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CAPITAL ACCUMULATION AND ECONOMIC REFORM IN SOUTH AFRICA

By

Carolyn Jenkins

1. Introduction

South Africa is a mineral exporting country. It is the world's largest gold producer, and it has commercially viable reserves of all major minerals except oil and bauxite. The economy is essentially market-driven, although historically there was heavy government intervention, in order, amongst other things, to maintain a system of institutionalised racial discrimination. Of its population of about 44 million, over 80 percent are indigenous blacks. Although its income per head is over US\$3,000, its measured income inequality is very high,¹ creating political pressures for redistribution of income and wealth.

Compared with most of the rest of Sub-Saharan Africa, the economy is large, diversified and developed. Nevertheless, throughout the twentieth century mining output has dominated exports, and from the 1970s fluctuations in the gold price in particular have had a significant influence on macroeconomic performance. The international isolation of the country in the apartheid era had wide-ranging effects, deepening the aspiration for self-sufficiency as an aim of economic policy and providing an additional disincentive to reform a protectionist trade regime designed to promote the

¹ In 1993 the Gini coefficient was 62.

welfare of the relatively skilled and educated minority. Even so, South Africa began a process of trade liberalisation some two decades before joining the WTO in 1994. The process has been gradual and sustained, and is not yet complete.

Since 1980 macroeconomic performance has been poor. Growth decelerated to virtually nothing. Unemployment is very high, and inflation was in the 10–20% range from the early 1970s until the mid-1990s. This economic performance parallels that of other resource-rich middle-income countries that pursued an import-substitution strategy over a long period - especially those which experienced social conflict.

In general, mineral-rich countries tend to perform worse than those that are deficient in natural resources, both by reducing the efficiency with which produced and human capital are deployed and by permitting for longer periods erroneous economic policies which ultimately contribute to a growth collapse. This paper examines the effect of South Africa's mineral wealth on its development generally and economic policy in particular, and assesses the implications for the current process of policy reform. The next section sets out the characteristics of the typical development trajectory of a mineral-driven economy, which will allow a comparison between South Africa's experience and the stylised facts in order to ascertain whether or not South Africa fits the usual pattern. Section 3 compares South Africa's growth experience with that of other middle-income countries in order to develop working hypotheses as to what has conditioned its growth trajectory. Section 4 provides a brief account of South Africa's economic performance and traces the evolution of trade and industrial policy, and Section 5 considers in more detail the magnitude and composition of investment, and how these have changed over time. Section 6 assesses the policy reform process, focusing on the constraints imposed by the need to redistribute both income and wealth to the recently enfranchised black majority. Section 7 summarises the argument.

2. *A stylised growth trajectory of natural resource-driven development*

Resource-abundant economies tend, with some notable exceptions to have a development path characterised by²:

- evidence of Dutch Disease (competitive manufacturing is smaller than in resource-deficient countries)
- a tendency to closed trade policy accompanied by mounting economic distortions
- the emergence of protected capital-intensive manufacturing that employs relatively few
- an expanding non-tradables sector, including slow-maturing infant industry, which frequently requires increasingly onerous subsidies out of taxation of the resource sector
- failure to diversify exports plus an emerging foreign exchange constraint
- mounting foreign borrowing which then cannot be serviced
- relatively slow skills accumulation and high income inequality
- inadequate social capital, which reduces the ability to generate a social consensus to manage shocks, especially negative shocks
- failure to push investment above 25% of GDP, along with a deteriorating incremental capital-output ratio which reduces the efficiency and profitability of investment
- a growth collapse

Recovery generally requires reforms that include a sharp depreciation of the real exchange rate to price workers back into competitive employment.

3. *Growth experience in comparative perspective*

South Africa is fairly typical of other developing countries classed by the World Bank as 'upper middle income'. In this section its growth performance is compared with that of other countries in its group, and an attempt is made to isolate the possible reasons for its declining growth rate. Ideally, one would want to estimate a growth model for South Africa in order to ascertain what determines the country's growth path, but data for almost all developing countries are too poor to undertake theoretically-consistent econometric work. Apart from possible model misspecification, the results would be insufficiently robust for any confidence to be attached to the findings. The methodology employed in this section, therefore, will be to isolate those variables which have been found to

² This model follows Auty (1999).

explain growth in other developing regions and then to compare South Africa's averages for these variables with the averages for other upper middle income developing countries.

The starting point is a paper by Sala-i-Martin [1997], written as a response to earlier econometric studies involving a range of methodologies and hundreds of variables to explain growth, which attempts to rank explanatory variables according to their robustness in regressions. Sala-i-Martin draws on the empirical economic growth literature to identify variables that have been found to 'explain' growth. Three fixed variables are almost always found to be important in the wider growth literature: initial *per capita* income; initial life expectancy; and the initial primary school enrolment rate. A model incorporating these is then tested with a large number (62 in all) of additional variables that have also been argued to contribute to growth performance. The results are reported for those that are found to be strongly correlated with growth.

The following discussion is based on Sala-i-Martin's 'robust' variables.³ These variables and their average values are recorded in Table 1. The countries reported are those classified by the World Bank Environmental Economics and Indicators Unit as 'upper middle income'. The countries whose names appear in bold type are those where mining is an important component of GDP and/or where primary exports are a significant proportion of total exports. In order to avoid the problem of noncomparability of data, the data used have been taken from the six largest of the original cross-country studies. The period covered by growth regression analysis is typically 1960-1990, as these are the years for which GDP adjusted for purchasing power parity are available.⁴

Half of the twelve countries reported in the table are dependent on primary commodities. In five, over 10% of GDP is accounted for by mining (nearly one quarter in the case of Saudi Arabia), and in all of these, except Trinidad and Tobago, the proportion of primary products (minerals and agriculture) in total exports is high. Diversification away from dependence on primary exports is a consistently significant regressor in cross-country growth models. Generally speaking, the *per capita* growth rate is higher the lower the proportion of primary exports in total exports (or in GDP). This is

³ Religious variables are omitted.

not obvious from Table 1, where Asian countries and the only European country have outperformed those in Africa and Latin America over the thirty-one years 1960-90 irrespective of whether or not they are dependent on primary exports.

