September 1998

IMF Staff Country Report No. 98/96

South Africa: Selected Issues

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International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

SOUTH AFRICA

Selected Issues

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Approved by African Department

June 30, 1998

Contents Page

Contents Page

Contents Page

Contents Page

Figures

Contents Page

Text Tables

Annex

Contents Page

Appendix Tables

South Africa: Basic Data

Area	1.2 million square kilometers
Population (1996)	37.9 million
Population growth rate	2 percent
Employment in the nonagricultural sector	5.18 million
IMF Position (May 31, 1998)	
Quota	SDR 1365.4 million
Fund holdings of rand	SDR 1595.7 million
Holdings of SDRs	SDR 113.6 million
Exchange rate	US$ 1 = R 5.16

	1997	1994	1995	1996	1997 Prel.
National accounts	In billions of rand at current prices	(Percentage change at constant prices)			
GDP (at market prices)	594.9	2.7	3.4	3.2	1.7
Private consumption	366.7	3.1	4.7	3.9	2.0
General government consumption	127.0	3.1	-1.4	6.0	7.1
Fixed investment	103.3	8.7	10.3	7.8	3.5
Gross Domestic Expenditure	588.0	6.5	5.0	2.7	1.4
Exports of goods and nonfactor services	165.2	1.0	10.5	11.0	5.3
Imports of goods and nonfactor services	158.4	16.1	17.1	9.2	4.6
Savings and investment balances		(Percent of GDP)			
Total Investment		17.4	19.0	18.2	16.6
Foreign savings		0.3	2.0	1.3	1.5
National government finances 1/		(Percent of GDP)			
Total revenue		25.2	25.3	26.4	26.6
Total expenditure		30.8	31.1	31.6	30.6
Deficit		-5.6	-5.8	-5.2	-4.0
Money, prices, and the labor market		(Percentage change)			
12-month growth of M3 (period end)		15.7	15.2	13.6	17.2
Consumer prices (annual average)		9.0	8.6	7.4	8.6
GDP deflator		9.8	8.8	8.5	7.8
Average remuneration (pvt. nonagriculture)		10.0	11.2	10.6	9.2
Balance of Payments		(In billions of U.S. dollars)			
Current account balance		-0.3	-2.7	-1.7	-1.9
Merchandise trade balance		3.5	1.7	2.3	2.0
Total exports		25.0	28.9	29.7	30.4
Gold exports		6.7	6.2	6.1	5.6
Nongold exports		18.3	22.6	23.6	24.8
Merchandise imports		21.5	27.1	27.4	28.4
Factor and nonfactor services		-3.9	-4.5	-4.0	-3.8
Financial account balance		2.3	4.2	5.4	1.9
Net direct investment		0.2	0.7	0.7	2.0
Portfolio investment		0.3	1.3	-0.3	2.7
Other		1.7	3.4	2.9	1.0
Stock of gross reserves of the SARB		3.1	4.3	2.2	5.8
in months of merchandise imports		1.7	1.9	1.1	2.6
Stock of net reserves of the SARB (incl IMF)		0.9	3.5	1.6	3.4
in months of merchandise imports		0.4	1.3	0.7	1.4

Sources: South African Reserve Bank, *Quarterly Bulletin*; and Fund staff estimates.

1/ Fiscal year, cash basis.

I. Recent Economic Developments

A. Introduction

1. Cautious monetary and fiscal polices during 1997 resulted in a return of financial investor confidence and capital inflows during 1997 and through April 1998. These policies helped the South African economy emerge successfully from the exchange market pressures of 1996 and weather the contagion from the East Asian crisis in the second half of 1997. Throughout 1997 and up until May 1998, inflation and market interest rates fell considerably, net international reserves increased and the net open forward position (NOFP) of the Reserve Bank was reduced sharply (Figure 1). However, renewed turbulence in emerging markets has recently severely affected South Africa. Despite increases in interest rates, pressures intensified, and the authorities intervened heavily in the foreign exchange markets.

2. Following relatively rapid growth in 1995 and early 1996, the economy moved to a lower rate of growth in 1997 and thus far in 1998, while formal employment in the private nonfarm sector continued to decline. Moreover, little progress has been made in implementing the structural reforms announced in the Growth, Employment and Redistribution (GEAR) strategy aimed at accelerating job creation and ultimately reducing open unemployment, which is disproportionately concentrated among the young and unskilled.

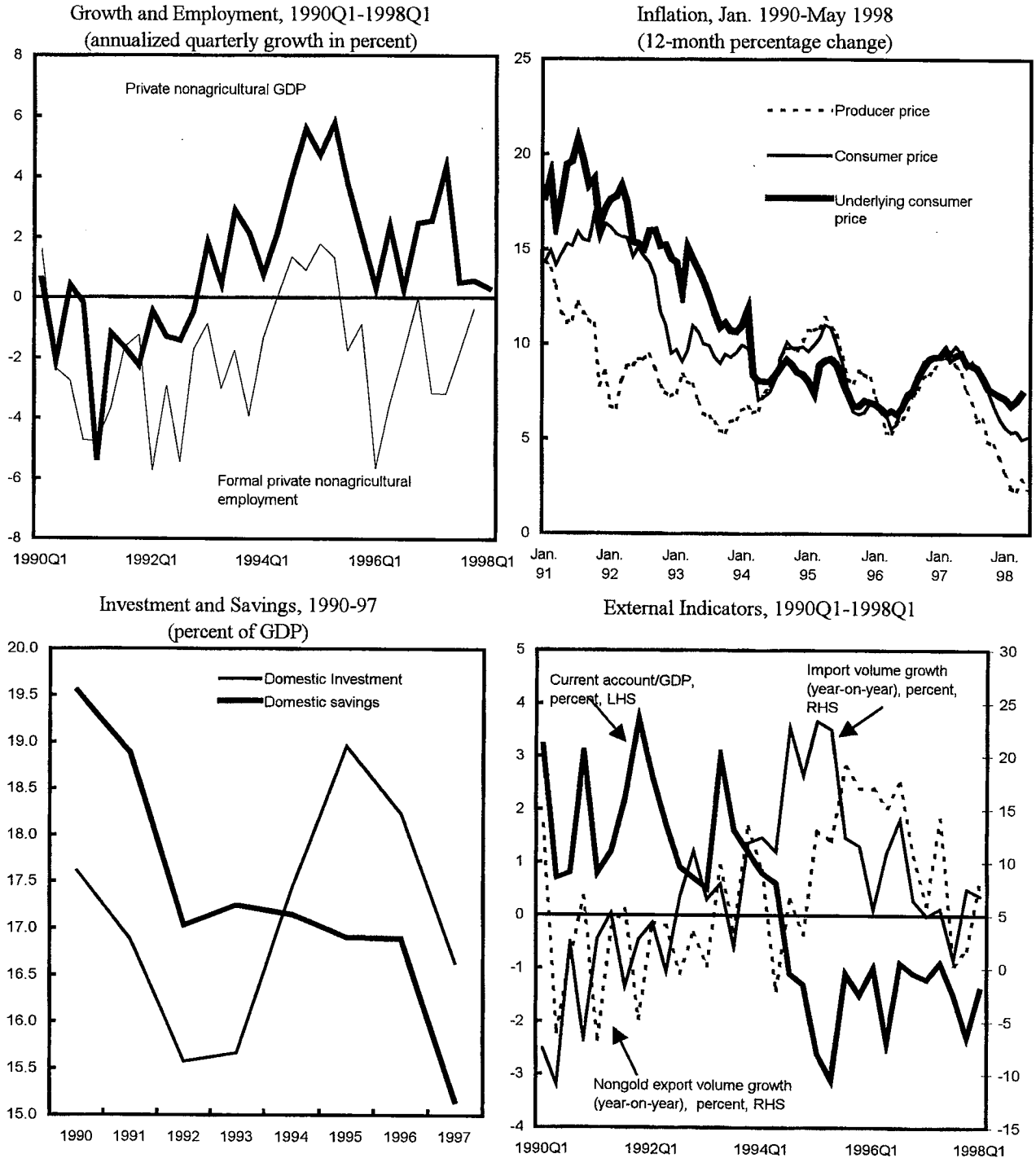
B. Real Sector Developments

3. *Economic activity slowed during 1997 intensifying the ongoing structural decline in formal sector employment. Weaker aggregate demand and beneficial developments in certain exogenous cost-push factors contributed to a dampening of inflationary pressures despite strong wage growth. An increase in general government dissaving, together with a continued decline in private saving, more than offset a slowdown in domestic investment, and thus increased somewhat the economy's reliance on foreign saving.*

4. Real GDP growth slowed from 3.2 percent in 1996 to 1.7 percent in 1997. The slowdown was particularly marked in the second half of the year, as real GDP growth fell to an annualized rate of 0.9 percent, compared with 3.3 percent in the second half of 1996. The sluggish economic activity continued in the first quarter of 1998 as real GDP grew by 0.7 percent (seasonally adjusted annual rate) over the previous quarter. With population growth estimated at 2 percent, real GDP per capita declined slightly in 1997, the first such drop since 1993. Real GDP at factor cost increased by 1.7 percent in 1997 compared with 3.1 percent in 1996.

5. The main source of growth in 1997 was the manufacturing sector, which grew by 3.3 percent and was responsible for just under half of the growth in output for the year. However, after growing at an annualized rate of close to 7 percent during the first half of the year, manufacturing output declined during the second half of the year at an annualized rate

Figure 1. South Africa: Economic Indicators



Sources: South African Reserve Bank; and Fund staff estimates

of almost 1 percent. The contrast in the performance between the first and second halves of the year may have been attributable in part to developments in the external sector, including the termination of the export incentive program, the economic crisis in East Asia, and movements in the real effective exchange rate (see below, in Section VII).[1] The other important contributors to growth were the financial services sector, reflecting continued high activity in the financial markets, and the electricity, water and gas sector, which benefitted from increased demand for electricity in neighboring countries and the expansion of electricity and water availability to the less developed regions of the country.

6. Output in the mining sector grew by 1.2 percent in 1997, after declining for three consecutive years. New measures to boost productivity in the gold mines, strong export demand for coal, and higher world prices for platinum were the main reasons for the turnaround in the mining sector. In contrast, agriculture output declined by 1 percent in 1997, after having grown by 29 percent in 1996 as a result of exceptional climatic conditions. Excluding agriculture, real GDP at factor cost grew by 1.8 percent, the same growth rate as in 1996.

7. Growth in real domestic demand decelerated from 2.7 percent in 1996 to 1.4 percent in 1997, reflecting a significant slowdown in private consumption and a major reduction in inventories. The slowdown in demand occurred despite an increase of 7.1 percent in real general government consumption, following a rise of 6.0 percent in 1996. The growth in private consumption expenditure slowed from 3.9 percent in 1996 to 2 percent in 1997 as real disposable income grew by just 0.7 percent in 1997 (and by only 0.1 percent between the fourth quarter of 1996 and the fourth quarter of 1997), owing mainly to continued declines in employment and increased personal income tax collections. The deceleration in private consumption was across-the-board, but was especially marked in durable goods, where consumption declined throughout the year (most notably in transport equipment and furniture) following very strong growth in the fourth quarter of 1996.

8. As has been the case since 1994, fixed investment grew faster in real terms than real GDP in 1997 but at less than half the rate of growth of the previous year (3.5 percent compared with 7.8 percent in 1996). Investment spending on nonresidential buildings and other construction continued to grow at a strong pace in 1997, up by 9.6 percent for the year; in contrast, spending on machinery and equipment grew by 2.4 percent, compared with an average annual growth rate of 14.1 percent during 1994-96. Residential investment grew by only 0.3 percent, prolonging a slump that began in 1993.

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[1]The real effective depreciation of the rand in 1996 bolstered the competitiveness of South African manufactured goods and stimulated production in the first half of 1997; but the real appreciation of the currency in the first half of 1997 had the opposite effect on manufacturing output in the second half of the year.

9. The slowdown in fixed investment occurred in both the private and public sectors: private investment, which comprises almost three-quarters of total fixed investment, grew by 3.1 percent in 1997 compared with 6.1 percent the previous year. Public investment, comprising both the general government and government-owned enterprises, grew by 4.6 percent in 1997 compared with 12.7 percent the previous year. In terms of the sectoral distribution of investment spending, real investment continued to be strong in the manufacturing sector, growing by 6.2 percent in 1997, reflecting the introduction of tax incentives[2]. However, there were real declines in investment in the agriculture and utility (electricity, water and gas) sectors following very strong growth in 1996.

10. There was a large reduction in inventories in 1997 (R3.1 billion, or 0.3 percent of GDP) as the general slowdown in final domestic demand (consumption plus fixed investment) and the high level of interest rates encouraged manufacturers as well as wholesalers and retailers to economize on inventories. The decumulation of inventories was responsible for reducing the growth rate of real GDP by 2 percentage points.

11. In 1997, net exports contributed 0.3 percentage point to the overall real GDP growth rate compared with 0.5 percentage point in 1996 and three consecutive years of negative contributions during 1993-1995. Growth in both exports and imports slowed markedly in 1997, but the former grew faster than the latter for the second consecutive year.

12. Gross national saving continued its downward trend, falling from 16.9 percent of GDP in 1996 to 15.2 percent of GDP in 1997. Thus, although domestic investment declined from 18.2 percent of GDP in 1996 to 16.6 percent in 1997, there was an increase in the reliance on foreign saving, as seen in the worsening of the current account deficit from 1.3 percent of GDP in 1996 to 1.5 percent of GDP in 1997. With private consumption rising faster than disposable income, personal saving as a percent of disposable income fell to 0.9 percent, its lowest level in many years. Corporate saving also declined. In agriculture, mining, and resource-based manufacturing sectors, the decline was largely attributable to weak income growth associated with a fall in output (in agriculture) and lower international commodity prices. In manufacturing, operating surpluses also were adversely affected by input costs rising generally faster than producer prices. Overall, private saving declined from 19.1 percent of GDP in 1996 to 17.8 percent in 1997, while general government dissaving increased from 2.3 percent of GDP to 2.7 percent.

13. Despite the growth in real GDP in 1997, the unemployment rate is unlikely to have declined from its 1996 level of 32 percent (October Household Survey estimate). Nonagricultural employment in the formal sector declined by 130,000 positions (or

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[2]Two tax incentive schemes geared at promoting the manufacturing sector were introduced in 1996: an accelerated depreciation allowance for new investments; and income tax holidays for firms undertaking new investments and satisfying location, labor absorption and industrial policy criteria (see SM/97/162 for details).

2.4 percent between December 1996 and December 1997), with public sector employment falling by 1.6 percent and private sector employment dropping by 2.9 percent. The fall in formal employment in the private sector continued a pattern of substitution of capital for labor that has been underway since 1990 and which is attributable in part to the increase in the price of labor relative to capital. After growing at roughly the same rate between 1985 and 1990, wages in the formal private sector grew almost twice as fast as the price of investment goods between 1990 and 1997 (Figure 2). Apart from the private services (including financial, hotel and transport sectors) and commerce sectors, which increased employment during 1997 by 1.1 percent and 0.6 percent, respectively, all the other nongovernment sectors shed workers, including mining and manufacturing, which reduced employment by 6.8 percent and 5.2 percent, respectively.

14. In December 1997, the parliament passed the Basic Conditions of Employment Act, which established basic workplace standards. These standards mainly relate to the duration of the work week (reduced from 46 to 45 hours, with the objective of progressively reducing it to 40 hours), overtime pay (increased from 1⅓ to 1½ times regular wages), maternity leave (minimum of 4 months), annual leave (three weeks and six weeks paid sick leave every 36 months), minimum working age (of 15 years, or if the work is inappropriate to a child of that age, 18 years), and severance pay and other employee rights at the time of dismissal. The act allows for certain departures from these provisions through collective bargaining, provided that "core rights" are not infringed.[3]

15. Nominal wages grew by 10.6 percent in 1997 compared with 11.2 percent in 1996. Wage increases in the private sector, which averaged 9.5 percent, were somewhat lower than in the public sector, where wage increases averaged 12.1 percent. In this context, real wages grew by 2.7 percent in 1997, compared with 1.3 percent in 1996. The acceleration of real wages in an environment of declining employment most likely reflects an inflation rate that was much lower than had been expected at the time of the wage negotiations. On the other hand, the growth in unit labor costs decelerated, increasing by 6.8 percent in 1997 compared with 9.2 percent in 1996. The slowdown in the rate of growth of unit labor costs was attributable to a faster pace in average labor productivity growth, from 1.9 percent in 1996 to 3.6 percent in 1997, reflecting to a significant extent the substitution of capital for labor.

16. Inflation, as measured by the consumer price index, declined from 9.4 percent during the 12-month period ended December 1996 to 6 percent by December 1997, and further to 5.0 percent during the 12-month period ended May 1998. The sharp decline in inflation was aided by one-off effects from slower increases in food prices in the second half of the year and a drop in mortgage costs following the reduction of the Bank rate in October 1997 and March 1998. Excluding these effects, which have a weight of about 45 percent in the overall index,

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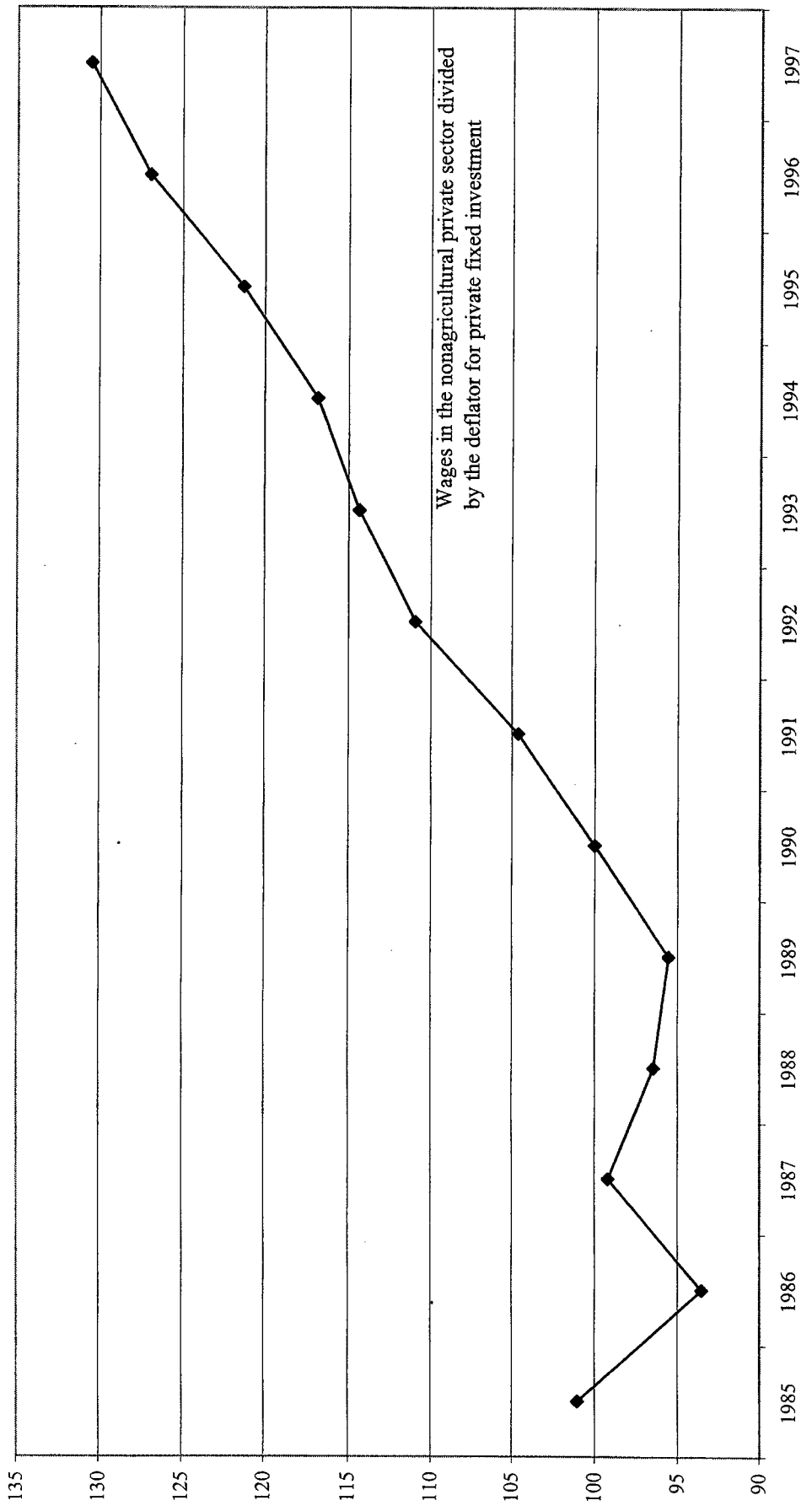
[3]In response to private sector concerns, the implementation of certain aspects of this act is awaiting a specially commissioned report to assess its impact on small and medium-sized companies.

Figure 2. South Africa: Relative Price of Labor with respect to Capital
1990 = 100



Source: South African Reserve Bank, *Quarterly Bulletin*

underlying inflation declined from 9.3 percent during the 12 month period ended December 1996 to 7.3 percent by December 1997, before increasing slightly to 7.4 percent in April 1998. The moderation in underlying inflation was attributable to tighter financial policies, a 10 percent nominal effective appreciation of the rand in the first half of 1997, the above-mentioned slowdown in the growth of unit labor costs, and a considerable slowdown in imported inflation.

C. Developments in Public Finance

17. The national government met its fiscal target for the 1997/98 fiscal year by reducing its fiscal deficit by over 1 percentage point of GDP. However, fiscal consolidation at the general government level was not as great, as the finances of the provinces and local authorities deteriorated. The government presented a 1998/99 budget that projected a further decline in the deficit and included a number of tax changes. Also, for the first time, the government presented a multi-year spending framework.

Developments in 1997/98

18. The fiscal deficit of the national government declined from 5.2 percent of GDP in 1996/97 to 4 percent of GDP in 1997/98, in line with the budget target (Figure 3). Revenue is estimated to have exceeded the budget target by R1.5 billion despite lower-than-projected growth in GDP.[4] As a result, ordinary revenue increased from 26.4 percent of GDP in 1996/97 to 26.6 percent of GDP in 1997/98 (compared with a budget target of 26 percent of GDP). Significant improvements in tax administration, particularly in the area of personal income tax (PIT) and including increased collection of tax arrears, were responsible for the better-than-projected revenue performance. These improvements more than offset a shortfall in collections (relative to the budget projection) from income tax on gold mines because of weaker-than-expected gold prices, from VAT because of sluggish growth in private consumption, and from customs duties partly because of tax evasion and partly because the budget had not taken into account the impact of the tariff reductions of 1996.

19. Total expenditure exceeded budget projections by R1.0 billion mainly because of extraordinary transfers of R2.1 billion to the provinces at the end of the fiscal year to help

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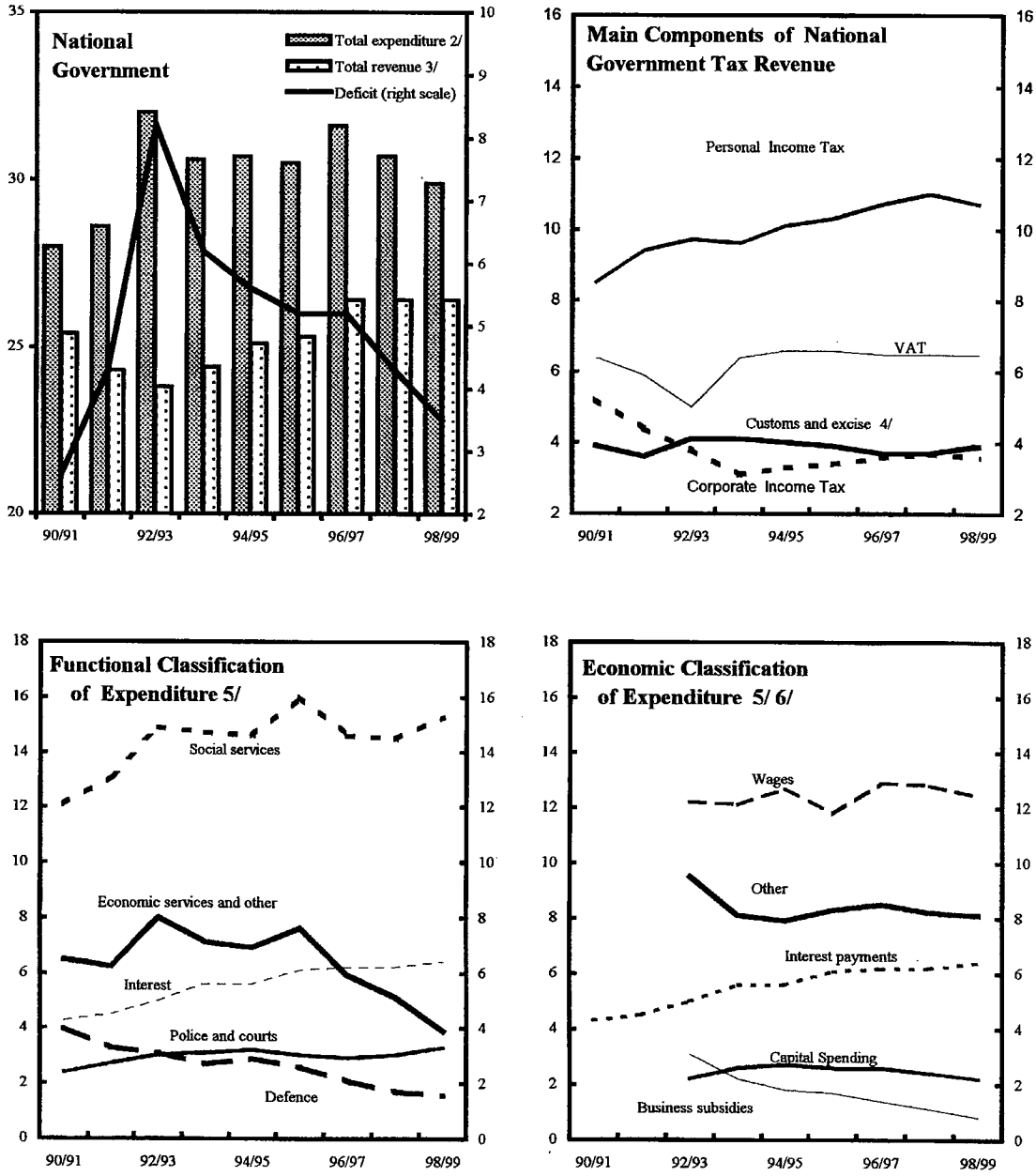
[4]The numbers quoted in this section exclude extraordinary revenue, such as sales of oil stocks and privatization receipts, and extraordinary expenditure, such as transfers to the government pension fund or the Contingency Reserve Fund of the South African Reserve Bank (see Section VI).

Figure 3. South Africa: Government Finances, 1990/91- 1998/99 1/
(In percent of GDP)



Sources: Deptartment of Finance; South African Reserve Bank; and Fund staff estimates.

1/ Fiscal year ending March 31. Data for 1996/97 and 1997/98 are preliminary; budget data for 1998/99.
2/ Excludes extraordinary transfers.
3/ Excludes extraordinary revenue such as sales of strategic stocks of oil and privatization receipts.
4/ Includes stamp duties and fees.
5/ Total expenditure by national and provincial governments, including stocks of rollover funds; budget data for 1996/97 - 1998/99.
6/ Data before 1992/93 not available; budget data for 1996/97-98/99.

them offset overruns emanating primarily in their education and welfare budgets.[5] Nevertheless, in terms of GDP, total spending by the national government fell from 31.6 percent in 1996/97 to 30.6 percent in 1997/98 (compared with a budget target of 30 percent of GDP).

Consolidated General Government Finances
(In percent of GDP)

	1996/97	1997/98
Central Government	-5.5	-4.2
National Government	-5.2	-4.0
Extra-budgetary institutions	-0.2	-0.2
Social Security Funds	0.0	0.0
Provinces 1/	-0.4	-0.8
Local Authorities 1/	0.1	-0.2
TOTAL	-5.9	-5.2

Sources: Department of Finance; Reserve Bank; and Fund staff estimates.

1/ Staff estimates, based on net financing to the provinces and local authorities.

20. As shown in the table above, the fiscal deficit of the general government is estimated to have declined from 5.9 percent of GDP in 1996/97 to 5.2 percent of GDP in 1997/98. The lower reduction in this deficit than that recorded at the national government level reflected a deterioration in the financial situation of the provinces and local authorities.

21. Expenditure overruns at the provincial level amounted to R6 billion, or 1 percent of GDP. Yet they might have been larger were it not for spending adjustments made during the fiscal year as task teams led by the Department of Expenditure and Finance conducted frequent and intense interactions with provincial treasuries to assist them in identifying areas of adjustment. Apart from the structural problems such as poor financial management systems and personnel, the deterioration in the provincial finances was attributable mainly to two factors:

(i) The 1997/98 budgets were based on 1996/97 budgets, instead of actual spending in 1996/97, which was characterized by significantly larger-than-projected increases in payroll spending, particularly through increases in employment and salaries for teachers and

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[5]Two provinces, Kwazulu-Natal and Eastern Cape received a total of R1.5 billion on condition that they put in place measures to help contain expenditure. A key problem facing these provinces is the absorption of a large number of employees of the administrations of the former TBVC states and self-governing territories.

health personnel. In this context, provinces were given unfunded mandates, i.e., national government departments set standards, which the provinces were responsible for observing, but did not provide adequate funding. The main example of this was in education, where the national government established national teacher-pupil ratios, which set off a wave of teacher hirings and caused large overruns in provincial education budgets. The 1998/99 budget relaxed these standards, without compromising the government's medium-term social objectives (see below).

(ii) Certain provinces may have intentionally underbudgeted in key areas such as education, health and welfare, anticipating that the national government would accommodate the resulting overruns.

22. The worsening of the finances of the local authorities was attributable to poor financial management systems and increases in personnel and administrative expenditures. The local authorities also have an ongoing problem of unrealistic budgeting, which arises from revenue projections that either do not sufficiently take into account the high level of nonpayment for services (water, electricity, sewerage, etc.) or do not provide for an intensified effort to strengthen collections.

The 1998/99 budget

23. The 1998/99 budget for the national government targets an overall deficit (excluding extraordinary revenues) of 3.5 percent of GDP, reflecting the authorities' continued commitment to fiscal consolidation envisaged in GEAR. Revenue is projected to decline slightly to 26.4 percent of GDP, while expenditure is budgeted to decline by 0.7 percentage point of GDP to 29.9 percent of GDP. Domestic bond issues will finance the bulk of the deficit, leaving a customary small amount to be financed externally.

24. Total revenue in 1998/99 is projected to increase by 9 percent, mainly because of the impact of tax measures and planned improvements in tax and customs administration (see box below). Personal income tax collections are projected to rise by 6.2 percent in nominal terms, but to decline as a percent of GDP, as a result of measures to limit the bracket creep that are estimated to reduce revenue from this source by R3.7 billion. This revenue decline is expected to be more than offset by higher revenue resulting from more efficient collection of all taxes, increases in the fuel levy and other excise duties, and an increase in the tax on retirement funds. (Revenue measures are explained in more detail below.)

Improvements in Tax and Customs Administration

The South African Revenue Authority (SARS) obtained administrative autonomy with the passage of the SARS Act in October 1997. Under the arrangement, SARS has considerably increased its flexibility in managing its resources, while remaining accountable to the Minister of Finance. With the help of technical assistance from abroad it has embarked on a significant transformation process with goals and objectives of the organization driven by performance, including a provision for incentive bonuses for workers. As part of the transformation process it has issued a Client Charter which sets out the rights (such as fair and impartial treatment by SARS) and obligations (such as honesty and prompt and full payment of taxes) of taxpayers.

On October 1, 1997, SARS launched an extensive coordinated campaign to broaden the tax base through registering those persons, businesses and employers outside the tax net. Activities have included information gathering, cross-checking tax information, and business to business inspection using 1,500 SARS personnel. As a result of this effort, it was able to evaluate 162,792 entities of which more than 30 percent were liable for, but in default of, registration for tax purposes. In order to improve tax compliance the government proposes to give the Commissioner of SARS powers to publish the names of tax defaulters who have been convicted of an offence in terms of tax laws that he administers. In a major effort to reduce smuggling across borders, 96 designated posts of entry were cut to 19 of which 9 are currently staffed by customs officials and the remainder are expected to be operational by mid-July 1998.

25. On the expenditure side, the wage bill is projected to rise by 6.3 percent in nominal terms, but to decline in relation to GDP from 12.8 percent in 1997/98 to 12.4 percent in 1998/99. This reflects an increase in wages that is R1.5 billion lower than envisaged in the 3-year Civil Service Conditions of Service Agreement.[6] Capital expenditure and transfers to provinces are budgeted to fall in real terms.

26. The budgeted transfers to the provinces for 1998/99 reflect a more realistic projection of provincial spending in education, health, and welfare. Moreover, several measures have been taken to monitor and control provincial expenditure in order to prevent a recurrence of the problems of last year. These measures include placing all provinces and national departments on the same centralized personnel system; the planned passage of the Treasury Control Bill later this year, which will improve financial management; setting standards for financial reporting and accountability; and conditioning certain transfers to provinces on their designing credible budgets and taking steps to improve collection of own revenue.

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[6]The CSCSA, which became effective in July 1996, extends over three years and covers the civil service wage grid, the combined wage bill of the national and provincial governments, employment policies, and the pension fund. The minimum wage was increased, wage scales compressed, and the wage bill set to rise by R6.5 billion for each of the three years, while savings from the "right sizing" program were to be applied to increase wage rates. The reduction in the wage bill referred to above was justified on the grounds of lower inflation and is being challenged by the civil service unions.

Tax changes in 1998/99

27. The 1998/99 budget introduced a number of tax changes, including taxation of personal income and fringe benefits, taxation of retirement funds, and customs and excise duties. Consistent with the recommendations of the Third Interim Report of the Katz Commission regarding personal income taxation, and following up on changes that were implemented at the time of the 1997/98 budget, the tax schedule was revised to (i) eliminate bracket creep; (ii) increase the standard deduction from R3,215 to R3,515; (iii) raise the deduction for persons over 65 years from R2,500 to R2,660; (iv) reduce the marginal rate from 41 percent to 39 percent for individuals with taxable income between R46,000 and R60,000; (v) increase the level of income to which the maximum rate of 45 percent applies from R100,000 to R120,000; and (vi) lower the number of income tax brackets from 7 to 6 (see table below).

28. Three changes to the tax treatment of fringe benefits were introduced in order to reduce distortions. First, the laws governing the taxation of housing benefits provided by employers were modified: originally announced at the time of the 1997/98 budget and intended to minimize tax avoidance, the laws were modified to eliminate possible adverse effects on lower income groups. Specifically, the law reaffirmed that the value of the accommodation for tax purposes would be equal to the cost to the employer except in cases where (a) it was customary for an employer in the industry concerned to provide free or subsidized housing to its employees; or (b) it was necessary for the particular employer to provide free or subsidized housing for the employees to properly perform their duties. These modifications are scheduled to become effective on March 1, 1999 and thus would have no revenue impact in 1998/99. Second, employers' contributions to their employees' medical insurance funds that exceeded 66 percent of the total contributions were made subject to tax as an employee fringe benefit effective April 1, 1998. Third, the taxable portion of the transportation allowance paid to employees in order to compensate them for the use of their private cars on official or company business was raised from 40 percent to 50 percent of the allowance.

29. The tax rate applicable to retirement funds on their gross interest income and net rental income (as well as dividend income from real estate investment trusts) was increased from 17 percent to 25 percent effective March 1, 1998; and, regarding the taxation of trusts, a new rule governing the tax treatment of losses was introduced, and the tax rates on income vesting in trusts were raised effective March 1, 1998.

South Africa: Summary of Effects of Tax Proposals; 1998/99
(In millions of rand)

	Revenue gain (+)/ Revenue loss (-)
Personal income tax:	
Adjustment of table and rebates	-3,700
Fringe benefits	
* Travelling allowance	150
* Contributions to registered medical funds	700
Increases in effectiveness and efficiency of collections	1,000
Nonmining companies: Increase in effectiveness and efficiency of collections	400
Trusts: Adjust rate structure and new treatment of losses	150
Value-Added tax:	
Adjustments—export scheme	150
Increase in effectiveness and efficiency of collections	400
Tax on Retirement Funds: Increase in rate	1,218
Customs and Excise:	
Increase excise duty on beer, wine, spirits and tobacco	1,010
Increase in effectiveness and efficiency of collections	100
Increase in fuel levy	1,660
Other taxes:	
Increase in effectiveness and efficiency of collections	100
Revenue gain	3,338

Source: Department of Finance, *Budget Review*.

30. A number of specific excise duties were raised: the tax on gasoline and diesel (the fuel levy) was raised by 10 cents a liter effective April 1, 1998; the duties on beer and grain alcoholic beverages were raised by 6 percent, in line with inflation, while the increase in the duties on wines was somewhat higher (between 14 percent and 20 percent, depending on the type of wine); the duties on tobacco products were raised by 29 percent, in line with the policy recommendation of the health authorities.

31. Continuing a process that began at the time of the 1997/98 budget, a number of ad valorem excise rates—on such items as cosmetics, photographic equipment, audio and video electronic equipment and motorcycles, were lowered from 15 percent to 10 percent, after having been reduced from as high as 37½ percent to 15 percent at the time of the 1997/98 budget. In addition, a new list of items were made subject to the 10 percent tax, including air conditioners, cell phones, yachts and other water sports equipment, so that the overall revenue effect is expected to be neutral.

32. In order to curb serious VAT evasion through false declaration of exports to neighboring countries, especially of cigarettes and liquor, traders from these countries will no longer be able to purchase these products free of VAT in South Africa or obtain a VAT refund at a land border post. The zero-rating for these products will now only apply when South African sellers consign or deliver goods to purchasers outside the country. To further improve tax collection, the government also proposed that prior to the approval of any overseas investment by residents, an investor must have a tax clearance certificate.

33. The authorities have decided to impose a one-off charge (at a rate of 2.5 percent) on the windfall gain that will accrue to policyholders of two large insurance companies when they demutualize, possibly in the upcoming eighteen months. The revenues, which will be off-budget, are earmarked for a fund to support youth employment and training.

The medium-term expenditure framework (MTEF) and social expenditures [7]

34. The MTEF—which sets out three-year spending plans for the national and provincial governments, and aims at ensuring that budgets reflect the government's social and economic priorities—is one of the most important reforms of the budgetary process introduced by the government. It will help to improve the allocation of resources to priority areas and encourage more efficient planning and management of budgetary resources, by providing a framework within which policy proposals can be assessed, roll-overs reduced, and transparency in government outlays enhanced. The MTEF is a critical tool for implementing and coordinating the new intergovernmental financial system which is prescribed by the Constitution, whereby each level of government is responsible for drawing up a budget reflecting its priorities but is constrained by overall consolidated budgetary resources.

35. The MTEF identifies several priority areas of government spending for the three-year period. These include efforts to improve financial management and enhance the capacity of provincial education departments; promote the transformation of education, health and welfare services in the provinces; and support labor-based poverty alleviation programs. Priority was also given to children's needs, including free health care for pregnant women and for children under six years of age, a primary school nutrition program expected to reach 4.9 million children, and a child-support grant aimed at refocussing social security in favor of poor children.

36. In education, the single largest component of government spending, the MTEF envisages spending remaining constant in real terms in the last two years after increasing by 16 percent (in nominal terms) in 1998/99. Emphasis will be placed on supporting tertiary education, where demand has been rising at a fast pace.

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[7]Data in this section refer to the consolidated spending of the national and provisional governments.

37. In health, after a 25 percent increase in 1998/99 (compared with the 1997/98 budget projection), spending is expected to increase in line with inflation for the remainder of the MTEF period. The delivery of primary health care—under the principle of equal access of quality services throughout the country—is the main priority in national health policy. The government's goal is to increase the average number of publicly-provided primary health care consultations from 1.8 visits per person in 1992/93 to 2.8 by the year 2000. Given resource constraints, reprioritizing spending in favor of primary care implies a shift of resources within and between provinces and from tertiary health care hospitals to district services.

38. Spending on welfare and social security is expected to remain constant in real terms over the MTEF period. The welfare and social security system comprises statutory grants for specific entitlement programs and welfare services. Social assistance and welfare services will focus on the transformation of the child and youth care system, including services catering for abused and neglected children, probation services, and community-based care for children with disabilities. A grant of R100 per child per month subject to means testing replaced one of R430 per month for parents and R135 per child per month for up to two children under 18 years. The new program—expected to benefit 3 million children—will, however, cost the government more than twice the previous one because of its wider coverage. The Department of Welfare has also launched a new program for support of income-generating projects aimed at women and youth, and drawing on funds from poverty alleviation programs.

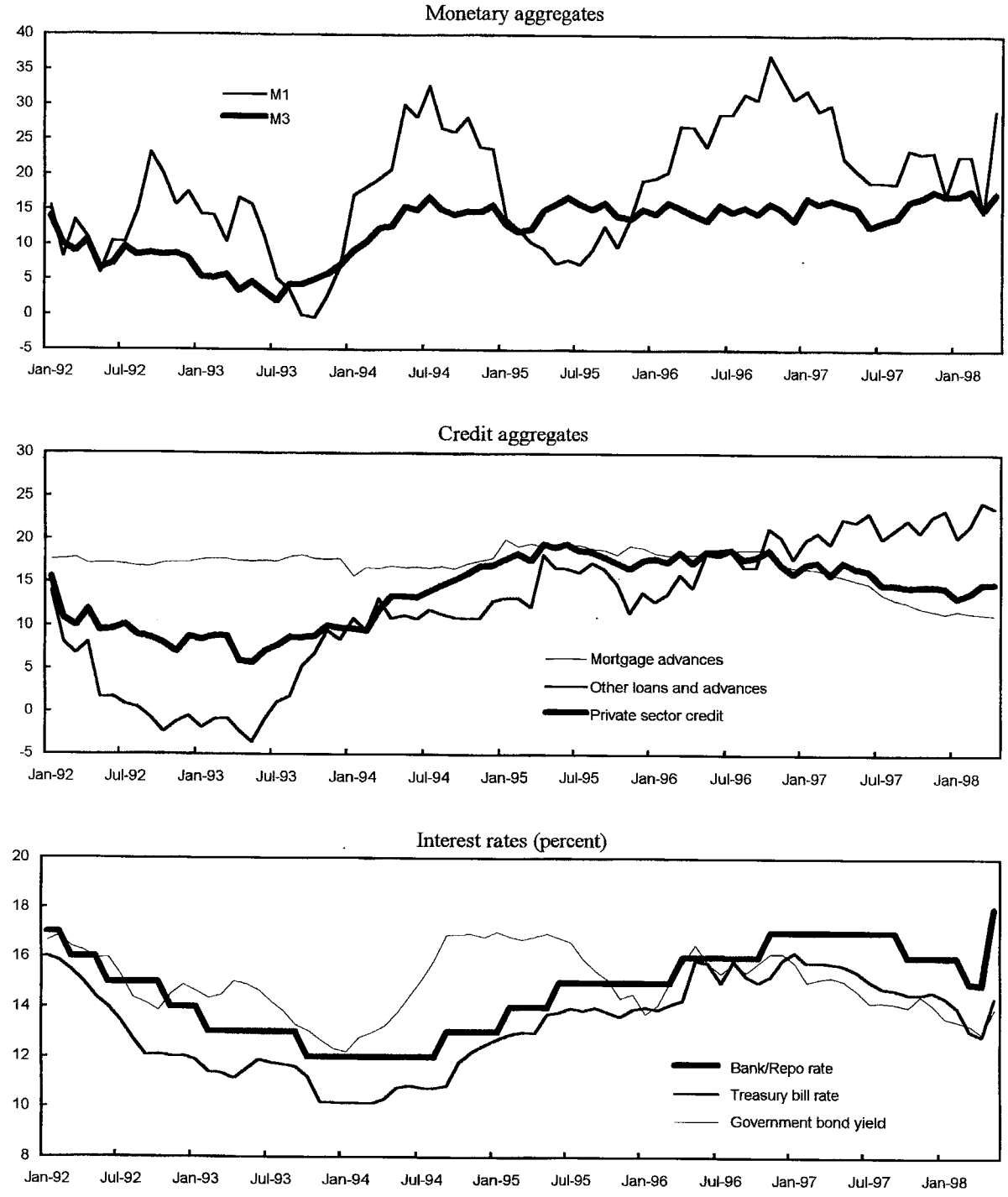
D. Monetary Developments and Policies

39. *Monetary developments in 1997 and early 1998 were characterized by volatile and strong growth in narrow and broad money aggregates. This was reflected in robust credit expansion and a substantial accumulation of foreign assets—the latter owing to a surge in foreign capital inflows.*

Money and credit

40. A noticeable slowdown in the growth rate of broad money (M3) toward the end of 1996 continued during the first half of 1997 (the 12-month growth rate fell from 13.6 percent in December 1996 to 12.7 percent by June 1997), but this pattern has reversed since then, and the 12-month growth rate increased to 17.2 percent by December 1997 and further to 17.5 percent by April 1998 (Figure 4). This rate of growth in M3 compares with the informal guideline range of 6-10 percent set by the South African Reserve Bank (SARB), and implied a further slowdown in income velocity, as inflation fell during the year. The rapid growth in M3 was reflected in a large rise in savings and time deposits, as real interest rates increased following the slowdown in inflation; a strong increase in check and transmission deposits by companies, as they increasingly made use of new cash management services supplied by

Figure 4. South Africa: Monetary Indicators and Interest Rates, 1992-98
(Annual percentage change)



Sources: South African Reserve Bank, *Quarterly Bulletin*

banks; a dramatic rise in turnover in the equity and bond markets during 1997,[8] which raised demand for transaction balances; and a sharp increase in (short-term) deposits in the fourth quarter of 1997, as investors in the equity and bond markets shifted from long-term bonds and equity to more liquid investments following the crisis in Asia.

41. The counterpart to the nearly R55 billion rise in broad money in 1997 was increases in the net domestic assets of the banking system of R48 billion and in the net foreign assets of R6 billion. Most of the rise in the former was due to robust growth in credit extension to the private sector, which increased by 14.5 percent in 1997 and 15 percent in the 12 months to April 1998 (down from 16.1 percent in 1996), approximately evenly distributed between households and companies. As a consequence of this rapid growth, credit to the private sector as a proportion of GDP increased for the fourth consecutive year, from 63 percent in 1996 to 67 percent in 1997. The expansion in private sector credit during 1997 and early 1998 can be attributed to a number of factors, including household borrowing to smooth private consumption, as real disposable income stagnated;[9] strong demand for working capital by the corporate sector; increased borrowing by businesses in a period of (perceived) temporary slack in demand; a switching of trade financing from foreign to domestic sources, as a result of exchange rate uncertainties; a sharp increase in credit to local authorities;[10] and increased demand for speculative investments in financial assets. Offsetting factors were a slowdown in the growth of mortgage advances from 16.9 percent in 1996 to 11.5 percent in 1997, in part reflecting higher risks perceived by banks, but also owing to less demand as growth in disposable income remained sluggish and real interest rates increased. Similarly, there was a substantial deceleration in credit extension in the form of instalment sales and leasing finance, owing to slower household expenditure on durable goods.

42. Following the disturbances in the foreign exchange markets in 1996, financial investor confidence returned in early 1997 and strong capital inflows resumed. These capital inflows resulted in some monetization of the economy as the net foreign asset position of the consolidated banking system increased by R9 billion between December 1996 and March 1998, mainly reflecting a strong increase in net international reserves of the SARB (see Section I.E).

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[8]Turnover in the secondary bond market increased by 41 percent in 1997, from an aggregate amount of R3,023 billion in 1996 to R4,269 billion in 1997. Similarly, turnover in the secondary share market rose by 77 percent, from R117 billion in 1996 to R207 billion in 1997.

[9]As a result, household indebtedness increased from 66 percent of disposable income in 1996 to 68 percent in 1997. However, this increase also reflected the extension of banking services to low-income households which earlier did not have access to formal credit facilities.

[10]Credit to local governments has been recorded as private sector credit, but starting in mid-1998, the SARB will publish separate series for credit to the private sector and to local governments.

Interest rates and liquidity

43. The level and structure of interest rates were also affected by developments in the foreign exchange market. During 1996, the SARB raised the bank rate (the Reserve Bank's accommodation rate for overnight loans to the banks, see below) from 15 percent to 17 percent in two steps of one percentage point, as a response to the pressures in the foreign exchange markets. The bank rate was kept at this relatively high level through the first three quarters of 1997, reflecting concerns about the strong growth in credit and money aggregates. However, as the foreign exchange market stabilized and inflation decelerated, the SARB cut the bank rate to 16 percent in October 1997, and when the new monetary arrangement was introduced in early March 1998 (see below), it initially set the repo rate—which replaced the bank rate—at 15 percent (see Figure 4).

44. Even though the bank rate was kept at 17 percent during the first nine months of 1997, money market conditions eased during the second and third quarter of the year. This was reflected in a decline in the "money market shortage" (the amount of overnight accommodation extended to banks by the SARB at the bank rate) from R10.5 billion at end-March 1997 to 6.5 billion at end-September. However, following contagion effects from the turbulence in Asia's financial markets in the fourth quarter of 1997, the money market shortage rose to R10.2 billion at end-December. The tightening of market conditions and a lack of securities qualifying as collateral for the "regular" accommodation window forced the banks to borrow from the Reserve Bank's "second-tier" window, which carried a penalty rate of 75 basis points above the bank rate.

45. The yield on long-term government bonds and short-term treasury bills declined throughout 1997 and the first quarter of 1998, reflecting expectations of lower inflation, a relatively stable nominal exchange rate development, and reductions in the bank rate. The yield on the benchmark R150 government bond (maturing in 2005–2007) fell by about 350 basis points between January 1997 and April 1998 to 12.4 percent, and tender rates on 3-months treasury bills fell by about 330 basis points over the same period to 12.9 percent. This general downward movement in market interest rates was temporarily interrupted on two occasions: in March 1997 when uncertainties regarding the budget proposal emerged, including concerns about the impact of an expected partial relaxation of exchange controls on residents; and in late October and early November 1997, when contagion from the Asian crisis spread to the South African financial markets.

46. On March 9, 1998, the Reserve Bank changed its operational procedures for providing banks with short-term liquidity: a repurchase auction system was introduced whereby banks tender on a daily basis for liquidity that is determined by the Reserve Bank. The objective of the new repo system is to enhance the flexibility and responsiveness of money market interest rates to liquidity conditions. In the system that prevailed until March 9, the SARB accommodated banks' liquidity needs virtually automatically at the prevailing bank rate,

provided that the banks had sufficient eligible securities.[11] In the new system, the repo rate is determined in daily auctions of short-term liquidity. In addition to the allocation of liquidity through the repo auctions, banks have access to a marginal lending facility (MLF) at which they can borrow liquidity overnight at a penalty rate. Eligible securities for entering into repurchase transactions with the SARB consist of Treasury bills, Land Bank bills, Reserve Bank bills, and government bonds irrespective of their maturity.

47. To facilitate the transition to the new system, the repo rate was initially fixed at 15 percent for a test period of about two weeks, while the interest rate at the marginal lending facility was kept at the previously prevailing bank rate (16 percent). After this initial test period, the repo rate was allowed to be determined in daily repo auctions, and it slowly started to drift downward, reaching 14.8 percent on May 11. To further stimulate activity in the interbank market and discourage banks from extensive use of the MLF, on May 20, the SARB increased the MLF rate to 3 percentage points above the previous day's repo rate.

48. With the introduction of the repo-based system, the regulations for cash reserve requirements were simplified. Effective April 23, 1998, the cash reserve requirement was changed to 2½ percent of banks' total liabilities on which no interest is paid, from the previous system where requirements were 2 percent on total liabilities, on which no interest was paid, plus 1 percent on short-term liabilities, on which interest was paid. In addition, to provide banks with greater flexibility in their liquidity management, banks were allowed to meet their cash reserve requirements on the basis of an average amount calculated over each monthly maintenance period, rather than on a daily basis.

Recent pressures in foreign exchange markets

49. As mentioned above, contagion effects from the financial turmoil in East Asia in October 1997 led to pressures in South Africa's financial and foreign exchange markets. The authorities responded by letting market interest rates rise, while limiting intervention in the foreign exchange markets, and allowing the rand to depreciate. Between October 20 and end-November, long-term government bond yields increased by about 50 basis points, share prices declined by about 13 percent, and the rand depreciated by 3½ percent. However, the financial markets recovered in the following months, and by end-April 1998, share prices were 15 percent higher and bond yields were 130 basis points lower than their respective values prior to the onset of the pressures.

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[11]Eligible securities consisted of t-bills, Land Bank bills, Reserve Bank bills, and government bonds with outstanding maturities of up to 91 days. In the event the banks needed additional liquidity, they could borrow from the SARB at the bank rate plus a penalty margin (75 basis points during 1997), using as collateral the above-mentioned instruments but with outstanding maturities of more than 91 days but less than 3 years.

50. However, turbulence in emerging markets escalated in May and June 1998, and, following rumors that the SARB would sharply devalue the rand in mid-May, South Africa experienced renewed strong pressures in the foreign exchange and financial markets. The authorities responded initially by reducing the supply of liquidity relative to the banks' needs at the daily repo auctions forcing banks to access the MLF; as a result, the repo rate and the effective cost of borrowing increased gradually (Figure 5). On May 26, as the pressures intensified, the authorities raised the repo rate to a fixed level of 18 percent but subsequently lowered it in two steps to 17 percent on June 12. Although the interest rate of the MLF was raised in two steps to 15 percentage points above the repo rate on June 2, the impact of this sharp increase was dampened as the SARB increased the supply of liquidity through the repo window, largely sterilizing the exchange outflows.

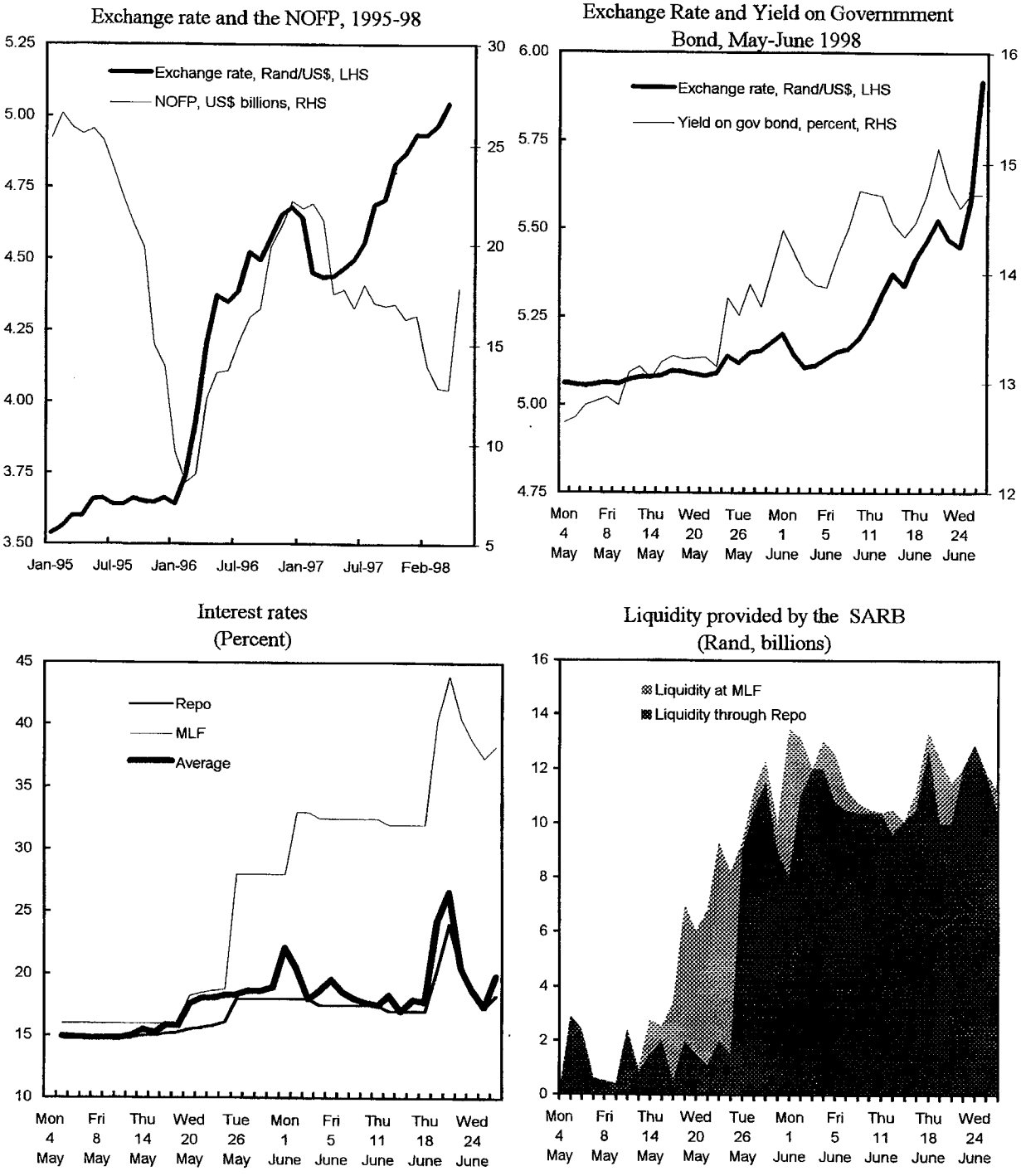
South Africa: Interest Rates and Liquidity, May–June 1998

	Interest Rates (In percent)			Liquidity (In billions of rand)		
	Repo	MLF 1/	Average	Repo	MLF 1/	Total
May 12	14.80	16.00	14.80	2.40	0.00	2.40
May 18	15.15	16.00	15.87	0.50	2.89	3.39
May 20	15.50	18.26	17.57	1.50	4.54	6.04
May 26	18.00	28.00	18.34	9.00	0.31	9.31
June 2	18.00	33.00	20.44	11.00	2.14	13.14
June 3	18.00	33.00	18.00	12.00	0.00	12.00
June 4	17.50	32.50	18.68	12.00	1.03	13.03
June 12	17.00	32.00	18.33	9.60	0.93	10.53
June 18	17.00	32.00	17.75	12.70	0.67	13.37
June 19	20.38	40.38	24.24	10.00	2.39	12.39
June 22	23.99	43.99	26.59	10.00	1.50	11.50
June 26	18.31	38.31	19.89	10.30	0.88	11.18

1/ Marginal lending facility.

