



# DPRU

WORKING PAPERS

## **Social Policy to address Poverty**

**Servaas van der Berg**

No 99/30  
ISBN: 0-7992-1973-8

August 1999

Development Policy Research Unit  
University of Cape Town

## Table of Contents

1. Introduction .....	2
2. Education .....	4
2.1 Education, inequality and poverty .....	4
2.2 Education and growth .....	8
2.3 Education policy .....	10
3. Social security .....	12
3.1 Background to South African social security .....	12
3.2 Social insurance .....	15
3.3 Social assistance .....	17
3.4 Coverage against risk: The adequacy of social security .....	20
3.5 Social security policy .....	22
4. Conclusion .....	24
References .....	26

## List of Tables

Table 1: Educational inequality for two SA cohorts, 1995 .....	5
Table 2: Inequality of monthly earnings by race, 1980 & 1993 .....	6
Table 3: Inequality of educational outcomes between schools in the Western Cape, 1997 .....	7
Table 4: Social pensions and grants paid by category and race, 1990 & 1993 .....	18
Table 5: Composition of social assistance expenditure by field of service .....	18
Table 6: Budgeted per capita spending by province, 1998/99 .....	19
Table 7: Socio-economic situation of different income classes, 1993 .....	20

## List of Figures

Fig. 1: Mean years of education by race and birth cohort, 1995 .....	29
Fig. 2: Literacy and numeracy test scores by age and race, 1993 .....	29
Fig. 3: African literacy and numeracy test scores and years of education relative to white levels .....	30
Fig. 4: Years of education by age, race and income group .....	30
Fig. 5: At school as percentage of each age group by race, 1995 .....	31

*infrastructure that any society has to offer, and this breaks down once the interracial differences – the average differences between groups – go beyond a critical level. What this threshold is varies from society to society – but the fact that it exists cannot be denied.”*

- Kanbur, 1998: 26

## 1. Introduction

The analyses contained in the previous papers in this research project indicate that poverty is still endemic in South Africa, that it has a strong racial dimension, and that it has its origins largely in the labour market. Despite the continuing relevance of race for identifying the poor, the analysis has also shown that labour market discrimination has declined as a factor in the generation of poverty and inequality. What appears to contribute more are other factors also correlated with race, such as differentials in education, location (urban/rural), family size and composition. Moreover, as will be argued below, if cognisance is taken of large differentials in educational quality not considered in earnings functions, the residual role for labour market race discrimination in explaining earnings differentials may well be small. Thus there is an urgent need to identify those factors that are amenable to policy intervention, in order to reduce poverty and inequality.

Unlike in countries with low poverty rates, where transient poverty is relatively large, i.e. movement in and out of poverty is relatively large compared to the stock of poverty at any moment in time (cf. Van den Bosch at al., 1997: 107), it is likely that endemic poverty is more the norm in a country such as South Africa, with high levels of poverty and structural unemployment. There is no panel data available to support this conclusion, however. Endemic poverty combined with high expectations and high levels of inequality, particularly racial inequality, are likely to be bad for stability and therefore undermine prospects of growth. As Kanbur (1998: 26) remarks, “The core literature on Income Distribution and Development is strangely silent on inter-racial or inter-ethnic dimensions of distribution as development process, while the daily political discourse in many countries, particularly in Africa, has this as a constant topic of discussion and tension.” This racial dimension to poverty and inequality enhances the urgency of policies to reduce poverty.

When one considers the pattern of inequality and even many other aspects of South African economic life, the similarities with Latin America are striking. Latin America shares with South Africa its middle-income developing country status as well as high levels of inequality. For this reason it is useful to draw on a recent analysis about inequality in Latin America by the Inter-American Development Bank (hereafter IADB) (1999):

- Latin American (as indeed also South African) inequality is associated with large wage differentials. “In other words, it results not only from differences between owners of capital and workers, but from a divergence of incomes among workers.” (IADB, 1999: 1)
- “(M)uch of Latin America’s inequality relates to the difference between the top 10 percent of the population and the rest.” (IADB, 1999: 1), as is indeed also the case for South Africa. Thus, while the richest decile have a per capita income 60% higher than that of the second richest decile in the US, and 160% higher in Latin America, it is 208% higher in South Africa<sup>1</sup>.
- As in Latin America, it will be shown below that indeed in South Africa also “much of this gap between the top 10 percent and the rest reflect the ... slow and unequal progress in improving the level and quality of schooling.” (IADB, 1999: 2), and in particular high returns to and unequal access to higher education

---

<sup>1</sup> The South African data is based on expenditures, not income, and the situation with regard to incomes may even show greater inequality.

(IADB, 1999: 5). Indeed, as in Latin America, primary education is virtually universal in South Africa, while the challenge at this stage remains "to improve the quality of primary education and to universalize secondary education." (IADB, 1999: 5)

- In Latin America, "(f)amilies play many roles in the complex relationships that sustain income inequality. They mitigate the effects of high inequality by sharing resources, often across generations. They also play a role in determining how many of their members should try to find work, how many children to have, and how much education to give them." (IADB, 1999: 2) This is also true in South Africa where, in addition, migration and urban-rural remittances play a particularly important role in mitigating inequality (although the separation of migrants and their families of origin into separate households may accentuate measured inter-household inequality). Furthermore, family formation is strongly influenced by the pervasiveness of unemployment, leading to many young males attaching themselves to older households until a fairly high age (Simkins, 1998), and the presence of old-age pensions as an important source of income in rural areas also influences family structures, through retaining older members within the household (Case & Deaton, 1998).<sup>2</sup>
- The demographic transition presently offers both Latin America and South Africa some respite: Fertility decline and ageing are having opposite effects on dependency ratios, but the effect of fertility decline still dominates, thus reducing child dependency burdens and labour force growth rates. In South Africa, in contrast, fertility decline started somewhat later and fertility is still higher than in Latin America, so the benefits of this effect on child dependency burdens are somewhat less strong and the rate of labour force growth higher than in Latin America.
- As in Latin America, the capital market largely bypasses the poor and even large segments of the middle-income group in South Africa. This not only excludes them from the economic mainstream, but reduces overall growth opportunities by wasting potential entrepreneurial resources.
- As in Latin America, the scope for more progressive taxation is severely limited and a widening of the tax base plus progressive spending offers better possibilities for improving equity. But as the IADB Report (1999: 4) points out, economic instability is strongly related to inequality, and such inequality makes fiscal prudence politically much more difficult.
- Whereas Latin America has improved its macro-economic performance in recent years, there is still greater uncertainty whether South Africa's growth rates are likely to be adequate to outpace population growth.

Thus there is much to learn by South Africa from the experience of and analysis of Latin American countries. In Latin America, there is some grounds for optimism:

*"Although it may be little solace for those riding in the last cars of the development train, most of Latin America appears to be turning the corner; as these trends continue, they should provide a basis to reduce income inequality in the future, as long as the adequate economic and social policies are in place."* (IADB, 1999: 3)

This conclusion as to prospects for reduced inequality in Latin America may equally apply to South Africa, but for the fact that economic growth is far less entrenched yet in the latter. Adequate and sustained growth is required to ensure that the distributional conflict in South Africa does not remain a zero sum game that may tear at the fabric of social stability. Broadly speaking, two routes for reduced poverty suggest themselves. The

---

<sup>2</sup> Kanbur (1998: 14) remarks, in discussing Chen's conclusion that the pattern of household formation is the major factor explaining increasing household inequality in the 1980s and 1990s in Taiwan, that this factor is "missing from nearly all studies in the 'Kuznetsian' tradition" (Kanbur, 1998: 14). In South Africa, too, this is still a far too neglected field.

one is to reduce inequity through various interventions, including those targeting mainly the poor. The alternative route is concerned with an acceleration of growth. It is widely agreed in the development literature today that such growth contributes most to the reduction of poverty if it is strongly associated with utilising the major assets of the poor, particularly their labour (De Haan *et al.*, 1997). Growth can strongly impact directly on poverty, even without improved distribution, but may also allow distribution to take place without engendering increased conflict. The macroeconomic conditions for growth fall outside the ambit of this research project, but we shall return to growth as a factor in poverty reduction when we consider the growth effects of human capital provision.

Based on the work in this project, as well as the international literature, there are a number of more promising avenues for improving equity and targeting the poor. In the South African circumstances, the most promising routes appear to be:

- Social transfers to the poor, which already contribute in a major way to reducing poverty in South Africa (Ardington & Lund, 1995; Van der Berg, 1997; Case & Deaton, 1998)
- Expanding and improving the educational system to reduce earnings differentials, improve access of the poor to available job opportunities, and accelerate growth. Training, both on and off the job, would naturally also contribute in this regard.
- Improving access for the poor to other social services (health, housing and social infrastructure). Though this would not necessarily improve their income, it may improve other aspects of their life, e.g. through improved sanitation, access to water, health services, nutrition, and housing. As this research project focuses on money-metric aspects of poverty (income poverty), however, we shall not discuss policy options in this field.
- Improving access to financial services, particularly credit facilities, to the poor. This is a highly technical issue about which present household surveys can tell very little, and consequently it will not be discussed any further. This does not, however, detract from its importance for the poor and for broad-based economic growth.

Thus the next two sections will focus on the two areas of social policy directly relevant to improving the incomes of the poor, i.e. education and social transfers (safety nets).

## 2. Education

Education's role in reducing poverty is of paramount importance, because of its contribution to improving the earnings potential of the poor, both in competition for jobs and earnings in a static labour market, and as a source of growth and employment in itself. As Kanbur (1998: 20) puts it, "The distribution of physical and human capital emerges from the theoretical and empirical literature as the key to distributional consequences of growth, and as the determinant of growth itself." For this reason, we shall investigate the possible impact of education in terms of both its distributional consequences and its potential impact on economic growth. Thereafter, we shall briefly discuss possible educational policy consequences of the economic debates on the role of education.

### 2.1 Education, inequality and poverty

Other research in this project has shown that education is crucial in determining labour force participation, employment, and earnings. This is similar to the results found in other similar societies. Ferreira & Litchfield (1998: 32), for instance, report that between one-quarter and one-third of income differentials between households in Chile can be ascribed to differences in the educational attainment of the household head, a far greater proportion than captured by any other characteristic of the household.

Inequality of education has long been a determining factor in earnings distribution in South Africa. In the past decades, there has been a substantial reduction in schooling inequality as reflected in the years of educational output (unadjusted for the quality of education). For instance, working on the same data set as most of the studies in this report, Lam (1999) shows the decline in inequality in years of education completed between two birth cohorts separated by 30 years, shown in Table 1. Note that not only mean-invariant measures such as the coefficient of variation have declined, but also the variance. This is important, for if earnings were log-linearly related to years of education, an increased variance could well be associated with increased earnings inequality even if the coefficient of variation declined, as Lam (1999) argues indeed occurred in Brazil.<sup>3</sup> In SA, schooling variance declined even amongst blacks. Between the different races, schooling inequality greatly declined, as shown by Fig. 1, which shows the mean years of schooling by birth cohort. Africans in the cohort born in 1920 had a mean backlog of 8.0 years of education compared to whites; those born in 1950 still a 6.0 year backlog, the 1960 cohort a 4.6 year backlog, and the 1970s cohort a backlog that had been reduced to only 3.2 years.

Interestingly, Lam's results comparing educational inequality between Brazil and South Africa are supported by the work of Filmer and Pritchett (1998), who find that Latin American educational inequality is still large, even more so than in many countries of Southern and Eastern Africa (though they did not include South Africa in their sample). Londoño (1996) confirms that Latin American educational performance, in terms of years of education completed, lags far behind most other countries at this level of economic development.