Between 1960 and 1990, South Africa's real output per head grew at a rate similar to that of Chile and of Trinidad and Tobago, both of which are mineral economies. These three countries outperformed Argentina and Uruguay, neither of which produce and export minerals in significant proportions - although agriculture is important in Uruguay. However, they, in turn, were outperformed by the other countries in Table 1, some of which are primary exporters and others of which are not. It appears that factors in addition to the resource endowment must be considered when assessing the comparative growth performance of the countries in Table 1.

⁴ Because of the importance of 'initial conditions', some of the variables in Table 1 are *intended* to apply to several decades ago. In the case of longer series of data, most are out of date, simply because more recent information is not available across all countries in the sample.

Table 1 *The determinants of growth in GDP per capita in comparative perspective*

Sources: 1. Barro & Lee [1994]; 2. Levine & Renelt [1992]; 3. Easterly & Levine [1997]; 4. Hall & Jones [1998]; 5. Sachs & Warner [1997]; 6. De Long & Summers [1993]

Initial socio-economic conditions

Convergence processes suggest that the initial level of income is a factor in determining the speed at which economic growth occurs, with poorer countries (in this case Korea, Malaysia and Brazil) growing faster if they are able to take advantage of technological developments in more advanced countries, thereby converging on their own long-run growth paths.⁵ South Africa and Greece had very similar levels of GDP per head in 1960 (just over US\$2,000 in 1985 international prices) which suggests that, in theory and other things being equal, they should have been experiencing similar growth rates. In terms of initial conditions, all other things were not equal, however. Indicators of human capital (education and health) were poorer in South Africa than they were in any of the countries now classified as upper middle income, with the exception of Mexico and Saudi Arabia. The level of education of the workforce is particularly important, as expenditure on schooling generally raises productivity (and employability) over time [Appleton and Mackinnon, 1993; Birdsall *et al.*, 1997], and basic education is important for developing exports of manufactured goods [Wood, 1994]. Because there is no clear pattern with respect to initial conditions, other factors must explain, at least in part, the wide disparity in growth in output per head observed in Table 1.

Investment

Neo-classical growth models stress the importance of investment in driving more rapid expansion of output, and the correlation between the rate of investment and the rate of growth of output is strong in all studies that analyse the determinants of economic growth. This is particularly true of equipment investment (rather than investment in buildings and other construction projects). The average ratio

investment 23% of GNP), but there is no way of knowing whether these figures are comparable with those used by De Long and Summers, who compiled the figures used for the calculations in Table 1. It is possible that South Africa has had comparatively high rates of physical investment, as relative prices were skewed to favour capital. If this is the case then other explanations must be found for lower than average rate of economic growth.

Economic policy

Indicators of economic policy and stability which have been found to correlate strongly with economic growth include the extent of openness to international trade, the degree to which markets are allowed to operate, the extent of exchange-rate distortion, and the variability of the premium on the black-market exchange rate.

The countries in the sample which have tended to grow faster are those which have been open for at least some of the period 1965-90. The growth literature has a considerable amount to say about the relationship between openness to international trade and economic growth. There is an emerging consensus that outward orientation is one of the main factors driving growth in both developed and developing countries.⁶ A lower degree of distortion of the exchange rate – and a lower degree of variability in the black-market rate (which is usually associated with lower levels of black-market trading) – are evident in the faster-growing economies. These indicators are symptomatic of macroeconomic instability and a policy regime which is highly uncertain, and may also be symptomatic of overvaluation caused by Dutch disease. Although South Africa displayed some distortion of the exchange rate, and a small black market premium, these were moderate by developing country standards. This is entirely believable, as government spending did not ever race out of control to the same extent as in many other mineral economies which experienced severe Dutch disease, and, even during the period of political uncertainty, the authorities maintained macroeconomic stability sufficient to limit the extent of capital flight.

⁶ See, for example, Ben-David [1995]; Collier and Gunning [1997]; Dollar [1992]; Edwards [1993]; and Sachs and Warner [1997]. These findings are not undisputed (Krishna *et al* [1998]; Rodriguez and Rodrik [1991]). Trade policies are, to some extent, endogenous, and the direction of causation may not be obvious. Moreover, the protection of manufacturing often produces high growth initially but slower growth in the longer term.

Although frequently significant in cross-country regressions, it is not obvious from the averages presented in the table that fast-growing economies are associated with a high degree of market orientation. This implies at least that considerable government intervention in the economy is not inimical to growth.

Civil liberties and human rights

The type of state often emerges as important in determining economic growth [Auty, 1999; Rodrik, 1998b], although, again, it is not obvious from the data presented in the table that a higher level of civil liberty and democracy accompanies economic growth. South Africa rates worse on civil and political liberties than other countries in the sample, with the exceptions of Chile, Korea and Saudi Arabia. It is very likely that the interaction of social conflict and external shocks were responsible for the economy's stagnation in the 1980s and early 1990s.

Summary

This section was intended to give an indication, by placing South Africa in comparative perspective, of the possible determinants of its growth performance. In most of the variables which have been found worldwide to explain economic growth, South Africa has tended to underperform faster-growing countries. This is most observable in the areas of human and social capital, social and political stability, and trade policy. Essentially, the points made in this section remain in the nature of hypotheses, and are examined in more detail below.

4. Economic performance and industrial policy

4.1 An overview

Like that of many other developing countries dependent on exporting primary commodities other than oil, South Africa's economic growth decelerated as a result of a series of shocks in the 1970s. Growth performance was particularly weak after commodity prices collapsed in the early 1980s (Table 2). The turning point was probably 1974, when the long-run growth rate began to decline and

the cyclical pattern of economic activity became more unstable.⁷ The 1974 crisis was the culmination of various structural problems, which, amongst other things, reduced the profitability of investment.

Table 2
Economic performance indicators (% p.a.)

