

The Impact of Growth and Redistribution on Poverty and Inequality in South Africa

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Abstract

This country study evaluates the experience of the South African economy with respect to growth, poverty and inequality trends since the advent of democracy in 1994. The post-apartheid government took a definite turn toward greater spending on social security, while job creation and a narrowing of the gap between the so-called first and second economies – the latter defined as the informal part of the economy that is also largely removed from formal sector activities – enjoyed priority in its economic strategy. Despite this focus on uplifting the poor it remains unclear to what extent government has been successful. Some controversy exists around whether relatively fewer South Africans are poor ten years after the democratic government came into power. There seems to be greater consensus among analysts that inequality has increased. This study attempts to shed some light on these issues, drawing on recent South African literature and data.

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1. Introduction

South Africa is officially classified as an upper middle-income country. Certainly, as measured by its per capita income, the average South African citizen appears to be fairly well-off compared to international standards for developing countries. However, the country is also characterised by extreme degrees of inequality in the distribution of income, assets and opportunities. Past discriminatory policies have left a large proportion of the population outside the economic mainstream and relatively poor compared to an elite minority. Since the transition to democracy in 1994 various policies of redistribution, mainly through labour and capital markets, were put in place, including affirmative action and broad-based Black Economic Empowerment (BEE). However, even with these policies in place, it appears that overall inequality has increased further, albeit not necessarily along racial lines.

Many analysts, however, share the sentiment that the high degree of relative poverty (or inequality) should not overshadow the high incidence of absolute poverty that persists in this country. Depending on the definition of the absolute poverty line, current income poverty rates of between 45 and 55 per cent are often quoted in the literature (see for example Hoogeveen and Özler 2004, May 1998, Taylor 2002, Woolard and Leibbrandt 2001). The underlying structural causes of poverty are best addressed by long-term strategies that give people access to opportunities and income-generating assets. There is, however, also a strong realisation that certain temporary relief measures are necessary to assist the “*particularly vulnerable*” in society (Taylor 2002: 43). As a result, the last few years have seen a significant rise in expenditure on social security programmes as a direct measure to reduce poverty. However, state resources are limited and whether social security provisioning can be sustained or expanded further remains a hotly debated topic in the policy arena today.

This paper is structured as follows: Section 2 reviews the poverty and inequality trends during the last ten years. In Section 3 more attention is focused on the nature of economic growth experienced in South Africa in an attempt to determine whether growth was in fact pro-poor or not. Also reviewed in this section are some of the important labour market trends observable in the last decade and how these have impacted on poverty and inequality. Finally, in Section 4, the role of cash transfers, including pensions, disability grants and various child care grants, in relieving poverty is explored. Some conclusions are drawn in Section 5.

2. Poverty and Inequality in the Post-Apartheid Era

2.1 A Profile of the South African Population, 1995 - 2000

When the ANC government came into power in 1994 it inherited a fragmented society and faced daunting socio-economic reforms. Some of the key challenges included regenerating a stagnating economy just emerging from isolation and addressing the socio-economic divide (Van der Berg *et al.* 2005). The latter challenges involve “*breaking down the barriers that exclude people from participating in the economy on the grounds of race, gender or location*” (Leibbrandt *et al.* 2001: 21).

Income poverty in its simplest sense is usually defined as the “*inability [of an individual or household] to attain a minimal standard of living*”, where standard of living is measured in terms of consumption or income levels (Woolard and Leibbrandt 2001: 42). A broader definition of poverty might consist of a variety of components, including household income/consumption, human capabilities, access to public services, employment and asset ownership. The introduction of non-income measures of poverty provides a more complete assessment of poverty in its different dimensions. Given the focus of this study, as well as the complexities involved in measuring poverty in a non-monetary framework, the analysis here only considers income poverty. We also steer clear of the debate on what an appropriate poverty line should be by studying individuals from five different household quintiles. These quintiles are formed around the 20th, 40th, 60th and 80th percentiles of household per capita income. Quintile one thus contains the poorest 20 per cent of households, quintile two the next poorest 20 per cent, and so on. For pragmatic reasons and given the widespread use of the approach we consider individuals in the bottom two household quintiles to be ‘poor’, with those in the bottom quintile defined as the ‘ultra poor’. Given this approach the cut-off per capita income level between the second and third quintiles can be regarded as some kind of relative poverty line.¹

In the following sections the social, demographic, geographic and labour market characteristics of the different household quintiles in 1995 and 2000 are briefly discussed. The Income and Expenditure Survey (IES) of 1995 and 2000, as well as the October Household Survey (OHS) of 1995 and the Labour Force Survey (LFS) of 2000 are used for the analysis.²

1 As the income distributions change, this poverty line shifts, hence the term relative (as opposed to absolute) poverty line.

2 The LFS replaced the OHS in 1999. In 1995 and 2000 the survey samples were drawn on the same sample frame as the IESs of the same years, hence, by merging the two it is possible to form comprehensive datasets with both household-level income and expenditure data and person-level demographic and employment information. The latest IES was conducted in 2005, but the data was not yet released at the time of writing.

2.1.1 Demographics

Table 1 shows some basic features of the household quintiles in 1995. About 28.7 per cent of the people lived in the poorest 20 per cent of households. Out of the estimated 40.3 million South Africans in 1995, 20.9 million (52 per cent) were relatively poor according to our definition, while the richest 20 per cent of the households (quintile five) contained only 12.7 per cent of individuals. This reflects the fact that the average size of households in the poorest quintile is much larger. In fact, in 1995 it was double that of the richest quintile. Also important to note is the much lower average number of workers per household in the lower quintiles. This illustrates the strong linkages between unemployment and poverty that exist in South Africa. The table also illustrates the extreme degree of inequality that exists in the country. The average annual per capita income in the highest quintile was roughly 36 times that of the first quintile.

Table 1: Basic Features of Household Per Capita Quintiles in 1995

Characteristic	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	All
Share of households (%)	20	20	20	20	20	100
Share of population (%)	28.7	23.4	19.3	15.9	12.7	100
Household size	6.4	5.2	4.3	3.5	2.8	4.4
Number of workers per household	0.8	1.3	1.7	1.8	1.9	1.4
Average ratio children to adults	0.4	0.3	0.3	0.2	0.2	0.3
Number (000's)	11561.3	9425	7789.2	6428.8	5125.8	40330.1
Avg. per capita income (R/annum)	1223.9	2757.3	5472.4	12402.4	44592.8	9696.7
<i>Weighed figures, n =125,906</i>						

Source: IES/OHS 1995

By 2000 the share of the population in ultra-poor households had increased to 32.2 per cent (see Table 2). Out of the estimated 43.3 million South Africans in 2000, 55.6 per cent lived in the bottom two quintiles, compared to 52.1 per cent in 1995. This, of course, is not evidence of an increase in the absolute poverty rate, but merely suggests that a larger share of the population now live in households that are, according to our definition, relatively poor. The average annual per capita income in the highest quintile was roughly 45 times that of the first quintile, which is indicative of a worsening income inequality during the period 1995 to 2000.

Table 2: Basic Features of Household Per Capita Quintiles in 2000

Characteristic	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	All
Share of households (%)	20	20	20	20	20	100
Share of population (%)	32.2	23.5	17.1	14.4	12.9	100
Household size	6.0	4.5	3.4	2.9	2.5	3.8
Number of workers per household	0.8	1	1.1	1.3	1.4	1.1
Average ratio children to adults	0.4	0.3	0.3	0.2	0.1	0.3
Number (000's)	13928.1	10168.6	7386.6	6224.1	5594.4	43301.7
Avg. per capita income (ZAR/annum)	1330	3236.8	6450.1	14444.9	60781.1	12218.1
<i>Weighed figures, n =104,100</i>						

Source: IES/LFS 2000

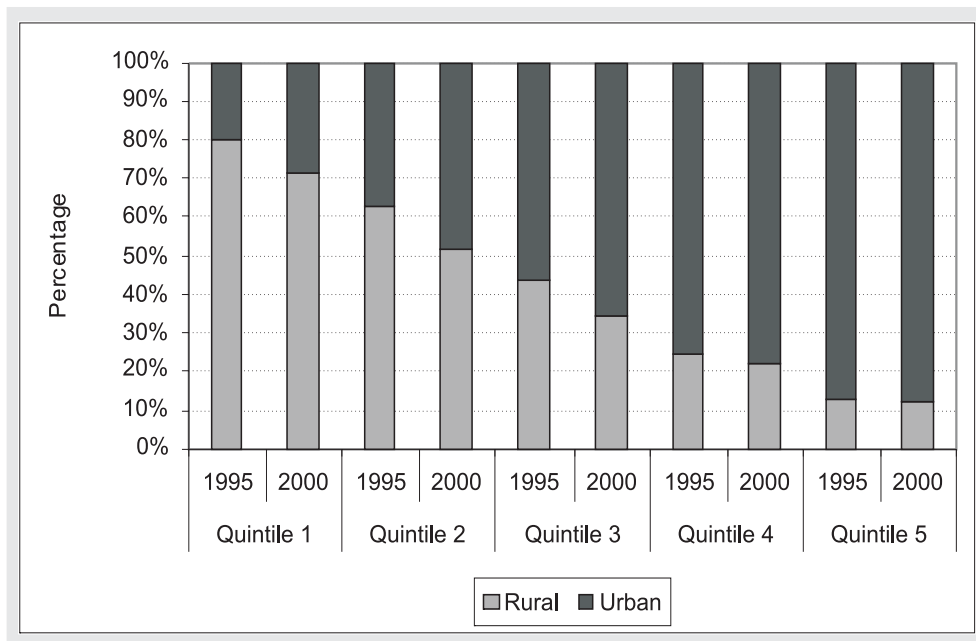
The issue of household size and, in relationship with welfare, deserves closer attention. From Table 2 it is evident that higher income households are, on average, smaller in size. When using a per capita welfare measure a larger household means that the household's resources are divided into smaller parts, thus increasing the risk of being poor. In absolute terms households in all quintiles became smaller or more fragmented over time, with the average household size dropping from 4.4 in 1995 to 3.8 in 2000. This result is confirmed by the South African National Censuses conducted in 1996 and 2001, which show a decline in the average household size from 4.1 to 3.8 between these two years. Given the apparent correlation between household size and welfare levels the expectation may thus be that poverty would have declined between 1995 and 2000. However, Bhorat *et al.* (2004) find no such positive relationship, arguing that complex relationships involving a massive unemployment problem, little social security for those of working age who cannot find jobs and excessive household stress caused by additional factors such as the HIV/AIDS pandemic may all have played a role.

Lanjouw and Ravallion (1995) also warn that the relationship between household size and poverty is not clear cut, with empirical results being sensitive to assumptions and value judgments. Clearly this relationship is much more complex, stretching beyond issues of the poor on average having more children (see child to adult ratios in Table 2), to the clustering of extended family networks around limited income resources, to issues of economies of scale of consumption of public household goods when a greater number of people live together.

Figure 1 shows the urban-rural composition of households in 1995 and 2000. Just over half the South African population (51.1 per cent) lived in urban areas. Particularly noteworthy is the relation between income quintiles and location. The ultra poor represented 79.1 per cent of the population who lived in rural areas compared to just

20.9 per cent of the ultra poor in urban areas. In addition, the richest quintile accounted for just 12.6 per cent of individuals who lived in rural areas compared to 87.4 per cent of individuals in urban areas.

Figure 1: Composition of Household Quintiles by Location in 1995 and 2000



Source: IES/OHS 1995 and IES/LFS 2000

The urban-rural ratio has not changed much between 1995 and 2000, although there is some evidence of urbanisation taking place. The share of people living in urban areas increased slightly from 51.1 per cent in 1995 to 54.5 per cent in 2000. The ultra poor represented 71.3 per cent of the population who lived in rural areas compared to just 28.6 per cent of the ultra poor in urban areas.

Poverty was also distributed unevenly among South Africa’s provinces between 1995 and 2000. Table 3 shows that the Eastern Cape, KwaZulu-Natal and Limpopo had the largest concentration of individuals in quintiles one and two in 1995. The Eastern Cape accounted for 27.5 per cent of the ultra poor, followed by KwaZulu-Natal with 19.7 per cent of the ultra poor. In contrast, 42.0 per cent of the richest quintile lived in Gauteng. This pattern was largely unchanged by 2000, with the Eastern Cape, KwaZulu-Natal and Limpopo still being home to the largest concentration of individuals in the poor quintiles. Large parts of the Eastern Cape and KwaZulu-Natal provinces were formerly part of the so-called Bantustans or homelands, including Transkei, Ciskei and KwaZulu. These areas were formed under apartheid policy of earmarking areas where Africans were forced to live under a system of self-rule. Clearly, the decades of under funding, poor management,

and economic and geographical isolation of these areas still impact on welfare levels of households living there today.

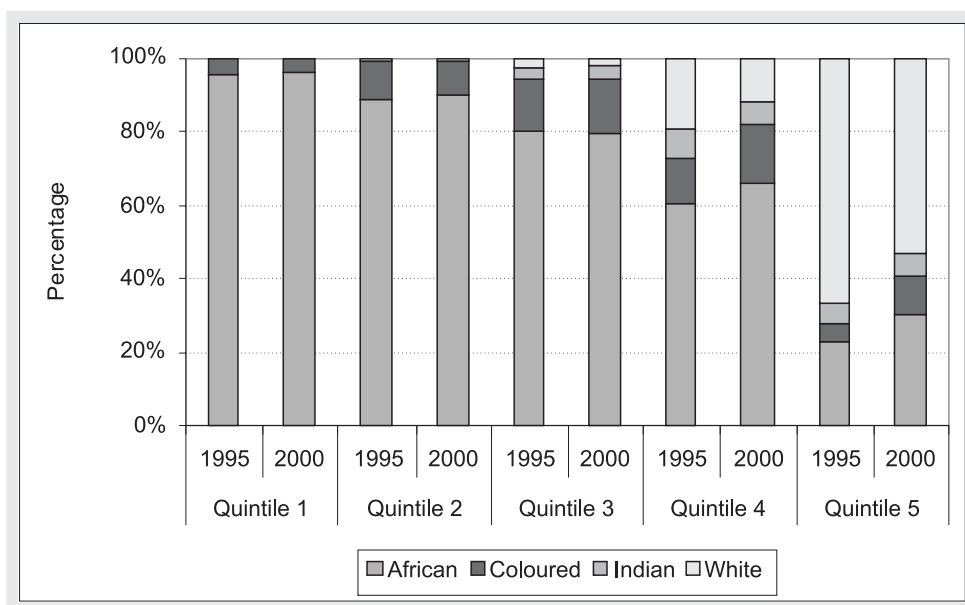
Table 3: Composition of Household Quintiles by Province in 1995 and 2000

	Quintile 1		Quintile 2		Quintile 3		Quintile 4		Quintile 5		Total	
	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000
Western Cape	2.7	2.5	8.4	7.0	13.3	11.1	13.6	12.0	14.5	15.5	9.3	9.6
Eastern Cape	27.5	25.0	16.7	16.1	10.7	10.3	8.9	6.9	7.4	7.2	16.2	13.1
Northern Cape	1.7	1.3	2.3	2.0	1.9	1.9	1.5	1.4	1.5	1.9	1.8	1.7
Free state	9.4	8.4	6.7	6.9	4.6	4.6	5.2	4.8	4.8	7.1	6.6	6.4
KwaZulu-Natal	19.7	22.5	25.5	20.3	23.7	18.9	19.9	17.9	14.3	14.1	21.2	18.7
North-West	10.8	7.2	9.1	8.2	7.2	7.2	6.8	7.4	5.2	6.3	8.4	7.2
Gauteng	2.4	11.1	8.4	19.0	17.8	30.7	27.3	39.5	42.0	39.5	15.8	27.9
Mpumalanga	8.8	5.7	8.4	7.4	7.8	6.4	5.3	5.3	3.6	4.7	7.3	5.9
Limpopo	17.0	16.4	14.5	13.2	13.1	8.9	11.5	4.8	6.8	3.7	13.5	9.4
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

Source: IES/OHS 1995 and IES/LFS 2000

As far as the racial composition of household quintiles are concerned, Figure 2 shows that more than 95 per cent of the population in the poor quintiles (one and two) belonged to either the African or Coloured population groups in 1995. These two population groups were clearly overrepresented in the poor quintiles given that they jointly made up 85 per cent of the total population. Only 28 per cent of the richest quintile was either African or Coloured compared to Whites who made up about 67 per cent of the richest quintile.

Figure 2: Composition of Household Quintiles by Population Group in 1995 and 2000



Source: IES/OHS 1995 and IES/LFS 2000

Poverty remained concentrated among the African and Coloured population groups in 2000. In fact, more than 95 per cent of the population in the poor quintiles still belonged to these groups. The distribution of African and Coloured people in the richest quintile increased from about 28 per cent in 1995 to about 45 per cent in 2000. The share of Whites in quintile five decreased from about 66 per cent in 1995 to about 52 per cent in 2000. This is evidence of an increasing black upper-income class emerging since the fall of apartheid, a phenomenon investigated by Van der Berg *et al.* (2004) and believed to be one of the main drivers behind growing income inequality in South Africa.

2.1.2 Labour Market Participation

Table 4 shows how labour market characteristics, in particular employment and unemployment rates varied across the five household quintiles in 1995 and 2000. More precisely, the table shows fractions of working age adults between the age of 15 and 65 in employment and unemployment (broad and strict definition). Note that these are not unemployment or employment rates.³ Not surprising, the level of welfare is positively related to the fraction of employed, and negatively related to the fraction of unemployed, in both 1995 and 2000.

3 The sum of the strict and broad unemployment shares as a percentage of the total labour force (employed and unemployed) will give the corresponding broad unemployment rate. The strict unemployment rate is calculated in a similar way, only now assuming that the broad unemployed are non-participants.

Table 4: Labour Market Participation Status by Household Quintiles in 1995 and 2000

	Quintile 1		Quintile 2		Quintile 3		Quintile 4		Quintile 5		Total	
	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000
Employed	17.1	21.4	28.7	33.7	40.6	46.7	54.9	59.0	68.0	72.5	38.7	43.1
Unemployed (expanded)	26.3	36.1	21.4	29.9	16.2	24.8	9.0	16.4	3.3	5.6	16.7	24.6
Unemployed (strict)	9.8	20.6	10.0	19.1	8.7	16.4	5.0	11.2	2.0	4.0	7.7	15.3
Non-participants	46.8	21.93	39.9	17.41	34.5	12.14	31.1	13.46	26.7	17.9	36.9	17.09
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

Source: IES/OHS 1995 and IES/LFS 2000

The policy implications arising from Table 4 are obvious. The extremely high unemployment rates in South Africa fundamentally impact on welfare levels, and hence, an increase in employment is likely to benefit the poor. However, the issue of skills constraints (or even of complete lack of skills among the poor) is also at the forefront of policy issues at present in South Africa. There is a realisation among policymakers that many of the poor are simply unemployable because they lack certain basic skills demanded by the labour market. This alters the policy stance towards the poverty-unemployment dilemma from one of creating more jobs to one of addressing the lack of skills through training and education. Naturally, of course, both job creation and skills training are important policy options. It is especially important to create more low-skilled jobs in order to absorb more of the unskilled unemployed workforce in the meantime given that education and training policies inherently are longer term policies.

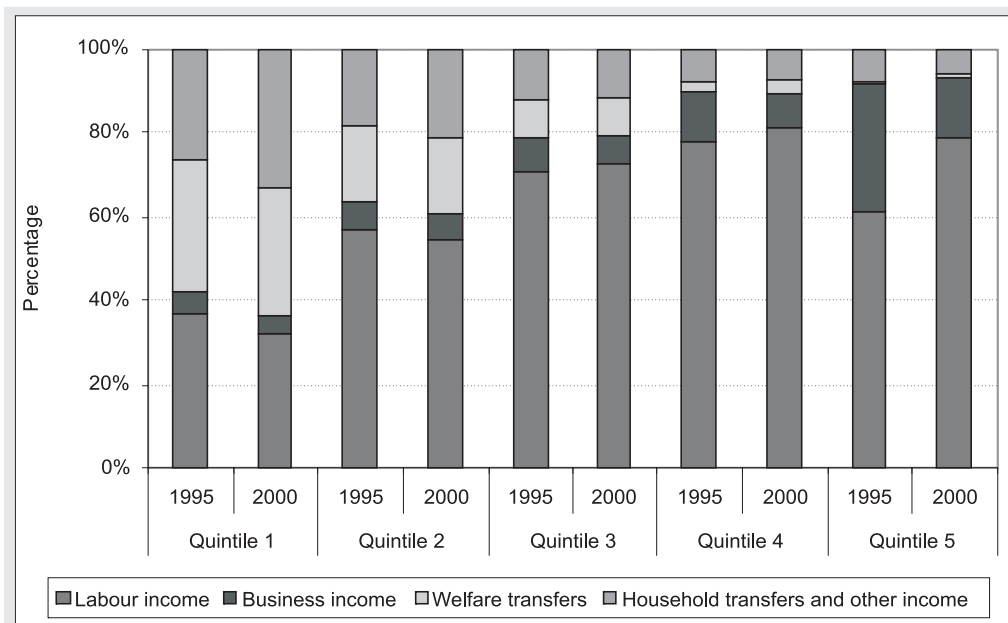
2.1.3 Households Income Sources

The IES and OHS/LFS include a variety of income sources of households and individuals. For simplicity these income sources are aggregated into four main sources, namely (1) income from labour, (2) income from business, (3) welfare transfer income and (4) remittance (household transfers) and other income. Income from labour includes all wages and salaries earned from employment. Business income is very loosely defined as the sum of 'gross operating surplus',⁴ income from dividends, and transfers from incorporated business enterprises. Welfare transfer income in the IES is made up of pensions, disability grants and family allowances. Remittance income is self-explanatory, while other income may include actual or implicit income from home produced goods, gifts, donations and so on.

⁴ GOS is defined as income arising from the ownership of physical and/or human capital, hence, sometimes also referred to as mixed income.

Figure 3 shows the income sources of households in 1995 and 2000. Clearly, labour income is an important source of income across the entire spectrum of households, although its importance as an income source grows as we move to the richer household quintiles. This reflects the fact that poverty is often associated with large households and high unemployment, and, as a result, a high degree of dependence on a limited number of employed household members in low-income jobs.

Figure 3: Income Sources of All Households, 1995 and 2000



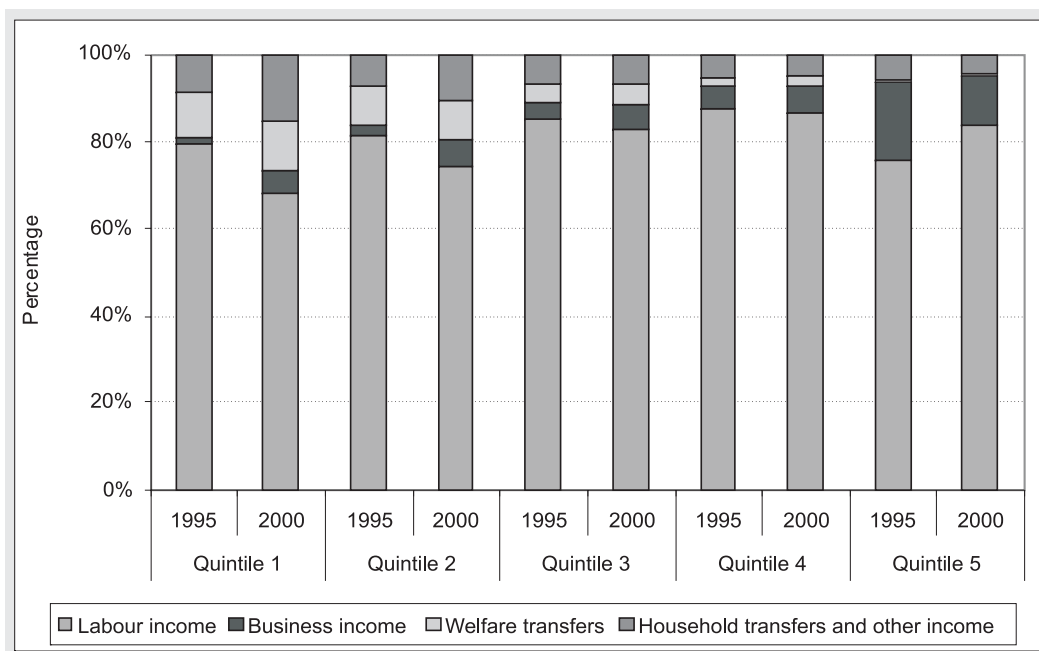
Source: IES/OHS 1995 and IES/LFS 2000

Also apparent in Figure 3 is the increasing business income share as we move to the richer quintiles. The large apparent decline in the relative importance of business income in 2000 compared to 1995 is interesting. This, more than likely, has to do with the way in which business income (or GOS in particular) was reported in these two years. Formally GOS includes income arising from self-employment or ‘human capital’, which in the IES 1995 was captured under labour income rather than business income (see Pauw 2005).

Finally, the reliance of poorer households on welfare transfer income and remittances from other households is apparent. Approximately 22.9 per cent of income of poor households (quintiles one and two) is earned from welfare transfers, compared to only 2.0 per cent of non-poor households’ income. These percentages have remained fairly stable between 1995 and 2000, falling to 22.5 per cent for poor households and rising to 2.4 per cent for non-poor households.

Next we turn to the income sources of working households in 1995 and 2000 (see Figure 4). Wage income contributed about 80 per cent to household income in 1995, with not much variation across the quintiles. This remained the average percentage income share from wages in 2000, although there is much more variation between quintiles in 2000. In particular the wage income share in the lower quintiles has dropped significantly. This may be a reflection of a number of things, among others the decline in real wages (see Section 2.2.2), increased unemployment and the structural change in labour demand that adversely affected low-skilled (low wage) workers (see Section 3.3), or increased diversification of income sources, that is, more income is being derived from non-labour income sources. These possibilities are discussed in more detail in the sections referred to above.

Figure 4: Income Sources of 'Working' Households, 1995 and 2000

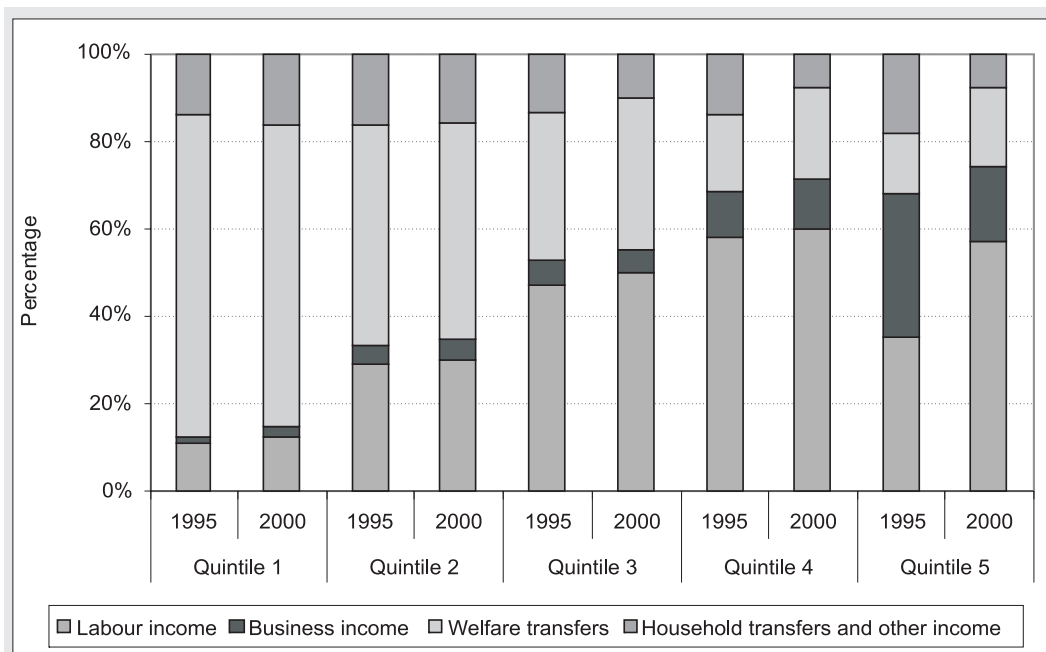


Source: IES/OHS 1995 and IES/LFS 2000

Finally, we also explore income sources of households that earn income from welfare transfers. Figure 5 includes all households that have had one or more welfare recipients in the household, be they pensioners or recipients of disability or child grants. These households are clearly very reliant on this source of income, with on average 58.6 per cent of poor and 17.1 per cent of non-poor households' income coming from welfare payments in 1995. These figures have changed to 56.7 and 20.6 per cent for poor and non-poor households, respectively, in 2000. South African welfare grants are all means tested, hence, at first glance it may appear strange to see welfare grant recipients in the

non-poor quintiles. However, as shown in Figure 3 these income shares are generally very low among non-poor households. Furthermore, the means test is based on the individual recipient's income level (combined with his or her partner in the case of a married couple) and not the joint household income, which implies that pensioners, for example, living in a non-poor household with their children, may in fact receive the pension even if the household is not classified as poor. The average per capita income in the third quintile was R6 450 in 2000 (see Table 2). A single pensioner qualifying for the full pension would have earned R540 per month or R6 480 per annum in 2000, thus already placing that person in the third quintile (i.e. non-poor) according to our definition.

Figure 5: Income Sources of 'Welfare Recipient' Households, 1995 and 2000



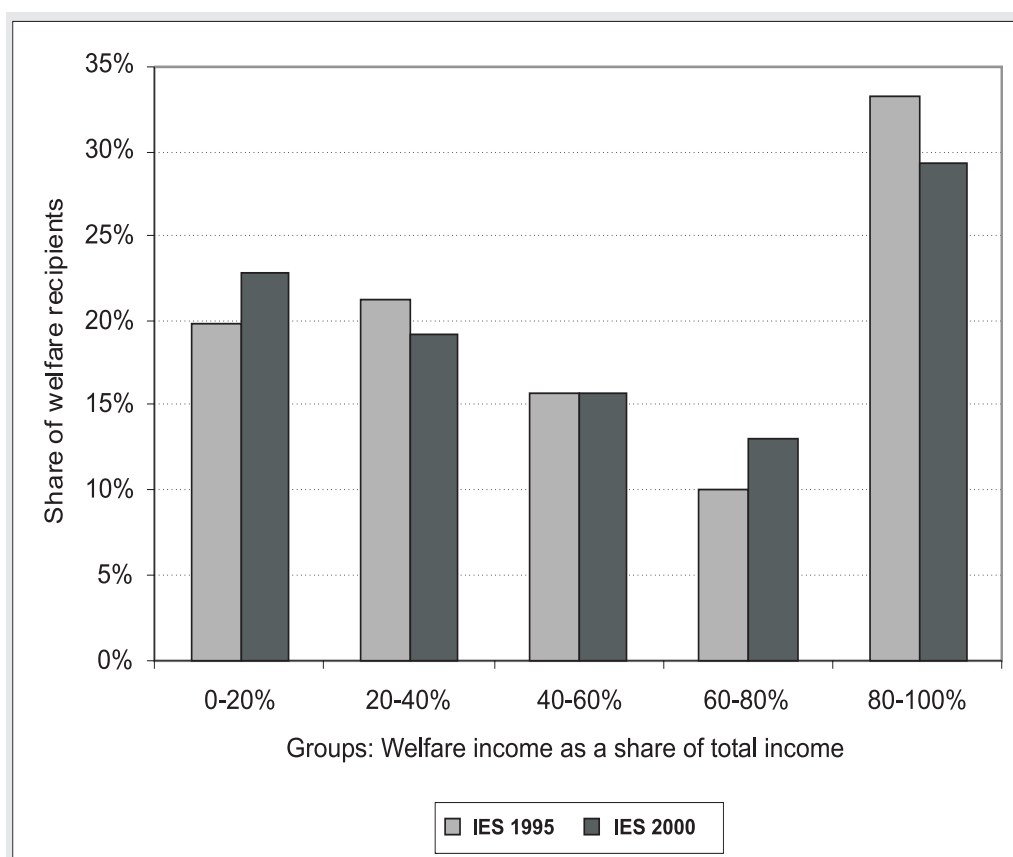
Source: IES/OHS 1995 and IES/LFS 2000

Based on estimates in the IES 1995 and 2000 approximately 29 per cent of the population lived in households that received welfare grants. This figure increased marginally to 30 per cent in 2000 – approximately 12.7 million people living in 2.5 million households. Figures from the Department of Social Development suggest that there were just over 3 million beneficiaries of welfare grants (individuals) in 2000. The question is, however, to what extent these beneficiaries or the households in which they live rely on the welfare transfer income as a source of income. From Figure 5 we saw that low-income households in particular rely heavily on welfare income. In order to analyse the reliance on welfare transfers in a more nuanced way, recipient household (or 'welfare households') are grouped into five groups, namely those deriving between zero and 20 per cent, 20 and 40,

60 and 80 and 80 to 100 per cent of their (household-level) income from welfare transfers.

Figure 6 shows that in 2000 about 22.8 per cent of recipients households earned between zero and 20 per cent from transfers. The share of households drops systematically for higher income shares, but then rises sharply for the 80 to 100 per cent group. In fact, in 2000, 29.2 per cent of recipient households earned between 80 and 100 per cent of their income from welfare transfers, the largest of all the income-share cohorts. This share is down slightly from 1995, where 33.2 per cent of recipient households fell in this category. Thus, at least a quarter of all households (or a third of the population) relies on welfare transfers for income, and at least a third of these households earn 80 per cent or more of their income from welfare transfers.

Figure 6: Reliance on Welfare Transfers



Source: IES 1995 and 2000

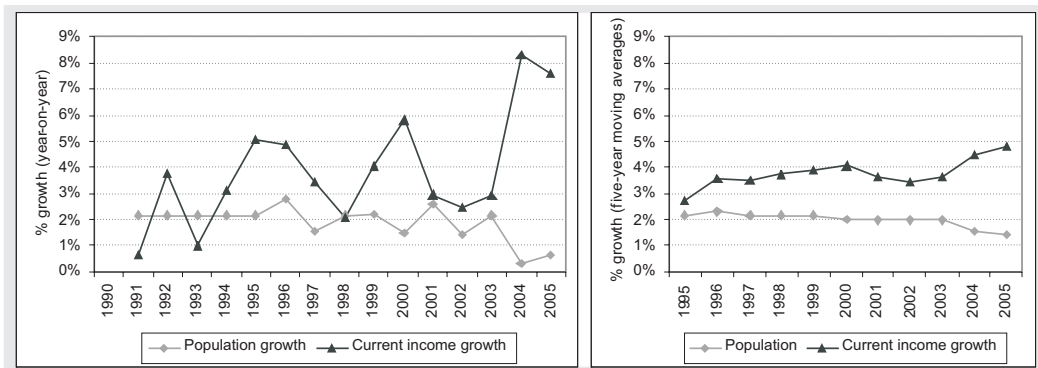
2.2 Poverty and Inequality Trends: 1994 - 2006

The question whether poverty and inequality has improved or worsened during the post-apartheid period is a topical and even controversial one. Since 2000, various researchers have attempted to analyse trends in poverty and inequality with diverse results, often depending on the measurement approach and/or data sources used. Most poverty and inequality studies conducted in South Africa make use of the household surveys released regularly by Statistics South Africa, including the IES (1995 and 2000) and various OHSs and LFSs. Although the income and expenditure data in the National Censuses of 1996 and 2001 are limited, these have also been used by some researchers to evaluate changes in income. Very few researchers have attempted to analyse trends beyond 2000 or 2001, mainly because the LFS datasets have very little information on non-wage income and household expenditure, while the IES 2005 has not yet been officially released. This section reviews the data as well as some of the South African literature on poverty and inequality trends since 1994.

2.2.1 What do the National Accounts Say?

Much of the controversy around changes in poverty and inequality over the last decade is caused by the apparent discrepancy between the trends and levels of income and expenditure as reported by Statistics South Africa's various surveys or National Censuses and those reported on in the national accounts published by the South African Reserve Bank (SARB). The national accounts data show a steady increase in total current household income between 1990 and 2005. During the period 1995 to 2000 in particular, current income, which is the sum of employee remuneration, property income and transfers (from government, households and the rest of the world), increased from R555 602 million to R677 570 (2000 prices). Figure 7 shows, on the left-hand side, the year-on-year growth in the population as well as current household income between 1991 and 2005. The right-hand side shows the five-year moving averages. During the entire period, between 1990 and 2005, real current household income grew, on average, at a higher rate than the population. Furthermore, towards the end of this period the gap between the two growth rates appears to have widened.

Figure 7: Real Growth in the Population and Current Household Income, 1990 - 2005

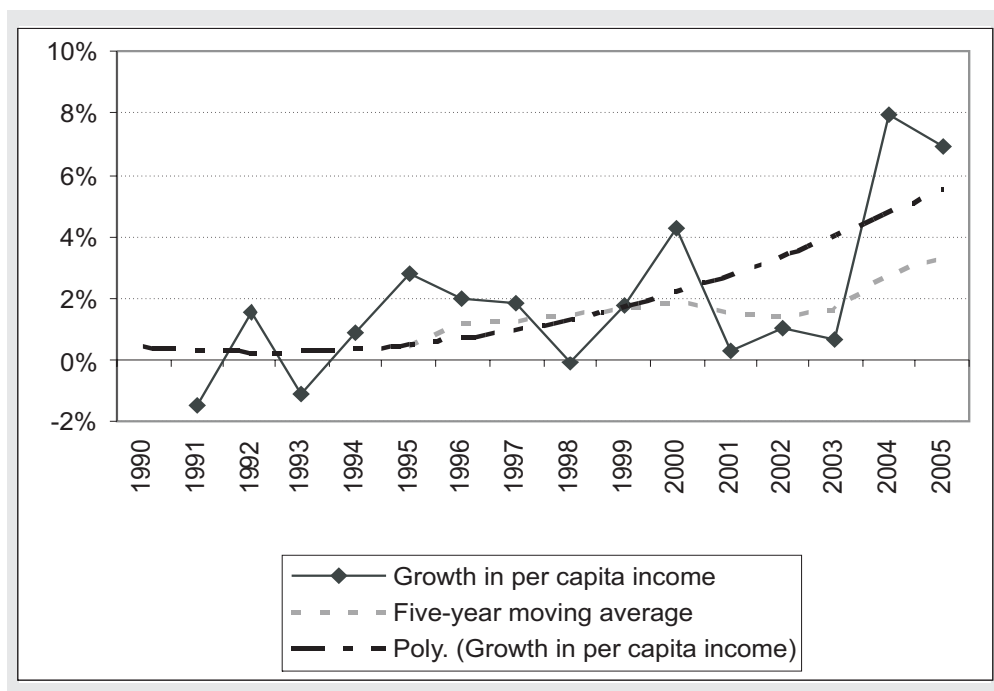


Source: National Accounts Data, SARB Quarterly Bulletin (2006)

Note: The underlying population series is constructed from Statistics South Africa's mid-year population estimates and various National Censuses (see www.statssa.gov.za)

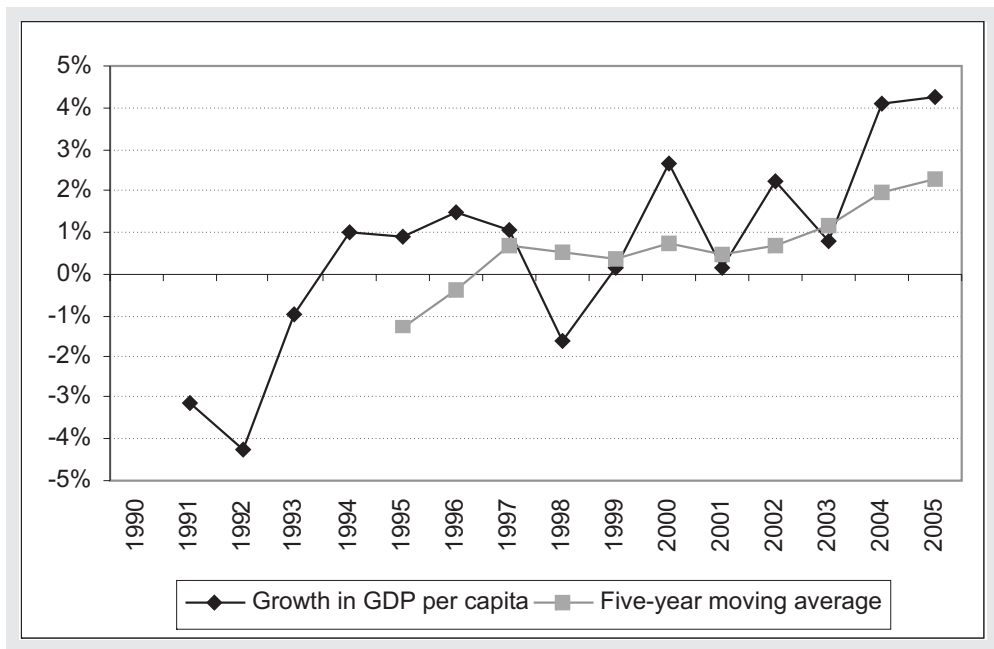
Figure 8 shows the year-on-year and five-year moving average of the growth in per capita household income as reported in the national accounts. The trend is clear: per capita incomes appear to be growing at an increasing rate (the non-linear curve labelled 'Poly' is a fitted polynomial trend). A comparative indicator of individual welfare levels is the per capita Gross Domestic Product (GDP), which averaged just less than one per cent per annum for the period 1995 to 2000 (see Figure 9). This is yet another indication that South Africans, on average, are better off in real terms in 2005 compared to 1995, at least as far as the national accounts statistics are concerned.

Figure 8: Real Growth in the Per Capita Current Household Income, 1990 - 2005



Source: National Accounts Data, SARB Quarterly Bulletin (2006)

Figure 9: Real Growth in the Per Capita GDP, 1990 - 2005



Source: National Accounts Data, SARB Quarterly Bulletin (2006)

2.2.2 Household Survey Analyses

In sharp contrast to the SARB's national accounts data most analyses of the household surveys, in particular the IES 1995 and 2000, suggest that there was a decline in the average household income between 1995 and 2000. A further cause for concern about the reliability of either the survey data or national accounts data is that the weighted household income estimates in the surveys do not add up to the national accounts estimates. A variety of factors may contribute to these two fundamental discrepancies. The fact that the weighted survey totals do not match national accounts totals may be due to underreporting in the surveys or incorrect sampling weights. It could of course also imply that the estimates in the national accounts are biased.

The comparability of the IES 1995 and 2000 datasets remains a moot point. These surveys were not conducted as a panel survey, although the sampling designs were similar in the two periods. Some argue that 1995 was an atypical year because of the transition of power only the year before. The IES 2000, however, poses more of a problem. This dataset is fraught with data problems, which makes estimates somewhat unreliable and hence comparisons with the 1995 data difficult. Most of the problems relate to sloppiness in data collection, accounting and coding of variables (Van der Berg *et al.*, 2004). There are also numerous records that are problematic due to missing values for some of the variables, while an alarmingly large number of households report zero expenditure on food. Reporting on, for example, tax payments is also far below the expected level when compared to actual tax collection data. A detailed account of the problems is included in Pauw (2005). While these problems are disheartening, it remains the only and most recent formal account of South African households' income and expenditure estimates, hence, many researchers have persisted in using it for their analyses.

a. The Statistics South Africa Report

Shortly after the release of the IES 2000, Statistics South Africa released a report on the changes in household income as measured in the IES of 1995 and 2000 (StatsSA, 2002). According to the report the average household income, which includes regular income from salaries and wages as well as other income, was R37 000 in 1995 (or R51 000 in 2000 prices), compared to R45 000 in 2000 (11.8 per cent decline). The report also finds that average expenditure on goods and services declined from R37 000 in 1995 (R51 000 in 2000 prices) to only R40 000 in 2000 (21.6 per cent decline). The per capita income declined by 3.1 per cent in real terms, while per capita expenditure dropped by 14.8 per

cent.⁵ The report has a limited focus on income poverty, but provides some detail on changes in non-monetary forms of deprivation. As far as inequality is concerned, they find that the Gini coefficient has increased slightly from 0.56 to 0.57 between 1995 and 2000 (StatsSA, 2002).

b. The South African Human Development Report

In 2003 the United Nations Development Programme published its South Africa Human Development Report (UNDP, 2003). Among other things the publication reported on changes in poverty and income inequality. The study uses a poverty line of R354 per adult equivalent in 2002 prices, derived on the basis of the cost of a food bundle that would satisfy the basic dietary requirement of an adult. The associated poverty headcount rate was 51.1 per cent in 1995, falling to 48.5 per cent in 2002.⁶ They also compare poverty rates between 1995 and 2002 using the international \$1 and \$2 per day poverty lines. At \$2 per day the poverty rate declined from 24.2 per cent in 1995 to 23.8 per cent in 2002. However, at \$1 per day, a poverty line often regarded as a measure of extreme poverty, the poverty rate increased from 9.4 per cent to 10.5 per cent between these two periods. The report further finds that inequality as measured by the Gini coefficient had risen from 0.596 in 1995 to 0.635 in 2002 (UNDP, 2003).

c. Hoogeveen and Özler's Study

Hoogeveen and Özler (2004) analyse changes in poverty using a number of poverty lines, including the \$1 and \$2 international poverty lines, as well as a 'lower bound poverty line' of R322 per capita per month (2000 prices), which was derived using the cost of basic needs approach. Using the IES 1995 and 2000 they find no change in the poverty rate at the R322 per capita poverty line, but there is evidence that extreme poverty is on the rise. The poverty rate at the \$2 per day poverty line increased from 32 per cent to 34 per cent, while at the \$1 poverty it increased from 7.7 per cent to just over 10 per cent. They also calculate a variety of inequality measures. In particular, they find that the Gini coefficient increased from 0.565 to 0.577 between 1995 and 2000.

5 Although the StatsSA report does not elaborate much, the fact that the average household size declined from about 4.44 members in 1995 to 3.88 members in 2000 may account for the large differences between the household-level and per capita-level declines.

6 While the 1995 estimate was based on the IES 1995, it remains unclear from the report exactly where the income variable for 2002 was sourced from.

d. Authors' Calculations

Our own calculations of changes in poverty and inequality are based on adjusted versions of the IES 1995 and 2000 datasets. A detailed account of and motivation for the adjustments made is included in a series of technical reports by Pauw (2003, 2005). In short, any visible accounting and reporting inconsistencies were corrected. In the case of the IES 2000 food and tax expenditures were imputed to replace unexpected missing or zero values or cases of obvious underreporting. A further important adjustment made is motivated by a key feature of the IES questionnaire that is often overlooked by researchers. The questionnaire is structured such that the household accounting principle, that is, income (Y) equals consumption (C) plus savings (S), should hold for each household in the survey. In the IES 1995 the reporting was far more accurate in this respect than in the IES 2000. In order for this accounting principle to hold it was assumed that for each household (observation) the larger of total income and total expenditure was the correct measure, and all the components that make up total income or expenditure were subsequently scaled upwards. This adjustment for each household ensures that the accounting principle also holds for the economy as a whole.

Naturally, the fact that the average discrepancy between total income and expenditure was much higher in the IES 2000 meant that total income and expenditure estimates were scaled up relatively more in the 2000 dataset. Since no such scaling was done in the work by Statistics South Africa (StatsSA, 2002) or Hoogeveen and Özler (2004) it is of course difficult to compare estimates of poverty and inequality directly. Furthermore, as shown by Hoogeveen and Özler, estimates may be fairly sensitive to the weights used. The estimates below use the 'original' sampling weights distributed with the IES 1995 and 2000 datasets, which differ from Hoogeveen and Özler's preferred set of weights.⁷

In our analysis we use an adjusted per capita expenditure variable (assuming a uniform intra-household distribution of income). The 1995 estimates are inflated to 2000 prices using a national CPI price deflator from Statistics South Africa. Table 5 shows that the Foster-Greer-Thorbecke (FGT) poverty headcount ratio (P_0) at the 'lower bound poverty line' of R3 864 per capita per annum increased from 0.451 to 0.521. At the \$2 per day poverty line, the headcount ratio increased by about 50 per cent from 0.218 to 0.307, while at the \$1 per day poverty line it more than doubled from 0.048 to 0.105. The indication that extreme poverty has risen more rapidly than 'normal' poverty is in accordance with findings by the UNDP (2003) and Hoogeveen and Özler (2004). As shown in Table 5 the depth (P_1) and severity (P_2) of poverty has also increased over the period at all the poverty lines.

⁷ Various alternative sets of sampling weights, none of which was ever officially released by Statistics South Africa, have been used by different researchers.

Table 5: A Comparison of Poverty Estimates between 1995 and 2000

FGT Poverty Classes	US\$1 per day		US\$2 per day		R3864 per annum	
	1995	2000	1995	2000	1995	2000
Poverty headcount (P_0)	0.048	0.105	0.218	0.307	0.451	0.521
Depth of poverty (P_1)	0.011	0.030	0.070	0.120	0.196	0.261
Severity of poverty (P_2)	0.004	0.014	0.031	0.062	0.109	0.160

Source: Author’s calculations using adjusted IES 1995 and 2000 figures.

As far as inequality is concerned our own estimates are somewhat higher than those of other researchers.⁸ However, the trend of rising inequality seems to be a universal finding. The Gini coefficient for the same per capita expenditure measure used for the poverty analysis above increased from 0.622 in 1995 to 0.664 in 2000.

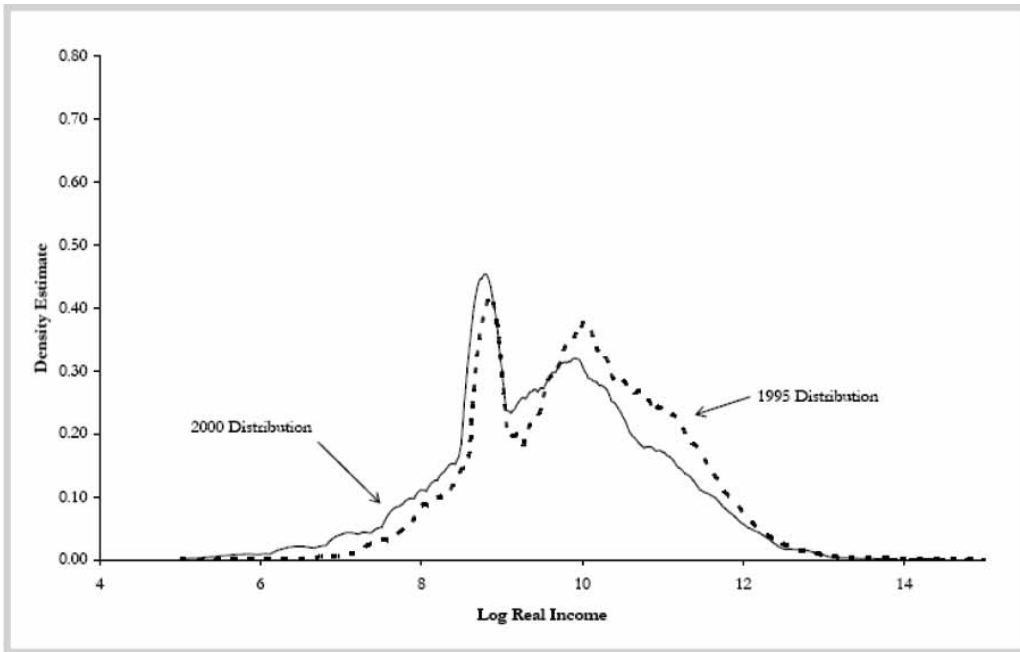
e. Leibbrandt, Levinsohn and McCrary’s Study

Leibbrandt *et al.* (2005a) compare incomes using the IES/OHS 1995 and IES/LFS 2000 by also inflating the 1995 values to 2000 levels using a national CPI price deflator. Their analysis is limited to individuals aged 18 and older with “valid” demographic information and sampling weights, as well as positive income.⁹ Figure 10 and Figure 11 show kernel density functions of log real individual income for men and women respectively as estimated by Leibbrandt *et al.* (2005a). The authors make three important observations: firstly, there is a clear shift in the distribution to the left, indicating a decline in real incomes. This is evident throughout the distribution with the exception of the highest income earners. The average fall in incomes is about the same magnitude as inflation, which in practice means that nominal incomes have remained more or less constant but their real values have been eroded by inflation. Secondly, the shift is more severe for women than it is for men, and thirdly, the large spikes observable in both distributions is caused by old age pensions, which is a dominant form of income among lower-income individuals, especially for women.

8 This can be ascribed to imputations of certain expenditures, the scaling of incomes and expenditures and the choice of sampling weights.

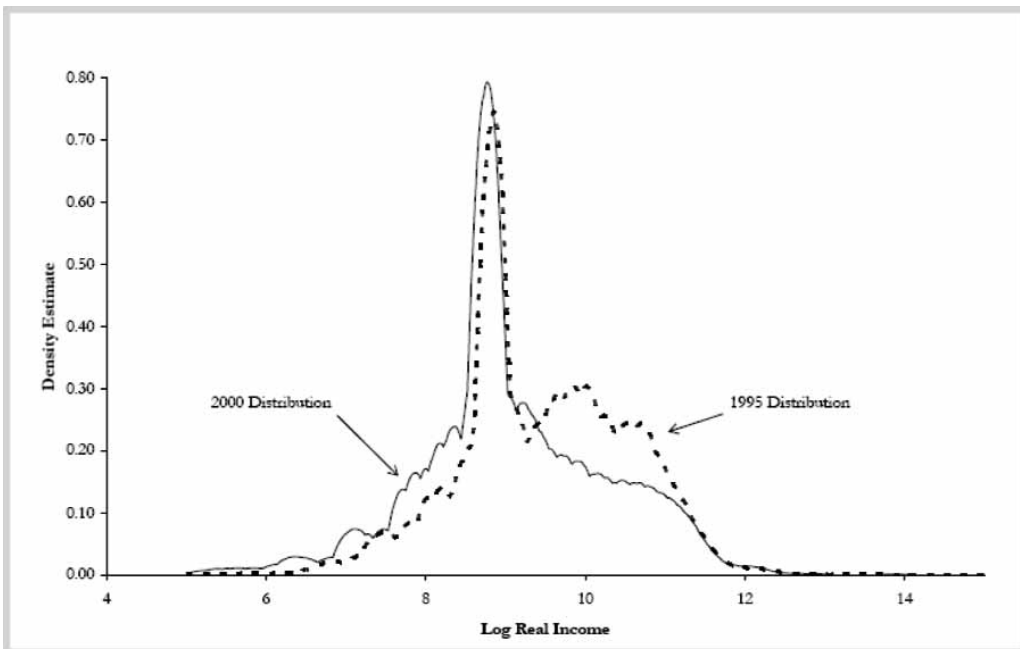
9 The approach usually followed in South African studies of this nature is to aggregate individual incomes at the household level, and to then distribute this income uniformly across individuals in the household. Children under 18 years of age are, therefore, also typically included in such analyses.

Figure 10: Log Real Individual Incomes (Men), 1995 and 2000



Source: Leibbrandt et al. (2005a); 2000 prices

Figure 11: Log Real Individual Incomes (Women), 1995 and 2000



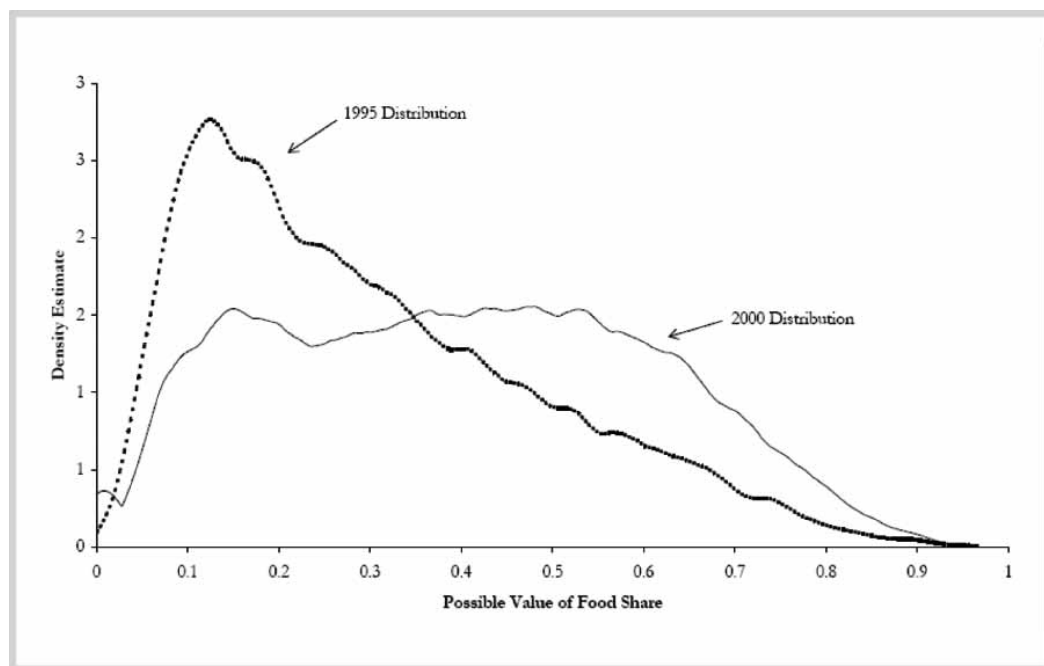
Source: Leibbrandt et al. (2005a); 2000 prices

Leibbrandt *et al.* (2005a) use a variety of methods to find possible reasons for the decline. One hypothesis is that human capital endowments, which are largely determined by education levels, may have declined between the two periods. This hypothesis is found to be unsubstantiated by the data. In fact, at worse, education levels have remained unchanged, which leads to the conclusion that returns to education had declined. This, they argue, explains much of the overall decline in individual incomes. This finding is consistent with evidence elsewhere that young people entering the labour market are becoming better educated and, hence, the stakes have been raised in terms of finding employment and attracting high wages (see Borat and Oosthuizen 2005, Oosthuizen and Naidoo 2005).

Another contributing factor could be a selection issue. Two possibilities exist here. Firstly, the IES 1995 and 2000 is not a panel dataset, that is, the sampled observations are different in the two periods. Even though the sample was designed to be random and unbiased, differences in selection into the survey sample may explain changes in income. A second issue is selection into the subset of income earners. Leibbrandt *et al.*'s (2005a) key message is that selection into 'income reciprocity' changed between the two periods, thus contributing to the decline in average incomes. This is best explained by an example provided in their paper. The authors find that income reciprocity rates among White men have declined, while they have increased for Black women. Their analysis only considers the sub-sample of positive income earners. If the incomes of Black women are now lower, on average, than those of White men, the changes in reciprocity rates explain the decline in average incomes.

A final consideration by Leibbrandt *et al.* (2005a:13) is the "*bad data*" argument. Some researchers have argued that the two sets are incomparable (see discussion earlier), despite the fact that the sampling methods were consistent in the two periods and that the survey was conducted by the same statistical agency. Since this is not a panel, the authors evaluate the mean education levels of various cohorts in the data. Allowing for the fact that differences in mortality and emigration rates among cohorts may contribute to some differences, they conclude that "*the income and expenditure data and accompanying demographic data are reliable*" (Leibbrandt *et al.* 2005a: 14). Furthermore, they compare the share of food expenditure between the two periods and find a dramatic shift to the right, which "*is entirely consistent with a substantial decline in real income*" (2005a: 15) (see Figure 12).

Figure 12: Food Share of Household Expenditures, 1995 and 2000

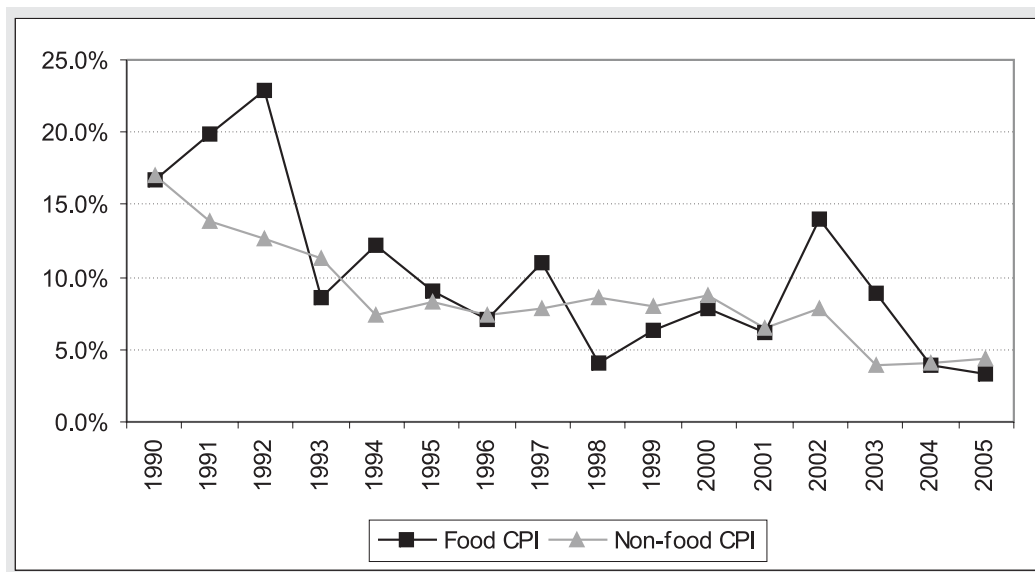


Source: Leibbrandt *et al.* (2005a)

The food expenditure share argument seems a very plausible one. However, one of the possible explanations for this change, not considered by Leibbrandt *et al.* (2005a), is relative price changes. If food items are becoming relatively more expensive than non-food items, then households would have to spend a greater share of their budgets on food. Using the South African Reserve Bank data on current and real household expenditure on various commodity items, two price indices are created (see Figure 13). The growth in non-food prices was fairly stable between 1995 and 2000, averaging about 8.1 per cent. The food price growth, on the other hand, although much more volatile, averaged around 7.2 per cent between 1995 and 2000. Comparative figures from the Statistics South Africa website¹⁰ puts the average growth in the food expenditure CPI at 6.9 per cent for the same period, compared to the overall CPI index growth of 6.7 per cent. Thus, there is no conclusive evidence that food prices grew more rapidly than other prices, at least not to the extent that it would have altered the food share significantly. This adds weight to the conclusion drawn by Leibbrandt *et al.* (2005a).

10 See <http://www.statssa.gov.za/keyindicators/cpi.asp>. The CPI food index (metropolitan areas) and the CPI for all items are compared (metropolitan areas).

Figure 13: Relative Growth in Prices, 1990 - 2005



Source: Authors' calculations, using National Accounts Data, SARB Quarterly Bulletin (2006)

f. Leibbrandt, Poswell, Naidoo, Welch and Woolard's Study: National Census Data

A study by Leibbrandt *et al.* (2005b) utilises the South African National Censuses of 1996 and 2001 to evaluate changes in poverty and inequality. Much of the paper is devoted to changes in non-income poverty and inequality, that is, “*access-based measurement approaches*”. Such an approach focuses on households’ types of dwellings, access to water, energy sources, sanitation and other basic services. The authors report “*significant improvements*” in these access measures between 1996 and 2001, much of which can be attributed to substantial investments by government in public service provisioning, especially in previously disadvantaged communities.

In order to evaluate income measures of poverty and inequality Leibbrandt *et al.* (2005b) had to deal with a number of data issues. Firstly, personal income is reported in income bands rather than actual levels. The bands used in 1996 and 2001 are not comparable. In particular the top income band in 1996 (R30 000 or more) was lower, in real terms, than the top three income bands in 2001, which meant that the top three bands in 2001 had to be compressed. This affects inequality measurement. Secondly, when aggregating personal incomes at the household level the authors find many households with missing values or zero income (23 and 28 per cent of observations in 1996 and 2001 respectively). These households are excluded from the income poverty and inequality analyses. However, since at least some of these households may truly be zero-earners, dropping

these observations may have an impact on poverty and inequality measures.¹¹

A kernel density plot of log per capita incomes reveals some evidence of a leftward shift in the income distribution between 1996 and 2001, a shift that is “*particularly pronounced in the middle and lower-income sections of the distribution*” (Leibbrandt et al. 2005b). Much of this shift occurred within the region of two poverty lines used by the authors, namely the \$2 per day poverty line and R250 per capita per month (1996 prices). The authors calculate that the poverty headcount rises from 0.26 to 0.28 at the \$2 per day poverty line, and from 0.50 to 0.55 at the R250 poverty line. The poverty gap ratio is, however, unchanged at the \$2 poverty line, and increases marginally from 0.30 to 0.32 at the R250 poverty line.

As far as inequality is concerned Leibbrandt *et al.* (2005b) find that the Gini coefficient for all population groups have increased, with the national Gini coefficient increasing from 0.68 to 0.73 between 1996 and 2001. They also analyse changes in inequality within and between population groups by decomposing the Theil index of inequality, and find that the share of between-group inequality in overall inequality has decreased between 1996 and 2000, a result also confirmed by the Hoogeveen and Özler (2004) study.

g. Van der Berg and Louw’s Study: Adjustments to the IES Data

Van der Berg and Louw (2004) compare South African poverty and inequality trends between 1970 and 2000.¹² The authors argue that the poor quality of the household survey data, especially the IES 2000, calls for substantial data adjustments to be made. The fact that the household survey data is incompatible with the national accounts data is one of their major concerns.

In short, their technique involves using time series national accounts income data, decomposed into three components (remuneration, government transfers and property income), as the benchmark. The between-race distribution of each income component in each year is then estimated using a variety of sources. Total remuneration data is obtained from average wage and employment data by race from the Standardised Employment Series¹³, as well as the OHSs and LFSs. Transfer income data is obtained from the Department of Social Development, while property income is derived from intermittent surveys by the Bureau of Market Research (BMR). The within-group income distributions

11 Some sensitivity analysis is performed to gauge the effect this has on poverty and inequality measures (see Leibbrandt *et al.*, 2005b for more).

12 Given the interest in the Post-Apartheid period we focus mainly on their results for the 1995 to 2000 period.

13 Available only until 1996

are obtained from a variety of sources, including the BMR, the urban foundation and the 1995 and 2000 IESs, linked to the OHS and LFS respectively. Rather than using the survey means, the inter-racial means derived previously are used, that is, survey data is effectively scaled up or down to match the inter-racial group means which, in turn, are consistent with the national averages as reported in the national accounts. The authors admit that the crucial assumption of such an approach is that the distribution of income obtained from these alternative data sources is correct, but that the averages or weighted totals are not. It further also assumes that the aggregate figures reported in the national accounts are correct.

Their results show that there have been small increases in income inequality within all racial groups between 1995 and 2000. In particular the Gini coefficient rose from 0.57 to 0.59 for Africans, 0.52 to 0.55 for Coloureds, 0.49 to 0.51 for Indians and 0.47 to 0.49 for Whites. An estimate of national inequality is omitted. As far as poverty estimates are concerned Van der Berg and Louw (2004) report “*pessimistic*” and “*optimistic*” estimates for 2000, the latter based on higher employment estimates for the post-1995 period. Using a poverty line of R3 000 (2000 prices) they find that overall poverty had decreased from 38.8 to 38.6 per cent under the pessimistic scenario, and to 36.4 per cent under the optimistic scenario. The absolute number of poor people, however, has increased given population growth.

h. Van der Berg, Burger, Burger, Louw and Yu: Using Alternative Income Data

Few studies have attempted to analyse the period beyond 2000 or 2001. One such study by Van der Berg *et al.* (2005) has attracted some attention. This paper, in a sense, builds further on the methods developed by Van der Berg and Louw (2004) but utilises the All Media Products Surveys (AMPS) conducted by the South African Advertising Research Foundation (SAARF) as the source of income data rather than the IESs. As far as inequality results are concerned the most surprising result from their analysis is the declining inequality (as measured by the Gini coefficient) within the Black population since 2000.

However, the main aim of their study is to evaluate poverty trends. In line with most other studies they find that the proportion of people living in poverty has increased between 1993 and 2000. Since 2000 this trend has been reversed, thanks largely, according to Van der Berg *et al.* (2005), to favourable economic growth and employment creation, coupled with large-scale expansion of the social grant system. Using a poverty line of R3 000 per annum they find that the headcount ratio (P_0) first increased from 0.406 in 1993 to 0.413 in 2000, but thereafter declined steeply to 0.332 in 2004.

The poverty gap ratio (P_1) and poverty gap squared (P_2) also show relatively large declines for the period 2000 to 2004, which is a reflection of their findings that the per capita incomes of those individuals in the poorest two income quintiles rose by more than 30 per cent during the period. Not only has the headcount ratio declined, but the absolute number of poor people has declined from 18.5 million in 2000 to 15.4 million in 2004, despite the overall population growth of about 3.8 per cent during the period. The authors maintain that these are their conservative estimates, and that the “*true conclusion regarding the extent of poverty in South African may be even more optimistic than the one drawn*” in their study (Van der Berg *et al.* 2005: 22).

i. **Meth’s Critique of Van der Berg *et al.***

Meth (2006) challenges the Van der Berg *et al.* (2005) findings by pointing out a number of inconsistencies with regards to the poverty headcount ratios and the associated poverty headcounts. He argues that the numbers presented do not seem to produce plausible population estimates. That aside, most of the paper focuses on discrediting Van der Berg *et al.*’s poverty estimates for 2004 by comparing them with his own estimates derived from the LFS 2004. The LFSs remain an interesting choice for poverty analysis and are perhaps not as well suited as the IES. Only a single household-level expenditure estimate is reported by respondents by selecting an appropriate expenditure band or bracket, which implies the distribution is discontinuous. Meth (2006) adjusts expenditures upward in cases where the reported household income exceeds the reported expenditure level. A concern of this approach is, of course, the fact that the LFS is largely a labour force survey and reports in detail on wages and salaries. There is limited information on welfare transfer income, but no information on other income sources such as remittances or investment income.

Meth (2006) suggests that Van der Berg *et al.*’s (2005) poverty headcounts are too low, arguing that, based on his estimates, between 18 and 20 million people live in poverty and not 15.4 million people as estimated by Van der Berg *et al.* (2005). This, he further argues, has important implications for poverty reduction: “*it matters very much ... whether there are 15 million people below the poverty line, or 20 million*”. Further, “*the chances of meeting the poverty-halving goal to which government has committed itself, are considerably diminished if there turn out to be many more people to be raised out of poverty*” (Meth 2006: 6). Meth also calculates significantly higher values for the poverty gap ratio (P_1). In fact, he finds that in order to close the poverty gap it would cost between R2 and R6 billion more than what Van der Berg *et al.*’s (2005) estimates suggest.

One of the assumptions underlying the justification of scaling survey income and expenditure estimates to the level of the national accounts data is that respondents

underreport their true incomes and expenditures in the surveys.¹⁴ Meth (2006) allows for different degrees of underreporting in his poverty estimates and shows that his results only start to replicate those of Van der Berg *et al.* (2005) when he allows for between 38 and 50 per cent underreporting. He then argues that, since welfare transfers are fixed by government, the only possible component of total household income that can be assumed underreported is income from the employed (either from those within the household or from remittances of household members employed elsewhere). This implies that if expenditure is underreported by, say, 38 per cent, the effective or actual error on earned income is 85 per cent in the bottom expenditure category (R0 - R399). The average effective underreporting for the R0 - R2499 category is 54 per cent and so on. This, Meth (2006) argues, is implausible, and he concludes that Van der Berg *et al.*'s (2005) method overcorrects underreporting, especially at the bottom end of the income distribution.

As mentioned previously, Van der Berg *et al.* (2005) attribute the large decline in poverty to improved employment conditions, to some extent, but largely to the rapid increase in welfare transfer payments – more than a 70 per cent increase in real terms during the last four years. Meth (2006) agrees that this would have undoubtedly had an important impact, but also notes an important budgetary considerations in this regard which has led to the “*state’s strong antipathy to the extension of the social grant system beyond its present boundaries*”. The trend of rapidly growing coverage of grants is unlikely to continue and, hence, extrapolations on the current trend are nonsensical (Meth 2006: 54)

2.2.3 Summary

The preceding discussion raises a number of questions about survey data and national accounts data in this country. Should one trust the national accounts data as the benchmark and adjust survey data aggregates accordingly? Or should one perhaps accept that national accounts data may also be inaccurate? Leibbrandt *et al.* (2005a: 8) note, firstly, that these types of discrepancies (between household survey data and national accounts) are not uncommon, and secondly, that the “*results using the survey data are replicable and all the inputs – principally survey responses and sampling weights – are explicit and available hence yielding a relatively transparent and replicable methodology*”.

Furthermore, national accounts data are frequently revised, therefore, any given dataset, even if it is currently a final release, may still be subject to future revisions.

14 It could, of course, have to do with the sampling weights applied, although it can also be shown that the mean per capita income in the IES 2000 (for example) is well below the mean per capita income from the national accounts.

In a recent study by Van Walbeek (2006) the issue of data revisions in South African national accounts data is investigated. With regards GDP, consumption expenditure and disposable income of households Van Walbeek notes that revisions made have had a “*significant positive bias [on estimates] especially after 1994*”. Consequently, the magnitudes and trends are affected by the vintage of the data.

Data problems aside, there seems to be consensus that inequality in the distribution of income has increased during the last decade. On the issue of whether per capita incomes have increased, and more importantly whether the poverty rate has declined, there is a great deal of disagreement. Table 6 summarises the results presented in this section. Not only are changes in poverty estimates sensitive to the choice of poverty line (see, for example, the StatsSA (2002) and UNDP (2003) studies), but they are also sensitive to the sampling weights used. Since the release of the IES 2000 a number of weights have been distributed officially and unofficially and there seems to be no clear indication from Statistics South Africa about which is the right set of weights. It also seems that it is only possible to achieve a result indicating a reduction in poverty once substantial adjustments are made to the traditional household surveys (Van der Berg and Louw, 2004) or when alternative datasets that are perhaps less suited for this type of analysis (for example the AMPS data used by Van der Berg *et al.* (2005)) are used.

Looking at the evidence presented by Van der Berg *et al.* (2005), which shows an initial increase in the poverty rate between 1995 and 2000 (which is consistent with most of the other studies) and a subsequent decline in poverty between 2000 and 2004, one is tempted to agree that this sounds realistic. The unemployment trends since 2000 suggest a turnaround in the trend of job losses after 2002 (DPRU 2006). Welfare grants have been stepped up significantly since 2000, and economic growth has been favourable. The critique by Meth (2006) uses the LFS 2004 as its main data source, a survey in which incomes and expenditures are poorly reported. Hopefully the eagerly awaited IES 2005 will shed some light on these issues.

Table 6: Summary of Income, Poverty and Inequality Findings

	Income	Details	Poverty	Details	Inequality	Details	Data
StatsSA (2002)	↓	Average household income declined by 11.8 per cent; Per capita income by 3.1 per cent.	-	-	↑	Gini coefficient increased from 0.56 to 0.57 between 1995 and 2000.	IES 1995, 2000
UNDP (2003)	-	-	↓/↑	Depending on poverty line: National food poverty line shows decline in poverty from 51.1 per cent to 48.5 per cent between 1995 and 2002. Also decline for \$2 per day, but increase from 9.4 per cent to 10.5 per cent for \$1 per day extreme poverty line.	↑	Gini coefficient increased from 0.596 to 0.635 between 1995 and 2002.	IES 1995
Hooqveen & Ozler (2004)	-	-	↓/→	Depending on poverty line: For \$2 per day poverty line poverty increases from 32 per cent to 34 per cent between 1995 and 2000, while for the 'lower bound poverty line' it remains virtually unchanged at 58 per cent.	↑	Gini coefficient increased from 0.565 to 0.577 between 1995 and 2000. The mean log deviation and Theil index also show increases in inequality.	IES 1995, 2000
Own Calculations	↓/↑	Disposable income of the poor declined by 10.1 per cent, while that of the non-poor increased by 9.8 per cent. Overall disposable income declined by 5.4 per cent.	↑	Increased at all the poverty lines evaluated, in particular from 45.1 to 52.1 per cent using Hooqveen and Ozler's R3 864 per capita per annum poverty line.	↑	Gini coefficient increased from 0.622 to 0.664 between 1995 and 2000.	IES 1995, 2000
Leibbrandt <i>et al.</i> (2005a)	↓	Average fall in incomes by roughly the same magnitude as inflation.	-	-	-	-	IES 1995, 2000
Leibbrandt <i>et al.</i> (2005b)	↓	Leftward shift in the entire income distribution, particularly pronounced in the middle- to lower sections of the distribution.	↑	Poverty increased from 26 to 28 per cent at the \$2 per day poverty line, and from 50 to 55 per cent at the R250 per capita per month poverty line	↑	Gini coefficient increased from 0.68 to 0.73 between 1995 and 2000.	Census 1996 and 2001
Van der Berg and Louw (2004)	-	-	↓	Falls under both the 'pessimistic' and 'optimistic' scenarios, from 38.8 per cent in 1995 to 38.6 or 36.4 per cent in 2000 at a poverty line of R3 000 per capita per annum.	↑	Increases in inequality within all racial groups, namely 0.57 to 0.59 for Africans, 0.52 to 0.55 for Coloureds, 0.49 to 0.51 for Indians and 0.47 to 0.49 for Whites.	Standard Employment Series, OHS, LFS, IES (various years)
Van der Berg <i>et al.</i> (2005)	-	-	↑↓	Initially increased from 40.6 per cent in 1993 to 41.3 per cent in 2000, but thereafter declined to 33.2 per cent in 2004 at a poverty line of R3 000 per capita per annum.	-	-	Standard Employment Series, OHS, LFS, All Media Products Surveys (various years)

3. Pro-poor Growth and South Africa's Employment Track Record

3.1 South Africa's Macroeconomic Policies Since 1994¹⁵

The first comprehensive macroeconomic strategy adopted by the newly elected government in 1994 was the Reconstruction and Development Programme (RDP). The RDP was committed to reducing poverty and inequality "*with its underpinning ideology acknowledging the links between development, growth, reconstruction and development*" (Bhorat *et al.* 2005: 2). The policy placed government-funded infrastructural development at the centre. However, given budgetary constraints, it was proposed that rather than increasing total expenditure, the composition of expenditure be shifted towards more capital spending.

The Growth, Employment and Redistribution (GEAR) strategy replaced the RDP in 1996 and had an implementation period of four years. Whereas the RDP focused on growth through (infrastructural) development led by government, GEAR envisaged a more central role for the private sector. Although the RDP was certainly successful in bringing about stability and moderate economic growth (an average of three per cent per annum was achieved between 1994 and 1996) the advocates of GEAR felt higher growth was crucial. Policymakers envisaged "*sustained growth on a higher plane*", achieved through increased private sector investments and an outward-oriented manufacturing sector, as one of the main outcomes of GEAR (Department of Finance, 1996). Although the optimistic growth predictions of around six per cent growth in GDP by 2000 never quite materialised, the economy performed reasonably well in an unstable international environment.

An outcome of improved economic growth, so the GEAR policymakers propagated, would be rapid job creation. Policymakers predicted that an average of 270 000 jobs would be created every year between 1996 and 2000, which translates into an average annual increase of 2.7 per cent in formal non-agricultural employment (Department of Finance 1996). However, in terms of employment creation GEAR performed poorly: formal employment continued to fall, or at best stagnated during the latter half of the 1990s.¹⁶ Bhorat *et al.* (2005) conclude that GEAR achieved its goals in terms of fiscal

15 This section as well as the following (Section 3.2) draws largely on a report on growth, poverty and economic policy by Bhorat *et al.* (2005), unless otherwise cited.

16 Some controversy exists about the employment performance in the latter part of the 1990s.

and macroeconomic stability, thus creating a platform for growth. However, the welfare challenges remained.

The post-GEAR period has seen “a shift in the policy stance towards government having a more direct role in promoting economic expansion” (Bhorat et al. 2005: 4), particularly through the implementation of microeconomic strategies aimed at improving skills, increasing efficiency, removing constraints to business development and so on. In contrast to GEAR it was now felt that increased expenditure in social and economic infrastructure would crowd in rather than crowd out investment. Policymakers felt that greater attention to detail would ensure that resulting economic growth had a more meaningful impact on employment creation and poverty reduction. To some extent it appears as if government is reverting back to a macroeconomic strategy that is more in line with the RDP than GEAR – a notion strengthened by government’s more recent Accelerated and Shared Growth Initiative for South Africa (ASGISA). Many of the ASGISA proposals emphasise the importance of public funded infrastructural investments as a key to improving the productive capacity and the future growth potential of the economy.

3.2 Economic Performance: Has Growth Been Pro-Poor?

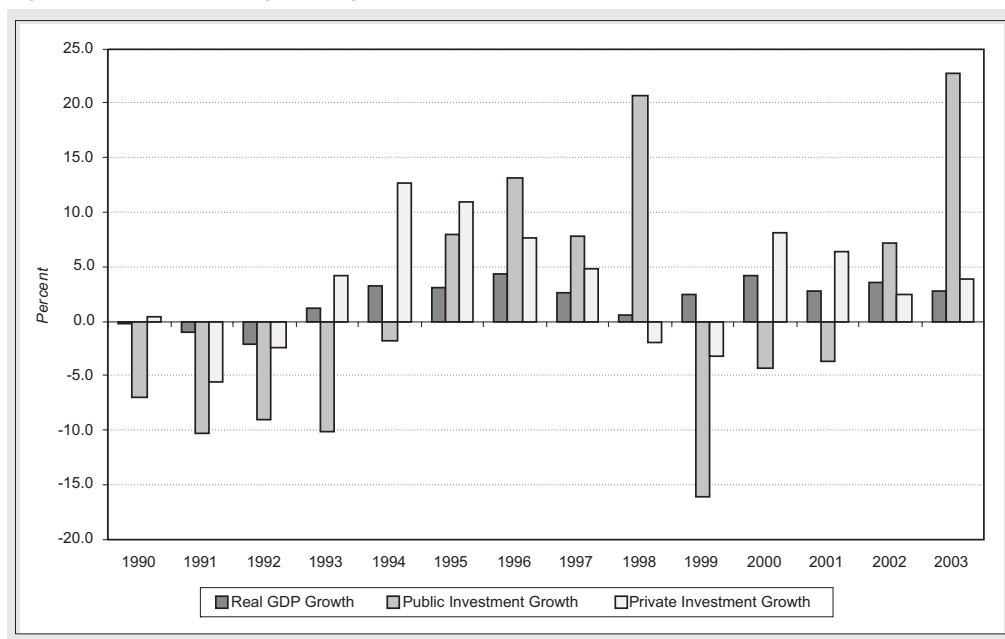
3.2.1 Policy and Growth Targets

The economic growth and employment targets of GEAR were given a lot of media coverage and to some extent became the benchmark against which the government’s success in terms of macroeconomic policies was measured during the first decade after apartheid. The government has to, however, be commended for a number of other successes. Various fiscal policy objectives, including the implementation of a sound and comprehensive budgeting process, the excellent performance of the South African Revenue Services (SARS) in terms of revenue collection and the widening of the tax base, and the reduction in the fiscal deficit and debt to GDP ratio, were reached during the GEAR period.

Figure 14 shows that real GDP growth was positive, albeit low, during the first decade after apartheid. It was hoped that private sector investment, complimented by public investment, would be the main driver of growth. Although gross fixed capital formation grew at an average of 5.1 per cent between 1994 and 2003, this was “clearly inadequate to generate the economic growth necessary for large-scale job creation and poverty

alleviation required' (Bhorat et al. 2005: 7). The lower-than-required investment levels were a result of tight monetary policy at the time, driven largely by a strong policy focus on protecting the value of the South African currency (Rand) during a period of regular domestic and international crises. A general lack of investor confidence also prevailed at the time.¹⁷ Public sector investment was also constrained in line with the policy goal of rapidly reducing the government deficit.

Figure 14: Real Percentage Change in GDP and Investment, 1990-2003



Source: Bhorat et al. (2005), based on National Accounts, SARB 2005

Consumer spending was strong during the period, outpacing growth in GDP and disposable household income. However, Bhorat *et al.* (2005) point out that most of this spending was directed at imports, despite the weak Rand, thus doing little to boost domestic production. In summary then, growth was well below expected levels and well below the levels required to make inroads into poverty through job creation. A number of questions need to be asked. Is growth really the answer to job creation? Or perhaps put differently, can the type of growth experienced explain why job creation was not a natural outcome? Sections 3.2.2 and 3.2.3 look at job creation rates (output-employment

17 A loss of confidence in 1996, shortly after the appointment of Trevor Manuel as Minister of Finance, had a large impact on the value of the Rand. This was followed by the emerging market crisis in 1998, while the Argentinean and Zimbabwean crises and September 11 in 2001 again took its toll. During the entire period domestic socio-political problems (crime, labour regulations, tax regimes) caused instability and deterred investments up to at least the early 2000s (see Gelb 2005, cited in Bhorat et al. 2005).

elasticities) and whether the growth that was experienced actually benefited the poor in South Africa.

3.2.2 Is Growth the Answer to Job Creation and Poverty Reduction?

Output-employment elasticities are useful for evaluating the impact of growth on employment creation. The output-employment elasticity is defined as the rate of job creation for a given percentage growth in the economy. The output-employment elasticity for South Africa as a whole has always been below one since the 1970s, and even dipped below zero during the 1990s, a period characterised by jobless growth (Bhorat *et al.* 2005). Whether the output-employment elasticity will rise above one in the next decade remains anyone’s guess, but given the historical trends this is unlikely.

The current unemployment rate (broad definition) is about 38.8 per cent (LFS 2005). During the last decade the South African labour force has been growing at an average of 3.9 per cent per annum (DPRU 2006). Assuming that the labour force growth rate remains stable and that the employment-output coefficient recovers to around 0.8, simple arithmetic reveals that the growth rate required to halve unemployment by 2015 (to 19.4 per cent) is around 8.5 per cent per annum (*ceteris paribus*). Various scenarios can be explored based on the assumption that the unemployment rate in some future period (u_t) is a function of the time lapsed (t), the expected growth in labour supply (l), assumed to be constant here, the GDP growth rate (y) and the output-employment elasticity (η).

$$u_t = f(y, \eta, l, t) \tag{1}$$

Table 7 shows the predicted unemployment rates for 2015 ($t = 10$) for various combinations of employment-output elasticities and GDP growth rates, given a labour supply growth of $l = 3.9$ per cent. The block of grey shaded cells represents the range of unemployment rates that would result if the economy grew at between 4 and 6 per cent and the employment-output elasticity was between 0.6 and 1.0. These are deemed fairly optimistic ranges for the growth rate and the employment-output elasticity. The dark shaded cells running diagonally across the matrix represent unemployment rates below the 19.4 per cent target. Clearly the corresponding growth and/or employment elasticities associated with these unemployment rates are highly optimistic judging by South Africa’s past economic performance. The empty cells represent combinations of growth and employment elasticities that would result (mathematically speaking) in negative unemployment estimates and were, hence, deleted. The message, however, is clear: a reliance on growth alone to halve unemployment is overambitious. Furthermore, historic trends in output employment elasticities for South Africa suggest that the economy

will never be able to generate enough jobs through growth alone to halve unemployment.

Table 7: Predicted Unemployment Rates in 2015

		<i>Possible Output Employment Elasticities</i>									
		0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0
<i>Possible GDP Growth Rates (%)</i>	1%	57%	56%	56%	55%	54%	53%	52%	51%	50%	49%
	2%	56%	55%	53%	51%	49%	47%	45%	43%	40%	38%
	3%	56%	53%	50%	47%	44%	40%	37%	33%	29%	25%
	4%	55%	51%	47%	43%	38%	33%	28%	22%	16%	10%
	5%	54%	49%	44%	38%	32%	25%	18%	10%	1%	-
	6%	53%	47%	40%	33%	25%	16%	6%	-	-	-
	7%	52%	45%	37%	28%	18%	6%	-	-	-	-
	8%	51%	43%	33%	22%	10%	-	-	-	-	-
	9%	50%	40%	29%	16%	1%	-	-	-	-	-
	10%	49%	38%	25%	10%	-	-	-	-	-	-

3.2.3 Has Growth Been Pro-Poor?

There are a number of approaches to determining whether growth is pro-poor (see Borhat *et al.* 2005). One approach is to examine a growth incidence curve (GIC), which plots the growth in expenditure across each percentile in the distribution. Borhat *et al.* (2005) show that the mean of the growth rates in expenditure at each percentile was approximately three per cent between 1995 and 2000. The GIC only exceeds this mean at about the 70th percentile of individuals, thus, less than one-third experienced welfare gains above the national average. The GIC is furthermore upward sloping over the entire distribution, with those at the bottom end experiencing the lowest growth rates. This suggests that growth has not been pro-poor between 1995 and 2000. Borhat *et al.* further find a clear racial bias in the expenditure growth rates, with Coloured and White expenditures growing at a much faster rate than African expenditures: “*it is evident that the Coloured and White poor realised significantly greater gains than their African counterparts in this period, suggestive of the racial bias within this already tepid pro-poor growth performance*” (2005: 36).

A more nuanced approach to measuring pro-poor growth evaluates the impact of both growth and changes in inequality on poverty rates. This approach is based on the decomposition in equation [2]. Understanding the impact of growth on poverty requires an understanding, firstly, of how changes in income impact on poverty and secondly, how changes in inequality impact on poverty. Following Kakwani (1993) let θ be the poverty

index for poverty line z and mean per capita income, μ . If inequality is represented by a Lorenz curve that is characterised by k parameters, m_1, \dots, m_k , we can write for a fixed poverty line

$$d\theta = \frac{\partial\theta}{\partial\mu} d\mu + \sum_{i=1}^k \frac{\partial\theta}{\partial m_i} dm_i \quad [2]$$

This equation decomposes the change in poverty ($d\theta$) into components relating to the growth impact for a constant income distribution (left-hand term) and the income redistribution impact for a constant income level (right-hand term). These two effects are referred to as the “*pure growth effect*” and the “*inequality effect*” (Kakwani 1993). For positive economic growth the pure growth effect will always be zero or negative. As long as the inequality effect is less than the absolute value of the pure growth effect, the net effect of growth on poverty will be negative – the so-called trickle-down effect of growth.

In applying this methodology to the FGT poverty measures, specifically P_1 and P_2 , the poverty growth elasticity can be calculated using the following equation:

$$\eta_{P_\alpha} = -\frac{\alpha [P_{\alpha-1} - P_\alpha]}{P_\alpha} \text{ for } \alpha \neq 0 \quad [3]$$

This effect measures the pure growth effect on poverty reduction with inequality held constant. For the FGT poverty measures it can now be shown that the elasticity of the P_α poverty measure for a change in the Gini coefficient is given by the expression (Kakwani 1993):

$$\varepsilon_{P_\alpha} = \eta_{P_\alpha} + \frac{\alpha\mu P_{\alpha-1}}{zP_\alpha} \text{ for } \alpha \neq 0 \quad [4]$$

The marginal proportional rate of substitution (MPRS) between mean income and income inequality can then be calculated. This illustrates the trade-off between the effects of mean income growth and changes in inequality on overall poverty and allows the analyst to determine the required percentage increase in mean income that would counter the negative impact of increasing inequality on poverty.

$$MPRS = -\frac{\varepsilon_{P_\alpha}}{\eta_{P_\alpha}} \quad [5]$$

Bhorat *et al.* (2005) apply the above methods to the IES datasets for 1995 and 2000, using the Hoogeveen and Özler (2005) poverty lines of R322 and R174 per capita per

month. Their results for the P_1 poverty estimate are shown in Table 8. Two interesting observations can be made with regard to the mean income elasticity (mean income is used here as a proxy for economic growth). Firstly, the elasticity estimates have declined between 1995 and 2000 at both poverty lines, suggesting that growth has become less pro-poor over time. Secondly, however, the elasticity estimates are much higher at the lower poverty line, suggesting that income growth has “a magnified impact on the ultra-poor” (Bhorat et al. 2005).

Table 8: Elasticities of Poverty Measures for South Africa, 1995-2000

Category	Poverty line R322 p.c.		Poverty line R174 p.c.	
	1995	2000	1995	2000
Mean Income Elasticity for P_1	-1.00	-0.87	-1.58	-1.38
Gini Elasticity for P_1	2.45	3.48	6.66	8.84
MPRS for P_1	2.45	3.99	4.21	6.43

Source: Selected results from Bhorat et al. (2005) based on calculations using the IES 1995 and 2000.

The inequality elasticity estimates for the standard poverty line show that for a one per cent increase in the Gini coefficient the poverty gap (P_1) would increase by 2.45 and 3.48 per cent in 1995 and 2000 respectively. These elasticities rise significantly at the lower poverty line. Clearly, as Bhorat et al. (2005) conclude, increases in inequality can cause significant increases in poverty. Finally, the MPRS measures at the standard poverty line show that a growth in mean income of 2.45 and 3.99 per cent is needed to counter the impact of a one per cent rise in inequality in 1995 and 2000 respectively. Not only has the MPRS increased between 1995 and 2000, but it is also much higher at the lower poverty line. This suggests that even higher growth in mean incomes is required to counter the impact of an increase in inequality on ultra-poverty.

3.3 The Post-Apartheid Labour Market Experience¹⁸

Some important structural shifts have taken place in the South African economy and the labour market during the last decade. Most apparent has been the shift in output away from primary and secondary sectors towards services or tertiary sectors (Bhorat & Oosthuizen 2005), a trend natural to any developing economy. This has brought about a change in the demand patterns for different types of labour due to differences in sectors' skills composition. Most notably, there has been the increase in demand for skilled labour at the cost of unskilled workers (Burger & Woolard 2005). This section briefly expands

¹⁸ This section draws largely on analyses done for a DPRU project on graduate unemployment in South Africa (DPRU 2006), unless otherwise cited.

on the reasons for and nature of the structural shifts, and the implications for the labour market and the poor.

A variety of factors have contributed to the structural change observed in the South African economy. Domestic firms have in the past decade or more been forced to adopt improved production techniques in order to remain competitive in the face of globalisation, trade liberalisation, and more recently, the strengthening of the currency. Production efficiency gains enable producers to produce a unit of output using fewer inputs than before, thus, depending on the demand-side effect of the resulting lower commodity prices, often leading to a decrease in demand for factors of production. Such gains have been especially prevalent in the primary sectors agriculture and mining, both of which employ a large share of low-skilled (or low-wage) workers. This has resulted in a decline in employment in these industries (Burger & Woolard 2005). The technical change experienced has been mostly capital deepening in nature, that is, capital-labour ratios have increased as production processes have become more capital intensive. Borhat and Oosthuizen suggest that, in general, such technical change is “*viewed in a relatively negative light due to [its] dampening on the employment-increasing effect of output expansion*” (2005: 12). Intuitively speaking, however, one would expect greater capital intensity to actually increase the demand for high-skilled workers, albeit at the expense of low-skilled workers. This is due to the fact that firms demand more skilled labour who are “*required to operate and maintain the new capital equipment*” (Bhorat & Hodge 1999: 352).¹⁹

Other studies in the past have focused more on the effects of trade liberalisation on the structure of employment. Bell and Cattaneo (1997) find that “*trade flows have shifted production away from Black intensive sectors towards White intensive (or skill intensive) sectors*” (as cited in Edwards 2001a). A more recent study by Dunne and Edwards (2005) finds that tariffs fell relatively sharply in labour intensive sectors, particularly those with high shares of low-skilled workers, and as a result the direct employment effect of liberalisation has been biased against low-skilled workers. Their analysis further shows that, in addition to the negative impact in labour intensive sectors, metal products sectors also experienced a decline in labour demand, while the capital-intensive resource-based and chemical products sectors experienced positive employment effects.

19 These authors further decompose the changing labour demand patterns in order to gauge the relative importance of technical change versus structural change in the overall employment change and find that although both had been important the former had a greater impact in terms of the demands for different types of labour (skilled versus unskilled and low-skilled).

Factor costs have also undoubtedly had an important impact on the structure and levels of employment in South Africa. The capital intensification of the economy was partly due to the reduction of the cost of capital relative to other factors of production through subsidisation of capital intensive industries (tax breaks and preferential interest rates). According to Edwards (2001b), financial support for certain capital-intensive industries, such as chemicals and iron and steel, continued during the 1990s. Real wage increases and changes in relative wages have further put pressure on employment levels, particularly for low-skilled workers. Although comparisons over long periods in South Africa's history are slightly problematic, Lewis (2001) estimates that the real wage of semi- and unskilled workers increased by 150 per cent between 1970 and 1999. In stark comparison wages of highly skilled workers declined while those of skilled workers rose by approximately 10 per cent over this period. At the same time, Nattrass (2000) argues that the post-1994 period has seen increases in non-wage costs of employment due to stricter labour market legislation. Evidence such as this leads Burger and Woolard (2005) to conclude that wage levels for some low-skilled workers are above their market clearing levels, which make them relatively less attractive than skilled workers.

It is impossible to disentangle the relative importance of economic development, technical progress, trade liberalisation, and increases in real wage and non-wage costs of labour in altering the labour demand patterns in South Africa. However, all these effects have contributed to the economy's skills-biased labour demand trajectory. The welfare implications of these structural changes are interesting. In an analysis of (trade-induced) skill-biased structural change in the South African economy Pauw *et al.* (2006: 52) find that poor households often "*lack connections to the labour market and especially the better remunerated sections of the labour market*". This is both due to the fact that individuals in poor households often live further from formal sector job opportunities (e.g. rural areas) and that they do not possess the skills to compete for jobs. This disconnection from the formal economy implies that poor households are often more reliant on non-labour income sources such as government transfers and less vulnerable to changes in employment demand patterns caused by structural changes in the economy.

Although, as argued in the preceding paragraphs, the welfare implications of changes in structural-change induced labour demand patterns are unlikely to have significant welfare implications for the very poorest in society, it is still instructive to consider the education profiles (as a proxy for skill levels) of individuals in the labour force who are either poor or non-poor. For simplicity we assume that individuals in the bottom two household quintiles as defined in Section 2.1 are poor and the rest are non-poor. Figure 15 shows the distribution of poor and non-poor labour market participants, including employed and unemployed individuals, across different education cohorts, namely low education

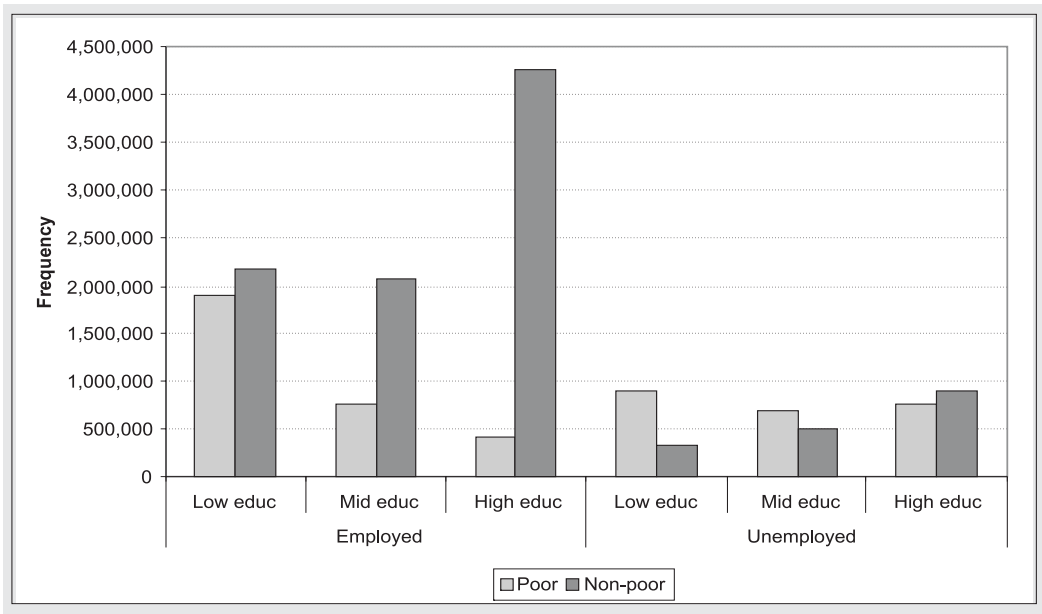
(primary school or below), middle education (lower secondary, that is, up to Grade 10) and high education (upper secondary, inclusive of Grade 12 and tertiary qualifications).

Among the employed, people with high education levels are more likely to be non-poor if we associate the large number of observations in this cohort with a larger likelihood or probability. The same is true for unemployed persons – a higher education level is associated with a larger probability of being non-poor. This probably reflects the fact that non-poor unemployed persons with high education levels are more likely to be temporarily unemployed and/or they have alternative income sources, be it from asset ownership or other members of the family. Among the employed, people with low education levels are more likely to be poor (the working poor). The same also seems to hold for the unemployed. It is further quite likely that unemployed people with low education levels fall in the group of structurally unemployed persons.

Figure 15 is a very simplistic way of analysing the issue. Although further analysis is required to substantiate, it does perhaps tell a story of how the poor are more likely to be adversely affected by structural changes. As argued before, the structural changes that have taken place (and are likely to continue in the future) have benefited high-skilled workers at the expense of low-skilled workers. This implies that more jobs in the high-skilled categories have become available, while fewer opportunities exist in the low-skilled categories. If we associate skills with education levels, then it is quite likely that as more high-skill (high education) jobs become available, the individuals that compete for these jobs, whether unemployed or currently employed, will be non-poor. On the other hand, as low-skill (low education) jobs are shed, the working poor are more likely to be adversely affected.²⁰

20 Examples of poor people losing their jobs in industries such as agriculture and textiles are abundant.

Figure 15: Education Levels of Poor and Non-poor Labour Market Participants



Source: IES 2000

Note: For simplicity we assume that individuals in the bottom two household per capita income quintiles (see Section 2.1) are poor.

4. Poverty and Social Security Provisioning in South Africa

There appears to be some degree of consensus that incomes have declined and poverty increased between 1995 and 2000. The economy's poor track record in terms of job creation played a big role in this regard. In this section we look at social security provisioning in South Africa and how this has impacted on poverty. First, however, we consider broadly the role of taxes and welfare transfers in redistributing income in South Africa. Thereafter we consider the degree to which welfare transfers are successfully targeted at the poor. Finally, we consider briefly the large increases in welfare transfer spending in South Africa over the last decade.

4.1 Transfers and Taxes as Tools of Redistribution, 1995 - 2000

Table 9 shows the mean estimates and Gini coefficients of some alternative measures of welfare. These alternative measures include (1) gross per capita income before welfare transfers, (2) gross per capita income after transfers and (3) net disposable income, that is, after taxes have been deducted. The first income measure gives an indication of the income levels that would have prevailed in the absence of a government that imposes taxes and makes welfare payments. The second and third income measures give an indication of the effectiveness of government's direct income redistribution policies through welfare transfers and taxes, respectively, in reducing inequality.

The net effect of transfers and taxes clearly benefits poor people.²¹ In 1995 their disposable income was 35.7 per cent higher than their gross income before transfers, while in 2000 the difference was slightly less at 30.2 per cent. For non-poor people the net effect of taxes and transfers was negative in both years (12.1 and 9.0 per cent respectively). The worrying aspect of per capita incomes, however, is that the incomes of poor people has declined, while that of non-poor people has risen. This explains why inequality has been rising, as the rich are apparently getting richer while the poor are getting poorer.²² Another concern is also the fact that the average transfer per poor person seems to be declining in real terms (difference between (1) and (2) in the Table 9). In 1995 the average welfare transfer value per poor person was R624 (2000 prices), compared to R465 in 2000. The equivalent values for non-poor persons remained fairly stable at R559 and R564 for 1995 and 2000 respectively.

21 The same definition of poor and non-poor people used in Section 2.1 applies here.

22 A comparison such as this should be done with care, especially since we are not dealing with panel data. To put it more correctly, people defined as poor in 1995 earned on average less in real terms than people defined as poor in 2000.

Table 9: Average Incomes and Inequality, 1995 - 2000

	1995 (2000 prices)			2000			Changes in real income			Gini coefficient		
	Poor	Non-poor	All	Poor	Non-poor	All	Poor	Non-poor	All	1995	2000	Change
Gross per capita income before transfers (1)	1,553	20,853	12,807	1,456	22,110	11,704	-6.2%	6.0%	-8.6%	0.675	0.721	6.9%
Gross per capita income after transfers (2)	2,177	21,412	13,393	1,921	22,674	12,218	-11.8%	5.9%	-8.8%	0.653	0.698	6.9%
Net per capita income (disposable income) (3)	2,108	18,326	11,565	1,896	20,128	10,942	-10.1%	9.8%	-5.4%	0.636	0.678	6.6%
Percentage change (from 1 to 3)	35.7%	-12.1%	-9.7%	30.2%	-9.0%	-6.5%				-5.7%	-5.9%	

Source: IES 1995 and 2000, Authors' Calculations

The Gini coefficient for all these income measures increased between 1995 and 2000. However, the Table also shows that inequality is reduced by direct redistribution policies. In particular, transfers, which are targeted at low-income recipients, and taxes, which are targeted at middle- to high-income people, reduced inequality from 0.675 to 0.636 (5.7 per cent reduction) in 1995 and from 0.721 to 0.678 (5.9 per cent reduction) in 2000. Thus, although inequality is on the rise, it appears as if policies of redistribution are doing marginally more to reduce inequality than in the past.

4.2 Is Government Social Welfare Grant Spending Pro-Poor?

Van der Berg's (2005) study of the welfare incidence of public spending, including welfare grants, finds that of all public spending (including education, health and housing), expenditure on social grants was by far the best targeted to poor people in 1995. This is to be expected given the use of means testing to determine a grant recipient's eligibility. Also contributing to this result is the fact that the unemployed and children tend to cluster around old age pension (OAP) recipients, which reduces the per capita incomes in such households, which in turn increases the likelihood of the household being defined as poor. The targeting of social welfare spending appears to be somewhat less efficient in 2000 than in 1995. Van der Berg (2005) believes the introduction of child support grants (CSG) during this period led to, at least initially, a weakening of targeting. The means testing of the CSG is difficult to implement as it has to be "*very finely grained to separate the lowest 40 per cent of the child population*", while urban households had earlier access than rural households, thus initially excluding many of the poorest from coverage (Van der Berg 2005: 19).

However, Van der Berg (2005) admits that this result may be due to the way in which households are ranked for this particular incidence analysis. The welfare measure used

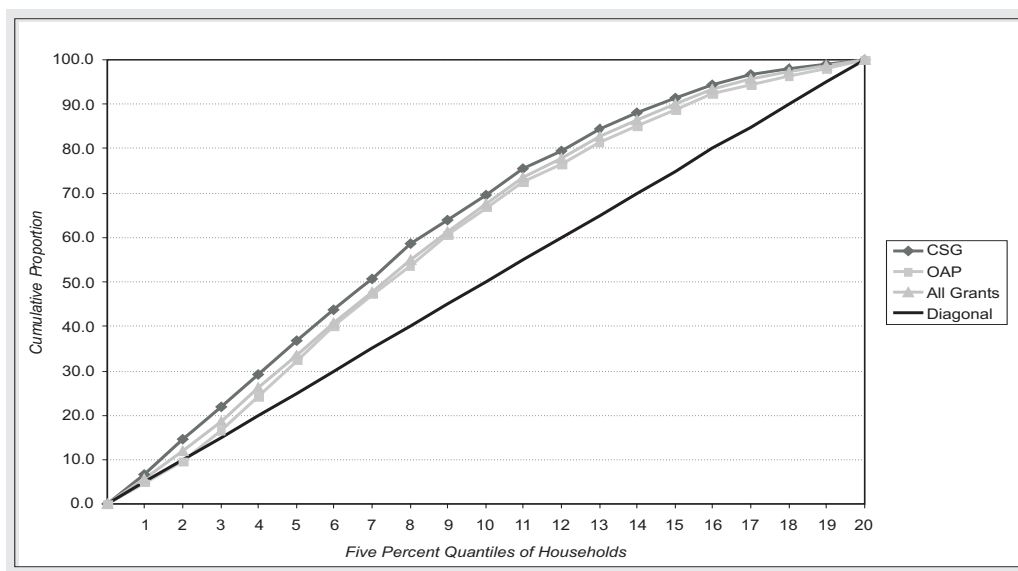
excludes grant income. In pensioner households the pension is often the only income source, thus reducing the welfare measure to zero. This implies that a disproportionate number of OAP recipients will be located at the very bottom of the income distribution. In CSG recipient households there are often other sources of income as well, so that the CSG appears to be benefiting more households with some non-grant income as opposed to those with none. Figure 16 (from Borat *et al.* 2005) shows the concentration curve, defined as the cumulative proportion of spending going to cumulative proportions of the population, where the population is ranked by a welfare measure (in this case per capita expenditure). The fact that the CSG concentration curve lies above that of the OAP supports the argument that the CSG supports more households with some non-grant income.

From Figure 16 it is clear that poorer households receive a disproportionately large share of grants. Borat *et al.* (2005: 25) note that “*more than two-thirds of grant recipients live in the poorest 50 per cent of households*”, as ranked here by per capita expenditure. Consequently it is not surprising that grants have an important poverty-reducing impact. Woolard (2003) finds that, in the absence of the OAP, 56 per cent of the elderly would be poor and 38 per cent would be ultra-poor.²³ Assuming perfect uptake of the grant these poverty rates decline to 23 per cent (poor) and 2.5 per cent (ultra-poor). The CSG is also highly effective in reducing poverty. Poverty among children under the age of seven²⁴ would decline from 43 per cent to 34 per cent in the case of complete uptake of the grant, while ultra-poverty would decline from 13 per cent to 4 per cent. The combined impact of OAPs and CSGs lowers poverty from 40 per cent to 24 per cent, while reducing the Gini coefficient of household per capita expenditure from 0.67 to 0.62 (Woolard 2003).

23 Poor are defined as the bottom 40 per cent of individuals as ranked by pre-transfer per capita income. The ultra-poor are defined as the poorest 20 per cent.

24 At the time of Woolard's (2003) study the CSG covered children up to the age of seven. This has subsequently been raised to include children up to the age of fourteen.

Figure 16: Concentration Curve of Grant Recipients, 2003



Source: *Bhorat et al. (2005), based on the GHS 2003*

Note: *Bhorat et al. (2005: 26) note that "since quantiles were constructed from household expenditure, the concentration curve will be slightly warped at the lower end." Further, "on pre-transfer income, grant-receiving households would tend to be located right near the bottom of the income distribution". The concentration curve derived by Van der Berg (2005: 19), which is based on pre-transfer income, shows a prominent 'bulge' at the lower end of the distribution.*

4.3 Increases in Welfare Spending by Government, 1995 - 2005

Van der Berg *et al.* (2005) ascribe their observed turnaround in the trend of declining incomes and increasing poverty since 2000 to improved job creation and a significant increase in public spending on welfare grants. With regards to the grants they argue that welfare grants, due to targeting based on means testing, typically benefit the poor in society. According to their estimates the total income accruing to the bottom two quintiles in 2000 was about R27 billion. They further estimate that the increase in welfare spending between 2000 and 2004 alone was R22 billion in real terms (constant 2000 prices). Based on this evidence they argue that their results, which show very large increases in income among the poor, are plausible.