**Table 1: Educational inequality for two SA cohorts, 1995**

	Cohorts 55-59	Cohorts 25-29
Mean	5.77	9.05
Standard deviation	4.51	3.60
Coefficient of variation	0.78	0.40
Gini	0.44	0.21

Source: Lam, 1999: Table 2

Moll (1998) shows convincingly that South African earnings inequality between race groups has been decreasing between 1981 and 1993, whilst inequality in earnings within race groups has been increasing. Thus the net result was to leave overall earnings inequality largely unchanged, as Table 2 shows. It is likely that changes in education played only a minor role in the shifts in earnings. Moll argues that the growing earnings inequality within race groups was rather caused by the removal of labour market discrimination in the past decades, which allowed more wage mobility within race groups, with some blacks better positioned than others to benefit from the new opportunities for upward mobility, while more poorly educated whites in particular lost the protection they had historically enjoyed in the form of barriers to black job advancement.

<sup>3</sup> If logarithm of earnings of worker  $i$  is

$$\log y_i = \alpha + \beta S_i + u_i$$

( $y_i$  is earnings,  $S_i$  schooling,  $u_i$  residual uncorrelated with schooling), then

$$V(\log y_i) = \beta^2 V(S_i) + V(u_i)$$

Thus earnings inequality (log variance) is a linear function of variance in schooling.

If schooling inequality is measured by the coefficient of variation  $CV = \sigma/\mu$  (standard deviation divided by mean), which is mean-invariant, then greater earnings inequality is possible despite reduced schooling inequality. Lam (1999) shows that the standard deviation for schooling rose less than the mean for Brazilian cohorts born 1925 to 1950, thus the coefficient of variation declined. But lower schooling inequality did not also reduce high earnings inequality, as variance of schooling rose.

But even in this case, education is important, in that it determines who can and who cannot benefit from the new opportunities for blacks in the labour market.

**Table 2: Inequality of monthly earnings by race, 1980 & 1993**

	1980	1993
Gini coefficient	0.52	0.51
Coefficient of variation	1.19	1.12
<b>L-statistic *</b>	<b>0.49</b>	<b>0.50</b>
L-statistic: Blacks	0.14	0.28
L-statistic: Indians	0.21	0.28
L-statistic: Coloureds	0.25	0.35
L-statistic: Whites	0.21	0.28
<b>Within-group inequality</b>	0.17	0.29
<b>Between group inequality</b>	0.32	0.21

\* The L-statistic (mean logarithmic deviation) is an additively decomposable measure of inequality that ranges from 0 (complete equality) to infinity. If utility has a logarithmic form, L measures the difference between maximum social welfare with a given income (the ideal state of distribution) and the actual social welfare (Moll, 1998: 4). It is calculated as the mean of the natural logarithms of earnings, minus the natural logarithm of mean earnings.

Source: Mol, 1998: Tables 1 & 2

When working with South African educational data, however, it is important to consider that the quality of education still varies considerably. In this respect, too, the similarities with Latin America are great, for there too "the poor receive an inferior quality of schooling" (IADB, 1998: 53). To some extent, the old dividing lines of race have blurred in South Africa: large numbers of black pupils are now attending schools formerly serving whites only, while there is also growing diversity in the quality of schools serving mainly black pupils. Nevertheless, there are still considerable differentials in the ability of schools to have their pupils pass matriculation, with most formerly African schools performing much more poorly than white schools. Very high matriculation failure rates (more than half of matriculants failed in 1998, and only 13 per cent received university exemption (Edusource, 1999: 5) despite high repetition rates also indicate that pass rates at lower standards are still perhaps artificially high, thus educational attainment figures below the matriculation level for Africans in particular may be inflated relative to the cognitive education levels they have mastered.

But the quality differentials go beyond only the ability to get pupils to pass matriculation. It also lies in the quality of the matriculation itself, in terms of the standard at which matric is passed, as well as the subject choice. It is a source of much concern in South Africa, for instance, that few schools serving mainly Africans perform adequately in terms of providing good background in Mathematics or Science. So, for instance, only 45% of matriculation candidates wrote mathematics in 1997 (with a marked male bias); only 21% passed it. For Science these percentages were even lower, at 25% and 16% respectively. Moreover, a large proportion of those who wrote Mathematics did so at the lower grade, a standard far below what is conventional in developed countries. Only 50% and 42% of teachers teaching Mathematics and Science have studied these subjects beyond secondary school level. In the Western Cape, the province with the best matriculation results, only 24% of matriculation candidates attempted Mathematics at the higher grade, and only 20% passed it.

Another indication of the inequality in educational output can be gleaned from some data for the Western Cape. As pass rates are almost uniformly high, differentials between schools (inequality) in terms of pass rates is relatively low, as Table 3 shows. However, as soon as more advanced levels of school performance are evaluated (percentage A-candidates, or percentage exemptions), inequality increases considerably, with a Gini coefficient of 0.56 and 0.80 respectively.

**Table 3: Inequality of educational outcomes between schools in the Western Cape, 1997**

	% A-aggregate	% Exemption	% Pass
Mean	2.6%	23.0%	80.6%
Standard deviation	5.0%	22.0%	22.5%
Coefficient of variation	1.94	0.96	0.28
Gini coefficient	0.80	0.56	0.15

Source: Own calculations from Western Cape Education Department data

The differentials in quality of education provided are also well illustrated by Fig. 2, which shows, for African and whites aged 13 to 18, literacy and numeracy test scores for 1993 on an 8 point scale, where questions have been set at approximately Grade 7 (age 12) level. Not even the performance of whites is very encouraging, but what is particularly alarming is that Africans do far worse than whites on both these tests. This has to be seen against the fact that educational levels attained by Africans and whites at age 13 differ relatively little. The poorer African attainment at higher age levels can thus perhaps be seen as the delayed effect of lower cognitive achievement levels on progression through high school and on matriculation pass rates. Figure 3 shows that though Africans aged 13 to 18 in 1995 had attained between 78% and 86% of white levels of years of education, their 1993 performance in terms of literacy scores ranged only between 50% and 63% of white levels, and their numeracy scores lagged even further behind at 36% to 47% of white levels. Indeed, at the cross-country level, "...school children from higher income countries tend to achieve higher test scores, holding fixed other factors that influence student achievement." (Lee & Barro, 1997: 23). Whether this is the effect of non-school factors operating (home environment, or education of parents), or of qualitative differences in school productivity between rich and poor countries is not clear, but in South Africa test score differentials by race are so large that it is likely that school and teacher quality play a determining role.

Case and Deaton (1999, Table 8) show that factors associated with higher test scores for Africans on both literacy and numeracy include the age of respondents, years of education completed (standardising for age), and education of the head of the household. Keeping all other factors constant, their regression coefficients suggest that almost ten years of additional education would be required to bring African cognitive levels in terms of both literacy and numeracy up to the same standard of that of whites ("four additional years generate one additional correct answer on the tests"(Case & Deaton, 1999: 26)). This may be an exaggeration, but does show that the former African school system is completely inadequate to integrate large numbers of people into the modern economy. This must be the yardstick by which, from an economic viewpoint, the efficacy of the educational system must be measured.

Considering these quality differentials, some of the racial differentials in wages for persons with the same education and experience may in fact be the result not of labour market discrimination, but of pre-labour market discrimination in the quality of schooling. In some Latin American countries, where private education is important to improve educational quality, the Inter-American Development Bank (IADB, 1998: 54-5) found significant differentials in the labour market earnings for individuals from different income with similar education and earnings, which they ascribe to differential quality of education. "Estimates show that individuals from the lower deciles receive a primary education whose quality (measured in terms of income generation capacity) is 35 percent lower than that of the next decile above." (IADB, 1998: 54)

Not surprisingly, there is also increasing inequality developing within the African population as far as educational attainment is concerned. This largely follows the lines of income: more affluent families are better able to support their children through school, so that there is increasing stratification taking place within African society. Fig. 4 shows that children from the top two deciles among Africans do considerably better than their poorer counterparts and only at age 15 start falling behind whites. Case & Deaton (1999: 21) conclude that private resources (expenditures) were indeed a major factor in determining South African educational outcomes under apartheid. "Pupils in better-off Black households do better in their education, and we find no parallel for Whites. That the education of Blacks but not Whites is constrained by financial resources is further supported by the fact that many Blacks who are not in school (but not Whites) – report lack of resources as the reason." (Case & Deaton, 1999: 28) Furthermore, newly acquired access to better quality schools for the more affluent is likely to have accentuated qualitative educational differentials amongst Africans.

In the labour market, educational differentials in association with the demand for labour determine returns to education. Thus far, little is known about past patterns of returns to education and their evolution over time in South Africa, not even to speak about what these would have been in the absence of apartheid-based labour market interventions. Thus it is extremely difficult to predict with any confidence what would happen to labour market inequality given future educational outcomes and patterns of economic growth and development. International patterns of development point, however, to growing demand for skills (see for instance Goldin & Katz, 1999 on returns to skills in the USA) since the beginning of the twentieth century, and without a large spurt in the availability of such skills, educational premia are likely to remain high. Thus the reduction of labour market inequality requires a substantial improvement in the supply of skills through an improvement in both the quantity and quality of education. Returns to education for the USA for all of the twentieth century (Goldin & Katz, 1999) found that only an enormous expansion in secondary schooling after 1910 made possible a reduction in the returns to education until the 1950s, since which time returns to education again rose as skills demand outstripped their supply. "Skill-biased technological change" (Goldin & Katz, 1999: 25) was a major factor in the US (as has also been shown for recent decades by Murphy & Welch, 1994), as it is likely to be also in South Africa.

## 2.2 Education and growth

The new growth literature has again brought to the fore the importance of human capital and technology for economic growth. The neo-classical growth model of Solow pointed to unconditional convergence of per capita incomes, for two major reasons.

- Firstly, capital accumulation would shift to less developed countries once diminishing returns to capital make further investment in developed countries unattractive.
- Secondly, if technology is a public good freely available to all, developing countries should enjoy the "benefit of coming late", which would allow them to grow more rapidly than more developed countries by utilising existing technologies, without having to bear the cost of developing them (Fagerberg, 1994).

Given these assumptions, catch up and convergence should in principle have taken place. That this did not occur and that an increasing gap arose instead between the "convergence club" - countries able to share in international capital movements and technology and indeed converging on the world leader - and the majority of the developing world (Baumol *et al.*, 1989), called for an alternative view of the growth process. The theoretical underpinnings for this came to the fore with the new growth literature and the concept of endogenous growth:

- One common feature of many endogenous growth models is in their modelling of technology as something whose benefits are to some extent appropriable. This allows for a different view of the role

and the development of technology, for only if they can appropriate (some of) the benefits would firms find it attractive to invest in technological research and development.

- A second common feature of the new growth literature is a new role for human capital as separate from labour or physical capital in the production process.

The new growth literature again spawned a further array of empirical studies attempting to isolate the crucial variables in international growth. Such attempts based on cross sectional data for both developed and developing countries, whether based on a theoretical model or only empirical observations, have been relatively unsuccessful, *inter alia* because the quality of the data which they use are highly suspect, and the human capital and technology variables very difficult to specify or to measure. Thus it is not surprising that Levine & Renelt's (1992) finding still largely applies, that international growth regressions have been unable to convincingly identify any other contributor to long term growth but capital accumulation.