	1951-70	1971-80	1981-90	1991-98
Real annual average growth rates	5.1	3.9	1.6	1.1
Population growth	n.a.	n.a.	2.4	2.1
Average private investment ratio	16.2*	19.3	18.5	14.5
Average private savings ratio	17.4*	19.9	22.2	20.0
Inflation	3.6*	9.5	14.4	13.2
Source: calculated from SARB data				
* 1960-1970				

The South African literature identifies a range of causes of the deceleration of growth, summarised below. Many of these appear to be as predicted by the model of resource-abundant growth, outlined in Section 2, although South Africa’s unique political problems exacerbated these factors.

Labour productivity was falling because of skills shortages. Political unrest, frequently expressed by strikes, was also driving up real unit labour costs. The growth of the capital-labour ratio accelerated (in an attempt to maintain productivity). Consequently, the capital-output ratio rose sharply, causing the profitability of investment to fall [Gelb, 1991:19-23; Roux, 1991: 105]. At the same time, insufficiently developed export capacity, together with a high propensity to import investment goods placed a foreign-exchange constraint on growth. This was exacerbated by an overvalued exchange rate, which intensified the bias against manufactured exports and, at least in prospect, by calls for international sanctions.

Although the meteoric increase in the price of gold helped to partially insulate South Africa from the balance-of-payments crises which were a factor in driving many developing countries into debt, falling world demand contributed to falling production and rising unemployment. The government’s almost complete disinterest in stimulating alternative employment for blacks [Thomas, 1990:255],

⁷ 1975 appears to be a turning point for many countries experiencing a collapse in economic growth, with sharper falls in those countries divided by social conflict [Rodrik, 1998].

and the deliberate dualism in both agricultural development and skills acquisition made it difficult to absorb new job seekers: job creation fell from 157,000 annually between 1960 and 1974 to 57,000 a year from 1974 to 1985.

Financial sanctions imposed against South Africa in 1985-86 precipitated a debt crisis, although, unlike other developing countries, debt-service difficulties arose from the structure of the foreign debt (predominantly short-term loans) rather than its magnitude. Increasing social conflict, political uncertainty and tight monetary conditions necessitated by financial sanctions caused private investment to fall.⁸ Costs of production rose sharply: of capital, because of a shift in policy towards maintaining positive real interest rates and a weaker currency; of labour, because union pressures saw wage increases outstripping productivity improvements and because of a huge increase in politically-motivated strikes; and of raw materials, because of both domestic inflation and a weaker currency. For the first time, retrenchments of skilled workers became a feature of unemployment.

With the change of government in 1994 came the lifting of economic sanctions and a surge in confidence, which resulted in growth accelerating (modestly) for a period of about three years. However, the tight anti-inflationary stance of the central bank, although successful in reducing inflation to 6.9% by 1998, stifled growth. This, together with a tighter fiscal stance, significant structural changes occurring as a result of rapid trade liberalisation, and nervousness about emerging markets in the wake of a series of financial crises, meant that South Africa's growth performance in the 1990s was disappointing.

Although South Africa has not experienced a prolonged period of contraction, it does display a sustained deceleration of economic growth. It is possible to say that South Africa demonstrates many of the characteristics of mineral-driven development, with the resulting misallocation of investment and slow growth, and that many of these characteristics were heightened by apartheid, which, amongst other things institutionalised skills acquisition and income differentials along racial lines and

⁸ A complicating factor was the growing investment of private South African companies in foreign assets. Although there were strict exchange controls, total direct investment abroad increased in real terms by 105% between 1980 and 1985, as South African capital, reluctant to invest at home, found more profitable and less risky opportunities abroad.

prevented investment in social capital. This becomes even more evident when changes in policy and capital accumulation are described.

4.2 *The evolution of trade and industrial policy*

This section traces out South Africa's trade and industrial policy, which has been one of the key features of its development strategy. The events are summarised in an appendix table.

Import-substituting industrialisation from 1925

South Africa was one of the first of the world's current middle-income countries to explicitly adopt, in 1925, a policy of import-substituting industrialisation (ISI). ISI was expected to assist with developing greater economic independence from Britain and with creating employment for whites in manufacturing [Botha, 1973:334; Lumby, 1990:63]. There were substantial gains both in employment and in industrial expansion and diversification, but protection had a weakening effect on initiative and risk-taking, and on competitiveness [Black, 1993]. However, many industries became reliant on protection for survival, and its maintenance became a political issue, particularly when the threat of economic isolation from 1960 added a strategic need for continuing ISI.

Manufacturing growth began to slow towards the end of the 1960s. Empirical estimates of the ;

were rising too rapidly for the trade deficit to be financed by gold exports and capital inflows. The government introduced a policy of export promotion through a range of incentives, but left the protective tariff and import-control structure largely unchanged. The strategy was reinforced by the real devaluation of the rand in the mid-1970s.

In the years which followed the shift in policy, exports grew in volume terms more rapidly than imports, although these effects are better attributed to the depreciation of the currency than to any programme of export promotion. The growth in exports came mainly from an expansion in mining exports (from 57% to 62% of the value of total exports) and from processed minerals, which recorded impressive growth from around 5% of total exports (15% of manufactured exports) to 17.5% of the total (52% of manufactured exports) from 1974 to 1985. With few exceptions, most other categories of manufactures were sold mainly in the domestic market. There is no empirical evidence to suggest that basic metals received greater incentives to export than did other sectors, and yet, apart from basic metals, the export performance of most other sectors in the economy failed to respond to the improved system of incentives [Holden, 1990:267].