51. As pressures continued, the SARB again allowed the repo rate to be determined in daily auctions on June 19 and further raised the interest rate of the MLF to 20 percent above the repo rate. The repo rate increased to 24 percent on June 22, as the SARB allotted less liquidity than demanded in the daily auction, before it declined to 18.3 percent on June 26. Throughout the period of pressures, the SARB also intervened heavily in the foreign exchange markets, and the net open forward position of the Reserve Bank rose by US$5.1 billion during May 1998 (see Section I.E). Between end-April and June 26, as a consequence of the turmoil, the rand depreciated by 17.1 percent to R5.92 per U.S. dollar, the yield on the R150 government bond increased by 200 basis points to 14.7 percent, and share prices declined by 16.5 percent.

Figure 5. South Africa: Financial Market Indicators, 1995-98



Sources: South African Reserve Bank; Reuters

E. The Balance of Payments

52. *The external current account deficit of 1.5 percent of GDP in 1997 was little changed from that recorded in 1996 (1.3 percent of GDP), although non-oil export volume growth decelerated significantly in 1997 compared with the previous two years. Favorable financial investor confidence in 1997 and until May 1998 led to an increase in international reserves and a decline in the NOFP. However, renewed pressures since May and large-scale intervention by the Reserve Bank resulted in the NOFP increasing from US$12.8 billion at end April to US$17.9 billion at end May.*

53. The external current account deficit was 1.5 percent of GDP in 1997, compared with 1.3 percent of GDP in 1996. However, as a share of GDP, the deficit narrowed to an annualized rate of 1 percent in the first half of 1997 driven by a surge in nongold exports, before widening to 1.9 percent in the second half as nongold exports slowed, gold prices continued to weaken, and imports strengthened.

54. The merchandise trade balance, while remaining in surplus, narrowed as a share of GDP in 1997 as growth in both exports and imports slowed considerably from the high rates recorded in 1996. This slowdown reflected an easing in volume growth, as the terms of trade were little changed.[12] The slow growth in merchandise exports was concentrated in nongold export volumes, as gold volumes rose for the first time since 1992. The volume of nongold exports increased by 4.5 percent in 1997, which represents a significant slowdown from the growth rates recorded in 1995 and 1996 (of almost 16 percent a year on average). Moreover, this slowdown in annual rates of increase masks the fact that nongold export volumes grew by an average of only 0.1 percent a quarter in the five quarters to December 1997.[13] This slowdown in export growth may reflect a combination of factors: (i) the rand appreciated considerably in real effective terms in the first half of 1997;[14] (ii) the economy may have reached the end of an upward structural shift in the level of exports (and imports) resulting from the elimination of trade sanctions in 1994; (iii) the General Export Incentive Scheme

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[12]The aggregate terms of trade for goods (i.e., including gold) and nonfactor services fell by 1.4 percent in 1997, while the terms of trade excluding gold rose by 1 percent.

[13]Data on export volumes by broad industry sectors are unavailable, but over this period export values have grown in mining and manufacturing and fallen in agriculture and other sectors.

[14]Developments in indicators of competitiveness are discussed in more detail in Section VII.

(GEIS) was terminated in July 1997;[15] and (iv) the crisis in East Asia is likely to have dampened exports to those countries in the second half of 1997.

55. The value of gold exports in U.S. dollar terms continued to decline in 1997. The drop in the gold price—from an average of US$388 an ounce in 1996 to US$331 an ounce in 1997[16] —was only partly reflected in domestic currency earnings by exporters due to some hedging operations and the depreciation of the rand against the U.S. dollar. Indeed, export unit values fell by 7.3 percent in domestic currency terms compared with a 15 percent fall in the spot price. The trend decline in gold export volumes was interrupted in 1997, as a reduction in inventories helped increase export volume by 5½ percent.[17]

56. The easing in import growth in 1997 relative to 1996 reflected a slowing in import volumes as prices rose in domestic currency terms at a rate broadly similar to that in the previous year. While import volume growth slowed, owing to the effects of both a deceleration in domestic economic activity and the convergence to a higher normal level of imports, the import penetration ratio, i.e., the share of merchandise imports in gross domestic expenditure, increased from 26.7 percent in 1996 to 27.6 percent in 1997. Import prices in domestic currency terms rose by 6 percent in 1997, after a 7 percent increase in 1996, as the impact of a further depreciation of the rand and rising foreign wholesale prices offset most of the impact of lower world oil prices.

57. The deficit on the services account widened further, although it fell slightly as a share of GDP in 1997. While service receipts grew by 19.1 percent and payments rose by 12.7 percent, the much higher level of debits than credits meant that the value of the deficit continued to widen. Tourism and investment income made the largest contributions to the increase in service credits while payments of investment income, owing in part to the relaxation of exchange controls on South African residents investing abroad, and South African tourism abroad, made the major contributions to the growth in service debits. The rise in investment income payments and receipts reflects the large increase in inward investment in the bond and equity markets, through outright purchases and asset swaps (see below).

58. After rapid growth in capital inflows in 1995, the financial crisis of 1996 saw net capital inflows fall sharply, with a net outflow of short-term capital, as the rand came under repeated speculative pressure. However, having weathered these disturbances, South Africa saw a resumption of strong capital inflows in 1997, as mentioned above. Total inflows

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[15]The ending of the GEIS also appears to have played a part in the volatility of nongold exports in 1997, with a surge in exports immediately preceding the ending of the scheme followed by a fall immediately thereafter.

[16]Average daily fixing price in the London market.

[17]Production was 495 tons in 1997, down only slightly from 497 tons in 1996.

reached US$4.4 billion (up from US$0.5 billion in 1996), with long-term inflows rising from US$1.7 billion to US$6.6 billion, although short-term flows remained negative as the nonbank private sector reduced its short-term indebtedness.

59. The net inflow of long-term capital reflected both strong public and private inflows. The public sector inflows included two successful foreign currency offerings by the authorities in June 1997—a 20-year, US$500 million "Yankee" issue and a 7-year, ¥ 40 billion "Samurai" issue. Public corporations were also active, with Eskom, Transnet, and the Development Bank of Southern Africa undertaking eurorand issues in 1997. Eskom completed a further eurorand issue in January 1998. During 1997, foreigners were net purchasers of R26 billion of stocks on the Johannesburg Stock Exchange and R15 billion of bonds on the South African Bond Exchange, for total purchases of around R41 billion. Approved asset swaps continued to increase in 1997, reaching around $8.8 billion, although actual outflows amounted to only around $4.2 billion. The total use of the asset swap mechanism since its inception has been significantly below the amount potentially available to be swapped, suggesting that the existing limits remain nonbinding. As discussed in Section I.F, these ceilings were raised further in 1997.

60. There was a sharp increase in the volume of activity in the Eurorand market during 1997 and until early 1998. In a typical Eurorand transaction, an international entity (for example, the World Bank or the Government of Sweden) with high credit rating issues rand-denominated paper and swaps the rand obtained for dollars. The counterparties to this swap arrangement (usually an international bank or financing house), which have acquired the rand liability, will seek to hedge this liability by buying rand-denominated assets (for example, long-dated South African government bonds), which leads to a capital inflow into South Africa.[18] Between September 1995 (when the Eurorand market came into being) and October 1997, cash investments in Eurorand totaled R28.8 billion, of which over 70 percent were in the first 10 months of 1997.[19]

61. Capital inflows remained strong in 1998 until the exchange market pressures in May: thus, nonresident purchases of equities and bonds increased by R35.7 billion in the first four months of 1998, but by only R2 billion between May and June 19. The impact of the

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[18]Although eurorand issues should typically lead to net capital inflows, this need not always be the case; for example, if the counterparty that acquires the rand liability from the issuer buys rand-denominated assets as part of an arrangement with a South African institution that invests in foreign assets (as permitted under the reserve Bank's foreign exchange regulations relating to asset swaps), then there need not be a capital inflow.

[19]The actual book value of Eurorand investments between September 1995 and October 1997 was about R126 billion. The difference between the book value and actual cash investments is accounted for by long-dated zero-coupon bonds.

experience market pressures was especially severe in the bond market which experienced sizable outflows, while in the equity market the inflows declined but remained positive.

South Africa: Nonresidents' Net Purchase of Bonds and Equities
(In millions of rand)

	Equity	Bonds	Total
1996	5,254	3,384	8,638
1997	26,202	14,778	40,980
1997 Q1	3,470	6,085	9,555
1997 Q2	8,238	7,408	15,646
1997 Q3	7,888	5,986	13,874
1997 Q4	6,606	-4,701	1,905
1998 Q1	12,819	10,097	22,916
April 1998	6,535	6,235	12,770
May 1998	3,547	-3,042	505
June 1998 1/	2,972	-1,526	1,446

1/ Through June 19.

62. Long-term foreign direct investment increased from around US$600 million in 1996 to an estimated $2 billion in 1997; however, most of the increase was related to the sale of a 30 percent stake in the telecommunications company, Telkom, to a foreign consortium in the second quarter, which raised around $1.25 billion.

63. Gross official gold and foreign exchange reserves rose substantially in 1997, reaching US$5.9 billion at end-December 1997 compared with US$2.2 billion a year earlier. Reserves continued to increase in early 1998, reaching US$6.5 billion at end-April. As reserve liabilities remained relatively stable, net official reserves rose from US$1.3 billion at end-December 1996 to US$3.4 billion at end-December 1997 (equivalent to 10 weeks of imports), and then to US$4.4 billion at end-April 1998.[20] However, as a result of heavy intervention in the foreign exchange market, net official reserves fell to US$2.8 billion at end-May, while gross reserves remained at US$6.4 billion, as the SARB drew down its credit lines (thereby boosting reserve-related liabilities).

[20]Net official reserves include liabilities to the IMF.

64. The SARB used the strong improvement in investor confidence in early 1998 to help reduce the NOFP. By end-April 1998 the NOFP had fallen to $12.8 billion, implying an oversold forward position—obligations to deliver foreign exchange in excess of rights to receive foreign exchange—of $17.5 billion.[21] However, in response to pressure in the exchange markets in May, the authorities intervened heavily in the forward market, and by the end of the month, the NOFP had increased to US$17.9 billion, and the oversold forward book had risen to US$21 billion.

65. Because of the composition of capital inflows in the first half of 1997, South Africa's external foreign currency external debt fell slightly from US$23.6 billion (20 percent of GDP) in December 1996 to US$23.4 billion (18 percent of GDP) in June 1997. The most recent data available on rand-denominated foreign debt relate to end-1996, at which time total external debt was estimated at $32.9 billion, or 26.1 per cent of GDP (see Section VIII).

F. Capital Control Liberalization

66. South Africa has followed a strategy of progressively easing exchange controls since 1994, reflecting the government's commitment to the eventual abolition of all controls on capital transactions and has made considerable progress in this regard in recent years.[22] With the abolition of the financial rand mechanism in 1995, all exchange controls on nonresidents were eliminated. They are able to purchase shares, bonds and other assets without restriction and to repatriate dividends, interest receipts and current and capital profits, as well as the original investment capital, from South Africa at will. Nonresidents are also free to hold rand accounts in the banking system. The major remaining constraint on nonresidents relates to the amount that nonresident-controlled organizations may borrow domestically, although this too has been relaxed. In March 1998, the authorities raised the threshold from which the restriction would apply from 50 percent to 75 percent of nonresident ownership.

67. Exchange controls on residents have been considerably relaxed. Rather than allowing complete liberalization of a particular type of current or capital transaction while others remained prohibited, the authorities have pursued a strategy of allowing an increasing array of transactions, with each subject to a quantitative cap. These caps have been progressively raised over time, to the point where many have become nonbinding and, in some cases, abolished.

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[21]South Africa has also met repurchase obligations of SDR 307 million to the IMF under the Contingency and Compensatory Financing Facility during 1997 and SDR 77 million in the first quarter of 1998. The remaining obligations under this facility fall due over the course of 1998 and involve a principal amount of a further 230 million SDRs.

[22]SM/97/162 contains a discussion of South Africa's history with exchange controls.

68. There are no controls on the transfer of funds arising from the import or export of goods and services.[23] Some minor restrictions remain on the current transactions of individuals although the March 1998 budget increased the allowance for individuals traveling abroad to R100,000 per calendar year for adults, up from R80,000 (R30,000 and R20,000, respectively, for children under 12 years of age). The need to pre-register before using a credit card while overseas was abolished, and the budget foreshadowed that additional administrative reforms affecting current transactions would be announced in the near future.

69. While restrictions remain on capital transactions by resident corporations, institutional investors and private individuals, these too have been subject to progressive easing. Until this year, authorized dealers in foreign exchange were restricted to holding daily balances of no more than $1.5 billion in foreign exchange. Although this limit was removed in January 1998, prudential restrictions prevent the banks from having a net open foreign exposure exceeding 15 percent of net qualifying capital and reserves.

70. Since July 13, 1995, resident insurance companies, pension funds, and unit trusts have been permitted to apply to the South African Reserve Bank to invest in foreign assets via swap arrangements with nonresidents. These limits were initially set at 5 percent of total assets but were subsequently increased to 10 percent of total assets in June 1996 in the context of the GEAR. At that time, these institutions were granted permission to transfer abroad in 1996 up to 3 percent of the net inflow of funds received in 1995, subject to the 10 percent limit on total holdings of foreign assets. The 1997/98 budget permitted a further transfer, in 1997, of 3 percent of the inflow of funds in 1996, broadened the definition of institutions that may undertake asset swaps and increased the flexibility in the definition of the 10 percent limit of assets. The 1998/99 budget continued this process and raised the limit on asset swaps to 15 percent of total assets, while allowing 5 percent of the previous year's net inflow of funds to be invested abroad in 1998.[24] An additional 10 percent of the net inflow of funds may be invested in securities listed on SADC member stock exchanges, subject to the overall limit on foreign assets of 15 percent of total assets.

71. The 1998/99 budget also further relaxed restrictions governing direct investment abroad by residents, including currency transfers abroad. Corporates can now invest abroad R50 million per project—approved by the exchange control department—and up to R250 million per project in member countries of the Southern African Development

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[23]Although the foreign currency proceeds of exports must be repatriated to South Africa within 180 days.

[24]In some instances, domestic prudential regulations have supplanted these limits as the binding constraint on investment abroad by residents.

Community[25] (previously R30 million and R50 million, respectively). Firms will also be allowed to list on the Johannesburg Stock Exchange to raise capital for projects within the SADC region, subject to these investment limits. The limit on investments abroad by private individuals—which had been set at R200,000 per person effective July 1, 1997—was also raised to R400,000 per person in March 1998.

72. Limits on the value of goods that can be exported by emigrants upon their departure from South Africa were also raised. Previously, emigrants were subject to a limit of R100,000 for household and personal effects, and a similar limit on the value of motor vehicles. The distinction between the two categories has now been abolished and the limits replaced by a combined cap of R1 million. However, restrictions on former emigrants' "blocked" funds—estimated at about R10 billion or US$2 billion—remain unchanged.

G. Trade Policy Developments

73. Considerable progress has been made in rationalizing the external trade regime in the last few years. According to data compiled by the Industrial Development Corporation (IDC) (Table 1), South Africa reduced the number of tariff lines from 7,163 in 1994 to 6,638 in 1997; at the same time, the simple average tariff was reduced from 21.2 percent in 1994 to 17.9 percent in 1996 and to 14.4 percent in 1997, while the import-weighted average tariff declined from 14.4 percent to 9.9 percent and 9.2 percent. Reductions in the average tariff (in absolute terms) were similar for all categories of goods. The share of imports entering at zero duty increased from about 41 percent in 1994 to about 56 percent in 1997. Tariff rationalization also involved a reduction in the maximum rate, which was reduced from 924 percent in 1994 to 72 percent in 1997. Notwithstanding these changes, which generally reduced the complexity of tariffs and the average level of protection, the tariff rationalization process during 1996 and 1997 involved increases in tariffs on agricultural products, vegetable oils, sugar, textiles and clothing, footwear, and motor vehicle products and a reduction in the share of goods entering at duty free rates. In 1996 and 1997, South Africa imposed final antidumping duties on 17 products affecting imports from 32 countries. As of end-1996, 35 final antidumping duties were in force.

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[25]Other than Namibia, Swaziland, and Lesotho where funds are already free of restriction.

Table 1. South Africa: Tariff Reform, 1994-97
(in percent unless otherwise indicated)

		1994	1995	1996	1997
A. Number of tariff lines					
All		7163	7163	7163	6638
of which: ad valorem		6763	6763	6763	6463
Capital goods		1438	1438	1438	1385
of which: ad valorem		1361	1361	1361	1359
Intermediate goods		2649	2649	2649	2558
of which: ad valorem		2499	2499	2499	2431
Consumer goods		3072	3072	3072	2688
of which: ad valorem		2899	2899	2899	2668
B. Average tariffs					
All	Simple	21.2	19.3	17.9	14.4
	Import Weighted	14.4	10.6	9.9	9.2
	Maximum	924.0	90.0	83.0	72.0
Capital goods					
	Simple	9.1	5.6	4.7	5.2
	Import Weighted	11.1	6.9	6.4	5.4
	Maximum	549.0	65.0	61.0	57.0
Intermediate goods					
	Simple	10.0	6.6	6.3	5.2
	Import Weighted	7.7	5.2	5.0	4.8
	Maximum	639.0	32.0	30.0	26.0
Consumer goods					
	Simple	36.5	36.7	34.2	27.9
	Import Weighted	32.2	27.6	25.9	16.9
	Maximum	924.0	90.0	83.0	72.0
C. Averages excluding items entering duty free					
All	Simple	27.5	34.8	32.9	26.6
	Import Weighted	24.2	30.3	28.7	20.9
	Percent of duty free imports	40.5	63.6	63.7	55.9
Capital goods					
	Simple	14.7	17.9	17.5	17.4
	Import Weighted	22.1	26.3	25.1	15.2
	Percent of duty free imports	49.8	73.8	73.9	64.5
Intermediate goods					
	Simple	14.5	15.6	14.7	13.0
	Import Weighted	12.5	14.9	14.1	12.2
	Percent of duty free imports	38.3	61.5	61.6	60.9
Consumer goods					
	Simple	40.1	47.1	43.9	34.8
	Import Weighted	40.1	48.1	45.1	35.1
	Percent of duty free imports	19.8	40.3	40.3	51.8

Source: Industrial Development Corporation

74. There has also been significant liberalization in the agricultural sector. The number of marketing boards had been reduced from 22 in 1992 to 14 in June 1997; as of January 1998, all the marketing boards were abolished. As a result, all remaining restrictions on the import and export of agricultural products have in principle been eliminated, although these products will continue to be subject to sanitary and phytosanitary regulations.

75. Negotiations on the free trade agreement (FTA) with the European Union (EU) have acquired renewed momentum. The EU's current offer envisages the elimination of tariffs on about 89 percent of its imports from South Africa over a three-year period, of which 96 percent (85 percent of total imports) would be liberalized upon entry into force of the FTA. 78 percent of the EU's imports from South Africa were already duty free in 1994. The EU's offer excluded from the FTA agricultural products that accounted for about 48 percent of South Africa's agricultural exports. In turn, South Africa's offer would eliminate its tariffs on about 81 percent of its imports from the EU over a 12-year transition period.[26] South Africa was contemplating special protocols to exempt, or extend, the transition period for certain agricultural products (to avoid exposing them to subsidized agricultural exports from the EU) and other sensitive manufacturing sectors under the FTA.[27]

76. In accordance with the 1996 Trade Protocol of the Southern African Development Community (SADC), South Africa intends to eliminate its tariffs on intra-SADC trade faster (over a five-year period) than other countries (following an eight-year period, as stipulated in the SADC Trade Protocol). However, the authorities also intend to give certain sensitive sectors, including textiles and clothing, footwear, and automobiles, special treatment, exempting them from the FTA or delaying their liberalization. Negotiations are expected to commence among SADC members to determine the phasing of the tariff liberalization and the treatment of these sensitive sectors.

77. Negotiations are ongoing on changes to the revenue sharing formula under the Southern African Customs Union (SACU).[28] SACU members have been dissatisfied with the existing arrangements. For countries other than South Africa (Botswana, Lesotho, Namibia, and Swaziland (BLNS countries)), there has been a loss of fiscal discretion because South Africa sets the common tariff and the excise tax for SACU as a whole; in addition, import duties designed to protect South African producers have the effect of raising prices for all

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[26]In addition to the scope and timing of tariff liberalization, agreement is outstanding in a number of areas, including antidumping, safeguards, competition policy, intellectual property, and government procurement.

[27]These protocols would cover red meat, dairy, grains, sugar, automobiles and components, textiles and clothing, TV assembly, and chemicals.

[28]The current formula is described in detail in the 1996 Selected Economic Issues Paper (SM/96/109, Section IV, Appendix II).

SACU members. Certain guidelines for a possible new revenue sharing formula (RSF) have been agreed. These include: the customs pool should not include excise duties; the RSF should not place a fiscal burden on any member; all members' shares should be calculated and there should be no residual calculations; calculations should be based on verifiable data; any major change in the RSF would need to be accompanied by a transitional arrangement; and there should be a built-in review mechanism of 5 years. Agreement on the RSF is linked to the institutional arrangements for the new tariff-setting process. The BLNS countries are seeking a greater role in this process in order to address the loss of fiscal discretion under the existing arrangements. In addition, they are seeking an additional share of the revenue to compensate them for the loss of such discretion and for the price-raising effect that they experience.

II. Growth Accounting

A. Introduction

78. This section undertakes an examination of the growth performance of the South African economy since 1970 from a supply side perspective. It seeks to identify the contribution of three factors—capital, labor, and technological progress (or alternatively efficiency)—to economic growth. One of the motivations underlying such an exercise is to explore whether the growth process has been "intensive" or "extensive". The former occurs when long-run economic growth is driven predominantly by an increase in factors of production—labor and capital; the latter occurs when such growth is a result of increases in the efficiency of the economy. High rates of economic expansion are not sustainable under an intensive growth process.[29] Extensive growth—based on improvements in technology or efficiency—can, on the other hand, be sustained over longer periods of time, and thus offers the best basis for increasing the economy's long-run supply potential.

79. Based on measurements of total factor productivity (TFP) growth at aggregate and sectoral levels, this study compares the performance of the South African economy with that of some high-performing East Asian countries, discusses the possible determinants of TFP growth, examines the performance of the manufacturing and mining sectors, and estimates the long-run growth potential of the South African economy as well as the inefficiency in the nonfinancial public enterprise sector and its output consequences.

B. Methodology

80. Growth accounting exercises are based on the following relationship between output, inputs, and technology, and are derived from a simple Cobb-Douglas production function:

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[29]This is because there are limits (usually demographic) to the increase in the growth of labor; also, higher growth in capital (than in labor) will lead to diminishing returns to capital thereby reducing output growth over time even if capital growth is maintained.

$$\Delta q/q = \Delta A/A + \alpha (\Delta k/k) + (1-\alpha) (\Delta \ell/\ell) \qquad (1)$$

where, q, k, and ℓ denote respectively output, capital, and labor; A represents the level of technology; α and $(1-\alpha)$ are the shares of output that accrue to capital and labor, respectively. Equation (1) simply states that the rate of growth in output per capita (the left hand side) is the sum of: the rate of change in the technology ($\Delta A/A$, hereafter referred to as total factor productivity growth (TFP)); the rate of growth in capital per capita weighted by its share in output; and the rate of growth of labor per capita weighted by its share in output.

81. TFP growth is a key variable of interest in a growth accounting exercise because it measures how efficiently the factors of production are being used in generating output. In equation (1), given data on q, k, ℓ, and α, TFP growth is determined as the residual. The parameter α can be estimated in three ways: first, by directly using data from the national income accounts (hereafter referred to as the "NIA approach") which measure the income that is distributed to factors of production; and second, by a regression approach, where typically output per worker is regressed on capital per worker. Both these approaches suffer from disadvantages which are described in Sarel (1997).[30]

82. Instead, this study uses values of α computed by Sarel (1997) (hereafter referred to as the "SM approach") for each of the 9 major kinds of activity in the national income accounts.[31] These sectoral values of α are the simple average for a sample of 26 countries for which disaggregated data were available.[32] To obtain the value of α at an aggregate level,

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[30]The national income approach implicitly assumes that capital and labor markets are perfectly competitive and that the income accruing to each factor of production is equal to the value of its marginal product. In the case of South Africa, with large imperfections in the labor market this assumption does not hold. Second, this approach ignores the impact of government policies that affect the returns to the different factors. For example, subsidies to capital could result in the return to capital exceeding its marginal product. The regression approach suffers from two drawbacks: it assumes that factor shares are constant over time and that the growth rate of each input is exogenous.

[31]The nine activities with their respective capital shares are: agriculture (0.275), mining and quarrying (0.601), manufacturing (0.308), utilities (0.538), construction (0.189), commerce (0.232), transportation and communication (0.320), financial and business services (0.604), and government and other services (0.0812). It can be seen that the more capital-intensive sectors such as mining and utilities have higher capital shares.

[32]To check whether the typical capital share is affected by the level of development of a country, Sarel regresses these sectoral capital shares on the average capital stock per person, and finds that the coefficients are insignificant for all sectors at the 1 percent confidence level,

(continued...)

sectoral values of the capital shares are weighted by the share of each sector in aggregate output. Hence, under the SM methodology, the capital shares vary over time only to the extent that the sectoral composition of output changes. Figure 6 compares the capital share obtained under the NIA and SM approaches. Two differences are discernible. First, whereas the SM approach yields a relatively constant capital share, the NIA approach yields values that change significantly over time. Two such episodes of striking change in the capital share occurred in the early 1970s and early 1980s when the marked surge in the price of gold increased the profits accruing to this sector and hence for the economy as a whole. Second, for the nongovernment sector, the NIA approach yields a value for the capital share that is about 12 percentage points greater on average than under the SM approach. The larger average capital shares recorded in the national income accounts can possibly be ascribed to two factors. First, to the favorable treatment of capital (Selected Issues Paper, SM/95/90) which could have increased the returns to capital; and the significant labor market distortions, resulting in wages above their market clearing levels, combined with a greater-than-unity elasticity of labor demand, could also have reduced the share of labor in total output.[33]

C. Results

Growth performance

83. The growth accounting exercise is carried out at an aggregate level as well as for different sectors. Real GDP of the private nonagricultural sector[34] grew at an annual average rate of about 3.5 percent in the 1970s, slowing down considerably to about 1 percent a year in the 1980s and 1990s (Figure 6). At a disaggregate level, manufacturing output also exhibited this pattern of robust performance in the 1970s (5.4 percent annual average rate of growth) followed by faltering growth thereafter. In contrast, the mining sector has witnessed declining trend growth since the 1970s, with some deceleration in this trend in the 1980s, owing in part to the gold boom, which saw a large increase in gold prices.

Contribution to growth

84. Table 2 depicts the contribution of the factors of production and TFP to aggregate and sectoral growth performance. Here too, a common pattern emerges. The 1970s witnessed

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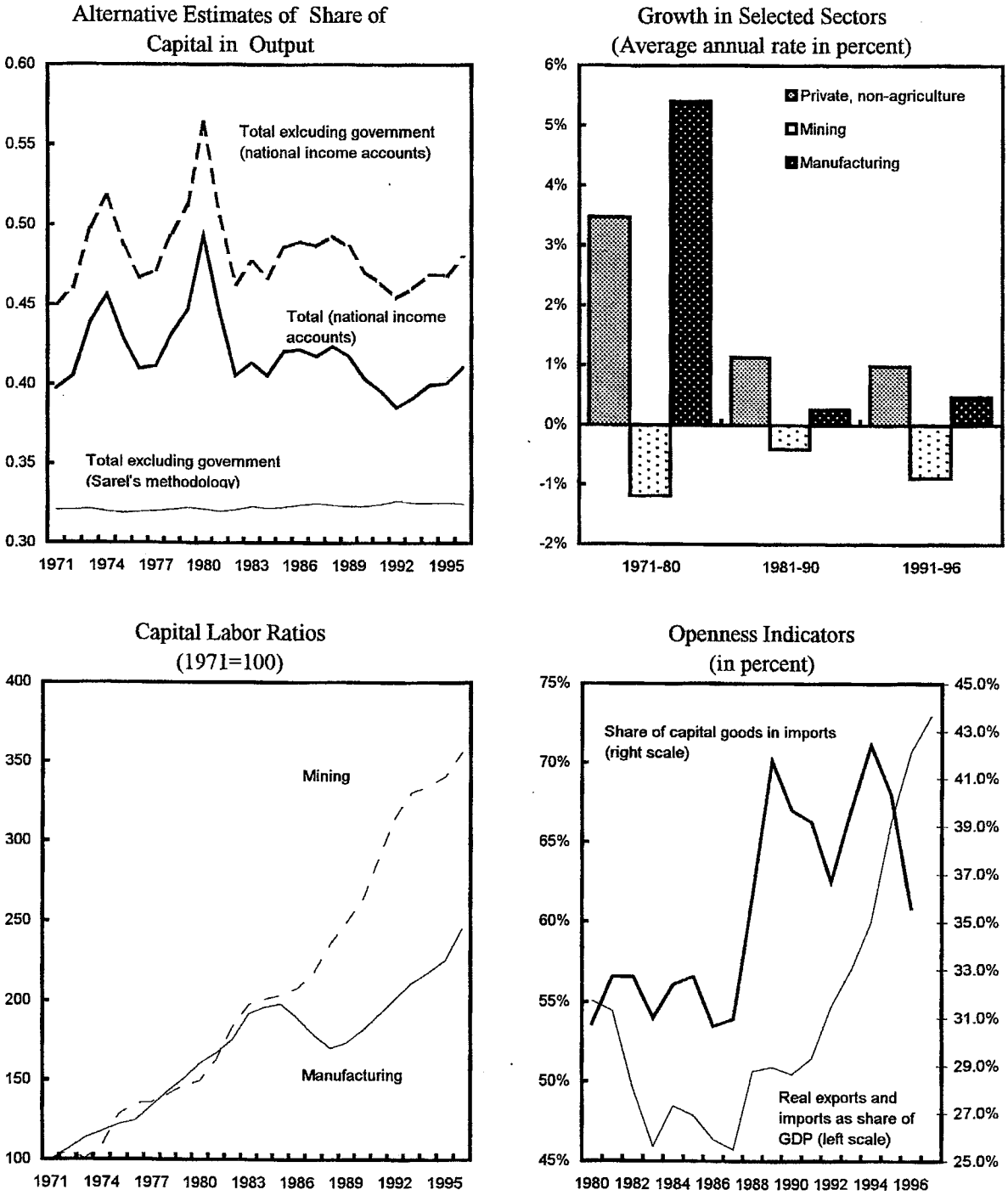
[32](...continued)
and marginally significant for three sectors at the 5 percent confidence level. This statistical insignificance validates the use of the average sample value for all countries.

[33]For South Africa, Chadha (1994) estimates an elasticity of unskilled labor demand with respect to wages of -1.5.

[34]The private nonagricultural sector excludes the category of "general government" but includes the nonfinancial public enterprises.

Figure 6. South Africa: Selected Indicators, 1971-96



Sources: South African Reserve Bank; and Fund staff estimates

Table 2. South Africa: Growth in Output, Factors, and Total Factor Productivity, 1971-1996

			1971-80	
	Output	Capital	Labor	TFP
Nonagriculture, nongovernment 1/	3.5%	6.3%	2.4%	-0.3 % (-0.7%)
Mining	-1.2%	6.6%	2.0%	-5.8%
Manufacturing	5.4%	8.2%	2.6%	1.0%
			1981-90	
	Output	Capital	Labor	TFP
Nonagriculture, nongovernment 1/	1.1%	2.8%	0.7%	-0.3 % (-0.5%)
Mining	-0.4%	5.6%	-0.2%	-3.6%
Manufacturing	0.3%	2.3%	1.0%	-1.1%
Nonfinancial public enterprises	4.7%	8.7%	9.0%	-4.1%
			1991-96	
	Output	Capital	Labor	TFP
Nonagriculture, nongovernment 1/	1.0%	1.9%	-2.2%	1.6 % (1.2%)
Mining	-0.9%	-0.3%	-5.2%	1.3%
Manufacturing	0.5%	3.5%	-1.6%	0.5%
Nonfinancial public enterprises	1.7%	1.7%	2.8%	-0.4%
			1971-96	
Nonagriculture, nongovernment 1/	2.0%	3.9%	0.7%	0.2 % (-0.2%)
Mining	-0.8%	4.6%	-0.5%	-3.3%
Manufacturing	2.3%	4.8%	1.0%	0.1%
Nonfinancial public enterprises 2/	5.2%	7.4%	6.2%	-1.4%

Sources: Fund staff estimates

1/ Figures in parentheses use capital shares derived from the national income accounts; all other figures use capital shares based on Sarel (1997)

2/ 1977-1996; annual average growth of output during 1977-80 was about 12 percent

substantial capital accumulation, averaging over 6 percent a year for the economy as a whole, and as high as 8 percent a year in manufacturing. During this period, employment creation was quite substantial, varying between 2 percent a year for the mining sector, and close to 2.5 percent a year for the rest of the economy. TFP growth, however, was poor. Thus, capital and to a lesser extent labor, were the primary engines of growth. In other words, South Africa was at a stage of intensive rather than extensive growth.

85. During the 1980s, factor accumulation slowed down, mirroring the decline in output growth. Excluding the mining sector, which saw substantial investments related to the boom in gold prices and to the fact that mines were becoming deeper, capital growth declined to an average of about 2-3 percent a year. Employment growth, at about 0.7-1 percent a year, started lagging behind the growth in the labor force. At the same time, aggregate TFP growth remained broadly unchanged, although it deteriorated substantially in the manufacturing sector (see below).

86. While real GDP growth in the 1990s remains close to that in the 1980s, its determinants have been very different. Capital accumulation slowed further in the 1990s, employment started to exhibit substantial negative growth rates, but TFP growth turned around and began to increase substantially, bolstering the flagging growth process. In each sector and at the aggregate level, TFP growth improved by about 2 percentage points a year (see below). Thus, insofar as there has been growth in the 1990s, it has been extensive rather than intensive.

87. The robustness of these estimates of TFP growth was tested using an alternative estimate of the capital share (obtained from the national income accounts). The absolute magnitude of TFP growth was modified somewhat, but the change in TFP growth over time remains broadly as described above. For example, if the capital share is estimated using the NIA approach rather than the SM approach, TFP growth in the private nonagricultural sector was about 0.4 of a percentage point a year lower in the 1970s and 1990s and 0.2 percentage point a year lower in the 1980s.[35] Accordingly, the turnaround in TFP growth between the 1980s and 1990s was about 1.7 percentage points a year rather than 1.9 percentage points under the SM approach.

Possible determinants of TFP growth

88. Whereas the neoclassical growth model assumes technological progress to be exogenous, the new (or endogenous) growth theory views TFP growth as an outcome of policy and institutional factors. One important determinant of TFP growth emphasized in the latter is the amount of research and development undertaken in an economy (Romer (1997) and Grossman and Helpman (1997)). For countries such as South Africa that do not invest

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[35]A higher capital share reduces the contribution of TFP (the residual) because the growth in capital exceeds the growth in labor.

greatly in research and development, international trade and FDI offer important vehicles for technological spillovers that allow them to close the technology gap vis-à-vis industrial countries (Coe et al. (1997)). More specifically, since this technology will be embodied in machinery and equipment, capital goods imports acquire special significance. Relatedly, De Long and Summers (1991) have argued that investment in equipment has been a critical variable explaining differences in growth performance across countries. In the case of South Africa, FDI has traditionally been low and cannot explain the variations in TFP growth. However, Figure 6 and the table below suggest that all these factors, namely, openness of the economy, imports of capital goods, and equipment investment, may have had a role in explaining the improved TFP growth performance of South Africa in the 1990s relative to the 1980s.

89. Another set of factors that could have affected the overall efficiency of the economy relates to the role of the public and private sectors in investment. In the case of South Africa,

Selected Factors Affecting TFP Growth
(In percent)

	1970s	1980s	1991-97
Share of trade in GDP (real terms)	61.2	49.0	61.9
Share of capital goods in imports	n.a.	34.1	39.0 1/
Share of equipment and machinery in investment	29.6	37.7	43.5
Share of private business sector in investment	51.2	60.8	71.0
Share of private business sector in investment in equipment and machinery	66.0	50.8	75.9

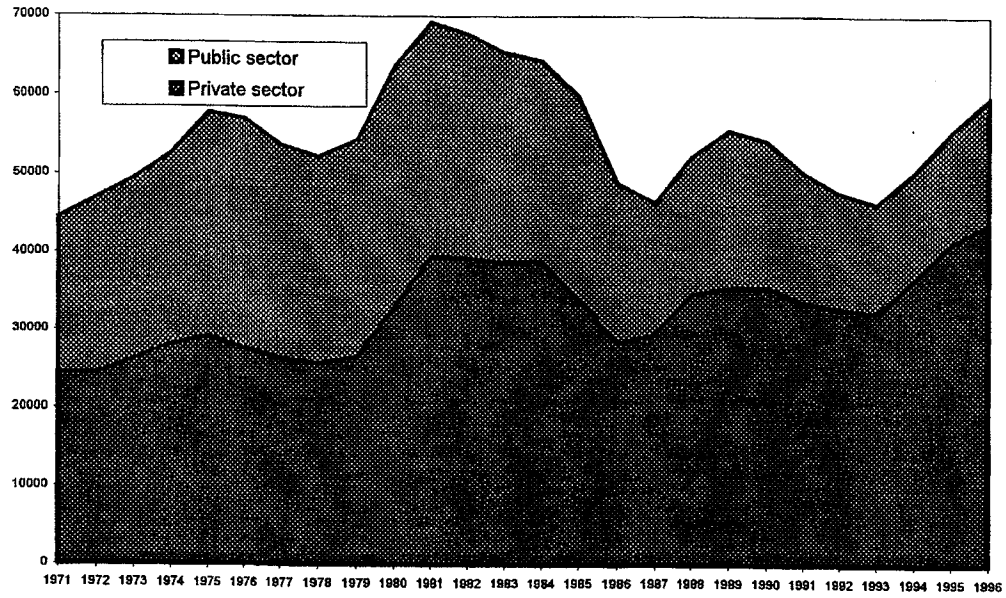
Sources: Reserve Bank Quarterly Bulletin; and Fund staff estimates.
1/ 1991-96

public sector investment led to significant excess capacity. Mitra (1994) has pointed out that South Africa's transport, communications, and electricity generation systems faced substantial excess capacity during the apartheid years. In addition, as suggested by the analysis of the performance of nonfinancial public enterprises below, public sector investment may also have been inefficient. Figures 7a and 7b as well as the table above indicate that the sharp increase in the share of the private sector in overall investment and in investment in equipment and machinery may have contributed to the improvement in TFP growth between the 1980s and 1990s.[36]

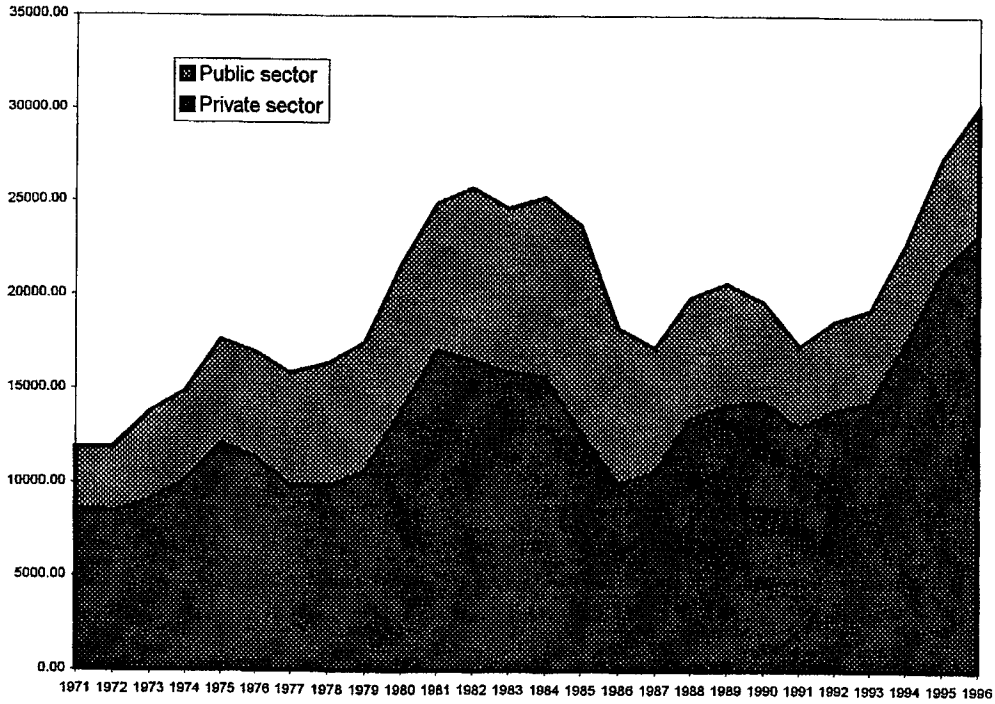
[36]It is possible that there were also complementarities between public and private investment that affected TFP growth with a lag in the 1990s.

Figure 7. South Africa: Public and Private Sector Investment, 1971-96
(In millions of Rand)

A. Total Real Fixed Investment



B. Real Investment in Machinery and Equipment



Sources: South African Reserve Bank; and Fund staff estimates

Caveats

90. An economy's supply potential is affected not only by the quality and quantity of its physical capital stock, but also its human capital stock embodied in the labor force. Since the work of Mankiw et. al. (1992) and Barro and Sala-i-Martin (1992), it has become customary to undertake the growth accounting exercise by adjusting the labor force by its human capital content, usually proxied by educational attainment. In the endogenous growth models, human capital is seen as important not only in itself but also in enhancing the ability of an economy to exploit the fruits of technological progress (see Coe et al. (1997)). The analysis in this study does not take account of the human capital factor in part because of the lack of readily available proxies for the human capital embodied in the labor force. Because of this omission, TFP growth should be interpreted as the measure of an economy's capacity to generate more output using a fixed quantity of inputs, and encompasses factors such as the level of knowledge, proficiency, skill, and other similar concepts.[37]

Cross-country comparisons

91. A cross-country comparison of South Africa's growth and TFP performance is sobering, while offering some ground for optimism. The table below compares these indicators for South Africa with five Asian countries—Indonesia, Malaysia, the Philippines, Singapore, and Thailand—and the United States. Over the longer period, South Africa's performance has, with the exception of the Philippines, been substantially below that of the comparator countries both in terms of output per capita and TFP growth.[38] Between 1978 and 1996, the Asian countries grew about 5 percent a year faster than South Africa, while registering TFP growth which was close to 2 percentage points a year higher than that for South Africa.[39] However, for the most recent period—1991-96—South Africa's TFP growth of about 1.6 percent a year was not far behind that of the fast growing Asian economies whose TFP growth averaged between 2 and 2.5 percent a year; notwithstanding this improved efficiency, South Africa's overall growth performance remained well behind that of the comparator countries.

92. The marginal product of capital (MPK) is not directly related to TFP growth, but is a key variable in determining the return on investment and hence the growth rate of capital and

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[37]It should be noted, however, that the failure to incorporate human capital will affect the measurement of TFP growth only to the extent that rate of growth in the proxy for human capital has been different from the rate of growth in the changes in employment.

[38]The comparison's are based on Sarel's estimates for these countries for the period 1978–96.

[39]As noted below, in the steady state, each 1 percentage point difference in TFP growth translates into a difference of output growth of over 3 percent a year, assuming a capital share of about two-thirds.

output. As Sarel (1997) notes, MPK is particularly important in cross-country comparisons because capital tends to flow to countries that offer a high return to investment.

South Africa: Comparison of Output and TFP Growth with Selected Countries
(In percent)

	1978-96		1991-96	
	Growth in Output per Person	TFP Growth	Growth in Output per Person	TFP Growth
Indonesia	4.7	1.2	5.1	2.2
Malaysia	4.5	2.0	5.4	2.0
Philippines	0.2	-0.8	1.6	0.7
Singapore	5.1	2.2	4.9	2.5
Thailand	5.2	2.0	6.5	2.3
United States	1.1	0.3	1.3	0.6
South Africa	**-0.3**	**0.2**	**-1.5**	**1.6**

Source: Sarel (1997); and staff estimates.

93. Under a Cobb-Douglas production function, the MPK is by definition equal to the product of the capital share ($\propto$) and the average product of capital. The table below compares South Africa's marginal product of capital with those in the comparator countries. Both over the long term and for the most recent period, the MPK for South Africa is lower than that for most comparator countries. The table also shows that the main source of variation in the MPK is not the capital share, which is roughly the same for South Africa as for other countries,[40] but the average product of capital which remains substantially below that for comparator countries, including the United States. According to the neo-classical growth model, both average and marginal product of capital will tend to decline over time as capital deepening takes place. The figures tend to suggest that South Africa has experienced significant capital deepening without the commensurate benefits in terms of the higher rates of growth experienced by these countries which suggests that such deepening has been inefficient. The low and declining returns to capital are the dual of the increasing capital intensity, which in turn may have been affected by labor market rigidities and by the negative real interest rates (and correspondingly low user cost of capital) during the 1970s;[41] two sectors where this process has been particularly evident are mining and manufacturing (Figure 6) which have seen a rise in the capital-labor ratio by a factor of 2.5 and 3.6, respectively, over the last 25 years.

[40]This is partly by assumption but also reflects the fact that South Africa's sectoral composition of output may not be very different from that of the comparator countries.

[41]However, real interest rates which were negative during the 1970s turned around in the 1980s and 1990s without any apparent impact on the capital-labor ratio.

South Africa: Capital Share, Marginal and Average Product of Capital
(In percent)

	Marginal Product of Capital		Capital Share		Average Product of Capital	
	1978-96	1991-96	1978-96	1991-96	1978-96	1991-96
Indonesia	20.8	15.4	32.3	32.3	63.4	47.8
Malaysia	15.0	14.1	32.6	32.6	47.9	43.3
Philippines	16.3	15.2	29.7	29.7	55.0	51.2
Singapore	13.0	12.9	34.8	34.8	38.8	37.0
Thailand	18.7	16.8	29.5	29.5	64.9	57.0
United States	10.9	10.2	28.1	28.1	37.2	36.2
South Africa	**12.1**	**12.8**	**35.6**	**36.7**	**32.9**	**35.8**

Source: Sarel (1997) and staff estimates.

D. Sectoral Perspectives

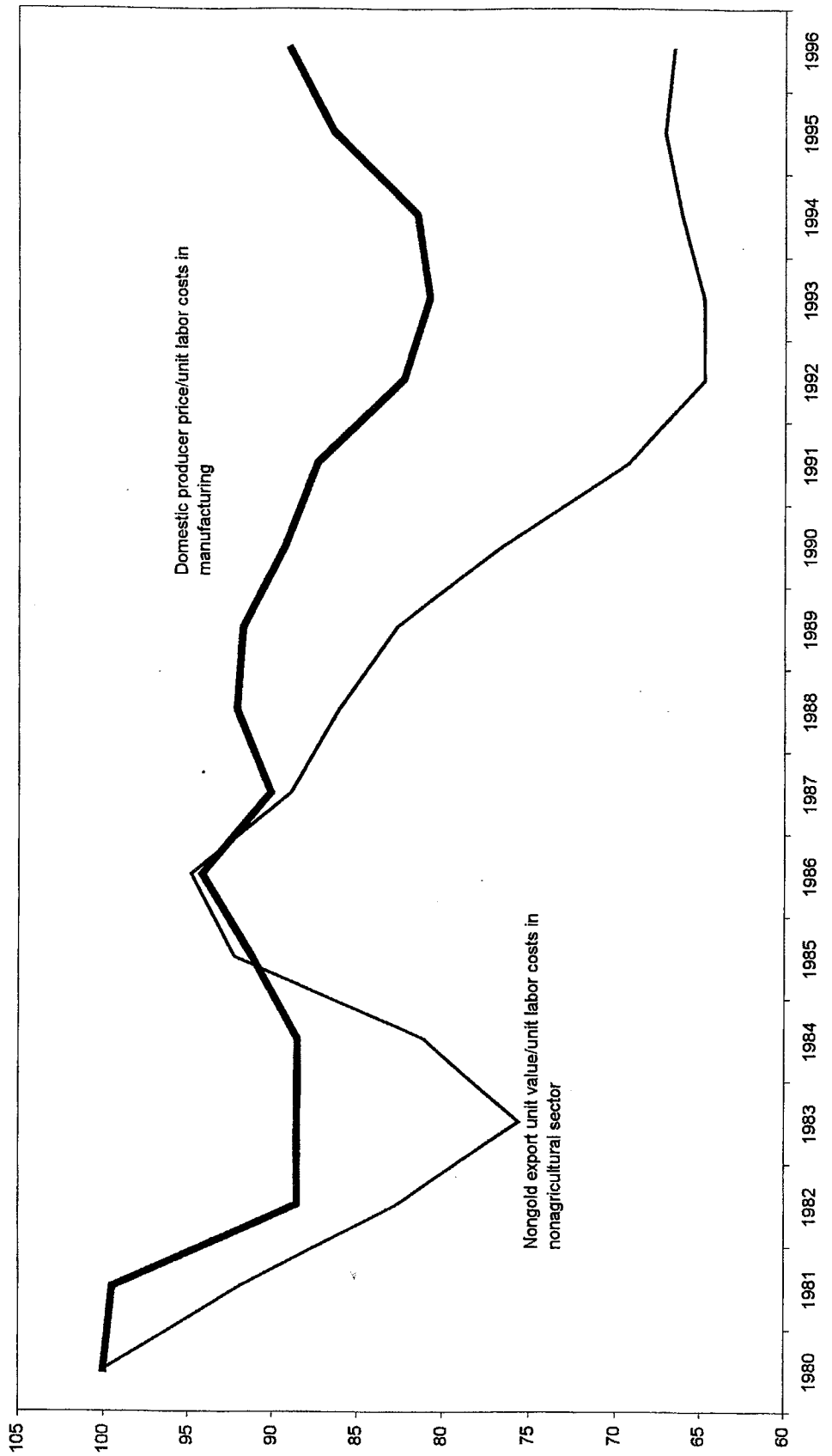
94. It is instructive to examine more closely the growth accounting exercise for two sectors—mining and manufacturing—that are of particular importance for South Africa. Both sectors produce tradable goods and together constitute more than one-third of South Africa's GDP in 1997. The manufacturing and mining sectors accounted for 27 percent and 5 percent, respectively of total formal sector employment in 1996. Mineral exports constituted about 41 percent of South Africa's total exports in 1995.

Manufacturing

95. The manufacturing sector witnessed high growth rates and rapid accumulation of capital and labor in the 1960s and 1970s, behind high tariff and nontariff barriers, consequent upon South Africa's decision to adopt an import-substitution strategy. In the 1980s, a constellation of factors, including the progressive exhaustion of import-substitution possibilities, the gold boom of the 1980s which was akin to a "Dutch disease" phenomenon, and rising wages resulted in a loss of competitiveness of the domestic manufacturing sector (Figure 8). In the early 1990s, in contrast, lackluster manufacturing sector performance owed more to the generalized recession, disinflationary policy in the face of a major deterioration in the public finances, and the uncertainties ahead of the political transition.

96. However, the progressive liberalization of the economy and the lifting of sanctions, have raised the overall efficiency of the manufacturing sector. TFP growth has increased by about 1.6 percentage points a year relative to the 1980s, reflected in the improvement in the profitability indices (see Figure 8). The increased openness of the economy and the rising share of capital goods imports described above may have played an important role in TFP growth developments between the 1980s and 1990s. It is important to note that the openness indicator also correlates well with the deterioration in TFP growth in the manufacturing sector between the 1970s and 1980s.

Figure 8. South Africa: Profitability Indices, 1980-96
(1980=100)



Sources: South African Reserve Bank; and Fund staff estimates

97. However, it is striking that TFP growth in the manufacturing sector has consistently lagged behind that in the economy as a whole, by about 1.5 percentage points a year. During the 1990s, even the mining sector has experienced faster TFP growth than manufacturing (see below). This is contrary to the usual pattern observed in other countries of the tradable goods sector witnessing faster TFP growth. One possible explanation for this lagging performance of manufacturing is that it continues to be relatively insulated from foreign competition by high effective protection, which impedes the attainment of higher levels of efficiency.

Mining

98. As noted above, the mining sector witnessed substantially negative TFP growth in the 1970s and 1980s, which has been reversed in the 1990s. The low and negative TFP growth in the mining sector observed in South Africa in the 1970s and 1980s would be paradoxical given the fact that this sector was relatively open. But these developments as well as the turnaround in TFP growth in the 1990s can possibly be explained by taking into account the evolution of South Africa's world market share of its major mining exports.

99. Table 2 and Figure 9 show that in the 1970s and 1980s South Africa invested heavily in the mining sector and reaped high rents despite poor efficiency: one indicator of this was the high MPK, which was in excess of 50 percent in the 1970s and almost 30 percent in the 1980s. The high inefficiency, manifested in the negative TFP growth, was possible given South Africa's dominant supplier status.[42] However, the return to capital declined as this dominance ebbed in the 1990s. This was caused by increased competition from countries that had more easily recoverable deposits than South Africa, where mines were becoming deeper and more capital-intensive; the increased competition probably necessitated restructuring in the South African mining industry, leading to improvements in TFP growth in the 1990s.

E. Estimating Long-Run Potential Growth Rates

100. The growth accounting exercise facilitates the estimation of an economy's long-run potential growth rate of real GDP.[43] Under the standard neoclassical growth model, if capital

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[42]South Africa's share of world gold production is shown below.

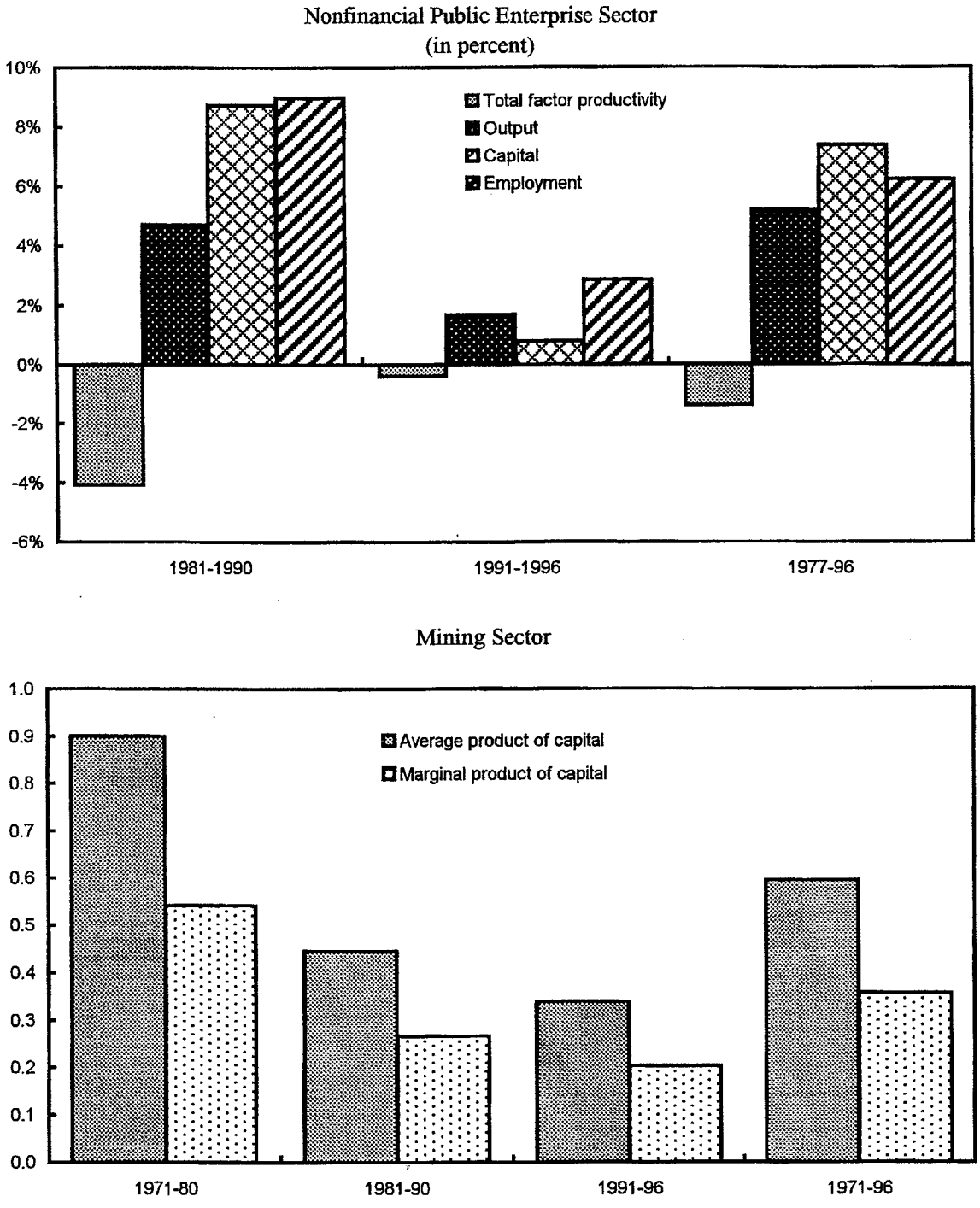
(In percent)

1971	1976	1981	1986	1991	1996
68	59	51	40	29	22

Source: Commodity Year Book

[43]Such an estimation is very sensitive to the underlying assumptions and should be viewed as indicative of possibilities rather than as a serious forecasting tool.