Despite the failure to prove the role of human capital in long term economic growth, most economists agree that the reason for this lies mainly in data deficiencies and variable specification, rather than in the absence of such a relationship flowing from human capital to growth. (There is also no doubting the flow of reverse causality as well, which complicates empirical analysis.) Three forms of education-growth relationships have been variously tested, being consistent with *a priori* views of informed observers in this field:

- That improvements in education and in economic performance (growth) go together (which accentuates the difficulty of determining the direction of causality);
- That educational improvement is a condition for higher growth, so that high initial levels of education lead to high rates of economic growth, all other things being constant;
- That the distribution of education is crucial, in a similar way as others have pointed to the initial distribution of other productive assets (land or capital) as contributor to accelerated growth.

A more general explanation is also possible, viz. that human capital is part of what has been termed "social capability", a crucial ingredient that determines whether countries are able to attract international investment or utilise available technology so as to reduce the gap between themselves and developed countries (Abromovitz, 1989). Social capability obviously incorporates more than only human capital (e.g. institutions, governance, etc.), but clearly human capital is a component.

Irrespective of one's view on the relationship between education and growth, the problem in taking further the work in this field appears to remain the paucity of dependable data where the human capital variable can be specified in a form that accords with the theoretical point of departure. Much of the work has taken school enrolment (usually gross enrolment) as proxy for human capital, which it is not; almost all have had to ignore possible differentials in the quality of education; studies differ in whether they use data on primary, secondary or tertiary education, or combinations thereof.

So, for instance, Barro (1999: 15 & Table 1) finds that economic "(g)rowth is positively related to the stock of human capital at the start of each period, as measured by the average years of attainment at the secondary and higher levels of adult males. (Growth turns out to be insignificantly related to secondary and higher attainment of females and to primary attainment of males and females.)" However, though schooling appears to affect growth rates, it does not impact significantly on investment (Barro, 1999: 16 & Table 2). If these results are robust, the implication must be that education's effect works through productivity improvement rather than through attracting more investment in physical capital. This is a finding that is crucial for South Africa with its history of poor, but improving, multifactor productivity – but the data deficiencies warn against too strong weight given to these results. Only lately have some (e.g. Lee & Barro, 1998) painstakingly started collecting the data which would be necessary for moving beyond the present empirical impasse that research in this field has reached.

## 2.3 Education policy

Four broad issues of economic policy arise in the educational area, viz. the question of the fiscal costs of education in aggregate, allocation of resources within education, the productivity of educational resource use, and the economic requirements in terms of education. This last issue has been dealt with to some extent in the previous section; national resources for education and the allocation of resources within education have been treated in detail in an excellent recent government report (South Africa, 1998a), so they will only receive perfunctory treatment here. That leaves the question of educational productivity as the major policy issue to be discussed here.

South Africa allocates, by international standards, a large share of its national resources to public education; its public education spending ratio at about 7 per cent of GDP is close to the highest in the world. Moreover, education spending has increased relatively rapidly. Shifting further fiscal resources to education does not appear to be a viable proposition. Moreover, larger financial flows to education in the past five years did not in fact increase real resources for education: the impact of the fiscal resource shift was overshadowed by wage increases for teachers, with the result that the total full time equivalent number of teachers employed may even have marginally declined, while pupil numbers continued to rise. Cutbacks in educational personnel in some of the richer provinces could therefore not be matched by increases in personnel in the educationally worse endowed provinces. Internationally, the development process appears to give rise to the relative burden of teacher salaries falling (i.e. relative to per capita GDP):

*"...from 1960 to 1990, the real average salary per primary school teacher increased from \$10 428 to \$26 820 in the OECD and from \$4 869 to \$7 179 in developing countries. The rising trend applies to all developing countries... In contrast, the figures for the CPEs have fallen markedly from \$14 462 in 1965 to \$4 771 in 1990. The ratios of estimated real salaries of primary school teachers to per capita GDP have typically declined over time; from 1965 to 1990, the value dropped from 2.5 to 2.2 in the OECD, from 4.9 to 3.6 in the overall group of developing countries, and from 7.4 to 1.7 in the CPEs. These ratios tend to be higher in developing countries, especially in Sub Saharan Africa (5.1 in 1990) than in the OECD." (Lee & Barro, 1997: 17/18) (All figures in 1985 PPP-dollars.)*

In South Africa, in contrast, teacher salaries outpaced the growth of national resources. One reason for this was the strong bargaining power of the teacher unions that has allowed them to raise their salaries far more than inflation. Furthermore, black teachers felt themselves left behind when black advancement in the public sector accelerated after democratisation, as there were few opportunities for promotion within the teaching sector that they could benefit from (De Villiers (1996: 288-9) reports that more than 90 per cent of teachers will not receive more than one promotion in a lifetime of teaching), thus their frustrations were vented in the wage bargaining process. Thus after democratisation, when the need for resource shifts across the formerly racially-based departments was crucial, resources increasingly had to be directed to personnel spending, leaving a growing dearth of non-personnel spending. Thus from 1995/6 to 1997/8, personnel expenditure in real terms increased by 20%, while non-personnel expenditure declined by 17% (South Africa, 1998a: 27).

As the growth in pupil numbers still exceeds the growth rate of the economy, the government team investigating the medium term expenditure framework (South Africa, 1998a) last year came to the conclusion that there is likely to be a major funding problem in education in coming years, unless

- more funds are allocated to education, which they regard as fiscally infeasible, and which internationally has been shown not always to improve educational outcomes (Gupta *et al.*, 1999: 4);
- pupil-teacher ratios rise even further, which is unacceptable to government, teacher unions and parents;
- teacher salaries decline in real terms, which is strongly opposed by the teacher unions;
- some combination of the above occurs.

From an economic efficiency point of view, it can be argued that the malaise of the South African educational system lies less in terms of allocative inefficiency than in x-inefficiency. Reallocating resources from one level of education to another, as many suggest for developing countries (Gupta *et al.*, 1999), would bring little gain in South Africa, and it is not even clear which level of education most requires additional resources, as will presently be discussed. There is perhaps a stronger case for shifting more financial resources to non-personnel teaching resources; personnel spending is so dominant that even a small shift of this nature would have a major impact on the availability of classroom resources.

However, the clearest problem is one of utilising existing resources better, even in their present application. The major inefficiency in qualitative terms lies in what used to be the African school system, by far the largest part of the system, where the quality of learning in schools is often abysmal. Strong words from the President and the Minister of Education in recent months show that they blame this in part on a lack of discipline within schools, and in particular amongst teachers.

This is the result of a typical principal-agent problem. Outputs of the educational system are extremely difficult to monitor, as is teacher effort (input), thus low teacher productivity is difficult to overcome. The educational authorities have responded to this problem by attempting to shift the monitoring to the parent community as the final "principal". Unfortunately, however, this policy has had limited success in those schools where the parents themselves have had little education and therefore do not feel confident about their ability to assess the contribution of teachers. Moreover, lines of authority are also not always clear and school principals often find it difficult to act against undisciplined teachers or pupils.

Thus there is still a large effort required to restore the "culture of learning" to South African schools. The expenditure review team notes that the COLTS (Culture of Learning, Teaching, and Service) campaign launched in 1996 "was the first more or less official recognition of the fact that efficiency and work effort problems, rather than funding by itself, were at the heart of the problems in the education sector" (South Africa, 1998a: 35). The effect of the culture of learning on educational performance manifests itself completely differently in the case of East Asia, which appears to be outperforming other educational systems: "...a major component of East Asia's academic performance is left unexplained by the family and school inputs that were included in the regressions." (Lee & Barro, 1997: 25) "The significance of the East Asian dummy may reflect the existence of an 'Asian value', which is broadly defined by the cultural and religious features unique to the East Asian countries." (p.25) Thus culture and history play a strong role in education, and South Africa is presently poorly placed to benefit from this.

One avenue to improve the situation, as always where there is a principal-agent problem, is the provision of more information. There is a paucity of information for the education authorities to analyse the educational situation and their policy options. Presently, they have only one measure of educational output available to them, and that is matriculation results, but these still do not identify the roots of the problem. It has been shown in Section 2.1 above that as early as age 13, literacy and numeracy levels amongst Africans are already far below par. Allocating resources based on matriculation results cannot adequately address a problem which requires far earlier intervention. Thus the question of whether resources should go to secondary or to primary level, even if matriculation pass rates were the criterion, cannot be properly answered without more data on the qualitative performance of different parts of the school system. This requires a large scale and continued effort at measuring cognitive achievement at different levels within the educational system, in order to better understand the relationship between home background of pupils, educational inputs, and enhancement of cognitive achievement. Moreover, identifying the poor performing schools in order to take remedial action requires a better understanding of how schools perform, and what are the causes behind it.

Thus the returns-to-education literature, useful as it is, cannot assist South Africa all that much in resource allocation across different levels of the educational system:

- It is not clear that more resources are the solution to problems of expansion of outputs. In fact, access to education is no longer a major problem, as is clear from Fig.5, which shows that more than 90% of children of all race groups remain at school until attaining matric or reaching at least the age of 16, and

that among Africans it is common to remain in the school system much longer, due to poor progression rates, amongst other factors.

- The quality of the output varies considerably amongst schools and over time, so that the educational returns literature is always suspect.
- The needs of the economy in terms of the type rather than the level of educational output should also be considered, and may affect the returns to education (e.g. the importance of the choice of Mathematics as school subject for further training);
- Returns to education are the result of the interaction between the supply and demand for human capital, and the latter is related to the growth path of the economy, which is itself changing. Moreover, insofar as growth itself may be determined by the availability of appropriate levels of education, there is an endogeneity problem that cannot be solved.

### 3. Social security<sup>4</sup>

#### 3.1 Background to South African social security

South African social security system is surprisingly developed for a middle income developing country, as is evident from both coverage against contingencies and social security spending ratios (Van der Merwe, 1996: 296 & 318), a fact that can perhaps be ascribed to the way that the system developed under apartheid as a welfare state for whites and expanded under social and political pressure to incorporate other groups (Van der Berg, 1997). If one allows for the fact that South African occupational insurance is really a form of social insurance that does not flow through the budget, social security expenditure ratios have reached levels only attained by Western European welfare states in the post-Second World War period (cf. Alber, 1982: 64, Table 4). In a country known for its racial inequalities and discriminatory social policies that were poorly targeted at the poor, it appears puzzling that social security is so advanced .

Access to modern employment has become a major dividing line within the population, with all insiders increasingly sharing in the privileged situation previously reserved for whites, and unemployed outsiders, through lack of skills, geographic location and marginalisation in wider society, becoming further impoverished. An intermediate group, though formally employed (often in agriculture, domestic service or mining, and including many women in the first two categories), is only tenuously linked to employment and to the modern consumer society because of their low wages, uncertain jobs, or status as migrant workers. As in other developing countries, the large part of the labour force lacking formal employment cannot be reached by social insurance, and as will be shown, not all the employed are covered by social insurance. Yet there exists today a well developed social assistance system that, although fiscally expensive (it costs more than 2 per cent of GDP) , reaches many of the poor.

In apartheid South Africa, an embryonic welfare state was erected to protect whites against various contingencies. The expansion of this system to other groups ironically puts South Africa in the rather unique situation for a semi-industrial country of having the trappings of a modern welfare state. South African social security today has two main components:

- **Occupational (social) insurance**, which includes: retirement benefits for a substantial proportion of the formally employed labour force; a somewhat inadequate system of workers compensation against injuries sustained at work; a system of unemployment insurance which cannot address the major

---

<sup>4</sup> This part of this report is largely based on previous work of the author, particularly that published as Van der Berg 1997.

unemployment risks associated with structural rather than cyclical unemployment; and health insurance for the better skilled<sup>5</sup>; and

- **Social assistance**, with three main pillars: Social old age pensions, disability grants and child and family grants, all means tested to ensure targeting at the poorest.

