)				
Total imports, fob	50	-2	5	18	46
Consumer goods	92	-6	11	1	58
Intermediate goods	-22	35	24	44	33
Capital goods	11	-1	-17	61	26
	(In percent of GDP)				
Total imports, fob	51	33	36	35	40
Consumer goods	34	21	24	20	25
Intermediate goods	3	3	3	4	4
Capital goods	14	9	8	10	10
	(Shares in percent of total)				
Consumer goods	67	64	68	58	63
Intermediate goods	6	8	10	12	11
Capital goods	27	28	22	30	26

Source: National Bank of Angola.

Table 16. Angola: Services, 1999–2003

	1999	2000	2001	2002	2003
	(In millions of U.S. dollars)				
Services (net)	-2,442	-2,432	-3,316	-3,115	-3,120
Transport	-348	-295	-379	-460	-743
Insurance	-45	-28	-65	-94	-157
Government	-401	-429	-342	-125	-61
Oil sector	. . .	. . .	. . .	-1,542	-1,644
Other	-1,647	-1,680	-2,529	-886	-505
Total receipts	153	267	203	207	201
Transport	47	16	13	17	16
Insurance	16	35	28	0	0
Government	0	0	0	0	0
Oil sector	. . .	. . .	. . .	8	9
Other	90	216	161	190	185
Total payments	2,595	2,699	3,518	3,322	3,321
Transport	395	311	392	477	759
Insurance	61	63	93	94	157
Government	401	429	342	125	61
Oil sector	. . .	. . .	. . .	1,550	1,654
Other	1,738	1,896	2,690	1,076	690
	(Percent change)				
Total receipts	25.6	74.7	-24.2	2.1	-2.8
Total payments	-1.5	4.0	30.3	-5.6	0.0
Of which: Oil sector	. . .	. . .	. . .	. . .	6.7
	(In percent of GDP)				
Services (net)	-39.7	-26.6	-37.1	-28.9	-22.6
Total receipts	2.5	2.9	2.3	1.9	1.5
Total payments	42.2	29.5	39.4	30.8	24.0
Of which: Oil sector	. . .	. . .	. . .	14.4	12.0

Source: National Bank of Angola.