Figure 9. South Africa: Nonfinancial Public Enterprise and Mining Sectors, 1971-96



Sources: South African Reserve Bank; and Fund staff estimates

accumulation is determined endogenously, and the growth rate of labor supply and factor shares remain constant, then the current rate of TFP growth can be extrapolated to calculate long-run growth rates. The steady-state solution for the long-run growth rate per capita is equal to the TFP growth rate divided by the share of labor in output, i.e.,:[44]

$$\Delta q/q = (\Delta A/A) / (1-\alpha) \qquad (2)$$

101. In the case of South Africa, if current rates of TFP growth are maintained in the future, an assumption that relies crucially on the implementation of the structural reforms envisaged in the GEAR, and if the available labor supply to the economy in the future comprises all new entrants to the labor force, the long-run growth rate will be close to 6 percent a year. However, if the available labor supply to the economy in the future could include the current stock of unemployed in excess of what might be considered a natural rate of unemployment, potential output growth in the future could be higher.

F. The Nonfinancial Public Enterprise Sector and Privatization

Background

102. The nonfinancial public enterprise (NFPE) sector encompasses the public business enterprises and the public corporations. While both types of entities are controlled by the government, the former needs to seek legislative approval for their budgets while the latter does not. Table 3 lists the most important NFPEs as well as their sectors of activity. In South Africa, the share of output accounted for by the NFPEs increased from about 6 percent in 1978 to over 8 percent in 1996.

103. As a consequence of an intensive program of public investment, the NFPE sector witnessed substantial real growth averaging about 5 percent a year in the decade and a half prior to the 1990s. However, in the 1990s, their output growth moderated to about 1.7 percent a year (see Table 2). Public sector investment increased as a result of the transportation and communication infrastructure programs (launched by TRANSNET, the transportation conglomerate, and the former Department of Posts and Telecommunications) in the early 1970s, and of the utility services programs (initiated by ESKOM, the electricity company and the Rand Water Board) in the late 1970s. During the 1970s and 1980s, public sector investment also grew through a substantial expansion in industries considered to be

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[44]In the standard neoclassical growth model, the capital-labor and capital-output ratios are constant *given* the level of technology. However, equation (2) expresses the change in the steady state value of output per capita (or per worker) when there is technological progress (i.e., TFP growth). Under these conditions although the steady state value of the capital-output ratio does not change, the capital-labor and output-labor ratios do; thus, output grows faster than the growth in the labor force with the difference being related to TFP growth.

Table 3. South Africa: Major Nonfinancial Public Enterprises

Company	Activity
Category I (Essential Infrastructure Services)	
Eskom	Electricity supply
Telkom 1/	Telecommunications
Spoornet	Rail transport
S.A. post office	Postal services
SABC	Broadcasting
Portnet	Ports
Sarcc	Rail commuting
Airports company 1/	Air transport services
Air traffic and navigational services	Air transport control
Category II (Public Policy/Interest Dimension)	
Denel	Manufacturing
Petronet	Oil/petrol pipeling
Atomic energy board	Atomic research
Armscor	Armament
Mossgas	Oil exploration
SAA	Air transport
Strategic fuel fund	Fuel funding
Soeker (pty) Ltd.	Oil exploration
Foskor	Mining
Category III (No Public Interest Dimension)	
Sun Air 2/	Air transport
Autonet	Road transport
Safcol	Forestry
Alexkor	Alluvial diamond mining
Px	Parcel express
Abakor	Abattoirs
Aventura	Holiday resorts

Source: World Trade Organization's Trade Policy Review of South Africa.

1/ Partially privatized.
2/ Fully privatized.

strategically important, such as iron and steel (ISCOR), synthetic fuels (Sasol and Mossgas), and armaments (Armscor and Denel).

104. The 1980s saw large increases in factor absorption as capital and employment grew at close to 9 percent per annum accounting for more than 100 percent of the growth in output. Thus, TFP growth of the NFPEs averaged -4 percent during this period. In the 1990s, however, growth of capital and employment slowed down. Labor absorption by the NFPEs far exceeded that of the rest of the economy during the 1980s and 1990s.

105. That NFPEs have not received explicit budgetary support, or that some enterprises—such as ESKOM and TRANSNET—have good credit ratings and regularly access international capital markets, are neither necessary nor sufficient conditions for establishing that they have made efficient use of society's scarce resources.[45] Growth accounting offers a useful tool for measuring the economic performance of the nonfinancial public enterprises (NFPEs) as it allows an estimation of TFP growth.

106. One measure of the inefficiency of the NFPEs is the difference between its TFP performance and that of the rest of the economy. In the 1980s, this differential was close to 4.5 percentage points a year which narrowed to 2 percentage points a year in the 1990s (Figure 9). The methodology described above can be used to measure the output consequences of this inefficiency. If the NFPEs could attain the efficiency levels of the private nonagricultural sector i.e., achieve TFP growth of about 1.6 percent, their steady state growth rate, even allowing for the fact that NFPEs have a lower share of labor in output, could be increased by about 3 percent a year. There is a therefore a need for a major restructuring effort, including privatization and policies to inject competition into the domestic economy, such as trade liberalization and domestic competition policies, to help achieve such higher levels of efficiency.[46]

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[45]For example, ESKOM's positive financial performance may to some extent be related to the fact that it has not had to pay income tax and stamp duties. Further, several parastatals received substantial financial support from the Reserve Bank in the form of subsidized cover for their international borrowing during the 1980s and early 1990s.

[46]In 1996, under the auspices of the National Economic Development and Labor Council (NEDLAC), a National Framework Agreement was concluded among the social partners, establishing the guidelines for the process of restructuring state assets. For the purposes of privatization, the NFPEs have been placed in three categories (Table 3): (i) NFPEs with an explicit role in the provision of basic needs; (ii) NFPEs which do not provide essential infrastructure services but nevertheless have a public policy dimension; and (iii) NFPEs which fit neither of the above descriptions. The restructuring process has a number of objectives, including the need to make NFPEs more competitive, to assist in the repayment of government debt, to deliver affordable services to the population, and to address historical

(continued...)

G. Summary and Conclusions

107. Moderate rates of real GDP growth in the 1970s were followed by very low rates in the 1980s and 1990s. The sources of growth varied in these three periods. In the 1970s and 1980s, growth was driven largely by increases in the factors of production, notably capital. However, in the 1990s, the improvement in economy-wide efficiency, as measured by TFP growth, was the main engine of growth. This pattern of a turnaround in TFP growth in the 1990s relative to the earlier periods was evident not only at the aggregate level but also at the sectoral level.

108. This improvement in TFP growth in the 1990s could have been due to (i) technological factors, as reflected in the increased share of capital goods in imports and the increased share of machinery and equipment in investment; and (ii) to efficiency-inducing factors such as the increased openness to trade and a greater role for the private sector in investment. There is some evidence of large-scale and inefficient capital accumulation, reflected in the high and rising capital-labor ratios and in the attendant low returns to capital compared with, for example, the East Asian countries.

109. If the TFP growth achieved during the 1990s is maintained, for which the implementation of structural reforms is a prerequisite, the potential growth rate of the South African economy can be close to 6 percent a year.

110. Despite relatively low levels of efficiency, the mining sector enjoyed high returns to capital in the 1970s and 1980s, possibly because of South Africa's dominant supplier status in those periods. However, as this dominance ebbed, this sector was forced to improve its efficiency levels which resulted in a strong increase in TFP performance in the 1990s.

111. The manufacturing sector also effected improvements in efficiency in the 1990s, but the level of TFP growth still lags behind the rest of the economy. This is contrary to the pattern observed in most countries, possibly due to the high levels of effective protection which hamper efficiency.

112. The growth accounting exercise also reveals the magnitude of the inefficiency of the nonfinancial public enterprise sector. TFP growth in the NFPEs has remained negative in the 1990s and substantially less than that for the economy as a whole. If this difference could be bridged through restructuring and privatization as well as other measures to enhance

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[46](...continued)
imbalances. At this stage, whereas restructuring could take the form of majority divestiture for the last category, the government intends to devise specific divestiture strategies for enterprises in the first two categories on a case-by-case basis, taking into account the needs of individual sectors.

domestic competition, potential output growth of the NFPEs could be increased by about 3 percent a year, yielding considerable efficiency gains, and fiscal benefits could also be achieved as privatization proceeds are used to reduce government debt and the interest bill.

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Data Sources and Methodology

Data for the growth accounting exercise were obtained from the South African Reserve Bank's Quarterly Bulletin. Selected data on nonfinancial public enterprises (nominal value added, nominal capital stock at replacement value, and nominal remuneration of employees) were provided by the Reserve Bank.

All aggregates relating to the private sector exclude "General Government." The agricultural sector includes agriculture, forestry and fishing. The mining sector includes mining and quarrying. Thus, GDP of the private nonagriculture sector is the difference between series 6003 (GDP at factor cost) and the sum of the series 6031 (GDP of agriculture, forestry and fishing) and of series 6043 (GDP of general government).[47]

Fixed capital stock for the economy (series 6149) and individual sectors (series 6140–6148) are calculated on a replacement value basis. Employment data refer to the formal sector (series 7000–7009). National income-based capital share estimates were derived from series 6285 which is the ratio of remuneration of employees to GDP.

For the NFPEs, real value added was obtained by deflating nominal value added using a price series for the nonagricultural sector. An employment series for the NFPEs was obtained by deflating the nominal wage bill by remuneration per worker in the public authorities (series 7011). Estimates of the real capital stock were derived by deflating the nominal capital stock by the price series for gross domestic fixed investment. Two estimates of the share of capital in output of the NFPEs were used: the first was the capital share for the private, nonagricultural, nonmining sector, and the second, based on the ratio of the nominal remuneration of employees to nominal value added in the NFPE sector. The data on NFPEs exhibit discontinuities owing to the reclassification of some enterprises: TRANSNET was classified as an NFPE in 1990, and TELKOM and the South African Post Office were added to the list of NFPEs in 1992.

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[47]All series references relate to those in the Reserve Bank's Quarterly Bulletin.

III. Inflation, Money Demand, and Purchasing Power Parity in South Africa

A. Introduction

113. Inflation has fallen considerably in South Africa during the 1990s. Annual growth in the consumer price index fell from 16.2 percent in 1991 to 9.4 percent in 1993 and further to 6.8 percent in 1997. However, developments in broad money (M3) have not followed the same pattern. Although the annual growth rate in M3 fell from 13.8 percent in 1991 to 5.9 percent in 1993, it has since increased to 17.3 percent in 1997. During the 1970s and 1980s, fluctuations in inflation and money growth were even larger (Figure 10). The contrasting developments in inflation and money growth during the 1990s have led analysts to question whether there exists a stable relationship between money growth and inflation, i.e., whether money demand is stable, and whether it is appropriate for the Reserve Bank to use M3 as an intermediate target for its monetary policy decisions.[48,49] As a consequence of the perceived uncertainty in the relationship between money and prices, and as a means of enhancing the transparency and credibility of monetary policy decisions, the possibility of adopting an explicit inflation targeting regime in South Africa has been discussed, mirroring the monetary policy regime in countries such as New Zealand, United Kingdom, and Canada.

114. At the same time, the nominal exchange rate has fluctuated widely in South Africa (Figure 10). For example, in recent years, the nominal effective exchange rate depreciated by 21.5 percent in 1996, appreciated by 6.0 percent during the first half of 1997, before it depreciated again by 6.4 percent in the second half of the year.[50] Although the presence of trade sanctions reduced imports as a share of GDP during the 1980s and early 1990s (Figure 10), it is likely that movements in foreign prices and the nominal exchange rate have also contributed to inflationary developments in South Africa.

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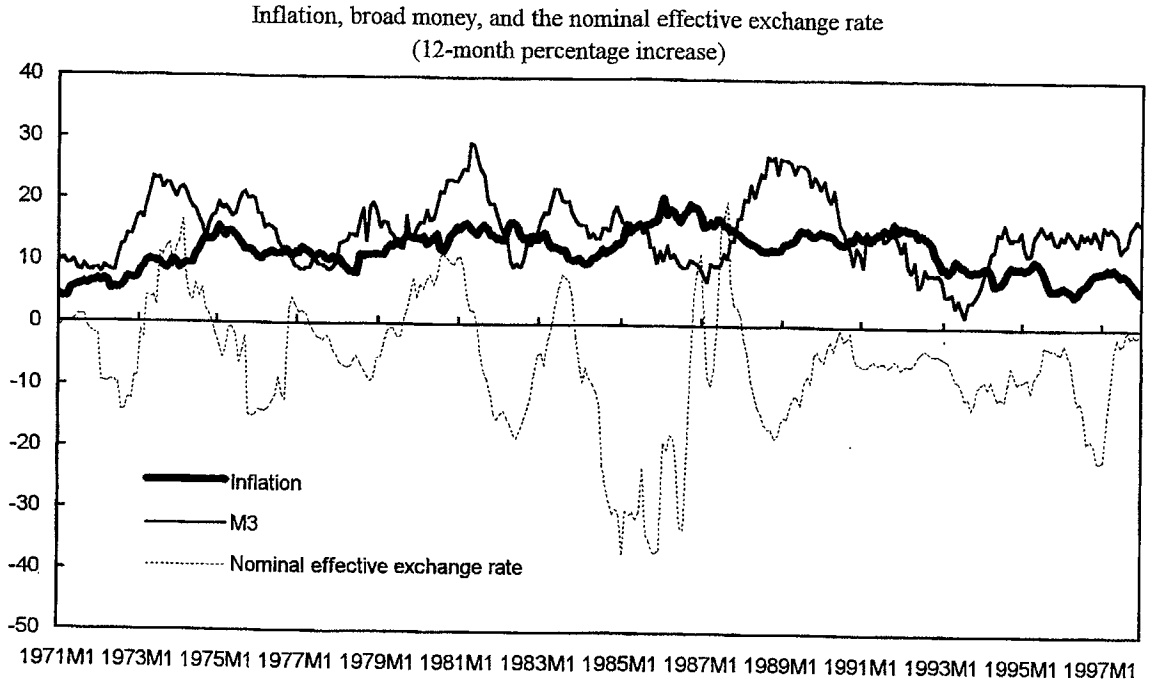
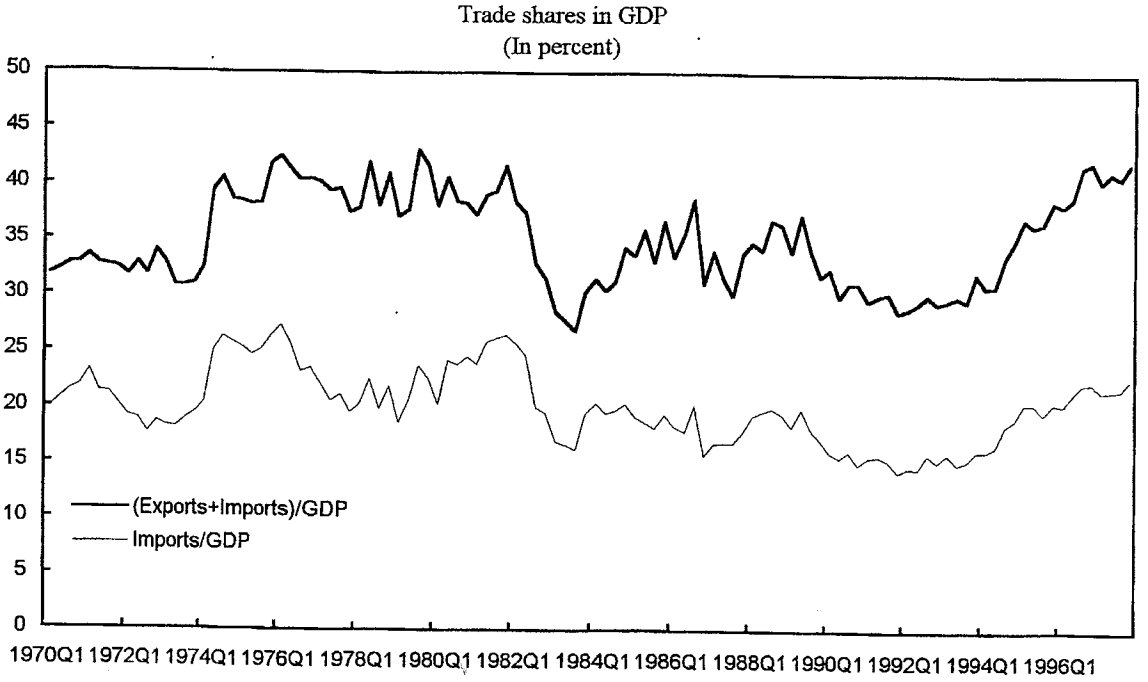
[48]Strictly speaking, an unstable relationship between money growth and inflation does not necessarily imply that money demand is unstable, as the latter would be expected to vary with fluctuations in other variables, such as real income and nominal interest rates.

[49]The Reserve Bank has announced annual guidelines for growth in broad money since 1986 (6-10 percent in 1997). However, actual growth in M3 has substantially exceeded the guideline range during the last few years, and the authorities have on several occasions announced that the Reserve Bank in practice is guided by developments in a number of different indicators including, various price indices, the shape of the yield curve, the nominal exchange rate, and the output gap.

[50]The Reserve Bank's measurement of the nominal effective exchange rate is used throughout the paper; an increase in the effective exchange rate means an appreciation of the rand. See Appendix for details.

Figure 10. South Africa: Inflation, money growth, exhange rate, and trade developments, 1970-97





Source: South African Reserve Bank, *Quarterly Bulletin*

115. The purpose of this empirical study is to simultaneously examine the long-run and short-run relationships between prices, the exchange rate, and various monetary aggregates in South Africa. This includes a search for a stable money demand relationship, and an examination of the purchasing power parity (PPP) hypothesis. In the course of doing this, the leading indicator properties of different aggregates for inflation are studied, and the issue of a potential structural break in the data since 1994—the starting year of the successful political transformation of the economy and the lifting of sanctions—is tentatively examined.

116. The results indicate that (i) there exists a sensible and stable money demand type of relationship between M3, nominal income, and long-term interest rates, as well as a long-run relationship between foreign prices, the nominal effective exchange rate, and domestic prices; (ii) temporary deviations from the long-run equilibrium in the money market and, in particular, in the external market are important for short-run inflation fluctuations; and (iii) there are indications of a structural break in the data sometime around 1994, implying that a given rate of money growth is likely to lead to an inflation rate that is about 2-3 percentage points less per year after 1994, ceteris paribus.

117. The rest of this section is organized as follows: Section B briefly reviews some earlier studies related to inflation, money demand, and PPP in South Africa, before it lays out the theoretical and methodological approach in the current study, and discusses some data issues. Section C presents the empirical results, while Section D summarizes the findings and concludes.

B. Background, Methodology, and Data

118. Previous empirical studies have either focused exclusively on the demand for money or the degree of pass-through from exchange rate movements to inflation. In a previous Selected Issues paper (SM/96/109), it was argued tentatively that narrow money (notes and coin in circulation outside the banking system) might warrant a more prominent role in the monetary policy framework, as this aggregate is a fair leading indicator for inflation, and as the demand for narrow money appears to be stable. However, on the first point, DeJager and Ehlers (1997) show in an extensive study that growth in M3 is a better and more stable indicator for future inflation rates than narrow money, and that M3 has a consistent negative relationship with interest rates. Hurn (1991) has examined the demand for M3 in South Africa, using data for the period 1965-90, and finds that the long-run effects of prices, real income, and interest rates are significant and of sensible magnitudes. This contrasts with Moll (1997) who argues that the results for long-run money demand are more robust when the models include a narrow definition of money.

119. The issue of PPP and whether there is a full pass-through from exchange rate movements to domestic prices, have been discussed recently by Tsikata (1998) and Subramanian (1998). Although the results are sensitive to the choice of price aggregates and sample period, indications are that the effective nominal depreciation of the rand during the 1990s is almost fully reflected in higher prices of imported goods.

120. The first step in the empirical section below includes a general examination of the leading indicator properties of various monetary aggregates for inflation. This is motivated by two reasons: (i) in the context of an inflation target regime, it is important to find a set of indicators that contain information about future inflation rates,[51] as the lags between changes in the monetary aggregates (or instruments) and their effect on inflation typically are relatively long; and (ii) this exercise can possibly cast some light on which money aggregate and interest rate might be suitable to include in the money demand framework. The leading indicator properties for inflation were examined with the so-called "Granger-causality" tests, and by inspecting the associated impulse-response functions.[52] Hence, the following equation was estimated:

$$\Delta p_t = \alpha + \sum_{i=1}^{k} \delta_i \Delta p_{t-i} + \sum_{i=1}^{k} \beta_i \Delta x_{t-i} + \varepsilon_t \qquad (1)$$

where p refers to the underlying price level, and x denotes variables such as money and credit, interest rates, exchange rates, wages, or output (see Appendix for details)[53]. The variable x is said to "Granger-cause" p if the null hypothesis of $\beta_1 = \beta_2 = ... = \beta_k = 0$ is rejected.

121. The theoretical underpinning for the study of money demand and the PPP relationship is standard. Hence, assume that the domestic price level in the economy, p, is a linear combination of the price level for tradeable goods, p_T, and nontradeable goods, p_{NT}, respectively, i.e., $p = \alpha p_T + (1-\alpha) p_{NT}$, where $0 \leq \alpha \leq 1$. The PPP hypothesis implies that the price of the tradeable good is determined in the world market and equal to $p_T = p^* - e$ in domestic

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[51]An inflation target regime basically involves a two-step approach: First, the authorities project the future inflation rate under current policies by studying indicators such as current and past values of money growth, interest rates, exchange rates, and output activity. Together, these "leading indicators" are used to evaluate the inflation-momentum in the economy which is compared with the inflation target. Second, if projected inflation is outside the target, the authorities pursue an appropriate policy mix using available instruments to correct for the discrepancy. The empirical analysis in this paper is related to the first of these steps, i.e., it can be regarded as a preliminary attempt to find useful leading indicators of inflation.

[52]It should be noted that the "Granger-causality" concept has a different interpretation from what is usually meant by causation. The intuition behind Granger-causality is simply that if an event y is the cause of an event x, then y must precede x in time, and by using past observations of y in addition to past observations of x, the forecast of x should improve.

[53]As is conventional in the literature, all variables are expressed in natural logarithms, except for the nominal interest rate. Hence, the first difference of a variable equals the percentage change from the previous quarter.

currency, where e is the nominal (effective) exchange rate (defined as foreign currency per domestic currency), and p^* represents foreign prices. The price of nontradeables is then determined by adding an assumption of equilibrium in the money market, i.e., where real money supply equals real money demand: $m^s-p = m^d(y,i)$, with real money demand assumed to be a positive function of real income, y, and a negative function of the nominal interest rate, i.[54] Thus, we end up with a system of 6 interrelated variables *[p, p*, e, m, y,* and *i]*, where economic theory suggests that two long-run relationships could be found; one between domestic prices, foreign prices, and the nominal exchange rate, and another between domestic prices, money, real income, and the nominal interest rate. While we would expect both the real exchange rate and real money demand (or, alternatively, velocity) to be fairly stable in the long-run, we would also expect temporary deviations from these two long-run equilibriums to affect future fluctuations in prices such that the long-run equilibriums are restored.

122. In addition to these considerations, a dummy variable for the period 1994-97 was added to the model in an attempt to identify a possible structural break associated with the economic effects of the political transformation that took place in the early 1990s. This transformation, as well as some important economic structural reforms, could arguably have affected both the long-run money demand relationship and the real exchange rate, since it led to both some financial deepening (as nonwhite households gained access to formal banking services to a larger extent), as well as a strong increase in foreign competition which in turn could have had a one-off effect on the domestic price level.[55]

123. The empirical analysis was carried out using quarterly data between 1970:1 and 1997:4. The underlying consumer price index (CPIu) was used rather than the headline consumer price index (CPI) throughout the study. By using CPIu, which excludes highly volatile food prices and housing costs from the CPI, it was expected that the signal to noise ratio would improve in the estimations. To further examine whether broad money or narrow money is more closely related to inflation, three different monetary aggregates were used in the analysis: **NC**, notes and coin in circulation outside the banking sector; **M1**, consisting of NC plus cheque and demand deposits; and **M3** (broad money) consisting of M1 plus medium- and long-term deposits. In addition, when estimating the money demand relationship, two

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[54]More precisely, economic theory suggests that demand for money depends on the opportunity cost of holding money. Although the opportunity cost for holding cash is larger when the nominal interest rate is higher, it is ambiguous whether broader definitions of money are positively or negatively related to the nominal interest rate, as broader money typically is interest bearing. Ideally, one should control for any differences between the "own" deposit interest rate and the interest rate on alternative assets (such as government securities). See Ericsson (1998) for further discussions.

[55]The dummy was included in the model without restricting it to the cointegrating vector, implying that the average growth rates of the variables can change at the time of the structural change while the cointegrating vectors remain unchanged.

alternative interest rates were used: 3-month t-bill rates, and 10-year government bond yields. Traditional unit root tests (not reported) indicated that all series were integrated of order 1, i.e., the series were nonstationary in levels but stationary in first-differences.

124. The nonstationarity of the data together with the notion that none of the variables a priori can be regarded as exogenous (possibly with the exception of foreign prices), suggested that an appropriate methodology would be to start with a nonstructural vector auto regression model (VAR), and use Johansen's cointegration tests to examine whether there existed any long-run relationship among the variables. As a second step, economic theory (as described above) was used for identification, turning the empirical model into a structural VAR, and specific cointegrating vectors—related to the PPP and money demand hypothesis—were estimated and tested. Hence, to allow for dynamic interaction among the variables in the system, the two long-run relationships (as suggested by theory) were estimated separately but simultaneously.

C. Results

125. The results from the Granger-causality tests are reported in Table 4. The tests were conducted for the whole sample period and for the subperiods 1972:2–1984:4 and 1985:1–1997:4. Although the results are not very impressive when the whole sample period is considered, the subsample regressions show that the overall results are driven by a very poor relationship between the variables during the first subperiod. However, for the later subperiod (Table 4b), a number of reasonable leading indicators for inflation were found, including narrow money aggregates (M1 and, possibly, NC), interest rates and interest spreads,[56] the nominal exchange rate, foreign prices, wages, and output fluctuations.[57] The associated impulse response functions for some selected aggregates are displayed in Figure 11. They show that movements in broad money contain information about the underlying inflation rate further into the future than narrow money, and that a depreciation of the rand indicates a pick up in underlying inflation within two quarters. An increase in the output gap tends to be followed initially by a fall in underlying inflation, but this fall is more than reversed in the

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[56]The Granger-causality tests should be interpreted with particular caution when (long-term) interest rates are used as an indicator. It is well-known that aggregates which reflect forward-looking behavior often are good predictors of various macroeconomic time series. Obviously, this does not mean that these variables "cause" fluctuations in other variables; it rather reflects that the market uses current information efficiently.

[57]The same tests were performed using inflation rather than underlying inflation. The results (not reported) were similar to those in Table 4, although foreign prices and wages seemed to contain less predictive information about future inflation than for underlying inflation, whereas the opposite was true for M3.

Table 4. Leading Indicators and Underlying Inflation

(Marginal significance levels) 1/

a) Full sample: 1972:2 - 1997:4

Lags	Money and Credit				Interest rates 2/				Exchange rates			Wages		Output gap	
(k)	NC	M1	M3	PSC	3m	10y	3mS	10yS	US$	NEER	P*	Wage	ULC	GDP	Gap 3/
1	0.75	0.25	0.99	0.56	0.07	0.15	0.41	0.91	0.00	0.00	0.14	0.08	0.04	0.45	0.16
2	0.54	0.31	0.93	0.73	0.15	0.18	0.69	0.03	0.00	0.00	0.16	0.23	0.08	0.73	0.26
3	0.10	0.53	0.33	0.50	0.38	0.35	0.66	0.03	0.00	0.00	0.36	0.57	0.32	0.94	0.22
4	0.21	0.29	0.33	0.32	0.56	0.46	0.69	0.05	0.01	0.00	0.29	0.19	0.41	0.75	0.30
5	0.18	0.37	0.16	0.38	0.69	0.58	0.80	0.10	0.01	0.01	0.42	0.05	0.21	0.76	0.41
6	0.31	0.51	0.24	0.57	0.65	0.68	0.83	0.21	0.02	0.01	0.64	0.00	0.08	0.86	0.54
7	0.37	0.55	0.29	0.64	0.36	0.66	0.87	0.26	0.01	0.01	0.68	0.01	0.10	0.44	0.68
8	0.43	0.29	0.22	0.75	0.46	0.35	0.91	0.32	0.02	0.02	0.77	0.02	0.15	0.14	0.18

b) Subsample: 1985:1 - 1997:4

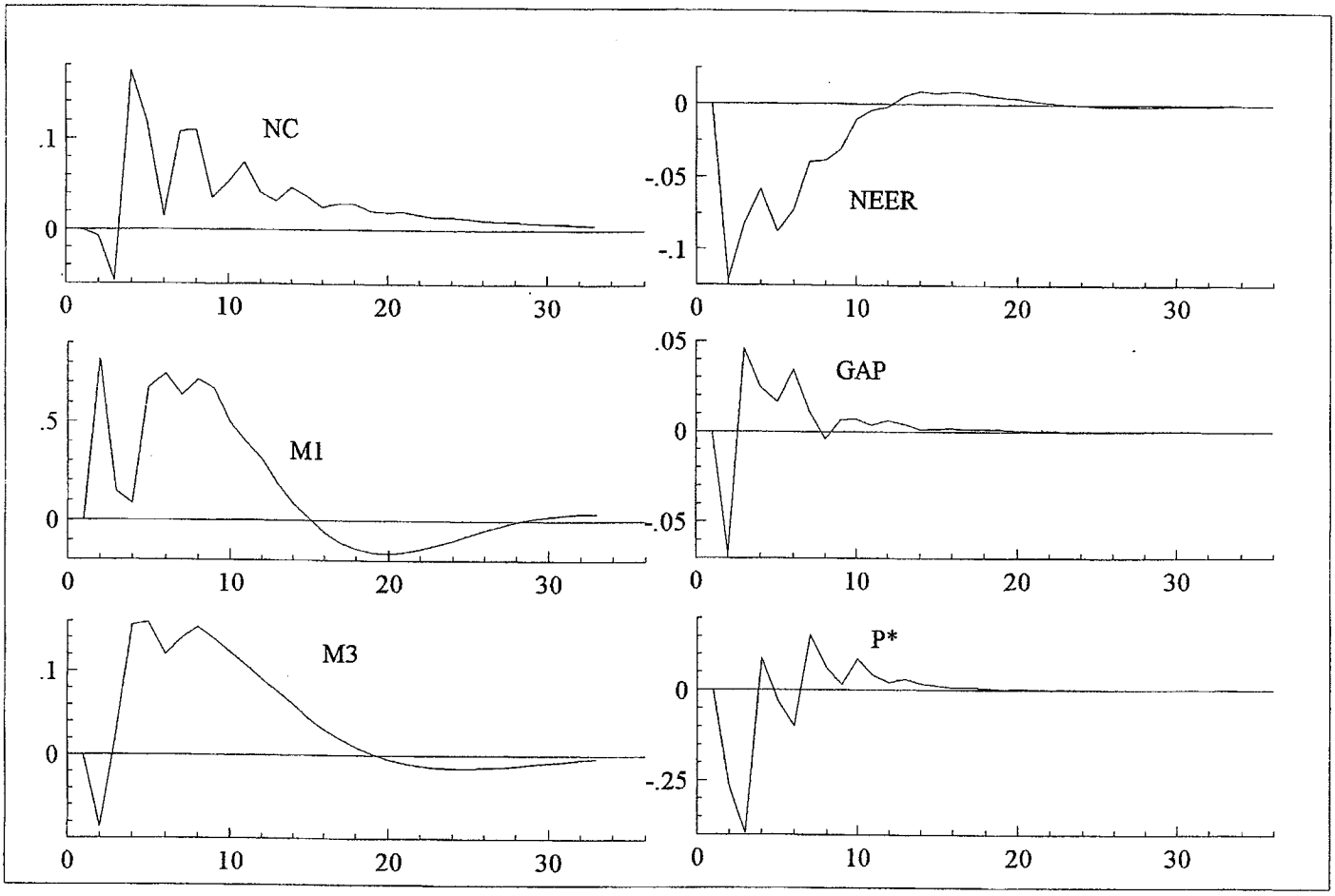
Lags	Money and Credit				Interest rates 2/				Exchange rates			Wages		Output gap	
(k)	NC	M1	M3	PSC	3m	10y	3mS	10yS	US$	NEER	P*	Wage	ULC	GDP	Gap 3/
1	0.64	0.09	0.85	0.88	0.02	0.05	0.19	0.05	0.00	0.00	0.08	0.10	0.12	0.88	0.24
2	0.68	0.03	0.35	0.66	0.02	0.12	0.38	0.01	0.00	0.00	0.22	0.09	0.02	0.00	0.19
3	0.09	0.11	0.27	0.17	0.00	0.17	0.07	0.00	0.00	0.00	0.06	0.29	0.18	0.03	0.00
4	0.23	0.16	0.46	0.15	0.01	0.25	0.17	0.01	0.00	0.00	0.10	0.15	0.21	0.02	0.00
5	0.35	0.23	0.50	0.32	0.04	0.45	0.20	0.02	0.00	0.00	0.04	0.02	0.06	0.05	0.00
6	0.42	0.32	0.48	0.23	0.05	0.52	0.08	0.02	0.00	0.00	0.06	0.01	0.04	0.10	0.01
7	0.49	0.01	0.37	0.37	0.05	0.52	0.12	0.03	0.00	0.00	0.03	0.02	0.04	0.05	0.02
8	0.41	0.02	0.33	0.53	0.05	0.46	0.21	0.06	0.00	0.00	0.04	0.02	0.06	0.11	0.02

1/ The p-values are the marginal significance levels for a Wald-test (Chi^2(k)) of the hypothesis that the estimated coeffients for the relevant variable are jointly zero. Shaded numbers indicate rejection of the hypothesis of no Granger-causality of a monetary indicator at the 10-percent level. All regresssions include seasonal dummy variables.

2/ The interest rate indicators include the level of the interest rates (3-months t-bills and 10-year government bonds), and the spread against the comparable U.S. interest rate. Hence, these indicators are not in first-difference form.

3/ Gap stands for output gap. This indicator is not in first-difference form.

Figure 11. South Africa: Impulse responses of inflation to a unit shock in a monetary variable
(Bivariate VAR models including 4 lags)



subsequent 3-6 quarters, possibly indicating that output shocks on average are driven by fluctuations in aggregate demand.[58]

126. Shifting to the long-run relationships among the variables, the results from the cointegration tests are summarized in Table 5. The number of cointegrating vectors was estimated using the Johansen (1988) procedure. It is well-known that cointegration tests in the Johansen setting are sensitive to the lag-length of the VAR. Although it is common to include 4 lags in the VAR when quarterly data are used, common information criteria tests[59] indicated that only 2 lags should be included. However, inspection of the standard diagnostic tests suggested that a VAR-order of 3 or 4 was more appropriate. Hence, the results are reported with 2, 3, and 4 lags included in the VAR, respectively.

127. The economic model suggests that 2 cointegrating vectors should be found, and the cointegration tests typically picked up 2-3 stationary vectors, but the results varied between 0 and 4 vectors depending on the number of lags included in the model, as well as on the choice of monetary aggregate and interest rate (see column 2 in Table 5). Despite these somewhat inconclusive results, restricted cointegration tests were performed under the assumption of the presence of two cointegrated vectors. The parameters in the restricted model were constrained to test whether the two stationary vectors could be represented by the two long-run relationships discussed above. The results were in general supportive of the theoretical arguments: the hypothesis that one of the cointegrating vectors includes only the variables p, p^*, and e, (column 3, Table 5) was rejected in only 3 of the 18 specifications,[60] and the hypothesis that one cointegrating vector includes only the variables p, m, GDP and i (column 4, Table 5) was rejected in only 4 of the 18 specifications. However, the joint test of the two hypotheses was typically rejected when M1 or NC was included in the model, but it was not rejected when M3 was included in the model (column 5, Table 5).

128. Turning to the parameters of the cointegrating vectors, it can be noted that the estimated parameters for the nominal effective exchange rate and foreign prices have the expected signs. However, the joint hypothesis of the coefficients being equal to -1 and 1, respectively, (so-called "strict PPP") was almost always rejected (not reported). Nevertheless, it is interesting to notice that the joint movements in the nominal effective exchange rate and foreign prices seem to be almost fully reflected in domestic prices in the long-run, in the sense

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[58]If the output gap is due to a positive aggregate supply shock, one could expect a (temporary) fall in inflation, whereas the opposite would be true when the output gap is the result of a shock to aggregate demand.

[59]Both the Akaike Information Criterion and the Schwarz Bayesian Criterion were examined.

[60]By not constraining the coefficients to equal 1 (in absolute values), the test allows for various fixed costs, such as transportation and menu costs, to vary over time and across countries. This test is sometimes referred to as a simple test of PPP.

Table 5. Results from the structural VAR-model 1/

Lags	Number of Cointegrating vectors 2/	Likelihood Ratio (LR) tests of: PPP	Mon-d	Joint	Restricted cointegrated vectors						
					p	*e*	*p**	*M3*	*GDP*	*10y bond*	*3m t-bill*
2	1, 3	0.23	4.12*	6.27	-1	-0.79	1.41				
					-1			0.85	-1.58	0.09	
3	0, 3	0.20	1.84	2.12	-1	-0.80	1.39				
					-1			0.89	-1.59	0.07	
4	0, 3	3.81	0.99	3.98	-1	-0.81	1.38				
					-1			0.94	-1.54	0.05	
2	4, 3	4.44	0.11	5.90	-1	-0.76	1.44				
					-1			1.13	-1.80		-0.02
3	3, 3	4.11	0.45	5.54	-1	-0.78	1.39				
					-1			1.12	-1.63		-0.02
4	1, 3	1.51	3.31	6.67	-1	-0.78	1.38				
					-1			1.14	-2.01		-0.02
					p	*e*	*p**	*M1*	*GDP*	*10y bond*	*3m t-bill*
2	2, 2	4.04	3.80	4.05	-1	-0.70	1.62				
					-1			0.56	3.98	0.09	
3	1, 2	1.29	7.42**	8.51*	-1	-0.79	1.45				
					-1			0.60	1.76	0.01	
4	0, 1	0.72	1.10	9.08*	-1	-0.85	1.38				
					-1			0.65	0.79	0.07	
2	3, 2	4.72	0.02	5.26	-1	-0.73	1.55				
					-1			0.52	2.84		-0.01
3	3, 3	6.84*	3.14	8.83*	-1	-0.75	1.50				
					-1			0.60	2.53		-0.03
4	1, 2	2.58	0.76	3.10	-1	-0.76	1.48				
					-1			0.55	2.60		-0.01
					p	*e*	*p**	*NC*	*GDP*	*10y bond*	*3m t-bill*
2	1, 2	0.90	9.14**	13.60**	-1	-0.81	1.39				
					-1			0.91	-1.95	0.12	
3	0, 2	1.09	8.68**	8.90**	-1	-0.83	1.36				
					-1			0.88	-1.22	0.09	
4	0, 0	1.69	3.58	3.85	-1	-0.84	1.36				
					-1			0.81	-0.95	0.14	
2	3, 3	7.17*	0.23	8.44*	-1	-0.76	1.46				
					-1			0.80	0.55		0.03
3	3, 2	13.69**	2.10	14.00**	-1	-0.82	1.32				
					-1			1.02	0.27		-0.04
4	0, 1	3.59	1.07	3.74	-1	-0.79	1.44				
					-1			0.63	1.99		0.06

1/ The VAR also include (unrestricted) seasonal dummy variables and a time dummy for the period 1994:1-1997:4.

2/ Number of cointegrating vectors based on Johansen's Trace statistic and the maximum eigenvalue statistic, respectively, at the 5-percent significance level. * and ** indicate rejection of the LR-test at the 5-percent and 1-percent significance level, respectively.

that the sum of the estimated parameters (in absolute values) is relatively close to 2. A possible explanation for these results is that domestic price-setters sometimes hesitate to adjust domestic prices in line with exchange rate fluctuations—perhaps because they regard these fluctuations as temporary. This would explain a coefficient of less than one for *e*. But since this behavior would erode competitiveness in the long-run, the price-setters compensate by increasing domestic prices by slightly more than a corresponding increase in international prices.

129. The estimated coefficients in the money demand relationship have the expected signs and are of a plausible magnitude when M3 is included in the model. The estimated coefficient on M3 is between 0.9 and 1.1, and the coefficient on real income is between 0.6 and 2. Constraining the coefficient on M3 to equal 1 yields an income elasticity for real money demand of 1.8 (where the VAR includes 3 or 4 lags and the interest rate variable is government bond yields), but the standard errors are fairly large, and the joint hypothesis of the coefficients on M3 and GDP being equal to 1 and -1, respectively, could not be rejected. The estimated coefficient for the nominal interest rate is positive when the government bond rate is used but negative when the t-bill rate is used. A possible explanation for this result could be that the own deposit rate for broad money is more closely related to the short-term t-bill rate than the long-term government bond rate. However, the magnitudes of the estimated coefficients are quite small, and a likelihood ratio test shows that the interest rate can often be excluded from the cointegrating vector, indicating that M3, prices, and real income form a cointegrating vector, i.e., velocity is stationary.

130. The results were less encouraging when narrow money (M1 or NC) was included in the model: the estimated coefficient on real income was quite unstable and often had the wrong sign, and when the coefficient on M1 or NC was constrained to equal 1, the estimated income elasticities become even more implausible. Consequently, a sensible and stable long-run money demand relationship for narrow money could not be established.

131. To further test the robustness of the results regarding the real demand for broad money and PPP, an error-correction model for short-run fluctuations in the underlying inflation rate was estimated. The hypothesis was that in the case of either a disequilibrium in the money market or a deviation from PPP, some adjustment would have to take place in the subsequent period(s) to restore long-run equilibrium, and a good candidate for such an adjustment would be the domestic price level. Hence, a regression was estimated with the underlying inflation rate as an independent variable on lagged residuals from the two restricted cointegration vectors (the error-correction terms)[61] and lagged observations of the underlying inflation rate, quarterly growth rates in money and real output, and a linear combination of the nominal exchange rate and foreign prices. As the focus was shifted to the short-run properties

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[61]The error-correction terms were derived from the restricted VAR model which included M3, and interest rates on government bonds (each with 3 lags), with the coefficients on prices and M3 constrained to -1 and 1, respectively.

of the data, the regressions were estimated both for the whole sample period, and for the shorter subperiod 1985:1–1997:4.

132. The results broadly confirmed the hypothesis regarding inflation adjustments (Table 6); the estimated coefficients on the error-correction terms always came in with the expected negative signs, indicating that temporary deviations from the long-run equilibrium in the money market and from the PPP equilibrium result in short-run inflation adjustments which tend to restore the long-run equilibria. For example, the results indicate that if the real effective exchange rate depreciates (above its long-run equilibrium level) during a quarter due to an unexpected increase in foreign prices or a nominal depreciation of the rand, underlying inflation will increase in the subsequent quarter to partly offset the real depreciation. Likewise, for a given level of real income and nominal interest rates, a positive shock to M3 will result in a pickup in underlying inflation in the subsequent quarter. Although the magnitudes of the error-correction coefficients appear quite small (for example, the estimated coefficient of -0.04 for the PPP error-correction term indicates that 16 percent of any deviation from the long-run equilibrium is restored within 1 year), they are similar to what is typically found for other countries.[62] It can also be noted that the estimated coefficient on the error-correction term from the money demand relationship is only significant in the subperiod 1985–97, which is consistent with the results from the Granger-causality tests that the money-price relationship is more reliable during this period. Finally, the estimated coefficient for the 1994–97 dummy variable has the expected negative sign and is significant in most specifications, indicating that for a given rate of money growth, the underlying annual inflation rate after 1993 would be about 2–3 percentage points less than during the period 1972–1993, everything else equal, thereby suggesting an important process of financial deepening in recent years.

133. The results further show that there is marked persistence in the inflation rate, as lagged inflation enters significantly. However, the other lagged variables were typically nonsignificant, implying that past observations of these variables were less important, once one controlled for the dynamics of inflation and the deviations from the long-run PPP and money demand relationships. In addition to the monetary aggregates mentioned above, a number of alternative aggregates—which potentially could affect short-run fluctuations of inflation—were included in different specifications of the error-correction model. These included growth in nominal wages and unit labor costs, other measures of the output gap, and measures of the fiscal balance. However, these variables were also nonsignificant once one controlled for the inflation dynamics and the error-correction terms.

134. The fit of the error-correction model was reasonably good (see Figure 12), especially when the focus was on the subperiod 1985–97. Figure 12 also plots the dynamic forecasts for 1997 using equations (1) and (5) in Table 6. Although the forecast overestimates the inflation

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[62]For example, McDonald (1995) finds that the speed of adjustment of a deviation from PPP is about 2 percent per month for bilateral U.S. dollar, German mark, and Japanese yen exchange rates.

Table 6. Short-Run Fluctuations in Underlying Inflation, Results from the Error-Correction Model 1/

$$\Delta p_t = \alpha + \sum_{i=1}^{k} \delta_i \Delta p_{t-i} + \sum_{i=0}^{kn} \beta_i \Delta x_{t-i} + \gamma_1 ECppp + \gamma_2 ECmon + \varepsilon_t$$

	Independent variable: Underlying inflation						
	1971:2 - 1997:4				1985:1 - 1997: 4		
	k=4	*k=2*	*k=4*	*k=2*	*k=2*	*k=4*	*k=2*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dum9497 2/	-0.67*	-0.76**	-0.75**	-0.82**	-0.68*	-0.48	-0.45
	(0.35)	(0.34)	(0.32)	(0.34)	(0.39)	(0.42)	(0.50)
EC-ppp (-1)	-0.03*	-0.04**	-0.04**	-0.04**	-0.04*	-0.04**	-0.02
	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.02)
EC-mon (-1)	-0.01	-0.02	-0.02	-0.01	-0.05*	-0.06**	-0.05*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)	(0.08)
$\sum_{i=1}^{k} \delta_i$	0.38**	0.30**	0.32**	0.29**	0.00	0.20	0.21*
M3 3/	0.06	0.00			-0.20*		
GDP 3/	0.06	0.01			-0.18		
(p^*-e) 3/		0.04	0.03		0.01	0.06	0.06
M1 3/				0.01			-0.01
GAP 3/ 4/				0.07			-0.08
R-square:	0.51	0.47	0.48	0.48	0.76	0.70	0.73
Observations:	107	107	107	107	52	52	52

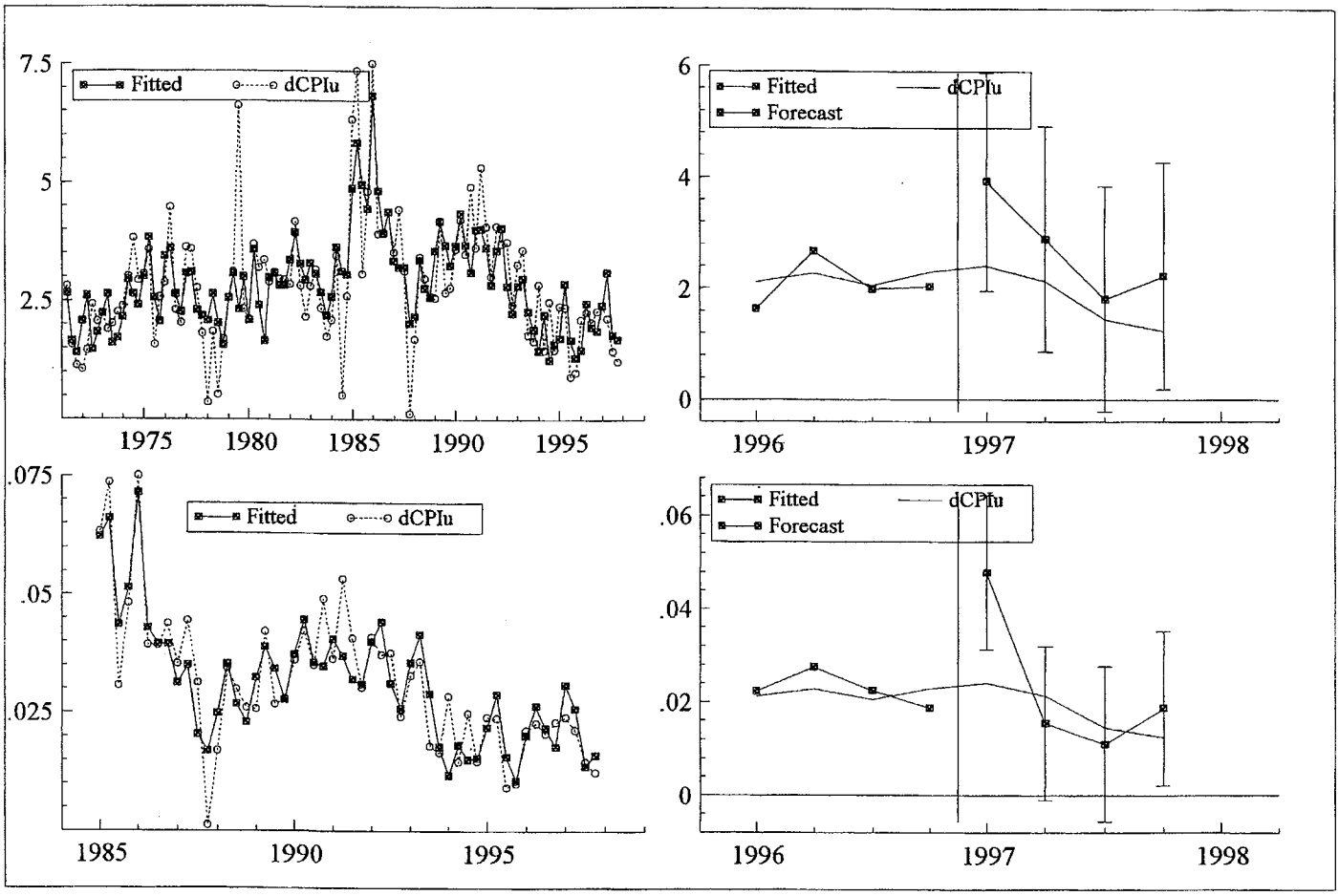
1/ * and ** indicate significance at the 10-percent and 5-percent level, respectively, of either the t-test for a single coefficient or of a Wald-test for the sum restriction. All regressions include seasonal dummies. *k* is the number of lags, and *n* is the number of additional independent variables.

2/ The coefficients for Dum9497 are multiplied by 100.

3/ *k* lags of the variable were included. The reported coefficient is the sum of the estimated coefficients for the *k* lags.

4/ GAP is the output gap. This variable is not in first difference form.

Figure 12. South Africa: Actual values, fitted values, and forecasts of the underlying inflation rate.



rate in the first quarter of the year (due to an estimated large coefficient on the first-quarter dummy variable), the actual inflation outcomes in the following three quarters are well within the forecast confidence interval.

D. Summary and Conclusions

135. The main results in this study are that two long-run stable relationships involving domestic prices can be identified: one between domestic prices, M3, real income, and long-term interest rates, indicating that demand for broad money is stable in the long-run; and one between domestic prices, foreign prices, and the nominal effective exchange rate, indicating that the real effective exchange rate is stable in the long-run. The results further show that temporary deviations from these two long-run equilibria (in the money market and in the external market) are important for short-run inflation fluctuations. Finally, there are indications of a structural break in the data sometime around 1994, implying that, ceteris paribus, a given rate of money growth is likely to lead to an inflation rate that is about 2–3 percentage points less per year after 1994.

136. An interesting aspect of the results is that even though the South African economy has undergone a number of important structural changes during the period under review—including long periods of trade sanctions, the presence of the financial rand system and widespread exchange controls on residents, different monetary policy regimes (see below), and considerable swings in the terms of trade—the long-run relationships between the examined macroeconomic and financial aggregates are fairly stable, and consistent with economic theory. In this context, it is perhaps not surprising that it is the broadest measure of money that seems to work better in the long-run, although fluctuations in narrow money aggregates might be useful for short-run inflation projections.

137. Notwithstanding the long-run results, the results regarding the short-run fluctuations are strengthened when the analysis focuses on the subperiod 1985–97, as the fit of the inflation model improves considerably. This is probably explained in part by the shift in the monetary policy regime that took place in the early 1980s, when the Reserve Bank moved to a system of indirect control of money supply. This shift implied a greater scope for the use of short-term interest rates, rather than changes in cash and liquid asset requirements combined with credit ceilings and interest rate controls, thereby enhancing the responsiveness of monetary aggregates to macroeconomic developments. In addition, the opening up of the economy during the 1990s—including the trade reforms and liberalization of capital controls—has probably made the domestic economy more responsive to fluctuations in international markets.

138. To sum up, two general policy conclusions emerge from this study: (i) the result regarding the PPP hypothesis implies that any attempts to enhance competitiveness by actively depreciating the nominal exchange rate will be eventually dissipated through higher domestic inflation, and (ii) the result regarding the stability of money demand means that growth rates in broad money cannot be ignored when monitoring and forecasting inflation developments,

although the quantitative effect of money growth on inflation appears to have declined during the last few years.

139. To further understand the dynamic interplay between various macroeconomic aggregates in South Africa, it would be interesting to expand the current framework to include different types of shocks (aggregate demand and supply shocks, or real and nominal shocks, etc.), and trace, for example, the simultaneous response of output and inflation. The structural VAR model used in this paper is a suitable framework for such an exercise, and Moll (1997) has taken interesting steps in that direction.

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Data

All data series are from the South African Reserve Bank, *Quarterly Bulletin*, except for the U.S. interest rates which are taken from IMF, *International Financial Statistics.* The following variables are included in the study:

CPIu: Underlying consumer price index. This index equals total CPI excluding "food and nonalcoholic beverages", "home owner's cost" and "value added tax".

NC: Notes and coin outside the banking system.

M1: NC plus checking deposits.

M2: M1 plus short- and medium-term deposits.

M3: M2 plus long-term deposits.

PSC: Credit extension to the private sector.

3m: Interest rate on 3-months t-bill.

10y: Interest rate on 10-year government bonds.

3mS: Spread between interest rates on 3-months t-bills in South Africa and the U.S.

10yS: Spread between interest rates on 10-year bonds in South Africa and the U.S.

US$: Nominal exchange rate; Rand per US dollar.

NEER or E: Nominal effective exchange rate including (weights in brackets) U.S. dollar (51.7), British pound (20.2), Deutsche mark (17.2), and Japanese yen (10.9).

P*: Effective producer price index in foreign countries, including the same four countries and weights as when calculating the NEER.

Wage: Remuneration per worker in the nonagricultural sectors.

ULC: Unit labor costs in the nonagricultural sectors.

GDP: Real gross domestic product, 1990 prices, seasonally adjusted.

Gap: Output gap; calculated by using the Hodrick-Prescott filter (with λ=400) on real GDP.

IV. The Banking System and Bank Supervision in South Africa

140. This chapter analyses the banking system and the bank supervision framework in place in South Africa. Section A reviews the main characteristics of the banking system, provides an assessment of the soundness of the banking system, and describes the degree of concentration and competition in the marketplace. Section B discusses the main elements of the bank supervision framework in South Africa, with special emphasis on those areas where action could be taken to further improve the operations of the supervisory authorities. Section C concludes and provides a summary of the main recommendations.

A. The Banking System

Main characteristics of the banking system

141. By end-1997, the South African banking system consisted of 46 banks and five mutual banks. There are no state-owned banks. The number of foreign banks operating in South Africa has increased significantly following the passage of the Banks Amendment Act of 1994; there are now 10 subsidiaries and 11 branches of foreign banks as well as 60 representative offices. In addition to banks, large insurance companies figure prominently in the South African financial system; these companies developed rapidly in the past owing to tax advantages for savers. The Bank Supervision Department of the Reserve Bank (BSD) has full supervisory authority over the banks, while the Financial Services Board (FSB), an independent agency, supervises all nonbank financial institutions.[63]

142. The banking system grew strongly in 1995-97, even as the economy slowed down. Total bank assets rose by 19 percent in 1997, following an expansion of almost 40 percent in 1995-96 (Table 7); in real terms, deposits grew by 10 percent a year during the last three years, while loans increased by almost 11 percent a year during the same period. The rapid expansion of the banking system during 1995-97 was the result of the entry of new and aggressive foreign banks as well as the opportunities for new business arising from the lifting of sanctions and the economy's globalization. South African banks deal almost exclusively in domestic currency: by end-1997, foreign currency deposits and loans represented only 2 percent of total deposits and loans.

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[63]The FSB, an independent agency, supervises the nonbank financial institutions, which in 1997 included 49 long-term insurance companies, 68 other insurance companies, 1,222 insurance intermediaries, 15,426 retirement funds, 216 friendly societies, 168 unit trust schemes, 25 participation bond schemes, three stock exchanges, 50 stockbroking firms, 156 financial instrument dealers, and 103 portfolio managers.

Table 7. South Africa: Indicators of Bank Soundness, 1994-97
(In percent, unless otherwise indicated)

	1994	1995	1996	1997
Number of banks	40	45	44	46
Capital adequacy ratio	9.5	10.0	9.68	9.93
Total assets (billion rand)	330.8	338.6	460.6	549.4
Total deposits (billion rand)	253.2	300.8	347.5	420.9
Total loans (billion rand)	278.2	325.7	390.4	470.7
Nonperforming loans/Total loans	3.6	3.3	3.3	3.2
Loan provisions/Nonperforming loans	65.0	66.4	60.8	59.0
Liquid assets held/Liquid assets required	113.0	114.2	111.0	115.2
Large credit exposure (granted)/Capital	1032.5	981.9	1243.5	934.5
Large credit exposure (used)/Capital	365.4	436.7	429.8	314.6
Return on equity	16.4	16.3	12.6	14.6
Net spot open position in foreign currency/Capital	n.a.	-43.5	-61.4	-41.7
Total net foreign currency position after hedging/Capital	n.a.	0.0	1.8	-0.4

Source: South African Reserve Bank; and Fund staff estimates.