An interesting dimension of the development of South African social security was the tension between the liberal Anglo-Saxon *laissez-faire* position, sceptical of social security, and continental European influences, more supportive of it (Kruger, 1992: 117; Van der Merwe, 1996: 381). The latter were dominant in the old Boer Republics and in the pre-British Cape Colony, and again came to the fore under Afrikaner nationalist rule, but then with a racial bias; *laissez-faire* enjoyed stronger support under direct British rule and later from the predominantly English business class.

Although there was little poor relief and barely any other social services in the early period of European settlement (the 17<sup>th</sup> and 18<sup>th</sup> centuries), racial distinctions crept into the provision of services (Kruger, 1992: 113). British occupation in the early 19<sup>th</sup> century brought pre-Victorian English views on the distinction between the “deserving” and “undeserving” poor, and strengthened the racial bias in provision of social services, a pattern that remained dominant for almost two centuries.

The first pension fund, introduced in the old Transvaal (South African) Republic in 1882, was prescribed neither by legislation nor by convention and could thus in no way have been regarded as social insurance. However, in the 1920s, occupational retirement insurance expanded rapidly to many skilled (mainly white) employees. The norm of excluding the lower skilled (and, in the context of apartheid, therefore almost all blacks) from such coverage remained, though. Only in the 1960s and the early 1970s, when rapid industrialisation increasingly drew African workers into industry, was occupational retirement insurance widened to also include less skilled workers. The (mainly) white trade unions were instrumental both in this and in having coverage extended to more industries. Membership of both occupational and private retirement funds increased from 923 000 in 1958 to 9 309 000 in 1993 (Smith Committee, 1995: D2.4a), a growth rate of almost 7 per cent per annum over three and a half decades (though these figures include extensive duplication where many people are members of more than one fund). The membership growth rate of 8 per cent in the 1960s and 10 per cent in the 1970s slowed to 3.7 per cent in the 1980s, partly as a result of saturation of the market.

After the African trade union movement became a political force in the 1970s, social security only really came to the fore as an issue when the government in 1981 attempted to enforce preservation of pension rights when people changed jobs – an issue that the trade unions ironically effectively mobilised against, and their victory became another milestone in the empowerment of African workers. African workers saw the Louw Committee’s recommendation for compulsory preservation of pension rights upon withdrawal from a fund as an attempt to deny them access to their own money (Mouton Committee, 1992:153; Rumney, 1988:35). Moreover, according to Adler (1989:20), “most Black people see the State as the legitimate source of old-age pensions”. Thus this measure met with such fierce resistance that the government was forced to withdraw the proposed bill. After this victory, trade unions took a far more active interest in retirement benefits. As low income workers who retire often prefer a lump sum benefit to buy land, cattle or a house (Basson, 1987:34), partly because the means test favours holding certain assets rather than receiving income (Mouton Committee, 1992: 154; Sephton *et al.*, 1990: 45, 101), many provident rather than pensions funds were subsequently established. (Retiring pension fund members can receive at most one-third of their benefits as a lump sum pay-out and must take the rest as a monthly pension. Provident fund members, however, may take their full benefit as a lump sum.)

---

<sup>5</sup> In conjunction with universal health care for those who cannot afford private health care. Health is not usually regarded as part of social security in South Africa, not even in the case of health insurance, so that this issue will not be gone into further here.

Thus social retirement insurance was initially instituted for whites (who dominated the skilled positions in formal employment), but eventually extended to Africans. However, the majority of the African labour force, who are either unemployed or in jobs not covered by social retirement insurance, remain outside the security net.

The second pillar of the social security system consists of **social assistance**, i.e. categorical transfers funded from general government revenues<sup>6</sup> to certain individuals in the form of social old age pensions, disability grants, or child support grants, conditional upon the recipient qualifying in accordance with a means test. Social assistance benefits presently still reach far more people than social insurance. Its central feature is means-testing, which by its very nature encourages a “poverty trap” and can also in certain circumstances lead to perverse incentives.

Modern social assistance in South Africa mainly dates from the period 1910 to 1933, when many new schemes were introduced, although Africans and Indians were initially often excluded from benefits (Kruger, 1992: 159). The exclusion of Africans was predicated on the “civilised labour” view (see Paper 1 in this research project), that people accustomed to modern lifestyles and consumption patterns had greater need of social protection than those in rural subsistence agriculture, who were not proletarianised and were thus presumed to be better placed to meet traditional subsistence needs:

*Rural natives were excluded from old-age pensions mainly on the assumption that Native custom makes provision for maintaining dependent persons. Urban Natives were excluded in consequence, regardless of their needs, owing ‘to the difficulty of applying any statutory distinction between them and other Natives’ (SA, Social Security Committee, 1944: 19, as quoted by Kruger, 1992: 165).*

Military pensions date from 1919, and in 1928 social pensions were instituted for those whites and coloureds not covered by occupational retirement insurance, subject to age criteria and a means test to ensure that only the needy were targeted. The white population dependent on social pensions remained relatively small despite an increasingly liberal means test, as occupational retirement insurance covered the more affluent. In 1943, take-up rates amongst the elderly were 40 per cent for whites and 56 per cent for coloureds (SA, Social Security Committee, 1944: 43-4, 58). By that year, only 4 per cent of all social assistance spending was on Africans (mainly targeted relief and pensions for the blind), 1 per cent for Indians and 16 per cent for coloureds (SA, Social Security Committee, 1944: p.15). But in 1944 the Smuts government extended social old-age pensions to Africans (Van der Merwe, 1996: 378), though benefit levels were less than one tenth of those of whites and the means test far more stringent. By 1958, Africans already composed 60 per cent of 347 000 social old-age pensioners, although they received only 19 per cent of old-age pension spending. By 1978, after their numbers had grown by 5 per cent a year for two decades, Africans made up 70 per cent of the 770 000 pensioners and received 43 per cent of pensions. By 1990 this latter proportion had increased to 67 per cent.

Around the time of the Second World War, other forms of social assistance also expanded. In 1936 and 1937, grants for respectively the blind and the disabled were instituted, but these were initially confined to whites and coloureds and only extended to other groups in 1946. War veterans pensions were instituted in 1941, and family allowances for large low income families in 1947, but these excluded African people (Kruger, 1992: 167-170).

Since the mid-1970s, attempts to give the homeland system and later the three-chamber parliament political legitimacy led to a rapid increase in the funds for social assistance, especially for the elderly. Both the coverage of the African elderly population and the real value of the benefits paid increased markedly, and in

---

<sup>6</sup> Under apartheid a large number of administrations were created (10 homelands, 4 provincial administrations that covered blacks outside the homelands, and a separate administration under the three-chamber parliament for each of the other three groups), each of which had some leeway to set rules and administrative procedures; however, funding levels were essentially determined by the white central government. The major way in which the homelands deviated from the practice set in South Africa was by not implementing certain types of grants at all, or by reducing real benefit levels.

1993 there were almost twice as many Africans pensioners inside the homelands as outside. The flow of funds to the coloured and Indian communities also increased remarkably, but the fiscal costs of incorporating these relatively small groups into the mainstream social security system were manageable. The far greater fiscal challenge only came later, once the principle of moving to parity in social spending levels was reluctantly accepted in the late 1970s.<sup>7</sup> From that time onwards, fiscal expenditures on social assistance rose rapidly to incorporate blacks into the system and to eliminate the racial barriers which had allowed the white welfare state to prosper in the first place. This led to the rise in social old-age pensions spending from 0.59 per cent of GDP in 1970 (a decline from the 0.80 per cent in 1960) to 1.82 per cent by 1993 (Smith Committee, 1995: D2.15) and a budgeted 2.51 per cent in 1998/99 (calculated from South Africa, 1998b: 25, Table 1).

The levels and types of social grants were then a result of the peculiar nature of political patronage in apartheid society, and later attempts to deracialise benefit structures. Fiscal constraints precluded increasing black benefits to white levels, thus pension equalisation occurred through a combination of enhancing African pension benefits (by 7.3 per cent per year in real terms from 1970 to 1993) and rapidly eroding real white pensions (white resistance was limited due to the marginal political position of those small numbers of elderly or disabled poor whites who qualified under the means test). In 1980, white pensions displaced more than 30 per cent of the average wage, compared to only 8.6 per cent for African pensions; by 1993, when pension parity was achieved and discrimination in the application of the means tests eliminated, the pension displaced 15.5 per cent of the average wage (Van der Berg, 1994).

Under apartheid, white employment was secure (given preferential access to human capital development and to some jobs) and most social security needs could be met through social insurance. The major additional social security measures required were social grants for the elderly and for the disabled, and child and parent allowances. Social assistance was thus set up as a safety net for the white (relatively) poor who, in the wider South African context, were not the poorest. In contrast, the safety net for other groups was initially rudimentary or non-existent, but as apartheid became diluted through the decades, benefits were gradually extended to other race groups and benefit levels were unified. Some of that growth was generated by the creation of the homelands and the three-chamber parliament, some by the belated attempt to redesign social assistance schemes to be non-racial:

*(t)he social pensions and grants which were set up to protect the white population have gradually expanded their eligibility rules to include all South Africans. This makes it ... an unusually comprehensive system compared with that found in other developing countries... (Lund, 1993:22).*

By this quirk of history, the social security system changed dramatically in terms of the relative size of the two components, with the formerly less important social grants becoming the major part of the social security system, reaching far more people than occupational insurance.

The South African social security system uses primarily social insurance to protect those in formal employment, while social assistance (also called social grants or social transfers) is meant to protect those poor left unprotected by social insurance. In addition, private provision against certain contingencies is both encouraged and common in certain areas (e.g. retirement and life insurance). This next section thus deals with social insurance, and the subsequent section with social grants.

### 3.2 Social insurance

The large insurance industry plays a crucial role in mobilising contractual savings for investment, much of it as occupational retirement insurance. Assets of retirement funds alone amounted to 73 per cent of GDP in 1993 (Smith Committee, 1995: D2.16). Occupational pensions are mainly responsible that the elderly are on average somewhat better off than the working age population (Mouton Committee, 1992:62). In 1992, total benefits of R17.2 billion were paid out by occupational retirement funds, of which R3.3 were resignation and

---

<sup>7</sup> See DPRU working paper 99/29.

withdrawal benefits, leaving retirement benefits of R13.9 billion, compared to the R4.8 billion paid as social old-age pensions (Smith Committee, 1995: D2.1, 2.2 & 2.6).

Aided by agreements between employers and employees, occupational retirement has expanded its coverage to most industries. It is usually mandatory for employees in such industries or firms to join their Pension or Provident Fund. Coverage is still low in agriculture; trade, catering and accommodation (mainly employees of small traders and shopkeepers); and domestic service. Coverage amongst men is probably much higher than amongst women, who are disproportionately present in services, including both trade and domestic service. Insofar as agreements and convention have made occupational insurance for retirement the norm in the formal sector, occupational insurance can be regarded as social insurance, despite the absence of legal compulsion to provide such insurance. However, as the "taxes" imposed on employers and employees do not flow through state coffers, fiscal comparisons understate social security provision in South Africa. But although coverage of the *formally employed* by occupational pensions schemes for retirement, even after allowing for some double counting, is high at about 73 per cent (Mouton Committee, 1992:490, Smith Committee, 1995: D2.11), the large extent of unemployment means that only some 40 per cent of the *labour force* is covered (Kruger, 1992: 215, Smith Committee, 1995: D.2.11). According to the Smith Committee (1995: D2.8), retirement fund benefits were paid to only 44.5 per cent of the elderly in 1993, as against 78.7 per cent receiving social old-age pensions.