More concerted attempts at liberalisation from 1983

In 1983 the government began to liberalise trade by replacing QRs with import tariffs.⁹ The liberalisation was not unambiguous, however. Import surcharges, introduced in 1985 in response to a tightening of economic sanctions, raised rates of effective protection substantially [Holden, 1992b:253; IDC, 1990], and, as in other countries, increases in tariffs were used to offset the effects of the removal of QRs on industry.¹⁰ Towards the end of the 1980s the Board of Trade and Industry,

⁹ The share of imports (by value) requiring import permits fell from 77% in 1983 to 55% in 1984 to 23% in 1985 [Levy, 1992:10]. By 1989 the proportion was 15%. The government was not, however, in favour of completely free trade. A government white paper issued in 1985 states:

The government wishes to make it very clear that it has never espoused any so-called 'free-trade' policy. On the contrary, like all previous South African governments since 1924, and indeed earlier, it has decisively implemented a policy of protection for industry. Like previous governments, it has accorded protective customs duties, where justified, against competition from normally priced imports. This has continued to be done on a moderate and selective basis. [RSA, 1985:14]

¹⁰ These did not take the form of increases in *ad valorem* tariffs, but the creation of a non-transparent system of import reference prices (known in South Africa as 'formula duties'), the extent of protection increasing as the gap between an external reference price and the (lower) import price increases. Reference prices were often ruling Western European prices, implying that almost by definition countries exporting to South Africa at prices below those of firms in Western Europe were treated as if they were dumping. The formula duties became less important over time, as the formulas were not adjusted for inflation.

which historically had responded sympathetically to private-sector requests for tariff relief, began to move pro-actively towards reforming industrial policy. From 1987 the Board responded less favourably to applications for tariff protection, supporting 65% in 1987, 38% in 1988 and 20% in 1989.

Generally speaking, the 1980s saw a shift towards market-oriented instruments of economic policy, not only with respect to trade but also in monetary and exchange-rate policy. At the same time, the government initiated a review of the parastatals, shifting towards a programme of ‘commercialisation’ (rather than privatisation). The significance of this is discussed later.

It has been argued that the dismantling of QRs initiated what has been called ‘South Africa’s second liberalisation episode’ [Bell, 1993], although, if anything, effective protection rose in the mid 1980s. The process was supplemented with more effective incentives to exporters, and supported by a more appropriate exchange-rate policy. The sanctions-precipitated debt crisis of 1985 increased the urgency with which this was pursued, as this required action by the authorities to turn the historical current-account deficit into a substantial surplus, so as to enable the servicing of the foreign debt. The effect was a dramatic increase in non-gold export volumes which increased by an average of 7.7% annually between 1984 and 1990, in spite of trade sanctions. The proportion of gold in total exports fell from 48% in 1983 to 27% in 1992.

Trade policy reform from 1994

There were fears that the new majority government elected in 1994 would be under pressure to reverse the reforms, opting for more interventionist policies. However, framework studies commissioned by both the largest trade union body and the African National Congress [ISP, 1993; MERG, 1993] recognised the need for South Africa to become internationally more competitive, and recommended a more neutral trade regime, with a simpler transparent tariff structure, and tariffs reduced in line with GATT requirements. These recommendations were implemented as part of an agreement signed with the WTO in 1994.

After 1994 the new government actually accelerated the programme of tariff reduction agreed with the WTO, and introduced supplementary measures to deepen the liberalisation, including a programme of privatisation and the abolition of almost all agricultural marketing.¹¹ The phased liberalisation of exchange controls occurred simultaneously with the freeing of trade, although neither process is yet complete.

South Africa has experienced not so much a trade liberalisation episode as a gradual shift of trade policy in a more liberal direction, accelerated with the transfer to majority rule and the removal of international sanctions. Historically, South Africa has had a high and significantly differentiated level of import protection, and, in spite of rationalisation, this remains the case. The complex structure of import protection meant that the system was open to lobbying by sectional interests: an industry which felt itself to be under serious threat from import competition would expect a sympathetic hearing from the government, although this began to change even before the change of government in 1994. The issue of the accumulation of rents from the exploitation of natural resources is considered below, after a look at the composition of the capital stock which emerged from the process of industrialisation described above.

5. *The magnitude and composition of wealth*

5.1 *The stock of capital in 1994*

It was argued in Section 3 that South Africa has underperformed other middle-income developing countries in investment in human capital, but not in physical capital formation. This is only partially consistent with the experience of other natural resource-abundant countries, where natural resource rents have tended to both distract governments from the need to develop human resources and divert the attention of private investors away from wealth creation into rent-seeking activities Ranis [1991].

¹¹ Historically the marketing boards had power over imports, exports and prices of most agricultural products. In part their abolition is in line with WTO requirements. However, the objectives include the breaking of the monopolistic stranglehold over agricultural markets and the opening up of the sector to those previously excluded.

The World Bank [1999] has estimated the stock (in 1994) of human, produced and natural capital for 92 countries.¹² Table 3 reports the estimated proportions of each form of capital in total wealth for the twelve countries defined as upper middle income by the World Bank EEI Unit. The figures are converted to US dollars for comparison, but are not adjusted for purchasing power parity.

Table 3
Wealth estimates for upper-middle income developing countries, 1994

	Trin. & Tobago	Korea	Malay.	Maur.s	South Africa	Saudi Arabia	Mexico	Argent.	Brazil	Chile	Urug.y	Greece
<i>US\$bn</i>												
Total wealth	83	6,025	1,280	57	2,168	2,608	6,267	4,680	9,453	958	264	1,077
<i>US\$ per head</i>												
Total wealth	64,400	135,193	65,639	51,874	52,135	149,024	68,224	136,911	59,400	68,249	83,351	103,513
human resources	33,212	109,979	41,942	40,287	36,969	52,853	49,405	114,504	41,492	45,919	59,682	75,046
produced assets	19,078	22,278	11,881	10,351	10,962	24,296	12,187	12,557	10,846	7,890	8,864	23,261
natural capital	12,109	2,937	11,817	1,236	4,205	71,876	6,632	9,850	7,061	14,440	14,806	5,207
<i>% of total wealth</i>												
human resources	0.52	0.81	0.64	0.78	0.71	0.35	0.72	0.84	0.70	0.67	0.72	0.72
produced assets	0.30	0.16	0.18	0.20	0.21	0.16	0.18	0.09	0.18	0.12	0.11	0.22
natural capital	0.19	0.02	0.18	0.02	0.08	0.48	0.10	0.07	0.12	0.21	0.18	0.05

Source: calculated from data available at the World Bank Environmental Economics and Indicators Unit website

In terms of the structure of wealth, South Africa appears to be representative of its group, showing no severe distortion. Less than 10 percent of South Africa's estimated wealth in 1994 was in the form of natural capital¹³ (agricultural land as well as minerals). The proportion of wealth held in the form of produced capital is particularly high, and previous investment in human resources is about average for the group. Even when adjusted for purchasing power parity, these percentages are not significantly different: 75%, 20% and 5% respectively.