143. Bank lending to households represents approximately two-thirds of bank lending to the private sector.[64] The strongest growth of lending to households during the last three years was concentrated in credit cards (26 percent a year), instalment sale credit (24 percent a year) and overdrafts (18 percent a year); these three types of credit amounted to 25 percent of bank credit to households in 1997. However, mortgage lending was by far the main component of bank lending to households, accounting for two-thirds of the total. Loans to the public sector were only 2 percent of total bank lending and are conducted on a purely commercial basis.

144. Mortgage lending grew by 11 percent in 1997, after having increased by around 19 percent in 1995 and 17 percent in 1996. This rapid growth reflected the banks' interest in promoting such lending, owing to the low risk-weighted capital requirements attached to it and low credit risk, as well as its attractiveness for debtors, given the flexibility of mortgage loans to provide access to the capital of the repaid portion of a loan at comparatively low interest rates. Following the rapid growth in 1995-96, mortgage lending slowed in 1997, reflecting higher risks perceived by banks as well as lower demand owing to increased real interest rates. There has not been a real estate asset price bubble in South Africa: the average nominal value per real estate transaction increased by only 4 percent a year during 1995-97; in some instances, there has been a decline in real estate prices, which has given rise to cases of negative equity.

Soundness of the banking system

145. The South African banking system appears to be generally sound: the banks are well capitalized, as the average risk-weighted capital adequacy ratio for the system as a whole reached 9.9 percent by end-1997, a slight increase over 1996, compared with the required minimum ratio of 8 percent stipulated by the Basle principles (Table 7). Thirty-one banks had a capital adequacy ratio of 11 percent or better in 1997 (Table 8). At the same time, reported nonperforming loans have remained at 3.2 percent of total loans.

146. South African banks are well run and organized, and in general have sophisticated risk management systems and corporate governance schemes in place. Banks reacted swiftly to the pressures arising from renewed competition from foreign banks that started in 1995, the new opportunities opened up by the lifting of international sanctions, and the gradual lifting of exchange controls, and have invested significantly in adopting modern technologies and in developing more sophisticated financial products.

147. The banking system has been profitable during the last few years. By end-1997, return on equity reached 14.6 percent, up from 12.6 percent a year earlier (Table 7). Local banks were more profitable than foreign-controlled banks, in part reflecting the fact that the retail

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[64]Overall household indebtedness in South Africa has grown substantially, from around 55 percent of personal disposable income in 1992 to 68 percent in 1997.

Table 8. South Africa: Indicators of Bank Soundness, According to Capital Adequacy Levels, 1994-97 (cont.)
(In percent, unless otherwise indicated)

	1994	1995	1996	1997
I. Banks with capital adequacy ratio between 8 and 9 percent in 1997 1/				
Number of banks	4	4	4	4
Capital adequacy ratio	9.6	9.4	8.7	8.3
Assets/Total banking system assets	37.1	37.4	38.6	37.1
Deposits/Total banking system deposits	38.8	39.0	39.6	37.8
Nonperforming loans/Total loans	3.2	3.2	3.2	3.6
Loan provisions/Nonperforming loans	74.0	74.8	60.5	53.6
Liquid assets held/Liquid assets required	115.7	127.5	120.1	130.8
Large credit exposure (granted)/Capital	701.6	869.1	1292.7	1616.5
Large credit exposure (used)/Capital	288.0	387.5	419.7	438.9
Return on equity	17.5	27.9	14.0	15.5
Net spot open position in foreign currency/Capital	n.a.	-26.7	-50.5	-23.3
Total net foreign currency position after hedging/Capital	n.a.	2.9	2.8	-1.7
II. Banks with capital adequacy ratio between 9 and 11 percent in 1997				
Number of banks	9	9	9	9
Capital adequacy ratio	8.5	9.0	8.6	9.4
Assets/Total banking system assets	51.3	51.2	50.4	49.0
Deposits/Total banking system deposits	51.2	51.7	50.4	49.5
Nonperforming loans/Total loans	4.0	3.6	3.4	3.2
Loan provisions/Nonperforming loans	63.6	63.3	61.9	64.0
Liquid assets held/Liquid assets required	107.2	101.4	105.1	130.4
Large credit exposure (granted)/Capital	1172.6	1012.6	1288.8	571.4
Large credit exposure (used)/Capital	363.4	477.4	459.7	172.1
Return on equity	14.6	11.6	12.9	14.5
Net spot open position in foreign currency/Capital	n.a.	-50.9	-87.9	-67.0
Total net foreign currency position after hedging/Capital	n.a.	-1.8	3.5	1.4

1/ Excludes two small banks with capital adequacy ratio of approximately 8 percent, owing to statistical problems.

Table 8. South Africa: Indicators of Bank Soundness, According to Capital Adequacy Levels, 1994-97 (concl.)
(In percent, unless otherwise indicated)

	1994	1995	1996	1997
III. Banks with capital adequacy ratio between 11 and 15 percent in 1997				
Number of banks	11	11	11	11
Capital adequacy ratio	20.6	22.1	21.4	14.0
Assets/Total banking system assets	5.2	5.3	6.0	7.7
Deposits/Total banking system deposits	4.0	4.2	5.6	7.3
Nonperforming loans/Total loans	3.7	1.6	3.3	3.6
Loan provisions/Nonperforming loans	43.1	68.0	45.7	52.6
Liquid assets held/Liquid assets required	123.4	158.2	102.7	114.8
Large credit exposure (granted)/Capital	423.5	517.2	678.4	795.4
Large credit exposure (used)/Capital	227.2	277.3	313.8	461.8
Return on equity	9.5	5.6	11.9	13.1
Net spot open position in foreign currency/Capital	n.a.	-9.2	-13.6	-23.0
Total net foreign currency position after hedging/Capital	n.a.	-2.3	-6.4	-6.4
IV. Banks with capital adequacy ratio greater than 15 percent in 1997				
Number of banks	15	19	18	20
Capital adequacy ratio	12.1	16.4	26.7	34.2
Assets/Total banking system assets	4.7	4.0	2.5	3.8
Deposits/Total banking system deposits	4.0	3.1	2.3	3.0
Nonperforming loans/Total loans	1.6	2.1	5.0	1.6
Loan provisions/Nonperforming loans	54.0	52.0	58.0	55.6
Liquid assets held/Liquid assets required	164.7	124.1	109.7	131.7
Large credit exposure (granted)/Capital	4329.9	2712.5	1054.7	621.0
Large credit exposure (used)/Capital	1339.3	764.4	388.1	284.4
Return on equity	23.3	-4.1	12.1	17.4
Net spot open position in foreign currency/Capital	n.a.	-60.8	3.1	15.9
Total net foreign currency position after hedging/Capital	n.a.	0.8	0.3	0.3

Source: South African Reserve Bank; and Fund staff estimates.

segment—where, as described below, foreign banks are not currently active—is the more profitable one.

148. Cost control and an expansion of the banks' business into new areas help explain current profit levels. Although bank costs are high in South Africa, mainly reflecting the large number of branches, significant levels of overhead, and high cost of security services, banks have been taking measures to reduce them. At the same time, banks have successfully developed alternative, noninterest sources of profit, and transaction-based fee income and investment income now represent over 50 percent of banks' revenues.

149. The excess of short-term liabilities over short-term assets (i.e., with less than 30 days maturity) for the banking system as a whole stood at 3.3 times its qualifying capital and reserves in 1997; in the case of the four largest banks, this mismatch represented over 3.6 times their capital while in the rest of the banking system it was 2.8 times the level of capital. However, in light of the robust capital adequacy position of the banks and of their strong corporate governance systems, this mismatch should not be cause for excessive concern. Also, South African banks maintain adequate levels of liquidity; on average, liquid assets exceeded the regulatory minimum by about 15 percent in 1997, up from 11 percent in 1996.

150. Reflecting adequate profitability levels and prospects, as well as better results relative to most other sectors of the economy, bank share prices have experienced marked increases in recent years: 130 percent in 1994-96 followed by around 45 percent in 1997. One-off factors, including the listing of new institutions and the positive effects of announced mergers, are additional reasons explaining such increases.

151. To remain adequately sound and profitable, however, the banks in South Africa will need to continue to be alert to important challenges lying ahead, particularly those arising from the cycles of economic activity. Slower economic growth and increasing unemployment tend to weaken the quality of bank assets while limiting the growth of financial intermediation. At the same time, the economic and social changes, which will arise when the much-needed structural reforms announced in the GEAR are implemented, will introduce uncertainty.

152. In meeting these challenges, South African banks will need to continue with their efforts to reduce costs and tap new areas of activity in order to maintain high levels of profitability. In view of the strong competition in the corporate and the higher-income retail markets, banks will need to tap the lower-income segment of the retail market—which is costly and fraught with risks—in order to expand their activities and maintain high profits. At the same time, however, the banks are well positioned to reap substantial benefits from the rapid integration taking place between the South African economy and those of neighboring countries.

153. Sometimes the authorities have applied moral suasion on banks to increase their lending for low-income groups, especially in the area of mortgage lending, but there have not

been any formal instances of directed lending or interest rate controls in South Africa. To ensure the continued health of the banking system, the authorities must continue to avoid forcing banks to adopt measures that would endanger depositors' interests and promote financial disintermediation.

Concentration and competition in the banking system

154. The South African banking system is highly concentrated: by end-1997, the largest four banks accounted for 75 percent of the banking system's assets and 76 percent of its deposits (Table 9).[65] The four largest banks, which until the late 1980s operated as a formal cartel, continue to be dominant in the retail banking segment; in addition, they own the national ATM network and carry out almost all the clearing in the South African payment system. However, mainly reflecting the entry of new foreign banks as well as increased activity by smaller banks, the four largest banks have experienced a loss of market share. By the end of 1994, their assets and deposits had represented 80 percent and 82 percent, respectively, of those of the overall banking system, while their capital and reserves dropped from 75 percent of the banking system's total in 1994 to 66 percent in 1997.

155. There are no legal barriers to entry in the South African banking system, although the high cost of retail banking acts as an impediment to entry in some segments of the market. Banks in South Africa are licensed as universal banks, and offer a full range of services to both corporate and personal clients. The largest banks offer a wide diversity of services, while the smaller banks—including the foreign banks—tend to behave as niche banks, specializing in a few banking products. As a result, competition levels differ in the different segments of the market. Banks must establish legally separate subsidiaries to operate in the markets for equity securities and insurance.

156. The strong presence of foreign banks in the corporate end of the market and in trade finance as well as in the higher-income retail market has given rise to very competitive conditions in these market segments. The foreign banks have brought important innovations to the marketplace, both in terms of operational efficiency as well as of the introduction of new products and access to foreign markets, forcing the local banks to rise to the occasion in order to remain competitive.

157. There is limited competition, however, at the lower end of the retail banking market, which continues to be dominated by the large local banks and is substantially less price-sensitive than the market segments mentioned above. This market is characterized by high operating costs, related to the security situation, the poor enforceability of collateral, the very small scale of individual operations, and the lack of a widespread banking culture among lower-income groups. The larger banks are expanding very cautiously in the low end of the

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[65]The four largest banks are ABSA, Standard, First National Bank, and Nedcor. Two other banks, NBS Boland and Investec, account for an additional 10 percent of the market.

Table 9. South Africa: Assets, Loans and Deposits in the Banking System, 1994-97

	Total (Billion rand)				Growth rates (Percent)			Percent of total	
	1994	1995	1996	1997	1995	1996	1997	1994	1997
					I. Assets				
Total banking system	330.8	388.7	460.6	549.4	17.5	18.5	19.3	100.0	100.0
Four largest banks	266.0	310.9	366.8	410.5	16.9	18.0	11.9	80.4	74.7
Rest of banking ystem	64.7	77.8	93.8	138.9	20.2	20.6	48.1	19.6	25.3
Local banks	320.1	378.0	449.9	526.3	18.1	19.0	17.0	96.8	95.8
Foreign banks	10.7	10.7	10.7	23.1	0.0	0.0	116.0	3.2	4.2
					II. Loans				
Total banking system	278.2	325.7	390.4	470.7	17.1	19.9	20.6	100.0	100.0
Four largest banks	222.8	260.8	310.1	351.7	17.1	18.9	13.4	80.1	74.7
Rest of banking ystem	55.4	64.9	80.4	118.9	17.1	23.8	48.0	19.9	25.3
Local banks	262.8	264.3	381.6	450.2	0.6	44.4	18.0	94.5	95.7
Foreign banks	15.4	61.4	8.8	20.5	298.0	-85.7	132.5	5.5	4.3
					III. Deposits				
Total banking system	253.2	300.8	347.5	420.9	18.8	15.5	21.1	100.0	100.0
Four largest banks	206.9	248.7	278.9	318.6	20.2	12.1	14.3	81.7	75.7
Rest of banking ystem	46.3	52.1	68.7	102.3	12.5	31.7	48.9	18.3	24.3
Local banks	242.6	296.7	342.8	404.7	22.3	15.6	18.1	95.8	96.2
Foreign banks	10.6	4.2	4.7	16.2	-60.4	12.1	244.6	4.2	3.8

Source: South African Reserve Bank; and Fund staff estimates.

retail market and are restructuring their business by closing costly branches and promoting the growth of an electronic banking network. It does not seem likely that foreign banks will enter the low-end retail market at any time soon, not only because of the high operating costs but also because the very high prices of bank shares prevent them from purchasing established local banks.

158. Nevertheless, established banking institutions in the low-end retail market face competition from small informal lending institutions. Micro-lenders insist that they do not take deposits from the public—which would constitute an illegal activity given that they are not registered as banks—but there is anecdotal evidence that they do so, which permits them to expand the scale of their activities. Given that micro-lenders are not subject to the oversight of the BSD, banks complain strongly about being subject to unfair competition.

159. The interbank market is not yet highly developed in South Africa. So far, smaller banks prefer to follow a strategy of keeping liquid funds at hand, lending them to the larger banks in the overnight market. In addition to these loans, the larger banks obtain resources from the central bank on a daily basis through the repo auction system. At the time of the introduction of the repo system, there was a large spread between the average interest rate in the interbank market and the rate paid for central bank funds at the daily repo auctions, and the dispersion of the interest rates bid by the banks was quite small. However, as the banks got accustomed to the new system and following a sharp rise in the interest rate for borrowing at the Reserve Bank's marginal lending facility, the repo rate became more sensitive to liquidity conditions, and the spread between the interbank and repo rates diminished, indicating that the efficiency of the interbank rate has improved.

160. The large level of concentration in the financial market has allowed the largest banks to reap significant benefits from economies of scale, and to some extent facilitates the task of the supervisory authorities, but it is also a source of systemic risk. There is, therefore, a need for measures to promote an expansion of the smaller banks' market share and thus stronger levels of competition in the banking system. These include actions to encourage the continued entry of foreign banks in all segments of the banking system; enhance the smaller banks' competitive edge; improve the transparency of the interbank market and of the market for central bank funds (including, for example, setting limits to the participation of individual institutions); and promote a more level playing field between formal and informal players in the retail banking market.

161. The BSD is studying how to address the need for regulation of micro-lenders, and is planning to assist this sector to become self-regulated. It is entirely appropriate to regulate the activities of micro-lenders in order to promote healthy competition in the retail segment of the financial market as well as to create a level playing field among all those concerned. However, if micro-lenders take deposits, and given that their size is larger than that of other self-

regulated informal financial institutions,[66] the authorities may want to consider the advantages of direct regulation and supervision of this sector by the BSD as against those of self-regulation.

B. Issues in Bank Supervision

Operations of the Bank Supervision Department

162. The regulatory framework for banks in South Africa is quite robust by emerging market standards. The supervisory authorities focus their activities on modern principles of risk assessment, and strive to comply with the Basle core principles for efficient supervision. The BSD conducts its business competently, and its activities are held in high regard by the banking community.

163. The BSD (whose head is known as the Registrar of Banks) was set up in April 1987 after being transferred from the ministry of finance to the central bank, and its responsibilities and functions are specified in the Banks Act and the Mutual Banks Act, and are supported by the Reserve Bank Act. The Banks Act and the Mutual Banks Act define the institutions to be regulated by the BSD as those accepting deposits as a regular feature of their business and acting as a financial intermediary in the use of such deposits. No person may conduct the business of a bank in South Africa—i.e., accept deposits—unless registered as a bank with the BSD, except for institutions such as credit unions and savings clubs, which, given the small size and nature of their operations, are permitted to accept deposits within a framework of self-regulation. The BSD considers that the legal basis for the conduct of its supervisory activities is appropriate. Although the head of the BSD is an employee of the Reserve Bank, the BSD is fully autonomous in the conduct of its business. BSD staff have legal immunity with respect to the discharge of their supervisory duties.

164. The current staff of the BSD—55 in number—are somewhat overstretched, owing in part to added responsibilities in the department following the recent entry of foreign banks and the internationalization of the local banks' activities. The BSD is presently in the process of hiring 20 more employees, of which 15 will work as bank analysts. Despite strong staff morale and salaries, which remain competitive with those in the banking industry, the BSD, as other supervisory agencies around the world, suffers from a high rate of staff turnover, in part reflecting perceived limitations regarding upward mobility. The average length of employment with the BSD is 3–4 years for analysts, although the problem is less severe at senior levels.

165. Training of staff members is an important concern for the BSD, which has a structured program that is managed by its training section. In addition to in-house training activities, BSD staff receive training from outside institutions, such as courses offered by external auditing firms or seminars conducted by financial institutions, and are expected to attend a

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[66]Micro-lenders are organized in a union, and their loan portfolio amounts to about R6 billion.

12-month course on banking at a local university to bring their qualifications up to the required standard. The BSD also has a mentor system in place, by which an experienced supervisor is assigned to work with every new staff member for a certain period of time to provide intensive on-the-job training. At the same time, the Reserve Bank, and the BSD in particular, has contributed significantly to developing supervisory expertise elsewhere in Africa.

166. The main focus of bank supervision by the BSD is the assessment of risks assumed by banks and of the quality of the banks' risk management procedures; in addition, the BSD is charged with ensuring compliance with prudential requirements. Off-site supervision of banks is an essential component of the work of the BSD. It is based on several forms which the banks must regularly submit to the BSD, covering information in the areas of balance sheet and income statement, off-balance sheet activities, risk-based returns, and prudential requirements. An internal monthly off-site report is produced for each bank; it includes peer group comparisons and an analysis of deviations from "normal" trends.

167. The information submitted by banks has improved noticeably during the last five years as a result of the introduction of the new bank reporting framework established by the Banks Act of 1990. The BSD performs routine checks to assess the quality and veracity of the data received by the banks. If it believes that the information provided by a bank is defective, it requests an ad-hoc independent external audit. In addition, the quality and veracity of data are verified in general terms by the external auditor during the course of the annual audit of the bank. This procedure needs to be improved, however, because the BSD has no systematic procedures in place, other than during the annual external audit, to ensure that the data that it receives from the banks truly portray underlying positions and trends.

168. The BSD employs a two-pronged approach to bank licensing: initial authorization and final registration. The latter is only granted subject to compliance with the conditions imposed at the time of initial authorization. Applicants are required to submit a detailed application, including information on their business plan (in terms of the usual prudential reporting forms), the people involved (to test for "fit and proper" criteria), and capital requirements (minimum requirements are currently R50 million, but the BSD does not view favorably applications based on less than R150 million). To further enhance the licensing process, the BSD should go ahead with current plans to formalize the licensing process, including by specifying and documenting the objective criteria to be used in licensing banks.

169. As part of the efforts to ensure the highest quality of the supervisory function, the Reserve Bank's internal audit service has recently conducted a thorough evaluation of BSD compliance with the 25 Basle core principles for effective bank supervision. It concluded that the BSD already complies with the majority of the core principles, although it noted opportunities for improving compliance in several areas, the most important of which include capital adequacy requirements, the need for on-site inspections and for clarification of the role of the external auditors, the need for clear guidelines regarding loan loss provisioning methods and large exposures, and the importance of consolidated supervision. The internal audit also

identified other areas for improvement which seem to be of less urgency at the present time. These include the need for enhanced supervisory legislation, improvements in the licensing process and a review of the supervisory forms filled by the banks.

On-site inspection and the role of the external auditor

170. The BSD's point of view regarding on-site bank inspection versus off-site supervision is that the one is not a substitute for the other, but rather that what matters is the balance between the two. In particular, by combining the results of on-site activities and the information produced from off-site supervision, the BSD strives to arrive at a judgmental conclusion regarding the bank's overall risk position and health and thus to implement a supervisory program which is commensurate with the particular circumstances of each bank.

171. The on-site activities currently performed by the BSD itself consist mainly of discussions with senior bank staff at different levels, including the holding group managing director (if applicable), the bank managing director, the bank's risk managers (including the internal auditor), and the bank's operational heads. The objective of these discussions is to try to establish the nature of future strategies, systems and controls, and the current risk position of the bank. Furthermore, the BSD makes an annual presentation to the full board of directors of the bank, which includes a discussion of the bank's risk position. Additionally, an annual trilateral discussion is held between the BSD and the bank's Audit Committee and external auditors, covering the latter's reports and the reactions to it on the part of bank management, as well as the manner in which the Audit Committee discharges its duties and responsibilities in terms of the requirements of both the Banks Act and corporate governance practice. BSD also performs sporadic visits to branches of South African banks abroad to conduct these discussions.

172. The actual on-site inspection of banks in South Africa is carried out by external auditors on behalf of the BSD. The BSD provides input into the formulation of the terms of reference for the external auditor's mission. The BSD may also request extraordinary external auditor reports on any bank at any time, to deal with any perceived difficulties; an average of 5-6 of these extraordinary external audits, which are paid for by the banks concerned, are undertaken every year. The largest banks have to be audited jointly by two auditing firms. The external auditing teams vary in size from 5 people for the smaller banks to around 20 people in each of the two joint teams auditing the larger banks. The BSD has licensed only six of the more reputable auditing firms to conduct on-site inspections on its behalf, although pressures are mounting to enlarge this group, especially by including black-owned auditing firms. While the BSD would be well advised to strengthen its own role in on-site bank inspection activities, as discussed below, as long as the external auditors remain in charge of conducting these activities, the authorities must continue to be very strict with respect to approval procedures for them.

173. The external audit teams produce three reports: a statutory review, which is disclosed publicly; a report on the prudential returns submitted by the bank to the BSD, which is

forwarded to the latter; and a letter to the bank's management, which discusses the external auditor's main findings. The report submitted to the BSD is discussed in a trilateral meeting between the BSD, the external auditor, and the bank's audit committee. The auditors' letter to the bank's management is often seen by the BSD, but only after the audited bank has authorized the auditor to share it with the BSD. The report on the bank's prudential returns in respect of the financial year-end concerns itself with data that are three months old when forwarded to the BSD. Moreover, in the course of their work, the auditors check the veracity and quality of data submitted by the bank to the BSD for the last month of the financial year. The external auditors also report whether, in their opinion, the information contained in the returns for other months reasonably reflects the information of the management accounts and is prepared using the same accounting policies as those applied in the annual financial statements.

174. The system of using external auditors in lieu of on-site inspections may have the advantage of economizing BSD resources and instilling an air of impartiality, but it limits severely the BSD's options, as it adds one more layer in the conduct of bank supervision. First, even if the BSD specifies minimum requirements to be met by external auditors and participates in the design of the terms of reference for the on-site inspection, it cannot ensure the quality of the work in the same way as if it carried out the on-site inspections itself. In particular, BSD analysts do not acquire a full intimate knowledge of the banks under their responsibility and the BSD is not capable of reacting immediately to problems that become apparent during the course of the on-site inspection. Second, the BSD can only check the veracity of the data provided by the banks indirectly and only on the dates for which an external audit has been programmed. Third, given that the external auditor acts simultaneously as the bank's private agent and as the supervisor's proxy, conflicts of interest may impair the timeliness and quality of the information received by the BSD, even after taking into account that the external auditor is under the legal obligation to inform the BSD of any situation that might endanger depositors' interests. Finally, given that the BSD is not under the legal obligation to inform the external auditors of its concerns or to share its monthly off-site reports with them, the external auditing team might not always conduct its investigation with the benefit of full information.

175. Against this background, the BSD should consider a more active participation in the area of on-site inspections, with its own resources and at its own initiative and discretion.[67] However, given resource and expertise limitations at the present time, the BSD may need to adopt a gradual approach and target on-site inspections on specific risk areas. It would seem advisable to start by including BSD staff as part of the external auditors' teams and to promote initially BSD on-site inspections with a limited focus, while gradually garnering the expertise and resources necessary to undertake full on-site inspections.

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[67]It is interesting to note that the British supervisory authorities, which used to rely on external auditors in much the same way as in South Africa, have now decided to gradually develop their own on-site inspection capability.

Nonperforming loans and loan provisioning

176. As mentioned above, reported nonperforming loans stood at 3.2 percent of total loans by end-1997, about the same level as in 1995 and 1996. In 1997, the ratio of nonperforming loans to total loans was 3.6 percent in banks with a capital adequacy ratio of 8-9 percent and 1.6 percent in banks with a capital adequacy ratio of over 15 percent (see Table 8).

177. Since bank lending has been growing rapidly, the stability of the ratio of nonperforming loans to total loans obviously indicates that nonperforming loans also have been growing fast, i.e., by over 18 percent in 1996 and 16 percent in 1997 (albeit from a low base); most of the nonperforming loans have arisen in the area of household credit. Nonperforming loans in the four largest banks expanded by 48 percent in 1996–97, mainly reflecting problems in mortgage lending, while nonperforming loans in the rest of the banking system grew by about 11 percent during the same period. Against this background, it is important that banks remain alert, as the rapid growth of bank lending in the current context of slow growth, significant unemployment and high indebtedness of households, could lead to a further deterioration of banks' assets.

178. Nonperforming mortgage loans represented the largest category of nonperforming loans, accounting for 43 percent of the total. The problem in this area has been related in part to the authorities' efforts to promote lending by the larger local banks in the area of low-income housing. As a result, such banks set up a market-based mortgage program for low-income households that would complement the subsidies received from the government towards the purchase price of a house. However, around R2 billion—out of a total of about R9 billion lent in this area—are in arrears. At the same time, banks have experienced serious problems in their attempts to repossess collateral owing to difficulties in enforcing court-mandated actions. The banks and the authorities have been discussing setting up a Mortgage Indemnity Fund, which would reimburse banks a portion of the overdue amounts pending repossession of the collateral. Against this background, it is essential that banks are not required to lend on nonmarket related terms.

179. There also has been a growing incidence of nonperforming loans in the area of instalment credit, which reached 12 percent of all nonperforming loans in 1997. In addition to the problems arising from the sluggish economic environment, problems reflected the fact that credit appraisals are frequently done by the commercial firm selling the good being financed. These firms are not always fully capable of conducting adequate credit appraisals, and as a result the bank may end up providing loans of dubious quality. The BSD should, therefore, ensure that banks set up improved frameworks for ensuring the originators' abilities to appraise the creditworthiness of instalment credit applicants.

180. Loan provisions have not kept up with the expansion of nonperforming loans: they covered 59 percent of the value of nonperforming loans in 1997, down from 61 percent in 1996 and more than 66 percent in 1995 (see Table 7). Furthermore, the decline was more intense in the case of banks with a capital adequacy ratio of 8-9 percent than in banks with

better capitalization levels (see Table 8). Current levels of loan provisions seem adequate given available collateral, but the decline in loan provisioning raises concerns because it increases banks' vulnerability.

181. The methods of loan classification and provisioning are left to the initiative of the banks as there are no rules in the Banks Act or issued by the BSD instructing banks in these areas. The larger banks have so far followed apparently prudent rules in this regard, but the risk that such rules might be relaxed if confronted with distress should not be minimized. In addition, smaller banks tend to set their loan loss provisions on the basis of the levels provisioned by the larger banks, which may not be appropriate if the quality of their loan portfolio differs from that of the larger banks. Thus, the BSD has been thinking of moving to a more regulated environment in this regard, given that bad loans are growing rapidly and that loan classification and provisioning practice differs from bank to bank. It would be very important to ensure that early progress is made in this direction, by issuing explicit and mandatory loan classification and provisioning rules that would trigger corrective action automatically and prevent the emergence of risky practices in this regard.

182. At the same time, to help limit the riskiness of the banks' asset portfolio, the BSD should go ahead with its plans to introduce more stringent capital requirements regarding mortgage financing and lending to local authorities. In the case of mortgages, a risk weighting of 50 percent is currently assigned to the full outstanding balance of fully-secured residential mortgage loans. An increase to 100 percent in the risk weighting assigned to those portions of home loans that exceed 80 percent of the value of the residential property is under consideration, given that mortgage loans against repaid principal tend to be used for purposes other than real estate and that, in some cases, negative equity has lowered the quality of outstanding mortgages. Regarding bank lending to local governments, which has been growing rapidly, there are currently no regulations;[68] the BSD's proposal to raise the risk weighting applicable to such loans from 10 percent to 100 percent is appropriate.

183. Loan loss provisions are currently fully deductible for tax purposes, which is clearly in accordance with best practice internationally. Therefore, it would be important to avoid limiting such deductibility by shifting it from the year when the provision is made to the year when the actual loss occurs, as currently being considered by the authorities.

Large exposures

184. Current practice in South Africa is that banks are self-regulated in the area of large exposure. There is no established limit on the aggregate position of large exposures of a bank, and banks are only required to report individual transactions that result in the bank being exposed to a single client by more than 25 percent of qualifying capital and reserves. In

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[68]Bank lending to provincial governments, however, are limited by law to overdrafts for bridging purposes only.

addition, banks have to report on a quarterly basis all exposures in excess of 10 percent of the net qualifying capital and reserves; instead of being subject to approval by the BSD, such loans have to be approved by a board-appointed committee of the bank. If a bank has excessive exposure to individual parties, the BSD will discuss with it the implicit risk. By end-1997, actual usage of large credits fell to 315 percent of capital and reserves (see Table 7). However, on a granted basis, large credit exposure was 935 percent of capital and reserves, considerably higher than the Basle guideline of a maximum of 800 percent; if fully used, these credit lines would raise banks' risks markedly and thus limit their ability to expand their operations abroad.

185. Lenient regulations with respect to large credit exposures may have been justified in the past on the grounds that international sanctions had effectively closed the South African economy to the rest of the world and it was unavoidable that, first, highly concentrated corporate ownership structures would arise and, second, that they would turn to the local banks for their financing needs. However, this situation is rapidly changing: the economy is opening up and South African banks and corporations actively compete in the global marketplace (which, in the case of the banks, requires that they abide by internationally-agreed prudential limits). Against this background, formal guidelines in accordance with international best practice standards are needed to place hard limits that would effectively constrain large credit exposures of local banks. Although the new guidelines should be introduced gradually so as to give time to all those affected to adapt to them, the fact that large credit lines are not fully used should make it easier to implement them.

Consolidated supervision of financial conglomerates

186. As mentioned above, banks are supervised by the BSD while nonbank financial institutions are supervised by the FSB.[69] In principle, the BSD and the FSB have no overlapping or conflicting mandates and scope, but the complex cross-ownership structures in the South African financial system may sometimes blur their areas of authority. The authorities have established the Policy Board for Financial Services and Regulations to provide a formal framework for BSD-FSB collaboration, and a number of projects of mutual interest are being carried out. However, coordination between the BSD and the FSB in day-to-day operations still remains mainly sporadic and ad-hoc. The two institutions share information when necessary, but the FSB has some statutory limitations in doing so; the inclusion of BSD staff in FSB inspections has been used as a way of dealing with this problem. No case of distress involving both the BSD and the FSB has arisen so far; in such a case both institutions would have to agree on a lead supervisor, even though no procedures have been established in this regard.

187. The BSD and the FSB should give high priority to developing a formal framework for consolidated supervision, a task made easier by current market trends toward consolidation

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[69]The FSB was set up six years ago; it was previously part of the Department of Finance.

and rationalization of the operations of major players in the financial market. The discussion at times has veered off in the direction of the required institutional setup, i.e., whether the BSD and the FSB should continue to exist as separate institutions or should be merged. However, it seems more important to address the practical arrangements that must be followed to conduct efficient consolidated supervision, including issues such as statistical reporting by the conglomerates to the BSD and the FSB, sharing of confidential information among both institutions, measurement of capital and definition of capital adequacy for institutions belonging to a financial conglomerate, harmonization of licensing and prudential requirements, conduct of on-site inspections of financial conglomerates, and the principles that would guide joint administration of possible distress cases, including the nomination of the lead supervisor.

Deposit insurance

188. No formal deposit insurance scheme exists at this time in South Africa, because of concerns that it would introduce moral hazard into the banking system and distort the incentive structure. The BSD is now of the view that it would be useful to introduce such a scheme. Indeed, given the need to operate in an environment with clear rules, to protect small and unsophisticated depositors, and to promote competition among banks, and that the banking system is generally sound at the present time, it would seem highly appropriate to introduce a limited, well-designed, and adequately financed deposit insurance scheme.

189. Given that all instances of bank resolution in the last ten years or so have included a significant element of ad-hoc deposit insurance, the public already expects that such support would be provided whenever a bank experiences distress; thus, moral hazard is already present. Moreover, in the absence of clear indications of the extent of the deposit guarantee, the authorities may be exacerbating the moral hazard problem. In addition, explicit deposit insurance may contribute to enhance the smaller banks' competitive edge; it is interesting to note that deposits in two small banks that were recently restructured actually expanded after the authorities made an explicit and public commitment to guarantee those deposits. Thus, the balance tips strongly in favor of setting up a deposit insurance scheme in South Africa.

190. Such a deposit insurance scheme requires explicit legislation that would make it clear that deposit insurance would be available only in case of bank insolvency; that it would cover only a certain proportion of deposits, up to a specified limit; and that it would be used only after applying the shareholders' capital to cover the deposit obligations of the failed bank. To avoid adverse selection, membership in the deposit insurance scheme should be compulsory for all banks. The scheme should be financed by contributions from insured institutions; although in some cases it has been proposed to determine such contributions according to the risk attached to each institution, it would seem better to use a uniform premium for all institutions to avoid creating a competitive advantage for some banks and in recognition of the fact that the reduction of systemic risk benefits all banks equally. In addition, the legislation would need to establish the institutional setup for the deposit insurance scheme and its relationship with the BSD and the lender-of-last-resort function of the Reserve Bank, and

specify in no uncertain terms the sources of funding of any financial gap that may arise between accumulated bank contributions and the scheme's financial obligations.

Exit policy

191. In principle, Reserve Bank policy is that insolvent banks should fail and lender-of-last-resort support should be extended only to illiquid but solvent banks which are in possession of collateral, and following a due diligence report. However, this has not always been the case. In the past, some banks in distress have been considered "too-big-to-fail" and the Reserve Bank has granted them "soft loans,"in the form of a loan at a low interest rate or the purchase of part of their bad assets. Moreover, in past episodes of bank failure, the BSD has followed an ad-hoc exit strategy, claiming that the nature of each case of bank failure is special and that there are operational advantages of operating in a surprise mode.

192. The absence of preestablished rules regarding bank exit is detrimental to the operations of the banking system and the Reserve Bank. Under current arrangements, it is not clear whether the Reserve Bank or the Department of Finance should take the lead in cases of bank distress, whether the bank in distress should be restructured or liquidated, who should finance such restructuring or liquidation, and what the limits are to the Reserve Bank's financial responsibility. Thus, even if drafted in general terms, to allow for some flexibility in light of the specificities of each case, clear exit rules should be formulated to deal with aspects that are common to all cases of bank failure. In addition to the issue just mentioned, these rules should include the process of appointing a curator, the rules governing the responsibilities of the bank's shareholders, the uses of the bank's capital, the way in which bank assets will be disposed and the financing of any financial gap remaining after using the resources from the deposit insurance scheme (if established) and the sale of bank assets.

193. Under current practice, if a bank in distress is insolvent, it is supposed to be placed under the control of a curator, who has extensive powers to be used in the interest of the bank's depositors.[70] The BSD, however, cannot impose curatorship on a bank. Rather, the bank's board of directors must formally request it; after receiving the request, the Reserve Bank proposes a curator, and the Minister of Finance appoints him or her. Usually the authorities apply moral suasion on the bank concerned to request curatorship, which generally goes along; it is possible, however, that a bank may refuse to do so, as in the case of a small bank liquidated in 1997—where it took almost a year for the bank to agree to call for a curator. In principle, the Reserve Bank can go to court and request the authority to liquidate a bank, but current procedures in this regard are cumbersome and inefficient. It would therefore be important that the BSD be able to declare a bank under curatorship at its own initiative, even against the will of the bank in question; banks, in any case, should retain the option of challenging the BSD's action in court, as with any other unilateral decision made by the BSD.

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[70]When in curatorship, a bank continues to operate, but deposits are frozen and subject only to limited withdrawals.

194. Also, exit policy should be transparent; the procedures, amounts, conditions, collateral, and overall strategy involved in the restructuring or liquidation of a bank must be a matter of public knowledge. Currently, the Reserve Bank retains the discretion of conducting secret operations to help restructure a bank in difficulties, which in the past has given rise to doubts about the legality of some restructuring operations; even if unfounded, such doubts are detrimental to the effectiveness and authority of the Reserve Bank as bank supervisor.

195. In South Africa, the procedures specified in the Companies Act, rather than in the Banks Act, are followed in case of liquidation of banks. Because banks are very different from other kinds of corporations, this creates serious problems in case of failure, as depositors are not distinguished from creditors and thus may not be legally entitled to be reimbursed first. The authorities need to consider modifications of the relevant legal texts to correct for this problem, or attempt to deal with it by including clear guidelines in this regard as part of the legislation that would govern the deposit insurance scheme.

Banks' perception of the BSD

196. Banks in general have a positive view of the BSD, and value highly the ability to maintain informal contacts and a transparent relationship with it. The BSD is seen as an agency capable of detecting problems at an early stage and of taking appropriate action to deal with them. Banks appreciate BSD's analysis of their banking business; in fact, in some of the smaller banks, BSD supervisory reports are used by management as a planning tool. Banks find BSD's proactive stance very useful; for example, the current BSD efforts to ensure compliance with "year 2000" requirements are held in high regard by the banks. The supervisory requirements imposed by the BSD are not viewed by the banks as being too onerous. Finally, banks feel comfortable with BSD licensing requirements for new banks, as well as with the current levels of public disclosure of bank information.

197. Nevertheless, banks consider that there are four important areas where operational improvements are needed: (i) the BSD needs to enhance its resource and skill base to deal effectively with the rapid changes in the banking environment in South Africa; (ii) the supervisory authorities need to improve the way consolidated supervision is conducted; (iii) although peer group comparisons are found to be extremely useful in the analysis of individual bank soundness, small and foreign banks consider that comparisons may need to be refined to better represent these banks' particular roles in the market; and (iv) the BSD should attempt to tackle more in-depth the growing money-laundering problem.

C. Conclusions and Main Recommendations

198. The South African banking system appears to be generally sound. In 1997, the overall risk-weighted capital adequacy ratio reached 9.9 percent, while the ratio of reported nonperforming loans to total loans remained at about 3.2 percent. The banks are profitable, and bank share prices have outperformed most other share prices in South Africa by

significant margins. Recently, the relaxation of foreign exchange controls and the entry of several foreign banks have provided important opportunities for technological progress and product diversification in the local banking system and underlie a welcome increase in competition among banks. As in all countries, however, banks in South Africa must remain vigilant to meet the challenges arising from continued foreign competition, the cycles of economic activity, and the changes associated with the social and economic reforms.

199. The BSD conducts its business efficiently, and its activities are held in high regard by the banking community. The adoption of a modern, risk-based supervisory framework, based on the Basle principles for effective banking supervision, has been instrumental in minimizing the challenges faced by the banking system, such as those mentioned above, and the implications for systemic risk arising from high levels of concentration in the banking sector. In its constant search for further improvements in its operations, the BSD is appropriately considering changes in several areas. Among these, emphasis needs to be placed on: (i) the establishment of a formal limited deposit insurance scheme; (ii) the adoption of loan classification and provisioning procedures that would be applicable to all banks; (iii) the improvement of methods for consolidated supervision of financial conglomerates in line with the work being done in conjunction with the FSB, given the importance of conglomerates in the South African financial sector; and (iv) the regulation of informal micro-financial institutions to enhance healthy competition in the retail segment of the market. At the same time, the supervisory authorities could consider changes in other areas, including (i) a more active role for on-site inspections of banks by the BSD to further enhance the quality of its supervisory work; (ii) the use of hard limits in the area of large exposures in line with international best practice to limit the potential high levels of risk; and (iii) the adoption of a formal framework to govern exit policy in the banking sector in order to increase transparency.

V. Tax Reform in South Africa

200. Tax reform in South Africa has been guided by the recommendations of an independent tax commission, headed by Professor Michael Katz, which was appointed in 1994 to review and make recommendations on selected aspects of South Africa's tax system. As of May 1998, the Commission had issued six interim reports, with a seventh report (on tax assignment between different levels of government) expected to be completed shortly. Given that the first three reports of the Commission have been reviewed in previous staff papers, this section discusses the fourth, fifth, and sixth reports which cover the capital transfer tax, the implications of the source or residence principle in South Africa's tax system, and the taxation of benefit funds, respectively.

A. Capital Transfer

201. In its Third Interim Report, the Commission had accepted the desirability of a wealth tax because of the huge inequalities in income and assets in South Africa. Although it was of the view that redistribution was often better achieved through expenditure policy, it

nevertheless considered that a tax on wealth could make a significant contribution to the overall fairness of the tax system.

202. Wealth can be taxed through an annual wealth tax (AWT) by imposing a levy on the stock of wealth at a particular point in time. It can also be taxed through a wealth transfer tax (WTT) by imposing a levy when wealth is transferred from one person to another by gift or as a result of death. In its fourth interim report, the Commission expressed the view that, although an AWT could, in theory, be designed to achieve the redistributive objectives with few economic distortions, in practice the tax might not constitute a major source of revenue because of the difficulty in enforcing it. In addition, the tax is difficult to assess and administer. For these reasons, the Commission recommended against an AWT or a one-off wealth tax. Instead, it favored a WTT, complemented by gift taxes to avoid erosion of the tax base, because it is simpler to collect.

203. As regards the form of the wealth transfer tax, the Commission considered two options: (i) an inheritance tax, in which the heirs are taxed on their shares of the assets being bequeathed; and (ii) an estate tax, in which the estate itself is subject to tax; in the end, the Commission recommended maintaining the existing estate duty (complemented by the existing donations tax) on grounds of administrative ease.

204. Under existing law, income received by or accruing to a trust is subject to income tax to be paid by the trust during the fiscal year in which such income is received by or accrued to the trust; alternatively, if the income is distributed by the trust to a beneficiary during the fiscal year, the beneficiary is subject to the income tax. However, assets, and the distribution thereof, are not subject to a capital transfer tax, and thus present an opportunity to use generation skipping trusts to avoid capital transfer taxes. In order to address this issue, the Commission recommended that trusts be subject to the capital transfer tax provisions on the basis that, at periodic intervals (25 to 30 years), net assets of trusts be valued and taxed at rates applicable to *inter vivos* (among the living) donations and assets without rebate. As regards the distribution of capital out of trusts, the Commission recommended that such distribution should be subjected to the capital transfer tax in all circumstances except in situations where to do so would result in double taxation.

205. To encourage individuals to promote causes which the government considers as being important to the public good, the Commission recommended that bequests to certain identified nongovernmental organizations, determined periodically by the government, should constitute a discharge of the estate's obligation to pay tax.

206. Given that South Africa's income tax is based on the source principle (see below), the Commission considered whether there would be advantages in extending the capital transfer tax provisions to a residence basis, thereby bringing under the tax net capital assets acquired offshore, such as by inheritance or donation from nonresidents. It did not recommend such an extension, however, on the grounds that it could not be enforced effectively.

207. The Commission's recommendations are sound, and if implemented should improve the fairness of the South African tax system. Even though they may not make a significant dent in the gross income and wealth inequalities that characterize the South African economic system, they constitute an important step forward. However, the recommendation to grant special concessions as incentives to encourage socially beneficial bequests can, over time, be abused and thereby narrow the tax base.

B. The Source Versus Residence Principle in the South African Tax System

208. A country that adopts the source principle seeks to tax all income that is derived within the state's jurisdiction while a country that adopts the residence principle seeks to tax all income derived by its residents regardless of the source of such income. In practice, income tax systems in many countries have included elements of both principles, and the South African system is no exception. It has developed on the basis of the source principle but it has been extended by a number of provisions that bring passive income derived from outside South Africa into the tax net.

209. The Commission recommended that South Africa continue to tax active income on a source basis, as this will enhance South Africa's re-integration into the world economy. In addition, maintaining the source basis for income taxation is tax neutral. In particular, it pointed out that as long as South African income tax rates are higher than those of trading and investment partners, taxing on a residence basis would mean that South African businesses in foreign countries would have to compete at a major competitive disadvantage. Similarly, foreign companies operating in South Africa will pay income tax on income earned in South Africa at the same rate as domestic companies.[71]

210. As regards passive income, the Commission recommended that South African residents (corporate or individual) pay their income tax irrespective of the source of the income. It justified the recommendation on the grounds that taxing passive income on a world wide basis would protect the tax base from possible erosion when capital controls are lifted, and South Africans invest offshore in greater amounts than at present. To prevent avoidance through re-characterization of taxable passive income as nontaxable dividends, appropriate anti-avoidance measures would be required. In this regard, the Commission underlined the importance of keeping such measures simple for effective implementation.

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[71]To deal with taxability of cross-border active income, the Commission recommended that South Africa introduce into its laws the notion that liability to tax arises from identification of a permanent establishment. The Commission further recommended adoption of the definition of permanent establishment in the United Nations Model of Tax Convention because it provides wider scope to impose tax on nonresidents compared with the OECD Model Tax Convention.

211. With a view to clarify the definition of the source of interest income—which is currently not defined in the law—the Commission recommended that the source of interest should be the location where the credit or funds are being applied (as opposed to where the funds are sourced) which, in most cases, means the debtor country. As a consequence, interest from portfolio investment (that is payment to an unconnected lender) to a nonresident investor should continue to be exempt from the normal income tax as well as from the nonresident tax on interest income (NRTI). However, in cases where the interest arises from borrowing and lending between connected parties, only the exemption from the normal income tax should apply. For consistency reasons, the Commission recommended that such income should also be subject to the 12.5 percent secondary tax on corporations.

212. Finally, with a view to enhancing the favorable tax regime for corporate headquarters and holding companies, the Commission also recommended exemptions on fee incomes of such companies.

213. The Commission's recommendation to tax passive income on a source basis would extend the income tax base and, over time, prevent its erosion as exchange controls are lifted. However, it is important, as recognized by the Commission, that simple and effective anti-avoidance measures accompany the implementation of this recommendation. It is questionable whether granting tax exemptions to corporate headquarters and holding companies is an effective way of encouraging these entities to locate in South Africa rather than in neighboring countries.

C. Benefit Funds

214. Currently benefit funds are exempt from income tax. Therefore, contributions received and investment income earned by benefit funds are tax exempt. Depending on the circumstances, contributions made by employers on behalf of their employees are tax deductible up to: (i) a percentage of each individual employee's "approved remuneration;" (ii) a limit of 10 percent of the employee's remuneration (at the discretion of the Commissioner); and (iii) an amount, calculated for each employee separately, equal to the sum of contributions made on his/her behalf in respect of benefit and retirement funds. Member contributions to benefit funds do not qualify for deductions under the income tax, except for contributions to registered medical schemes made by the elderly (and others who have incurred medical expenses exceeding the greater of R1,000 or 5 percent of income), and contributions to benefit funds that provide disability benefits in the form of income replacement policies. The combination of tax-deductible contributions by employers, tax-free investment income, and benefits that are often treated as capital receipts, or taxed at concessionary rates provide ample scope for tax avoidance which the recommendations of the Commission sought to address.

215. The Commission recommended that employer contributions to friendly societies should no longer be tax deductible but that these societies' investment income should remain untaxed. As regards registered medical schemes, it recommended that (i) investment income

remain untaxed; (ii) employer contributions should be limited to "rand for rand"—that is, for every rand contribution by the employee, a corresponding contribution by the employer can be claimed as deduction; and (iii) self-employed persons should be entitled to deduct 50 percent of their contributions. As for medical savings accounts, which are provided by some medical schemes, and can be accessed to meet major medical expenses or, in some cases, post-retirement medical contributions, the Commission recommended that a final withholding tax be imposed on interest credited to, and cash withdrawals (for any purpose other than to another registered medical scheme) from, the accounts.

216. Limiting employer contributions to a "rand for rand" deduction to registered medical schemes should enhance revenue collection, while the entitlement to deduct 50 percent of contributions by the self-employed makes the system equitable. In addition, the recommendations on benefit funds significantly reduce the scope for avoidance.

VI. The Nonfinancial Public Sector

217. The nonfinancial public sector of South Africa is composed of the general government and the nonfinancial public enterprises. The general government comprises the national government, social security funds,[72] and the extrabudgetary institutions[73] (which together make up the central government), the provincial governments (which, prior to 1994, were the former provincial authorities, TBVC states, and self-governing territories), and the local authorities (i.e., municipalities). In 1997/98, the public sector borrowing requirement, PSBR (excluding extraordinary receipts and spending), was 5.1 percent of GDP, down from a recent peak of 8.8 percent of GDP in 1992/93 (Table 10 and Figure 13).[74] Including this extraordinary spending, the recent peak of the PSBR was 10.9 percent of GDP in 1993/94.

218. It has been customary when analyzing fiscal issues in South Africa to focus exclusively on the national government. For example, the staff's assessment that fiscal policy is

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[72]Including the Unemployment Insurance Fund, the Mines and Works Compensation Fund, and the Workmen's Compensation Fund.

[73]Including universities, technikons, museums, parks boards, libraries, research councils, the National Road Fund, the Legal Aid Board, the Special Defense Account, and the Atomic Energy Corporation. Independent accounting arrangements outside the State Revenue Account exist for these institutions.

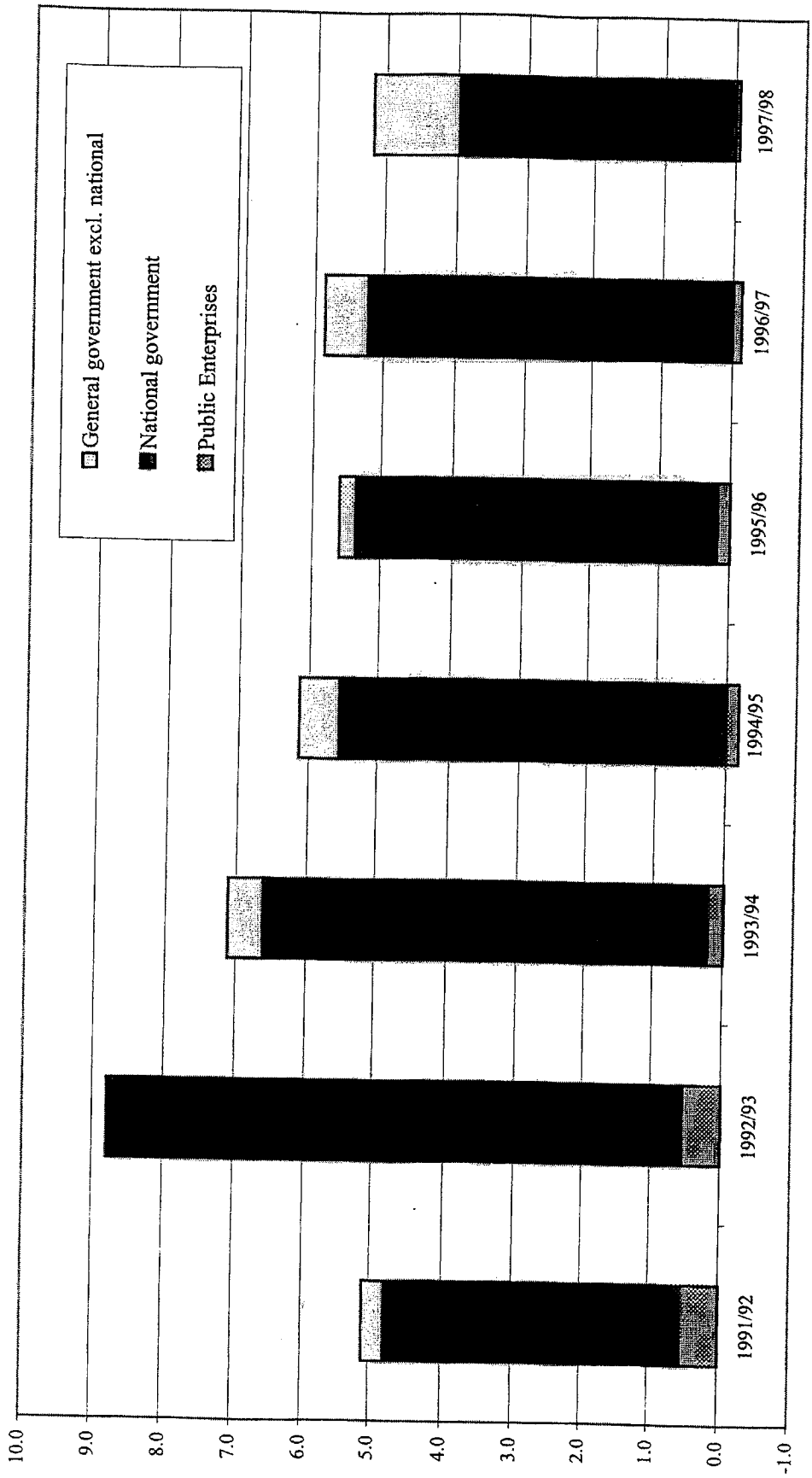
[74]Extraordinary receipts include sales of oil stocks and privatization receipts by the national government, and extraordinary expenditure includes transfers to the Reserve Bank Gold and Foreign Exchange Contingency Reserve Account or transfers to government pension funds (see below, in the section on National Government).

Table 10. South Africa: Public Sector Borrowing Requirement (PSBR) of the Nonfinancial Public Sector

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
			(In billions of rand)				
Central Government	18.3	31.2	40.7	25.3	29.5	30.7	26.0
National government	15.6	32.3	40.2	24.8	28.9	29.0	24.4
Extra budgetary institutions	2.7	-1.1	0.3	0.4	0.4	1.4	1.4
Social security funds	0.0	0.0	0.2	0.2	0.2	0.2	0.3
Provinces	-2.3	0.6	0.9	1.6	0.0	2.4	4.7
Local Authorities	0.6	0.7	0.6	0.5	0.5	-0.5	1.0
General Government	16.6	32.4	42.1	27.4	30.0	32.6	31.7
Public Enterprises	1.7	1.9	0.8	-0.8	0.9	-0.7	-0.3
Nonfinancial Public Sector	18.3	34.4	43.0	26.6	30.9	31.9	31.4
GDP	**320.2**	**347.9**	**395.6**	**444.9**	**497.3**	**556.0**	**613.0**
			(As a percent of GDP)				
Central Government	5.7	9.0	10.3	5.7	5.9	5.5	4.2
National government	4.9	9.3	10.2	5.6	5.8	5.2	4.0
Extra budgetary institutions	0.8	-0.3	0.1	0.1	0.1	0.2	0.2
Social security funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Provinces	-0.7	0.2	0.2	0.4	0.0	0.4	0.8
Local Authorities	0.2	0.2	0.1	0.1	0.1	-0.1	0.2
General Government	5.2	9.3	10.7	6.2	6.0	5.9	5.2
Public Enterprises	0.5	0.5	0.2	-0.2	0.2	-0.1	-0.1
Nonfinancial Public Sector	5.7	9.9	10.9	6.0	6.2	5.7	5.1
MEMORANDUM ITEMS:							
PSBR (excluding extraordinary spending)							
National government	4.3	8.2	6.4	5.6	5.2	5.2	4.0
Central government	5.1	7.9	6.5	5.7	5.3	5.5	4.2
General government	4.6	8.2	6.9	6.1	5.4	5.9	5.2
excluding the national government	0.3	0.0	0.5	0.6	0.2	0.6	1.2
Nonfinancial public sector	5.1	8.8	7.1	6.0	5.6	5.7	5.1
Primary balances (surplus (+))							
National government	-0.5	-4.4	-4.9	-0.1	0.1	0.9	2.4
excluding extraordinary spending	0.1	-3.3	-1.1	-0.1	0.7	0.9	2.4
Central government	-1.2	-3.9	-5.0	-0.2	0.0	0.7	2.2
excluding extraordinary spending	-0.6	-2.9	-1.2	-0.2	0.6	0.7	2.2
Provinces	0.8	0.1	0.1	-0.1	0.2	-0.3	-0.8
Local Authorities	0.1	0.0	0.1	0.1	0.2	0.3	0.0
General government	-0.3	-3.9	-4.8	-0.2	0.4	0.7	1.5
excluding extraordinary spending	0.3	-2.8	-1.1	-0.2	1.1	0.7	1.5

Sources: Department of Finance; South African Reserve Bank; and Fund staff estimates

Figure 13. South Africa: Public Sector Borrowing Requirement
(percent of GDP)



Sources: Department of Finance; South African Reserve Bank; and Fund staff estimates

appropriate and on the right track stems mainly from the fact that the national government (i) met its 1997/98 fiscal deficit target of 4 percent of GDP (down from 5.2 percent the previous year) and (ii) presented a 1998/99 budget that seeks to reduce the deficit to 3½ percent of GDP, on the way to deficits of 3 percent of GDP in subsequent years.

219. While the national government remains the most important level of government from a macroeconomic perspective, an increase in the budgets of other levels of government during the 1990s as well as the fiscal federalism arrangements defined in the 1994 constitution imply that an assessment of fiscal policy that looks only at the national government would be incomplete. Indeed, the national government is directly responsible for only 39 percent of total general government spending; 37 percent of capital expenditures; and 77 percent of the deficit (Figures 14 and 15). As explained in Section I, the improvement in the fiscal situation of the general government in 1997/98 was due entirely to the national government because the financial performance of both the provinces and the local authorities deteriorated.

220. This section, through a number of charts and tables, presents a picture of the consolidated nonfinancial public sector of South Africa, with the objective of facilitating a more complete analysis of the public sector's finances and its performance. Because detailed discussion of the fiscal developments in the national government has been standard in all staff reports and Selected Issues papers, this section concentrates on the other constituents of the public sector, most notably the provinces and the local authorities.

