

# PROJECTIONS OF SOUTH AFRICA'S BALANCE OF PAYMENTS

by  
John E. Lind



California/Nevada Interfaith Committee on Corporate Responsibility  
P.O. Box 6819, San Francisco, CA 94101 (415) 885-5102

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## SUMMARY

The purpose of this report is the projection of South Africa's balance of payments in order to assess what demands foreign creditors can make for the short-term debt owed to them. However, this analysis is based upon the assumption that South Africa should keep its belt tightened in 1986 and import no more than it did in 1985. In contrast, what appears to be happening is that South Africa has expanded its volume of imports by 33% in early 1986, pushing them closer to the high levels of 1984. South Africa is also projecting a balance of payments for 1986 as a whole which is consonant with this high import level throughout 1986. These higher import volumes are partially hidden by the lower cost of oil imports arising from the collapse of oil prices in early 1986.

Thus this report calls upon the international banks to demand a more rapid payoff of the South African debt to them and for South Africa to achieve this through lowering the volume of imports to the levels of 1985. The particular form of the proposal is that the savings that South Africa should accrue during the last half of 1986 and the first half of 1987 should be paid in a lump sum in July 1987 as a front-end payment for the next interim debt agreement. This year long period covers the major period of the interim arrangement for the debt stand still that is now in effect and will expire 30 June 1987.

In the four quarters from July 1986 through June 1987, South Africa could have \$3 billion of foreign exchange to cover unreported capital flight (errors and omissions) and provide a surplus for a front end payment in July 1987 on the next interim arrangement on their short-term debt under moratorium.

These estimates assume that South Africa will keep its import bill at the 1985 level and not stockpile strategic imports as it did with oil in the first quarter of 1986. Otherwise this estimate is quite conservative in its bases. The estimate assumes that oil prices will be maintained at \$15 per barrel, diamond sales will remain high and platinum and gold prices will be at \$345 and \$450 per ounce, respectively.

The present volatility in one export, gold, and one import, oil, could significantly raise the estimate for the front end payment to the banks. The following table shows how the surplus, before unrecorded capital flight and sanctions, would vary with gold and oil prices.

### SURPLUS BEFORE UNRECORDED CAPITAL FLIGHT AND SANCTIONS

US\$ Billions			
Gold \$/oz		345	385
Oil Price 15	3.0		3.8
\$/barrel 10	3.4		4.2

The proposed sanctions could effect 21% of the annual South African exports or \$3.3 billion per year. Since most of these exports are part of large international markets, such as coal and steel, these exports will continue at a relatively high level through third parties. Thus an effectiveness of only 20% is reasonable, for this is about the same as the surcharge that South Africa has paid to obtain oil in spite of sanctions.

The unreported capital flight may well be \$1.8 billion per year, still leaving \$1.2 billion surplus for the front end payment. This \$1 billion surplus assumes that the sanctions, which are being contemplated by various countries, will not yet have affected significantly South Africa's exports by mid 1987. If for some reason sanctions were 20% effective for the first half of 1987, the foreign exchange available for the front end payment would be reduced to \$0.8 billion. The variation of this estimate for the front end payment with 20% effective sanctions and various gold and oil prices is shown below.

### SURPLUS AFTER CAPITAL FLIGHT AND SANCTIONS

US\$ Billions			
Gold \$/oz		345	385
Oil price 15	0.8		1.6
\$/barrel 10	1.3		2.1

Obviously if oil prices decline and gold prices increase, a considerably larger payment could be demanded. Thus the proposed payment of about \$1 billion for July 1987 is a conservative figure considering that sanctions take time to implement. that gold prices may remain high for

some time, and that unreported capital flight may be overestimated because of the increased controls put on the export of capital by the South African government.

### BALANCE ON CURRENT ACCOUNT

The balance on current account represents the net earnings of a country arising from foreign trade plus unrequited transfers and net earnings from investment income including interest on foreign debt. Central to this balance is the trade balance, the net of exports and imports.

### EXPORTS

Exports will first be projected assuming that no sanctions have been enacted. Even when they are imposed there will be a considerable time lag before they are effective. Thus this initial calculation without sanctions will be valid through the end of 1986 and perhaps until mid 1987. Sanctions will then be considered in the following section.

Three of the major exports are gold, diamonds and platinum. These together with certain other strategic metals like vanadium are not easily subject to sanctions. Gold is by far the major export, representing nearly half of the total exports. To give an overview of South African exports, Table 1 shows on a quarterly basis for 1984 and into 1985, the general distribution of exports. Regrettably this detailed break down lags considerably and is thus not very current. For the projection of exports into the future without the effects of sanctions, the exports of gold, diamonds and platinum will be separately projected, and the remaining exports will be carried at the average levels of 1985. The 1985 level was one of belt tightening but not of extreme austerity. This level can thus serve as a reasonable base line for projections for when there is no stockpiling or expansion of the economy.

### GOLD:

Gold exports are likely to remain relatively constant in the near future. According to Stefan Wagstyl (*Financial Times*, 30 July 1986), world gold production has been increasing with new mines

being developed. In 1985, western mine output rose 1,213 tons and is expected to increase by 1,400 tons in 1989. Much is being used in jewelry rather than directly as an investment, and thus the price will become more dependent upon the demand for jewelry. In August 1986 there has been a surge in the price of gold to about \$380 per troy ounce, triggered by a rise in the price of platinum. Until then the price had been below \$350 per ounce, and with the increased production the price might be expected to settle down closer to that figure later in 1986. Such a price is well above the cost of production which is reportedly less than \$200 per ounce for one of the new Nevada mines using the heap leach method (*Wall Street Journal*, 29 August 1986). However, should this present price of \$40 per ounce above the first quarter average price of \$343.38 per ounce be maintained, another \$199 million should be added to the projected export earnings each quarter in the Balance of Payments Table in the centerfold of this report.

### DIAMONDS:

Diamond exports by South Africa are increasing because of the increase in demand for gem stones, with total diamond sales surging by 45% in the first half of 1986. Diamonds are handled through the Central Selling Organization (CSO) of South Africa's De Beers Consolidated Mines. CSO buys and sells for itself and other producers with about 20% of the diamonds that are handled being produced in South Africa itself. South Africa's diamond sales may increase proportionally more than the average because the initial burst of sales reduced the large stock of diamonds held by De Beers and only now is the CSO selling at a rate comparable to production. The following table gives the diamond sales for the past several years.

### DIAMOND SALES OF CSO MILLIONS

Year	Q1 + Q2	Q3 + Q4
1984	R1180 = \$ 941	R1126 = \$ 668
1985	R1676 = \$ 838	R2351 = \$ 970
1986	R2710 = \$1238	-----

Source: Kenneth Martson, *Financial Times*, 4 July 1986. \$/R from *International Financial Statistics*

The projections in the Balance of Pay-



Table 1.

## EXPORT TABLE

Millions of U.S. Dollars

	Per Cent 1984	1984				1985			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Gold	46.5	2233.8	2000.5	1877.2	1885.6				
Food, Beverages & Tobacco	4.6	189.2	279.3	198.9	130.9	135.6			
Fruit	2.4	93.5	181.2	90.1	41.1	55.0			
Beverages & Tob.	0.1	4.8	6.5	6.5	4.6	3.1			
Inedible Raw Mat'l	16.5	748.1	692.9	668.6	724.9	712.2			
Coal	6.9	293.7	292.2	300.7	304.5	316.6			
Metal Ores	3.7	181.6	144.6	158.2	154.5	152.3			
Animal & Veg. Oils & Fats	0.1	4.9	5.8	7.2	7.0				
Chemicals	3.0	119.4	166.5	120.0	107.4				
Manufactured Goods	16.1	718.1	747.9	668.1	636.3	691.5			
Textiles	0.3	13.1	14.3	14.1	14.0	16.7			
Diamonds, Not Ind.	5.3	233.9	265.7	221.7	193.5	218.2			
Metal Products	9.1	415.1	407.2	373.8	370.3	407.7			
Machinery & Transport	1.9	82.3	84.4	81.4	82.6				
Misc. Manufacturs	0.7	24.9	24.4	28.2	34.5				
Clothing	0.2	10.6	9.3	10.4	11.9				
Unclassified	10.5	449.9	491.6	385.0	474.4				
TOTAL	100	4570.4	4493.2	4034.6	4083.6				

Source: Bulletin of Statistics, quarterly, Central Statistical Services,  
Republic of South Africa; Conversion to dollars - IPS of IMF.

TABLE 2

## PROPOSED SANCTIONED EXPORTS OF SOUTH AFRICA

Average Quarterly Exports in Millions of U.S. Dollars

	U.S.	U.K.(1)	EEC (1)	Common- wealth(1)	Nordic(2)	Japan(3)	Total(3)	Total as % S.A. Exports --(4)--
Iron & Steel	73.4	12.6	80.5	29	-	36	206	53%
Coal	10.9	7.8	207.0	12	-	106.4	329	110%
Uranium	35.0						35	13%
Textiles	13.8						14	100%
Fruit	13.0							
Other Agricult.	32.4		-----154.6 (5)-----				200	100%
Unclassified					42		42	
Total	178.4	20.4	287.5	41	42	142	825	21%(6)

## Notes to Table 2:

Unless otherwise noted, the data are taken from the **New York Times**, 16 August 1986, which summarizes official sources. The data are for 1985 except for the Commonwealth which are for 1983.

(1) Some commonwealth and EEC countries have or will impose sanctions on agricultural commodities. Ireland and Denmark have already imposed them, but their imports from South Africa are small. The U.K. is a major importer but is likely to endorse sanctions against only iron, steel and coal, which are a small fraction of their imports from South Africa.

(2) **Direction of Trade Statistics**, IMF. The Nordic countries are likely to approve a total ban on imports from South Africa.

(3) **Monthly Statistics of Japan**, Statistics Bureau, provides Japanese imports of iron and steel but not of coal. Coal was assumed to be imported in the same ratio to iron and steel as by the EEC.

(4) The sums are computed by eliminating the double counting between the U.K. and both the EEC and Commonwealth. Denmark is included with the EEC and not the Nordic countries. it does have a ban on all imports from South Africa, but 90% of these imports have been coal.

(5) Total 1984 exports from South Africa of food, beverages and tobacco from Table 1 are used, assuming that the bulk of those exports go to the U.S., U.K. and the commonwealth.

(6) The final total of all South African exports under sanctions is computed as a percentage of the 1985 total exports as given by the South African Reserve Bank in the Balance of Payments Table.

ments Table were made for the first two quarters of 1986 by increasing the 1985 figures in the Balance of Payments Table by the dollar ratio of the first two quarters each of 1986 to 1985 from the Diamond Sales Table above. For the third quarter of 1986 forward, a round figure of \$500 million is used, being about 10% above that for the second quarter. This projection assumes that the diamond sales are reaching a new plateau.

#### PLATINUM:

Because of the rapid rise of the price of platinum in August 1986, which was prompted by the threat of sanctions, platinum sales may contribute significantly more to the export earnings of South Africa. Since sales data by quarter are not readily available, the value of this export is estimated as follows. The 1985 **Commodity Year Book** of the Commodity Research Bureau estimates the 1984 production of platinum by South Africa at 2.8 million troy ounces. Assuming that this export volume has remained constant since that date, the quarterly export value is calculated as one-fourth the annual production times the average price per ounce for that quarter.

The projected price of platinum for the fourth quarter of 1986 and beyond is taken at the current futures' value of about \$545 per troy ounce. The significant increase in the price of platinum will probably hold for some time because of the demand for platinum, especially in auto anti-smog devices, and the uncertain political situation in South Africa. South Africa exports about 40% of the world's supply. Production has not been increasing elsewhere like that of gold, so the higher price is likely to be maintained.

#### OTHER EXPORTS:

In the Balance of Payments Table, the difference between the exports of gold, diamonds and platinum and the total exports reported by the South African Reserve Bank is denoted as "other". It represents 45% of the total exports in 1985 and includes that portion of South Africa's exports which would be subject to sanctions as well as certain strategic materials such as vanadium and uranium ores.

## SANCTIONS

Sanctions of various forms are being considered by a number of countries. Table 2 gives an overall view of them. The effects of the U.S. sanctions are based upon the Senate bill and include sanctions against iron and steel, uranium, textiles and agricultural products. Ms. Thatcher, Prime Minister of the U.K., has said that she would only agree to sanctions against iron, steel and coal. These are only minor imports for Britain which is a significant member of both the EEC and the Commonwealth. However, iron, steel and coal are significant imports to the EEC as a whole. Thus with the British agreement, the EEC is likely to sanction these items. Japan has indicated that it will probably follow the lead of the EEC. Some EEC countries will go further by imposing sanctions on agricultural exports from South Africa. These include Ireland and Denmark, the latter imposing a total ban on South African goods. The other Nordic countries are likely to follow Denmark's lead later in 1986. Finally, the Commonwealth is likely to invoke the British sanctions plus sanctions on agricultural products.

These sanctions could effect about 21% of South African exports or about \$825 million per quarter of exports. Sanctions are not likely to have a significant effect before 1987. Even then South Africa will cut prices and sell to or through third party countries. Thus sanctions will not mean a loss of 21% of exports, but a lesser figure buoyed up by dumping at lower prices. Thus the loss of export earnings because of sanctions is very difficult to estimate. However, as an example of the cost of sanctions, we can cite the South Africa's import of oil in contravention of sanctions for which South Africa paid an additional 16% to 27% per barrel at the old price of about \$30 per barrel. Certainly the sanctions on South African exports would probably cost no more than 20% to 40% of the sanctioned exports at the most. These figures yield a loss of between \$165 million and \$330 million per quarter.

Our analysis is that exports in the last quarter of 1986 will be unaffected by sanctions. During the first two quarters of 1987, exports might drop from \$4482 million per quarter to \$4317 million per quarter and certainly to no less than



\$4152 million per quarter. These totals are still well above the 1985 export totals because of the increased diamond sales and increased platinum prices. The estimate also assumes no increase in the long-term price of gold. Any such increase would raise the export earnings even more.

Since the discussion of sanctions always raises the specter of the cut off by South Africa of strategic materials, the following table gives the percentage of the world production of a number of commodities by South Africa and the U.S.S.R. and China.

#### WORLD PRODUCTION OF STRATEGIC COMMODITIES

	South Africa	USSR China	Other
Chromite (84)	27%	29%	44%
Diamonds	20%	*	80%
Gold (84)	49%	24%	28%
Platinum (84)	42%	54%	4%
Titanium (85)	10%	11%	79%
Vanadium (84)	30%	50%	20%
Uranium (83)	15%	*	85%

\*U.S.S.R. not included in data.

Source: 1985 CRB Commodity Year  
Book

As can be seen from the table, the rest of the world exclusive of these three nations controls at least 40% of the production of all but gold, platinum and vanadium. Only in the case of platinum is the rest of the world's production but a small 4% of the total, and this fact accounts for the recent rise in platinum prices.

#### IMPORTS

Table 3 gives the imports of South Africa by category for 1984 and into 1985. Since oil is a strategic material, imports of it are not listed separately but are hidden in these categories.

As the economy faltered and unrest increased, imports were curtailed by 35% in 1985 relative to 1984. **We assert that the 1985 level of imports is not unreasonable and should be maintained in 1986 in order to free up foreign exchange for debt repayment.** This lower import level has not been maintained in 1986, however, because of large oil imports. Gerhard de

Kock, Governor of the Reserve Bank of South Africa, stated in April 1986 that the 22% increase in first quarter imports was caused by the fact that South Africa had "taken advantage of the sharp fall in international oil prices to replenish its strategic stockpile of oil." (County Securities, *Daily Notes*, 21 July 1986)

Table 3, the Import Table, shows the distribution of imports percentagewise for each category in 1984 as a whole in the first column. In order to categorize the decline of imports in 1985, a second column has been inserted for each quarter of 1985 showing each category as a percentage of that quarter's 1984 total import bill. As can be seen from this column, imports were relatively uniformly cut from almost all categories.

In order to project the import figures into the future, oil imports must be separated out from the total import bill in order to account for the dramatic drop in prices in 1986.

#### OIL:

Oil is a major strategic import of South Africa because it is not produced in significant amounts in South Africa, except through conversion from coal. It is purchased in spite of an embargo at prices of \$5 to \$8 per barrel above the going rate. South Africa does not publish its oil import statistics but the Shipping Bureau of Amsterdam (Letter, 8 August 1986) uses a figure of 14 million tons per year (279,000 b/d) for imports since 1983 and states that others use a figure as low as 12 million tons per year (239,000 b/d). This lower figure is used to calculate the cost of oil in our Balance of Payments Table. The lower import figure gives a conservative value for South Africa's current savings on oil imports. OPEC prices are used, assuming that any embargo surcharge will be independent of oil price and thus will be a constant part of "other imports". The surcharge costs amount to \$110 million per quarter for a surcharge of \$5 per barrel. Projections are then made into late 1986 and 1987 assuming a price of \$15 per barrel being maintained by OPEC. If the price should remain at \$10 per barrel, an additional \$110 million per quarter should be subtracted from the import bill.

#### OTHER IMPORTS:

Other imports is the difference between

TABLE 3

## IMPORT TABLE

Millions of U.S. Dollars

	Per Cent	1984				1985			
	1984	Q1	Q2	Q3	Q4	Q1	%84 Q1		
Food, Beverages & Tobacco	6.7%	290.5	267.5	245.9	203.5	179.5	4.3%		
Inedible Raw Mat'l	4.4%	170.7	170.1	166.6	150.9	133.5	3.2%		
Animal & Veg. Oils & Fats	1.1%	31.5	39.3	42.6	48.7	43.7	1.1%		
Chemicals	9.8%	365.1	396.1	376.9	326.9	295.6	7.1%		
Manufactured Goods	12.4%	493.8	514.9	479.5	370.3	321.0	7.7%		
Machinery & Transport	42.6%	1671.6	1753.3	1535.0	1401.8	1085.7	26.2%		
Machinery	31.5%	1216.0	1301.4	1140.2	1040.2	852.6	20.6%		
Motor Vehicles	9.6%	377.3	392.5	344.5	325.5	190.8	4.6%		
Misc. Manufactures	8.1%	312.0	325.3	322.6	242.9	178.0	4.3%		
Unclassified	14.8%	809.8	494.5	479.3	429.8	486.0	11.7%		
TOTAL	100 %	4145.0	3960.8	3648.2	3174.4	2723.0	65.7%		

Source: Bulletin of Statistics, quarterly, Central Statistical Services, Republic of South Africa; Conversion to dollars - IFS of IMF.

%84 Q1 are the Q1 1985 data expressed as a percentage of the total imports of Q1 1984.

## SOUTH AFRICA'S BALANCE OF PAYMENTS:

Past and Projected without sanctions in Millions of US Dollars

	1984				1985		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
<b>A. CURRENT ACCOUNT</b>							
EXPORTS: Gold	2234	2001	1877	1886	1752	1606	1823
Diamonds	245	275	230	198	225	300	210
Platinum	333	333	235	223	188	188	207
Other	1774	1807	1539	1648	1729	2043	1753
Total	4586	4416	3881	3935	3894	4137	3993
IMPORTS: Oil (22 ml.b/Q)	- 638	- 638	- 638	- 638	- 631	- 616	- 616
Other	-3427	-3307	-2941	-2484	-2037	-2137	-1993
Total	-4065	-3945	-3579	-3122	-2668	-2753	-2609
TRADE BALANCE	521	472	302	813	1226	1384	1384
OTHER GOODS, SERVICES & INCOME							
Credit	771	847	745	673	675	680	602
Debit: Interest @ 8%	-1594	-1683	-1602	-1418	-1284	-1410	-1366
Other							
Net	- 823	- 826	- 857	- 745	- 609	- 730	- 764
UNREQUITED TRANSFERS, Net	32	34	19	28	37	49	44
BALANCE ON CURRENT ACCOUNT	- 270	- 320	- 536	96	654	703	644
<b>B. LONG-TERM CAPITAL MOVEMENTS</b>							
Direct Investment	68	67	57	45	2	14	-2
Portfolio Investment, Total	173	277	261	272	96	266	32
Of which Bonds are:							
Other Capital, Total	131	295	239	26	76	- 227	- 184
Of which Int'l Bank Loans							
Total	372	639	557	343	174	53	- 154
BASIC BALANCE, Groups A + B	103	320	22	438	827	757	510
<b>C. SHORT-TERM CAPITAL, Excl. F-H</b>	-11	353	135	- 231	- 829	- 476	- 343
Of which Int'l Banks (BIS)*							
<b>D. ERRORS AND OMISSIONS</b>	- 448	- 417	- 403	- 439	- 409	104	- 345
TOTAL, Groups A through D	- 356	256	- 247	- 232	- 411	385	- 177
<b>E. COUNTERPART ITEMS</b>	-30	51	24	24	5	-12	-80
<b>F. EXCEPTIONAL FINANCING</b>	-36	31	248	- 187	277	- 267	80
<b>G. LIABILITIES CONSTITUTING FOREIGN AUTHORITIES' RESERVES</b>		-4	4		- 2	-8	14
TOTAL, Groups A through G	- 442	334	29	- 394	- 131	98	- 162
<b>H. TOTAL CHANGE IN RESERVES</b>	442	- 334	- 29	394	131	- 98	162
<b>MEMO ITEMS:</b>							
Oil, av. US\$/barrel	29.00	29.00	29.00	29.00	28.67	28.00	28.00
Platinum, av. \$/Troy oz.	475	475	336	319	268	269	296
Exchange Rate, Av. US\$/Rand	0.8109	0.7840	0.6362	0.5504	0.4917	0.5088	0.4467
SOURCES: International Financial Statistics, IMF; # Quarterly Bulletin, South African Reserve Bank; Estimates							

1986					1987			
Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1764	1705	1750	1750	1800	1800	1800		
268	365	485	500	500	500	500		
237	270	296	370	382	382	382		
1652	1970	1804	1800	1800	1800	1800		
3921#	4310#	4335	4420	4482	4482	4482		
- 616	***	- 242	- 220	- 330	- 330	- 330		
-1572	***	-2000	-2000	-2000	-2000	-2000		
-2188#	-3142#	-2242	-2220	-2330	-2330	-2330		
1733#	1168#	2093	2200	2152	2152	2152		
630#	630	630	630	630	630	630		
-1295#	- 480	- 462	- 457	- 447	- 439	- 431		
	-1100	-1100	-1100	-1100	-1100	-1100		
- 665#	- 950	- 932	- 927	- 917	- 909	- 901		
32#	40	40	40	40	40	40		
1100#	258	1201	1313	1275	1283	1291		
	(500#)	(670#)						
	-48	-65	-86	-104	-134	-88		
	-369	-371	-317	-319	-321	-317		
	-331	-331	-280	-280	-280	-280		
-60#	-417	-436	-403	-423	-455	-405		
1040#	-159	765	910	852	828	886		
-1369	- 70	- 500	- 90	- 20	- 20	- 20		
	0	- 430	- 20	- 20	- 20	- 20		
- 450	- 450	- 450	- 450	- 450	- 450	- 450		
- 779#	- 679	- 185	370	382	358	416		
	90	93	92	92	92	92		
28.00	18.14	11.00	10.00	15.00	15.00	15.00		
338	385	423	529	545	545	545		
0.3784	0.4663	0.4469						

( #) Reserve Bank reported by Financial Times, 26 Aug. 1986.  
August 1986

the estimated oil imports and the total of all imports. The estimates for the latter part of 1986 and for 1987 are assumed to be equal to the average of the first three quarters of 1985 when the import bill was low but not constrained by the debt moratorium.

#### BALANCE OF TRADE:

If South Africa returns to import levels of 1985 and sanctions have no effect, its trade balance will be about \$2.15 billion positive for each quarter in the last half of 1986 and the first half of 1987. This increase from about \$1.4 billion per quarter in 1985 arises from over \$300 million saved because of lower oil prices plus increased export earnings of \$450 million per quarter from increased diamond sales and higher platinum prices. Sanctions at the 20% level of effectiveness would reduce the balance of trade to about \$1.98 billion per quarter.

#### OTHER GOODS, SERVICES AND INCOME

##### RECEIPTS (CREDIT):

Service receipts have dropped from an average of about three-quarters of a billion dollars per quarter in 1984 to a little under two-thirds of a billion dollars per quarter by the end of 1985.

The reporting of the detailed breakdown of the receipts as well as of payments has a very long lag time. The primary basis of all data is the report of the South African Reserve Bank in its **Quarterly Bulletin**. These data are reported in greater detail to the International Monetary Fund and published in its **Balance of Payments Statistics**. The most current break down to date is that for the first Quarter of 1985 in the 1985 **Yearbook of IMF Statistics**. The **Quarterly Bulletin** of the Reserve Bank only reports annual figures through 1984.

Because of the relatively slow change of the value of the service receipts, they have been extrapolated at the third quarter 1985 figure of \$630 million per quarter.

##### PAYMENTS (DEBIT):

The payments category requires a much closer examination, for it is over twice the magnitude of the receipts and includes South Africa's payments of interest on foreign bank loans and bonds.

Since detailed figures exist only for 1984, projections of these figures into late 1986 and 1987 requires an extrapolation of about two years. The most detailed break down is given in Table 4 of South African Payments for Services from the Reserve Bank. Regretably, it is given on an annual basis only. There is a drop in direct investment income and indirect investment dividends between 1983 and 1984, mostly caused by the declining value of the rand. In contrast the indirect interest, which includes the interest on the debt to international banks and on bonds, increased between those two years. These recorded interest payments amounted to an average quarterly payment of \$257 million in 1983 and \$316 million in 1984.

These figures can be compared with the quarterly figures of the IMF in Table 5, which gives the Service Payments under the title: Other Goods, Services and Income: Debit. This table has fewer category details but provides data on a quarterly basis. The indirect interest on the debt must be separated out from the other investment income, in order to permit a more adequate projection into the future. In order to accomplish this separation, the average 6-month US dollar LIBOR is tabulated below the IMF data in this table, together with the interest that South Africa would have paid if a total debt of \$23.9 billion were contracted at that rate. The calculated interest based upon the total debt and the current LIBOR is about twice that shown by the Reserve Bank. Since much of the debt is short-term and therefore at rates comparable to LIBOR, we must assume that the Reserve Bank's data do not include all the interest. An estimate of the interest on short-term debt, not included in the Reserve Bank's data under this item, is then given by the difference between the Reserve Bank's figures for this interest and this value based upon the current value of LIBOR.

To estimate the service payments other than interest on the debt, the average interest of \$316 million per quarter from the Reserve Bank in 1984 is scaled to the third quarter of 1985 using LIBOR. This scaling yields for this interest item \$260 million. This \$260 million is then subtracted from the total service payments (debit) and the remainder is approximately \$1100 million per quarter. The third quarter of 1985 is used because it is the



TABLE 4

SOUTH AFRICAN PAYMENTS FOR SERVICES  
Millions of U. S. Dollars

	1983	1984
Freight & Merchandise		
Insurance	971	1,060
Other Transportation & Travel	1,373	1,287
Investment Income	2,650	2,245
<i>Direct</i>	956	561
<i>Indirect:</i>		
<i>Dividends</i>	417	233
<i>Interest</i>	1,028	1,264
<i>Taxes</i>	249	187
Other Services	2,106	1,814
TOTAL	7,099	6,407

Source: Quarterly Bulletin, South African Reserve Bank; Currency conversion from IFS.

TABLE 5

## INTEREST ON INDIRECT INVESTMENT

	1983				1984				1985			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Other Goods, Services, and Income: Debit	-1,734	-1,760	-1,762	-1,827	-1,619	-1,699	-1,565	-1,372	-1,328	-1,421	-1,330	
Shipment	-237	-234	-237	-260	-293	-263	-270	-247	-249	-261	-218	
Other Transport	-156	-170	-168	-149	-124	-181	-158	-126	-109	-131	-120	
Investment Income	-673	-676	-569	-723	-558	-599	-503	-518	-521	-578	-525	
<i>Interest, Indirect</i>	-257	-257	-257	-257	-316	-316	-316	-316			-260*	-253*
Other	-669	-679	-787	-694	-645	-655	-634	-480	-449	-451	-466	
LIBOR				10.08	10.32	11.87	11.97	10.10	9.53	8.43	8.30	8.06
Interest on Total Debt (Based on LIBOR rate)				-602	-617	-709	-715	-603	-569	-504	-496	-482

Sources: Balance of Payments Statistics, 1985 Yearbook, IMF; South Africa, Table 1A.