The preceding discussions have shown how the economic policies between 1996 and 2001 were based on fiscal prudence in an effort to reduce government debt and keep inflation in check. Government, it was argued, was very successful in this regard. Since 2001, however, government expenditure started increasing, with Trevor Manuel making

the intent of government clear in his Budget Speech (2001):

“We can now embrace a more confident and expansionary vision. This Budget tells the story of the choices and decisions we have made and which have advanced the transformation of our country and its economy to the point where we can now begin to enjoy the fruit.”

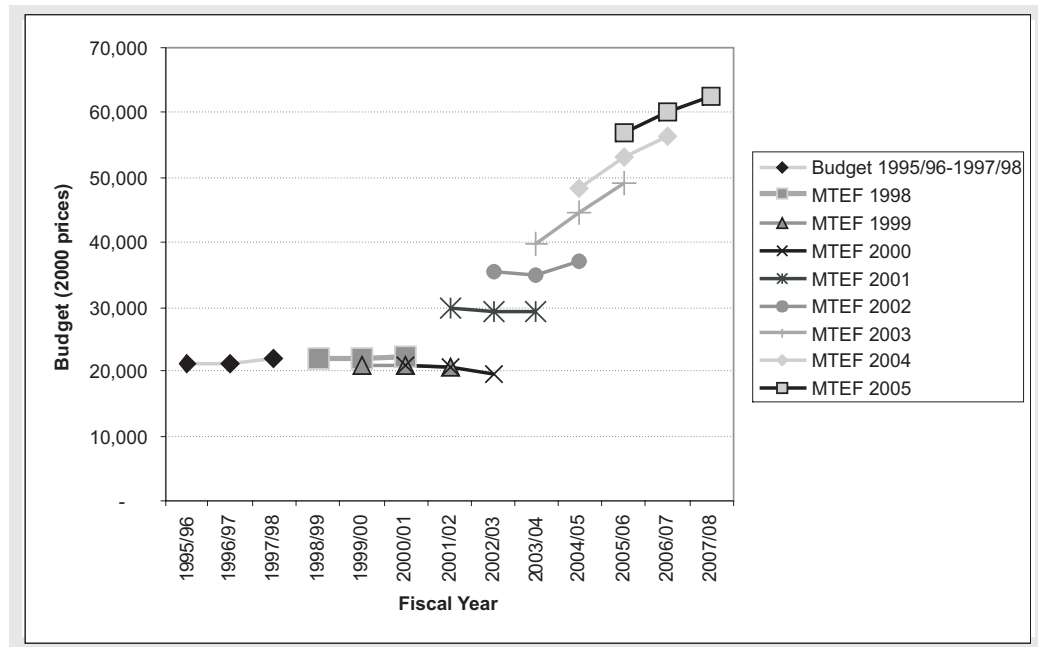
Welfare grants are funded from the welfare budget, which in turn forms part of the social services budget in South Africa. Welfare grants are currently administered through a centralised institution called the South African Social Security Agency (SASSA). Previously grants were administered through the provincial departments of Social Development (previously Welfare). Given these administrative changes it is fairly difficult to analyse welfare grant expenditure trends and, hence, we focus on the total consolidated welfare budget of national and provincial governments from 1995 to 2005. It is also difficult to find reliable estimates of actual welfare payments for all the years, especially prior to 2000. According to the Budget Review of 2000 (published online on the National Treasury’s website at www.treasury.gov.za) up to 90 per cent of the total welfare budget comprises grant payments, and although this did not remain absolutely stable over time, the trend in the total welfare budget is arguably a good indication of the trend in welfare payments as well.

In order to analyse trends in expenditure on welfare, government budgets dating back to 1995 were analysed. The South African budgeting system is based on a three-year rolling budget system called the Medium Term Expenditure Framework (MTEF). This means that for each fiscal year the budget for the upcoming three years is specified. Budget Reviews for 1998 (the oldest available) to 2005 were used for the analysis. Budget Review 1998 includes welfare budgets for the 1995/96 to 1997/98, as well as MTEF estimates for 1998/99 to 2000/01. Budget Review 1999 contains MTEF estimates for 1999/00 to 2001/02, Budget Review 2000 contains MTEF estimates for 2000/01 to 2002/03 and so forth. Thus, three separate MTEF estimates are available for each budget year from the 1999/00 fiscal year onwards.

Figure 17 shows the welfare budgets from 1995 to 2005. These figures are expressed in real terms (2000 prices), with actual (nominal) budgeted figures adjusted using the CPI deflator from Statistics South Africa. Up until the budget for 2000, which included MTEF estimates for 2000/01 to 2002/03 the welfare budget remained fairly stable in real terms at around R20 000 million. However, revisions for 2001/02 and 2002/03 published in the Budget Review 2001 were suddenly significantly higher, increasing to around R30 000

million in real prices. From there onwards, each revised MTEF made further upward adjustments, eventually taking the budget up to R56 819 million for the 2005/06 budget year as estimated in Budget Review 2005. In the figure it is clear that there was a definite structural break in the trend of welfare spending in South Africa from 2001 onwards.

Figure 17: Welfare Budgets, 1995 – 2005 (2000 prices)



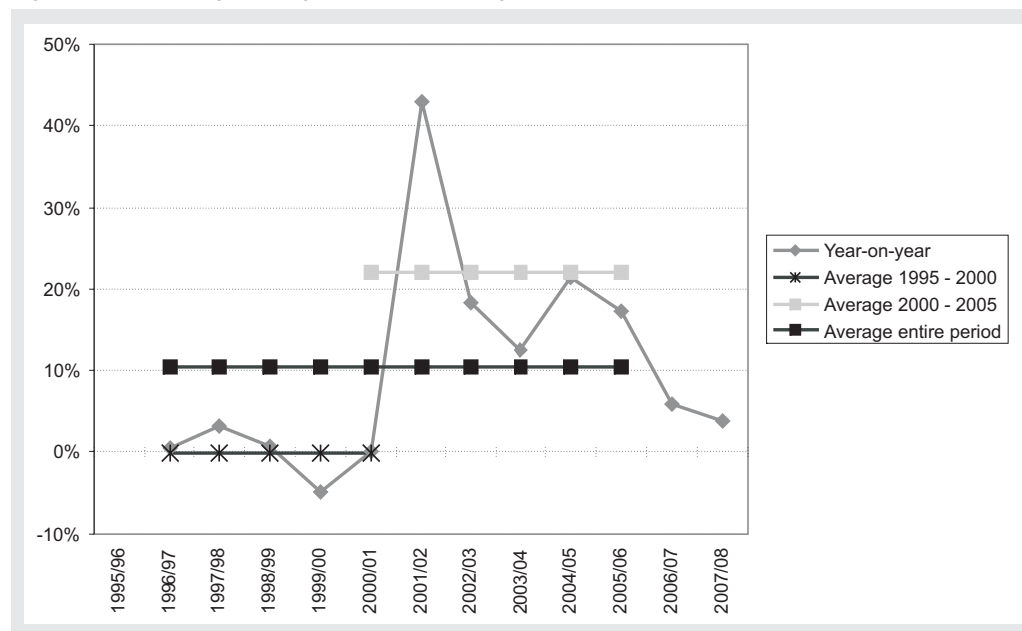
Source: National Treasury Budget Review (various years, available at www.treasury.gov.za)

Figure 18 shows the percentage changes (in real terms) in the welfare budget over this period. Although the year-on-year growth rate was fairly erratic, with the largest growth (43 per cent) in the 2001/02 budget, the average real growth over the period 1996/97 to 2005/06 was just over 10 per cent. However, the figure also shows the average growth rates for the period 1995/96 to 2000/01 and again for 2000/01 to 2005/06. In the period up to 2000 the real growth in welfare spending was around zero per cent, that is, it kept pace with inflation. From 2000 onwards, however, it grew at an average of about 22 per cent, which is well above the inflation rate. MTEF estimates for 2006/07 and 2007/08 as provided in the Budget Review 2005 predict further real growth rates of 6.0 and 3.8 per cent respectively based on the assumption that the inflation rate will remain stable at around 4.5 per cent during this period.

Much of the growth in real welfare expenditure is attributed to a large increase in the uptake of welfare grants, especially those relating to child care. The Budget Review 1998 published estimates of the number of beneficiaries within each type of welfare grant.

More recently in the provincial budgets and expenditure review of 2006 the number of beneficiaries were again published, this time for the period 2000 to 2006. Table 10 shows the growth in the number of beneficiaries over time, particularly for the years 1997 to 2006. The total number of beneficiaries grew by 15.4 per cent per annum. Most of this growth is attributed to very high growths in the number of care dependency and child support grant recipients.

Figure 18: Percentage Changes in Welfare Budget



Source: National Treasury Budget Review (various years, available at www.treasury.gov.za)

Table 10: Growth in the Number of Beneficiaries Per Grant Type, 1997 - 2006

	Old age	War veterans	Disability	Grant in aid	Foster Care	Care Dependency	Child Support	Total
Beneficiaries in 1997	1,742,253	11,495	754,830	9,720	42,917	3,815	400,599	2,965,629
Beneficiaries in 2006	2,126,373	2,889	1,311,148	26,217	299,865	88,679	6,894,428	10,749,599
Average annual % growth	2.2%	-14.2%	6.3%	11.7%	24.1%	41.8%	37.2%	15.4%

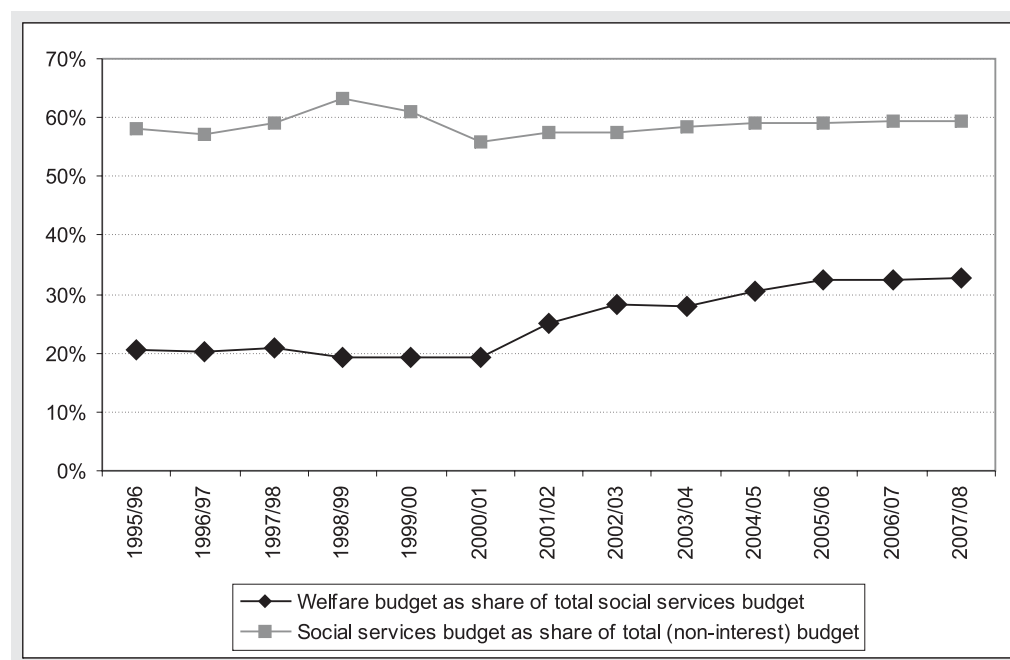
Source: Department of Social Development (available at www.welfare.gov.za)

A comparison of the 'per capita benefit', defined here simply as the total welfare budget divided by the total number of beneficiaries actually declined from R8 241 in 1995 to R5 601 in 2006. The change in the composition of welfare grant recipients is the reason behind this. Old age pensioners currently receive a maximum of R820 per annum,

compared to the child support grant of only R190.

So how have these sharp increases in welfare transfers been funded? Increases were partly made possible by much improved tax collection rates by the South African Revenue Services. However, there has also been a restructuring of the social services budget, which is certainly a concern. In addition to welfare spending, social services is made up mainly of expenditure on health, education and housing. The social services budget as a share of the total non-interest spending budget remained fairly stable at around 60 per cent during the last decade. However, welfare spending as a proportion of the social services budget has shown a fairly sharp increase, especially since the 2001/02 budget year. Whereas it averaged around 20 per cent prior to 2000, it has now increased to almost 33 per cent in the latest budget estimates (see Figure 19). Given already poor service delivery in health, education and housing provision in South Africa this restructuring of the budget is both puzzling and a source for concern.

Figure 19: Budget Shares, 1995/96 - 2007/08



Source: National Treasury Budget Review (various years, available at www.treasury.gov.za)

5. Concluding Remarks

More than a decade after the advent of democracy, the South African government still faces many of the same challenges faced when the ANC took power in 1994. Poverty is still widespread, while the socio-economic problems associated with unemployment still persist. One of the main goals set by the new government was that of redressing inequalities and fighting poverty. Although, ultimately, the goal of economic and social policy is to allow more people to become self-sufficient through the creation of employment opportunities, there was always a realisation that a large proportion of the population will always remain structurally unemployed or chronically poor. Government, therefore, committed itself to providing safety nets, both as a temporary measure to assist the transitory poor, but also as a more permanent arrangement for the chronically poor.

The poor growth performance and employment track record of the economy between 1995 and 2001 has taken its toll on household incomes and poverty levels. Many may see this as a failure of government, at least measured against the optimistic goals set out in GEAR. However, in hindsight, the policy of fiscal discipline and 'getting the fundamentals' right proved to create an ideal platform from which to launch a renewed fight against poverty through increased government expenditure, especially on welfare transfers. In addition to this the good performance of SARS in terms of tax collection and broadening the tax base created the opportunities and impetus for increased welfare expenditure. However, as shown, increased expenditure on welfare transfers was not entirely funded by these revenue overruns; in fact, the share of the total social services budget remained constant, while relatively more resources appear to have been channeled to welfare, away from housing, education and health.

Today a very large proportion of the population is reliant on welfare transfers, including old age pensions, disability grants, and, especially more recently, a variety of child maintenance and support grants. At least one quarter of households in South Africa earns welfare transfer income, while about a third of these recipient households rely on these transfers for between 80 and 100 per cent of their income. The uptake of welfare transfers is on the rise due to a number of reasons: there is increased awareness of grants, welfare coverage has been extended dramatically since the 1990s, HIV/AIDS-related illnesses lead to higher dependency rates and lower household incomes, while the population is also ageing. As households become smaller and more fragmented, the share of households relying on welfare transfers may become even larger.

Welfare transfer expenditure makes up approximately 30 per cent of the social services budget, which in turn accounts for about 60 per cent of the overall non-interest budget

of the South African government. Thus, about 20 per cent of the overall budget is spent on welfare transfers, this despite the fact that the tax base in South Africa is fairly narrow given the high unemployment rate. Many have questioned the sustainability of having 10 million workers – of which about three-quarters earn enough income to become eligible for income tax²⁵ – and 10 million welfare transfer recipients. Admittedly the average welfare grant, which ranges from R190 for child maintenance grants to R820 for the social old age pension, is fairly low and, hence, the effective cost per taxpayer is relatively low. However, some analysts have raised concerns about calls for further increasing welfare transfer payments as a policy option to fight poverty.

There is little doubt that the significant growth spurt in welfare transfer expenditure, especially between 2001 and 2004, has made important inroads into poverty and inequality. However, there seems to be a great deal of consensus that further increases well above the inflation rate are not sustainable. Another important issue is whether it is sensible to divert funds away from other crucial areas such as health and education in a society plagued by a high mortality rate associated with the HIV/AIDS pandemic and exceptionally poor schooling outcomes. These are the important policy issues that government will have to grapple with when they determine the future path of social security provisioning in South Africa.

25 This estimate is based on wage income estimates from the IES/LFS 2000. The threshold taxable income level was R22 000 per annum in 2000.

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