In *per capita* terms, however, South Africa compares unfavourably with the other countries: its human capital stock per person (US\$37,000) is almost the worst of the group, and its stock of

¹² As these data are in an early stage of compilation, they may still be inaccurate. The data for South

produced capital per person (US\$11,000) is third from the bottom. Moreover, these figures imply nothing about either the efficiency of the capital stock or its ownership distribution. In South Africa, much previous investment in both physical and human capital is arguably inefficient¹⁴, and its distribution is highly unequal, held by an economic elite defined, until recently, on racial grounds and protected by a legal and economic policy framework.

5.2 *Trends in capital accumulation*

Until the early 1970s South Africa was successful in attracting large inflows of both direct and portfolio foreign investment, mainly into mining. Relatively high domestic savings financed local capital accumulation and meant that a domestic capitalist class developed. After the mineral boom of 1979-81 both GDI and GDS fell as a proportion of GNP (Figure 1).¹⁵ The economy stagnated, consumption absorbed a larger proportion of output, and investment fell.

As a proportion of GNP, public spending on education rose sharply during the 1970s, falling very slowly thereafter (Figure 2). Prior to that, it was a matter of explicit policy *not* to provide more than a basic education for Africans, who were viewed as an unskilled workforce. This is entirely consistent with the considerable investment in physical capital, which required a small highly-skilled workforce and with the strategy of ISI, one aim of which was to provide employment for whites. The country's mineral wealth made the strategy appear sustainable, and reduced the need to develop labour-intensive industry so as to absorb the black population into the modernising economy, at least until the 'easy' stages of ISI were over and growth slowed in the 1970s. As political protests intensified, and as the government began to move pro-actively towards promoting export diversification, investment in black education rose rapidly, although it is still inadequate. In other words, the aims of apartheid and industrialisation policy have overlapped to a considerable extent for most of the century.

¹³ The EEI Unit's figures for wealth embodied in minerals and metals is the estimated present value of reserves. The value of South Africa's reserves is probably underestimated.

¹⁴ It is not really possible to generalise about the efficiency of investment. There were huge capital-intensive projects pursued as part of the self-sufficiency strategy that were a complete waste of money (like Moss gas), and others, including some parastatals, which have become so efficient that a range of estimates of South Africa's comparative advantage have concluded that the country has a comparative advantage in large capital-intensive production (for example, Holden and Holden [1978]).

¹⁵ The charts show all data as percentages of GNP, as this controls for the effect of economic growth on investment and savings.