Workers and employers typically each contribute 7½ per cent of the monthly wage to a retirement fund. Workers can then claim benefits upon retirement. The Pension Funds Act of 1956 lays down the rules for the 16 000 retirement funds so as to safeguard the interests of their members (Sephton *et al.*, 1990:1). Retirement funds also provide withdrawal benefits to employees who resign or are dismissed, retrenchment benefits, and sometimes insured benefits to employees who are disabled or to the dependants of employees who die (Sephton *et al.*, 1990). Benefits are generally not portable, i.e. they cannot be transferred from one fund to another. Consequently, most workers who change jobs get a certain share of the accumulated benefits paid out to them and do not transfer retirement benefits to their new employer's fund. It has been estimated that 90 per cent of pension fund members are expected to change jobs before retirement (Munro, 1991).

Typically, an African worker outside the primary sectors accumulates a retirement income of about R40 per month (2 per cent of final salary) for every year that he belongs to a retirement fund, thus he would need to work 13 years to accumulate retirement benefits greater than the full social pension. If he changes jobs and withdraws from the fund after 10 years, he thus forfeits R400 retirement pension per month, which is less than the social pension of R500 per month. Moreover, upon withdrawal he gets at least his own accumulated contribution and some interest back. Furthermore, the social pension, unlike the occupational pension, can be expected to roughly keep pace with inflation.

Occupational retirement insurance is vital for many South Africans, but cannot cater to those outside paid employment, nor for some parts of the employed population presently uncovered. Of particular concern is that the interaction with the means test for social old-age pensions could discourage private retirement provision for many low-income workers, an issue we shall return to.

Unemployment insurance only applies for certain workers covered by the Unemployment Insurance Fund (UIF). Agricultural and domestic workers, certain public sector employees, seasonal workers and those whose incomes exceed a certain level are excluded (Kruger, 1992:198). Until the late 1970s, the UIF usually did not cover African workers (Mouton Committee, 1992:153-4). In 1993, legislation was enacted to extend coverage to agricultural workers.

Workers and their employers each contribute 1 per cent of the wage to the UIF, which is publicly administered and to which the government also from time to time commits funds. When unemployed or ill, UIF benefits of 45 per cent of the weekly wage are paid for one week for every six weeks the worker contributed, but not exceeding 26 weeks. Maternity benefits and benefits to the dependants of deceased workers are of a similar magnitude, although the former was a major contentious issue in the recent debate about the Basic Conditions of Employment Bill. Such benefits can thus be at best a way of sheltering the

presently unemployed against temporary job loss. In 1993, 6.3 million workers were covered, up from 1.7 million in 1970, a growth rate of 5.9 per cent for more than two decades. But despite its rapid growth, UIF coverage was still less than half of the labour force. In 1990 the average payment per unemployed beneficiary amounted to only R1 270 per annum. The unemployed beneficiaries from the UIF stood at about 538 000 in 1991 (Mouton Committee, 1992: 513, D3.5), i.e. only about 6 per cent of those without formal jobs. Benefits paid of R1.6 billion in 1994 were 0.5 per cent of total remuneration (Van der Merwe, 1996: 386-8).

The UIF's financial position has been seriously eroded by large scale retrenchments in the past decade. This makes it difficult to improve the level of benefits it offers. Until the labour surplus situation in South Africa has effectively been overcome (which could take decades), unemployment insurance can only cover a small part of the labour force for a short period against the scourge of unemployment.

Worker's Compensation, instituted in 1941, requires employers to make risk-related contributions to the Accident Funds (Kruger, 1992:198), and is paid to employed workers below a threshold income who are temporarily or permanently disabled as a result of injuries or industrial diseases sustained at work. In this case also, growth of coverage was fairly rapid, from 3.9 million in 1971 to 5.2 million in 1988 (South African Statistics, 1992:6.8). In 1988 a total of R320 million was paid from the Fund. There was some concern that the criteria for such compensation were sometimes too strictly applied, which disqualified some from getting these benefits and sometimes made them an effective burden on the state, if they had to draw disability pensions. Mineworkers fell under separate legislation (the Occupational Diseases in Mines and Works Act), which in addition to occupational injuries covered them against certain occupational diseases, mainly respiratory, prevalent in the industry (Lund, 1993:8). Beneficiaries received lump sum payments rather than pensions. It is estimated that coverage had improved to 5,2 million people by 1990. In 1994 new legislation was introduced, the Compensation for Industrial Injuries and Diseases Act, replacing both previous Acts and providing much improved coverage and removing racial discrimination. Benefits relate to medical aid, compensation for temporary disability, and lump sum payments or pensions for permanent disability. A fuller treatment of this topic is given by Lund (1994).

Health insurance is similarly common amongst better-paid workers in the private sector. Others fall back on subsidised public health services, usually means tested to ensure that subsidies target the poor. While these funds have recently increased their coverage of lower income workers, cost containment problems arising *inter alia* from the usual moral hazard problems associated with such insurance have slowed down this expansion, despite concerns about the quality of public health services.

### 3.3 Social assistance

Table 4 summarises available information on the various social pensions and allowances for the last years for which racially based data were still provided (all the homelands included). The numerically most important social transfers are social old-age pensions, covering about three-fifths of all recipients or some one and a half million people, followed by disability pensions (another fifth) and child maintenance grants. Other categories are much smaller. Although this effectively targets many of the poor (Ardington & Lund, 1995; Case & Deaton, 1996), not all the poor can be reached in this way. The Table also shows that by that time coloureds and Indians benefited more in per capita terms from social assistance transfers than whites, who have larger incomes and thus less frequently qualify.

**Table 4: Social pensions and grants paid by category and race, 1990 & 1993**

	White	Coloured	Indian	African	Total
<b>Number of grants (thousands) (1993):</b>					
Old-age	122.9	129.6	34.3	1227.1	1513.6
War veterans	8.9	4.8	0.1	3.7	17.5
Disability	38.8	102.5	22.8	335.1	499.2
Blind	0.8	1.6	0.4	16.0	18.7
Special care	0.0	0	0.1	2.0	2.1
Parent allowances	9.6	64.2	14.9	29.4	118.2
Child maintenance	25.7	167.0	26.6	92.4	311.7
Foster parent	5.9	22.9	2.0	16.8	47.6
Single parent	3.2	0.8	0	0.0	4.0
<b>Total</b>	<b>215.5</b>	<b>493.3</b>	<b>101.3</b>	<b>1722.5</b>	<b>2532.7</b>
<b>Value of grants (R'million) (1990):</b>					
Old-age (incl. war veterans)	490.8	289.9	69.0	1753.1	2602.8
Disability (incl. blind)	115.6	201.2	51.6	459.4	827.8
Family (incl. child grants)	103.6	210.5	55.0	46.4	415.5
Relief	7.8	23.2	1.3	5.8	38.1
<b>Total</b>	<b>717.8</b>	<b>724.8</b>	<b>176.9</b>	<b>2 264.7</b>	<b>3 884.2</b>
<b>Population ('000s)</b>	<b>5 068</b>	<b>3 286</b>	<b>987</b>	<b>28 780</b>	<b>38 121</b>
<b>Per capita spending</b>	<b>R142</b>	<b>R221</b>	<b>R179</b>	<b>R79</b>	<b>R102</b>
<b>Proportion of income</b>	<b>0.8%</b>	<b>6.6%</b>	<b>3.0%</b>	<b>5.3%</b>	<b>2.5%</b>

Source: Calculated from figures obtained from Department of National Health and Population Development and from Lund, F.J. 1993. State social benefits in South Africa. *International Social Security Review* 46(1): 9, Table 1 and accompanying text. For the TBVC-homelands equal numbers of recipients were assumed pro rata as in the other homelands.

Table 5 shows more recent data on the distribution of social security spending across different social assistance programs and the administration of social security. It is evident that old-age pensions still dominate, though it has declined somewhat as a proportion of the total. Disability grants, in contrast, have grown from 22 to 26 per cent of total spending on social assistance. Interesting is also the still low cost of administering social assistance, although it has grown in relative terms in an effort to combat inefficiency in delivery and fraud in the system.

**Table 5: Composition of social assistance expenditure by field of service**

	Expenditure		Percentage of total		Average annual growth over period
	1995/96 Actual (R'000)	1998/99 Voted (R'000)	1995/96	1998/99	
Administration	32 470	502 747	0.3%	3.0%	149.2%
Child and family care	1 427 736	1 888 962	11.6%	11.2%	9.8%
Old-age pensions*	8 138 280	9 969 551	66.1%	59.3%	7.0%
Disability grants**	2 699 979	4 371 537	21.9%	26.0%	17.4%
Relief	12 354	67 399	0.1%	0.4%	76.0%
<b>Total Social Security</b>	<b>12 310 819</b>	<b>16 800 196</b>	<b>100%</b>	<b>100%</b>	<b>10.9%</b>

\* Including war veterans grants

\*\* Including pensions for the blind

Source: South Africa 1998b, 29, Table 5

Table 6 shows data on the social security budget by province. There are wide differences in per capita allocations to different provinces, but these result not so much from inequity in allocations, but rather from differences in demographic structure and take-up rates in different provinces, the latter partly determined by the means test and historical factors. Thus the richest province, Gauteng, has the lowest spending per capita on social transfers due to a smaller proportion of its elderly population qualifying under the means test for social old-age pensions. High take-up rates of especially the old child and family grants that are now being replaced by the new child support grants have kept social assistance spending in the Northern Cape inordinately high. Unfortunately, spending on disability grants is rather difficult to express relative to the target population, as the numbers of disabled are very uncertain.

*Table 6: Budgeted per capita spending by province, 1998/99*

	All social assistance spending per capita	Child, family care spending per child	Old-age pensions per elderly person
Eastern Cape	R596	R124	R6 945
Free State	R413	R233	R4 178
North West	R387	R 46	R5 984
Northern Province	R386	R118	R4 784
Mpumalanga	R357	R100	R5 631
Northern Cape	R651	R358	R6 051
Kwazulu/ Natal	R470	R153	R5 597
Western Cape	R444	R220	R3 275
Gauteng	R254	R 72	R2 815
<b>Total</b>	<b>R422</b>	<b>R133</b>	<b>R4 826</b>

Source: South Africa 1998b, 32, Table 10

Social old-age pensions are paid to men from 65 years of age and to women from age 60. Below the lower threshold (60 per cent of annual benefit), applicants qualify for the full pension. Above this level, every R2 increase in pre-pension income reduces the benefit by R1 until the benefit is zero. For married applicants, only half the combined income of the applicant and spouse is taken into consideration. The marginal "tax" rate or clawback of 50 per cent creates a typical poverty trap and has severe implications for behaviour of low income workers, as referred to earlier. The absence of adequate occupational retirement insurance in the past has left most people of pensionable age few other income sources than social old-age pensions to fall back on. Interestingly, social old age pensions are paid to more than three-quarters of all people of pensionable age, thus the means test is largely a way of excluding the rich rather than targeting the poor.

Disability grants are the second most important form of social assistance. The state provides disability grants to the disabled (including the blind) from age 16 up to retirement age, subject to medical eligibility criteria and the same means test as for old-age pensions. In 1993 disability grants went to 13 out of every thousand South Africans: only to 8 per thousand whites and 12 per thousand Africans, but the figures for coloureds (31) and Indians (23) were extremely high and may indicate some abuse of the system, particularly in the apartheid dispensation where different administrations applied eligibility rules differently. Considering the extent of unemployment, take-up of such benefits will be as great as administrative leniency allows.