221. While data for the national government are of a high quality,[75] the data on the provinces and local authorities are not as good and therefore the estimates presented here are preliminary. Moreover, provinces and local authorities do not utilize a single standardized financial accounting system, which hinders the aggregation and consolidation exercise.[76] Thus, in addition to published above-the-line data on the provinces and local authorities, this study utilizes "below-the-line" data (i.e., financing data) on banking system credits and deposits, and issues and redemptions of bonds and other securities.

A. South Africa's Federalist System

222. The 1994 constitution established national, provincial, and local governments as autonomous spheres and prescribed to each level of government functions for which it has concurrent or exclusive responsibility. To allow each sphere of government to carry out the functions prescribed for it, and taking into consideration each sphere's sources of own revenue, the constitution requires that nationally raised revenue be divided equitably between

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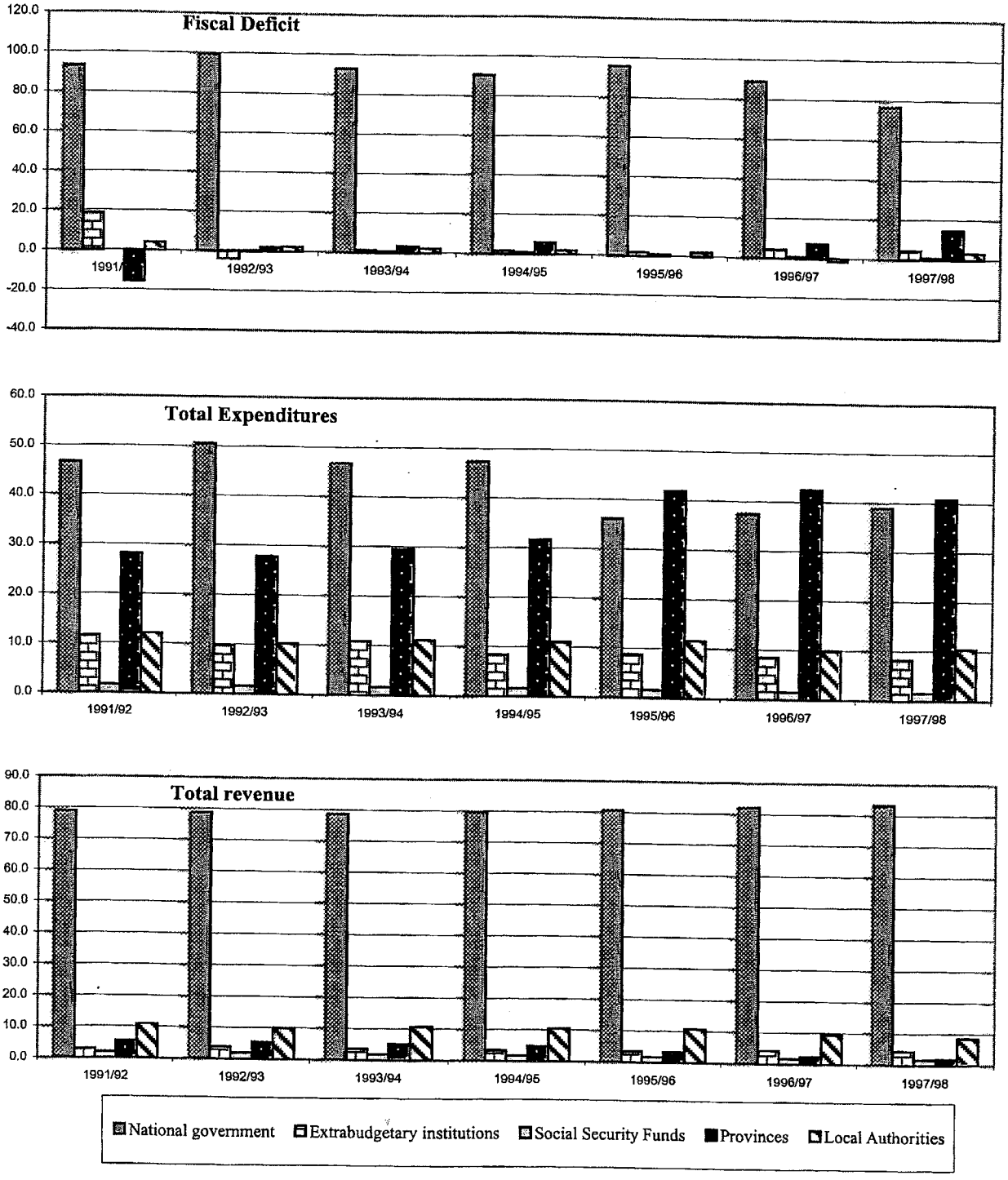
[75]National government data for 1996/97 and 1997/98 are still preliminary and subject to change.

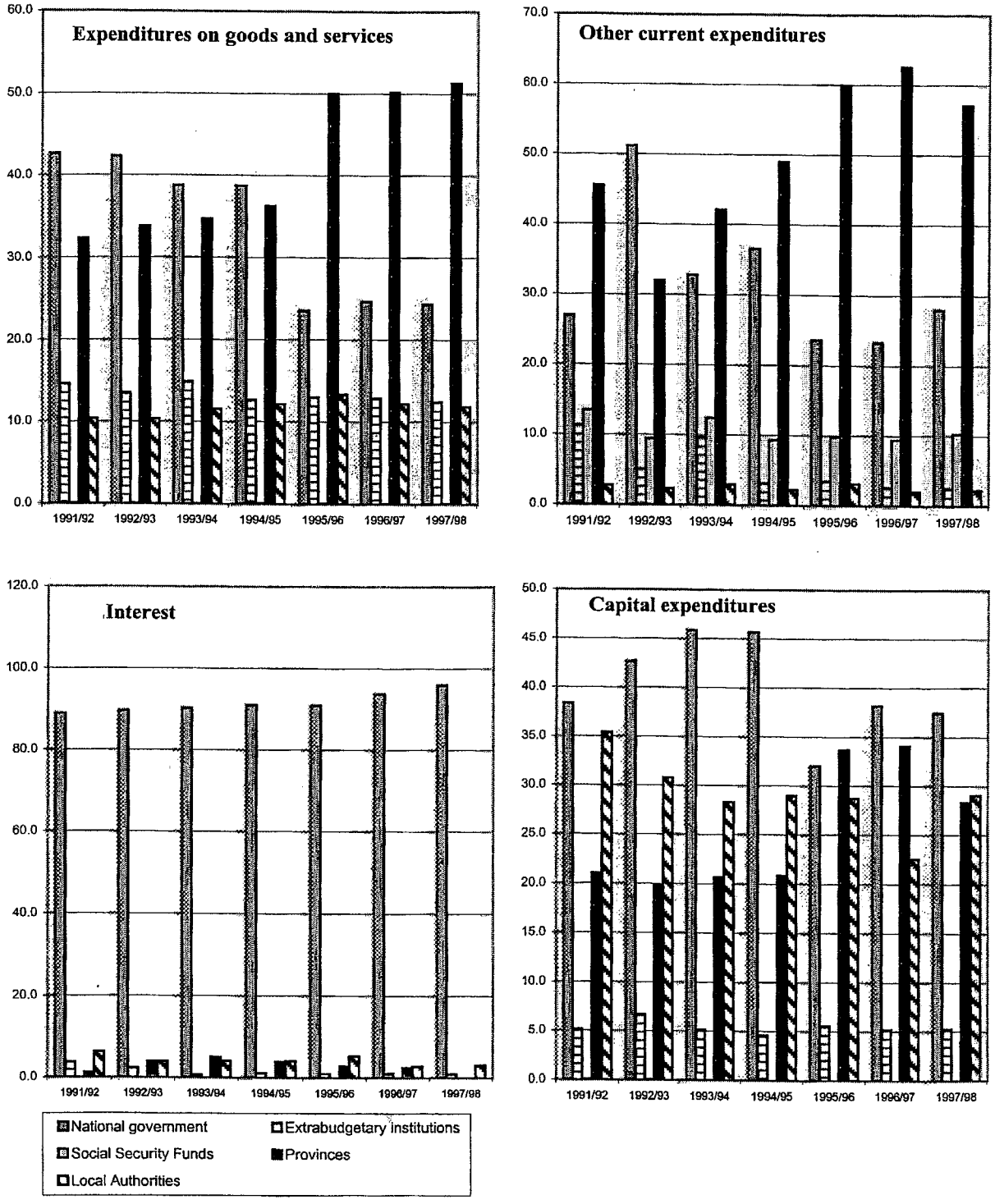
[76]As mentioned in Section I, however, all nine provinces and the national government moved to the same centralized personnel management system, PERSAL in 1997/98.

Figure 14. South Africa: General Government Overall Deficit, 1991/92 - 1997/98
(Contribution of individual levels of government in total general government, in percent)



Sources: Department of Finance; South African Reserve Bank; and Fund staff estimates

Figure 15. South Africa: General Government Expenditure, 1991/92 - 1997/98
(Contribution of individual levels of government in total general government, in percent)



Sources: Department of Finance; South African Reserve Bank; and Fund staff estimates.

the three spheres of government. Thus, while most of the general government revenue is raised by the national government, a significant portion is transferred to the provinces because of their substantial expenditure responsibilities and their own limited revenue sources. Local authorities, because they have more sources of own revenue, receive substantially less in the form of constitutionally mandated transfers from the national government.

223. These constitutional provisions became a reality on January 1, 1998 with the passage of the Intergovernmental Fiscal Relations Act, which established a formal process for considering intergovernmental budgetary issues, including setting out the process to arrive at the equitable sharing of nationally raised revenue among the three spheres of government (and the allocation of the overall provincial share among the nine provinces). Thus, 1998/99 is the first year in which the formula-based system of revenue sharing among the different levels of government has been in place.

224. The new intergovernmental fiscal system is radically different from the previous system.[77] Then, transfers were determined and administered through functional committees, in which national government ministries controlled allocations to the provincial counterpart departments. In the new system, provinces now budget for themselves, with provincial executive councils and legislatures allocating and voting funds according to their priorities, although they must still follow national norms and standards where they are applicable.

B. General Government

225. The overall deficit of the general government, reflecting the pattern of the deficit of the national government, reached a peak in 1992/93 and has declined since then, returning in 1997/98 to the level of 1991/92 (Table 11). The combined deficit of the other levels of general government remained very small, only beginning to rise in the past two years, mainly on account of the provinces, and even then only reaching a little above 1 percent of GDP in 1997/98. General government revenue has remained roughly constant at around 31 percent of GDP during the 1990s, although it has shown a slight upward trend in the last two years, in part because of improved tax administration procedures. The decline in the deficit since 1992/93 has come from almost similar reductions in current and capital spending; given that interest payments have increased by one percentage point of GDP over this period, noninterest current expenditure has declined more markedly.

226. The national government has two important instruments of control to regulate the size of the budget deficits of the provinces and the local authorities. First, consistent with the provision in the constitution that allows provinces and municipalities to borrow for bridge financing (which must be repaid within 12 months) and to finance capital spending, the government enacted the Borrowing Powers of Provincial Governments Act (1996) to regulate

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[77]See 1997 Selected Issues (SM/97/162) for a description of the new intergovernmental structure.

Table 11. South Africa: General Government Finances

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
				(In billions of rand)			
Tax revenue	85.1	90.8	105.9	122.2	133.1	153.6	172.1
Nontax revenue	13.2	14.0	16.4	18.2	22.1	23.9	22.8
Total current revenue	98.3	104.8	122.3	140.3	155.2	177.5	194.9
Capital revenue	0.3	0.3	0.4	0.4	0.7	0.5	0.5
Total revenue	98.6	105.0	122.7	140.7	155.9	178.0	195.4
Grants	0.0	0.1	0.0	0.0	0.1	0.5	0.2
Total revenue and grants	98.6	105.1	122.7	140.7	156.0	178.5	195.6
Goods and services	70.6	79.1	91.1	96.2	105.8	122.9	132.7
Interest	15.6	19.0	23.1	26.6	32.2	36.4	41.0
Other	14.0	21.5	25.8	26.6	27.9	32.0	32.9
Total current expenditure	100.2	119.6	139.9	149.4	165.9	191.3	206.6
Total capital expenditure	13.9	17.6	24.4	17.7	19.1	18.6	20.3
Total expenditure	114.1	137.2	164.3	167.2	185.0	209.9	226.9
Net lending	1.1	0.4	0.6	0.9	1.1	1.1	0.5
Total expenditure & net lending	115.2	137.6	164.9	168.1	186.1	211.0	227.3
Balance	-16.6	-32.4	-42.1	-27.4	-30.0	-32.6	-31.7
GDP	**320.2**	**347.9**	**395.6**	**444.9**	**497.3**	**556.0**	**613.0**
				(As a percent of GDP)			
Tax revenue	26.6	26.1	26.8	27.5	26.8	27.6	28.1
Nontax revenue	4.1	4.0	4.1	4.1	4.4	4.3	3.7
Total current revenue	30.7	30.1	30.9	31.5	31.2	31.9	31.8
Capital revenue	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total revenue	30.8	30.2	31.0	31.6	31.4	32.0	31.9
Grants	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Total revenue and grants	30.8	30.2	31.0	31.6	31.4	32.1	31.9
Goods and services	22.0	22.7	23.0	21.6	21.3	22.1	21.6
Interest	4.9	5.5	5.8	6.0	6.5	6.5	6.7
Other	4.4	6.2	6.5	6.0	5.6	5.8	5.4
Total current expenditure	31.3	34.4	35.4	33.6	33.4	34.4	33.7
Total capital expenditure	4.3	5.0	6.2	4.0	3.8	3.3	3.3
Total expenditure	35.6	39.4	41.5	37.6	37.2	37.8	37.0
Net lending	0.4	0.1	0.1	0.2	0.2	0.2	0.1
Total expenditure & net lending	36.0	39.5	41.7	37.8	37.4	38.0	37.1
Balance	-5.2	-9.3	-10.7	-6.2	-6.0	-5.9	-5.2

Sources: Department of Finance; South African Reserve Bank; and Fund staff estimates

provincial borrowing and the Local Government Transition Act (LGTA, 1996), to regulate borrowing by local authorities. In the case of the provinces, it had been agreed that they would not borrow at all in the 1997/98 and 1998/99 fiscal years, but as mentioned in Section I, a number of provinces utilized bank overdraft facilities in 1997/98.[78] In the case of the local authorities, borrowing equal to about 55 percent of capital expenditure was budgeted for in both 1996/97 and 1997/98. The second instrument of control for the national government arises from its responsibility for fiscal coordination. The LGTA gives it the authority to annually determine aggregate guidelines for both current and capital expenditure for the local authorities. For 1996/97 a growth rate of 10 percent was set for both current and capital spending, followed by 8 percent for 1997/98 and 6 percent for 1998/99.

C. National Government

227. The deficit of the national government has been reduced substantially since 1992/93, reflecting the authorities' serious commitment to macroeconomic stability and sound public finances (Table 12). The deficit reached a peak of R40.2 billion (10.2 percent of GDP) in 1993/94 , but more than a third of this amount was attributable to extraordinary spending.[79] Excluding extraordinary expenditure, the overall deficit peaked in 1992/93 at 8.2 percent of GDP. Since that time the burden in reducing the deficit has been shared almost equally by revenue and expenditure, with revenue rising from 23.8 percent of GDP in 1992/93 to 26.6 percent of GDP in 1997/98 and expenditure falling from 33.1 percent of GDP to 30.6 percent over the same period.

D. Provinces

228. The provinces moved from a balanced budget in 1995/96 to a deficit of 0.8 percent of GDP in 1997/98, mainly because of substantial increases in social spending (Table 13). As shown in Figures 14 and 15, the relative size of provincial budgets has grown substantially during the 1990s, with provincial outlays accounting for 41 percent of general government

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[78]Some provinces made provisions in their 1998/99 budgets to repay the full amount of the overdrafts—for example, Gauteng's overdraft was scheduled to be repaid in the first month of the new fiscal year—while others are only likely to be able to eliminate their overdraft balances over a number of years, given the size of their overdrafts and the need to reform structurally unsound finances.

[79]This consisted of R7.3 billion in transfers to the Government Service Pension Fund in order to raise its actuarial funding level and to help finance early retirements under a package offered to public workers; and R7.5 billion in transfers to the Gold and Foreign Exchange Contingency Reserve Account of the Reserve Bank in order to cover Reserve Bank losses incurred on forward exchange market operations over a number of years. Similar transfers to the Contingency Reserve Account of R3.8 billion and R3.1 billion were made in 1992/93 and 1995/96, respectively.

Table 12. South Africa: National Government Finances

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
			(In billions of rand)				
Total revenue and grants 1/	**77.9**	**82.8**	**96.7**	**112.2**	**125.9**	**146.8**	**163.2**
Tax revenue	76.2	80.6	94.1	110.3	123.1	142.6	160.1
Nontax revenue	1.7	2.2	2.5	1.9	2.7	3.6	2.9
Grants	0.0	0.1	0.0	0.0	0.1	0.5	0.2
Total expenditure & net lending	**93.5**	**115.1**	**136.9**	**137.0**	**154.8**	**175.8**	**187.6**
Current expenditure	88.0	106.2	122.4	129.0	146.7	168.9	180.8
Goods and services	30.1	33.5	35.3	37.3	24.9	30.3	32.3
Interest	13.9	17.1	20.8	24.2	29.3	34.1	39.4
Subsidies, other current transfers	5.4	11.9	14.3	5.9	3.9	4.8	7.1
Transfers	38.7	43.8	51.9	57.1	85.6	97.1	100.3
To provinces	28.7	30.9	37.1	45.9	72.0	84.5	86.9
To local authorities	2.4	2.6	3.1	2.2	3.3	2.9	3.2
To extra-budgetary institutions	7.5	10.2	11.7	9.2	10.2	9.1	8.8
To social security funds	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Other	0.0	0.0	0.0	-0.2	0.0	0.5	1.3
Other	0.0	0.0	0.0	4.5	3.0	2.6	1.7
Capital expenditure	5.3	9.7	15.2	8.1	8.2	7.1	7.6
Net lending	0.1	-0.7	-0.7	-0.2	-0.1	-0.2	-0.9
Balance	**-15.6**	**-32.3**	**-40.2**	**-24.8**	**-28.9**	**-29.0**	**-24.4**
Extraordinary expenditure	2.0	3.8	14.8	0.0	3.1	0.0	0.0
Current transfers 2/	2.0	0.0	7.3	0.0	0.0	0.0	0.0
Capital transfers 3/	0.0	3.8	7.5	0.0	3.1	0.0	0.0
Balance excluding extraordinary spending	-13.6	-28.5	-25.4	-24.8	-25.8	-29.0	-24.4
GDP	**320.2**	**347.9**	**395.6**	**444.9**	**497.3**	**556.0**	**613.0**
			(As a percent of GDP)				
Total revenue and grants	24.3	23.8	24.4	25.2	25.3	26.4	26.6
Tax revenue	23.8	23.2	23.8	24.8	24.8	25.6	26.1
Nontax revenue	0.5	0.6	0.6	0.4	0.5	0.6	0.5
Grants	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Total expenditure & net lending	29.2	33.1	34.6	30.8	31.1	31.6	30.6
Current expenditure	27.5	30.5	30.9	29.0	29.5	30.4	29.5
Goods and services	9.4	9.6	8.9	8.4	5.0	5.4	5.3
Interest	4.3	4.9	5.3	5.4	5.9	6.1	6.4
Subsidies, other current transfers	1.7	3.4	3.6	1.3	0.8	0.9	1.2
Transfers	12.1	12.6	13.1	12.8	17.2	17.5	16.4
To provinces	9.0	8.9	9.4	10.3	14.5	15.2	14.2
To local authorities	0.7	0.7	0.8	0.5	0.7	0.5	0.5
To extra-budgetary institutions	2.3	2.9	3.0	2.1	2.1	1.6	1.4
To social security funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.1	0.2
Other	0.0	0.0	0.0	1.0	0.6	0.5	0.3
Capital expenditure	1.7	2.8	3.9	1.8	1.6	1.3	1.2
Net lending	0.0	-0.2	-0.2	0.0	0.0	0.0	-0.1
Balance	-4.9	-9.3	-10.2	-5.6	-5.8	-5.2	-4.0
Extraordinary expenditure	0.6	1.1	3.8	0.0	0.6	0.0	0.0
Current transfers	0.6	0.0	1.9	0.0	0.0	0.0	0.0
Capital transfers	0.0	1.1	1.9	0.0	0.6	0.0	0.0
Balance excluding extraordinary spending	-4.3	-8.2	-6.4	-5.6	-5.2	-5.2	-4.0

Sources: Department of Finance; South African Reserve Bank; and Fund staff estimates

1/ Excluding extraordinary revenues

2/ In 1993/94, transfer to the Government Services Pension Fund

3/ Transfers to the Gold and Foreign Exchange Contingency Reserve Account

Table 13. South Africa: Finances of the Provinces

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
				(In billions of rand)			
Tax revenue	3.1	3.7	4.0	3.8	1.0	0.9	0.9
Nontax revenue	2.3	2.1	2.3	3.0	4.3	3.5	2.9
Total current revenue	5.4	5.7	6.3	6.7	5.3	4.4	3.8
Transfers from the national government	28.7	30.9	37.1	45.9	72.0	84.5	86.9
Total revenue and grants	34.2	36.6	43.4	52.6	77.3	88.9	90.7
Goods and services	22.8	26.7	31.6	34.9	52.9	61.7	68.0
Interest	0.2	0.8	1.2	1.0	0.9	0.9	0.0
Subsidies, other current transfers	5.8	7.0	8.0	14.5	14.1	16.6	18.9
Transfers to local government				1.1	0.7	1.6	2.6
Other	5.8	7.0	8.0	13.4	13.4	15.0	16.3
Statistical discrepancy 1/	0.0	0.0	0.0	0.0	3.9	5.8	2.6
Total current expenditure	28.8	34.4	40.7	50.5	71.9	84.9	89.6
Total capital expenditure	2.9	2.7	3.5	3.7	5.4	6.3	5.7
Total expenditure	31.8	37.1	44.2	54.2	77.3	91.2	95.3
Net lending	0.1	0.1	0.1	0.1	0.0	0.0	0.1
Total expenditure & net lending	31.9	37.2	44.3	54.2	77.3	91.2	95.4
Balance	2.3	-0.6	-0.9	-1.6	0.0	-2.4	-4.7
Change in net credit from banks						2.4	4.7
GDP	**320.2**	**347.9**	**395.6**	**444.9**	**497.3**	**556.0**	**613.0**
				(As a percent of GDP)			
Tax revenue	1.0	1.1	1.0	0.8	0.2	0.2	0.1
Nontax revenue	0.7	0.6	0.6	0.7	0.9	0.6	0.5
Total current revenue	1.7	1.7	1.6	1.5	1.1	0.8	0.6
Transfers from the national government	9.0	8.9	9.4	10.3	14.5	15.2	14.2
Total revenue and grants	10.7	10.5	11.0	11.8	15.5	16.0	14.8
Goods and services	7.1	7.7	8.0	7.8	10.6	11.1	11.1
Interest	0.1	0.2	0.3	0.2	0.2	0.2	0.0
Subsidies, other current transfers	1.8	2.0	2.0	3.3	2.8	3.0	3.1
Transfers to local government	0.0	0.0	0.0	0.2	0.1	0.3	0.4
Other	1.8	2.0	2.0	3.0	2.7	2.7	2.7
Statistical discrepancy 1/	0.0	0.0	0.0	0.0	0.8	1.0	0.4
Total current expenditure	9.0	9.9	10.3	11.3	14.5	15.3	14.6
Total capital expenditure	0.9	0.8	0.9	0.8	1.1	1.1	0.9
Total expenditure	9.9	10.7	11.2	12.2	15.5	16.4	15.5
Net lending	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure & net lending	10.0	10.7	11.2	12.2	15.5	16.4	15.6
Balance	0.7	-0.2	-0.2	-0.4	0.0	-0.4	-0.8

Sources: Department of Finance; South African Reserve Bank; and Fund staff estimates

1/ Difference between the deficit as calculated from "below-the-line", i.e. net financing, and as calculated from "above-the-line", i.e. revenue minus expenditure

spending in 1997/98 compared with 28 percent in 1991/92. This increase in relative importance reflects the provinces assuming the role prescribed for them in the constitution as having primary responsibility for the social welfare functions of government, namely education, health, and social assistance. As a result, the growth in the provincial share of noninterest expenditure of the general government categories is even more marked: provinces now account for 51 percent of general government spending on goods and services (including personnel costs), up from 32 percent in 1991/92; almost 57 percent of other current outlays (mostly welfare payments and subsidies to the private sector), up from 45 percent; and 28 percent of capital spending, up from 21 percent in 1991/92.

South Africa: Provincial Expenditure

	1996/97		1997/98	
	Billions of Rand	Percent of Total	Billions of Rand	Percent of Total
Education	36.6	40.1	38.9	40.7
Personnel Expenditure	31.1	34.0	34.6	36.2
Other Expenditure	5.5	6.1	4.3	4.5
Health	20.3	22.3	22.3	23.3
Personnel Expenditure	11.8	12.9	13.9	14.6
Other Expenditure	8.5	9.4	8.4	8.8
Welfare	15.5	17.0	17.3	18.1
Personnel Expenditure	0.5	0.6	0.6	0.6
Transfer Payments	14.5	15.9	15.9	16.7
Other Expenditure	0.5	0.5	0.8	0.8
Other functions	18.8	20.7	17.0	17.8
Personnel Expenditure	5.8	6.3	6.0	6.2
Other Expenditure	13.1	14.3	11.0	11.5
Total	91.2	100.0	55.0	100.0
Personnel Expenditure	49.1	53.8	40.5	57.6
Other Expenditure	42.1	46.2	95.5	42.4

Source: Department of Finance

229. Education is typically the largest item in provincial budgets, accounting for about 40 percent of total expenditure (see above). Provincial responsibility covers primary and secondary education, special education, teacher training and technical colleges. Salaries for education personnel account for 90 percent of total education spending. The size of provincial health budgets tends to vary between 15 percent and 35 percent of total expenditure depending largely on whether the province supports an academic hospital.[80]

230. As Figures 14 and 15 and Table 13 indicate, the overwhelming proportion of provincial funds come in the form of transfers from the national government; own revenue of the provinces accounts for only about 2 percent of general government revenue and finances only 4 percent of provincial expenditure. The major components of own revenue are licenses and fees, including motor vehicle licenses and hospital fees. For 1998/99, the national government rejected a recommendation by the Financial and Fiscal Commission that the provinces be granted additional taxation authority in the form of a surtax on the personal income tax.[81]

E. Local Authorities

231. The local authorities comprise six metropolitan councils (which account for about half of total expenditure); transitional councils, which are responsible for municipal functions in other areas; and district or services councils, which are responsible for infrastructure and regional services. Apart from normal municipal functions, the main functions of the local authorities include administering public housing and providing water, electricity and sewerage services. In 1997/98 municipal budgets totaled R52.3 billion, including bulk purchases of electricity and water.[82]

232. The budget deficit of the local authorities has remained low throughout the 1990s (Table 14). Revenue and spending by the local authorities have remained roughly constant at around 4 percent of GDP, resulting in deficits that have remained below R1 billion. These numbers, however, do not measure the serious cashflow problems being experienced by local governments. These problems have resulted in the drying up of private sector demand for

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[80]In the 1998/99 budget, the national government provided for a special conditional transfer of R3 billion to four provinces that have large central hospitals in order to cover the cost of the services these hospitals provide to the region and the nation as a whole.

[81]The constitution (section 228) provides for taxing authority on the part of the provinces. The national government is awaiting a report from the Katz Commission (see Section V) on provincial taxation issues, after which it will prepare draft legislation on the subject.

[82]Revenue and expenditure pertaining to the actual purchase and sale of utility services are not included in the fiscal tables since these do not represent government functions under the GFS framework.

Table 14. South Africa: Finances of the Local Authorities

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
				(In billions of rand)			
Tax revenue	4.2	4.8	5.7	6.0	6.7	7.5	8.3
Nontax revenue	6.2	5.3	7.1	8.4	9.5	8.9	8.0
Total current revenue	10.4	10.2	12.8	14.4	16.2	16.4	16.3
Capital revenue	0.2	0.2	0.3	0.3	0.6	0.4	0.4
Total revenue	10.6	10.4	13.1	14.7	16.8	16.8	16.7
Transfers	2.4	2.6	3.1	3.3	4.0	4.6	5.9
From national government	2.4	2.6	3.1	2.2	3.3	2.9	3.2
From provinces	0.0	0.0	0.0	1.1	0.7	1.6	2.6
From extra-budgetary institutions	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Total revenue and grants	13.0	13.0	16.2	18.0	20.8	21.4	22.6
Goods and services	7.3	8.2	10.5	11.7	14.1	15.0	15.7
Interest	1.0	0.8	0.9	1.1	1.7	1.0	1.3
Subsidies, other current transfers	0.0	0.1	0.1	0.1	0.3	0.0	0.0
Total current expenditure	8.3	9.0	11.5	12.8	16.1	16.1	17.0
Capital expenditure, including discrepancy 1/	4.9	4.2	4.8	5.1	4.6	4.2	5.9
Total expenditure	13.3	13.2	16.3	18.0	20.7	20.3	22.9
Net lending	0.3	0.5	0.5	0.5	0.6	0.6	0.7
Total expenditure & net lending	13.6	13.7	16.8	18.5	21.3	20.9	23.6
Balance	-0.6	-0.7	-0.6	-0.5	-0.5	0.5	-1.0
Change in net credit from banks						-1.0	1.5
Net issues of marketable securities						0.5	-0.4
GDP	**320.2**	**347.9**	**395.6**	**444.9**	**497.3**	**556.0**	**613.0**
				(As a percent of GDP)			
Tax revenue	1.3	1.4	1.4	1.3	1.3	1.4	1.3
Nontax revenue	1.9	1.5	1.8	1.9	1.9	1.6	1.3
Total current revenue	3.3	2.9	3.2	3.2	3.3	3.0	2.7
Capital revenue	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total revenue	3.3	3.0	3.3	3.3	3.4	3.0	2.7
Transfers	0.7	0.7	0.8	0.7	0.8	0.8	1.0
From national government	0.7	0.7	0.8	0.5	0.7	0.5	0.5
From provinces	0.0	0.0	0.0	0.2	0.1	0.3	0.4
From extra-budgetary institutions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total revenue and grants	4.1	3.7	4.1	4.0	4.2	3.9	3.7
Goods and services	2.3	2.4	2.7	2.6	2.8	2.7	2.6
Interest	0.3	0.2	0.2	0.2	0.3	0.2	0.2
Subsidies, other current transfers	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total current expenditure	2.6	2.6	2.9	2.9	3.2	2.9	2.8
Capital expenditure, including discrepancy	1.5	1.2	1.2	1.2	0.9	0.8	1.0
Total expenditure	4.1	3.8	4.1	4.0	4.2	3.6	3.7
Net lending	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total expenditure & net lending	4.2	3.9	4.2	4.2	4.3	3.8	3.9
Balance	-0.2	-0.2	-0.1	-0.1	-0.1	0.1	-0.2

Sources: Department of Finance; South African Reserve Bank; and Fund staff estimates

1/ Discrepancy is the difference between the deficit as calculated from "below-the-line", i.e. net credit from the banking system plus net issues of securities, and as calculated from "above-the-line", i.e. revenue minus expenditure

local government securities and intervention by the national government in the administration of some municipalities. The cashflow problem reflects widespread non-payment of utility bills, which has threatened the financial viability of a number of municipalities. As of September 1997, outstanding debt owed to the local authorities in the form of unpaid utility bills amounted to R9.3 billion, or approximately 25 percent of annual revenues from these sources.

233. In contrast to the provinces, local authorities' reliance on transfers from other levels of government is relatively small. Own revenue of the local authorities accounts for about 75 percent of their total revenue and comprises about 10 percent of general government revenue. With the exception of grants for rural water infrastructure, capital transfers from the national government are made under the consolidated municipal infrastructures program (administered by the Department of Constitutional Development). The main sources for operational (current) transfers are intergovernmental grants from provincial budgets and implicit subsidies from national and provincial departments. However, this system was found to be unsatisfactory as it was not based on any objective criteria and resulted in inequitable and unpredictable allocation. As a result, a transparent, formula-based system will be introduced during 1998/99, consistent with the provisions of the Intergovernmental Fiscal Relations Act.

234. In response to the financial problems of the local authorities, owing mainly to poor credit control procedure and the fact that only 70 percent of municipal residents are regular payers, the government launched "Project Liquidity" to monitor the state of local government finances and intervene where necessary. Under this program, whose legal basis was established in an amendment to the Local Government Transition Act, teams of financial experts in each province visit all the municipalities, report on the problems encountered and make recommendations for action. As a result of this program, Johannesburg is now being run by a ten-person task team that was appointed to restructure the municipal budget and to restore health to the public finances.

F. Extrabudgetary Institutions and the Social Security Funds

235. The extrabudgetary institutions rely on transfers from the national government for about half of their overall revenue, with fees charges and other nontax receipts comprising the other half (Table 15). Transfers, however, have been declining as a percent of GDP during the 1990s, and deficits, though very small, have begun to rise in recent years. The declining transfers reflect lower allocations in the national government budget to the Special Defense Account, universities and technikons.

236. The social security funds obtain most of their revenue from payroll taxes (Table 16). For the Unemployment Insurance Fund the employee and employer contribute one percent of the employee's earnings. The contributions to the compensation funds vary depending on the riskiness of the insured's occupation.

Table 15. South Africa: Finances of the Extrabudgetary Institutions

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
				(In billions of rand)			
Tax revenue	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nontax revenue	2.7	4.0	4.1	4.5	5.2	7.4	8.5
Total current revenue	2.8	4.0	4.2	4.6	5.3	7.5	8.6
Capital revenue	0.1	0.0	0.1	0.1	0.1	0.1	0.1
Total revenue	2.9	4.1	4.3	4.7	5.4	7.6	8.7
Grants	7.5	10.2	11.7	9.2	10.2	9.1	8.8
Total revenue and grants	10.4	14.3	16.1	13.8	15.6	16.7	17.5
Goods and services	10.3	10.7	13.6	12.2	13.8	15.8	16.5
Interest	0.6	0.4	0.1	0.3	0.3	0.3	0.4
Subsidies, other current transfers	1.1	0.7	1.3	0.5	0.6	0.6	0.6
of which: to local authorities				0.0	0.0	0.1	0.1
Total current expenditure	12.0	11.9	15.0	13.1	14.7	16.7	17.5
Acquisition of fixed assets	0.7	0.9	0.8	0.8	0.9	1.0	1.1
Capital transfers	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total capital expenditure	0.7	0.9	0.9	0.8	0.9	1.0	1.1
Total expenditure	12.7	12.8	15.8	13.9	15.6	17.7	18.6
Net lending	0.4	0.4	0.6	0.3	0.4	0.4	0.3
Total expenditure & net lending	13.1	13.2	16.4	14.2	16.0	18.1	18.9
Balance	-2.7	1.1	-0.3	-0.4	-0.4	-1.4	-1.4
Domestic financing	2.7	-1.1	0.3	0.4	0.4	1.4	1.4
Foreign financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total financing	2.7	-1.1	0.3	0.4	0.4	1.4	1.4
GDP	**320.2**	**347.9**	**395.6**	**444.9**	**497.3**	**556.0**	**613.0**
				(As a percent of GDP)			
Tax revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nontax revenue	0.8	1.1	1.0	1.0	1.0	1.3	1.4
Total current revenue	0.9	1.2	1.1	1.0	1.1	1.4	1.4
Capital revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total revenue	0.9	1.2	1.1	1.0	1.1	1.4	1.4
Grants	2.3	2.9	3.0	2.1	2.1	1.6	1.4
Total revenue and grants	3.2	4.1	4.1	3.1	3.1	3.0	2.9
Goods and services	3.2	3.1	3.4	2.7	2.8	2.8	2.7
Interest	0.2	0.1	0.0	0.1	0.1	0.1	0.1
Subsidies, other current transfers	0.3	0.2	0.3	0.1	0.1	0.1	0.1
of which: to local authorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total current expenditure	3.7	3.4	3.8	2.9	3.0	3.0	2.9
Acquisition of fixed assets	0.2	0.3	0.2	0.2	0.2	0.2	0.2
Capital transfers	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total capital expenditure	0.2	0.3	0.2	0.2	0.2	0.2	0.2
Total expenditure	4.0	3.7	4.0	3.1	3.1	3.2	3.0
Net lending	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total expenditure & net lending	4.1	3.8	4.1	3.2	3.2	3.3	3.1
Balance	-0.8	0.3	-0.1	-0.1	-0.1	-0.2	-0.2

Sources: Department of Finance; South African Reserve Bank; and Fund staff estimates

Table 16. South Africa: Finances of the Social Security Funds

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
				(In billions of rand)			
Tax revenue	1.5	1.7	1.9	2.0	2.2	2.5	2.7
Nontax revenue	0.3	0.4	0.4	0.4	0.4	0.5	0.5
Total current revenue	1.8	2.0	2.2	2.4	2.7	3.0	3.3
Capital revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total revenue	1.8	2.0	2.2	2.4	2.7	3.0	3.3
Grants	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Total revenue and grants	1.8	2.1	2.3	2.5	2.7	3.0	3.3
Goods and services	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Current transfers	1.6	1.9	2.2	2.4	2.6	2.9	3.2
Total current expenditure	1.6	1.9	2.3	2.5	2.7	3.0	3.3
Acquisition of fixed assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital transfers	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total capital expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure	1.6	2.0	2.3	2.5	2.7	3.0	3.3
Net lending	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Total expenditure & net lending	1.8	2.1	2.4	2.6	2.9	3.2	3.5
Balance	0.0	0.0	-0.2	-0.2	-0.2	-0.2	-0.3
GDP	**320.2**	**347.9**	**395.6**	**444.9**	**497.3**	**556.0**	**613.0**
				(As a percent of GDP)			
Tax revenue	0.5	0.5	0.5	0.5	0.4	0.4	0.4
Nontax revenue	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total current revenue	0.6	0.6	0.6	0.5	0.5	0.5	0.5
Capital revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total revenue	0.6	0.6	0.6	0.5	0.5	0.5	0.5
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total revenue and grants	0.6	0.6	0.6	0.6	0.5	0.5	0.5
Goods and services	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current transfers	0.5	0.5	0.6	0.5	0.5	0.5	0.5
Total current expenditure	0.5	0.6	0.6	0.6	0.5	0.5	0.5
Acquisition of fixed assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital transfers	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total capital expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure	0.5	0.6	0.6	0.6	0.5	0.5	0.5
Net lending	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure & net lending	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sources: Department of Finance; South African Reserve Bank; and Fund staff estimates

G. The Nonfinancial Public Enterprises[83]

237. The nonfinancial enterprises command an important presence in the South African economy. Total assets are equal to about 30 percent of GDP, while total liabilities equal about 17 percent of GDP. In 1995, these enterprises had a turnover equal to 11 percent of GDP and they employed almost 320,000 persons.

238. As discussed in Section II, the nonfinancial public enterprises, for the most part, do not represent a drain on government finances. In fact, in the past year, the government has been able to sell unprofitable enterprises like Sun Air (airline). The restructuring (including sale of minority interest to a strategic private sector partner) of South African Airways is now the government's priority in the area of public enterprise policy. The aggregate deficits of the early 1990s have turned into small surpluses in recent years, even as investment spending has increased substantially (Table 17).

[83]See Table 3 in Section II for a list of the most important enterprises.

Table 17. South Africa: Operations of the Nonfinancial Public Enterprises

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
				(In billions of rand)			
Net saving	-3.5	-6.7	-6.3	-4.3	-4.3	-2.6	-1.7
Depreciation	10.7	13.0	13.5	13.9	14.4	15.0	11.6
Gross saving	7.2	6.2	7.2	9.6	10.1	12.4	9.9
Investment	8.9	8.1	8.0	8.8	11.0	11.7	9.6
Balance	-1.7	-1.9	-0.8	0.8	-0.9	0.7	0.3
GDP	**320.2**	**347.9**	**395.6**	**444.9**	**497.3**	**556.0**	**613.0**
				(As a percent of GDP)			
Net saving	-1.1	-1.9	-1.6	-1.0	-0.9	-0.5	-0.3
Depreciation	3.3	3.7	3.4	3.1	2.9	2.7	1.9
Gross saving	2.2	1.8	1.8	2.2	2.0	2.2	1.6
Investment	2.8	2.3	2.0	2.0	2.2	2.1	1.6
Balance	-0.5	-0.5	-0.2	0.2	-0.2	0.1	0.1

Sources: Department of Finance; South African Reserve Bank; and Fund staff estimates

VII. Measures of External Competitiveness

A. Introduction

239. With the introduction of the Growth, Employment and Redistribution (GEAR) strategy in mid-1996, the authorities embarked on a program designed to transform South Africa into "a competitive, outward oriented economy."[1] The GEAR places considerable importance on "a powerful expansion by the tradeable goods sector" as a means of generating sustainable growth. Accordingly, one major policy challenge is to ensure that South Africa's external competitiveness is sufficient to play an appropriate role in the desired economic transformation.

240. In its broadest sense, external competitiveness covers a wide range of economic factors, some of which are directly amenable to being influenced by policy. Moreover, some elements of competitiveness are not obviously reflected in changes in prices. For example, even if the nature and price of a product appears unchanged, better telecommunications or transport links can allow a supplier to provide more rapid and convenient service. This is clearly an improvement in the quality of the product—there has been a change in the hedonic characteristics of the good—but one which may not be not fully captured in economic statistics.

241. While recognizing the impossibility of reflecting all facets of competitiveness in a single indicator, some insights can be obtained by considering the more narrowly focussed issue of developments in international price competitiveness. The real exchange rate, e, is defined as EP/P^*, where E is the nominal exchange rate (measured as foreign currency per unit of domestic currency) and P and P^* are domestic and foreign price indices. E and P^* are weighted averages of bilateral nominal exchange rates and foreign trading partner prices respectively. Since competitiveness is here defined in terms of the relative price of foreign goods in terms of domestic goods, a decrease in the indicator denotes an improvement in competitiveness.[2] Such an improvement should be manifest through, *inter alia*, an improvement in export volume growth, everything else being equal.

B. Estimates of the Real Exchange Rate

242. On two commonly cited measures South Africa appears to have made significant competitiveness gains in recent years. First, as shown in Figure 16, from 1994 to mid-1996 nongold merchandise export volumes grew rapidly, and faster than growth in major trading

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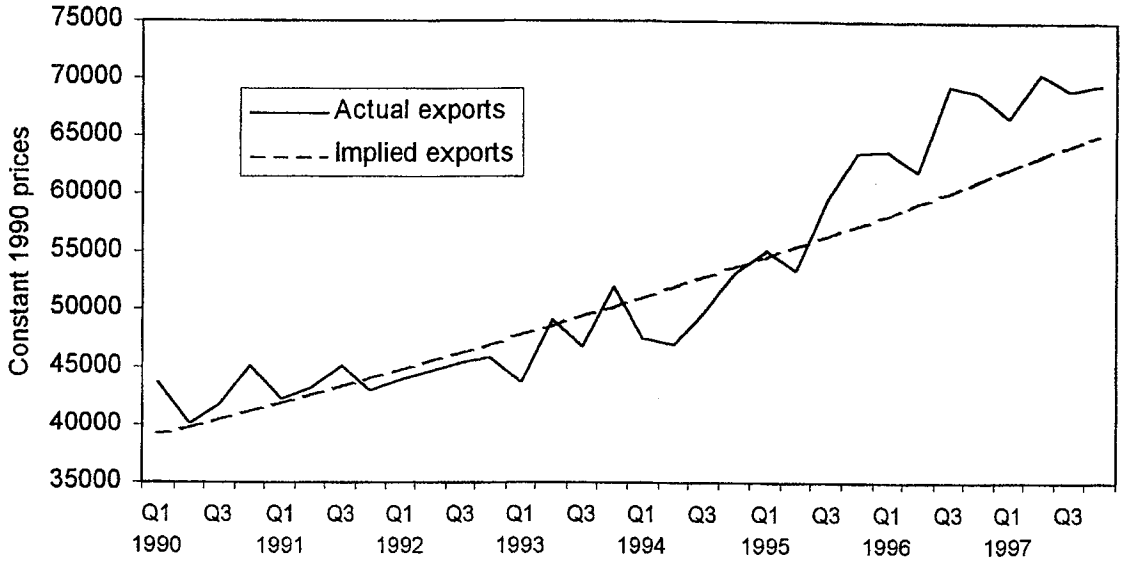
[1]Growth, Employment and Redistribution: A Macroeconomic Strategy, 1996, page 3.

[2]Issues associated with the practical specification of real exchange rate measures are discussed in detail in Turner and Golub (1997).

partner imports.[3] Second, by March 1998 the South African Reserve Bank's estimate of the real effective exchange rate, SARB-REER[4], was around 15 percent below that in 1990, with a particularly sharp improvement evident since late 1995 (Figure 17).

Figure 16. Nongold Merchandise Export Volumes-
Actual and Implied by Partner Import Growth
(In millions of rand)



Sources: IMF's Direction of Trade Statistics; and Fund staff estimates.

243. The growth in nongold merchandise exports is broadly consistent with the growth in partner country non-oil merchandise imports between 1990 and 1994. Faster growth in South Africa's exports than in partner imports—a rising market share for South Africa—from 1995 may be at least partly attributable to the depreciation in the rand in real effective terms and a series of structural reforms, including in the trade area. It is also possible that some of this

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[3]Implied partner country import growth is calculated from the actual growth in imports of goods (excluding oil) in countries which together account for more than 95 percent of trade with South Africa. Weights are based on each country's share in South Africa's exports.

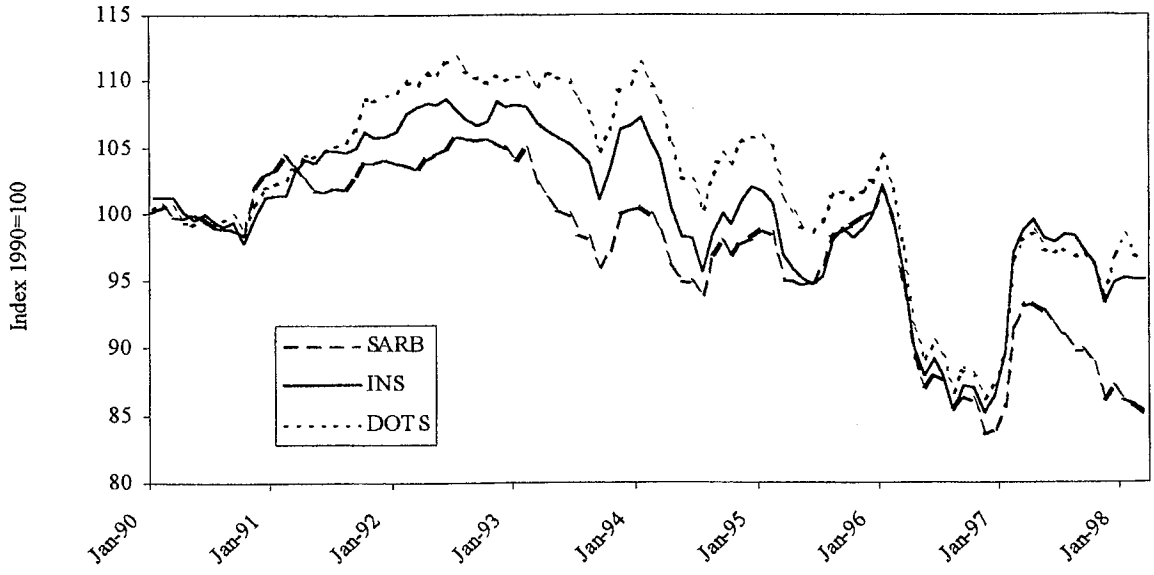
[4]Calculated as the nominal effective exchange rate deflated by relative producer prices.

growth is a consequence of the end of sanctions and would have occurred even in the absence of the depreciation and the reform program.[5]

244. If the effect of sanctions had been to impose a barrier to South African exports into particular markets, the removal of sanctions would provide a stimulus to export growth, as South Africa would recover its "natural" market share in previously closed markets. However, such a "sanctions-ending" boost to growth would be only temporary—growth in exports would eventually settle in line with partner market growth unless competitiveness continued to improve. In the transition period, though, export volumes could be expected to grow faster than the growth in world trade in the exported products. In contrast, if sanctions had no impact on South Africa's ability to export, the very rapid growth in export volumes is more likely to be attributable to competitiveness improvements alone.

245. Caution also needs to be exercised when considering developments in the SARB real exchange rate index as it is likely that the measure overstates the extent of the improvement in competitiveness, particularly in recent years. The SARB measure is based on a comparison

Figure 17. Real Effective Exchange Rate



Sources: South African Reserve Bank; and IMF's Information Notice System and Direction of Trade Statistics.

with only four trading partners—the United States (with a weight of 51.7 percent), the United Kingdom (20.2), Germany (17.2) and Japan (10.9). This is not necessarily a problem if these

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[5]Changes in taste and/or technology may also have triggered faster growth in demand for South Africa's exports.

countries were responsible for the bulk of trade with South Africa. However, their total two-way trade was only around 40 percent of South Africa's total trade in 1996, a share that has declined in recent years as can be seen in Figure 18.[6]

246. An alternative measure of the real exchange rate that covers a broader set of trading partners is available from the IMF's Information Notice System (INS). The INS real effective exchange rate, INS-REER, covers trade with 16 countries.[7] Weights are derived taking into account trade in manufactured goods and primary commodities, and reflect both direct and third market competition. (The weights are set out in Table 18).

247. Figure 17 shows that a significant wedge opened up between the two measures during the course of 1997 and early 1998, suggesting that competitiveness gains may have been more modest than implied by the SARB measure—around 5 percent relative to 1990 according the INS-REER measure. Figure 19 shows that the SARB nominal effective exchange rate, SARB-NEER, fell more sharply than the INS-NEER. This reflects the strength of the U.S. dollar and the U.K. pound during 1997 relative to the currencies of the broader set of trading partners covered by the IMF measure. In terms of the REER, the large depreciation of the rand in nominal effective terms in 1996 translated into a significant depreciation in real effective terms on both measures but, according to the INS-REER measure, much of this was subsequently unwound through the first half of 1997 as the rand strengthened and South Africa's inflation rate continued to run ahead of that of its trading partners.[8] In addition, the broader IMF measure reflects the real depreciation vis-à-vis the U.S. dollar and the pound experienced by many of South Africa's trading partners.

248. While having a wider coverage of partner countries than the SARB measure, the INS measure is open to the criticism that its weights are based on trade flows for the period 1988–90 and are therefore outdated. As Figure 18 illustrates, there has been a noticeable shift in South Africa's trading pattern since 1990, in part due to the lifting of trade sanctions.

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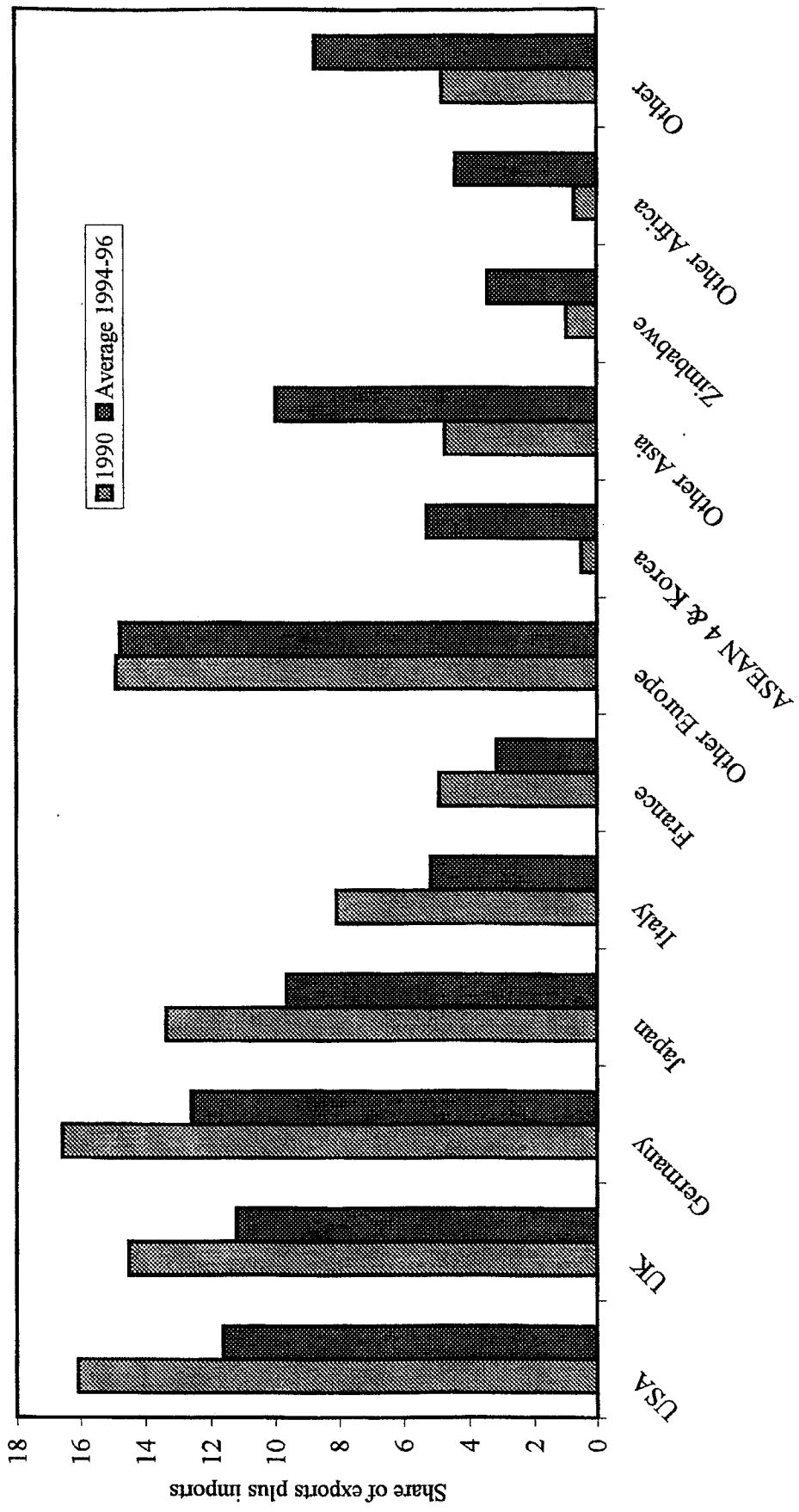
[6]Over the period 1994-96, specific trading partners can be identified for only around 76 percent of South Africa's total merchandise trade. For simplicity, that part of merchandise exports and imports for which a partner could not be identified has been pro-rated across all partners in accordance with their share in identified trade.

[7]Australia, Belgium, Brazil, Canada, France, Germany, Hong Kong, Italy, Japan, the Netherlands, Spain, Switzerland, Sweden, Taiwan, United Kingdom, and the United States.

[8]It remains to be seen whether the large nominal depreciation of the rand since the latter part of 1997 will translate into a sustainable real depreciation.

Figure 18. Direction of Trade
(in percent)



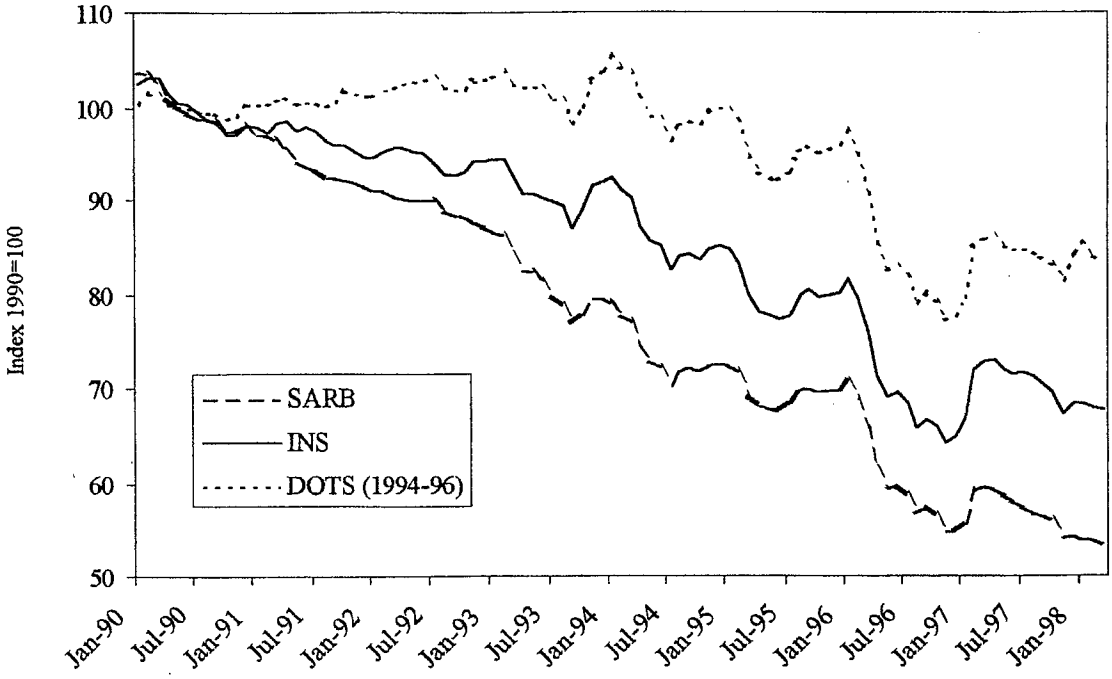
Source: IMF's Direction of Trade Statistics

Table 18. Country Weights in Various Measures of South Africa's Real Exchange Rate

Country	SARB-REER	INS-REER	DOTS-REER	ULC-REER
United States	51.70	14.81	11.53	16.35
Germany	17.20	20.78	12.52	17.75
United Kingdom	20.20	11.55	11.13	15.78
Japan	10.90	14.49	9.64	13.62
Argentina			0.80	
Australia		1.47	1.79	2.49
Austria			2.19	3.04
Belgium		4.09	3.28	4.59
Brazil		1.59	1.29	
Canada		2.31	1.09	1.48
China			2.09	
Congo, Rep. of			0.70	
Denmark			0.60	0.80
France		6.57	3.18	4.44
Hong Kong		2.25	2.58	
India			0.89	
Indonesia			0.50	
Iran			2.09	
Ireland			0.60	0.81
Israel			1.19	
Italy		8.58	5.17	7.28
Kenya			0.70	
Korea			3.08	
Malawi			0.60	
Malaysia			0.99	
Mozambique			1.49	
Netherlands		3.40	2.78	3.90
Saudi Arabia			0.60	
Singapore			1.49	
Spain		1.81	1.49	2.18
Sweden		1.19	0.89	1.26
Switzerland		3.26	2.98	4.22
Taiwan		1.85	2.98	
Thailand			0.70	
Zambia			0.99	
Zimbabwe			3.38	
Total	**100.00**	**100.00**	**100.00**	**100.00**

Sources: South African Reserve Bank; IMF's Information Notice System and Direction of Trade Statistics.

Figure 19. Nominal Effective Exchange Rate



Sources: South African Reserve Bank; IMF's Information Notice System and Direction of Trade Statistics.

249. An alternative to INS-REER can be calculated by replacing the existing INS weights with weights derived from the shares of 36 countries in South Africa's total trade between 1994 and 1996 (Table 18). While increasing the coverage of trading partners and using more timely data on trading patterns relative to the INS measure, this alternative approach fails to capture the impact of competition in third markets.

250. The result of calculating this direction-of-trade-based measure, DOTS-REER, is also shown in Figure 17. While the time profile differs until late 1995, the INS and DOTS-based measures move closely thereafter, both suggesting that there was little net gain in competitiveness since 1990 and that the improvement of 1996 was largely unwound during the first half of 1997.

251. The relative price variable used in measures of international competitiveness should, theoretically, represent the ratio of the domestic and foreign price indices of tradeable goods. Moreover, as noted by Turner and Golub (1997), these indices should be exogenous with respect to the exchange rate and unaffected by very short-term pricing decisions. In practice, such measures do not exist and the more common measures of the real exchange rate tend to

use indices of consumer (CPI) or producer prices (PPI), domestic production deflators or export and import unit values.

252. The SARB measure is based on relative producer price movements, while the INS and DOTS measures are based on movements in relative CPIs. As a practical matter, CPI-based measures have some advantages over PPI-based measures. Because the CPI is the most common means of measuring inflation, data on movements in CPIs tends to be more timely, and the design of CPI tends to be reasonably similar across countries. However, both the PPI and CPI baskets suffer from shortcomings. In particular, both are comprised of traded and nontraded goods and there is no reason why the prices of both types of goods should move together over time. To the extent that the prices of traded and nontraded goods diverge significantly, relative CPIs or PPIs may provide an inadequate picture of developments in competitiveness.

253. One way to minimize this problem is to calculate REERs based on movements in unit labor costs.[9] Due to data limitations, these are usually calculated for the manufacturing sector. Measures based on ULCs have a number of advantages as indicators of international competitiveness: they capture cost developments in an important sector exposed to international competition; offer a reliable gauge to the relative profitability of traded goods; are convenient from a statistical standpoint as fairly comparable data on the manufacturing sector exist for a number of countries; and, by construction, they bring into focus the largest component of nontraded costs and value added. Thus, ULC-based REERs provide a useful adjunct to CPI-based measures.

254. Figure 20 shows the results of estimating a REER measure based on data on unit labor costs in manufacturing in South Africa and 16 industrialized economies for the period 1990 to the second quarter of 1997 (the latest available data).[10] The results are consistent with previous measures—competitiveness improved in the 1990s, although the exclusion of South Africa's increasingly important Asian trading partners may overstate the extent of the improvement in competitiveness. Figure 20 compares this ULC-REER measure with a CPI-REER measure derived from the 1994–96 direction of trade data and normalized for the smaller group of 16 trading partners for whom the ULC data are available. While the two measures tend to move fairly closely together, the DOT measure for the 36 countries will only approximate a broader ULC measure if manufacturing unit labor costs move in line with changes in the CPI in the countries for which ULC data are unavailable.

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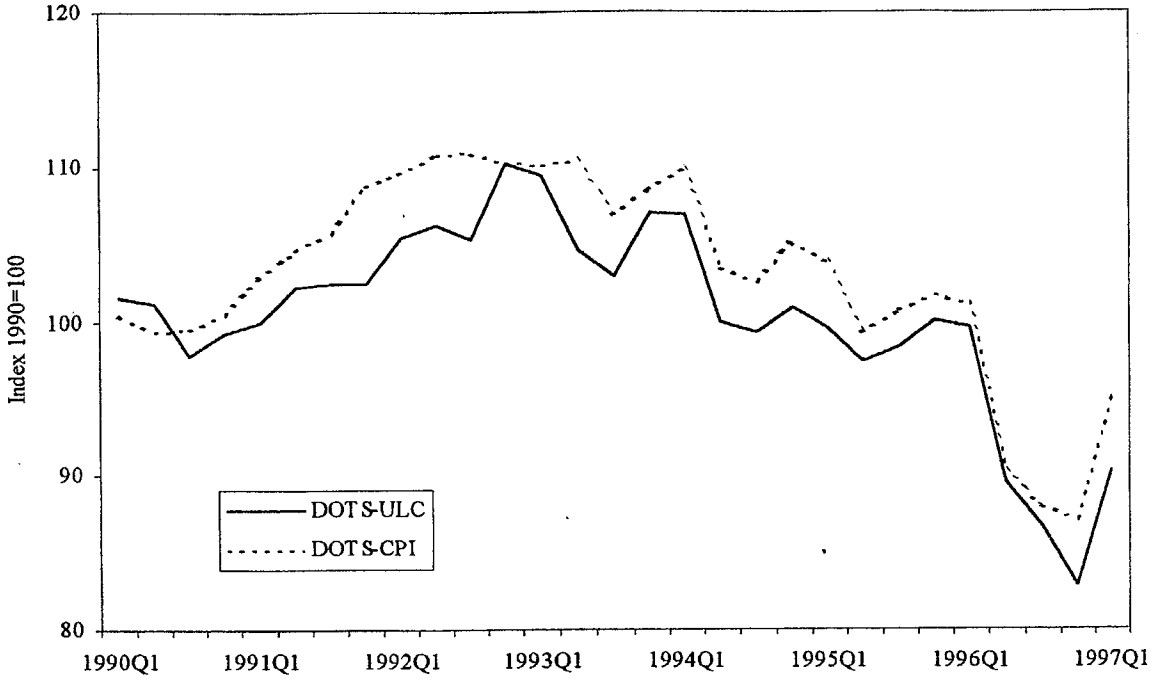
[9]For a detailed discussion of the relative merits of different approaches to estimating the real exchange rate, see Turner and Golub (1997) and Zanello and Desruelle (1997).

[10]Data on unit labor costs are only available for 16 countries. Weights are calculated by dividing each country's DOT weight by the sum of the DOT weights of the 16 countries.

Figure 20. REER-DOTS



Sources: IMF's Information Notice System and Direction of Trade Statistics.

255. While, all measures of the real effective exchange rate cited above point to some improvement in external competitiveness, it is not possible to infer from this anything about the appropriateness of the level of the real exchange rate. Time series data on the real exchange rate per se do not provide sufficient information to determine whether movements reflect changes in economic fundamentals or misalignments of the nominal exchange rate—this requires some idea of developments in the equilibrium real exchange rate. However, estimating movements in the equilibrium real exchange rate requires a lengthy time series of data. Given the structural changes that have occurred in South Africa since 1994, many of which have only occurred in the last year or two (so that the full extent of their impact in many cases is yet to be seen in the data), it would be difficult to estimate the impact of developments with precision.[11] Recent research has concentrated on characterizing the influences on the equilibrium real exchange rate using simulations rather than presenting

[11]In addition to the lifting of sanctions in 1994, major easings in exchange controls on capital transactions occurred since 1995, import duties were reduced significantly with the abolition of the import surcharge in 1995, most remaining quantitative restrictions on imports were replaced by tariffs by 1996, and the price of gold fell sharply in 1997.

estimates of the extent, if any, of any real exchange rate misalignment (see Aron et. al. (1997)).

256. After very rapid growth, nongold merchandise export volumes, while volatile, have grown by an average of only 0.1 percent per quarter in the five quarters to December 1997. While data on export volumes by country of destination or by industrial sector are unavailable, Table 19 shows that the most rapid growth in the value of nongold exports has occurred in manufactures—under plausible assumptions, it is reasonable to assume this also reflects developments in export volumes. Within this sector, the most rapid growth—and the major contribution to the increase—has occurred in exports to Asia and to Africa. In Asia, exports to Hong Kong, Korea, Singapore, and Taiwan accounted for more than 60 percent of manufactured exports to Asia in 1996, with exports to Indonesia and Malaysia growing very rapidly.[12] The aftermath of the Asian financial crisis and the increasing signs of a regional recession suggests that prospects for continuing rapid export growth to the region have been diminished, at least temporarily. The rapid growth of exports to the rest of Africa is a welcome sign of increased regional integration but again the scope for sustained double-digit growth in exports will be constrained by the capacity for growth in other regional economies, particularly as Zimbabwe has been South Africa's largest and fastest growing market for manufactures. Combined with increased competition in commodity export markets (and the continuing trend decline in gold exports), this weakening in the outlook for manufactured exports suggests caution in extrapolating the continuation of past growth rates in nongold export volumes.[13] Given the emphasis placed in the GEAR on the role of export-led growth in transforming South Africa's economic prospects, this suggests that renewed efforts to boost South Africa's international competitiveness through faster implementation of structural reforms may be required. The discussion in Section III and recent experience suggest that competitiveness cannot be durably improved as a result of the depreciation of the rand because it is likely to be eventually dissipated through higher domestic inflation (see Appendix).

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[12]Exports to Asia appear to have been boosted in part by the start-up of the so-called "mega projects," and by some diversion of nonferrous metal exports from traditional European markets to Asia.

[13]Progress on free trade agreements with the EU, and within SADC, would likely provide a fillip to South Africa's exports in the medium term but at this stage the final form of these agreements remain unknown.

Table 19. Composition and Destination of South Africa's Exports 1/

Composition of South Africa's Exports

Export Category	Share of Exports in 1989	Share of Exports in 1996
Gold	36.1	21.5
Primary products	20.3	19.4
Beneficiated primary products	23.3	27.8
Material-intensive products	4.9	7.1
Manufactured products	5.6	17.0
Unclassified	9.8	7.2

Destination of South Africa's Manufactured Exports

Region	Share of Total Manufactured Exports in 1996	Value of Exports in 1996 (In millions of U.S. dollars)	Annual Average Growth Rate in U.S. Dollar Export Values, 1992-1996
European Union	24.3	3349.3	4.7
Far East	23.1	3184.8	11.9
Southern Africa	17.8	2455.7	15.4
Rest of Africa	8.5	1170.8	24.3
North America	10.1	1394.8	11.6

Source: "South Africa's Manufacturing Exports: Recent Market Trends" by Pieter Laubscher in *Trade and Industry Monitor*, December 1997.

1/ Data apply to Southern African Customs Union members, i.e., Botswana, Lesotho, Namibia, South Africa, and Swaziland and are only available for the period 1992-1996. However, South Africa's share of the total SACU export basket is estimated to exceed 90 percent and the data presented here exclude "other manufacturing" which is dominated by diamond exports from other SACU members.

C. Conclusions

257. Despite South Africa's growing reliance on exports as a source of economic growth in recent years, it is unclear to what extent this can be attributed to developments in competitiveness. It is possible that nongold export volumes have been temporarily boosted by the catch-up effects of the removal of sanctions, leading to a step adjustment in export growth rates, although they have also reflected some improvement in competitiveness.

258. Existing measures of competitiveness, however, do not provide a guide to the appropriateness of the level of the real exchange rate. The extent of structural changes in recent years suggests that estimates of the equilibrium real exchange rate are likely to be of limited value until these changes have become fully embedded into South Africa's economic and industrial structure.

259. Given the importance of increased integration with the world economy for South Africa's economic transformation, sustained strong export growth seems imperative. In that regard, the performance of nongold exports in volume terms over the last two years is disturbing. Further stimulus to exports will require competitiveness enhancing measures such as labor market reform that promotes employment and skill accumulation; trade reform that reduces the anti-export bias of current policies and enhances efficiency; and with continuing efforts to reduce South Africa's inflation rate to levels comparable with those of its major trading partners.

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Pass-through from Exchange Rates to Domestic Prices

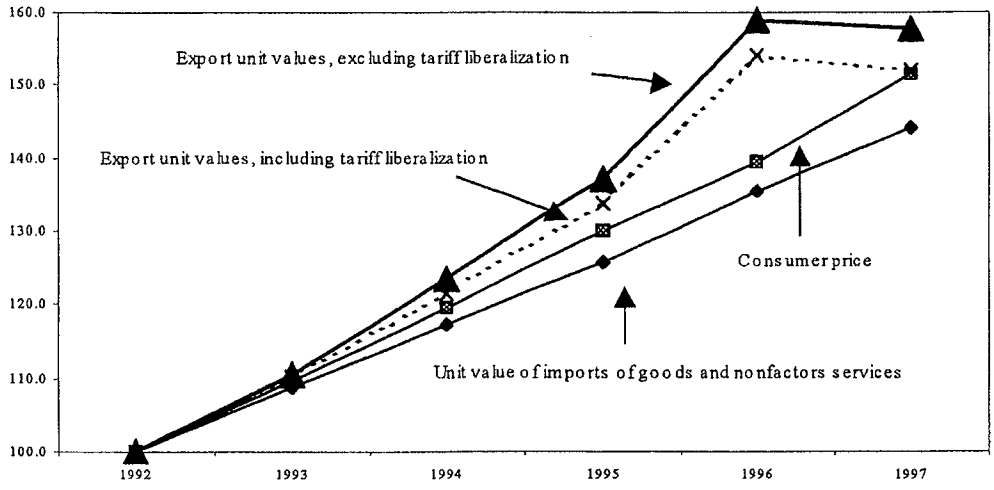
Earlier analysis by the staff drew attention to the relatively limited response of import and consumer prices to the large depreciation of the rand in 1996. Extending the analysis over a longer time period, from 1992 to 1997, and taking into account the trade liberalization that has occurred during this period, the following conclusions emerge:

- Between 1992 and 1997, the pass through from foreign prices to imported prices was between 77 percent and 85 percent (see figure below), depending on how foreign prices are measured.

- When a lower bound estimate for tariff reductions during this period is incorporated, the pass-through was larger, between 84 percent and 92 percent. Tariff reductions are captured through changes in the ratio of duties collected to imports. This lower bound impact of trade liberalization between 1992 and 1997 is equivalent to a decline of about 3.5 percentage points in import prices; it is a **lower bound** because insofar as liberalization has entailed the replacement of quantitative restrictions (QRs) by equivalent tariffs, measured duty collections will be higher, biasing downwards the impact of tariff reduction. If it is assumed that the elimination of QRs has contributed as much as tariff cuts, the pass-through will be between 90 percent and 100 percent.

- However, the wedge between changes in foreign prices and in the imported component of producer prices remains high, with only about 56 percent of the foreign price increase being reflected in imported producer prices.

Figure 21. Pass Through, 1992-1997
(1992 = 100)



Thus, over the period 1992-1997, exchange rate changes are almost fully reflected in domestic prices, once a sufficiently long period is considered to allow for lagged impacts, and the impact of trade liberalization on prices is taken into account. This is consistent with the conclusion in last year's staff report that over time fuller pass-through (than was evident in 1996) would make itself manifest. However, it is puzzling why producer price increases are so much lower than increases in other prices.

VIII. International Reserves and External Debt

A. Overview

260. South Africa's external debt is moderate by international standards although its international reserves are considerably exceeded by the oversold forward position of the South African Reserve Bank (SARB). A significant proportion of foreign debt is denominated in domestic currency terms, in part due to capital inflows into the bond market in recent years and in part to historical limits on the ability of emigrants to transfer capital abroad.[1] Reserves are unencumbered and usable reserves cover a high proportion of short-term foreign currency external debt.

261. Data quality is high, assisted in part by a history of extensive exchange controls.[2] That said, there are a number of areas in which the authorities could improve the statistical base, particularly as regards the timeliness of data collections from the private nonfinancial sector. In addition, the experience in Asia has illustrated that foreign debt alone is not an adequate indicator of external exposure, and it would be important that the authorities expand their collection of data to address some of the "missing pieces". The authorities are aware of the importance of ensuring high quality data, and are considering steps to maintain the existing integrity of data on debt as exchange controls continue to be progressively eased.

B. Monetary Authorities

262. South Africa's reserve assets (gross foreign reserves) comprise the gross foreign reserves of the SARB (the gross official reserves) plus the short-term foreign assets of the private banking sector and the central government.[3] Data on official reserves are compiled and marked to market daily. They are made public within one week of the end of the month, in accordance with the requirements of the Special Data Dissemination Standard (SDDS), to

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[1]The amount of capital that could be transferred from South Africa on emigration has been subject to a cap—assets in excess of these limits have been forced to remain in South Africa and comprise part of external debt. This cap was raised to R1 million (almost US$200,000) in early March 1998.

[2]A brief history of South Africa's experience of exchange controls is contained in the Appendix.

[3]It is expected that South Africa will switch to treating only official reserves as reserve assets, consistent with the treatment proposed in the Fifth Edition of the *Balance of Payments Manual (BPM5)*, when the compilation and presentation of external accounts is made BPM5-consistent in early 1999.

which South Africa subscribes.[4] Table 20 shows that at the end of May, 1998, South Africa's gross official reserves stood at US$6.4 billion or the equivalent of 10 weeks of imports of goods and nonfactor services. At the same time, net official reserves were US$3.1 billion[5], or around one month of imports. By way of comparison, at end-December 1997 gross official reserves were US$5.9 billion and net official reserves were US$3.8 billion. At that time, the rest of the monetary sector held an additional US$1.7 billion of gold and other foreign reserves.

263. The foreign assets of the SARB are readily available and controlled by the authorities.[6] The authorities advise that official reserves are unencumbered and are not placed on deposit with foreign branches of domestic banks. Virtually all reserves are held as instruments with A1 or higher credit ratings. The authorities also indicate that there are no contingent liabilities other than those related to the SARB's forward operations.

264. Monthly data on the stock of reserve-related liabilities of the SARB and of South Africa's total gross external reserves are published in the SARB Quarterly Bulletin with a two to three month lag. However, the monthly *Statement on Gold and Foreign Exchange Reserves* contains data both on gross official reserves and the extent to which foreign credit lines have been utilized in building gross reserves, which allows net reserves to be inferred on a monthly basis. The *Monthly Release of Selected Data* (available within four weeks of the end of the month) also provides data on changes in the total net foreign assets, with a lag of one month, which allows the level of gross external reserves to be inferred between Bulletin releases.

265. The SARB has traditionally operated extensively in forward foreign exchange markets on account of the government, running a large oversold forward position. Due to the need to facilitate imports and capital inflow during the period of sanctions, the SARB provided cover at less than market rates for both short-term and long-term transactions: "corporates could borrow abroad and hedge their exposure cheaply by buying forward cover from SARB at a cost subsidized by the South African taxpayer."[7] The SARB's operations in the forward

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[4]The SDDS recommends, however, that reserves be published weekly.

[5]National definition. If obligations to the IMF are also excluded, net official reserves were US$0.3 billion lower on May 30, 1998 and were US$0.4 billion lower on December 31, 1997.

[6]Less than US$35 million of official reserves is actually unavailable, comprising amounts lodged with international agencies as subscriptions or deposits, and a further US$2 million is in the form of fully collateralized gold loans to jewelers.

[7]*Annual Report, 1997*, Banking Supervision Department, SARB, forthcoming, page 10.

Table 20. Official Reserves and Reserve-Related Liabilities

	December 31, 1997		May 29, 1998	
	Rand, billion	US$, billion	Rand, billion	US$, billion
Gross official reserves	28.5	5.9	32.9	6.4
Gold		1.2		
Foreign exchange		4.8		
Reserve-related liabilities 1/	9.8	2.0	17.1	3.3
Net official reserves	18.6	3.8	15.8	3.1
Oversold forward book		-20.2		-21.0
Net open forward position		-16.3		-17.9
Gross reserve cover 2/		2.0		2.2
Net reserve cover 2/		1.3		1.1
Total reserve assets 3/	36.6	7.5	45.3	8.8
Memorandum item:				
External Debt				
Foreign currency 4/			105.8	23.4
Short term				11.7
Percent of GDP				*10.2*
Domestic currency 5/			43.8	9.3
Short term 6/				7.6
Percent of GDP				*6.2*
Short-term debt/total debt (foreign currency only) 4/				0.50
Short-term debt/total debt (all external debt) 6/ 7/				0.59
Interest payments as a share of export receipts (calender 1996)				7.2
Ratio of usable reserves to short-term foreign currency debt				
Gross 8/				0.55
Net 8/				0.27

Sources: South African Reserve Bank; and Fund staff estimates.

1/ Includes foreign loans received but excludes obligations to the IMF.
2/ In months of imports of goods and nonfactor services.
3/ Includes reserve assets held by the private sector. The most recent data is for end-March 1998.
4/ At June 30, 1997.
5/ At December 31, 1996.
6/ Emigrants' blocked funds are assumed to be long-term debt; all other rand-denominated debt is treated as short term.
7/ Domestic currency debt at December 1996 plus foreign currency debt at June 1997.
8/ Usable official reserves at May 29, 1998, to short-term foreign currency debt at June 30, 1997.

market are now priced at market rates and are exclusively short term. However, the average original maturity of all outstanding contracts is around 9 months, due to pre-existing long-term contracts. The net open forward position (NOFP)—the oversold forward book less net official reserves—is now published monthly, within one week of the end of the month. As at May 30, 1998, the NOFP stood at US$17.9 billion (around 14 percent of GDP) and the oversold forward book was US$21.0 billion. Data on unrealized gains and losses on the forward book are released periodically, although not on any regular schedule.

266. The authorities occasionally use transactions in other derivatives to manage reserve assets. These have generally involved the use of options to hedge portfolios (e.g., gold production), rather than to influence the exchange rate *per se*. Forward sales to nonresidents against future gold production are also sometimes used to drawdown pre-export credit lines. On one occasion an interest rate swap has been used for hedging purposes. In all cases, financial derivatives are marked to market on a daily basis, although gains and losses are not reflected in the accounts of the monetary authorities until the contracts mature.

C. Total External Debt

267. In line with the Fund's standard approach, South Africa's data distinguish between domestic and foreign obligations according to residency—foreign liabilities are obligations to nonresidents regardless of the currency in which the obligation is denominated. Domestic-currency denominated claims on nonresidents and the foreign currency assets of a South African resident foreign-owned bank are all included in the foreign assets of the South African domestic banking sector. By the same token, only the equity and loans provided by a South African parent bank to its offshore branches or subsidiaries are included in the foreign assets of the domestic banking sector—all other assets of the branch or subsidiary are assets of the country in which it undertakes operations.

268. South Africa publishes comprehensive data on foreign assets and liabilities (debt and equity) of all sectors although these data—published in the *International Investment Position* (*IIP*)—are available only on an annual basis, with the most recent data being for December 31, 1996. Data are compiled by the SARB using enterprise-based sample surveys and periodic censuses. The most recent *Census*[8] compiled estimates of the stock of assets and liabilities as at December 31, 1995. The *Quarterly Bulletin* contains *IIP* data on assets and liabilities by country or region of residence and by industry sector, while the *Census* also provides a cross tabulation. For example, the *Census* reveals that at end-December 1995, the construction sector had R224 million of foreign liabilities to EU residents, of which R89 million was in the form of debt.

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[8]*The Fifth Census of Foreign Transactions, Liabilities and Assets*, December 31, 1995, South African Reserve Bank *Quarterly Bulletin*, March 1998.

269. While the lags are still lengthy, data on foreign debt are generally compiled in a more timely fashion than are data on total external liabilities. The South African authorities compile debt data separately for both the foreign and domestic currency obligations of the public and private sectors. While the foreign currency debt is compiled on a semiannual basis, data on domestic currency obligations to nonresidents is currently compiled only annually. Table 21 shows that at December 31, 1996, total external debt was US$32.9 billion (26 percent of GDP). At June 30, 1997, foreign currency denominated debt was US$23.4 billion (18 percent of GDP), virtually unchanged from the level of end-December 1996. At end-June, some US$9.1 billion of foreign currency debt was short term, on an original maturity basis, while another US$2.6 billion could be considered short-term on a residual maturity basis[9], resulting in total short-term obligations of US$11.7 billion (9 percent of GDP) between mid-1997 and mid-1998. While it is likely that the vast majority of short-term debt would be rolled over or replaced by other short-term debt obligations, gross usable reserves cover a little over 50 percent of this obligation and net reserve cover is only around half this amount (Table 20).

270. Official data and those reported by the Bank for International Settlements (BIS) appear to be broadly consistent, recognizing the limited coverage of the latter (Table 21).The BIS data indicate that the foreign and domestic currency obligations to reporting banks amounted to US$20.4 billion at end-1996, at which time the official statistics suggested total external debt of US$32.9 billion. This difference is likely to reflect blocked funds, and liabilities to non-BIS reporting banks and other nonresident sources. At end-June 1997, BIS–reporting banks claims had risen to US$23.3 billion, of which US$3.6 billion were international securities. At that time, official data suggested that foreign banks held US$15.5 billion of South Africa's total foreign currency debt of $23.4 billion—however, information on bank holdings of the US$4.2 billion of foreign currency bearer bonds and of rand-denominated bonds was not available. The bulk of South Africa's foreign currency debt, US$17.3 billion, was denominated in U.S. dollars at end-June 1997.

271. The long lag in compiling official estimates of rand-denominated external debt is undesirable. However, much of the domestic currency investment of nonresidents occurs through domestic nominee companies, and the SARB has now reached agreement with interested parties to move to semiannual collection and compilation of this data. While residency is not recorded at the time of the original purchase of securities, residency status is recorded when debt securities are traded on the Bond Exchange of South Africa, even if the trades involve nominee companies. The data are compiled and released by the exchange on a daily basis.[10] Between January 1, 1998, and the end of April, 1998, nonresidents purchased R468 billion of bonds while selling R452 billion respectively, resulting in net purchases of bonds through the exchange of R16 billion or a little over US$3 billion.

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[9]Around US$1.2 billion of which was due in the second half of 1997.

[10]Nonresident purchases of equity on the Johannesburg Stock Exchange are also recorded and released on a daily basis.

Table 21. Comparison of Official and BIS Data
(In billions of U.S. dollars)

	December 1996	June 1997	September 1997
South African official statistics			
Foreign currency denominated debt	**23,583**	**23,389**	
Renegotiated debt	**2,736**	**2,589**	
Other foreign currency debt	**20,847**	**20,800**	
Short term	**8,800**	**9,105**	
Monetary sector	5,926	6,750	
Nonmonetary private sector	2,874	2,355	
Bearer bonds and notes	**3,979**	**4,177**	
Public sector		3,266	
Monetary sector		270	
Nonmonetary sector		641	
Medium- and long-term loans	**2,161**	**1,720**	
Public sector		430	
Monetary sector		360	
Nonmonetary sector		930	
Other public sector	**4,233**	**3,879**	
Other nonmonetary private sector	**1,674**	**1,919**	
Rand-denominated debt	**9,344**	**n.a.**	
Total foreign debt	**32,927**	**n.a.**	
BIS Statistics			
Total claims on:	**16,643**	**19,695**	**20,253**
Nonbanks	7,571	9,664	10,053
Of which: loans and deposits	6,562	7,127	7,119
Banks (residual)	9,072	10,031	10,200
Of which: loans and deposits	9,285	9,663	9,510
Plus:			
Holdings of international securities	**3,800**	**3,600**	**3,600**
Money market instruments	100	100	100
Bonds and notes	3,700	3,500	3,500
Total obligations to BIS reporting banks	**20,443**	**23,295**	**23,853**

Sources: South African Reserve Bank; and Bank for International Settlements, various publications.

272. The *Quarterly Bulletin* includes an annual amortization schedule showing the residual maturity of foreign currency denominated external debt, distinguishing between liabilities on the basis of original maturity and by economic sector of the debtor (Table 22). OECD and BIS data on the maturity structure of South Africa's total external debt appear broadly consistent with the official data (Table 23). Note that while no official data exist on the maturity structure of domestic currency debt, for the purposes of this exercise it has been assumed that emigrants' blocked funds are long-term debt and that all other domestic currency debt is short term.

External debt—public sector

273. The foreign currency external debt of South Africa's public sector was US$8.8 billion at end-June 1997, of which US$1.3 billion is debt remaining under the Final Agreement of the debt standstill. The SARB estimates that, at end-December 1996, nonresidents held around US$7.6 billion in rand-denominated bonds, resulting in total public sector foreign and domestic currency external debt of US$16.4 billion, or about half of total external debt of US$32.9 billion.

274. The public sector also had pre-existing guarantees over US$1 billion of private sector foreign currency external debt at the end of June 1997, although no loan guarantees are currently serviced by government agencies. The authorities have provided staff with an amortization schedule for outstanding government-guaranteed debt which suggests that the bulk of this debt should be amortized within the next three years.

External debt—private sector

Banking sector[11]

275. Data for the banking sector is collected by a complete enumeration of institutions. Data on the domestic banking sector's net external position are collected on a monthly basis. The private banking sector is a net debtor to the rest of the world. At December 31, 1997, short-term foreign assets amounted to US$1.7 billion while liabilities were US$9.7 billion (Table 24).[12] Note that borrowing from nonresident sources by the banking sector, which is

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[11]For a review of the banking system and the regulatory and supervisory framework in South Africa, see Section IV.

[12]Note that this data does not line up exactly with the BIS-reporting-banks data on liabilities of South African banks as part of lending of commercial foreign banks to South Africa is lending to the SARB.

Table 22. Maturity Structure of South Africa's External Debt, by Denomination

(In millions of U.S. dollars)

	Total	Short Term 1/	1997 2/	1998	1999	2000	2001	2002	2003 3/
Total foreign currency denominated debt as at end-June 1997	**23,389**	**9,105**	**1,202**	**2,910**	**2,530**	**1,982**	**1,955**	**539**	**3,166**
Renegotiated debt	**2,589**		**112**	**200**	**759**	**759**	**759**		
Public sector	1,265		55	98	370	371	371		
Monetary sector	229		10	18	67	67	67		
Nonmonetary private sector	1,095		47	84	332	321	321		
Other foreign currency debt	**20,800**	**9,105**	**1,090**	**2,710**	**1,771**	**1,223**	**1,196**	**539**	**3,166**
Bearer bonds and notes	4,177		4	185	767	456	306	200	2,259
Public sector	*3,266*		*4*	*115*	*767*	*456*	*306*		*1,618*
Monetary sector	*270*			*70*				*200*	
Nonmonetary private sector	*641*								*641*
Medium- and long-term loans	1,720		383	597	336	207	82	78	37
Public sector	*430*		*120*	*188*	*77*	*45*			
Monetary sector	*360*		*125*	*141*	*65*	*18*	*9*	*2*	
Nonmonetary private sector	*930*		*138*	*268*	*194*	*144*	*73*	*76*	*37*
Other public sector debt	3,789		440	1,597	346	345	583	109	459
Obligations to the Fund	*640*		*214*	*426*					
Other	*3,239*		*226*	*1,171*	*346*	*345*	*583*	*109*	*459*
Other monetary sector	6,750	6,750							
South African Reserve bank	*398*	*398*							
Other	*6,352*	*6,352*							
Other nonmonetary private sector	4,274	2,355	263	331	322	215	225	152	411
Trade finance									
Other									
Total rand-denominated debt as at end-December 1996	**9,344**								
Bonds	7,564								
Other 4/	1,780								

Source: South African Reserve Bank, *Quarterly Bulletin*, March 1998.

1/ Liabilities with an original maturity of less than one year.
2/ Liabilities with an original maturity of more than one year.
3/ Maturities of the year 2003 and after.
4/ Including blocked and freely transferable funds but excluding equity.

Table 23. Maturity Structure of External Debt

(In millions of U.S. dollars)

	Official 1/	OECD 2/	BIS 3/
Long term	19,217	11,060	
Banks	5,118	9,476	9,642
Nonbanks		700	
Multilateral		883	
Other	14,099 4/		
Short term	13,516		
Banks	10,434	10,153	13,247
Other	3,082 5/	838	
Total	32,733	22,052	22,889

Sources: SARB—*Quarterly Bulletin, March 1998*; BIS—*The Maturity, Sectoral and National Distribution of International Bank Lending, First Half 1997;* OECD, *External Debt Statistics, 1997.*

1/ End-June 1997 foreign currency debt plus end-December 1996 rand-denominated debt. Foreign currency debt is recorded by residual maturity. Domestic currency debt is assumed to be long term in the case of emigrants' blocked funds and short term for bond holdings.

2/ End-December 1996, original maturity.

3/ End-June 1997, original maturity—note that the BIS data is simply debt held by banks.

4/ Includes emigrants' blocked funds.

5/ Includes foreign holdings of rand-denominated bonds.

Table 24. External Assets and Liabilities of the Private Sector 1/

(In billions of U.S. dollars)

	December 31, 1997			
	Rand, billions		US$, billions	
Total assets (claims on nonresidents)		**8.1**		**1.7**
Deposits with and loans to other banks		6.8		1.4
- in rand	1.3		0.3	
- in foreign currencies	5.5		1.1	
Other foreign assets		1.3		
Total liabilities (obligations to nonresidents)		**47.3**		**9.7**
Foreign currency deposits of nonresidents		7.5		1.5
- Short term	2.5		0.5	
- Medium term	3.4		0.7	
- Long term	1.6		0.3	
Foreign currency loans and advances received		23.2		4.8
- Short term	9.4		1.9	
- Medium term	11.0		2.3	
- Long term	2.8		0.6	
Nonresident rand deposits 2/		13.3		2.7
Domestic currency loans and advances received from nonresidents		2.9		0.6
Loans under repurchase agreements from nonresidents		0.1		0.0
Other liabilities to nonresidents		0.2		0.0
Net liabilities of the private banking sector		**-39.2**		**-8.1**
Memorandum items:				
Resident foreign currency deposits		2.1		0.4
Liabilities of foreign branches of domestic banks 3/				27.0

Sources: South African Reserve Bank; and Fund staff estimates.

1/ Excluding equity.
2/ Includes blocked as well as freely transferable rand deposits.
3/ Estimate.

on-lent to the public sector or private sector, is recorded as part of the short-term foreign liabilities of the monetary sector and not as the liabilities of the end-borrower.[13]

276. Although the published statistics on the banking sector do not distinguish foreign-owned from domestically-owned resident banks, the data for individual banks are available on the SARB Internet website.[14] Foreign owned resident banks are primarily subsidiaries and branches of industrial country banks.

277. The foreign exchange exposure of South African resident banks is relatively limited. Prior to January 1998, the combined holdings of foreign exchange of all authorized dealers in foreign exchange was restricted to US$1.5 billion. Although this limit has been removed, prudential restrictions prevent banks from having net open foreign exposure exceeding 15 percent of net qualifying reserves and capital. Banks report their commitments each month, but no distinction is made between resident and nonresident counterparties.

278. The forward market in foreign exchange has grown rapidly since the lifting of sanctions. However, at end-December 1997 the banking sector's position was well matched, with commitments to purchase under forward contracts almost offset by commitments to sell, at all maturities (Table 25). Gross and net put and call currency options also appeared relatively small, although no data are available on the extent of gross margin calls on derivative transactions.

279. The banks are required to mark derivatives to market on a daily basis.[15] Unsettled derivative transactions that comply with the recognition criteria issued by the International Accounting Standards Committee[16] are reflected in the balance sheets of the banks. Risk-based returns are prepared in line with generally accepted accounting principles and these returns are reconciled with the bank's balance sheet and income statements, as well as to their individual management accounts. This treatment follows international practice. Forward transactions remain off-balance sheet until the time of delivery, although the change in the market value of options is included.

280. While South Africa uses a standard residency criterion to determine its external obligations, this does not necessarily capture all facets of a country's vulnerability to short-term capital movements. In particular, the experience in a number of Asian countries suggests

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[13]*Fifth Census*, pages 4–5.

[14]At http://www.resbank.co.za

[15]This also applies to members of the South African Futures Exchange (SAFEX) and professional fund managers.

[16]Contained in "Framework for the Preparation and Presentation of Financial Accounts."

Table 25. Forward Foreign Exchange Commitments of the Banking System at End-December 1997

(In billions of U.S. dollars)

Maturity	0-7 days	8-31 days	32 days-3 months	3-6 months	6-9 months	9-12 months	1-3 years	More than 3 years	Total
Commitments to purchase	15.4	21.2	31.8	26	17.8	7.3	9.1	6.6	135.2
Commitments to sell	14.6	20.8	32.6	24.5	16.2	6.5	9.4	6.6	131.2
Open position	-0.8	-0.4	0.8	-1.5	-1.6	-0.8	0.3	0.0	-4.0

Source: South African Reserve Bank.

that the short-term liabilities of the offshore branches and subsidiaries of domestic banks can be a source of considerable pressure even though they are not formally part of the nation's foreign debt. Gross liabilities of South African controlled banks located abroad is estimated to have been US$27 billion at end-1997. This is likely to overstate total liabilities because of cross claims on parent institutions and banking relationships with other South African residents. Offshore banks also undertake off-balance sheet activities, with the form these activities take and the magnitudes involved required to be reported to the SARB as part of usual supervisory practice.

Nonbank private sector

281. Nonbank private sector debt was about US$6.9 billion, or around one-third of South Africa's total foreign currency external debt, at end-June 1997. Of this, around US$2.8 billion was short term (on a residual maturity basis), and about US$2.4 billion of the latter amount was trade finance.

282. As noted above, the experience of the Asian crisis suggests that there is benefit in looking beyond traditional measures of foreign debt when considering a country's risk exposure.

283. While comprehensive data exist on corporate external-debt exposures, no official data exist on the extent to which these are guaranteed by the banking system. Nor are official data available on the extent to which foreign currency loans have call options that are likely to change their character. Similarly, little data are available on the off-balance sheet operations of the corporate sector. While large firms with dedicated treasury units are likely to mark derivatives to market on a daily basis, no data exist on the magnitude of derivative transactions in the nonbank sector, nor on the treatment adopted by firms in general between financial reporting periods. For reporting dates, the authorities advise that unrealized gains and losses should be included in the firms' income statements.

284. South Africa does not publish data on the liabilities of foreign subsidiaries of nonfinancial private sector firms. However, exchange control regulations require that all firms with offshore branches, subsidiaries, offices or joint ventures, submit financial statements on these operations to the Exchange Control Department (ECD) of the SARB, at least annually. Corporate entities which have subsidiaries abroad may expand such activities without ECD approval provided that expansion is financed by foreign borrowing (with no recourse to, or guarantee from, the parent) or by retained profits, although the parent is required to provide ECD with the proposed plans at an early stage. If the foreign borrowing is to be supported by a guarantee from the parent company, ECD must give prior approval. The application requires that ECD be advised of denomination, amount, interest rate, terms, etc., of the borrowing. Moreover, if the guarantor is subsequently required to service the loan, funds may only be remitted with ECD's prior approval. As a practical matter, this means that ECD has access to data which, if collated, would provide information on the extent to which offshore subsidiaries

of the nonfinancial sector were creating a contingent liability on South Africa. Similarly, given that prior permission is always required before a South African resident can borrow abroad, and loans for any purpose—other than trade—have to indicate whether the loan is guaranteed by a South African resident bank, the ECD potentially has available to it comprehensive data on the extent to which corporate external debt is guaranteed by the banking system. This suggests that use of the data available to the existence ECD could go some way to filling in the remaining gaps in the overall picture of South Africa's external exposure.

D. Conclusions and Recommendations

285. Reserves are unencumbered and rose significantly between the end of 1996 and May 1998. However, as has been the case for some time, the major source of vulnerability for South Africa can be traced to the large NOFP of the Reserve Bank, which amounted to US$17.9 billion at the end of May. The maintenance of a high NOFP requires interest rates to be higher than would otherwise be the case, entails potential quasi-fiscal losses, and risks undermining the credibility of monetary and exchange rate policy.

286. On the basis of available information, South Africa's external debt position appears relatively sound. Total external debt remains moderate as a share of GDP while foreign currency debt has declined to below 20 percent of GDP. Total external debt—both domestic and foreign currency denominated—has remained relatively stable during the 1990s, varying between 22 percent and 26 percent of GDP. However, short-term debt and maturing medium-term debt remain high relative to gross official reserves.

287. Whatever their other costs, the existence of exchange controls on residents (and their associated documentation) have been helpful in allowing the authorities to develop comprehensive and high quality data on foreign liabilities. In discussions with the Fund staff, the authorities noted that the challenge was now to ensure that the quality of data is maintained in the face of further capital control relaxation and eventual removal.

288. The timeliness of data collections offers room for improvement. While data on international reserves are currently published monthly, as required by the SDDS, transparency would be improved by adopting the SDDS's recommendation that data be published on a weekly basis. It would also be desirable, at a minimum, to align the periodicity of collections of rand-denominated debt with that of the semi-annual compilation of foreign currency debt in order to provide a more complete picture of foreign debt obligations. Ideally, the compilation of comprehensive debt statistics would be done on a quarterly basis.

289. The reporting of debt on a residual maturity basis is welcomed, but it would also be worthwhile for the authorities to consider whether it is possible to collect data on contingent liabilities accruing to various sectors of the economy, and on the extent of contingencies (or acceleration clauses) in debt contracts that could allow long-term debt to be converted to short-term debt in the event of financial or exchange pressures.

290. The authorities also acknowledge that existing data have some gaps due to the difficulties in reconciling stocks and flows, the difficulty of valuing intangible nonfinancial assets, and the potential omission of companies with foreign exchange transactions, assets and liabilities from the regular surveys.

291. Finally, it also seems desirable to attempt to periodically integrate available data on the activities of offshore subsidiaries of South African resident financial and nonfinancial enterprises with the existing data on the external obligations of residents to develop a broader measure of foreign exchange exposure. Collecting data on nonresident holdings of South African equities would also help in this regard.

EXCHANGE CONTROLS [17]

Comprehensive exchange controls were introduced in South Africa in 1961 to contain the capital outflows that followed the "Sharpeville massacre." While restrictions on nonresidents were eliminated in the early 1980s, restrictions were maintained on residents because of concerns about the impact on the exchange rate, real estate and stock markets in the event that residents chose to transfer significant funds out of South Africa, although a more liberal attitude prevailed toward approving applications by local firms to borrow and make certain types of investments abroad.

Capital controls were subsequently reimposed in August 1985 in response to a combination of adverse economic developments, an intensification of political pressures, and the imposition of international financial sanctions. Foreign debt had reached an estimated US$23 billion, almost 43 percent of GDP, and South Africa's ability to meet the principal and interest payments falling due was severely curtailed. On August 28, 1985 the authorities declared a debt moratorium ("standstill"). Its initial impact was to freeze all debt repayments but the end-result was a freeze on repayments of private debt to foreign commercial banks under the then existing terms.[18] As a result of negotiations with the major foreign creditors, the maturity structure of the existing debt was lengthened.[19] Around US$2.6 billion of renegotiated debt was still outstanding on June 30, 1997 although this is scheduled to be completely amortized by August 2001.

From 1985, nonresidents were subject to controls, including in the form of a dual exchange rate system. The Commercial Rand was used for foreign trade, authorized capital transfers and current payments including remittance of dividends and interest payments. The Financial Rand was used for financial transactions by nonresidents and outward capital transfers by residents and emigrants. Controls over residents were extensive and covered both capital and current transactions, while emigrants were subject to limits on the amount they could transfer out of South Africa upon departure, with any funds in excess of these limits "blocked" from leaving.

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[17]This section draws on chapter 5, "Capital Liberalization Strategy" of *South Africa—Selected Issues* (SM/97/162, 6/24/97), and Chapter 2, "Historical Background" of the SARB *Exchange Control Manual*. This later document is available on the SARB website at: http://www.resbank.co.za.

[18]There is some public debt included under the standstill due to loans incurred in the name of private banks which were on-lent to public corporations.

[19]A detailed description of the debt standstill is contained in Chapter 6, "The Debt Standstill" of the SARB *Exchange Control Manual*.

This regime of controls remained broadly unchanged until the election of the Government of National Unity in 1994. An important element of the policy framework of the new government was the removal of exchange controls. However, its room for maneuver was restricted by the large size of potential capital outflows if institutional investors were to diversify their portfolio with foreign assets and if emigrants were able to gain access to previously "blocked" funds. These concerns were exacerbated by South Africa's low level of international reserves and the large NOFP.

As a result, the authorities adopted a pragmatic approach to the removal of exchange controls, indicating that they would be phased out as conditions allowed. The first major step occurred in March 1995 with the abolition of the financial rand mechanism and, with it, most of the controls on nonresidents. The net effect of this has been that nonresidents are free to invest anywhere, to introduce and repatriate funds at will, and to hold rand-denominated deposits.

The government has subsequently eased controls on residents, allowing an increasing array of transactions, with each subject to a cap. These caps have been progressively raised over time to the point where for many, mainly current account, transactions they have become nonbinding or have been abolished. However, some form of restrictions still apply to most capital account transactions by residents.

In particular, exchange control regulations require that prior approval be sought for foreign borrowing. As part of the process, applicants must submit information on the purpose, terms and conditions of the loan, including an amortization schedule. While residents have greater freedom to invest abroad or in foreign currency deposits in South Africa, they must also receive prior permission from the ECD (and have status of taxpayer in good standing from the SA Revenue Service) before transferring capital overseas. Firms wishing to invest overseas must support their applications by setting out the benefits to South Africa from the investment. All sales of foreign exchange over R40,000 must, at a minimum, be reported to the ECD, even if this amount is less than the current cap on the transaction being undertaken.

IX. The Southern African Development Community and Other Regional Initiatives

A. Introduction

292. There is growing impetus for regional integration in Southern Africa under the auspices of the Southern African Development Community (SADC). SADC, which comprises 14 members (Table 26), envisages cooperation between members on a wide range of areas, including intra-SADC trade liberalization, exchange and payments system, financial services, infrastructure, investment, human resource development, and sectoral development. The SADC treaty provides for protocols that will set out the principles and procedures for cooperation between member states in each of the areas.

293. The SADC Trade Protocol was signed in August 1996 and aims to create a free trade area (FTA) among member states.[1] It envisages the dismantling of tariff and nontariff barriers between SADC members over an eight-year period. However, South Africa has espoused the principle of asymmetric liberalization, whereby it will reduce its barriers on imports from other SADC countries over a five-year period. The exact modalities of liberalization, namely, the phasing of the tariff and nontariff reductions and the treatment of certain sensitive sectors, will be decided during the course of negotiations scheduled for the second half of 1998, based on initial tariff offers made by SADC member countries.

294. SADC is only one of a number of regional integration initiatives in southern Africa. The others include the Cross-Border Initiative (CBI), the Common Market for Eastern and Southern Africa (COMESA), the Southern African Customs Union (SACU), the Commission for East African Cooperation (EAC), and the Indian Ocean Commission (IOC) (see Table 26). In addition, there are a number of bilateral agreements which provide for selective liberalization such as those between South Africa on the one hand and Zimbabwe, Malawi, and Mozambique on the other.

B. Features of SADC Trade [2]

295. Trade within the SADC region, although small relative to its overall trade, has been rising (Tables 27–29). Between 1990 and 1996, intra-SADC trade as a share of total trade

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[1]As of June 1998, only two members had ratified the Trade Protocol.

[2]Trade data are based on the IMF's Direction of Trade Statistics. Data for South Africa actually correspond to SACU's external trade, providing a better basis for analyzing SADC integration because in reality SADC would involve integration between already integrated members (i.e., those in SACU), and the non-SACU SADC countries. Due to the lack of reliable data, 3 of the 14 SADC members have not been included in the analysis.

Table 26. Summary of Regional Groupings in Southern Africa

SADC	***COMESA***	***SACU***	***CBI***	***EAC***
Angola	Angola			
Botswana		Botswana		
Congo, Dem. Rep. of	Congo, Dem. Rep. Of			
Lesotho	Lesotho	Lesotho		
Malawi	Malawi		Malawi	
Mauritius	Mauritius		Mauritius	
Mozambique	Mozambique			
Namibia	Namibia	Namibia	Namibia	
Seychelles	Seychelles		Seychelles	
South Africa		South Africa		
Swaziland	Swaziland	Swaziland	Swaziland	
Tanzania	Tanzania		Tanzania	Tanzania
Zambia	Zambia		Zambia	
Zimbabwe	Zimbabwe		Zimbabwe	
	Burundi		Burundi	
	Comoros		Comoros	
	Djibouti			
	Ethiopia			
	Eritrea			
	Kenya		Kenya	Kenya
	Madagascar		Madagascar	
	Rwanda		Rwanda	
	Somalia			
	Sudan			
	Uganda		Uganda	Uganda
Internal Liberalization by 2006; no commitment on external liberalization	*Internal trade liberalization by 2000; objective of common external tariffs by unspecified date*		*Internal liberalization and low harmonized external tariffs by end 1998*	*Internal trade liberalization and common external tariffs by 2000*

Table 27: Imports of SADC countries
(in millions of US dollars unless otherwise indicated)

	1990	1991	1992	1993	1994	1995	1996
Angola							
Imp-SADC	13.6	9.4	146.1	92.5	108.7	163.7	191.6
percent of imports from world	0.8	0.5	5.5	6.5	7.6	8.8	10.5
IMP-SACU	-	-	140.8	88.7	96.6	148.7	173.9
percent of imports from world	-	-	5.3	6.2	6.7	8.0	9.5
Malawi							
Imp-SADC	259.4	267.0	331.1	266.3	299.0	346.5	405.4
percent of imports from world	41.4	43.2	45.5	52.2	51.9	56.3	58.2
IMP-SACU	184.1	202.5	276.3	208.1	202.8	223.5	261.5
percent of imports from world	29.4	32.8	38.0	40.8	35.2	36.3	37.5
Mozambique							
Imp-SADC	64.2	42.0	311.9	390.8	507.9	767.1	897.5
percent of imports from world	7.0	5.0	27.1	38.6	48.2	61.1	64.2
IMP-SACU	0.0	0.0	261.6	324.7	435.8	678.5	793.8
percent of imports from world	-	-	22.7	32.1	41.4	54.1	56.8
Mauritius							
Imp-SADC	148.2	192.2	218.4	255.0	236.9	229.0	268.0
percent of imports from world	9.1	12.3	13.4	14.8	12.3	11.6	12.4
IMP-SACU	144.7	186.2	213.4	247.1	228.6	220.0	257.4
percent of imports from world	8.9	12.0	13.1	14.4	11.9	11.1	12.0
Tanzania							
Imp-SADC	13.9	19.5	20.4	33.5	100.3	257.7	301.5
percent of imports from world	1.4	1.6	1.3	2.4	7.1	14.9	17.4
IMP-SACU	3.0	3.3	14.3	24.1	62.0	196.7	230.2
percent of imports from world	0.3	0.3	0.9	1.7	4.4	11.3	13.3
SACU							
Imp-SADC	81.7	177.5	391.4	337.5	449.4	424.2	499.7
percent of imports from world	0.4	0.9	1.9	1.7	1.9	1.4	1.5
Zambia							
Imp-SADC	312.5	248.1	323.3	400.3	246.2	373.9	437.5
percent of imports from world	23.3	27.8	35.1	51.9	49.1	43.5	44.4
IMP-SACU	242.7	190.6	256.3	342.2	180.5	296.7	347.2
percent of imports from world	18.1	21.4	27.8	44.3	36.0	34.5	35.2
Zimbabwe							
Imp-SADC	496.1	618.2	619.1	575.9	806.0	1493.9	1747.9
percent of imports from world	26.8	30.3	28.1	31.8	36.0	55.1	56.7
IMP-SACU	472.8	588.9	585.5	552.6	782.5	1441.8	1686.9
percent of imports from world	25.6	28.8	26.6	30.5	34.9	53.2	54.7
Memorandum Items							
SADC's intra-regional imports	1389.7	1574.0	2361.5	2351.7	2754.2	4056.0	4749.0
percent of imports from world	4.9	5.5	7.6	8.2	8.3	10.0	10.7
percent of GDP	1.0	1.0	1.5	1.6	1.8	2.4	2.8
extra-reg imports	26867.7	26788.9	28708.4	26201.7	30407.1	36454.9	39604.3
percent of GDP	18.6	17.6	18.5	17.3	19.7	21.3	23.7

Source: IMF's Direction of Trade Statistics

Table 28: Exports of SADC Countries
(in millions of US dollars unless otherwise indicated)

	1990	1991	1992	1993	1994	1995	1996
Angola							
Exp.-SADC	0.1	0.0	0.0	0.3	5.0	1.2	1.5
percent of exports to world	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Exp.-SACU	0.0	0.0	0.0	0.3	4.8	1.0	1.1
percent of exports to world	-	-	-	0.0	0.2	0.0	0.0
Malawi							
Exp.-SADC	57.8	44.6	58.2	60.2	68.5	72.8	85.9
percent of exports to world	14.0	9.5	12.1	15.9	16.0	17.1	17.2
Exp.-SACU	30.2	33.3	49.1	51.4	55.2	59.8	70.5
percent of exports to world	7.3	7.1	10.2	13.5	12.9	14.0	14.1
Mozambique							
Exp.-SADC	7.6	13.7	25.8	22.8	35.1	44.2	52.2
percent of exports to world	2.0	3.4	9.3	11.6	15.9	18.3	21.9
Exp.-SACU	4.4	4.9	17.9	18.5	25.9	32.3	38.1
percent of exports to world	1.2	1.2	6.4	9.4	11.8	13.3	16.0
Mauritius							
Exp.-SADC	10.8	8.7	14.7	13.9	9.6	13.3	15.7
percent of exports to world	0.9	0.7	1.1	1.1	0.7	0.9	1.0
Exp.-SACU	7.1	4.9	10.4	6.8	5.0	6.7	7.9
percent of exports to world	0.6	0.4	0.8	0.5	0.4	0.4	0.5
Tanzania							
Exp.-SADC	8.2	10.5	16.7	17.7	13.3	21.6	25.5
percent of exports to world	2.0	2.5	3.4	3.5	2.4	3.0	3.2
Exp.-SACU	0.6	1.3	5.5	8.9	7.1	7.5	8.9
percent of exports to world	0.2	0.3	1.1	1.8	1.3	1.0	1.1
SACU							
Exp.-SADC	401.8	875.7	1692.2	1654.2	1882.2	2935.2	3463.6
percent of exports to world	1.6	3.1	7.1	6.8	7.4	10.4	9.7
Zambia							
Exp.-SADC	26.4	86.8	37.3	29.8	53.5	83.2	98.1
percent of exports to world	4.9	8.1	5.0	3.3	7.1	8.4	9.8
Exp.-SACU	2.2	19.3	8.1	2.0	20.3	22.8	26.9
percent of exports to world	0.4	1.8	1.1	0.2	2.7	2.3	2.7
Zimbabwe							
Exp.-SADC	426.1	354.9	382.1	445.6	604.3	700.0	826.0
percent of exports to world	28.6	27.6	30.4	33.6	30.7	34.2	35.1
Exp.-SACU	222.6	219.4	240.3	268.6	357.5	418.8	494.1
percent of exports to world	14.9	17.0	19.1	20.2	18.1	20.4	21.0
Memorandum Items							
SADC's intra-regional exports	938.8	1394.9	2227.1	2244.7	2671.5	3871.6	4568.4
percent of exports to world	2.9	3.9	7.0	7.1	8.0	10.3	9.8
percent of GDP	0.6	0.9	1.4	1.5	1.7	2.3	2.7
extra-reg exports	31995.1	34353.7	29540.1	29544.9	30873.8	33599.3	42101.2
percent of GDP	22.1	22.5	19.0	19.5	20.0	19.6	25.2

Source: IMF's Direction of Trade Statistics

Table 29: Selected Indicators of SADC Trade
(in millions of US dollars unless otherwise indicated)

	1990	1991	1992	1993	1994	1995	1996
Intra-regional trade	2328.5	2968.9	4588.7	4596.3	5425.7	7927.6	9317.4
percent of GDP	1.6	1.9	3.0	3.0	3.5	4.6	5.6
Extra-regional trade	58862.8	61142.6	58248.5	55746.5	61280.9	70054.2	81705.5
percent of GDP	40.7	40.1	37.5	36.8	39.7	41.0	48.9
Is SADC a natural trading partner of SACU?							
SACU's SADC Imports	81.7	177.5	391.4	337.5	449.4	424.2	499.7
SADC tot. exports	8198.4	7947.1	8093.8	7450.8	8134.1	9260.1	10891.2
SACU's share of SADC exp.	1.0	2.2	4.8	4.5	5.5	4.6	4.6
SACU's GDP	114.2	120.2	128.2	126.0	130.9	144.1	136.2
World GDP (-SADC)	22426.4	23549.4	23446.4	23935.8	25903.3	28753.9	29516.2
SACU's share of world GDP	0.5	0.5	0.5	0.5	0.5	0.5	0.5
SUMMERS INDEX	2.0	4.4	8.8	8.6	10.9	9.1	9.9
Is SACU a natural trading partner of SADC?							
SADC's IMP. from SACU	1308.0	1396.5	1970.2	2014.2	2304.9	3631.9	4249.3
SACU's tot. exports	24735.6	27801.4	23673.5	24338.8	25411.2	28210.8	35778.5
SADC's share of SACU's exp.	5.3	5.0	8.3	8.3	9.1	12.9	11.9
SADC's GDP	30.3	32.5	27.0	25.5	23.3	27.0	30.8
World GDP(-SACU)	22342.5	23461.7	23345.3	23835.3	25795.7	28636.7	29410.8
SADC's share of world GDP	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SUMMERS INDEX	39.0	36.3	72.0	77.5	100.6	136.8	113.5

Sources: IMF's Direction of Trade Statistics and World Economic Outlook

increased from 4 percent to 10 percent, and as a share of GDP from 2 percent to 6 percent.[3] For Africa as a whole, intra-trade represents 8 percent of total trade and 3 percent of GDP. Thus, there appears to be some nascent dynamism to SADC trade even in the absence of preferential arrangements.