From annual figure of the Quarterly Bulletin, South African Reserve Bank

\*Scaled from 1985Q1 on LIBOR.

last nearly normal quarter in the South African economy. The fourth quarter was distorted by the debt moratorium and the first quarter of 1986 is distorted by the large oil purchases. This value of \$1100 million per quarter is then used as the value for Service Payments, exclusive of the debt interest, for the projections into 1986 and 1987. This projection of a fixed value is not unreasonable because Table 5 shows only slow variations in items such as Shipment, Other Transportation, and Other. If anything the table shows a decline in investment income other than interest payments because of the declining exchange value of the rand. Thus keeping the extrapolated figure constant will tend to overstate the costs to South Africa. These costs would of course tend to increase if effective sanctions are instituted.

To this projected value of \$1100 million per quarter must be added the interest payments on the South African debt. For the quarters where we have projected the service payments, the total interest on the debt as added, including both long-term and short-term debt at about 1% above the current value of LIBOR. Thus the value of this item increases in the projected cases by about \$230 million per quarter because of this additional interest.

#### BALANCE ON CURRENT ACCOUNT

When the net service payments are added algebraically to the balance of trade and the net unrequited transfers, the result is the **Balance on Current Account**. Note that the projected Balance on Current Account include all interest payments on the debt, both long-term and short-term.

The balance on current account, assuming no effective sanctions and imports maintained at the level of the first three quarters of 1985, is projected as positive and about \$1.2 to \$1.3 billion per quarter. These figures will be reduced to the extent that South Africa continues to stock up on oil and other strategic imports and continues proposed capital projects such as the construction of the five coal power stations by ESCOM (*Financial Times*, 5 August 1986). The fact that the decision has not yet been made to cancel these five power stations reflects the strong balance of payments situation of South Africa.

For those quarters where sanctions are

effective at the 20% level, the balance on current account would be reduced to about \$1.0 to \$1.2 billion per quarter.

#### LONG-TERM CAPITAL MOVEMENTS

Direct investment is investment of such a nature that some form of control is exerted. Thus direct investment will include stock equities if they are sufficiently large to exert some form of control, but all other stock holdings will be included under portfolio investment.

Portfolio Investment includes investment in equities in which no control is exerted, i.e. stock purchases for investment income, and long-term instruments such as bonds and loans. After the debt moratorium and the two tiered currency system which locks all investment into South Africa, we assume that the only long term investment flows will be the redemption of bonds and the payment of debt to foreign entities. The bond redemptions are calculated from the bond tables in Appendix B of **South Africa's Debt at the Time of Crisis** by D.V. Espaldon and J.E. Lind. The payment on long-term foreign bank debt is estimated from "The Maturity Distribution of International Bank Lending" of the Bank for International Settlements. The data for maturity of "Over one year and up to two years" from one year prior to the year being considered is used to give this year's payment. This technique is used to separate out the long-term debt falling due during a given year from the short-term debt. It is valid for 1987 since no new debt is likely to be incurred of a little over one year term during 1986 because of the debt moratorium and the consequent stoppage of bank lending. It somewhat underestimates the 1986 payment since some of this medium term lending occurred in the first 9 months of 1985.

Missing from this data for 1986 and 1987 will be a small amount of official debt, nonbank private sector credit extensions and a small amount of debt to banks outside the reporting area of the Bank for International Settlements. How much of it is long-term and is due during the period of the projections is unknown. The unaccounted for debt represents about 10% of the debt analyzed above. If its maturity distribution is the same as the rest of

the debt, the long-term capital flow could just be increased by 10% to account for it. This increase is added to the international bank loans to give the "Other Capital, Total" in the Balance of Payments Table.

The result of these calculations is that the long-term capital movements, exclusive of the debt to the IMF, will run a little over \$400 million per quarter through the middle of 1987. When the IMF payments, discussed under reserves are added, the total becomes about \$500 million per quarter.

#### BASIC BALANCE:

The basic balance is the resulting algebraic sum of the balance on current account and the net change of long-term capital. This would be the total balance if there were no changes in short-term capital or reserves.

#### SHORT-TERM CAPITAL MOVEMENTS

This category should represent all short-term capital movements, exclusive of interest on them and exclusive of any loans that are related to exceptional financing and reserves. A major part of this item is the short-term lending by international banks to all sectors of the South African Economy, although some portion of this international bank lending will be considered part of South Africa's reserves and should be separated out, were the data available, and placed in further down the table.

In September 1985, a moratorium was placed on the payment of principal of short-term debt to international banks. The total under the moratorium was a little over \$10 billion. Payments of this short-term debt included under the moratorium have been spelled out by the interim agreement of 20 February 1986. It stated that 5% of this short-term debt would be paid by the end of the second quarter of 1987 with a down payment of \$430 million on 15 April 1986. A small amount of short-term debt was not covered by the moratorium. Initial reports suggested that it might amount to as much as \$3 billion. The U.K. is known to have guaranteed \$2.6 billion of export credits to South Africa (*N.Y. Times*, 16 August 1986). The short-term part of these loans is presumed not to be under the moratorium. If the maturity distribution of

these credits is assumed to be the same as the overall debt given by the Bank for International Settlements, some \$50 million would be paid quarterly by South Africa on this debt. This number is arbitrarily increased by 40% to \$70 million to include some unknown German, Swiss and Japanese guarantees. The U.S. Export-Import Bank has not lent or guaranteed export credits to South Africa. This \$70 million is then added to the category "of which international banks" in the Balance of Payments Table to yield the total "Short-Term Capital". The \$70 million addition is carried for only one year after the debt moratorium because any guaranteed debt beyond that point in time would have been long-term debt at the time of the moratorium and thus not covered by the short-term debt moratorium. When the short-term capital movements are added to the basic balance algebraically, the result should reflect the net excess or deficit of foreign exchange of South Africa. To this should be added exceptional financing, which is relatively small and very short-term, and liabilities constituting foreign authorities reserves, a negligible item. This sum should then be equal to any changes in the reserves of South Africa. In reality there is always some non-zero difference which is then labeled "Errors and Omissions". This item is generally held to be mainly unreported capital flight.

#### ERRORS AND OMISSIONS

Errors and Omissions is the number needed to make the balance of payments balance. It is often in cases like South Africa considered an indication of unreported capital flight, and thus in a sense, it is a part of short-term capital flows. In fact the *Quarterly Bulletin* of the Reserve Bank includes errors and omissions together with short-term capital flows and in the tables in this report the short-term capital movement is divided into the two parts for the quarter where data are available only from the Reserve Bank by scaling from the earlier IMF data.

According to the *International Financial Statistics* of the IMF, line 77e.d "Net errors and omissions" averaged about \$400 million in most quarters of 1984 and 1985 with the exception of the upturn in the economy in the second quarter of 1985.



For our projections into 1986 and 1987 a slightly higher number 450 million is used. Hopefully, South Africa has gained some control over this flight since the moratorium was imposed and this figure is now an overestimate. This estimate is the most uncertain of any of the inputs.

### TOTAL CHANGE OF RESERVES

Normally this section would include some short-term credit to banks and the government. In our projections such debt has been included in the short-term capital movements, since it is not easily separated out of the total. The one item not included in the short-term capital movements is the repayment to the International Monetary Fund. The algebraic sign in the reserves is the opposite to that in the rest of the table. Thus an increase in the reserves is a payment by the country to the IMF. Beginning with the first quarter of 1986, South Africa has been paying SDR 79.5 million or about \$90 million per quarter on its SDR 985.8 million debt to the IMF and expects to complete the the repayment by the end of 1987 (Schweizerische Handelszeitung, 2 May 1986).

### SOUTH AFRICAN ASSETS IN BANKS ABROAD

Liabilities of banks outside of South Africa to South African entities are related to both reserves and capital flight. Much of the liabilities of these banks outside of South Africa will be related to reserves, for their liabilities are the assets of South African banks in those foreign banks and in the South African banks' own branches outside of South Africa. The liabilities of banks outside of South Africa to the non-bank sector will include some of the capital flight.

The quarterly *International Banking and Financial Developments* of the Bank for International Settlements (BIS) with its May 1986 issue has begun to cover more adequately the liabilities of banks within the BIS reporting area. The BIS reporting area is basically all the major industrialized countries and most off-shore banking centers, but does not include South Africa. In figure 1, the assets of South African banks held by banks in the BIS reporting area are plotted separately from

the assets of the South African non-bank sector held by these banks. As can be seen, the non-bank sector assets abroad plummeted from \$2.7 billion at the end of 1983 to a low of \$0.85 billion a year later and they have risen slowly since then. In contrast the South African banking sector assets started out level in 1984 at \$1.3 billion, dipped in the third and fourth quarters of 1984, as the U.S. banks started to reduce their lending. They reached a minimum of \$0.64 billion in March of 1985 and then returned slowly to this \$1.3 billion level after the moratorium on short-term debt was declared in September 1985. This graph shows the run on the South African banks in mid 1985 through the variation of their asset levels abroad. The overall picture in the Fall of 1985 is dominated by the interbank assets of South African banks outside the country and any capital flight into foreign accounts in the private sector appears small and steady, without any sharp rise at the time of the moratorium. Obviously, other capital flight into securities, real estate, precious metals, etc. is not seen.

The next question is in which countries are these South African assets? The reporting by most individual countries does not break their bank liabilities to South Africa down by sector, so the total to all sectors of the South African economy will be analyzed. The following table gives the distribution for the end of 1984 and 1985.

### SOUTH AFRICAN ASSETS IN BANKS OUTSIDE SOUTH AFRICA IN THE BIS REPORTING AREA

Country of Bank	Millions US\$ or % of total			
	1984		1985	
United States	\$441	28%	\$485	19%
United Kingdom*	331	21	544	21
F.R.Germany+	106	7	191	8
Switzerland	232	14	—	—
Other	490	30	1322	52
Total	\$1600	100%	\$2542	100%

\*Includes only Sterling assets.

+Does not include foreign branches but does include foreign subsidiaries of German banks.

Roughly, banks in the U.S., the U.K. and the sum of Germany and Switzerland each held about 20% of the South African

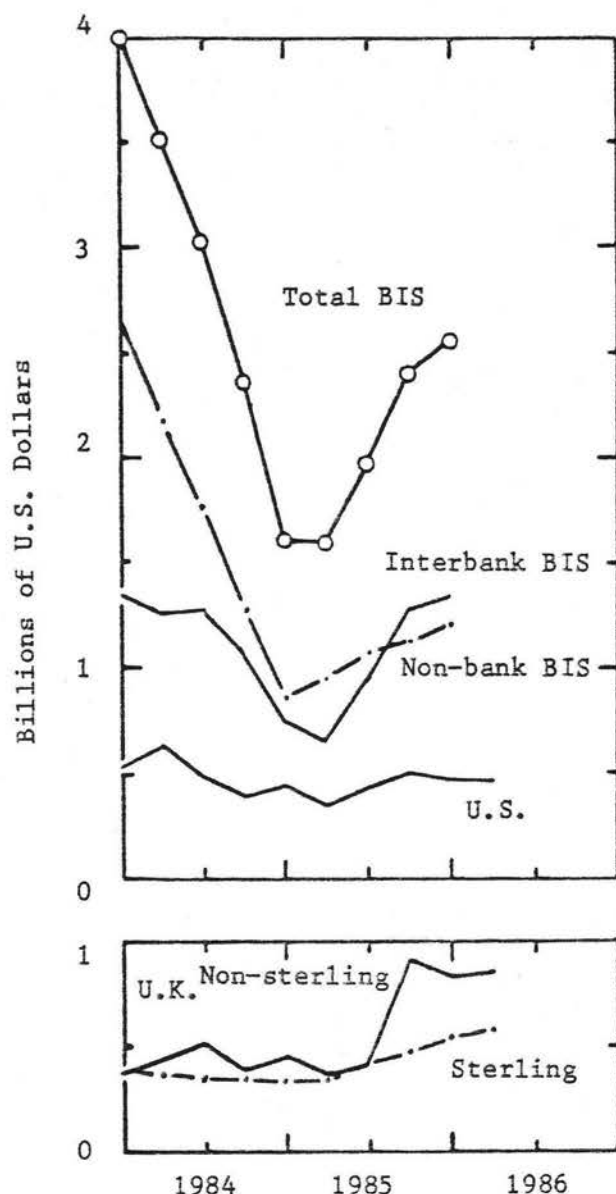


Figure 1. South African assets in banks outside of the country, including assets in South African banks' own foreign branches and subsidiaries.

Sources:

**International Banking and Financial Market Developments**, Bank for International Settlements, Basle. The reporting area is Austria, Belgium-Luxembourg, Denmark, Finland, France, Federal Rep. of Germany, Ireland, Italy, Netherlands, Norway, Spain, Sweden, Switzerland, U.K., Canada, Japan, U.S., Bahamas, Bahrain, Cayman Is., Hong Kong, Neth. Antilles, and Singapore.

**Quarterly Bulletin**, Bank of England, Table 14.

**Statistische Beihefte zu den Monatsberichten der Deutschen Bundesbank**, Reihe 3, (Continued on next page)

assets. During 1985 the South African assets rose only very slightly by 10% in the U.S. banks while the assets in sterling accounts in the U.K. and in German banks rose 60% to 80%. Sterling assets in the U.K. are looked at separately from the other assets in U.K. banks because they are more likely to reflect capital flight by individual South Africans whereas the other currency denominated assets are more likely to be interbank transfers, primarily in dollars. These non-sterling assets in the U.K., in contrast, remained low at about \$0.4 billion until the moratorium was declared and then rose precipitously to \$0.9 billion, representing much of the build up of South African bank assets described above.

In summary, the assets of South African banks in banks outside of South Africa, including their own branches, decreased to half in early 1985 and then were built back up with the help of the moratorium. At the time of the moratorium, much of these assets flowed into non-sterling accounts in London. Thus South African bank assets abroad were comparable at the end of 1985 to those at the end of 1983. Such funds are now necessary to guarantee payment for imports as shippers are unwilling to accept a guarantee of payment from a bank within South Africa (**International Trade Finance**, 26 March 1986). These South African assets in banks outside of South Africa represent a sum equal to 17% of the debt owed to these banks by all sectors of the South African economy or 11% of all South African debt at the end of 1985.

Figure 1. Continued.

**Zahlungsbilanzstatistik**, Tables 7d, 8b, and 9b.

U.S. bank liabilities are the sum of their domestic offices from the **Federal Reserve Bulletin**, Table 3.17, and their foreign offices from **Geographical Distribution of Assets and Liabilities of Major Foreign Branches of U.S. Banks**, Federal Reserve Release E.11 (121).



## CONCLUSIONS

If South Africa were to maintain its imports at the level of 1985, its balance on current account could run about \$1.2 to \$1.3 billion positive per quarter in the last two quarters of 1986 and the first two in 1987. This includes the conservative assumption that gold returns to about \$345 per ounce but that platinum prices remain high and diamond sales also remain high. Should gold remain at the inflated price of \$385, the balance on current account would increase to \$1.4 to \$1.5 billion per quarter.

When the repayment of the IMF loan, of all the long-term debt and of the short term debt is subtracted from the balance on current account of \$1.2 to \$1.3 billion, the resulting foreign currency surplus runs about \$730 million per quarter. This is the foreign currency surplus which would cover unreported capital flight, any effects of sanctions and any remaining surplus which should be demanded as a front-end payment for the next interim agreement on this short-term debt in July 1987.

Again let it be emphasized that this estimate is based on gold remaining at \$345 per ounce and oil at \$15 per barrel throughout the period. The variation of the surplus with the prices of gold and oil is given in the table below.

SURPLUS FOR Q4-1986 WITHOUT UNRECORDED  
CAPITAL FLIGHT AND SANCTIONS  
US\$ Millions

Gold \$/oz		345	385
Oil Price	15	730	930
\$/barrel	10	840	1040

From these numbers would be subtracted the unrecorded capital flight (errors and omissions) and the effects of sanctions.

For the last two quarters of 1986, the effects of sanctions will be negligible and unreported capital flight may be \$450 per quarter, although the uncertainty in this number is of the order of \$100 million. Obviously the unrecorded capital flight is a large and highly uncertain number in this projection and it must be followed over the coming months closely. This leaves \$280 million for this quarter for the front-end payment to the banks by our original conservative estimate. By

the first two quarters of 1987, this surplus would be \$280 and \$330 million, respectively. If sanctions were 20% effective by the second quarter of 1987, this \$280 million surplus would be reduced to \$110 million per quarter.

In summary for the year July 1986 through June 1987, the surplus of foreign exchange that could be applied to the pay-back of the short-term debt would be \$1160 million without the effects of sanctions. This amount is considered a minimum since decisions in the estimating process were made to yield the lowest surplus that could be demanded as a front end payment in July 1987. With 20% effectiveness of sanctions during the first two quarters of 1987, this surplus would be reduced to a little over \$830 million. Because the effects of unreported capital flight and sanctions are larger than the amounts that the banks could demand from South Africa, these capital flows must be followed carefully over the next six months as the next interim agreement takes shape.

By the third quarter of 1987, long-term debt repayment appears to increase and thus unless the price of gold remains high, the surplus will be squeezed. By this time however South Africa should have the unreported capital flight more under control.