Child maintenance benefits actually comprised of two types of grants: parent allowances and child allowances. It was paid mainly to single mothers (including widows, divorcees, women abandoned by their spouses, and those never married) and their children who had no other means of support. In the past, it was largely not extended to Africans. When the social assistance system was recently deracialised, it became apparent that the cost of these grants could become astronomical, that there were potentially perverse incentive effects associated with them, and that other equally poor children in intact families may not have qualified for such support. Thus following the Lund Committee recommendations, the cabinet approved the

phasing out of the old child and parent allowances, the institution of a new flat rate child grant of R100 per month to caregivers of the poorest children under 7 years of age, and a means test aimed at identifying the 30 per cent of children in this age group who are most vulnerable. This should add to the flow of social transfers into poor communities, and reach particularly households in the bottom two quintiles of the income distribution. If one considers the mean annual household income in the quintile of R2 406 in 1993, annual flows of R1 200 or R2 400 to recipient households (assuming either one or two children in the relevant age category) may have a considerable impact, even allowing for inflation. Overall spending allocated for this purpose of R2.7 billion per annum once it is fully operational, however, constitutes little more than 10 per cent of the income of the bottom two quintiles. Moreover, even under optimistic circumstances there would be some leakage to the non-poor, and some of the present R1.3 billion spent on the old grants also reaches the poorest. Thus such a programme, though important, would not have nearly the same impact as an acceleration in employment would have on the conditions of the poor.

### 3.4 Coverage against risk: The adequacy of social security

To understand the impact of the South African social security system, it is useful to consider how people in different income classes with diverging educational and skill levels are reached. Ideally, such an analysis should consider education, employment, wages, income, living standards, life cycles and contingencies, uncovered risks, and opportunities for class mobility through education, rural-urban migration or marriage.

**Table 7: Socio-economic situation of different income classes, 1993\***

	Income/consumption quintiles					Total
	Q1: Poorest	Q2	Q3	Q4	Q5: Richest	
Per capita income	R390	R1 056	R1 974	R4 158	R20 478	R5 611
Household income	R2 406	R6 372	R11 550	R22 458	R82 536	R30 630
Household monthly wage**	R287	R546	R930	R1 611	R4 689	R1 598
Unemployed	53%	43%	30%	17%	4%	30%
No education	24%	18%	13%	7%	6%	15%
Less than full primary educ.	54%	42%	33%	21%	9%	35%
Completed secondary educ.	4%	8%	13%	23%	62%	19%
Completed tertiary education	0%	0%	0.2%	0.6%	10.3%	1.8%
Primary enrolment (net)	85%	87%	88%	89%	90%	87%
Secondary enrolment (net)	46%	57%	67%	78%	83%	60%
Tertiary enrolment (net)	4%	5%	8%	20%	38%	11%
Remittances / Income	27%	14%	6%	2%	1%	3%
Regular wage/ Income	23%	44%	67%	79%	65%	65%
Regular wage main income source (% of households)	19%	41%	65%	84%	84%	59%
Households rural	76%	68%	46%	33%	15%	47%
Households metropolitan	10%	14%	29%	40%	58%	30%
Households in other urban areas	14%	18%	25%	27%	27%	23%
Households African	96%	93%	82%	68%	25%	73%
Households white	1%	1%	3%	16%	66%	17%
Household size	6.3	6.0	5.9	5.4	4.2	5.5
Persons per room	2.3	1.7	1.4	1.0	0.5	1.4
H'holds in shacks or traditional dwellings	39%	32%	25%	15%	2%	23%
H'holds with electricity	15%	28%	49%	77%	98%	53%

Commute by car/motorbike	7%	7%	10%	26%	77%	30%
Treated by private doctor	23%	31%	41%	53%	73%	44%
Stunting of children under 5	38%	27%	23%	18%	6%	27%
Satisfied with quality of life	17%	22%	29%	39%	70%	35%
Govt. food aid a major issue	34%	27%	17%	14%	11%	20%

\* Figures not fully comparable across dimensions, as criteria for division into quintiles differed (e.g. income/ consumption group, quintile of households/individuals, etc.)

\*\*

Including casual labour

Sources: Compiled from: World Bank. 1995. *Key Indicators of Poverty in South Africa*. Prepared for RDP Office. Pretoria: Government Printer; Saldru. 1994. *South Africans Rich and Poor. Baseline Household Statistics*, Cape Town: Saldru; Janisch, C.A. 1996. *An analysis of the burdens and benefits of taxes and government expenditure in the South African economy for the year 1993/94*. Masters dissertation. Pietermaritzburg: University of Natal; Klasen, S. 1996. *Poverty and inequality in South Africa*. Mimeo. Cambridge: Centre for History and Economics, King's College

For convenience, we identify four income class types, which we shall call, not fully accurately,

- ? the affluent (largely Quintile 5)
- ? the stable urban working class (Quintile 4)
- ? the insecure formal sector (Quintile 3)
- ? outsiders (Quintiles 1 and 2, the poor)

Despite its many limitations, such a typology is useful for focusing on the contingencies that interest us.

i) The affluent (Quintile 5): Under apartheid, the affluent have long been mainly white, but in the past two decades their ranks have been joined by members of other race groups. By 1993, only about two-thirds of the richest income quintile were white, and by 1995 whites may even have declined to only about half of households in this class (South Africa, 1997: Figure 36). This group exhibits high levels of education and wage and per capita income levels three times the national average. Moreover, almost all children enrol for secondary education and a substantial proportion goes on to tertiary education, thus this income class reproduces itself. Lifestyles reflect the suburban nature of this group (though perhaps less so amongst recent African converts to their ranks): spacious homes (two rooms per person, on average), universal access to electricity, commuting to work by private means, and general satisfaction with their quality of life.

Contingencies amongst such a group approximate those in industrial societies, and most risks are well covered by occupational insurance (or private insurance for self-employed professionals). Although coverage against cyclical unemployment is weak (the upper income groups are excluded from compulsory unemployment insurance), they are least affected by cyclical downswings and their skills and education limit the risk of long term structural unemployment.

ii) Stable urban working class (Quintile 4): In this largely urban income class, Africans already dominate in numerical terms, but Indians and coloureds are disproportionately represented, while lower middle class to working class whites typically also fall into this category. The striking feature of this group is their access to relatively well paid urban employment; unemployment occurs mainly amongst women or other secondary earners. This group is characterised by above average educational levels (though appreciably less than that of the affluent), but more particularly by high levels of enrolment of children in secondary and tertiary education: this is an upwardly mobile group.

This group faces some risk of falling victim to unemployment because of lower education and skill levels, which may pull them down the income distribution ladder once unemployment insurance benefits have been exhausted. Younger members of this group are accumulating adequate occupational insurance benefits before retirement to be potentially independent of the social old-age pension, but this group is most affected

by rules relating to the withdrawal of benefits when they change jobs and by the means test for old-age pensions. Though coverage is for many of them still of recent origin, this group looks mainly to occupational insurance rather than to social assistance for their social security.

iii) The insecure formal sector (Quintile 3): This group is most mixed in terms of employment status and geographic origin. Where the affluent are clearly urban and engaged in long term formal jobs, this group includes many better paid farm workers and a large proportion of migrant “men of two worlds”, who may have families and assets in rural areas but who are economically dependent on urban areas. Their access to jobs, however, is tenuous, as they usually have limited skills and low educational levels. As a result, many live in crowded housing or squatter shacks in the cities, while housing for farm workers is only as secure as their jobs.

High risks of unemployment subject many in this group to fluctuating fortunes, that depend on cyclical factors and uncertain prospects of finding new employment. When the duration of unemployment is appreciable and households have no other employed earner, many slip down the income ladder. On the other hand, those with some skills and education who do obtain regular employment may graduate to the second quintile. Life cycle factors may be particularly important for this group; youths who do find employment could add dramatically to the household’s fortunes.

Social insurance has a limited role amongst this group, although many of them are nominally covered by it. They prefer provident rather than pension funds for occupational retirement provision, as taking lump sum retirement benefits may still allow them to qualify under the means test for the full social old-age pension. If they are disabled (and physical disabilities are common in this group and amongst the outsiders), workmen’s compensation helps those injured on the job, while disability grants or social pensions are generous enough to maintain smaller households in this income class.

iv) Outsiders (Quintiles 1 and 2, the poor): This group consists predominantly of rural Africans who are poorly educated (78 per cent of household heads in the bottom quintile have not even completed primary education (World Bank, 1995:27)). In this poorest group, social stress is evident in high rates of absenteeism from rural areas of able-bodied males who work in the cities. Extremely high unemployment rates plus low wages - often in casual jobs – result in less than one in four of these households having a regular wage as main source of income. A permanent job or a social pension may sometimes move such households up the income ladder, but that partly depends on the burden of dependants. Household size is typically large, despite the absence of many workers from rural areas, whose remittances are a crucial but often very uncertain source of income (remittances contribute more than a regular wage to household incomes). Such broken households are also one of the factors that account for the higher proportion of women than men in poverty (World Bank, 1995: 13). The poor nutritional status of children is shown by stunting rates of one in three children under five, as against only 6 per cent amongst the affluent. Small wonder this group places a high premium on government food aid and is extremely dissatisfied with their quality of life.

Social assistance is vital for this group. For one in four, social assistance is the main source of income, compared to only 5 per cent amongst other households (World Bank, 1995: 15). Without such flows of funds to pensioners and the disabled, the nutritional and social situation of the beneficiaries and their extended families would have been much worse. It has been convincingly shown that such social transfers reach communities who have otherwise been poorly provided with social services such as education or health (Ardington & Lund, 1995; Case & Deaton, 1996).

### **3.5 Social security policy**

The challenge for South Africa is to offer a safety net for the poor, who are still numerous mainly due to the absence of remunerated employment, while insuring those in employment against major contingencies (loss of employment, old-age, ill health, disability). It has been shown in an earlier paper in this research project that

social transfers contribute more towards reducing poverty than to increasing incomes, an indication that indeed they are relatively well targeted. But although the social security system is relatively well-targeted and has developed to almost unprecedented levels for a semi-industrial country, the previous section showed that there are still major gaps. But the resources devoted from state general revenue to social security (as opposed to enforced social security taxes) are already generous and competing demands on fiscal resources at a time of political transition leave little scope for additional resources for social security.

Another growing problem is the HIV/AIDS epidemic, which is likely to have a major impact on the welfare of many South Africans. Not only the number of projected deaths is worrying, but also the many orphans and the wider impact this is likely to have on social support structures. In this respect the demand for social security may grow sharply.

The major contingency against which no proper protection is given, is unemployment, which has been extensively discussed in other parts of this research project and is strongly linked to poverty. Occupational insurance can reach at best only half the labour force, leaving the most vulnerable dependent upon various forms of social assistance. As living standards largely depend on access to remunerative employment, their poor education and skills imply that the rural African population is worst affected.

A second major deficiency of the social security system is that its impact on the poorest – those uncovered by social insurance - is almost exclusively tied to the presence of elderly or disabled members in households. There is naturally a life cycle component to it, as families may materially benefit at different stages from such a presence. However, at any particular time there are many poor families without such support. Social assistance for the elderly is a necessary, but insufficient condition for reaching most poor households. Social old-age pensions may have affected family structures by encouraging poor families to retain older members in the household, thus enhancing the status of old people in rural society and making them the main “breadwinners” in many extended families (cf. Case & Deaton, 1996: 11). Those households without access to employment and with no elderly or disabled members have become the poorest. Thus many children and young families are especially vulnerable, as are older workers who cannot effectively compete for manual work but are yet too young to qualify for pensions. If the prevention or amelioration of poverty is one of the major roles of the social security net, there is still considerable need for targeting such households.