296. Four features are noteworthy about intra-SADC trade in 1996. First, non-SACU SADC countries in aggregate rely to a great degree on SADC, and on SACU in particular (which is dominated by South Africa), for their imports, but to a lesser degree on SADC as a market for their exports (see Tables 27 and 28). Second, there is greater variation between these countries in terms of the importance of SADC as a source of their imports than as a destination for exports. Third, in absolute and proportional terms, SACU exports more to SADC countries than it imports from them, thereby running a large trade surplus on intra-SADC trade (in contrast, all other countries register a deficit on such trade). Fourth, for SADC as a whole, its dependence on the region for imports matches the importance of SADC as a market for exports (i.e., the share of intra-SADC imports in SADC's total imports (about 11 percent) is roughly the same as the share of intra-SADC exports in SADC's total exports).

297. On the import side, Malawi, Mozambique, Zambia, and Zimbabwe exhibited a high degree of reliance on the region for their overall imports in 1996, from 44 percent in the case of Zambia to 64 percent in the case of Mozambique, compared with a figure of about 11 percent for the region as a whole. These figures themselves mask the disproportionate importance of SACU for supplying the SADC countries. For all non-SACU countries, SACU supplied between 65 percent (Malawi) and 97 percent (Zimbabwe) of all imports from SADC countries. A very small proportion of the imports of Tanzania, Mauritius, and Angola (between 10 and 17 percent) originate within SADC. SACU sources an even smaller proportion of its imports (1.5 percent) from other SADC members.

298. On the export side, SADC represents an important export market for Zimbabwe (and to a lesser extent for Mozambique and Malawi). For other non-SACU countries, SADC accounts for less than 10 percent of each country's exports. For most countries, it is actually SACU that absorbs the bulk of goods exported to the SADC region (82 percent in the case of Malawi, 60 percent in the case of Zimbabwe, and 50 percent for Mauritius). SACU exports close to 10 percent of its total exports to the region.

C. The Welfare Economics of SADC

299. The static gains and losses from preferential trade liberalization are well-known (Viner 1950). When preferential liberalization leads to inefficient domestic production being replaced by efficient production in the partner country, there is a gain (to constituents and to the

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[3]Some of this increase could reflect increased recording of South Africa's trade consequent upon the dismantling of sanctions.

arrangement as a whole) in welfare; conversely, when efficient production from the third country is substituted by inefficient production in the partner country there is a loss in welfare. On balance, either of these effects could dominate, and the assessment of net benefits is ultimately an empirical one. The discussion below elaborates on the likely effects in the case of SADC.

300. Summers (1991) and Krugman (1992) have forcefully argued that there is a presumption that countries that are natural trading partners—defined as when two countries trade more with each other than suggested by their underlying income—will benefit when they enter into an FTA. Further, countries that are geographically close or contiguous should, *ceteris paribus*, be natural trading partners given the lower transportation costs. A crude, albeit indicative, index proposed by these authors for gauging natural trading relationships is to compare actual trading patterns with "geographically neutral" trade, in which country A's share of B's exports is equal to A's share of gross world product. If the index is greater than 1, A is a natural trading partner because B is exporting more to A than is suggested by A's share of world income.

301. Table 29 contains calculations for this index for the SADC region. Surprisingly, the relevant indices all exceed one by a large margin, suggesting natural trading relationships within the region. Two inferences may be tentatively drawn from Table 29. First, that SADC countries' trade links are intensifying as manifested in the rising value of the index. Second, and as suggested by the trade numbers presented above, the relationship between SADC and SACU is asymmetric; while SACU may be a natural trading partner for non-SACU SADC countries, the converse may be less true.

302. More recent theoretical work (Bhagwati and Panagariya (1996)) casts considerable doubt on the natural trading partner hypothesis, enough to even reverse its basic conclusions. This work shows that the more two countries are natural trading partners, in the sense of trading a lot with each other, prior to the formation of an FTA, the greater the likely loss from the FTA because of the large adverse impact on fiscal revenues, including from diverted imports (which is not compensated by reduced prices and higher consumer surplus). The second important conclusion is that the more a trading partner is an inefficient supplier, compared with third countries, the greater the likelihood that an FTA with that partner will be welfare-deteriorating because of inefficient trade diversion (see the Appendix for an analytical elaboration of these propositions).

303. These results have strong implications for SADC countries. For non-SACU countries that import a large proportion of their total imports from within the region, an FTA is likely to lead to substantial revenue losses, not only on the initial volume of imports but also the newly diverted imports. These countries will therefore need to enhance their domestic tax base to offset these losses. Second, insofar as South Africa, which is the predominant partner within SADC, is an inefficient supplier relative to third countries, non-SACU countries as well as SADC as a whole stand to lose from the FTA. The enhancement of South African efficiency thus holds the key to ensuring that SADC is a welfare-enhancing proposition for SADC.

Although South Africa's imports from SADC are very small, it would stand to gain from an FTA in those labor-intensive products (such as textiles, clothing and footwear), which are currently heavily protected, because partner countries are likely to be relatively efficient suppliers of these products.

D. Revenue Dependence

304. In the latest year for which data are available, trade taxes accounted for between 3 percent of total government revenue in South Africa to about 40 percent for Malawi and Mauritius, with the average at about 20 percent (see below). Countries with high reliance on trade taxes are of course at greater risk from weakening their fiscal position, absent corresponding fiscal reforms to strengthen the domestic tax base. While the overall reliance on trade taxes tends to be high in SADC countries (with the exception of South Africa and Botswana), the actual collections from intra-SADC imports are not high, varying from 2 percent in the case of Tanzania to about 5 percent for Malawi, Mozambique, Zambia, and Zimbabwe. SACU countries collect less than 1 percent of their import revenues from SADC trade. It should be noted, however, that these numbers are pre-SADC numbers and understate the likely adverse impact of the FTA because they ignore the marginal response which, ceteris paribus, is likely to lead to a greater proportion of imports being sourced from within SADC, exacerbating the revenue loss.[4]

Importance of Trade Taxes for SADC Countries
(In percent)

Country	Share of trade taxes in total revenue	Share of taxes on SADC imports in recurrent government revenue (1995)
Angola	4.6	n.a.
Botswana	8.4	n.a.
Lesotho	24.6	n.a.
Malawi	38.8	5.1
Mauritius	38.8	5.0
Mozambique	27.0	5.1
Namibia	15.2	n.a.
South Africa	2.8	n.a.
Swaziland	30.3	n.a.
Tanzania	16.0	2.0
Zambia	16.4	5.0
Zimbabwe	18.6	5.9

Sources: Fund staff estimates; and IMANI (1997)

[4]In these circumstances, it will be very important that SADC countries that are heavily dependent on revenue from trade taxation undertake steps to strengthen their domestic tax bases to compensate for the likely revenue losses from SADC.

E. The Challenges of SADC

Need for external liberalization

305. Regional trading arrangements can be beneficial in promoting efficiency and growth. However, to do so they must minimize the risks of inefficient trade diversion. Some principles that will help achieve this are: first, FTAs should be comprehensive in their scope, applying to virtually all trade between partners without carve-outs for special sectors or products; second, transition periods for the phase-in should be reasonably short; and most importantly, regional liberalization should be accompanied by external liberalization.[5] In a recent empirical study, Vamvakidis (1998) demonstrates that economies grew faster after nondiscriminatory liberalization, but slower after participation in an FTA. Economies also had higher investment ratios to GDP after nondiscriminatory liberalization but lower ratios after joining an FTA. As noted above, one of the biggest challenges facing SADC is to ensure that preferential liberalization does not lead to inefficient trade diversion, a real possibility if barriers to external trade are not considerably and simultaneously reduced. At this stage, SADC does not contemplate external liberalization.

Multiplicity of regional initiatives

306. SADC is only one of a number of preferential regional initiatives that are proliferating in the region with overlapping memberships (see Table 26), conflicting objectives and time schedules.[6] For example, the Cross-Border initiative (CBI), unlike SADC envisages the elimination of barriers to intra-CBI trade and the liberalization of external barriers by October 1998.[7] The Common Market for Eastern and Southern Africa (COMESA) envisages the liberalization of intra-trade barriers by 2000 and is working toward the objective of a common external tariff by an, as yet, unspecified date. The Commission for East African Cooperation (EAC) foresees internal and external liberalization by 2000. Adding to the multiplicity will be the FTA between the European Union and South Africa that is currently being negotiated.

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[5]Other principles include the need for rules of accession to FTAs and rules of origin to be simple and transparent.

[6]In addition, overlapping initiatives lead to costly duplication of administrative resources and, by utilizing scarce political and human capital, create the risk that the reform momentum for any one initiative or for multilateral liberalization will be dissipated.

[7]The CBI envisages that member countries would adopt, by October 1998, a tariff structure comprising no more than three (non-zero rates) rates, with a maximum tariff (including all import-specific charges) of 20-25 percent and a trade-weighted average of no more than 15 percent. While some members may have already achieved these targets, or close to doing so, others have still some way to go.

307. This multiplicity poses a number of questions that need to be addressed relatively soon, given the schedules of some of these initiatives. Could SADC members treat non-members better under new or existing arrangements? For example, if South Africa enters into an FTA with the European Union, can it give better treatment to the EU than to its SADC partners? How will rules-of-origin be designed in the context of this multiplicity? Is there the capacity to monitor such rules? If the external tariffs are different for SADC and CBI, there will be scope for trade deflection (or transhipment) through countries that are participants in both. Customs officials will not only have to distinguish between goods originating in SADC and say the EU, but also between goods originating in SADC and CBI countries.[8] If two countries are members of both CBI and SADC, will they be obliged to reduce internal barriers in accordance with the slower schedule of SADC or the faster schedule of CBI? In either case, there will be a different pace of liberalization among countries within a regional grouping, creating the need for rules-of-origin even during the transition period.

The impact of an FTA between South Africa and the EU on SADC members

308. An agreement between South Africa and the European Union (EU) is likely to have a number of effects on SADC member countries. For non-SACU SADC countries, there is likely to be a loss of export competitiveness in the EU markets because it would erode the value of the preferential access (relative to South African exports) that they currently receive in the EU agreement as a result of the Lomé agreement.[9] This loss relates not only to trade but the potential reduction in investment that had located in these countries to benefit from the benefits granted under the Lomé agreement. In addition, it would erode the value of the preferential access (relative to European exports) that will be conferred on these countries in the South African market by SADC. Offsetting these losses will be the gains to the region and to the non-SACU SADC countries deriving from the increased efficiency that the FTA with

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[8]The problem of appropriate rules of origin will arise not only when there are overlapping memberships but also within a regional grouping such as CBI. The reason is that, although all CBI members are in principle committed to the same tariff structure, that common structure does not apply on a product-by-product basis; thus, the problem arises because CBI is not envisaged to be a customs union with a common external tariff.

[9]The loss of competitiveness in the EU market need not be large because about ¾ of South Africa's exports already enjoy duty free access in the EU market under the Generalized System of Preference scheme.

the EU will induce in South Africa.[10] As noted above, this increased efficiency is necessary for these countries to benefit from SADC.[11]

F. Conclusions

309. SADC is one of a number of initiatives in the southern African region. A number of questions arise from the multiplicity of initiatives, involving overlapping memberships, conflicting objectives, varied schedules for liberalization, and disparate sets of exclusions from liberalization. Steps need to be taken by SADC member countries (and by COMESA and the EAC) to rationalize these initiatives and make them mutually consistent; in this context, and in view of the benefits of more broad-based liberalization, they should strive toward achieving the external liberalization objectives of CBI.

310. SADC is more likely to be beneficial for countries other than South Africa and for the region as a whole, the more efficient is South Africa and the more the FTA is combined with liberalization of external trade barriers. This underscores the need for the region, and especially South Africa, to improve its efficiency levels, through more ambitious structural reform. SADC may prove to be welfare-enhancing for South Africa in those sectors such as textiles, clothing, and footwear, where regional partners such as Zimbabwe and Zambia are efficient suppliers. This benefit underlines the need for South Africa to avoid exclusions of the so-called sensitive sectors from SADC, thereby providing increased access for exports of regional partners.

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[10]This too is subject to the caveat that the FTA with the EU should not lead to inefficient trade diversion away from efficient suppliers.

[11]For SACU members (other than South Africa), in addition to the effects noted above, the FTA with the EU is likely to reduce fiscal revenue, and therefore there they will need to take offsetting steps to enhance the domestic tax base. For countries such as Swaziland and Botswana, a key factor determining the impact of the EU agreement will be the status of the preferential access granted to these countries by the EU (under special protocols) for certain products such as sugar and beef. There need not be a significant adverse impact in the EU market if such access is maintained.

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Two Impacts of an FTA with Reference to SADC

This appendix highlights two likely impacts of the formation of an FTA among SADC countries. First, the more SADC countries import from each other, the greater the welfare loss from the FTA. Second, the more efficient the trading partner relative to the rest of the world, the more likely the welfare gain to countries and to the region as a whole.

Let us assume that Malawi is planning to integrate preferentially with South Africa (SA) under SADC. In Figure 22, MM represents the import demand curve for a product imported by Malawi. The supply curve of the product available from South Africa, the potential partner, is EE. Supply from the rest of the world (ROW) is assumed to be perfectly elastic and represented by HR.

Under a nondiscriminatory tariff at rate t per unit, supplies from SA and ROW as perceived by the consumer in Malawi are given by $E^t E^t$ and GB, respectively. Total imports into Malawi equal OQ_3 of which OQ_1 comes from SA and $Q_1 Q_3$ from ROW. Malawi collects tariff revenue equivalent to rectangle GHNS. The welfare gains to Malawi equal the tariff revenue (GHNS) and the consumer surplus equal to KGS. The welfare gain to SA is the area HDU, which is the producer surplus for South African exporters.

Suppose that Malawi integrates with SA by eliminating the tariff on SA's supplies but retaining it on those from ROW. Imports from SA increase to OQ_2 and those from ROW decline to $Q_2 Q_3$. The welfare consequences for Malawi are that its consumer surplus gains remain unchanged[12] because the domestic price continues to be determined by supplies from ROW which still faces a tariff t; but its revenues have now declined (to the area FLSN) because no tariffs are applied to imports from South Africa (the revenue loss is the sum of the loss on Malawi's initial level of imports from South Africa (OQ_1) and the newly diverted imports (Q_1Q_2). This leads to the first proposition that the greater the level of initial trade between Malawi and SA, the greater the revenue loss. The gain to SA from the FTA is the area GFUH, which is the increase in producer surplus to South African exporters. However, SADC as a whole loses (by an amount represented by the area FLU) because the gains to SA are less than the loss to Malawi.

Suppose instead that South Africa is a more efficient supplier than ROW. This case is shown in Figure 23 below, where the perfectly elastic supply now represents SA's supply schedule. With a nondiscriminatory tariff, the welfare gains to Malawi are the same as above. However, in the case of an FTA, the welfare consequences are different. The welfare gains to Malawi comprise (i) the increased consumer surplus (equal to RSN plus GHNS), which arises because the consumer price in Malawi has dropped by the full extent of the tariff; (ii) less the tariff revenue losses on imports from South Africa (WNSJ); the latter are outweighed by the

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[12]All comparisons are relative to the situation under the nondiscriminatory tariff.

former, and total welfare increases (by the areas RSN+HWYZ). This establishes the second proposition that the more efficient the partner country, the more likely the gains from an FTA. In this case, it is also true that the FTA as a whole also gains (equivalent to the gains to Malawi) because there are no losses to South Africa.

Of course, it is also true that in both situations considered above, nondiscriminatory tariff reduction is superior to an FTA and remains the first-best policy option.

Figure 22. Welfare Calculus of an FTA When Partner Country is Less Efficient than ROW

Country	Nondiscriminatory tariff	FTA
Malawi	KGS+GHNS	KGS+GHNS-GFLH (Malawi loses)
South Africa	HDU	HDU+(GFLH-FLU) = GFUH (South Africa gains)
SADC (Malawi + South Africa)	KGS+GHNS+HDU	KGS+GHNS+HDU-FLU (SADC loses)

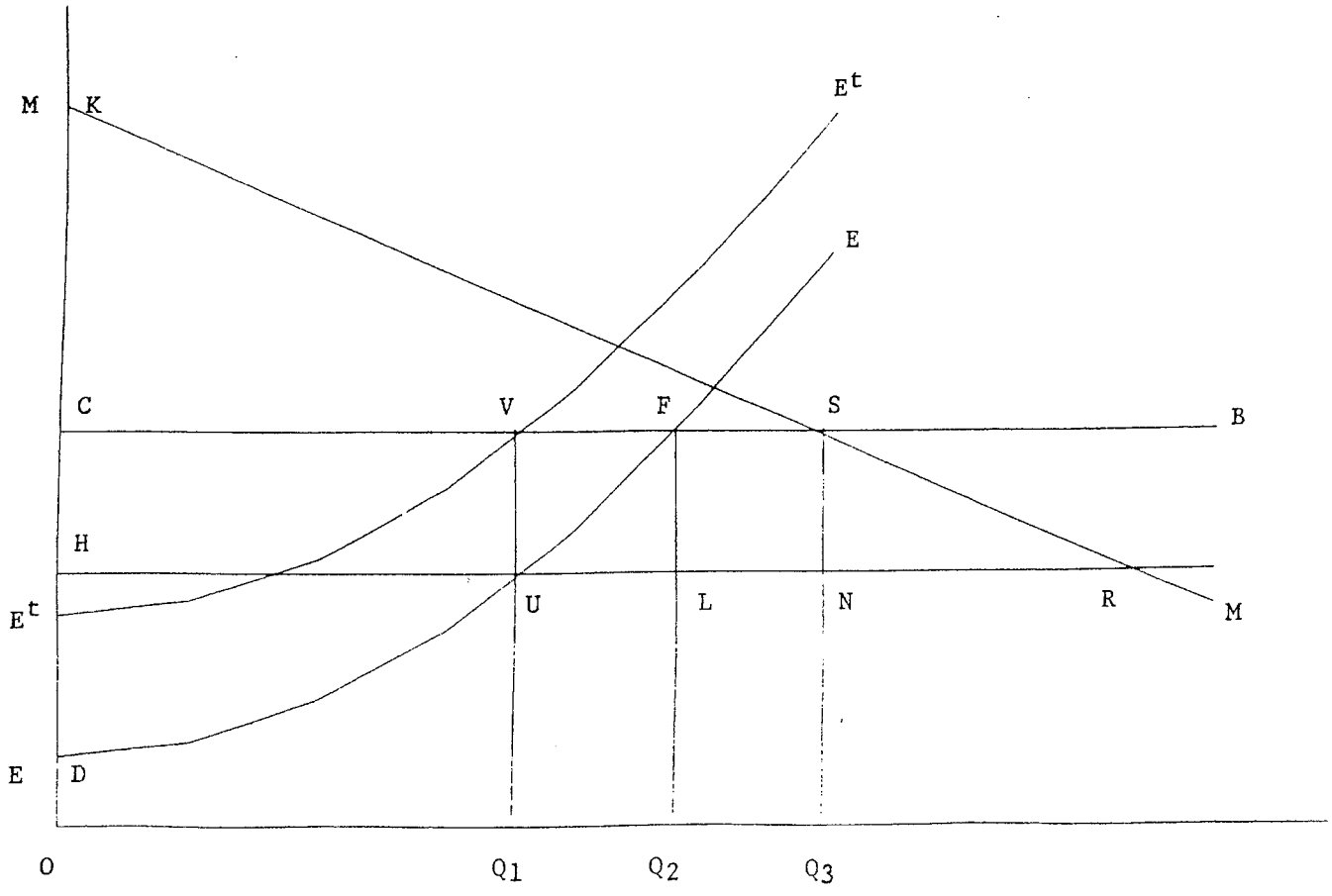
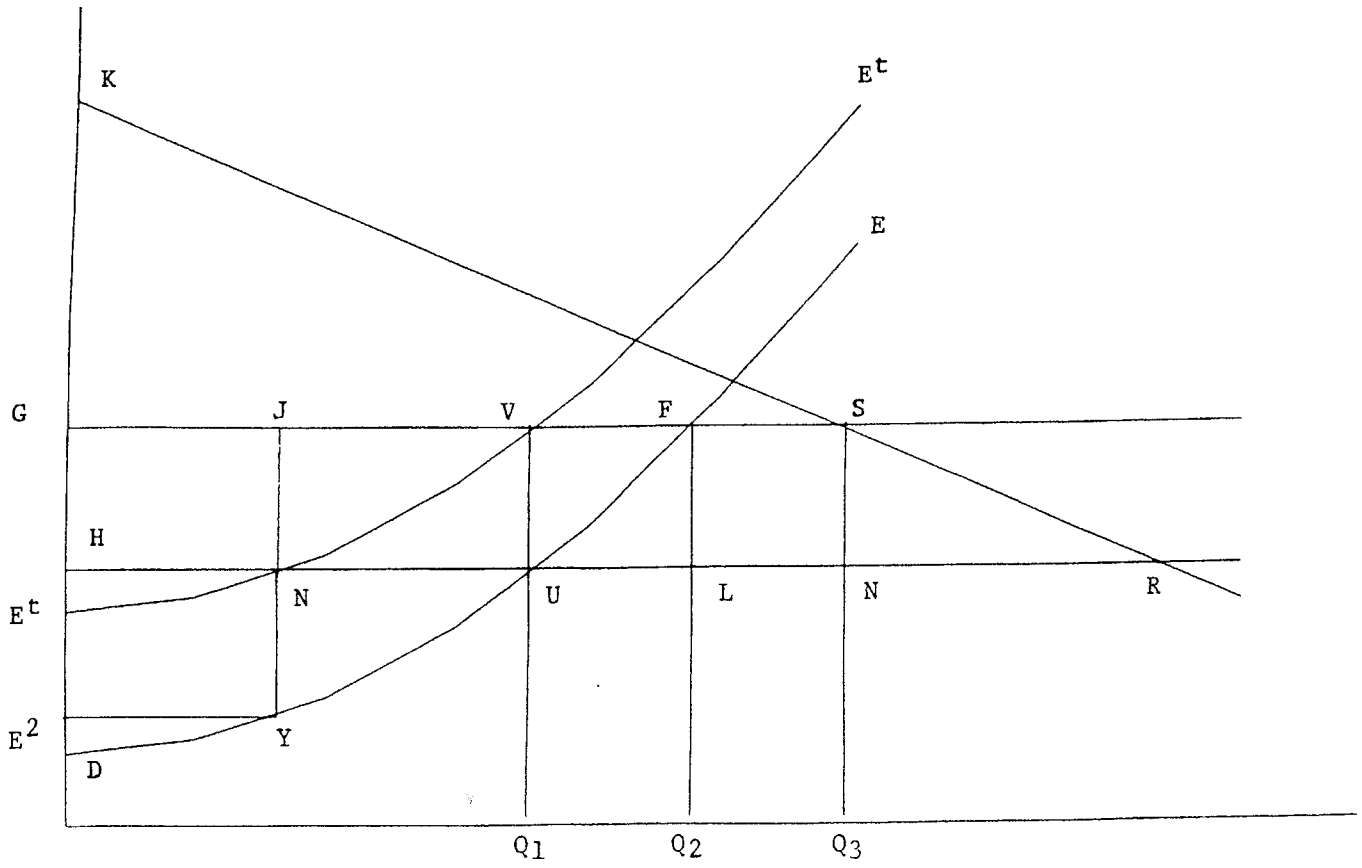


Figure 23. Welfare Calculus of an FTA When Partner Country is More Efficient than ROW

Country	Nondiscriminatory tariff	FTA
Malawi	KGS+GHNS	KGS+GHNS+RSN+HWYZ (Malawi gains)
South Africa	0	0 (No change to South Africa)
SADC (Malawi + South Africa)	KGS+GHNS	KGS+GHNS+RSN+HWYZ (SADC gains)



South Africa: Tax Summary as of April 1, 1998

(All amounts in South African rand)

Tax	Nature of Tax	Exemptions and Deductions	Rates
1. Taxes on income, profits, and capital gains			
1.1. Individual income tax Income Tax Act No. 58 of 1962 as amended	Central government tax charged on taxable income received by or accrued to a person from any source within or deemed to be within South Africa. Taxable income is assessed as gross income less exemptions and deductions. Receipts or accruals of a capital nature are generally excluded from gross income. Gains derived from asset transactions deemed to be made with the purpose of making a profit are included in gross income. Wage and salary earners are subject to withholding tax at source (PAYE) and may have to submit income tax returns at the end of the tax year. Persons whose income consists almost entirely of remuneration and of which the amount, after some deductions, does not exceed R 60,000 are subject to Standard Income Tax on Employees (SITE) under the PAYE system; SITE payers are not required to submit income tax returns. In the case of other individuals, tax is levied on taxable income in the tax year; provisional payments are effected in two half yearly installments. Certain provisional taxpayers may make a third "topping up" payment seven months after the end of their tax year. The tax year runs from the first day of March to the last day of February.	Exemptions include (i) the first R 2,000 of any taxable interest; (ii) dividends, excluding dividends paid by fixed property companies or unit portfolios; (iii) benefits payable under the Unemployment Insurance Act, and (iv) leave gratuities on retirement/retrenchment up to R 30,000. Deductions are allowed for (i) annual contributions to pension and retirement funds (the greater of R 1,750 or 7½ percent of pensionable income); (ii) retirement annuity fund contributions (the greater of R 1,750 or R 3,500 less allowable pension contributions or 15 percent of nonpensionable income), (iii) medical expenses (with deduction ceilings depending on age); and (iv) donations to certain educational institutions.	A single rate structure applies to all natural persons. The following rebates must be deducted from the normal tax determined on taxable income: Primary rebate: R 3,515. Additional rebate: R 2,660 (persons 65 years and older). Tax is calculated on the taxable income of any natural person under 65 years of age in accordance with the table below: Taxable Annual Income (In rand) / Marginal Tax Rates (In percent) / Average Tax Rates (In percent) 0- 18,500 — 0 — 0 18,501- 31,000 — 19 — 3.8 31,001- 46,000 — 30 — 11.3 46,001- 60,000 — 39 — 17.8 60,001- 70,000 — 43 — 22.2 70,001-120,000 — 44 — 28.0 120,001+ — 45 — – A separate rate structure applies to trusts.

(All amounts in South African rand)

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.2. Corporate taxes Income tax act No. 58 of 1962 as amended	Corporate income tax is a central government tax levied on the taxable income derived by all companies (whether local or foreign) from a source within South Africa. Taxable income is defined as gross income, other than capital receipts and exempt income, less allowable deductions and loss offsets. The tax year of assessment is the accounting year. Companies with taxable income in excess of R 20,000 are required to make three provisional tax payments in respect of each year of assessment, viz. the first within six months after the commencement of the year of assessment, the second at the end of such year, and the third within a period of seven months from the close of such year for companies with a February year end. In all other cases the third payment will be due within six months after the close of the tax year. Comprehensive agreements for the avoidance of double taxation on the same income are in force with 34 countries. Limited agreements for the avoidance of double taxation on profits derived from sea or air transport are also in force with six countries. Gold mining companies are subject to special tax provisions.	Deductions include normal operating costs, interest, and depreciation allowances but exclude dividends and capital expenditures. Depreciation allowances of non-mining companies vary according to type of asset, life expectancy, and intensity of use of assets. Generally, the straight-line method is used. Plant and machinery used in a process of manufacture, including aircraft and ships used by a taxpayer in the carrying on of his trade, may be written off on a straight line basis over five years. An initial allowance of 10 percent in respect of certain housing projects is also allowable. Farming machinery may be written off at 50 percent, 30 percent, and 20 percent over three years. A tax holiday scheme is in place for a period up to siix years depending on the number of components certified by the Regional Industrial Development Board. An assessed loss can be carried forward indefinitely but cannot be carried backward. Capital expenditures by all types of mines are allowable as a deduction from income in the year of assessment in which they are incurred, limited, however, to the annual mining working profit. Unredeemed balance ranks for redemption against future mining working profit. Cost of land, mineral rights, mining rights, servitude, etc., are not deductible.	a. Nongold mining companies: 35 percent of taxable income derived within South Africa. b. Gold mining companies: Formula-based tax rate according to: (a) Where the company is not exempt from the secondary tax on companies (STC): $y = 43 - (215 \div x)$ or (b) where the company is exempt from the STC: $y = 51 - (255 \div x)$ In the formula y is the tax rate and x is the profit-to-revenue ratio. c. Oil extraction companies: 61 percent. d. Long-term insurance companies: If taxable income is determined under Section 28, 45 percent. If taxable income is determined under Section 29, 35 percent in respect to income derived from company policies and 30 percent in respect of income derived from policies held by individuals. Income of pension and retirement funds: The net rental gross interest of pension, provident, and retirement annuity funds are taxed at a rate of 25 percent. Dividend payments received by the funds from unit trust schemes are also subject to the 25 percent tax.
1.3. Secondary tax on companies (STC) Income Tax Act No. 58 of 1962 as amended	A central government tax payable on the net amount of dividends, that is, the excess of dividends declared by the company over dividends accrued to the company during a dividend cycle.	Exemptions include *inter alia* 1. Dividend payments of fixed property companies as defined in section 1 of the Unit Trust Control Act portfolios. These dividends are taxed in the hands of the recipient. 2. Dividends in specie in relation to approved unbundling transactions are also exempt from STC. 3. Dividends paid out by subsidiary companies to their holding company.	12½ percent on dividends declared on or after March 14, 1996.

South Africa: Tax Summary as of April 1, 1998

(All amounts in South African rand)

Tax	Nature of Tax	Exemptions and Deductions	Rates
2. Social security contributions			
2.1. Unemployment insurance contributions	A contribution collected by unemployment insurance funds.	Not payable for employees earning more than R 63,648 per year. Also excluded from unemployment insurance are domestic servants, homeworkers, and temporary workers who are employed for less than eight hours or less than one full working day in any calendar year.	Employee and employer contributions of 1.0 percent of insured's earnings.
2.2. Work injury insurance contributions	A compulsory insurance scheme.	Not payable by employees earning more than R 55,068 per year. Also excluded are domestic servants and casual workers.	Insurance premia vary with risk.
3. Taxes on payroll and workforce			
3.1. Payroll tax Regional Service Councils Act No.109 of 1985 KwaZulu and Natal Joint Services Act No. 84 of 1990	A tax levied by District and Joint Services Councils.	A tax levied by the Councils on remuneration paid by employer. Some Councils grant discounts of 15 percent, 20 percent, or 25 percent to farming enterprises.	Ranges from 0.2 percent to 0.38 percent depending on Council.
4. Taxes on property			
4.1. Property tax	A local tax payable on the capital value of land and improvements.	Method of valuation and rates differ across local governments. Rebates of up to 40 percent are provided for different classes of property.	Rates differ across local governments and depend on valuation methods.
4.2. Estate duty Estate Duty Act No. 45 of 1955	A central government tax payable on the estate of an individual. Property includes life insurance proceeds and lump-sum benefits received from pension or provident fund benefits.	Deductions include funeral and estate administration expenses, as well as outstanding debts of deceased. A single deduction of R 1,000,000 is applicable.	25 percent in respect of natural persons who died on or after March 14, 1996
4.3. Donations tax Income Tax Act No. 58 of 1962	A central government tax payable by the donor on the cumulative value of property donated by residents.	Donations by public companies and donations to charitable, educational, or ecclesiastical institutions are exempt. Annual exemption limits of R 5,000 and R 25,000 apply for legal and natural persons, respectively.	25 percent.
4.4. Transfer duty Transfer Duty Act No. 40 of 1949	A tax payable on the purchase consideration of fair value (whichever is the greater) of transfers of immovable property.	Exemption limits of R 24,000 for unimproved property and R 60,000 for property with dwelling.	For natural persons, 1 percent on the first R 60,000 plus 5 percent on the value in excess of R 60,000 but under R 250,000 plus 8 percent on amount in excess of R 250,000. For other persons, 10 percent of total value of property.

(All amounts in South African rand)

Tax	Nature of Tax	Exemptions and Deductions	Rates
4.5. Marketable securities tax Marketable Securities Tax Act No. 32 of 1948	A tax payable on the purchase of marketable securities by a stockbroker on behalf of any person.		0.25 percent.
5. Domestic taxes on goods and services			
5.1. Value-added tax (VAT) Value-Added Tax Act No. 89 of 1991.	A central government tax levied on the supply of goods and services. VAT is collected at single rate, is consumption-type (allows full and immediate tax credit on capital goods), is based on destination principle (exports are zero-rated and imports are taxed), and uses an invoice-based credit method (VAT is calculated on sales and purchases separately, and tax is paid on difference between VAT on sales and VAT on purchases adequately supported by invoices.)	Main zero-ratings include (i) exports except of alcoholic beverages and tobacco products by traders from neighboring countries; (ii) several unprocessed food items including brown bread, maize meal, milk, eggs, fruit, and vegetables; (iii) petrol and diesel; (iv) several agricultural inputs including seeds, feed, and fertilizers; and (v) international transport services. Main exemptions include: (i) a limited number of financial services (mainly interest); (ii) residential rents; (iii) passenger transport; and (iv) educational services.	14 percent.
5.2. Turnover tax Regional Service Councils Act No. 109 of 1985 KwaZulu and Natal Joint Services Act No. 84 of 1990	A tax on turnover levied by District and Joint Service Councils.	Exemptions: (i) religious, charitable and educational institutions; (ii) nonprofit organizations engaged in nature conservation or animal protection; (iii) amateur sport clubs; and (iv) letting of accommodation to employees.	Ranges from 0.1 to 0.2 percent.

(All amounts in South African rand)

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.3. Excise duties Customs and Excise Act No. 91 of 1964 as amended	Central government taxes payable by the manufacturer or importer of certain commodities. Most are specific, though some ad valorem rates exist.	A rebate is granted on dutiable goods that are used by government, provincial administrations, diplomatic representatives, etc., and on taxable goods used by producers in the manufacture of taxable goods for industrial or commercial purposes.	Beer (excluding sorghum beer): 76.0-123.9 cents per liter depending on alcohol content. Sorghum beer: 7.45 cents per liter. Sorghum powder: 33 cents per kilogram. Unfortified wine: 61 cents per liter. Fortified wine: 138.0 cents per liter. Sparkling wine: 169 cents per liter. Spirits: 2,700 cents per liter absolute alcohol. Other fermented drinks: 100-216 cents per liter depending on the type. Cold drinks and mineral water: 14.83 cents per liter. Cigarettes: 102 cents per 10 cigarettes. Cigarette tobacco: 128 cents per 50 grams. Pipe tobacco: 938 cents per kilogram. Cigars: 868 cents per kilogram. Petrol: 3.909 cents per liter. Diesel: 3.817 cents per liter. Ad valorem rates reduced from 15 percent to 10 percent: essential oils; perfumes and toilet waters; beauty makeup preparations; preparations for the use on the hair; shaving or bath preparations; photographic plates and film, articles of apparel and fur skin; microphones and stands; turntables, record-players and cassette-players; magnetic tape recorders; video recording or reproducing apparatus; prepared unrecorded media for sound; records, tapes, and other recorded media; reception apparatus for radio-telephony; motorcycles (capacity equal to or exceeding 800cm^3); lenses, prisma, mirrors, and other optical elements; spectacles, goggles, and the like; binoculars, monoculars, etc.; photographic cameras; cinematographic cameras and projectors; image projectors; and wrist watches, pocket watches, and other watches. Rates reduced from 7.5 percent to 5 percent: motorcycles (capacity less than 800cm^3). Rates reduced from 6 percent to 5 percent: computers, printers, modems, and other office machines.

(All amounts in South African rand)

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.3. Excise duties (continued)			Additional goods with rates raised from 0 percent to 10 percent: air conditioners, wall/window types, self contained; cordless telephone sets; cell phones; video cameras for noncommercial application; caravans; yachts, boats, sailboats, motorboats, and jetskis; alloy wheels; and dishwashers (domestic).
5.4. Fuel levy Customs and Excise Act No. 91 of 1964 as amended	A central government levy on the sale of petrol, diesel, and kerosene mixtures.		Petrol: 80.4 cents per liter (unleaded); 86.6 cents per liter (leaded). Diesel: 76.1 cents per liter; distillate fuels and mixture of kerosene with lubricity agents: 76.1 cents per liter.
5.5. Motor vehicle taxes Customs and Excise Act No. 91 of 1964 as amended	A tax levied on the value of imported components used in the manufacture of duty payable motor cars, station wagons and similar dual purpose motor vehicles, excluding heavy duty motor vehicles and motorcycles.	(1) A Customs driven program in terms of which the Customs value of components imported for the manufacture of motor vehicles are liable to customs duty. Provision is made that the value of the imported components can be reduced by a duty free allowance as well as the value of imported rebate credit certificates. Customs duty is only payable on the remaining customs value.	49 percent with an annual reduction of 3 percent until it reaches 30 percent.
		(2) Ad valorem Customs and Excise duty which is applicable to imported as well as locally produced motor vehicles. Items (1) and (2) are applicable to motor cars, motor vehicles for the transport of ten or more persons of a vehicle mass not exceeding 1,600 kg., motor vehicles for the transport of goods of a vehicle mass not exceed 2,000 kg., or a GVM not exceeding 3,500 kg. or a mass not exceeding 1,600 kg. or a GVM not exceeding 3,500 kg. per chassis fitted with a cab and chassis fitted with engine of Heading No. 87.06 of a mass not exceeding 3,500 kg.	(0.000035 x value for ad valorem duty purposes) less 0.5 percent.
		(3) Heavy duty vehicles: certain components are liable to customs duty and the balance allowed under full rebate of customs duty.	Compression ignition engine: 27.5 percent. Driving axles: 27.5 percent. Gear boxes: 27.5 percent. Cabs/bodies: 17.5 percent. Pneumatic tires: 27.5 percent.

(All amounts in South African rand)

Tax	Nature of Tax	Exemptions and Deductions	Rates
6. Taxes on international trade transactions			
6.1. Customs duties Customs and Excise Act No. 91 of 1964 as amended	A one-column tariff schedule based on the Brussels nomenclature with general, most favored nation, and preferential rates of duty. Preferential treatment is given to goods from the United Kingdom and in some cases, goods from Canada and Ireland. There is a Customs Union with Botswana, Lesotho, and Swaziland. Most duties are assessed ad valorem at c.i.f. value but there are a number of specific duties.	Rebates are allowed for certain goods used in manufacture by approved industries or by particular institutions and bodies.	There are 45 ad valorem rates, and 8,063 tariff lines with either formula, specific, or other types of duties. Import duties vary widely.
7. Other taxes			
7.1. Stamp duties Stamp Duties Act No. 77 of 1968	Ad valorem or specific taxes payable on a wide range of legal documents such bills of exchange, bonds, fixed deposit receipts, leases, marketable securities, etc.	Most securities issued by certain public corporations and public authorities are exempt from stamp duty on issue and transfers. Where marketable securities tax is chargeable, brokers' notes do not attract stamp duty.	Rates of stamp duty vary for different instruments and also for a particular instrument. Examples are: 5 cents per R 100 for bills of exchange; 10 cents per R 200 per annum on fixed deposit receipts; and 0.25 cents per R 100 on registration of share certificates.

Table 30. South Africa: Expenditure on GDP, 1993-98

	1997		1993	1994	1995	1996	1997	1996				1997				1998
	Millions of rand	Percent of GDP						I	II	III	IV	I	II	III	IV	I
	(At current prices)		(Annual percentage change; at 1990 prices)					(Seasonally adjusted at annual rate)								
Private consumption	366,688	61.6	0.3	3.1	4.7	3.9	2.0	3.4	4.2	3.0	2.9	1.1	1.7	1.1	0.4	2.2
Public consumption	126,962	21.3	3.6	3.1	-1.4	6.0	7.1	6.4	10.9	8.8	3.4	5.8	7.4	9.2	11.3	4.0
Gross fixed investment	103,343	17.4	-2.8	8.7	10.3	7.8	3.5	10.4	6.5	5.2	4.8	2.1	3.1	3.0	1.7	7.2
Final demand	596,993	100.4	0.5	4.1	4.4	5.1	3.3	5.4	6.0	4.6	3.4	2.3	3.2	3.1	3.0	3.6
Inventory investment 1/	-4,390	-0.7	1.2	1.5	0.7	-1.2	-2.0	-3.7	7.8	-5.7	-2.7	-4.1	0.6	-2.8	1.8	-6.2
Statistical discrepancy 1/	-4,577	-0.8	-0.1	0.8	-0.1	-1.0	0.0	-2.3	1.1	-3.9	1.3	0.0	1.5	-0.2	-0.2	-0.9
Domestic demand	588,026	98.9	1.6	6.5	5.0	2.7	1.4	-0.8	15.6	-5.1	2.0	-1.9	5.4	0.1	4.7	-3.5
Exports of goods and nonfactor services	165,185	27.8	4.8	1.0	10.5	11.0	5.3	21.0	-17.2	56.7	-10.4	4.6	10.1	0.3	-1.2	10.5
Imports of goods and nonfactor services	158,353	26.6	7.0	16.1	17.1	9.2	4.6	5.2	16.3	20.0	-12.9	-0.6	19.4	-0.5	12.6	-2.8
Foreign balance 1/	6,832	1.1	-0.2	-3.4	-1.5	0.5	0.3	4.5	-10.1	8.7	0.8	1.6	-2.4	0.3	-4.2	4.3
GDP at market prices	594,858	100.0	1.3	2.7	3.4	3.2	1.7	3.6	4.1	3.2	2.8	-0.3	2.7	0.3	0.3	0.7

Source: South African Reserve Bank, *Quarterly Bulletin*.

1/ Contribution to GDP growth.

Table 31. South Africa: Gross Fixed Investment and Capital Stock, 1992-97

	1997 Share of total	1993	1994	1995	1996	1997
		(Annual percentage change; at 1990 prices)				
Total gross investment	100.0	-2.8	8.7	10.3	7.8	3.5
By type of organization						
Private enterprises 1/	73.1	-1.6	13.3	13.0	6.1	3.1
Public corporations	13.9	-13.4	-1.8	-7.7	15.0	4.0
Public authorities	13.1	2.6	-2.1	15.7	10.6	5.3
By sector						
Mining	9.0	-27.4	19.8	9.7	2.0	4.5
Manufacturing	28.7	5.1	9.9	20.9	7.4	6.2
Financial services 1/ 2/	21.9	-0.1	10.7	7.8	2.4	3.2
Community, social, and personal services	10.6	1.8	-0.7	-9.2	4.6	3.7
Other sectors	29.8	-3.8	7.5	12.2	15.7	1.0
By type of asset						
Residential building	9.2	-2.3	2.0	0.1	1.3	0.3
Nonresidential building	10.1	-6.7	-1.1	-5.9	9.2	8.1
Construction works	14.9	-10.6	-3.0	0.6	9.9	10.6
Transport equipment	12.4	-7.0	6.1	13.0	2.8	-1.1
Machinery and other equipment	50.4	3.2	18.4	20.4	10.0	3.3
Transfer costs	2.9	1.3	15.9	-2.4	2.8	-8.7
Real fixed capital stock 3/	100.0	0.5	0.9	1.3	1.6	1.7
Private enterprises 1/	49.9	1.0	1.8	2.6	2.7	2.6
Public corporations	19.6	-2.3	-2.3	-1.7	-1.2	-0.9
Public authorities 4/	30.6	1.7	1.6	1.4	1.7	1.8

Source: South African Reserve Bank, *Quarterly Bulletin.*

1/ Including transfer costs.
2/ Finance, insurance, real estate, and business services.
3/ End of period.
4/ General government plus four departmental enterprises (Community Development Fund, Government Motor Transport Trading, Government Printing Works, National Housing Fund).

Table 32. South Africa: Financing of Domestic Investment, 1992-97

(In percent of GDP at market prices)

	1992	1993	1994	1995	1996	1997
Gross private saving 1/	21.4	22.4	20.9	19.5	19.1	17.8
Less: Depreciation 2/	13.6	13.1	12.7	12.6	12.3	12.3
Net private saving	7.7	9.3	8.1	6.9	6.9	5.5
Net personal saving	2.7	3.4	2.6	1.2	1.3	0.5
Net corporate saving	5.0	5.9	5.6	5.8	5.6	5.0
Gross general government saving	-4.3	-5.1	-3.7	-2.6	-2.3	-2.7
Less: Depreciation 2/	1.1	1.1	1.0	1.0	1.0	1.0
Net general government saving	-5.4	-6.2	-4.8	-3.6	-3.3	-3.7
Net domestic saving	0.9	1.5	3.7	5.3	4.9	3.3
Net foreign saving (current account surplus -)	-1.5	-1.6	0.3	2.0	1.3	1.5
Net domestic investment	0.9	1.5	3.7	5.3	4.9	3.3

Source: South African Reserve Bank, *Quarterly Bulletin.*

1/ Before inventory valuation adjustment.
2/ Provision for depreciation at replacement value.

Table 33. South Africa: Growth of Disposable Income of Households, 1993-97

	1997 Structure of disposable income	1993	1994	1995	1996	1997
	In millions of rand	percent change				
Net remuneration of employees 1/	310,831	11.0	10.2	12.0	10.3	9.6
Net income from property	103,379	17.9	20.2	9.3	20.5	13.4
Transfers received	24,568	1.7	5.8	19.6	8.9	5.5
General government	23,430	0.3	6.5	19.9	8.7	5.1
Business enterprises	368	9.6	15.4	11.0	12.3	12.2
Abroad	770	49.5	-15.2	15.2	14.6	13.9
Current income	438,778	11.7	12.0	11.8	12.4	10.3
Less: Direct taxes	67,129	10.5	20.3	15.4	13.1	14.2
Personal disposable income	371,649	11.9	10.7	11.2	12.3	9.6
Less: Private consumer expenditure	366,708	10.7	12.1	13.7	12.1	10.8
Less: Transfers to general government and abroad	1,674	12.5	44.0	61.3	23.2	25.0
Personal saving	3,267	39.2	-15.0	-48.8	22.4	-53.1
Personal saving as a percent of personal disposable income 2/		5.3	4.1	1.9	2.1	0.9

Source: South African Reserve Bank, *Quarterly Bulletin.*

1/ After adjustment for net remuneration paid to the rest of the world.
2/ After provision for depreciation and inventory valuation adjustment.

Table 34. South Africa: Real Gross Domestic Product at Factor Cost, 1993-98

	1997		1993	1994	1995	1996	1997	1996				1997				1998
	Billions of rand	Percent of total						I	II	III	IV	I	II	III	IV	I
	(At current prices)		(Annual percentage change; at 1990 prices)					(Seasonally adjusted at annual rates)								
Primary sector	65.2	12.3	8.7	2.3	-7.5	8.9	0.3	25.9	16.7	15.5	2.3	-13.5	2.1	2.8	0.8	-0.3
Agriculture, forestry, and fishing	24.0	4.5	24.0	12.0	-14.9	29.1	-1.0	99.0	64.9	59.7	4.1	-30.9	-5.0	-0.4	-0.2	6.2
Mining and quarrying	41.2	7.8	2.3	-2.5	-3.1	-1.4	1.2	-0.4	-5.0	-7.4	1.0	1.3	7.0	5.0	1.4	-4.3
Industry sector	162.8	30.7	0.0	2.6	6.4	1.2	3.2	0.5	3.1	0.4	2.5	6.1	6.1	-0.7	-0.2	0.1
Manufacturing	126.7	23.9	0.2	2.5	7.6	0.4	3.3	-0.8	2.9	-0.9	2.2	7.1	6.6	-1.2	-0.5	-0.2
Electricity, gas, and water	21.0	4.0	4.0	3.7	3.3	4.9	4.3	6.3	4.9	6.6	4.9	4.0	6.2	0.5	0.9	0.5
Construction	15.2	2.9	-6.8	1.2	1.7	1.8	1.4	2.2	1.7	1.0	1.2	1.5	1.2	2.0	1.2	1.3
Service sector	301.5	56.9	0.6	2.5	3.7	2.8	1.1	0.9	3.0	2.2	2.8	-0.6	1.2	0.2	0.6	1.2
Wholesale and retail trade and catering	85.2	16.1	0.5	3.9	6.5	3.7	0.5	-2.6	5.5	-0.1	2.8	-2.1	2.0	-1.3	-0.4	1.5
Transport, storage, and communication	41.1	7.8	2.4	3.7	5.2	3.2	2.5	1.2	1.8	3.2	2.4	0.6	4.5	3.0	2.6	0.8
Finance, insurance, real estate, and business services	73.0	13.8	0.1	2.6	3.6	3.2	2.1	3.0	2.5	3.9	3.5	1.5	1.4	0.6	1.2	2.7
General government and other services	102.3	19.3	0.4	0.9	1.0	1.7	0.4	2.5	1.6	2.7	2.5	-1.2	-1.1	0.0	0.2	0.2
GDP at factor cost	529.6	100.0	1.6	2.5	2.9	3.1	1.7	3.8	4.8	3.4	2.6	-0.5	2.9	0.3	0.4	0.6
Memorandum item:																
GDP less general government	448.6	84.7	1.8	2.8	3.3	3.4	2.0	4.0	5.4	3.5	2.6	-0.2	3.7	0.4	0.5	0.7

Source: South African Reserve Bank, *Quarterly Bulletin.*

Table 35. South Africa: Indicators of Mining and Quarrying Activity, 1991-97

	Weights 1/	1991	1992	1993	1994	1995	1996	1997
				(Annual percentage change)				
Production volume	100	-0.9	0.4	3.0	-1.6	-1.6	-0.5	2.0
Gold	45.8	-0.7	2.0	1.0	-6.5	-10.2	-4.2	-0.6
Nongold	54.2	-1.1	-0.9	4.7	2.6	5.0	2.0	3.6
Gross fixed investment at 1990 prices		-6.8	-18.7	-27.4	19.8	9.7	2.0	4.5
Fixed capital stock at 1990 prices		2.1	0.1	-2.0	-1.0	-0.4	-0.3	0.0
				(In percent)				
Memorandum items:								
Share in total capital stock at 1990 prices		8.6	8.6	8.4	8.2	8.1	7.9	7.8
Share in total nonagricultural employment		13.0	12.2	11.7	11.5	11.2	10.7	10.5
Share in real GDP at factor cost		9.6	10.0	10.1	9.6	9.0	8.6	8.6

Source: South African Reserve Bank, *Quarterly Bulletin*.

1/ In 1990.

Table 36. South Africa: Indicators of Manufacturing Activity, 1993-97

	1993	1994	1995	1996	1997	1996				1997			
						I	II	III	IV	I	II	III	IV
						(Annual percentage change, at 1995 prices)							
Production volume	1.2	2.1	6.8	0.6	3.2	-0.5	6.7	-0.3	-2.1	14.5	8.6	-10.0	-6.5
Durable goods	-3.3	3.6	9.1	2.3	2.9	-4.9	16.8	-3.7	1.2	11.8	11.5	-15.3	-9.8
Nondurable goods	4.3	1.2	5.3	-0.5	3.5	2.5	0.3	2.3	-4.3	16.5	6.4	-6.1	-4.1
Sales	-0.6	2.0	7.4	2.0	0.5	-11.0	17.1	-1.9	12.0	-11.1	8.1	-9.9	6.8
New orders	-0.5	7.9	7.3	2.8	-0.5	-6.9	18.0	16.9	-1.9	-6.2	9.0	-15.3	-15.5
Unfulfilled orders	-1.0	12.6	4.4	-6.5	-2.2	-6.6	1.2	5.4	5.1	-2.5	-4.4	-10.8	-14.9
Gross fixed investment	5.1	9.9	20.9	7.4	6.2	2.8	3.8	2.3	5.1	9.1	7.4	5.1	6.6
Unit labor costs	7.5	8.5	4.5	3.9	0.8	5.9	-5.5	12.3	-6.1	-2.1	1.4	15.8	-9.7
Production prices	8.1	8.9	10.1	8.4	7.5	6.3	8.9	11.4	11.5	6.5	5.9	2.8	5.4
Labor productivity	3.0	1.8	5.9	4.5	7.2	7.6	10.9	3.6	-0.7	18.6	14.4	-5.1	-2.9
						(In percent)							
Capacity utilization	77.9	80.0	83.3	81.5	81.2	81.2	81.3	81.8	81.6	81.2	81.7	80.7	81.3
Durable goods	74.8	78.5	82.8	80.9	80.5	81.0	80.9	80.8	81.0	80.4	80.9	81.3	79.6
Nondurable goods	80.3	81.5	83.5	81.8	81.9	81.4	81.7	82.2	82.0	81.9	82.3	80.9	82.6

Source: South African Reserve Bank, *Quarterly Bulletin.*

Table 37. South Africa: Nonagricultural Employment, 1990-97
(1990 = 100)

	Public Authorities 1/			Private sector			
	General government	Business enterprises 2/	Total	Mining	Manu-facturing	Total 3/	Grand total
1990	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1991	103.20	98.50	102.40	92.70	97.80	96.50	98.30
1992	105.30	94.50	103.60	85.30	95.10	93.10	96.30
1993	106.10	82.40	102.30	79.60	93.40	90.80	94.30
1994	108.00	76.80	103.10	78.00	93.60	89.70	93.80
1995	108.00	76.40	103.30	76.20	94.40	90.40	94.30
1996	114.10	75.30	108.60	72.80	90.90	88.00	94.30
1997	113.90	73.20	108.10	70.60	87.60	86.00	92.80
			(End of quarter; seasonally adjusted)				
1992							
I	104.00	96.60	102.80	87.70	96.00	94.40	97.00
II	104.70	95.50	103.30	85.20	95.30	93.70	96.60
III	105.80	94.00	104.00	83.80	94.30	92.40	96.00
IV	106.70	91.90	104.30	82.40	94.70	92.00	95.80
1993							
I	106.40	86.60	103.30	80.70	94.30	91.80	95.30
II	105.10	83.80	101.80	78.80	93.50	91.10	94.40
III	105.80	80.30	101.80	78.70	92.90	90.70	94.10
IV	106.90	79.10	102.40	77.70	91.60	89.80	93.70
1994							
I	107.00	77.60	102.40	78.10	93.20	89.50	93.50
II	107.60	76.50	102.70	78.40	93.40	89.50	93.60
III	108.10	75.80	103.10	77.30	94.10	89.80	93.90
IV	109.30	77.30	104.30	77.30	94.10	90.00	94.40
1995							
I	109.40	77.00	104.30	77.10	94.50	90.40	94.70
II	105.20	77.00	101.10	76.70	94.90	90.70	93.90
III	105.80	76.20	101.50	75.50	94.60	90.30	93.70
IV	111.70	75.20	106.20	74.50	93.50	90.10	95.00
1996							
I	112.50	75.00	107.10	72.90	91.80	88.80	94.40
II	114.20	75.60	108.70	72.00	90.90	88.00	94.40
III	114.70	75.40	109.20	72.70	90.00	87.60	94.20
IV	114.90	75.00	109.30	72.30	90.50	87.60	94.30
1997							
I	113.30	74.70	107.80	71.60	89.00	86.90	93.30
II	114.50	74.00	108.60	70.70	87.10	86.30	93.10
III	114.10	73.30	108.20	69.70	86.60	85.90	92.70
IV	113.50	71.00	107.60	67.40	85.80	85.10	92.00

Source: South African Reserve Bank, *Quarterly Bulletin*.

1/ Central government, local authorities, provincial administrations, statutory bodies, and national and independent states (TVBC).
2/ Transnet and the Department of Posts and Telecommunications.
3/ Includes also construction, commerce, and private services sectors (e.g. banking, insurance, hotels, transport and laundary)

Table 38. South Africa: Remuneration, Labor Productivity, and Unit Labor Costs in the Nonagricultural Sector, 1992-97

	1992	1993	1994	1995	1996	1997	1996 1/				1997 1/			
							I	II	III	IV	I	II	III	IV
	(Annual percentage change)													
Remuneration per worker														
At current prices														
Public authorities	14.8	9.1	12.7	15.4	10.9	12.1	15.1	4.9	7.6	16.4	22.0	15.9	10.9	1.0
Private sector	14.9	11.0	10.0	11.1	10.6	9.5	12.8	10.2	11.0	8.7	7.8	10.3	9.6	10.2
Total	15.1	10.3	11.1	12.7	11.2	10.6	13.8	8.7	10.2	12.1	13.6	12.7	10.1	6.4
At constant 1990 prices 2/														
Public authorities	1.4	-1.5	3.9	6.3	1.0	4.1	5.6	-4.3	-2.1	5.6	12.5	7.7	3.1	-6.0
Private sector	1.5	0.1	1.5	2.4	0.8	1.6	3.4	0.4	1.0	-1.5	-0.6	2.5	1.9	2.7
Total	1.6	-0.4	2.4	3.8	1.3	2.7	4.4	-0.9	0.3	1.6	4.7	4.7	2.3	-0.9
Labor productivity	1.1	2.7	2.6	3.4	1.9	3.6	2.9	1.4	0.8	2.3	3.0	3.5	3.6	4.1
Unit labor costs														
Nominal	13.8	7.4	8.3	9.0	9.2	6.8	10.6	7.1	9.3	9.6	10.2	8.9	6.3	2.3
Real 2/	0.5	-3.1	-0.1	0.5	-0.6	-0.8	1.4	-2.3	-0.5	-0.7	1.6	1.1	-1.2	-4.6

Source: South African Reserve Bank, *Quarterly Bulletin.*

1/ Seasonally adjusted.

2/ At 1990 prices; deflated by nonagricultural deflator.

Table 39. South Africa: Price Developments, 1993-98

	Weight 1/	1993	1994	1995	1996	1997	1996				1997				1998
							I	II	III	IV	I	II	III	IV	I
							(Seasonally adjusted at annual rate)								
Consumer prices	100.0	9.7	9.0	8.6	7.4	8.6	8.9	7.8	9.0	11.5	9.9	7.0	6.6	4.1	3.9
Goods	55.0	10.4	9.4	7.4	6.2	8.1	8.7	5.7	9.4	11.2	9.2	6.6	6.0	5.2	4.2
Of which: Food	18.8	7.1	13.6	8.7	6.2	9.9	16.0	2.7	10.8	17.0	7.5	10.7	7.2	2.1	4.5
Services	45.0	8.7	8.9	10.7	9.5	9.1	10.1	10.4	9.7	11.2	12.0	5.8	7.8	2.7	5.4
Of which: Housing	26.0	-0.4	4.6	13.4	11.7	8.3	11.2	14.7	10.5	9.2	17.5	2.7	6.3	-0.5	2.5
Producer prices	100.0	6.7	8.2	9.6	6.9	7.1	5.1	6.9	9.3	12.7	8.1	3.1	2.5	4.4	0.6
Goods produced in South Africa	80.7	6.9	8.9	9.9	7.5	7.6	4.8	6.8	11.4	11.4	7.4	6.1	3.2	4.0	1.5
Imported goods	19.3	4.9	5.5	7.6	5.3	5.0	6.0	7.3	2.9	18.1	10.4	-8.9	-1.7	6.9	-2.8
GDP deflator at market prices		10.4	9.8	8.8	8.5	7.8	11.4	14.0	8.9	-0.7	10.2	11.5	9.9	1.7	7.6
Memorandum items:															
Twelve-month rate to end-of-period															
Consumer prices		9.7	10.1	7.0	9.4	6.0	6.2	6.6	8.6	9.4	9.6	8.9	8.2	6.0	5.3
Producer prices		6.3	10.3	8.8	8.6	3.8	5.9	6.0	7.8	8.6	9.5	7.6	6.2	3.8	2.2

Source: South African Reserve Bank, *Quarterly Bulletin.*

1/ The weights for the consumer price series correspond to 1995 expenditure patterns; and the weights for the producer price series are based upon 1989/90 production and foreign trade statistics.

Table 40. South Africa: National Government Finances, 1994/95-1998/99 1/

	1994/95	1995/96	1996/97	1997/98 Budget	1997/98 Est.	1998/99 Budget
			(In billions of rand)			
Total Revenue	**112.2**	**127.3**	**148.4**	**163.0**	**164.5**	**177.4**
Ordinary Revenue	112.2	125.9	146.8	161.8	163.2	176.6
Inland revenue	93.7	105.4	122.9	137.4	139.6	149.1
Customs and excise	16.5	17.7	19.7	21.5	20.6	24.5
Nontax revenue and grants	1.9	2.8	4.2	2.8	3.1	3.0
Extraordinary revenue 2/	0.0	1.3	1.6	1.3	1.3	0.8
Total expenditure	**136.9**	**154.8**	**175.8**	**186.6**	**187.6**	**200.3**
Current expenditure	128.8	146.6	168.7	178.9	180.0	192.4
Goods & services	37.3	24.9	30.3	...	32.3	38.6
Transfers to Provinces	...	72.0	84.5	84.1	86.9	90.4
Interest 3/	24.2	29.3	34.1	39.6	39.4	42.5
Other	67.3	20.3	19.8	55.2	21.4	20.9
Capital expenditure	8.1	8.2	7.1	7.6	7.6	7.9
Primary balance	**-0.5**	**1.8**	**6.7**	**16.0**	**16.3**	**19.6**
Excluding extra-ordinary revenue	**-0.5**	**0.5**	**5.1**	**14.8**	**15.0**	**18.8**
Overall balance	**-24.8**	**-27.5**	**-27.4**	**-23.6**	**-23.1**	**-22.9**
Excluding extra-ordinary revenue	**-24.8**	**-28.8**	**-29.0**	**-24.8**	**-24.4**	**-23.7**
			(In percent of GDP)			
Total Revenue	**25.2**	**25.6**	**26.7**	**26.2**	**26.8**	**26.5**
Ordinary Revenue	25.2	25.3	26.4	26.0	26.6	26.4
Inland revenue	21.1	21.2	22.1	22.1	22.8	22.3
Customs and excise	3.7	3.6	3.5	3.5	3.4	3.7
Nontax revenue and grants	0.4	0.6	0.8	0.5	0.5	0.5
Extraordinary revenue 2/	**0.0**	**0.3**	**0.3**	**0.2**	**0.2**	**0.1**
Total expenditure	**30.8**	**31.1**	**31.6**	**30.0**	**30.6**	**29.9**
Current expenditure	29.0	29.5	30.3	28.8	29.4	28.7
Goods & services	8.4	5.0	5.4	...	5.3	5.8
Transfers to Provinces	...	14.5	15.2	13.5	14.2	13.5
Interest 3/	5.4	5.9	6.1	6.4	6.4	6.4
Other	15.1	4.1	3.6	8.9	3.5	3.1
Capital expenditure	1.8	1.7	1.3	1.2	1.2	1.2
Primary balance	**-0.1**	**0.4**	**1.2**	**2.6**	**2.7**	**2.9**
Excluding extra-ordinary revenue	**-0.1**	**0.1**	**0.9**	**2.4**	**2.4**	**2.8**
Overall balance	**-5.6**	**-5.5**	**-4.9**	**-3.8**	**-3.8**	**-3.4**
Excluding extra-ordinary revenue	**-5.6**	**-5.8**	**-5.2**	**-4.0**	**-4.0**	**-3.5**
Memorandum items:						
Consolidated national and provincial governments (percent of GDP)						
Wage bill	10.7	11.9	12.9	11.9	12.8	12.4
Nonwage-noninterest current expenditure	...	...	11.3	9.9	10.8	9.5
Capital expenditure	2.7	2.6	2.6	2.4	2.4	2.2
GDP (billion Rand)	444.9	497.3	556.0	621.0	613.0	669.3

Sources: Department of Finance; and Fund staff estimates.

1/ National budget, fiscal year begins April 1.
2/ Excludes privatization receipts
3/ Cash basis.

Table 41. South Africa: National Government Revenue, 1993/94-1998/99 1/

(In billions of rand)

	1993/94	1994/95	1995/96	1996/97	1997/98 Budget	1997/98 Prel.	1998/99 Budget
Revenue	98.1	112.2	127.3	148.4	163.0	164.5	177.4
Inland Revenue	77.9	92.4	103.9	121.1	135.7	137.6	147.3
Income tax	50.2	59.9	68.1	82.3	89.6	91.7	95.8
Gold mines	0.6	1.2	0.9	0.5	0.8	0.5	0.2
Other mines	0.5	0.5	0.7	1.3	1.4	1.4	1.2
Nonmining companies	11.2	13.3	15.3	20.9	22.4	20.5	22.6
Individuals	37.8	45.0	51.2	59.5	65.1	69.4	71.8
Sales tax/VAT	25.4	29.3	32.8	35.9	40.3	40.1	43.4
Other	2.3	3.2	3.0	3.0	5.8	5.8	8.1
Customs and Excise	16.2	17.9	19.2	21.4	23.2	22.4	26.3
Customs duty	3.4	4.2	5.3	6.5	7.1	6.0	6.7
Surcharge	1.8	1.2	0.5	0.0	0.0	0.0	0.0
Excise duty	5.0	5.8	6.5	6.7	7.9	7.9	9.0
Fuel levy	7.9	8.4	8.9	10.4	11.6	12.1	14.4
Other	1.3	1.6	1.9	2.2	1.9	1.6	1.8
SACU payments	-3.1	-3.2	-3.9	-4.4	-5.2	-5.2	-5.6
Nontax Revenue	2.5	1.9	2.7	3.6	2.8	2.8	3.0
Grants	0.0	0.0	0.1	0.5	0.0	0.0	0.0
Extraordinary Revenue 2/	1.4	0.0	1.3	1.6	1.3	2.5	0.8
of which: Sales of oil stocks	1.4	0.0	1.3	1.6	1.3	1.3	0.0
Memorandum items:							
Direct taxes	50.9	61.0	68.9	82.9	93.0	91.7	95.8
Indirect taxes	43.2	49.3	54.2	61.3	66.0	70.0	72.6

Source: Department of Finance.

1/ Fiscal year begins April 1. Excludes repayment of budget lending.

2/ Excludes privatization receipts.

Table 42. South Africa: National Government Revenue, 1993/94-1998/99 1/

(In percent of GDP)

	1993/94	1994/95	1995/96	1996/97 Prel.	1997/98 Budget	1997/98 Prel.	1998/99 Budget
Revenue	24.8	25.2	25.6	26.7	26.2	26.8	26.5
Inland Revenue	19.7	20.8	20.9	21.8	21.8	22.4	22.0
Income tax	12.7	13.5	13.7	14.8	14.4	15.0	14.3
Gold mines	0.2	0.3	0.2	0.1	0.1	0.1	0.0
Other mines	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Nonmining companies	2.8	3.0	3.1	3.8	3.6	3.3	3.4
Individuals	9.6	10.1	10.3	10.7	10.5	11.3	10.7
Sales tax/VAT	6.4	6.6	6.6	6.5	6.5	6.5	6.5
Other	0.6	0.7	0.6	0.5	0.9	1.0	1.2
Customs and Excise	4.1	4.0	3.9	3.9	3.7	3.7	3.9
Customs duty	0.9	1.0	1.1	1.2	1.1	1.0	1.0
Surcharge	0.4	0.3	0.1	0.0	0.0	0.0	0.0
Excise duty	1.3	1.3	1.3	1.2	1.3	1.3	1.3
Fuel levy	2.0	1.9	1.8	1.9	1.9	2.0	2.2
Other	0.3	0.4	0.4	0.4	0.3	0.3	0.3
SACU payments	-0.8	-0.7	-0.8	-0.8	-0.8	-0.9	-0.8
Nontax Revenue	0.6	0.4	0.5	0.7	0.5	0.5	0.5
Grants	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Extraordinary Revenue 2/	0.4	0.0	0.3	0.3	0.2	0.4	0.1
of which: Sales of oil stocks	0.4	0.0	0.3	0.3	0.2	0.2	0.0
Memorandum items:							
Direct taxes	12.9	13.7	13.9	14.9	15.0	15.0	14.3
Indirect taxes	10.9	11.1	10.9	11.0	10.6	11.4	10.9

Source: Department of Finance.

1/ Fiscal year begins April 1. Excludes repayment of budget lending.

2/ Excludes privatization receipts.

Table 43. South Africa: Economic Classification of National plus Provincial Government Expenditure, 1992/93 - 1998/99 1/

	1992/93	1993/94	1994/95	1995/96	1996/97 Budget	1997/98 Budget	1998/99 Budget
			(In billions of rand)				
Goods and services	60.1	67.5	77.2	83.1	91.2	98.3	107.4
Remuneration of employees	42.4	47.7	56.5	59.0	67.6	73.8	83.3
Other	17.7	19.8	20.7	24.1	23.6	24.5	24.1
Interest 2/	17.5	22.2	24.9	30.3	34.6	38.6	43.0
Current transfers	32.7	31.6	34.8	39.0	37.1	37.2	39.4
Businesses	10.8	8.6	8.0	8.5	7.7	6.9	5.5
Households	10.7	11.4	14.9	16.6	16.3	17.6	18.7
Foreign	0.2	0.3	0.2	0.3	0.2	0.3	0.2
Other general government institutions and funds	11.0	11.3	11.7	13.6	12.8	12.5	15.0
Capital expenditure and transfers	7.8	10.1	11.3	16.7	14.2	14.8	14.4
Investment	5.2	6.8	7.9	11.7	10.1	9.4	8.4
Capital transfers	2.3	3.0	3.0	4.7	3.9	5.3	6.0
Businesses, households and foreign	0.4	0.8	0.5	0.7	0.5	1.4	1.1
Other general government institutions	1.9	2.1	2.5	4.0	3.4	4.0	4.9
Purchases of shares and loans	0.3	0.3	0.4	0.2	0.2	0.1	0.0
Unallocated	--	--	--	--	0.5	1.3	1.0
Less: Unspent funds 3/	1.9	4.2	8.0	13.0	--	--	--
Surrenders	0.4	0.7	1.6	4.1	--	--	--
Funds rolled over to new year	1.5	3.4	6.4	8.9	--	--	--
Total expenditure (cash)	116.2	127.3	140.2	156.0	177.6	190.2	205.2
			(In percent of GDP)				
Goods and services	17.3	17.1	17.4	16.7	16.3	15.8	16.1
Remuneration of employees	12.2	12.1	12.7	11.9	12.1	11.9	12.4
Other	5.1	5.0	4.7	4.8	4.2	3.9	3.6
Interest 2/	5.0	5.6	5.6	6.1	6.2	6.2	6.4
Current transfers	9.4	8.0	7.8	7.8	6.6	6.0	5.9
Businesses	3.1	2.2	1.8	1.7	1.4	1.1	0.8
Households	3.1	2.9	3.3	3.3	2.9	2.8	2.8
Foreign	0.1	0.1	0.1	0.1	--	--	--
Other general government institutions and funds	3.2	2.9	2.6	2.7	2.3	2.0	2.2
Capital expenditure and transfers	2.2	2.6	2.6	3.3	2.5	2.4	2.1
Investment	1.5	1.7	1.8	2.4	1.8	1.5	1.3
Capital transfers	0.7	0.8	0.7	0.9	0.7	0.9	0.9
Businesses, households and foreign	0.1	0.2	0.1	0.1	0.1	0.2	0.2
Other general government institutions	0.6	0.5	0.6	0.8	0.6	0.6	0.7
Purchases of shares and loans	0.1	0.1	0.1	--	--	--	--
Unallocated	--	--	--	--	0.1	0.2	0.1
Less: Unspent funds 3/	0.5	1.0	1.8	2.6	--	--	--
Surrenders	0.1	0.2	0.4	0.8	--	--	--
Funds rolled over to new year	0.4	0.9	1.4	1.8	--	--	--
Total expenditure (cash)	33.4	32.2	31.5	31.4	31.6	30.6	30.7

Source: Department of Finance.

1/ Fiscal year begins April 1; includes transfers to local government, extrabudgetary funds, and social security funds (though not extraordinary transfers). Actual figures for 1996/97 and 1997/98 not available.

2/ Does not include exchange rate losses on amortized loans, as in Table 40.

3/ These comprise allocations that were unspent during the fiscal year. It is not possible to separate these funds from the allocations shown in the other lines. The amounts rolled over are shown within the allocations in the next fiscal year.

Table 44. South Africa: Functional Classification of National plus Provincial Government Expenditure, 1992/93-1998/99 1/

	1992/93	1993/94	1994/95	1995/96	1996/97 Budget	1997/98 Budget	1998/99 Budget
			(In billions of rand)				
Protection services	21.2	23.1	27.1	27.7	28.1	29.6	33.0
Defence	10.8	10.7	12.9	12.8	11.8	10.7	11.0
Other 2/	10.4	12.4	14.2	14.9	16.3	18.9	22.0
Social services	51.8	58.0	65.4	79.6	81.4	88.6	102.1
Education	24.4	27.8	31.6	36.7	39.2	40.3	46.8
Non-tertiary	21.0	23.8	27.1	31.0	32.3	33.1	38.5
Tertiary	3.4	4.0	4.6	5.6	6.8	7.2	8.4
Health	12.7	14.0	15.6	17.7	18.5	20.2	25.1
Social security and welfare	10.0	10.8	13.7	15.7	16.4	18.4	19.8
Housing and related services	1.3	1.6	1.6	3.5	1.6	4.2	3.9
Other 3/	3.4	3.9	2.9	6.1	5.7	5.5	6.5
Economic services	18.4	18.3	17.8	20.2	19.5	18.9	17.1
Agriculture, forestry and fishing	6.1	3.7	3.6	4.3	4.4	4.5	4.3
Transport and communication	5.6	6.6	6.7	7.7	7.7	7.3	6.5
Other economic services 4/	6.7	7.9	7.4	8.3	7.5	7.1	6.3
of which: export trade promotion	2.7	2.5	2.2	2.3	1.9	1.4	--
Other noninterest 5/	9.2	9.9	13.2	12.4	13.5	13.2	9.0
Interest payments 6/	17.5	22.2	24.9	30.3	34.6	38.5	43.0
Unallocated funds	--	--	--	--	0.5	1.3	1.0
Less: Unspent funds 7/	1.9	4.2	8.0	14.1	--	--	--
Surrenders and suspensions 8/	0.4	0.7	1.6	5.2	--	--	--
Funds rolled over to new year	1.5	3.4	6.4	8.9	--	4.8	3.6
Total expenditure (cash)	116.2	127.3	140.2	156.0	177.6	190.2	205.2

Source: Department of Finance; and Fund staff estimates.

1/ Fiscal year begins April 1; general government comprises central and provincial governments, but excludes local governments, extrabudgetary funds, and social security funds. Actual figures for 1996/97 and 1997/98 not available.

2/ Police, prisons and law courts.

3/ Recreation and culture, community development, other community services and sewerage and sanitation.

4/ Including water, fuel and energy, mining, manufacturing and regional development.

5/ Including foreign affairs, general reserach, general administration, cost of raising loans, unallocable expenditure, and certain transfers to government enterprises.

6/ Does not include exchange rate losses on amortized loans, as in Table 40.

7/ Includes allocations that were unspent during the fiscal year. It is not possible to separate these funds from the allocations shown in the other lines. The amounts rolled over are shown within the allocations in the next fiscal year.

8/ In 1995/96, includes recovery from pension fund of R 1060 million, which cannot be allocated in the categories above.

Table 45. South Africa: Functional Classification of National plus Provincial Government Expenditure, 1992/93-1998/99 1/

	1992/93	1993/94	1994/95	1995/96	1996/97 Budget	1997/98 Budget	1998/99 Budget
			(In percent of GDP)				
Protection services	6.1	5.8	6.1	5.0	5.0	4.8	4.9
Defence	3.1	2.7	2.9	2.3	2.1	1.7	1.6
Other 2/	3.0	3.1	3.2	2.7	2.9	3.0	3.3
Social services	14.9	14.7	14.7	14.3	14.5	14.3	15.3
Education	7.0	7.0	7.1	6.6	7.0	6.5	7.0
Non-tertiary	6.0	6.0	6.1	5.6	5.8	5.3	5.7
Tertiary	1.0	1.0	1.0	1.0	1.2	1.2	1.2
Health	3.7	3.5	3.5	3.2	3.3	3.3	3.8
Social security and welfare	2.9	2.7	3.1	2.8	2.9	3.0	3.0
Housing and related services	0.4	0.4	0.4	0.6	0.3	0.7	0.6
Other 3/	1.0	1.0	0.6	1.1	1.0	0.9	1.0
Economic services	5.3	4.6	4.0	3.6	3.5	3.0	2.6
Agriculture, forestry and fishing	1.7	0.9	0.8	0.8	0.8	0.7	0.6
Transport and communication	1.6	1.7	1.5	1.4	1.4	1.2	1.0
Other economic services 4/	1.9	2.0	1.7	1.5	1.3	1.1	0.9
of which: export trade promotion	0.8	0.6	0.5	0.4	0.3	0.2	0.0
Other noninterest 5/	2.7	2.5	3.0	2.2	2.4	2.1	1.3
Interest payments 6/	5.0	5.6	5.6	5.5	6.2	6.2	6.4
Unallocated funds	--	--	--	--	0.1	0.2	0.1
Less: Unspent funds 7/	0.5	1.0	1.8	2.5	--	--	--
Surrenders and suspensions 8/	0.1	0.2	0.4	0.9	--	--	--
Funds rolled over to new year	0.4	0.9	1.4	1.6	--	0.8	0.5
Total expenditure (cash)	33.4	32.2	31.5	28.1	31.6	30.6	30.7

Source: Department of Finance; and Fund staff estimates.

1/ Fiscal year begins April 1. Actual data for 1996/97 and 1997/98 not available.

2/ Police, prisons and law courts.

3/ Recreation and culture, community development, other community services and sewerage and sanitation.

4/ Including water, fuel and energy, mining, manufacturing and regional development.

5/ Including foreign affairs, general reserach, general administration, cost of raising loans, unallocable expenditure, and certain transfers to government enterprises.

6/ Does not include exchange rate losses on amortized loans, as in Table 40.

7/ Includes allocations that were unspent during the fiscal year. It is not possible to separate these funds from the allocations shown in the other lines. The amounts rolled over are shown within the allocations in the next fiscal year.

8/ In 1995/96, includes recovery from pension fund of R 1060 million, which cannot be allocated in the categories above.

Table 46. South Africa: Financing of the National Government Budget, 1992/93-1997/98 1/

(In millions of rand)

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Fiscal balance before borrowing 2/	-29,446	-26,819	-25,522	-30,234	-31,115	-26,523
Government stock, bonds, and bills	28,180	38,755	24,990	32,536	22,423	19,370
Government stock, bonds and bills issued	32,219	41,385	34,433	41,372	28,613	23,405
Discount on government stock	-4,039	-2,630	-9,443	-8,836	-6,190	-4,035
Loan levy	0	0	-710	0	0	0
Other financing	0	0	-19	-4,215	-4,120	-3,976
Foreign loans	537	-140	2,604	1,745	1,277	3,815
Use of cash balances	5,286	1,537	-1,374	1,883	5,812	389
Unusual receipts	1,221	1,506	31	1,358	1,603	2,949
Privatization	108	0	0	0	0	1,697
Other 3/	1,113	1,506	31	1,358	1,603	1,252
Unusual transfers	-5,777	-14,840	0	-3,073	0	0
Gold and Foreign Exchange Contingency	-3,777	-7,500	0	-3,073	0	0
Government Pension Funds	-2,000	-7,340	0	0	0	0
Total financing	29,447	26,818	25,522	30,234	31,115	26,523

Source: South African Reserve Bank, Quarterly Bulletin, and Fund staff estimates.

1/ Fiscal year begins April 1.

2/ Reserve Bank data for the central government deficit differ from Department of Finance data owing to differences of definition and timing.

3/ Includes receipts from the sale of strategic stocks held by the National Supplies Procurement and Central Energy Funds.

Table 47. South Africa: National Government Debt, 1992/93-1997/98

(In millions of rand)

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
External debt 1/	2,348	5,201	8,783	10,944	11,394	14,560
Domestic debt	143,384	184,769	218,493	259,860	292,572	319,938
Marketable	138,681	181,890	216,476	258,892	289,852	318,438
Bonds	132,852	174,612	209,458	248,192	275,552	301,153
Bills	5,119	6,568	7,018	10,700	14,300	17,285
Loan levies	710	710	0	0	0	0
Nonmarketable	4,703	2,879	2,017	968	2,720	1,500
Bonds	334	279	175	61	0	0
Bills and floating rate stock	4,366	2,597	1,839	904	2,717	1,497
Loan levies 2/	3	3	3	3	3	3
Gold and foreign exchange contingency reserve account 3/	8,934	2,190	4,147	0	2,169	73
Debt of former homelands 4/	...	...	13,072	8,883	4,472	1,810
Total government debt	154,666	192,160	244,495	279,687	310,607	336,381
(In percent of GDP)	44.5	48.6	49.2	56.1	55.9	54.9
Memorandum items (as a percentage of total debt):						
External government debt	1.5	2.7	3.6	3.9	3.7	4.3
Domestic government debt	92.7	96.2	89.4	92.9	94.2	95.1
Marketable	89.7	94.7	88.5	92.6	93.3	94.7
of which: Bonds	85.9	90.9	85.7	88.7	88.7	89.5
Nonmarketable	3.0	1.5	0.8	0.3	0.9	0.4
Other (listed above)	5.8	1.1	7.0	3.2	2.1	0.6

Sources: South African Reserve Bank, Quarterly Bulletin; 1997/98 Budget Review; and staff estimates.

1/ Adjusted for exchange rate changes.

2/ Including tax redemption certificates and personal saving.

3/ Includes losses on forward exchange cover provided by the Reserve Bank.

4/ This debt is being gradually regularized, mainly into marketable bills and government stock.

Table 48. South Africa: Growth Rates of Monetary Aggregates, 1988-98 1/

	M1A	M1	M2	M3
	(Percentage change from year ago)			
1988	25.0	23.1	35.2	27.3
1989	10.4	9.6	26.7	22.3
1990	14.3	15.1	12.8	12.0
1991	17.7	14.0	15.7	12.3
1992 March	25.2	13.5	11.5	9.0
June	18.6	10.5	11.5	7.2
September	23.6	23.2	12.8	8.7
December	16.2	17.5	10.8	8.0
1993 March	19.4	10.4	5.1	5.7
June	18.1	11.0	1.8	3.3
September	6.9	0.0	1.3	4.3
December	16.6	6.7	3.9	7.0
1994 March	25.7	19.4	13.6	12.3
June	25.1	28.2	17.4	15.0
September	28.8	26.1	18.5	14.3
December	24.8	23.7	20.6	15.7
1995 March	6.6	10.4	12.6	12.2
June	17.0	7.8	15.6	16.8
September	12.9	12.7	11.5	16.1
December	16.8	19.3	13.9	15.2
1996 March	16.1	27.0	17.8	15.3
June	14.7	28.7	17.9	15.7
September	18.7	30.7	18.4	14.5
December	21.9	30.9	15.7	13.6
1997 March	25.7	30.1	17.8	16.5
June	24.5	19.1	13.0	12.7
September	25.2	23.7	17.5	16.3
December	23.0	17.3	18.7	17.2
1998 March	25.0	14.8	15.3	15.3

Source: South African Reserve Bank, *Quarterly Bulletin.*

1/ M1A includes coins and bank notes in circulation and check and transmission deposits with banking institutions, building societies, and the Post Office Savings Bank. M1 is defined as M1A plus other demand deposits with banking institutions. M2 is defined as M1 plus other short-term deposits and medium-term deposits with banking institutions and building societies, plus savings deposits with, and savings bank certificates of, the Post Office Savings Bank. M3 is defined as M2 plus all long-term, deposits with banking institutions and building societies (including, for the latter, other "share" investments), plus investments in national savings certificates issued by the Post Office Savings Bank.

Table 49. South Africa: Monetary Survey, 1994-97

	1994	1995	1996	1997
	(In billions of rand)			
Net foreign assets	-7.4	-7.5	-22.0	-15.7
Short-term	-9.0	-9.2	-23.9	-16.7
Gross reserves	14.1	18.2	16.8	36.6
Reserve Bank	11.1	15.7	10.3	28.5
Commercial banks	3.0	2.5	6.5	8.1
Liabilities	23.1	27.4	40.7	53.3
Reserve Bank	5.2	0.0	0.0	9.8
Commercial banks	18.0	27.4	40.6	43.5
Long-term	1.7	1.7	1.8	1.0
Net domestic assets	251.5	288.7	341.5	389.9
Credit to government, net	15.5	5.8	10.2	20.0
Claims on government	31.9	31.8	39.6	48.2
Government deposits	16.4	25.9	29.5	28.2
Credit to private sector	268.9	316.2	367.0	420.1
Other items, net	-32.9	-33.3	-35.7	-50.1
Broad money (M3)	244.1	281.2	319.4	374.2
of which M1	94.5	112.7	147.6	173.1
	(Annual percentage change)			
Net foreign assets	-13.2	-2.2	-192.8	28.8
Net domestic assets	15.6	14.8	18.3	14.2
Credit to government, net	107.8	-62.3	74.6	96.2
Credit to private sector	17.0	17.6	16.1	14.5
Other items, net	-66.4	-1.3	-7.2	-40.2
Broad money (M3)	15.7	15.2	13.6	17.2
	(Contribution to growth in M3)			
Net foreign assets	-0.4	-0.1	-5.2	2.0
Net domestic assets	16.1	15.2	18.8	15.2
Credit to government, net	3.8	-4.0	1.5	3.1
Credit to private sector	18.5	19.4	18.1	16.6
Other items, net	-6.2	-0.2	-0.9	-4.5
Memorandum items:				
Income velocity of M3	1.84	1.78	1.76	1.64
Official risk indicators 1/		(In percent)		
Share of non-performing loans in total lending	3.6	3.3	3.2	3.2
Risk-based capital asset ratio	9.1	10.0	9.7	9.9
Financial sector risk factors				
Share of foreign exchange loans in total lending 2/ 3/	5.0	4.7	3.7	3.6
Share of foreign deposits in total deposits 2/	0.4	0.5	1.3	2.0
Share of foreign currency denominated liabilities in total liabilities 2/	5.4	6.2	5.8	6.3
Share of short-term deposits in total deposits 4/	35.5	36.9	43.4	43.6
Share of mortgage advances in private credit 5/	42.8	43.2	43.3	42.7
Increase in value per real estate transaction 2/	14.4	4.2	2.7	5.0
Market assesment				
Share prices of financial institutions 6/	379	505	558	786

Sources: South African Reserve Bank; and Fund staff estimates.

1/ Banks are audited using acceptable international standards. In addition, in line with the EU's Capital Adequacy Directive, capital adequacy requirements are also imposed on securities trading.

2/ Annual average.

3/ Including foreign financing in bank's own name on-lent to clients.

4/ Short-term deposits include cheque and demand deposits.

5/ Annual average, except for 1998 which is the March figure.

6/ Index, 1990 = 100.

Table 50. South Africa: Interest Rate Developments, 1993-98

(In percent)

	Short-term rates					Long-term rates	
	Bank rate/ Repo rate 1/ 2/	Rate on interbank deposits at call 2/	Treasury bill rate 3/	Rate on three-month deposits with commercial banks 2/	Clearing bank prime overdraft rate 2/	Government bond yield 2/ 4/	Predominant rate on new mortgages; participation bonds 2/
1993 March	...	10.9	11.3	11.9	16.3	14.5	15.9
June	13.0	10.8	11.9	12.0	16.3	14.7	15.1
September	13.0	11.2	11.6	11.7	16.3	13.3	15.1
December	12.0	9.6	10.2	10.3	15.3	12.3	15.1
1994 March	12.0	9.6	10.1	10.3	15.3	13.0	14.0
June	12.0	10.4	10.8	10.5	15.3	14.5	14.0
September	13.0	9.8	10.8	11.5	16.3	16.9	14.0
December	13.0	11.6	12.5	12.6	16.3	16.8	15.1
1995 March	14.0	11.9	13.0	13.5	17.5	16.7	15.1
June	15.0	12.9	13.8	14.3	17.5	16.8	16.7
September	15.0	13.6	14.0	13.8	18.5	15.5	17.5
December	15.0	14.8	13.9	13.5	18.5	14.6	17.5
1996 January	15.0	14.3	14.0	13.8	18.5	13.8	17.5
February	15.0	14.3	13.9	13.8	18.5	14.1	17.5
March	15.0	14.1	14.1	13.8	18.5	15.0	17.5
April	16.0	14.6	14.3	14.3	19.5	15.8	17.5
May	16.0	16.0	15.9	14.8	20.5	16.5	17.5
June	16.0	16.0	15.8	15.5	20.5	15.8	19.5
July	16.0	15.3	15.0	15.2	19.5	15.4	19.0
August	16.0	16.2	15.9	15.5	19.5	15.8	19.0
September	16.0	15.4	15.3	15.2	19.5	15.4	18.3
October	16.0	15.7	15.0	15.5	19.3	15.8	18.3
November	17.0	16.9	15.3	15.8	20.3	16.2	18.3
December	17.0	17.7	15.9	16.0	20.3	16.2	18.6
1997 January	17.0	17.2	16.2	16.0	20.3	15.8	19.6
February	17.0	16.0	15.8	15.8	20.3	15.0	19.6
March	17.0	16.0	15.8	15.8	20.3	15.2	19.6
April	17.0	15.9	15.8	15.8	20.3	15.2	19.6
May	17.0	15.6	15.7	15.8	20.3	15.1	19.6
June	17.0	15.3	15.5	15.5	20.3	14.7	19.6
July	17.0	15.2	15.1	15.5	20.3	14.2	19.6
August	17.0	15.6	14.8	15.3	20.3	14.2	19.6
September	17.0	15.5	14.7	15.3	20.3	14.2	19.6
October	16.0	14.8	14.6	15.0	19.3	14.1	19.6
November	16.0	15.0	14.6	14.5	19.3	14.5	19.6
December	16.0	15.0	14.7	14.5	19.3	14.1	18.6
1998 January	16.0	14.8	14.4	14.5	19.3	13.6	18.6
February	16.0	14.3	14.0	...	19.3	13.5	18.6
March	15.0	13.0	13.1	...	18.3	13.3	18.6
April	14.9	13.0	12.9	...	18.3	13.0	...
May	18.0	17.0	13.3	...	18.3	14.0	...

Sources: International Monetary Fund, *International Financial Statistics;* and South African Reserve Bank, *Quarterly Bulletin.*

1/ Until February 1998, Reserve Bank's discount rate for short-term government paper. Thereafter, average repurchase rate.

2/ End of period.

3/ Averages for each Friday of the month.

4/ Average yield on government bonds with a maturity of ten years and more.

Table 51. South Africa: Changes in Bank Credit, 1992-98 1/

	Credit to the private sector								Credit	
	Bills discounted, investments	Instalment sale credit 2/	Leasing finance 2/	Mortgage advances	Other loans and advances	Total	Credit to government, net	Total bank credit	to the private sector	Total bank credit
	(Change from previous period; in millions of rand)								(Percentage change from year ago)	
1992	3,463	293	1,266	12,160	-368	16,815	3,606	20,420	8.7	10.4
1993	-4,976	3,510	993	14,619	6,173	20,317	244	20,563	9.7	9.5
1994	4,083	6,361	1,120	17,334	10,226	39,126	8,034	47,158	17.0	19.9
1995	2,075	8,019	2,762	21,919	12,470	47,244	-9,653	37,592	17.6	13.2
1996	-1,564	7,938	3,262	22,974	18,225	50,835	4,350	55,185	16.1	17.1
1997	2,794	4,157	-671	18,390	28,413	53,082	9,802	62,885	14.5	16.7
1994 March	-1,208	1,125	302	3,270	3,644	7,134	14,134	21,266	11.8	18.7
June	552	1,325	-43	3,909	-1,926	3,815	221	4,037	13.3	22.4
September	3,648	1,603	275	4,679	4,334	14,541	-685	13,854	15.3	22.2
December	1,092	2,308	586	5,476	4,174	13,636	-5,636	8,000	17.0	19.9
1995 March	-802	918	432	5,544	3,569	9,661	-2,046	7,615	17.6	13.0
June	-183	2,260	884	4,636	1,491	9,087	2,416	11,504	19.5	15.6
September	613	2,133	958	4,895	5,026	13,626	-6,743	6,882	18.0	12.3
December	2,447	2,708	488	6,844	2,384	14,870	-3,279	11,591	17.6	13.2
1996 March	403	1,648	651	5,506	6,034	14,243	-2,648	11,594	18.6	14.2
June	-1,316	2,256	915	5,287	3,786	10,927	8,930	19,858	18.7	16.4
September	-583	1,772	1,687	6,785	4,686	14,348	-2,046	12,301	18.1	17.8
December	-68	2,262	9	5,396	3,719	11,317	114	11,431	16.1	17.1
1997 March	749	789	263	5,379	9,018	16,199	4,571	20,768	16.0	19.3
June	111	1,105	-96	4,441	8,570	14,129	-3,252	10,879	16.4	15.7
September	98	435	-57	4,390	4,838	9,704	4,009	13,713	14.4	15.5
December	1,837	1,828	-781	4,180	5,987	13,050	4,474	17,525	14.5	16.7
1998 March	1,443	1,103	-459	5,882	12,363	20,333	-2,705	17,628	14.9	15.0

Source: South African Reserve Bank, *Quarterly Bulletin.*

1/ Credit extended by the banking sector, which comprises the Reserve Bank, the former National Finance Corporation, the Corporation for Public Deposits and the "pooled" funds of the former Public Debt Commissioners, the discount houses, the short term business of the Land Bank, the commercial and merchant banks, and other general banking institutions.

2/ Excluding unearned finance charges.

Table 52. South Africa: Balance of Payments, 1993-97

(In millions of U.S. dollars)

	1993	1994	1995	1996	1997
Current account balance	1,852	-340	-2,736	-1,697	-1,913
Trade balance	5,844	3,485	1,721	2,328	1,979
Exports	24,172	24,967	28,857	29,734	30,378
Net nongold, f.o.b.	17,299	18,298	22,644	23,613	24,774
Gold 1/	6,872	6,669	6,214	6,121	5,604
Imports, f.o.b.	-18,327	-21,481	-27,136	-27,406	-28,399
Nonfactor services	-2,009	-1,937	-1,462	-681	-496
Credits	3,730	4,171	4,740	5,030	5,475
Debits	-5,739	-6,108	-6,202	-5,711	-5,971
Factor services	-2,115	-1,933	-3,029	-3,272	-3,287
Credits	716	891	1,145	1,118	1,353
Debits	-2,831	-2,824	-4,174	-4,389	-4,640
Interest	-1,905	-1,877	-2,496	-2,567	-2,968
Dividends and profits	-825	-827	-830	-1,115	-1,030
Taxes	-101	-120	-120	-2	0
Transfers	131	45	33	-73	-109
Private	68	-29	-36	-44	-84
Official	64	74	69	-29	-24
Capital account balance	-4,666	1,219	5,240	621	4,394
Long-term capital, net	-83	987	5,026	1,569	6,519
Private	800	-169	2,100	14	2,246
Official	-883	1,156	2,926	1,554	4,273
Short-term capital, net	-1,623	1,392	1,842	1,768	-764
Private	-1,792	860	2,264	1,981	-693
Public	169	533	-422	-213	-72
Errors and omissions	-2,960	-1,160	-1,629	-2,716	-1,360
Change in net reserves (on a transactions basis) 2/	-2,814	881	2,489	-987	2,349
Change in liabilities relating to reserves 3/	2,274	-117	-1,455	-1	1,662
SDR allocations and valuation adjustments	493	97	86	693	53
Change in gross reserves 2/	-47	861	1,121	-296	4,064
Memorandum item:					
Current account/GDP (in percent)	1.6	-0.3	-2.0	-1.3	-1.5

Sources: South African Reserve Bank, *Quarterly Bulletin;* and Fund staff estimates.

1/ Net foreign sales of gold plus changes in the gold holdings of the Reserve Bank and other banking institutions.
2/ Gold and foreign exchange reserves of the Reserve Bank, the banking sector, and the Central Government.
3/ Liabilities related to reserves include all foreign short-term liabilities of the Reserve Bank and other banking institutions and short-term foreign loans to the Central Government by foreign banks and authorities.
The national definition excludes obligations to the Fund.

Table 53. South Africa: Quarterly Balance of Payments, 1995-97
(In millions of U.S. dollars)

	1995				1996				1997			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
					(Seasonally adjusted figures)							
Nongold exports, f.o.b.	5,415	5,217	5,831	6,174	6,116	5,492	6,051	5,970	5,970	6,483	6,208	6,119
Net gold exports 1/	1,590	1,530	1,709	1,386	1,653	1,468	1,607	1,414	1,488	1,382	1,399	1,338
Imports, f.o.b.	-6,683	-6,745	-6,682	-7,023	-7,016	-6,723	-6,934	-6,757	-6,851	-7,193	-7,114	-7,233
Trade balance	322	2	857	537	753	237	724	627	607	673	493	224
Net services and transfers	-1,160	-1,019	-1,243	-1,037	-1,103	-980	-997	-961	-985	-968	-979	-959
Current account balance	-838	-1,018	-385	-500	-350	-742	-273	-335	-378	-296	-486	-735
					(Actual data, not seasonally adjusted)							
Current account balance	-763	-998	-712	-267	-214	-759	-575	-139	-460	-196	-600	-640
Long-term capital, net	684	1,481	1,183	1,665	1,305	525	35	-129	937	3,338	1,795	532
Public sector	227	787	647	1,253	599	259	-218	922	548	3,811	635	-575
Private sector	457	695	536	412	706	265	253	-1,051	390	-473	1,160	1,106
Short-term capital, net	959	-195	-337	-193	-1,628	-252	-294	963	-96	-426	-1,458	-142
Public sector	50	-507	27	11	-85	-22	-86	-25	-52	-15	-13	6
Private sector 2/	484	1,116	243	499	-1,039	1,455	-105	1,727	512	748	-972	-3
Other 3/	425	-803	-607	-704	-505	-1,686	-102	-738	-556	-1,159	-473	-145
Total capital movements	1,643	1,286	846	1,472	-323	273	-259	834	841	2,912	337	389
Change in net reserves (on a transactions basis) 4/	880	289	134	1,205	-537	-486	-834	695	381	2,716	-263	-251
Change in liabilities related to reserves 5/	-412	-600	-86	-366	-1	9	131	-135	448	-261	767	765
SDR allocations and valuation adjustments	104	65	-70	-10	341	241	130	73	-241	59	124	105
Change in gross reserves	572	-246	-23	828	-197	-236	-572	632	589	2,514	627	619

Sources: South African Reserve Bank, *Quarterly Bulletin;* and Fund staff estimates.

1/ Net foreign sales of gold plus changes in the gold holdings of the Reserve Bank and other banking institutions.

2/ Excluding the Reserve Bank.

3/ Private nonmonetary sector including unrecorded transactions.

4/ Gold and foreign exchange reserves of the Reserve Bank, the banking sector, and the Central Government.

5/ Liabilities related to reserves include all foreign short-term liabilities of the Reserve Bank and short-term foreign loans but exclude obligations to the IMF.

Table 54. South Africa: Quarterly Balance of Payments, 1995-97
(In millions of rand)

	1995				1996				1997			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
	(Seasonally adjusted figures)											
Nongold exports, f.o.b.	19,306	18,989	21,269	22,563	23,054	23,670	27,048	27,679	26,931	28,976	28,831	29,404
Net gold exports 1/	5,670	5,569	6,234	5,064	6,233	6,325	7,184	6,558	6,712	6,178	6,499	6,429
Imports, f.o.b.	-23,830	-24,553	-24,375	-25,664	-26,448	-28,971	-30,996	-31,332	-30,904	-32,147	-33,038	-34,755
Trade balance	1,147	6	3,127	1,963	2,839	1,023	3,236	2,906	2,739	3,007	2,292	1,079
Net services and transfers	-4,135	-3,711	-4,533	-3,789	-4,160	-4,222	-4,457	-4,457	-4,444	-4,328	-4,547	-4,609
Current account balance	-2,989	-3,705	-1,406	-1,825	-1,321	-3,198	-1,221	-1,551	-1,705	-1,321	-2,256	-3,531
	(Actual data, not seasonally adjusted)											
Current account balance	-2,719	-3,632	-2,598	-976	-808	-3,269	-2,570	-645	-2,074	-878	-2,786	-3,075
Long-term capital, net	2,439	5,392	4,316	6,083	4,920	2,262	156	-599	4,228	14,918	8,336	2,554
Public sector	811	2,863	2,360	4,578	2,258	1,118	-974	4,275	2,470	17,032	2,949	-2,762
Private sector	1,628	2,529	1,956	1,505	2,662	1,144	1,130	-4,874	1,758	-2,114	5,387	5,316
Short-term capital, net	3,419	-709	-1,231	-705	-6,137	-1,086	-1,312	4,465	-434	-1,902	-6,771	-683
Public sector	178	-1,847	97	42	-319	-93	-386	-118	-233	-66	-60	28
Private sector 2/	1,725	4,061	888	1,824	-3,916	6,272	-469	8,006	2,308	3,342	-4,513	-15
Other 3/	1,516	-2,923	-2,216	-2,571	-1,902	-7,265	-457	-3,423	-2,509	-5,178	-2,198	-696
Total capital movements	5,858	4,683	3,085	5,378	-1,217	1,176	-1,156	3,866	3,794	13,016	1,565	1,871
	0	0	0	0	. 0	0	0	0	0	0	0	0
Change in net reserves (on a transactions basis) 4/	3,139	1,051	487	4,402	-2,025	-2,093	-3,726	3,221	1,720	12,138	-1,221	-1,204
Change in liabilities related to reserves 5/	-1,468	-2,185	-315	-1,338	-4	39	586	-627	2,020	-1,166	3,560	3,677
SDR allocations and valuation adjustments	370	237	-255	-37	1,287	1,038	583	337	-1,085	265	574	503
Change in gross reserves 4/	2,041	-897	-83	3,027	-742	-1,016	-2,557	2,931	2,655	11,237	2,913	2,976

Sources: South African Reserve Bank, *Quarterly Bulletin.*

1/ Net foreign sales of gold plus changes in the gold holdings of the Reserve Bank and other banking institutions.

2/ Excluding the Reserve Bank.

3/ Private nonmonetary sector including unrecorded transactions.

4/ Gold and foreign exchange reserves of the Reserve Bank, the banking sector, and the Central Government.

5/ Liabilities related to reserves include all foreign short-term liabilities of the Reserve Bank and short-term foreign loans to the Central Government by foreign banks and authorities but excludes obligations to the IMF.

Table 55. South Africa: Volume and Unit Value of Exports and Imports, 1994-97
(Percentage change from previous period)

	1994	1995	1996	1997	1996				1997			
					I	II	III	IV	I	II	III	IV
Volume of exports												
Goods and nonfactor services	1.0	10.0	11.4	5.3	5.2	-4.6	11.9	-2.7	1.1	2.4	0.1	-0.3
Nongold goods and nonfactor services	4.0	15.4	14.9	5.3	3.1	-3.3	12.2	-1.1	-1.3	4.2	-1.3	0.3
Volume of imports												
Goods and nonfactor services	16.2	17.1	9.2	4.6	1.3	3.8	4.6	-3.4	-0.1	4.5	-0.1	3.0
Unit value of exports 2/												
Goods and nonfactor services	12.0	6.9	10.5	5.2	2.6	6.4	2.1	2.5	-1.4	1.8	0.8	1.3
Nongold goods and nonfactor services	11.0	7.9	8.3	7.7	2.1	5.3	1.7	2.6	0.5	2.7	1.3	1.0
Unit value of imports 2/												
Goods and nonfactor services	7.6	8.4	7.9	6.6	0.8	4.4	3.5	4.2	-0.8	-0.1	2.3	1.2
Terms of trade 3/												
Including gold												
Index 1990 = 100	101.9	100.5	102.9	101.5	102.6	104.5	103.1	101.4	100.8	102.7	101.2	101.4
Percentage change	4.0	-1.4	2.4	-1.4	1.8	1.9	-1.3	-1.6	-0.6	1.9	-1.5	0.2
Excluding gold												
Index 1990 = 100	101.4	100.9	101.4	102.4	102.0	102.8	101.1	99.6	100.9	103.7	102.6	102.5
Percentage change	3.0	-0.5	0.5	1.0	1.2	0.8	-1.7	-1.5	1.3	2.8	-1.1	-0.1
Memorandum items:												
Effective exchange rate (IFS)												
Nominal	-5.2	-7.4	-12.0	0.4	-1.1	-11.4	-4.3	-2.8	8.4	2.3	-1.4	-3.9
Real 4/	-4.5	-3.0	-7.7	7.0	0.3	-10.3	-2.5	-0.7	10.4	3.4	-0.4	-3.3
Trading partners (GEE)												
Total domestic demand	3.5	2.9	2.6	2.5								
Non-oil import demand	10.8	9.7	6.3	8.1								
Domestic demand (incl. Exports) 5/	5.2	6.2	4.6	2.4	1.0	1.7	1.7	-0.3	-0.1	1.6	0.0	0.7

Sources: South African Reserve Bank, *Quarterly Bulletin;* International Monetary Fund, *International Financial Statistics;* and Fund staff estimates.

1/ Seasonally adjusted quarterly data, except for memorandum items.
2/ In rand.
3/ Goods and nonfactor services
4/ Relative consumer prices adjusted for exchange rate changes (depreciation -); period average.
5/ Quarterly data are seasonally adjusted.

Table 56. South Africa: Services and Transfers, 1993-97
(In millions of dollars)

	1993	1994	1995	1996	1997
Services					
Receipts	4,446	5,062	5,885	6,147	6,828
Freight	353	381	336	253	295
Other transportation	1,017	1,020	1,005	936	1,029
Travel	1,327	1,569	1,917	2,293	2,581
Investment income	716	891	1,055	1,006	1,230
Interest	129	188	268	238	544
Dividends and profits	501	602	664	653	686
Taxes	87	102	124	115	0
Other income 1/	1,033	1,202	1,572	1,660	1,693
Payments	-8,570	-8,933	-10,376	-10,100	-10,611
Freight	-1,241	-1,364	-1,859	-1,828	-1,920
Other transportation	-1,010	-1,166	-1,171	-1,012	-1,022
Travel	-1,870	-1,848	-1,822	-1,737	-1,916
Investment income	-2,831	-2,824	-3,446	-3,684	-3,998
Interest	-1,905	-1,877	-2,496	-2,567	-2,968
Dividends and profits	-825	-827	-830	-1,115	-1,030
Taxes	-101	-120	-120	-2	0
Other payments 2/	-1,619	-1,731	-2,077	-1,839	-1,755
Net	-4,124	-3,871	-4,491	-3,953	-3,783
Freight	-887	-983	-1,524	-1,575	-1,625
Other transportation	7	-146	-166	-76	7
Travel	-543	-279	95	556	664
Investment income	-2,115	-1,933	-2,390	-2,678	-2,768
Interest	-1,777	-1,690	-2,228	-2,328	-2,424
Dividends and profit	-324	-226	-166	-462	-344
Taxes	-14	-18	4	113	0
Other	-586	-529	-505	-179	-61
Net transfers	131	45	33	-73	-109
Private	68	-29	-36	-44	-84
Central Government	64	74	69	-29	-24
	0	0	0	0	0
Net invisibles	-3,993	-3,825	-4,458	-4,025	-3,891
(In percent of GDP)	(3.4)	(3.1)	(3.3)	(3.2)	(3.0)

Sources: South African Reserve Bank, *Quarterly Bulletin*; and Fund staff estimates.

1/ Income from nonmerchandise insurance and other foreign earnings.
2/ Payments for nonmerchandise insurance and other foreign payments.

Table 57. South Africa: Net Capital Movements, 1993-97
(In millions of dollars)

	1993	1994	1995	1996	1997 Prel.
Long-term capital	-83	987	5,026	1,569	6,519
Public sector	-883	1,156	2,926	1,554	4,273
General government	51	992	1,123	1,866	2,784
Public corporations	-935	164	1,803	-312	1,489
Nonbank private sector	819	218	2,000	310	2,425
Direct investment, net	-172	-100	385	855	-261
Nondirect investment, excluding net purchases of securities	131	208	368	-1,477	-1,065
Net purchases of securities by nonresidents	860	110	1,247	931	3,751
Banking sector	-19	-387	100	-295	-179
Short-term capital	-1,555	1,392	1,842	1,768	-764
Public sector	169	533	-422	-213	-72
General government	145	485	-475	0	0
Public corporations	24	48	53	-213	-72
Nonbank private sector	-712	-102	-79	-321	-936
Direct investment	-130	295	-35	101	-530
Nondirect investment	-582	-398	-44	-422	-406
Banking sector	-1,013	962	2,343	2,303	244
Errors and omissions	-2,960	-1,160	-1,629	-2,716	-1,360
Net capital movements	-4,598	1,219	5,240	621	4,394

Sources: South African Reserve Bank; and Fund staff estimates.

Table 58. South Africa: External Debt, 1992-97 1/

	1992	1993	1994	1995	1996	1997 4/
	(In millions of U.S. dollars)					
Debt outstanding (at year-end)						
Medium- and long-term 2/	8,342	8,145	11,444	12,549	11,424	11,653
Public sector 3/	5,260	5,481	6,197	7,319	7,249	7,325
Private sector	3,082	2,664	5,247	5,230	4,175	4,328
Short-term 2/	8,959	8,545	7,203	9,765	12,159	11,736
Public sector 3/	3,200	3,731	3,684	1,363	1,958	1,515
Private sector	5,759	4,814	3,519	8,402	10,201	10,221
Total external debt	17,301	16,690	18,647	22,314	23,583	23,389
Public sector	8,460	9,212	9,881	8,682	9,207	8,840
Private sector	8,841	7,478	8,766	13,632	14,376	14,549
Memorandum items:			(In percent)			
Total external debt (in billions of rand) 5/	83.2	86.7	98.8	120.5	154.2	
Debt / GDP 5/	22.7	21.8	23.0	24.7	26.1	
Debt / Exports of goods and nonfactor services 5/	95.1	89.2	92.9	95.1	91.8	
Share of short-term debt in total debt	51.8	51.2	38.6	43.8	51.6	50.2
Interest payments/exports of goods and nonfactor service	6.6	6.7	6.3	7.2	7.2	

Sources: South African Reserve Bank, *Quarterly Bulletin*; data provided by the South African authorities; and Fund staff estimates.

1/ Foreign currency denominated debt.
2/ The distinction between short-term and long-term debt is not based on the original maturity structure, but on the schedule of repayments, i.e. , short-term debt comprises all amortization payments due over the next year.
3/ Central Government, local authorities, public business enterprises, public corporations, and debt of the monetary sector that is not affected by the debt standstill.
4/ As of end-June 1997.
5/ Including rand denominated debt.

Table 59. South Africa: External Reserves, 1993-97

(In millions of U.S. dollars: end of period)

	1993	1994	1995	1996	1997	1996				1997			
						I	II	III	IV	I	II	III	IV
Gross external reserves	3,252	3,980	4,987	3,589	7,516	4,383	3,791	3,063	3,589	4,400	6,775	7,210	7,516
Gross official reserves 1/	2,676	3,129	4,299	2,201	5,846	3,515	2,596	2,217	2,201	2,967	4,885	5,686	5,846
Gold, national valuation 2/	1,658	1,445	1,481	1,261	1,048	1,693	1,529	1,323	1,261	1,144	1,144	1,164	1,048
SDRs	12	1	5	1	9	3	2	3	1	1	1	2	9
Other foreign exchange	1,006	1,683	2,813	939	4,788	1,820	1,066	891	939	1,821	3,740	4,520	4,788
Official liabilities relating to reserves 3/	2,461	2,243	767	594	2,304	699	650	750	594	1,109	858	1,639	2,304
Net external reserves 4/	791	1,737	4,220	2,995	5,212	3,684	3,141	2,313	2,995	3,291	5,917	5,571	5,212
Net official reserves 4/	215	886	3,532	1,606	3,541	2,816	1,946	1,467	1,606	1,858	4,027	4,047	3,541
Memorandum items:													
Gross official reserves													
In millions of rand	9,092	11,087	15,680	10,305	28,454	13,992	11,254	10,043	10,305	13,120	22,131	26,506	28,454
In millions of SDRs	1,945	2,145	2,882	1,530	4,314	2,437	1,792	1,541	1,530	2,148	3,536	4,155	4,314
In millions of dollars, excluding gold	1,018	1,684	2,818	940	4,797	1,822	1,067	894	940	1,822	3,741	4,522	4,797
In months of imports 5/													
Gross official reserves	1.3	1.4	1.5	0.8	2.0	1.3	1.0	0.7	0.8	1.1	1.7	1.9	2.0
Net official reserves 4/	0.1	0.4	1.3	0.6	1.2	1.1	0.7	0.5	0.6	0.7	1.4	1.4	1.2

Sources: International Monetary Fund, *International Financial Statistics;* and South African Reserve Bank, *Quarterly Bulletin.*

1/ Holdings of the Reserve Bank and Central Government.
2/-Gold reserves are valued at 90 percent of the average of the last ten London fixing prices during the month.
3/ Includes December 1993 CCFF drawing (SDR 614 million).
4/ Gross reserves less official liabilities relating to reserves.
5/ Imports of goods and nonfactor services.

Table 60. South Africa: Exchange Rate and Gold Price Developments, 1992-98
(Average date)

	U.S. dollar/ Rand	U.S. dollar/ Financial rand 1/		Effective exchange rate 3/		London gold price 5/	
				Nominal	Real 4/	Rand	U.S. dollars
			Discount	Index 1990=100			
1992	0.351	0.206	37.160	94.40	107.70	980	344
1993	0.306	0.233	20.880	91.00	105.50	1,177	360
1994	0.282	0.246	12.900	86.30	100.80	1,363	384
1995	0.276			79.90	97.80	1,393	384
1996	0.233			70.30	90.30	1,664	388
1997	0.217			70.60	96.60	1,523	331
1996							
Jan.	0.275			81.6	102.2	1,453	399
Feb.	0.267			79.4	99.7	1,516	405
Mar.	0.255			75.9	95.6	1,557	396
Apr.	0.238			71.4	90.0	1,657	393
May	0.229			69.2	87.9	1,715	392
June	0.230			69.5	89.2	1,677	385
July	0.228			68.4	87.9	1,684	383
Aug.	0.221			65.9	85.2	1,753	387
Sep.	0.222			66.8	87.2	1,725	383
Oct.	0.219			66.1	86.9	1,744	381
Nov.	0.215			64.4	85.2	1,759	378
Dec.	0.214			64.9	86.5	1,729	369
1997							
Jan.	0.215			66.9	89.7	1,648	355
Feb.	0.225			72.0	97.0	1,544	346
Mar.	0.225			72.9	98.8	1,561	352
Apr.	0.225			73.2	99.5	1,532	345
May	0.224			72.0	98.1	1,536	344
June	0.222			71.5	98.0	1,532	341
July	0.219			71.7	98.5	1,477	324
Aug.	0.213			71.4	98.2	1,517	324
Sep.	0.213			70.6	97.4	1,514	323
Oct.	0.212			69.5	96.2	1,530	325
Nov.	0.207			67.4	93.3	1,481	306
Dec.	0.205			68.4	94.9	1,408	289
1998							
Jan.	0.202			68.4	95.2	1,408	289
Feb.	0.203			68.0	94.9	1,468	297
Mar.	0.201			67.7	95.1	1,472	296
Apr.	0.198			66.8	94.0	1,551	308
May	0.197					1,523	299

Sources: South African Reserve Bank, Quarterly Bulletin; and International Monetary Fund, International Financial Statistics.

1/ End-of-period.

2/ The difference between the commercial and the financial rand as a percentage of the commercial rand.

3/ IMF estimates.

4/ Relative consumer prices, adjusted for exchange rate changes.

5/ Average daily fixing price per fine ounce.