Figure 1

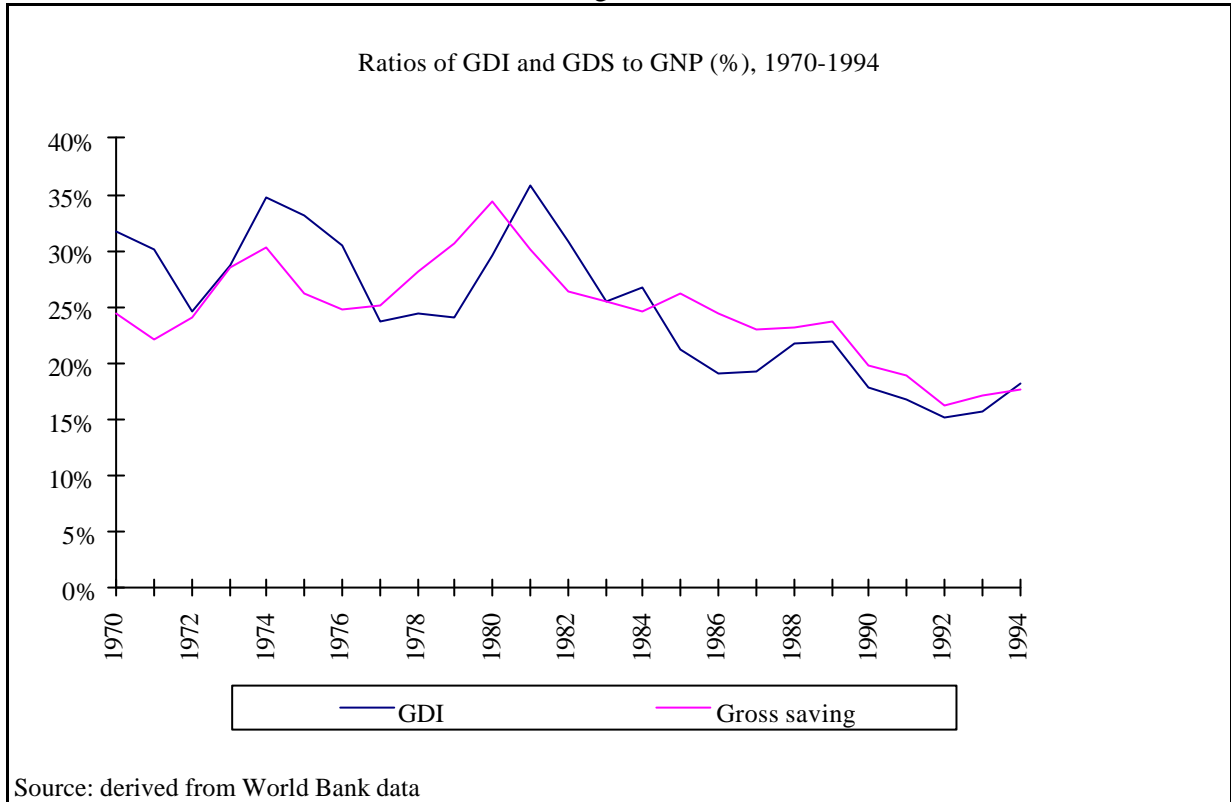
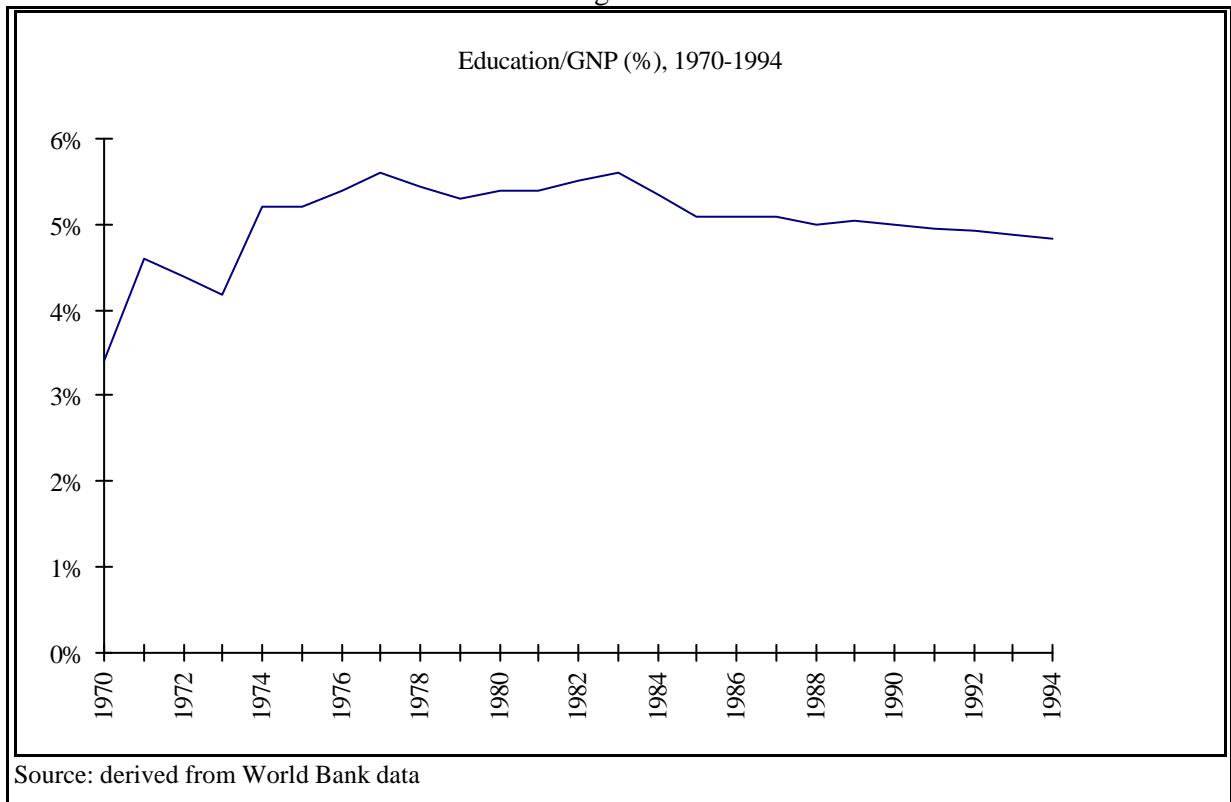


Figure 2



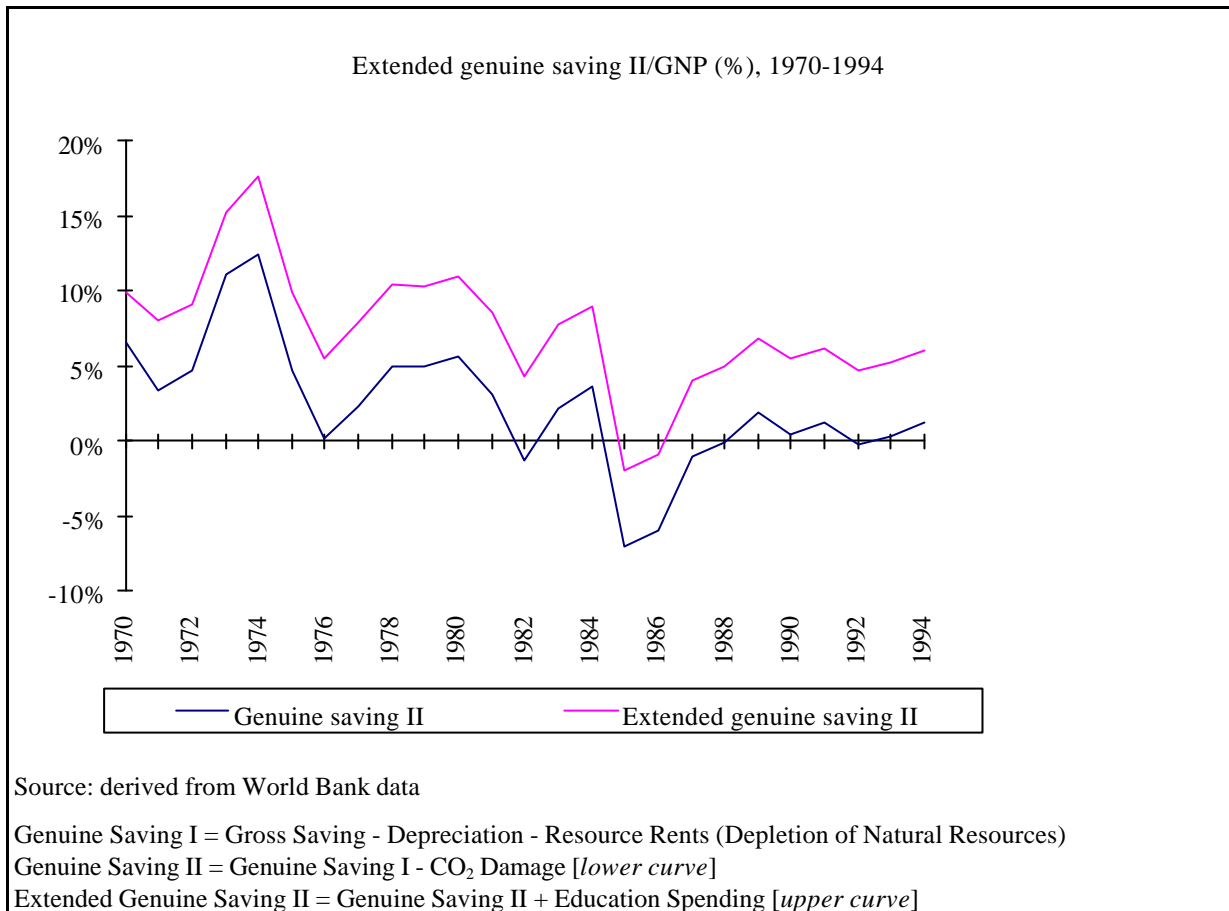
It is concerning that savings (out of which future investment is financed) is declining. In 1993 South Africa’s gross domestic saving was 17.2% of GNP, which is low for a country at its level of development. Sustainable development requires even higher rates of gross savings. If the definition of ‘saving’ is extended to take into account both natural resource depletion (deduction) and the accumulation of human capital (addition), the ratio of genuine saving¹⁶ to GNP was only 6.7%; deducting the costs of pollution damage causes the ratio to fall to around 5% (Table 4). This is considerably lower than the averages for countries in all income groups, including the poorest countries.

Table 4
Extended genuine saving, South Africa and income group averages, 1993

Extended genuine saving	High Income	Upper Middle Income	Lower Middle Income	Low Income	South Africa
% of GNP	14%	10%	11%	11%	5%
US\$ per cap.	3433	39	415	147	144
Source: World Bank EEI Unit [1999]					

If current spending on education is excluded from the concept of genuine saving, then the rate of resource depletion has almost entirely offset any savings which occurred in the 1980s and 1990s (Figure 3). This is consistent with the experience of other countries which have experienced growth collapses: natural capital (along with other forms of capital) tends to be eroded [Auty, 1999:12]. It is imperative that the rate of saving be raised, that the rate of environmental exploitation be reduced, and that the rate of natural resource depletion be at least offset by rates of accumulation of human and produced capital if the country is to pursue a sustainable growth path.

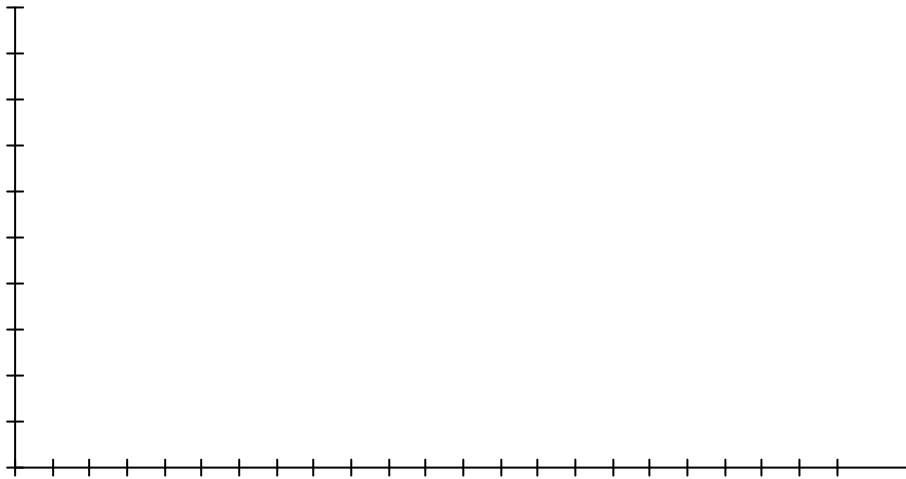
¹⁶ Genuine saving is the true saving rate in a country after accounting for investments in human capital, depreciation of produced assets, and the depletion and degradation of the environment.



5.3 Trends in the accumulation of natural resource rents

It has been hypothesised that the ability to accumulate natural resource rents distracts governments from investing in education, diverts the attention of private investors away from wealth creation into rent-seeking activities, and supports ISI long after its contribution to development has ceased to be positive [Auty, 1999:34; Ranis, 1991:76-77]. It is certainly true that significant reform of the country's industrial strategy was postponed until the change of government in 1994, two decades after it became evident that ISI was no longer driving growth, and that the gold boom, which coincided with the oil-price shocks, made it appear that South Africa could not only survive a difficult world environment but it could also weather economic sanctions. Was it also true that natural resource rents influenced the pattern of capital accumulation? Unfortunately, data on the rents accruing from natural resources are available only from 1970, which coincides with the beginning of the reform process in South Africa. These are plotted, again as a proportion of GNP, in Figure 4.

Figure 4



not only in mining but also in manufacturing.¹⁷ The fall in rents in the 1980s may have accelerated the shift in thinking towards liberalisation, as commodity prices fell sharply from and the economy was under greater strain from financial sanctions.

However, there were other factors which played a role in encouraging the transition. South Africa has always placed considerable emphasis on international economic integration. ISI was not, as so often elsewhere, part of a strategy of withdrawal from world markets, and South Africa only withdrew from international institutions to pre-empt expulsion. As world economic ideology moved rightwards during the 1980s, government and business sector thinking shifted in concert - at least part of the way. Moreover, by the end of the 1980s it was apparent that a change in the political regime was inevitable. Fears of African socialist-type policies helped to prompt moves towards liberalisation of trade policy and the restructuring of state assets, so that, by diluting the resource rents, they would not fall into the hands of the new state. It is difficult therefore to separate the effects of natural resource rents from other factors which were present in the shift towards less interventionist economic policy.

6. *Implications for the reform of policy in South Africa*

South Africa's policy reform process commenced in the 1970s, and proceeded in phases in the 1980s. Liberalisation of all aspects of the economy - with the exception of the labour market - has been accelerated since the transfer to majority rule in 1994. The reforms that have taken place have not been part of a general and formal structural adjustment programme, but have occurred in response to perceived economic problems.

This piecemeal introduction of policies means that the policy regime has consisted of both overlapping and sometimes contradictory policies. However, the fact that the liberalisation measures are designed domestically, with the aim of addressing particular problems, means that the government is committed to each reform. The government has usually moved at its own pace in implementing recommendations, even those of commissions appointed by itself, but it has generally

¹⁷ Not least was the diversification of activities of mining conglomerates which have increasingly moved into manufacturing activities of all kinds.

achieved consensus through consultation with the business sector, both before and after the 1994 political transition. (From the early 1990s, trade unions have also had representation in tripartite consultations.)¹⁸ Consequently there is domestically no significant credibility problem. Even with respect to a reduction in the overall level of protection, industrialists support the government's initiatives, even though specific programmes have been vigorously criticised. None of this implies, however, that the government has necessarily responded timeously. The existence of large natural resource rents made delays in reform possible in the past, and are likely to do so again, especially with respect to labour-market liberalisation.¹⁹

New labour legislation may undermine some of the objectives of current industrial policy, if it makes it more difficult to improve competitiveness. In the recent World Economic Forum's Global Competitiveness Index, South Africa ranked 38 (out of 53). However, although unwilling to oppose trade unions on the issues of conditions of employment (in spite of vociferous criticism from the business community), the government has dismissed organised labour's opposition to both trade liberalisation and privatisation. The primary reason for this is that the objective of employment-creating growth is driving the current reform.

The government's other priority is the need to redistribute wealth as well as income. For this, it must engage in structural as well as fiscal reform. Because the land issue is less important than in the rest of Africa, this must be achieved by increasing the rate of physical and human capital accumulation of the black majority. While change is clearly necessary, a fundamental restructuring which shifts resources away from the previously creates a strong impetus to emigrate, particularly among the better-educated. This creates a delicate problem for the new government. Against the pressure for radical redistribution must be set the need to keep skills and savings within the domestic economy, and to allow sufficient wealth accumulation to attract foreign investors. This will inevitably slow down the rate at which redistribution can be achieved. In the longer run this may be better for the country's

¹⁸ The government can be characterised as a hybrid state, with elements of both consensual democracy and autonomous bureaucracy. This characterisation is not necessarily stable; there are fears that the government may resort to populism with time, if the current reform programme does not 'work', and as divisions appear within the ruling African National Congress.

¹⁹ This is common amongst natural resource rich countries where labour movements tend to be strong [Ranis, 1991].

economic growth rate, as redistribution of wealth can retard economic growth [Alesina and Rodrik, 1994].

The problem is that the existing capital stock, which represents a sunk cost, was developed under a different development strategy, and may be inappropriate for the new outward-oriented, preferably labour-intensive, growth which the government is seeking to encourage. If development is path-dependent, then the question remains as to how to shift on to a different growth path. Perhaps the following is worth noting.

Compared with other upper middle-income economies, the structure of aggregate investment does not show significant distortion, with the probable exception of underinvestment in human capital. The guideline for sustainable development is that the accumulation of human and produced capital must occur at at least the same rate as the depletion of natural capital. The government can work on improving human capital; indeed, this is a priority not only for growth but also for redistribution. Investment in physical capital is better handled by the private sector, and this requires the right policy environment. Macroeconomic stability and more liberal trade tend to emerge in regression analysis as linked with higher investment and faster growth. If this is the case, then the current strategy is probably the best available.

This does not constitute a radical break with the past (as has occurred in some other middle-income countries with a history of ISI, like Mexico, Chile, Poland and former Czechoslovakia). However, destruction of the existing capital stock - and institutions - is costly, and current policy is nosing the economy towards a development strategy which has generated faster growth in the resource-deficient developing countries. For South Africa this may, in fact, be the wisest approach. At present the government's energy is concentrated on overcoming the legacy of apartheid. Investing in human resources and facilitating private investment, while liberalising the economy, may become increasingly attractive if its impact on the demand for unskilled labour is positive and if it generates faster growth. Slow reform may be more sustainable in the longer run.

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Appendix 1

Year(s)	Policy change, important commissions, relevant events
1925–72	The period of import-substitution industrialisation (ISI)
1925	Adoption of ISI with the Customs Tariff and Excise Duty Amendment Act
1948	Introduction of QRs
1958	Viljoen Commission recommends continued ISI, but using tariffs rather than QRs or subsidies
1969	SA government announces its intention to lift QRs under pressure from the GATT and the IMF, but does nothing
1972–83	The first trade liberalisation episode
1972	Reynders Commission recommends export promotion
1972	Export incentive measures are introduced
1972–76	Some relaxation of QRs
1975–79	The rand is devalued
1978	Further assistance to exporters introduced in line with the Van Huyssteen Committee's proposals
1979–80	Rand appreciates sharply
1983–91	The second trade liberalisation episode
1983	Kleu Study Group recommends a move away from ISI
1983–85	The reduction of QRs is resumed
1983	The dual exchange-rate system is abolished
1983–85	The external value of the rand falls significantly
1985	Government white paper recommends a dual approach to industrial policy: ISI and export promotion
1985	Debt crisis; dual exchange-rate system re-introduced
1985	Substantial import surcharges introduced
1987	BTI begins to move proactively towards trade policy reform
1989	QR removal continues
1989	'Structural adjustment' export incentives introduced for clothing, textiles, automobiles and automobile components
1990	General Export Incentive Scheme (GEIS) is introduced
1990	The phasing out of the import surcharge begins; not completed
1991	An accelerated depreciation tax scheme is introduced
Current	The third trade liberalisation episode
1994	The conversion of QRs to tariffs is completed
1995	Import surcharges are eliminated
1995	Tariff reduction in line with GATT requirements begins
1995	The financial rand is abolished
1995	Negotiations with the European Union over trade preferences commence
1996	The SADC free trade protocol is signed
1997	Further exchange control liberalisation is announced
1997	GEIS removed and replaced with WTO-compatible export incentives