The options in this regard are limited, given the large resource transfers required and the potential perverse incentive effects associated with certain possible targeting devices. For instance, substantial social transfers targeted at the unemployed may have perverse impacts on job search, labour input or even educational attendance. One possible approach is low wage public employment schemes as a self-targeting mechanism in rural areas, but efforts to this end have run into union opposition, capacity constraints and limited enthusiasm in government, *inter alia* because of the lack of a “powerful interest group to fight for the programme” (Breslin *et al.*, 1997: 34) One major reason for this is the persisting view that social transfers are handouts and therefore to be avoided. It is thus unclear what measures could or would be taken in this regard, though improvements to the unemployment insurance for those in employment are almost certain to ensue in the next few years and would improve the situation of those who lose their jobs. They are, however, a small proportion of the unemployed. Of more importance is an expansion of providing low-wage programmes that could reach large segments of the very poor. International experience has shown that it is essential that such programmes should offer relatively low wages, in order to attract only the poorest and not those already engaged in productive activities in the informal sector.

A continuing concern regarding is the interaction between social insurance and social assistance, especially for retirement provision. The crucial issue is how the means test interacts with occupational or private insurance and with the tax system. As more and more cohorts of Africans who retire have accumulated some occupational pension claims, the operation of the means test becomes more difficult. Improved targeting may seem one option, but does not reduce the negative aspects of the means test, i.e. the poverty trap and associated perverse incentive effects on saving behaviour, the propensity to lie about private income, and the difficulty of administration. The National Consultative Retirement Forum, set up by the government in 1997, expressed some support for a universal grant for the elderly, though cognisance was

taken of the fiscal constraints. A universal grant would remove the perverse incentives flowing from the present means test for withdrawal of retirement benefits, private retirement insurance for informal sector participants and domestic servants, the choice between lump sum retirement benefits and pensions, and the form in which assets are held. Abolishing the means test should encourage private retirement provision. Moreover, the means test encourages dishonesty and withholding of information and is difficult to administer. It would become even more difficult to apply when more people who retire receive some occupational retirement benefits.

The fiscal consequences of a universal old-age grant could partly be reduced by clawing back some spending through higher income tax, both by removing the old-age rebate and by the normal operation of the income tax scales. Thus net fiscal costs may appear manageable. However, more rapid ageing of the South African population means that the numbers in the higher age categories are presently growing more rapidly than the aggregate population and, indeed, as rapidly as the economy. Thus just to maintain real benefit levels, fiscal expenditures for old-age pensions would have to grow as rapidly as the economy. Unless economic growth accelerates markedly, such a universal grant is fiscally unrealistic. This point is strengthened by the fact that the tax system – which is supposed to claw back some of the cost – is still operating ineffectively and is being confronted by rapid expansion of potential numbers in the income tax paying brackets.

As long as the lurking menace of unemployment remains, the outsiders in South African society cannot be fully drawn into the economic and social mainstream, neither by social security nor by other means. Social assistance programmes can at best alleviate the plight of the rural poor, in itself an important enough objective. But for the moment, improved benefit levels for existing programmes are also unlikely, for that is not now the main priority. Employment is all that will allow social security needs to be contained to levels commensurate with the fiscal ability of the economy. Only then will South Africa be able to make further progress on the road to an advanced social security system.

The major gap in income security thus remains the large scale unemployment that so plagues South Africa. An extension of the Unemployment insurance system offers little hope, for this cannot reach those who have never been employed. A more promising avenue is the provision of **low-wage public works programmes**. These have the benefit of self-targeting: only the really poor are willing to work at very low wages. Attempts to expand such programmes in South Africa have thus far come up against opposition from trade unions, either because of the low wages, or because they see such programmes as undercutting unionised work. Within government, too, there has been little acceptance of such programmes as low-wage income support schemes rather than permanent job-creation or training schemes. Moreover, fiscal costs and managerial capacity within government are further constraints on massive expansion of such programmes, so that it appears that a moderate growth over time is the most that can be expected at this stage. The impact on the poor is thus likely to remain small.

## 4. Conclusion

Government's policies have already shifted substantially towards poverty alleviation, and there is limited scope for further initiatives to improve the position of the poor without major additional resource outlays. In the policy field, the discussion above suggests three areas for increased government attention in order to reduce poverty over the medium to long term, supplementing those policies already in place. These are:

- improving the quality of education, *inter alia* through better information systems on cognitive achievement levels in education;
- expanding low-wage public works programmes as a form of self-targeted poverty relief for those who cannot get access to jobs;

- government intervention in the capital market to ensure enhanced access to the poor of capital particularly for entrepreneurial purposes (though education would probably also benefit from it). This policy area was not discussed within the ambit of the present research project.

These policies, by themselves, cannot reduce poverty drastically. However, as everywhere in the world, South Africa is also likely to experience that sustained long run economic growth is the best alleviator of poverty, especially if such growth is employment creating. To some extent, these policy thrusts suggested above may contribute to such an outcome, but they also need to be underpinned by viable macroeconomic policies that would create the necessary climate for attracting international capital. For this reason the government's macro-economic growth strategy, GEAR, will have to be continued and consolidated. If poverty-ameliorating policies such as these suggested above complement a successful growth strategy, poverty alleviation may be quite rapid. As in Latin America, where, as discussed in the introduction, the turning point in inequality may have been reached, South African racial inequalities are also now being reduced in the new political dispensation. If growth is added to the mix, both poverty and racial inequality may be strongly reduced, and the trend towards increased inequality within racial groups may be arrested.

## References

- Abromovitz, Moses. 1989. *Thinking about growth, and other essays on economic growth and welfare*. Cambridge University Press: Cambridge
- Adler, Taffy. 1989. The problem with pensions. *Institute for Personnel Management Journal*. August: 20-22
- Alber, Jens. 1982. *Vom Armenhaus zum Wohlfahrtsstaat - Analysen zur Entwicklung der Sozialversicherung in Westeuropa*. Frankfurt: Campus Verlag
- Ardington, Elizabeth & Lund, Frances. 1995. *Pensions and development: How the social security system can complement programmes of reconstruction and development*. Development Paper 61. Midrand: Development Bank of Southern Africa
- Barro, Robert J. 1999. *Inequality, growth and investment*. NBER Working Paper 7038. Cambridge, MA: National Bureau of Economic Research.
- Basson, Deon. 1987. Debat oor voorsorgfondse kry momentum. *Finansies & Tegniek* 27 November
- Baumol, William J.; Blackman, Sue Anne Batey; & Wolff, Edward N. 1989. *Productivity and American leadership: The long view*. MIT Press: Cambridge, Mass.: Ch.5 (International convergence: The comparative US productivity lag): 85-113
- Breslin, Edward D; Delius, Peter; & Madrid, Carlos. 1997. Strengthening institutional safety nets in South Africa: Sharing Operation Hunger's insights and experiences. *Development Southern Africa* 14(1)
- Bromberger, Norman. 1982. Government policies affecting the distribution of income, 1940-1980. In: Schrire, Robert (Ed.). 1982. *South Africa: Public policy perspectives*. Cape Town: Juta: 165-203
- Case, Anne & Deaton, Angus. 1996. *Large cash transfers to the elderly in South Africa*. Discussion Paper 176. Princeton: Research program in Development Studies
- Case, Anne & Deaton, Angus. 1998. Large cash transfers to the elderly in South Africa. *Economic Journal* 108 (450): 1330-61
- Case, Anne & Deaton, Angus. 1999. School inputs and educational outcomes in South Africa. *Quarterly Journal of Economics* (forthcoming)
- De Haan, Arjan; Lipton, Michael; Darbellay, Eliane; O'Brien, David; & Samman, Emma. 1997. *The role of government and public policy in poverty alleviation in sub-Saharan Africa*. Review of the literature prepared for the African Economic Research Consortium's collaborative project on Poverty, Income Distribution and Labour Markets. Mimeo. Sussex: Poverty Research Unit
- De Villiers, AP. 1996. *Effektiwiteit in Suid-Afrika se onderwysstelsel: 'n Ekonomiese analise*. Unpublished Ph.D. thesis. Stellenbosch: University of Stellenbosch
- Deininger, Klaus & Squire, Lyn. 1996. A new data set measuring income inequality. *World Bank Economic Review* 10(3): 565-91
- Edusource. 1999. *Edusource Data News* 24. Johannesburg: Education Foundation. March.
- Fagerberg, Jan. 1994. Technology and international differences in growth rates. *Journal of Economic Literature* 32(3): 1147-75
- Ferreira, Francisco H. G. & Litchfield, Julie A. 1999. *Calm after the Storms: Income Distribution in Chile, 1987-1994*. World Bank Policy Discussion Paper 1960. Washington, D.C.: World Bank. 49pp.
- Field, Wayne. 1991. Employees' pension and provident fund rights: A renewed interest develops. *Industrial Law Journal* 12: 965-983.

- Filmer, Deon & Pritchett, Lant. 1998. *The effect of household wealth on educational attainment around the world: Demographic and health survey evidence*. World Bank Policy Research Paper 1980. Washington, D.C.: World Bank
- Fuchs, Maximilian. 1985. *Soziale Sicherheit in der Dritten Welt: zugleich eine Fallstudie Kenias*. Baden-Baden: Nomos Verlagsgesellschaft
- Fuller, Bruce; Pillay, Pundy; Sirur, Neeta. 1995. *Literacy trends in South Africa: Expanding education while reinforcing unequal achievement?* Mimeo. Saldru: University of Cape Town
- Goldin, Claudia & Katz, Lawrence F. 1999. *The returns to skills in the United States across the twentieth century*. NBER Working Paper 7126. Cambridge, Mass.: National Bureau of Economic Research
- Gruat, J.V. 1984. The extension of social protection in the Gabonese Republic: Consolidating the development process. *International Labour Review* 123(4): 457-71
- Gupta, Sanjeev; Verhoeven, Marijn; & Tiongson, Erwin. 1999. *Does higher government spending buy better results in education and health care?* IMF Working Paper. Washington, D.C.: International Monetary Fund
- Janisch, Catherine Ann. 1996. *An analysis of the burdens and benefits of taxes and government expenditure in the South African economy for the year 1993/94*. Masters dissertation. Pietermaritzburg: University of Natal
- Kanbur, Ravi. 1998. *Income distribution and development*. World Bank Working Paper WP98-13. Mimeo. Washington, D.C.: World Bank
- Klasen, Stefan. 1996. *Poverty and inequality in South Africa*. Accepted for publication in *Social Indicator Research*. Cambridge: Centre for History and Economics, King's College
- Kruger, J.J. (John). 1992. *State provision of social security: some theoretical, comparative and historical perspectives with reference to South Africa*. Masters thesis. Stellenbosch: University of Stellenbosch
- Lam, David. 1999. *Generating extreme inequality: Schooling, earnings, and intergenerational transmission of human capital in South Africa and Brazil*. Mimeo. Ann Arbor: University of Michigan
- Lee, Jong-Wha & Barro, Robert J. 1997. *Schooling quality in a cross section of countries*. NBER Working Paper 6198. Cambridge, MA: National Bureau of Economic Research.
- Levine, R & Renelt, D. 1992. A sensitivity analysis of cross-country growth regressions. *American Economic Review* 82(4): 942-963
- Lipton, M. & Ravallion, M. 1995. Poverty and policy. In: Behrman, J. & Srinivasan, T.N. (Ed.). 1995. *Handbook of Development Economics*, Vol.III. Amsterdam: North Holland: 2551-2657
- Londoño, Juan Luis. 1996. *Poverty, inequality, and human capital development in Latin America, 1950-2025*. World Bank Latin American and Caribbean Studies: Viewpoints. Washington, D.C.: World Bank
- Lund, F.J. 1993. State social benefits in South Africa. *International Social Security Review* 46(1): 5-25
- Lund, F.J. 1994. *Social security for disabled people in South Africa: challenges facing the new society*. Mimeo. Durban: University of Natal
- Moll, Peter. 1998. *Discrimination is declining in South Africa but inequality is not*. SANER Working Paper 5. Cape Town: South African Network for Economic Re
- Mouton Committee. 1992. *Report of the Committee of Investigation into a Retirement Provision System for South Africa*. 2 vols. Johannesburg: Government Printer
- Munro, Reg. 1991. Beware those 'golden handcuffs'. *Sunday Times*. 14 July