Table 17. Angola: Monetary Survey, December 1999- December 2003

	1999	2000	2001	2002	2003			
	Dec.	Dec.	Dec.	Dec.	Mar	Jun	Sep	Dec
	(In billions of kwanzas)							
Net foreign assets (banking system)	5.8	30.5	47.8	93.5	106.7	142.7	175.3	142.3
National Bank of Angola (BNA)	2.3	16.6	15.5	15.7	26.1	46.9	73.0	47.9
Of which: gross reserves	2.8	20.1	23.4	22.0	32.2	53.3	79.6	50.3
Of which: foreign liabilities – short term	-0.5	-2.7	-6.4	-3.0	-1.4	-1.3	-1.2	-0.8
Commercial banks	3.5	13.9	32.3	77.8	80.6	95.8	102.3	94.4
Of which: foreign assets	4.2	14.8	37.3	85.3	88.8	104.0	110.0	101.5
Of which: foreign liabilities – short term	-0.5	-0.5	-3.8	-6.2	-6.8	-7.6	-6.9	-6.4
Net domestic assets	-1.8	-14.7	-6.1	14.1	-0.7	0.0	-21.0	38.0
Net domestic credit	1.2	-13.5	-1.2	26.8	16.5	19.8	4.6	65.0
Credit to government (net)	0.7	-15.7	-9.4	2.1	-15.3	-18.3	-43.9	7.0
Claims on government	4.0	1.1	0.6	28.4	25.3	27.5	22.8	42.5
Government deposits	-3.3	-16.8	-10.1	-26.4	-40.6	-45.7	-66.7	-35.4
Credit to the economy	0.5	2.2	8.2	24.7	31.8	38.0	48.5	58.0
State companies	0.1	0.3	0.9	1.4	3.1	3.2	4.9	4.9
Other items (net)	-3.1	-1.2	-4.9	-12.7	-17.2	-19.8	-25.7	-27.0
Broad money (M3)	3.9	15.8	41.7	107.6	106.0	142.7	154.3	180.3
Money and quasi money (M2)	3.9	15.8	41.4	107.0	105.2	142.5	151.8	177.9
Money	3.1	13.3	30.2	69.4	52.6	70.7	94.7	127.0
Currency outside banks	0.7	3.0	8.2	20.9	14.6	16.2	20.8	35.4
Demand deposits	2.4	10.3	22.0	48.6	38.0	54.5	73.9	91.6
Of which: foreign currency deposits	1.8	8.2	16.5	37.4	26.6	26.3	44.4	57.7
Quasi money	0.9	2.5	11.2	37.5	52.6	71.9	57.1	50.9
Of which: foreign currency deposits	0.1	1.3	7.3	28.1	43.9	62.7	48.6	39.3
Central bank bonds	0.0	0.0	0.3	0.6	0.8	0.2	2.5	2.4
	(Cumulative percentage change from beginning of year)							
Net foreign assets	3,338	429	57	96	14	53	87	52
Net domestic assets	-559	696	-59	-332	-105	-100	-249	170
Net domestic credit	215	-1,191	-91	-2,294	-38	-26	-83	143
Net credit to the government	134	-2,331	-40	-122	-831	-972	-2,194	235
Credit to the economy	477	309	276	200	29	54	97	135
Broad money (M3)	533	304	163	158	-2	33	43	67
Currency outside banks	302	346	177	154	-30	-23	-1	70
Foreign currency deposits	1,084	307	151	172	5	29	36	43
	(In units indicated)							
Memorandum Items:								
Official exchange rate (selling; kwanzas per U.S. dollar)	5.6	16.8	31.9	58.7	68.6	78.5	79.3	79.1
Accumulated inflation (year to date; in percent)	329	267	113	112	23	48	69	83
Velocity (GDP/M2)	4.4	5.8	4.8	4.4	9.8	7.2	6.8	5.8
Gross international reserves (U.S. dollars)	496	1,198	732	375	469	679	1,004	636
Net international reserves (U.S. dollars)	408	1,039	531	324	448	663	988	625
Commercial banks' net foreign assets (U.S. dollars)	628	829	1,011	1,327	1,174	1,220	1,291	1,194

Sources: National Bank of Angola; and staff estimates.

Table 18. Angola: Interest Rates, December 1999 - December 2003 1/
(In percent per annum)

	1999	2000	2001	2002	2003			
	Dec.	Dec.	Dec.	Dec.	Mar.	Jun.	Sep.	Dec.
Demand deposits	10.0	15.8	10.2	10.0	10.1	10.1	10.0	10.0
Time deposits (days' maturities)								
0-90	35.5	46.0	56.1	41.0	37.8	20.0	26.3	26.7
91-180	55.0	55.0	50.0	59.7	50.9	27.0	30.0	28.0
181-364	57.0	57.0	-	-	25.0	-	-	-
365 +	57.0	-	-	-	-	-	-	27.1
Lending rates (days' maturities)								
0-180	118.3	89.6	97.6	99.7	98.4	101.4	100.5	93.4
181-364	n.d.	102.8	91.7	104.6	101.6	109.1	98.6	68.8
365 +	n.d.	120.0	110.0	102.8	86.1	91.8	86.3	75.7
Discount rate	120.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
Central bank bills								
14-day	-	112.5	-	-	-	-	-	-
28-day	79.1	115.2	-	102.7	90.0	65.2	-	45.8
63-day	-	120.1	-	107.9	97.0	78.9	-	56.1

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

Table 19. Angola: Summary of Government Operations, 1999-2003
(In billions of kwanzas)

	1999	2000	2001	2002	2003
Total revenue	8.0	46.0	88.9	190.8	386.9
Oil	7.0	41.1	70.8	146.4	290.4
Non-oil	1.0	4.9	18.1	44.5	96.5
Income taxes	0.3	1.4	5.3	12.5	27.7
Taxes on goods and services	0.3	1.6	5.8	14.6	30.1
Taxes on foreign trade	0.2	1.2	4.4	10.6	23.0
Other	0.2	0.7	2.6	6.8	15.7
Total Expenditure	14.0	53.684	96.7	234.7	468.9
Current expenditure	8.7	39.9	70.1	174.1	378.1
Personnel	0.7	5.3	16.0	53.2	129.0
Goods and services	4.6	23.6	33.6	92.9	163.8
Budgeted					
Extrabudgetary (recorded ex post)					
Interest payments due	1.6	5.0	9.8	15.5	19.0
Transfers	1.8	6.0	10.7	12.5	66.3
Capital expenditure	2.2	5.6	12.5	33.6	79.0
Quasi fiscal expenditures	…	1.4	1.9	1.0	0.0
Central Bank operational deficit	...	2.7	3.6	10.7	7.5
Discrepancy (unexplained)	3.1	4.1	8.6	15.3	0.0
Overall balance before grants (accrual basis)	-6.0	-7.7	-7.8	-43.9	-82.0
Change in payment arrears (net)	1.8	23.3	-2.3	36.8	6.7
Domestic	0.5	20.0	-7.5	32.0	4.2
External interest	1.3	3.3	5.2	4.8	2.5
Overall balance before grants (cash basis)	-4.2	15.7	-10.1	-7.1	-75.2
Financing	4.2	-15.7	10.1	7.1	75.2
Onetime oil field concession bonuses	2.6	0.0	4.3	13.6	0.0
Grants	0.7	2.0	4.7	0.0	8.0
External financing (net)	0.3	-4.3	-10.3	-24.2	36.2
Disbursements	2.5	10.5	25.7	40.8	117.7
Amortization	-2.2	-14.9	-36.1	-61.5	-101.2
Short-term borrowing, net	0.0	0.0	0.0	-3.5	0.0
Domestic financing (net)	0.6	-13.4	11.5	17.7	31.0
Memorandum items:					
Primary balance (commitment basis)	-4.5	-2.7	2.0	-28.4	-62.9

Sources: Angolan authorities; and staff estimates.

Table 20. Angola: Summary of Government Operations, 1999-2003
(In percent of GDP, unless otherwise indicated)

	1999	2000	2001	2002	2003
Total revenue	46.4	50.2	45.1	40.5	37.5
Oil	40.7	44.9	35.9	31.0	28.2
Non-oil	5.6	5.3	9.2	9.4	9.4
Income taxes	1.5	1.5	2.7	2.6	2.7
Taxes on goods and services	1.9	1.8	2.9	3.1	2.9
Taxes on foreign trade	1.3	1.4	2.2	2.2	2.2
Other	0.9	0.8	1.3	1.4	1.5
Total Expenditure	81.5	58.6	49.0	49.8	45.5
Current expenditure	50.6	43.5	35.6	36.9	36.7
Personnel	4.2	5.8	8.1	11.3	12.5
Goods and services	26.9	25.8	17.0	19.7	15.9
Interest payments due	9.0	5.4	5.0	3.3	1.8
Transfers	10.5	6.5	5.4	2.7	6.4
Capital expenditure	12.8	6.1	6.4	7.1	7.7
Quasi fiscal expenditures	…	1.5	1.0	0.2	0.0
Central Bank operational deficit	...	3.0	1.8	2.3	0.7
Discrepancy (unexplained)	18.2	4.5	4.3	3.2	0.0
Overall balance before grants (accrual basis)	-35.2	-8.4	-4.0	-9.3	-7.9
Change in payment arrears (net)	10.7	25.4	-1.2	7.8	0.7
Domestic	3.2	21.8	-3.8	6.8	0.4
External interest	7.5	3.6	2.6	1.0	0.2
Overall balance before grants (cash basis)	-24.4	17.1	-5.1	-1.5	-7.3
Financing	24.4	-17.1	5.1	1.5	7.3
Onetime oil field concession bonuses	15.2	0.0	2.2	2.9	0.0
Grants	4.0	2.2	2.4	0.0	0.8
External financing (net)	2.0	-4.7	-5.2	-5.1	3.5
Disbursements	14.7	11.5	13.1	8.7	11.4
Amortization	-12.7	-16.3	-18.3	-13.0	-9.8
Short-term borrowing, net	0.0	0.0	0.0	-0.7	0.0
Domestic financing (net)	3.3	-14.6	5.8	3.7	3.0
Memorandum items:					
Primary balance	-26.1	-2.9	1.0	-6.0	-6.1

Sources: Angolan authorities and staff estimates.

Table 21. Angola: Summary of Government Operations, 1999-2003
(In millions of U.S. dollars, unless otherwise indicated)

	1999	2000	2001	2002	2003
Total revenue	2,852	4,586	4,029	4,367	5,186
Oil	2,504	4,098	3,209	3,349	3,892
Non-oil	348	488	820	1,017	1,294
Income taxes	94	135	241	286	372
Taxes on goods and services	118	160	263	334	404
Taxes on foreign trade	80	123	199	242	308
Other	55	69	117	155	210
Total Expenditure	5,016	5,350	4,383	5,371	6,284
Current expenditure	3,112	3,972	3,180	3,984	5,068
Personnel	258	526	725	1,217	1,729
Goods and services	1,652	2,354	1,523	2,126	2,195
Budgeted					
Extrabudgetary (recorded ex post)					
Interest payments due	556	496	445	355	255
Transfers	645	596	487	286	889
Capital expenditure	785	561	568	770	1,059
Quasi fiscal expenditures	…	137	86	22	0
Central Bank operational deficit	...	273	161	246	100
Discrepancy (unexplained)	1,119	407	388	350	0
Overall balance before grants (accrual basis)	-2,164	-764	-354	-1,004	-1,098
Change in payment arrears (net)	659	2,324	-106	842	90
Domestic	195	1,995	-341	731	56
External interest	464	329	235	111	34
Overall balance before grants (cash basis)	-1,504	1,560	-460	-163	-1,008
Financing	1,504	-1,560	460	163	1,008
Onetime oil field concession bonuses	935	0	195	312	0
Grants	243	203	213	0	107
External financing (net)	125	-427	-468	-553	485
Disbursements	904	1,049	1,167	934	1,578
Amortization	-780	-1,485	-1,638	-1,408	-1,356
Short-term borrowing, net	0	0	0	-79	-79
Domestic financing (net)	201	-1,336	519	404	416
Memorandum items:					
Exchange rate (average)	2.8	10.0	22.1	43.7	64.3
Price of Angola's oil (in U.S. dollars per barrel)	17.4	27.1	22.7	23.7	30.7
Oil production (millions of barrels)	272	273	270	326	75
Oil production (millions of U.S. dollars)	4,751	7,414	6,144	7,739	2,302
Oil revenues/oil production (in percent)	52.7	55.3	52.2	43.3	169.1

Sources: Angolan authorities; and staff estimates.

Table 22. Angola: Functional Distribution of Government Expenditure, 1999-2003

	1999	2000	2001	2002	2003
			(In billions of kwanzas)		
General public services and other economic affairs	0.5	3.9	26.9	77.9	68.7
Defense and internal security	4.4	8.0	17.9	35.3	30.0
Education	0.3	1.7	6.5	14.0	31.6
Health	0.2	1.8	5.5	9.3	24.6
Social security, welfare, and housing	0.2	4.9	6.9	13.4	46.0
Energy, agriculture, mining, and transportation	0.2	1.8	7.2	12.1	105.5
Interest payments (committed)	1.6	5.0	0.2	4.9	19.0
Unclassified	6.6	26.7	25.5	67.8	143.5
Total	14.0	53.7	96.7	234.7	468.9
			(In percent of GDP)		
General public services and other economic affairs	3.0	4.2	13.6	16.5	6.7
Defense and internal security	25.5	8.7	9.1	7.5	2.9
Education	1.5	1.8	3.3	3.0	3.1
Health	1.2	2.0	2.8	2.0	2.4
Social security, welfare, and housing	1.2	5.3	3.5	2.8	4.5
Energy, agriculture, mining, and transportation	1.3	2.0	3.7	2.6	10.2
Interest payments (committed)	9.0	5.4	0.1	1.0	1.8
Unclassified	38.7	29.1	13.0	14.4	13.9
Total	81.5	58.6	49.0	49.8	45.5
			(In millions of U.S. dollars)		
General public services and other economic affairs	188	388	1,220	1,782	921
Defense and internal security	1,572	793	813	808	402
Education	92	169	295	320	424
Health	73	179	249	213	329
Social security, welfare, and housing	73	486	313	307	617
Energy, agriculture, mining, and transportation	80	180	326	277	1,414
Interest payments (committed)	556	496	9	112	255
Unclassified	2,381	2,660	1,158	1,552	1,923
Total	5,016	5,350	4,383	5,371	6,284

Sources: Angolan authorities; and staff estimates.

Table 23. Angola: Population Statistics, 1999-2003 1/

	1999	2000	2001	2002	2003
		(In thousands)			
Population	12,960	13,340	13,731	14,133	14,557
Urban	5,604	5,778	5,957	6,141	6,339
Rural	7,356	7,562	7,774	7,991	8,218
		(Change in percent)			
Population	2.9	2.9	2.9	2.9	3.0
Urban	3.1	3.1	3.1	3.1	3.2
Rural	2.8	2.8	2.8	2.8	2.8
		(In percent of total)			
Age group					
0-19	58.0	58.0	...	...	...
20-44	29.5	29.5	...	...	...
45 +	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: Public Medium- and Long-term External Debt
(In thousands of U.S. dollars)

	2002	2003	June 2004
Total public debt service	7,672,556	8,378,984	7,892,754
principal	3,519,919	4,080,810	3,691,662
arrears (excluding late interest)	4,152,637	4,298,174	4,201,092
Multilateral creditors	304,480	333,881	334,162
principal	302,853	331,120	331,444
arrears	1,627	2,761	2,718
Of which: World Bank (IDA)	265,995	290,812	291,648
principal	265,995	289,058	290,112
arrears	0	1,754	1,536
Of which: African Development Bank	4,723	2,879	2,102
principal	4,708	2,863	2,085
arrears	15	16	16
Of which : African Development Fund	25,991	27,267	26,683
Bilateral creditors	4,545,110	4,575,182	4,529,716
principal	1,427,332	1,484,778	1,432,867
arrears	3,117,778	3,090,404	3,096,850
Paris Club	2,361,176	2,537,034	2,509,473
principal	551,294	519,264	488,809
arrears	1,809,881	2,017,771	2,020,664
Non-Paris Club creditor countries	2,183,934	2,038,148	2,020,243
principal	876,038	965,515	944,057
arrears	1,307,897	1,072,633	1,076,186
Of which: Portugal	815,424	790,148	821,693
principal	94,702	6,271	33,372
arrears	720,722	783,877	788,321
Commercial Banks	1,868,420	2,470,676	2,078,978
principal	1,478,087	1,946,638	1,648,571
Oil guaranteed	1,146,812	1,939,165	1,538,037
Government	948,235	1,490,342	1,198,739
Sonangol	198,576	448,823	339,298
Not oil-guaranteed	331,276	7,473	110,534
arrears	390,333	524,039	430,406
Of which: Portugal's banks	531,744	521,114	530,180
principal	174,631	7,473	110,534
arrears	357,112	513,642	419,646
	0	0	0
Suppliers	954,546	999,244	949,897
principal	311,646	318,273	278,779
arrears	642,900	680,971	671,118
Of which: Portugal	446,394	470,125	439,981
principal	17,755	13,894	13,477
arrears	428,639	456,231	426,504
Of which: Sonangol	226,379	105,735	78,242

Sources: National Bank of Angola.

Table 25. Angola: Summary of Tax System as of June 30, 2003
(*all amounts in kwanzas, unless indicated otherwises*) [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 *(Imposto sobre o Rendimento do Trabalho)* Law 10/99 of October 29, 1999, repeals 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.	*Not defined as taxable income*: 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)
		Exemptions: 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 employees, including allowances and bonuses. b. Income of partners in firms, members		

Table 25. Angola: Summary of Tax System as of June 30, 2003
(*all amounts in kwanzas, unless indicated otherwises*) [1/]

Tax		Nature of Tax	Exemptions and Deductions	Rates
		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 *(Imposto sobre a Aplicação de Capitais)* 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. *Section A* covers interest on loans, credit contract fees, and late payment fines and charges. *Section B* 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.	*Exemptions*: *For Section A*, 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. *For Section B*, 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. *Tax incentive*: 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.
1.2	Corporate			
1.2.1	Industrial tax *(Imposto Industrial)* Legislative Instrument	Tax on profits, whether incidental or recurrent, imputable to any commercial or industrial activity not subject to earned	*Exempt*: workers' production cooperatives; building cooperatives engaged in construction directly or in the lending of money to	35 percent regular rate. 20 percent on income exclusively from agricultural,

Table 25. Angola: Summary of Tax System as of June 30, 2003
(*all amounts in kwanzas, unless indicated otherwises*) [1/]

Tax	Nature of Tax	Exemptions and Deductions	Rates
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	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. *Group A* — 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. *Group B* — presumptive profits: taxpayers not included in Groups A or C and who engage in occasional industrial or commercial activities. *Group C* — 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; and (e) whose current sales do not exceed 269 UCFs.	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. *Tax incentives*: 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. 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. All or part of the profit from activities carried out to implement social assistance, welfare and other social projects	forestry, and cattle-raising activities. 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.
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		

Table 25. Angola: Summary of Tax System as of June 30, 2003
(*all amounts in kwanzas, unless indicated otherwises*) [1/]

Tax	Nature of Tax	Exemptions and Deductions	Rates
	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 assetsX10 percent of the value of the contract, regardless of its form; (b) in all other cases, 15 percent of that amount.		35 percent
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	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		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

Table 25. Angola: Summary of Tax System as of June 30, 2003
(*all amounts in kwanzas, unless indicated otherwises*) [1/]

Tax	Nature of Tax	Exemptions and Deductions	Rates
January 22, 1999; Order 37/00 of February 3, 2000 Order 38/01 of February 9, 2001	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.		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
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 4 1/6 Total 16 2/3
1.2.3.2 Oil income tax *(Imposto de rendimento de petróleo)* Decree 41 357 of November 11, 1957 (*B.O.* 49 of	Tax on the profits of oil companies.	*Tax incentives*: 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 15.75 Total 65.75

Table 25. Angola: Summary of Tax System as of June 30, 2003
(*all amounts in kwanzas, unless indicated otherwises*) [1/]

Tax	Nature of Tax	Exemptions and Deductions	Rates	
December 4, 1957); Law 13/78 of August 26, 1978				
1.2.3.3 Oil transactions tax *(Imposto de transações sobre o petróleo)* 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 *(Imposto de consumo)* Decree 24/89 of May 27, 1989, amended by Decrees 70/91 of May 15, 1992, and 13/93 of April 14, 1993	A set of specific and ad valorem taxes on the production and importation of specified goods, such as beer, liquefied gas, industrial alcohol, jewelry, household durable goods, beverages, electronics, automobiles, etc.		5-30 percent.	
3.2.1 Excise tax – Government authorized by legislature: Resolution 6/96 (D.R. 21 of May 24, 1996); 3.2.2 Law 9/99 of October 1, 1999 3.2.3 Decree 75/97 of October 24, 1997 New Excise Tax	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; (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	*Exemptions:* (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. *Not subject*: (a) unprocessed agricultural and livestock products; (b) forestry primary products; (c) unprocessed fishing products; and	General rate Schedule I Taxed goods Schedule II Subsidized rates	10 percent 15 – 50 percent 5 percent

Table 25. Angola: Summary of Tax System as of June 30, 2003
(*all amounts in kwanzas, unless indicated otherwises*) [1/]

Tax	Nature of Tax	Exemptions and Deductions	Rates
Schedule	services, consumption of water and electricity.	(d) unprocessed mineral products.	
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.	*Exempt*: 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.
5. Other taxes			
5.1 Urban real estate tax *(Imposto Predial Urbano)* 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.	*Exempt*: 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. *Tax incentive*: 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	Art. 17		

Table 25. Angola: Summary of Tax System as of June 30, 2003
(*all amounts in kwanzas, unless indicated otherwises*) [1/]

	Tax	Nature of Tax	Exemptions and Deductions	Rates
	(Amended by Law 6/96 of April 19, 1996)	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. 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. Art. 28 3. The rent…may never be less than amount established for government buildings under the current legislation.		
5.2	Gift and inheritance tax *(Imposto sobre as sucessões e doações)* 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.	*Exempt*: 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.	Schedule of tax rates (in percent): Between spouses; to descendants or ascendants: Up to 11 UCFs 10; Above 11 UCFs 15 Between any other persons: Up to 11 UCFs 20; Above 11 UCFs 30 Calculation: these rates are applied as average rates up to the ceiling of the lower bracket and as marginal rates above said ceiling.
5.3	Real estate transfer tax *(Sisa sobre a transmissão de imobiliários por título oneroso)* 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.	*Exempt*: 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 *(Cofre da Previdência dos Funcionários Públicos)*.	10 percent of the amount of the transfer.
5.4	Stamp tax *(Imposto do selo)* Decree-Law 1647/45 of May 29,	A tax on documents and operations listed in the stamp tax general schedule.	*Exempt*: verbal contracts.	Sample rates: Capital increases 0.5 percent

Table 25. Angola: Summary of Tax System as of June 30, 2003
(*all amounts in kwanzas, unless indicated otherwises*) [1/]

Tax	Nature of Tax	Exemptions and Deductions	Rates
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.			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
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	*Banking operations:* I. Foreign drafts, gold certificates *(guias ouro)* 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.	*Exempt:* 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 (*Taxa de Circulação*) D.L. 3837 - Executive Decree 43/97 of October 10, 1997; 5.4.4 Executive Decree 39/99	Levied on all motor vehicles in the country or which may be put on the road in the country in future.	*Exempt:* 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	*Motorcycles* (In kwanzas) Up to 125 cc engine capacity 90 Over 125 cc engine capacity 105 *Light automobiles* Up to 1,500 cc engine capacity 210 Over 1,500 cc up to 1,800cc 315 Over 1,800 cc engine capacity 420

Table 25. Angola: Summary of Tax System as of June 30, 2003
(*all amounts in kwanzas, unless indicated otherwises*) [1/]

Tax	Nature of Tax	Exemptions and Deductions	Rates	
of January 27, 1999;		registration.		
5.4.5 Executive Decree 2/00 of January 14, 2000			*Heavy automobiles*	
5.4.6 Executive Decree 6/01 of February 13, 2001			Up to 10,000 kg tare weight	525
			Over 10,000 kg tare weight	720
II. Provincial governments	There are no provincial taxes.			
III. Municipalities	There are no municipal taxes.			
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).