- Murphy, Kevin M. & Welch, Finis. 1994. Industrial change and the rising importance of skills. In: Danziger, Sheldon & Gottschalk, Peter. 1994 (Eds.). *Uneven tides: Rising inequality in America*. Russel Sage Foundation: New York: 101-132
- Patel, Leila. 1992. *Restructuring social welfare: Options for South Africa*. Johannesburg: Ravan Press
- Rumney, Reg. 1988. Saving pensions. *Finance Week*. 5-11 May: 35-36
- Saldru. 1994. *South Africans Rich and Poor: Baseline Household Statistics*. Cape Town: Saldru
- Sephton, Brian; Cooper, Di; & Thomson, Clive. 1990. *A guide to pension and provident funds: Legal and policy considerations*. Cape Town: University of Cape Town, Labour Law Unit
- Simkins, Charles. 1998. *On the durability of South African inequality*. Macarthur Foundation Working Paper. Princeton: Macarthur Network on Inequality and Poverty
- Smith Committee. 1995. *Report of the Committee on Strategy and Policy Review of Retirement Provision in South Africa*. Pretoria: Department of Finance
- South Africa, Central Statistical Service. 1996. *Living in South Africa: Selected findings of the 1995 October Household Survey*. Pretoria: Central Statistical Service
- South Africa, Central Statistical Service. Various years. *South African Statistics (various years)*. Pretoria: Government Printer
- South Africa, Social Security Committee. 1944. *Report of the Committee on Social Security*. Pretoria: Government Printer
- South Africa, Central Statistical Service. 1992. *South African Statistics 1992*. Pretoria: Central Statistical Service
- South Africa, Central Statistical Service. 1997. *Earning and spending in South Africa. Selected findings of the 1995 income and expenditure survey*. Pretoria: Central Statistical Service.
- South Africa, Budget Office, Department of Finance. 1998a. *1998 medium term expenditure review: Education*. Pretoria: Department of Finance
- South Africa, Budget Office, Department of Finance. 1998b. *1998 medium term expenditure review: Welfare*. Pretoria: Department of Finance
- Van den Bosch, Karel; De Lathouwer, Lieve; Deleeck, Herman. 1997. Poverty and social security transfers – Results for seven countries and regions in the EC. In: Ott, Notburga & Wagner, Gert G. (Eds.). 1997. *Income inequality and poverty in Eastern and Western Europa*. Heidelberg: Physica Verlag: 53-67
- Van der Merwe, Theo. 1996. *Bestaansbeveiliging: 'n Ekonomiese perspektief*. D.Litt. et Phil Thesis. Pretoria: University of South Africa (UNISA)
- Van der Berg, Servaas. 1994. *Issues in South African social security*. Commissioned paper prepared for the World Bank. Mimeo. Washington, D.C.
- Van der Berg, Servaas. 1997. South African social security under apartheid and beyond. *Development Southern Africa* 14(4), October: 481-503
- World Bank. 1995. *Key Indicators of Poverty in South Africa*. Prepared for the Reconstruction and Development Programme Office. Pretoria: Government Printer

Fig. 1:

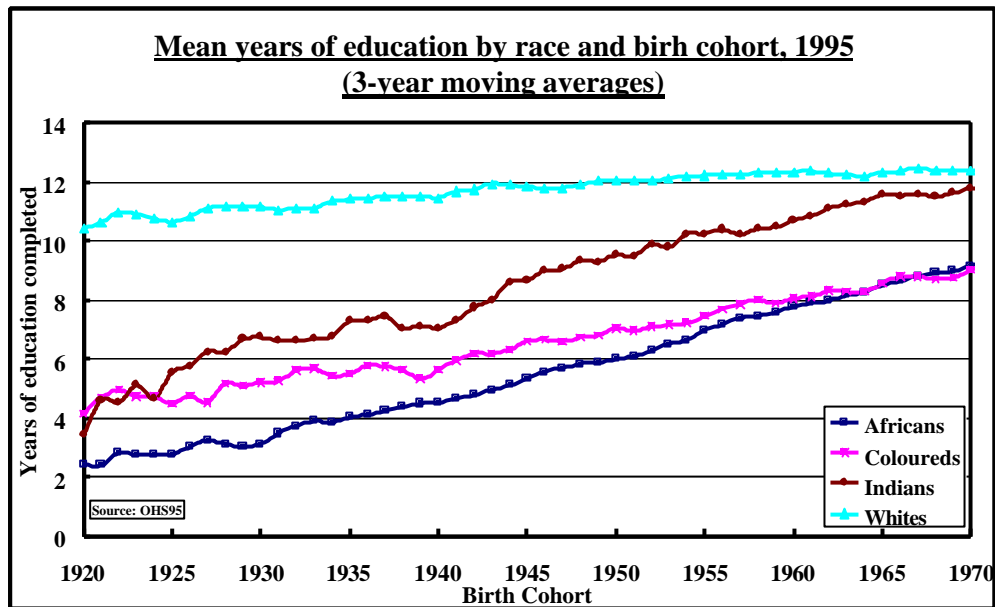


Fig.2:

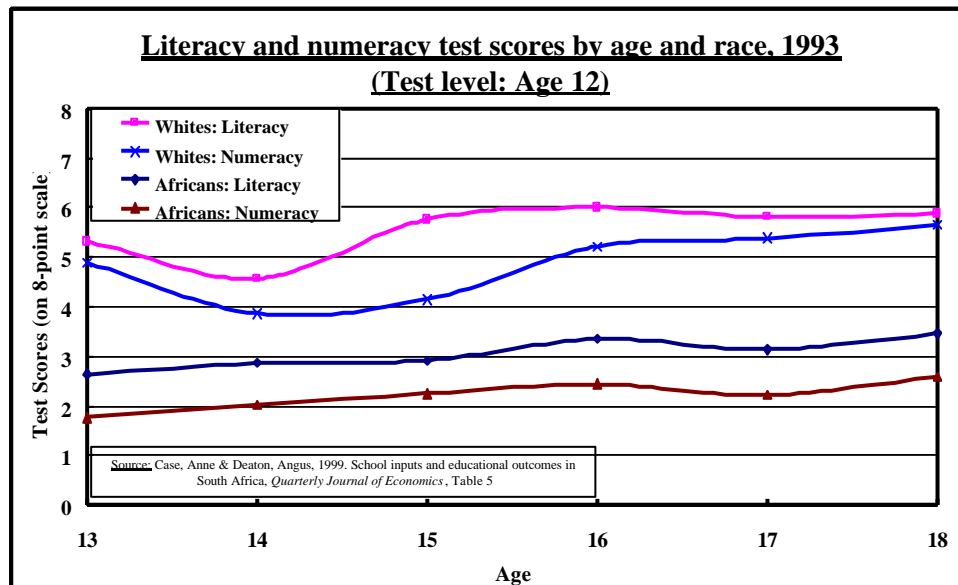


Fig.3:

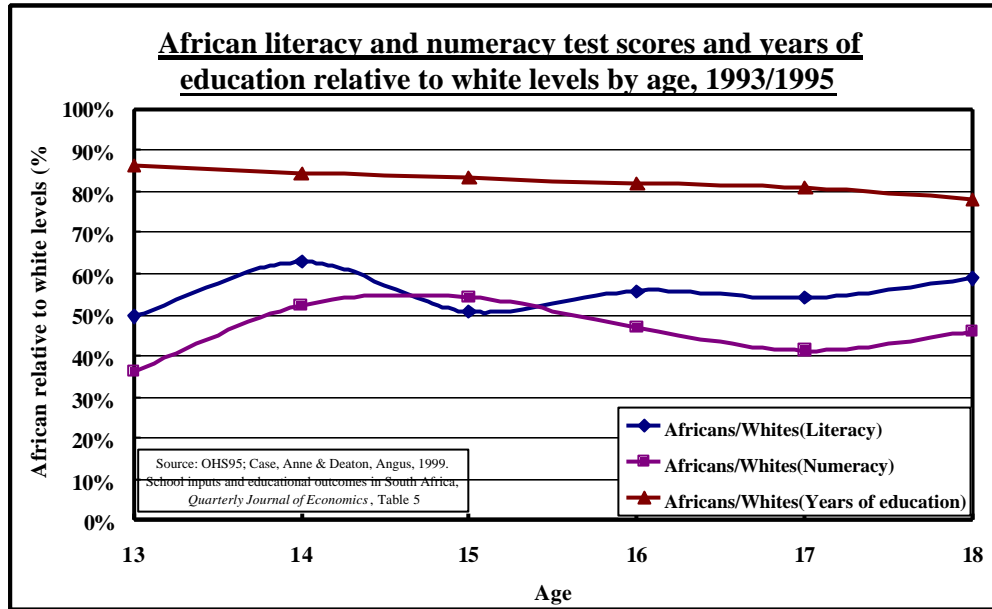


Fig.4:

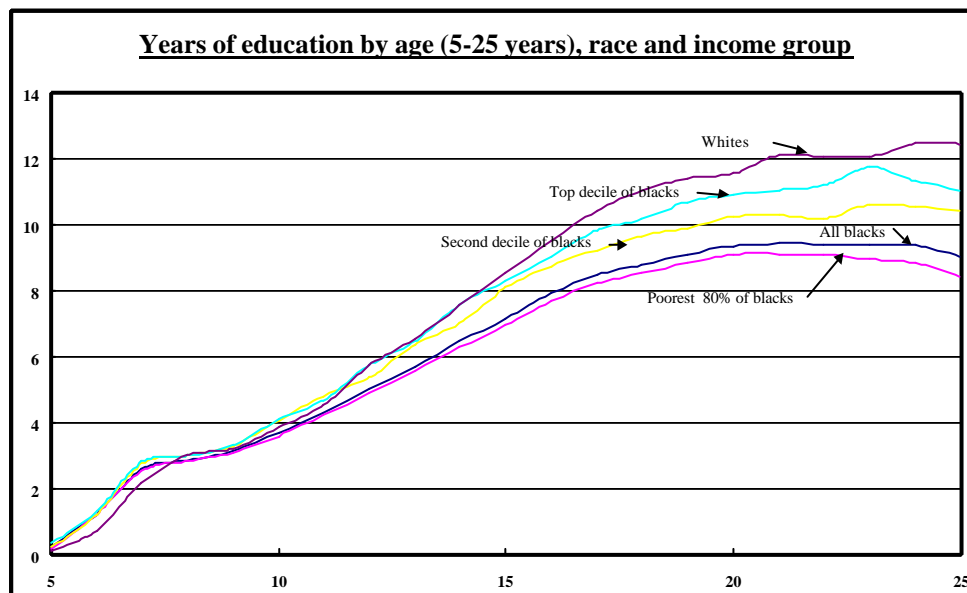


Fig. 5:

