University of Cape Town

CENTRE FOR
SOCIAL SCIENCE RESEARCH

INCOME INEQUALITY AFTER APARTHEID

Jeremy Seekings with
Murray Leibbrandt and
Nicoli Nattrass

CSSR Working Paper No. 75

SALDRU

Published by the Centre for Social Science Research
University of Cape Town
2004

Copies of this publication may be obtained from:

The Administrative Officer
Centre for Social Science Research
University of Cape Town
Private Bag
Rondebosch, 7701
Tel: (021) 650 4656
Fax: (021) 650 4657
Email: kforbes@cssr.uct.ac.za

Price in Southern Africa (incl. VAT and postage): R 15.00

or it can be downloaded from our website
http://www.cssr.uct.ac.za

ISBN 1-77011-003-8

CENTRE FOR SOCIAL SCIENCE RESEARCH

Southern Africa Labour and Development Research Unit

INCOME INEQUALITY AFTER APARTHEID

Jeremy Seekings with
Murray Leibbrandt and Nicoli Nattrass

CSSR Working Paper No. 75

August 2004

Jeremy Seekings is a Professor of Political Studies and Sociology at the University of Cape Town (UCT), and Director of the Social Surveys Unit (SSU) within the Centre for Social Science Research (CSSR).

Murray Leibbrandt is a Professor in the School of Economics at UCT and the Director of the Southern Africa Labour and Development Research Unit (SALDRU) within the CSSR.

Nicoli Nattrass is a Professor in the School of Economics at UCT and the Director of the CSSR.

Income Inequality after Apartheid

Abstract

This paper investigates changes in and patterns of income inequality in South Africa during the post-apartheid period 1994 to 2004. While findings show a rapidly growing high-income African population (a trend that began before 1994 and continued thereafter) as well as rising real wages for workers in formal employment, overall levels of income inequality have not been declining This is due to rising unemployment and a small informal sector that have therefore left unchanged South Africa's high level of income inequality. If anything, overall inequality has worsened. Inter-racial inequality has decreased while intra-racial inequality has increased. Opportunities have improved for some African people in South Africa, but not for all: a lack of human and social capital leaves many with little chance of rising out of poverty; AIDS-related mortality and morbidity are likely to exacerbate stratification and further increase inequality.

Throughout the apartheid period, South Africa was notorious for having one of the highest levels (if not the highest level) of inequality in the distribution of income. Many South Africans hoped that political change would reduce income inequality. Now, ten years after the first democratic elections of 1994, we can begin to determine whether the level and patterns of income inequality have changed. This paper reviews evidence on income inequality in post-apartheid South Africa. What is striking are the continuities from the preceding decade. The changes that occurred in post-apartheid South Africa were the continuation of changes that were evident before 1994. There continued to be rapid upward mobility into the upper classes and income deciles by black South Africans, and urban workers benefited from rising wages. But unemployment grew, the informal and smallholder agricultural sectors remained stagnant, and the ranks of the poor swelled. Inequality remained as high, if not higher, than ever, even if inter-racial differentials declined. The expansion of opportunities at the top did not result in significant improvements for most of the people at the bottom. An accompanying paper (Seekings and Nattrass 2004) examines how post-apartheid public policies have shaped these patterns of income inequality, including through direct redistribution (via the welfare system).

1. Overall Levels of Inequality after Apartheid

The study of inequality since 1993 has been aided by an explosion in the availability and accessibility of survey data, especially data on incomes (Seekings, 2001). The first of these surveys was the 1993 PSLSD, run by the University of Cape Town. Thereafter the post-apartheid state invested considerable sums in the measurement of incomes through countrywide sample surveys, including especially the 1995 and 2000 *Income and Expenditure Surveys* (IESs) and the annual *October Household Surveys* (OHSs) between 1994 and 1999. These data-sets are in a completely different league to the data that scholars had to use prior to 1993. Notable research using Population Census data include McGrath (1983) and Simkins (1979), later extended by Whiteford and McGrath (1994, 1998) and then Whiteford and Van Seventer (2000). This work is immensely valuable, especially if combined with local studies, but – as the authors themselves were the first to emphasise – was limited by the crudity of the measurement of income in the census. Combining data from the PSLSD and wage data with data from the Population Censuses, Simkins sought to improve on analyses that relied on census data alone (CDE, 1995).

Subsequent data from the IESs and OHSs, using representative country-wide samples much larger than the PSLSD samples, should have made a major contribution to our understanding of changes in income distribution over time. However, the data from the IESs and OHSs are of uncertain value in the study of changes over time. The value of any survey data depends on the sample being representative of the general population. Achieving a representative sample is extraordinarily difficult in South Africa, primarily because of uneven response rates among different classes (with the rich, including most white people, being difficult to interview). If the IES sample comprised at least representative samples within each racial group, then the use of appropriate weights to scale up the results would provide an adequate representation of overall inequality. In practice, however, there remain significant doubts about the quality of both the racial samples and the inter-racial weights used in the IES. In particular, the weights estimated by Statistics South Africa (Stats SA) for racial groups in 2000 seem to underestimate the size of the white population, notwithstanding emigration. This is potentially consequential for the analysis of racial income shares and overall patterns of inequality. It also appears very likely that the 2000 IES under-sampled higher-income African households, and made no allowance for this in any of the weights used. This would have the effect of over-estimating *inter*-racial disparities and under-estimating *intra*-African inequality and overall income inequality. Fedderke *et al.* (2003) report a series of other problems with using data from the

OHSs: incomes are recorded in different ways and the samples vary, complicating the task of plotting trends over time.

The analysis in this section uses data from Population Censuses as well as from the 1995 and 2000 IESs. At the time of writing, income data from the 2001 Population Census was still unavailable, so the most recent census data was from 1996. The IES data is presented with two sets of figures for 2000: one set is derived using the implausible StatsSA weights and the second using a set of revised weights, calculated by Simkins and Woolard. The figures derived using the revised weights will be discussed in the text. However, even with the use of revised weights, the IES data should be treated with caution. One of the reasons for this is that even the revised Simkins/Woolard weights weight by race and province only, and so make no adjustment for under-counting upper-income African households. Put another way, upper-income white households are taken into account because they are white and most white households are upper-income, but upper-income African households are not. The calculations using census data are by Whiteford and Van Seventer (2000); the calculations using IES data are unpublished work by Murray Leibbrandt. We also report Simkins' estimates of racial income shares, based on his combination of PSLSD, wage and census data.

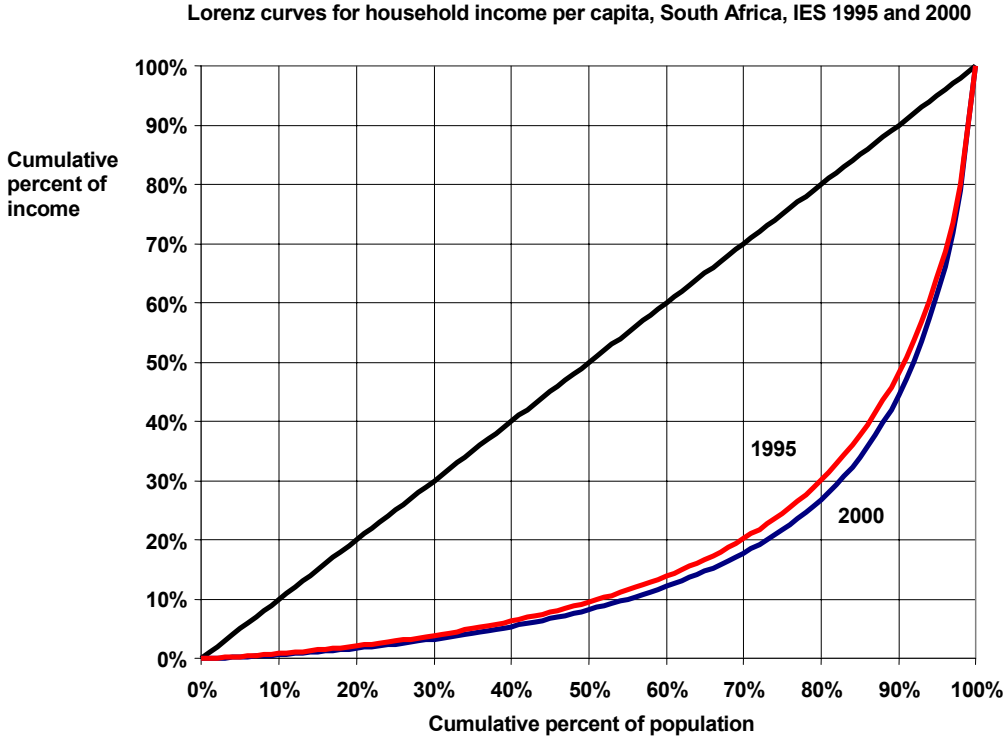
1.1 Overall Trends in Inequality

The census data suggest that overall levels of inequality changed little through the second half of the twentieth century. The Gini coefficient for gross income inequality hovered in the high 0.6s. IES data suggests that inequality worsened between 1995 and 2000, with the Gini coefficient for *per capita* incomes rising from 0.65 to 0.69 (using the StatsSA weights) or 0.70 (using revised weights). Fedderke *et al.* (2003: 20-2) show that the 1996-99 OHSs also show an upward trend in inequality. Figure 1 plots Lorenz curves for household income *per capita* using data from the 1995 and 2000 IESs.[1] The Gini coefficients suggest that the under-weighting of white households in the IES 2000 resulted in a small under-estimate of the extent of this post-1995 increase in inequality.

The IES collected data on expenditures as well as incomes. The expenditure data needs to be treated with as much caution as the income data. Whilst the IES sought to ensure that income and expenditure data reconciled, there was a much weaker correlation between household income and household expenditure in 2000 than in

[1] These Lorenz curves were plotted by David Lam.

1995. Taken at face value, however, the expenditure data appears to indicate the same general trend as the income data. The Gini coefficient for expenditure *per capita* rose from 0.65 in 1995 to 0.68 in 2000 (using the revised weights). Inequality increased, although the increase is less than that measured using income data. One reason why the expenditure and income data suggest different rates of growth of inequality is that expenditure and income data diverged sharply among low income earners in 2000. Between 1995 and 2000, the IES income data indicate the incomes of low-income households dropped sharply in both real and nominal terms. Whereas the income and expenditure data correlate in 1995, in 2000 these low-income households record incomes inexplicably lower than their expenditures. This serves as yet another salutary reminder that 'findings' on trends may be sensitive to the ways in which data are collected, and especially changes in the ways in which data are collected.



Source: 1995 IES and 2000 IES, plotted by Davis Lam.

Figure 1: Lorenz Curves, Household Income, 1995/2000

1.2 Inter-racial Inequality

Whilst overall levels of inequality might have changed little, there has been a steady shift in the income shares of the different 'racial groups'. As shown in table

1, census data suggests that the white population's share of total income declined from about 71 percent in 1970 to 52 percent in 1996 whilst the African population's share rose from about 20 percent to 36 percent (Whiteford and Van Seventer, 2000: 12). Estimates by Simkins using census and other data for a shorter time period suggest that inter-racial disparities were lower than indicated by census data alone, but the trend was the same (CDE, 1995: 16-17).

Table 1: Racial income shares, 1970-2000

	Censuses				*Censuses + wage data + PSLSD*				*IESs*		
	1970	*1980*	*1991*	*1996*	*1985*	*1990*	*1991*	*1995*	*1995*	*2000 (revised weights)*	*2000 (SSA weights)*
	%	%	%	%	%	%	%	%	%	%	%
White	71	65	60	52	59	54	54	52	49	46	40
African	20	25	30	36	29	33	33	34	39	40	46
Coloured	7	7	7	8	8	9	9	9	7	9	9
Asian	2	3	4	4	4	5	5	5	5	5	5
Total	100	100	100	100	100	100	100	100	100	100	100

Sources: Census data from Whiteford and Van Seventer (2000: 12); combined census, wage and PSLSD data from CDE (1995); IES data from unpublished research by Murray Leibbrandt.

IES data on incomes suggest that this trend continued to 2000, although the pace of change is very sensitive to the choice of weights. The white population's share of total income declined from 49 percent to 40 percent between 1995 and 2000, if you use the Stats SA weights for 2000 – but only to 46 percent if you use the revised weights. The revised weights suggest that the African share was creeping rather than galloping up.

These trends were also reflected in the shifting racial composition of the higher income deciles. By 1996, Whiteford and Van Seventer found that African households comprised 22 percent of the richest decile (see Table 2). As inter-racial inequality declined, so intra-racial inequality rose. Indeed, the rising share of income of the black population between 1991 and 1996 was due to the marked increase in the income share of the growing black elite (*ibid*). A comparison of the income data in the 1995 and 2000 IESs suggests that these trends continued (although, as noted above, the 2000 IES probably included too few higher income African households). Even across the short five-year period between the two surveys, the racial composition of the top two income deciles shifted dramatically. As shown in Table 2, however, this finding is also sensitive to the weights used in the 2000 IES. The white proportion of the top decile was 73 percent in 1995 and either 61 percent or 55 percent in 2000, depending on the weights used. The white

proportion of the top decile thus dropped by either 12 percentage points (a lot) or 18 percentage points (probably too much to be credible). The brain drain among white professionals and managers – and graduating students aspiring to those occupations – is likely to have freed up some more 'space at the top' for black professionals and managers, but precisely how much space is unclear because we have such unreliable data on emigration (see Brown *et al*., 2002) as well as the remaining white population. Even using the more conservative, revised 2000 weights, there were by 2000 about as many African households in the top income quintile (i.e. the top two deciles combined) as there were white households.

Table 2: Racial composition of top two income deciles, 1975-2000

		Censuses			*IESs*		
		1975	*1991*	*1996*	*1995*	*2000 (revised weights)*	*2000 (SSA weights)*
		%	*%*	*%*	*%*	*%*	*%*
10th (richest) income decile	White	95	83	65	73	61	55
	African	2	9	22	18	25	31
	Coloured	2	4	7	4	9	9
	Asian	1	3	5	5	5	5
	Total	100	100	100	100	100	100
9th (richest) income decile	White	83	61	42	38	22	17
	African	7	22	39	46	55	61
	Coloured	7	11	12	9	15	15
	Asian	3	6	7	7	8	7
	Total	100	100	100	100	100	100

Sources: Census data from Whiteford and Van Seventer (2000 15). IES data (using *per capita* income deciles) from unpublished research by Murray Leibbrandt.
Note: There was no census in 1975, so the 1975 data are actually estimates made by McGrath, extrapolating from 1970 census data.

1.3 Intra-racial Inequality

Declining inter-racial inequality was accompanied by rising intra-racial inequality. This is evident from changes in the Gini coefficients for the distribution of income for South Africa as a whole and the different racial populations within it. Table 3 reports the Gini coefficients calculated from census data (by Whiteford and Van Seventer, 2000) and IES data. Not only are the post-1991 intra-racial Ginis high (especially for the African population), but there is a clear upward trend. (There is little difference between the Stats SA and revised weights with respect to the Gini coefficients because the revised weights only took into account race and province; the choice of weights does, however, make a big difference whenever the

aggregate distribution is being explained as a weighted composite of the separate racial distributions).

Table 3: Gini coefficients for the distribution of household income, 1975-2000

	Censuses			*IESs*		
	1975	*1991*	*1996*	*1995*	*2000 (Revised Weights)*	*2000 (SSA Weights)*
African	0.47	0.62	0.66	0.56	0.61	0.61
White	0.36	0.46	0.50	0.44	0.46	0.46
Coloured	0.51	0.52	0.56	0.50	0.55	0.54
Asian	0.45	0.49	0.52	0.47	0.50	0.49
all South Africa	0.68	0.68	0.69	0.65	0.70	0.69

Sources: Census data from Whiteford and Van Seventer (2000): 16; IES data (using individual rather than household level data, allocating per capita household income to all household members) from unpublished research by Murray Leibbrandt.
Note: Gini coefficients for household income will be lower than Gini coefficients for *per capita* household income in a society, like South Africa, where poorer households are larger than richer households.

The declining importance of inter-racial inequality and rising importance of intra-racial inequality are also evident in decompositions using census data (conducted by Whiteford and van Seventer) and IES data. The Theil statistic is the most commonly used, additively decomposable measure of inequality (see further Bhorat, Leibbrandt *et al.*, 2001: 24-28).

The Theil statistic allows for decomposition into 'within group' (e.g. intra-racial) and between group' (e.g. inter-racial) components. The results of decomposing inequality using racial groups demonstrate the steadily declining importance of inter-racial inequality and rising importance of intra-racial inequality (Table 4). In 1975, the 'between-group', inter-racial contribution to overall inequality was almost twice as important as the 'within-group', intra-racial contribution, but by the late 1990s this ratio was reversed.[2]

[2] One caveat needs to be added to this general conclusion. The expenditure data from the 2000 IES tells a rather different story to the income data, but this appears to be due to inconsistencies in the measurement of expenditure and income in poorer households. Because the 2000 IES recorded a substantial drop in household expenditure at the bottom end, the Theil decomposition using expenditure data shows that the between-group share rises marginally.

Table 4: Decomposition of the Theil-T index for income inequality, 1975-2000

	Censuses			*IESs*		
	1975	*1991*	*1996*	*1995*	*2000 (Revised Weights)*	*2000 (SSA Weights)*
	%	*%*	*%*	*%*	*%*	*%*
Within group inequality	38	58	67	56	59	54
Between group inequality	62	42	33	44	41	46
Total	100	100	100	100	100	100

Sources: Census data from Whiteford and Van Seventer (2000: 17); IES data (using individual rather than household level data, allocating *per capita* household income to all household members) from unpublished research by Murray Leibbrandt.

2. Getting Ahead: The New African Elite and 'Middle' Classes

The accelerating growth of the African elite and 'middle' classes was perhaps the most dramatic shift in the social landscape of post-apartheid South Africa. Whiteford and van Seventer's analysis in 2000 of census data indicates the extent to which the benefits of changing incomes in the 1990s were concentrated in this group. Dividing each racial group into income deciles or quintiles, they calculate the growth in income between 1991 and 1996 that can be attributed to economic growth and add the aggregate income losses experienced by 'loser groups' (i.e. most white income quintiles). They then examine how this 'income' was distributed among beneficiaries. About 12 percent of the benefit went to the white elite (the top white income decile especially), whilst 52 percent went to the top African income quintile (with as much as 40 percent going to the top African income decile alone) (Whiteford and van Seventer, 2000: 20-22). Another way of indicating the rapid growth of the high-income African population is to look at the numbers of households in different income categories. Between 1991 and 1996, the number of households in South Africa grew by 26 percent. The number of households with incomes above R72 000 p.a. in 1996 prices – which is how Whiteford and van Seventer define 'middle class' households – rose by just 15

percent. But the number of 'middle class' African households rose by 78 percent (*ibid*: 22-23).

This growing high-income African population was generally described in the media as an 'elite' or 'middle class'. Seekings (2003a) defined and mapped the class structure of South Africa at the end of the apartheid period. In terms of the class categories defined in that previous work, the new African 'elite' or 'middle class' were members of the 'upper' class (labelled as WE1 and WE2 classes, referring to households earning significant income from wealth or entrepreneurial activity), and perhaps also the 'semi-professional' class comprising households headed by teaches or nurses. In 1993, the first three of these classes were still predominantly white, whilst the semi-professional class was predominantly African. In 1993, these classes were in no way in the middle of the class structure: the application to them of the term 'middle' class made little sense in the South African context, where the urban working class was really the middle class.

Table 5: Sources of income of households in the top two income deciles, 1995/2000

Source of income	*1995*		*2000*	
	Decile 9 %	*Decile 10 %*	*Decile 9 %*	*Decile 10 %*
Wages and salaries	68	60	78	74
Profits	7	15	2	5
Rent, interest and dividends	2	2	1	2
Private pension	9	7	4	6
Alimony and remittances	1	<1	3	1
Public pensions and grants	1	<1	2	1
Other income	12	15	10	10
Total	100	100	100	100

Source: IES 1995, IES 2000.

The new African 'middle' class comprised people in salaried jobs (such as managers and teachers) and professionals whose income is generally treated as salary, as well as entrepreneurs and capitalists. IES data indicates how much more important were salaried and quasi-salaried occupations than profit-generating activity in terms of the size distribution of income. Table 5 reports the sources of income of households in the top income quintile (i.e. the ninth and tenth income deciles combined) using IES data from 1995 and 2000. The discrepancies between

the two surveys are striking: the relative shares of the major categories of income vary by implausible amounts. The share of income of the top quintile from profits (which includes profits from commercial farming) plummeted between the 1995 and 2000 IESs. This is very unlikely to reflect a real trend (although profits in agriculture, for example, might have dropped). As ever, the IES data needs to be treated with caution. What is clear is that the lion's share of the top quintile's total income came from wages and salaries, with relatively very small sums from profits, rents or interest and private pensions. Even at the level of the 1995 IES, however, it is clear that 'black economic empowerment' through business opportunities was much less important in the late 1990s in terms of changing patterns of income distribution than upward occupational mobility, assisted by affirmative action, and reflected in the distribution of salaries.

Table 6: Racial composition of top occupational categories, 1996 and 2001

	Legislators, senior officials and managers		*Professionals*		*Technicians and associate professionals*		*Three categories combined*	
	1996	*2001*	*1996*	*2001*	*1996*	*2001*	*1996*	*2001*
	Number (%)	*Number (%)*	*Number (%)*	*Number %)*	*Number (%)*	*Number (%)*	*Number (%)*	*Number (%)*
African	97275 (27)	139509 (27)	427392 (49)	241578 (36)	178584 (33)	486731 (53)	703251 (40)	867818 (41)
Coloured	30369 (8)	42202 (8)	74870 (9)	47599 (7)	55414 (10)	101800 (11)	160653 (9)	191601 (9)
Indian	27418 (8)	46591 (9)	41800 (5)	48192 (7)	36338 (7)	48762 (5)	105556 (6)	143545 (7)
White	205652 (56)	287087 (56)	316718 (36)	331094 (50)	266514 (49)	282481 (31)	788884 (44)	900662 (43)
Total	364902 (100)	515389 (100)	870955 (100)	668463 (100)	542882 (100)	919774 (100)	1778739 (100)	2103626 (100)

Source: Stats SA, 03-01-19 (1996), table 14.0; and 03-02-03 (2003), table 2.32.
Note: The small number of individuals whose racial group was unspecified or 'other' in 1996 is included in the totals.

Analysis of these high-income earning classes is difficult because of the shortcomings of available data. In South Africa, response rates in surveys and censuses are closely, and inversely, correlated with income: response rates are low in high-income areas and high in low-income areas. This makes it difficult to plot the growth of the African high-income population. Table 6 reports the breakdown of top occupational categories by race from the 1996 and 2001 censuses. Overall, the number of people in these high-income occupations rose, by 18 percent between the two censuses. But there were big variations between occupational categories and racial groups. The "legislators, senior officials and managers"

category grew strongly, the professional category shrank – but this decline was accounted for by declining numbers of African and coloured professionals, not white and Indian professionals. At the same time, the number of African and coloured "technicians and associate professionals" rose very rapidly. The number of African professionals declined by 43 percent whilst the number of African technicians and associate professionals rose by an incredible 173 percent. Shifts of this scale over this time period are simply not possible. What is possible is that occupations were classified differently in the two censuses. Overall, the number of African men and women in these categories grew more strongly than the number of white men and women, with the result that the African share was, by 2001, almost equal to the white share. But it is also possible that the data is simply too unreliable for analysis of this sort. The coverage might have changed sharply between censuses.

Table 7: Racial composition of top occupational categories, 2001

	Legislators, senior officials and managers		*Professionals*		*Technicians and associate professionals*		*Three categories combined*
	LFS	*CEE*	*LFS*	*CEE*	*LFS*	*CEE*	*LFS**
	%	*%*	*%*	*%*	*%*	*%*	*%*
African	25	14	35	42	52	29	41
Coloured	7	7	8	7	11	13	9
Indian	7	5	7	6	4	6	5
White	60	74	50	45	33	52	44
Total	100	100	100	100	100	100	100

Source: own calculations from original LFS data; CEE data from Department of Labour (2003).
Note: * The CEE data cannot be aggregated because the CEE reports it in percentages only.

The *Labour Force Surveys*, conducted by Stats SA twice per year since 2000, are another possible source of data on the racial composition of the top income deciles or high-income occupations. The state used data from the LFSs to calculate the "official" unemployment rate, so it might be thought that the LFS data is more accurate than the *Population Census*. The results from the February 2001 LFS are shown in Table 7, together with data from the Department of Labour's *Commission on Employment Equity* (from Department of Labour, 2003). The LFS data are extraordinarily similar to the Population Census data. Moreover, a comparison of the February 2001 LFS with the other LFSs between February 2000 and March 2003 show that the LFSs data are very consistent on the racial composition of these

top occupational categories. By March 2003, the number of African men and women in the three occupational categories combined was almost the same as the number of white men and women.

The statistics released by the Commission for Employment Equity indicated lower rates of African influx into these higher-paid occupations. But the coverage of these statistics is known to be very limited. The statistics were based on information filed by employers under the *Employment Equity Act*. But data was only available for under 3.5 million employees, which was only just over 10 percent of the economically active population. Most small employers never filed the information.

Overall, there was clearly strong upward mobility by African men and women into higher-income occupations. This was especially pronounced in the public sector. Thompson and Woolard (2002) used public sector payroll (PERSAL) data from the Department of Public Service Administration to assess the changing racial composition of the upper ranks of the public sector between 1995 and 2001. Table 8 shows that the proportion of managers (at all levels) who were African rose from 30 percent in 1995 to over 51 percent in 2001, with the total black proportion rising from 40 percent to over 63 percent. The change in the composition of senior management was more muted, but nevertheless there were more black than white senior managers by 2001 and almost as many African as white senior managers. The racial composition of non-managerial staff in the public sector also shifted, with the African (and black) proportion rising and white proportion falling.

Table 8: Racial composition of top occupational categories, public sector, 1995/2001

	Public sector managers (all levels)		*Public sector senior managers*	
	1995	*2001*	*1995*	*2001*
	%	*%*	*%*	*%*
African	30.0	51.1	33.3	42.7
Coloured	6.7	6.6	2.0	5.8
Indian	3.4	5.7	2.0	6.0
Total black	40.1	63.4	37.3	54.5
White	59.9	36.6	62.7	45.5
Total	100	100	100	100

Source: PERSAL data analysed in Thompson and Woolard (2002).

Entry into these high-income occupations was in part a function of changing enrolment patterns in higher education institutions. Between 1988 and 1998, student enrolment in higher education was transformed, with the proportion of African students rising from 29 percent (in 1988) to 45 percent (in 1993) to 56 percent (in 1998). In 1994, there were about equal numbers of white and African students in higher education; by 1999, there were almost twice as many African as white students (Cooper and Subotzky, 2001: 14; Cloete and Bunting, 2000: 18-19). But, as Cooper and Subotzky (2001) put it, this was a 'skewed revolution'. African students tended to complete fewer years of higher education, be enrolled in technikons rather than top universities, and be under-represented in the more professional courses (such as engineering and accountancy). Higher education institutions turned out very large numbers of African men and women with qualifications for 'middle' class jobs, but relatively fewer for the very highest occupations (see also Bunting, 2002).

3. Wages, Employment and Unemployment

The growth of the African upper (or so-called 'middle') classes was both dramatic and visible, but was not the only change in the social landscape. Falling formal employment is probably the key defining feature of economic growth in the 1990s. As can be seen in Figure 2, non-agricultural formal private employment, and – to a lesser extent also public employment – fell across the decade. The magnitude of this fall is especially dramatic in the mining industry. The 'stabilisation' of mine-labour in the 1980s – i.e. the shift from employing larger numbers of less skilled workers on short contracts to smaller numbers of more skilled permanent workers – had dire consequences in rural areas that had relied on migrant labour. Agricultural employment also fell, compounding the problem. Unskilled labour were particularly hard hit by these sectoral trends.

It should be noted, however, that there was some uncertainty about South African labour statistics, and especially the extent to which economic growth was 'jobless'. Table 9 shows how different sources generated very different pictures of the South African labour market. Figure 2 is based on data from the South African Reserve Bank, using surveys of firms. It shows a decline in employment in the late 1990s. Data from household surveys (such as the OHSs), in contrast, suggests that there was a rise in employment in the late 1990s, due largely to rising *informal* sector

employment. LFS data from the early 2000s seems to indicate even higher levels of employment (at the same time as higher unemployment rates).

One of the problems with using data from firm-based surveys is that they typically under-estimate employment because informal sector firms are difficult to survey. Data from household surveys are better able to capture the number of people working. But the definition of 'work' is rather different in household level labour force surveys to that understood at the level of the firm. According to the standard labour force approach, anyone working for gain for one morning a week is counted as 'employed' even though this would not fit into most popular notions of what it means to have a job. By conflating employment and under-employment, employment is typically over-estimated in such household surveys. For example, Klasen and Woolard (1999) have shown that if employment in the 1995 OHS is re-estimated in terms of 'full-time equivalents' (i.e. someone working only twenty hours per week is counted as half employed rather than fully employed), then employment falls and the broad unemployment rate rises by three percentage points.

Table 9. Employment according to different sources ('000s), 1996-2002

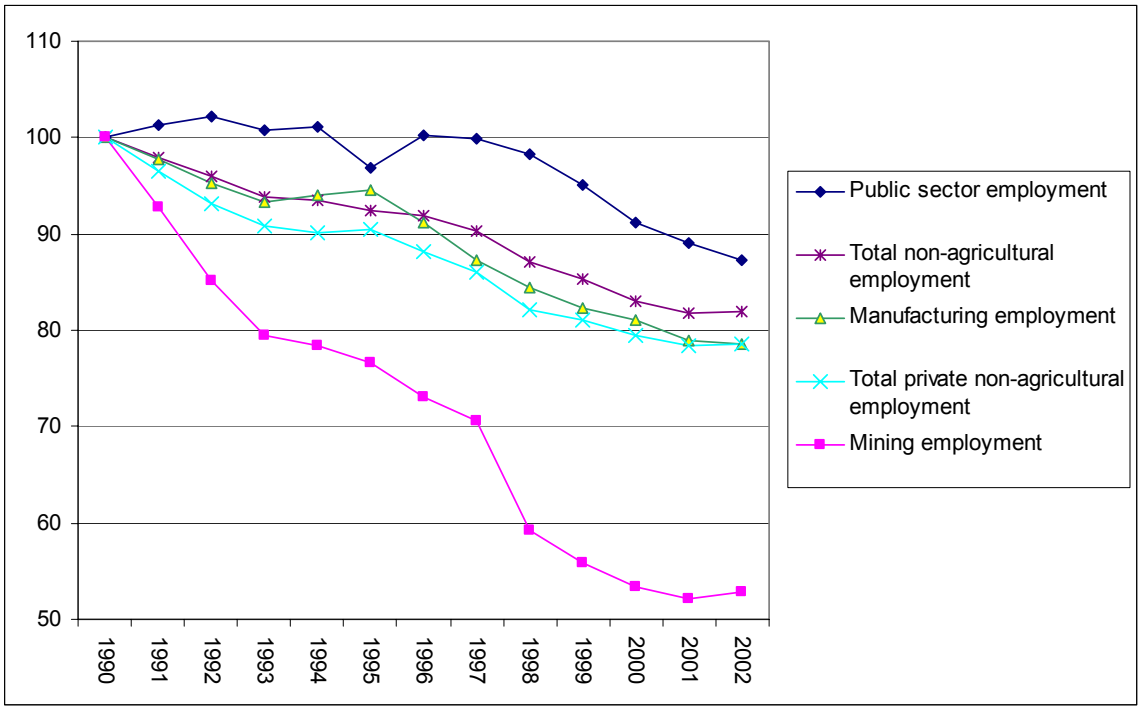
	October Household Survey				*Labour Force Survey*		
	1996	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*
Non-agricultural formal sector	5,242	5,139	4,945	4,840	6,678	6,678	7,036
Commercial agriculture	759	717	935	1,099	757	699	734
Subsistence or small-scale agriculture					1,508	653	792
Informal sector	996	1,136	1,316	1,907	1,821	2,665	1,767
Domestic service	740	668	749	799	1,001	914	972
Total employed	9,287	9,247	9,390	10,369	11,880	11,837	11,393
*South African Reserve Bank data**							
	1996	1997	1998	1999	2000	2001	2002
Non-agricultural employment	5,233	5,144	4,965	4,864	4,734	4,658	4,663

Sources: Statistics South Africa, PO210 September, 2002; Statistics South Africa PO317, 31 July 2000; South African Quarterly Bulletin, June 2003 and September 2002.
Note: * This South African Reserve Bank data draws on data from Statistics South Africa including the survey of Employment and Earnings in selected industries.

Taken together, the data in Figure 2 and Table 9 suggest that formal non-agricultural employment was probably strongly negative during the 1990s, but that some of the job losses depicted in Figure 9 may have been cushioned to

some extent by a rise in informal 'employment'. However, given high levels of under-employment and low incomes in the informal sector, this 'employment' growth must be treated with a great deal of circumspection.

Those who lost employment (or failed to find it) were the big losers in the 1990s. By contrast, most of the employed and owners of capital did relatively well (Seekings and Nattrass 2004). Fedderke and Mariotti (2002) show that the proportion of skilled workers in manufacturing rose sharply from 1990 and that this was associated with rising wages. Employment shedding in commercial mines and farms also contributed to the shift away from unskilled employment in South Africa over the decade (Edwards, 2001; Simbi and Aliber, 2000). Some of those who lost formal jobs may have been rehired as 'casual' workers. Many, however, joined the ranks of the unemployed. Other studies point to the shift from unskilled to skilled labour across a range of sectors (Bhorat and Hodge, 1999; Bhorat, 2003; Oosthuizen, 2003).



Source: Data from the South African Reserve Bank.

Figure 2. Trends in non-agricultural formal employment, 1990-2002

The 1990s saw continuing 're-segmentation' of the labour market, with a deepening divide between workers in formal, regular employment and those in casual or contract employment (see, e.g., Kenny and Webster, 1998). The pace or

extent of this re-segmentation remained unclear, however. On the one hand, there were many reports of changing employment relationships (e.g. ILO, 1999; House and Williams, 2000; Valodia, 2000). On the other hand, surveys conducted by the International Labour Organisation in the mid-1990s suggested that flexible employment relationships in manufacturing were not as widespread as had been expected. As much as 93 percent of the manufacturing workforce was in regular, full-time employment (Crankshaw, 1997). The Labour Force Surveys of the early 2000s provide few indications of any significant casualisation of employment. About 80 percent of people working for someone else for pay said (in March 2003) that they were in permanent employment, 4 percent were in fixed period contracts, 10 percent were temporary and only 6 percent were casual. Less than 2 percent said their employment was seasonal. Very few workers said they were paid by a labour broker, contractor or agency. Between 2000 and 2003, the proportion of working people without a written contract actually declined slightly.

There is some evidence from surveys on the relative fortunes of different categories of workers. The advantages experienced by formally-employed workers (especially those with skills) have persisted in post-apartheid South Africa. Analysis of changes in individual earnings of African people in KwaZulu-Natal – using the 1993 PSLSD and 1998 *KwaZulu-Natal Income Dynamics Study* (KIDS) data – shows that the real earnings of workers in regular employment rose by 30 percent between 1993 and 1998, compared to an overall average change in earnings of just 7 percent (Cichello *et al.*, 2001: 130). The earnings of workers in regular employment grew faster than the average for everyone in the sample. Some of this spectacular increase was because new entrants into formal employment had higher wages than those who left. But even among workers who were in formal employment in both 1993 and 1998, earnings rose by 20 percent (*ibid*: 132).

This does not mean that all members of these classes prospered. The earnings of workers who lost or left their jobs plummeted. The aggregate gains of workers in regular employment should not obscure the fact that the composition of this group shifted. The 1993/1998 KwaZulu-Natal data have not been disaggregated into discrete occupational classes, but it is likely that white-collar and skilled occupations enjoyed positive real earnings growth during the late 1990s.

3.1 Unemployment

Unlike most employed workers and capitalists, the unemployed were unambiguous losers during the 1990s. Since 1993, unemployment rates have risen steadily. Table 10 presents data on unemployment rates from the PSLSD survey of 1993, the official OHSs of 1994-99 and their successors, the Labour Force Surveys (LFSs) of 2000-02. Unemployment rates rose in terms of both the official (i.e. strict) and expanded unemployment rates.

Table 10. Unemployment Rates Since 1993

	PSLSD	*OHS, 1994-99*						*LFS, 2000-02*			
	1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*
Unemployment (official, strict)	12,7	20,0	16,9	19,3	21,0	25,2	23,3	26,7	26,4	29,4	31,2
Unemployment (broad, expanded)	29,4	31,5	29,2	33,0	36,0	37,5	36,2	35,5	37,0	40,9	42,1

Sources: Klasen and Woolard (1999: 11); CSS, *Statistical News Release* P0317.10, 13 August 1998; Statistics South Africa, *Statistical News Release* P0317 18 May 2000; *Statistical News Release* PO317 31 July 2000; *Statistical News Release*, PO210, September 2002; *Statistical News Release*, PO210, 23 September 2003.
Notes: The PSLSD and OHS unemployment rates are not strictly comparable due to differences in survey design. For example, the OHS asked respondents if they had looked for work in the past month (rather than in the preceding fortnight), and defined as broadly unemployed those who had not searched for work, but who would accept a 'suitable' job (rather than asking about why they had not searched for work). This probably accounts for the smaller rates of unemployment found in the PSLSD survey compared to the OHS in the early 1990s. The LFS figures are all for February. Note that the OHS figures for 1996 and 1997 have been re-weighted to adjust for the lack of inclusion of mining hostels in the sample. The figures for OHS 1998 and 1999 include mining hostels in the sample.

Despite some differences in survey and sampling design, post-1993 surveys showed a remarkably consistent pattern: unemployment was higher for Africans than other population groups; higher for women than men; and higher in rural than urban areas. These patterns hold irrespective of whether unemployment was measured in strict or expanded ways. Table 11 shows how rural African women were the most disadvantaged with respect to access to the labour market: 40 percent of them wanted work and were actively seeking work, and a further 20 percent wanted work but had given up actively seeking it. Unemployment rates were particularly high in the old 'homeland' areas (Dinkelman and Piroux, 2002: 879), illustrating one of the more pernicious legacies of apartheid.

The rise in unemployment contributed greatly to widening inequality in South Africa. In South Africa, where there was no subsistence agricultural sector to fall back on, unemployment was closely associated with poverty.

Unemployment rates were closely – and inversely – related to income in South Africa, being lowest in the rich deciles and highest in the poor deciles (Seekings 2000). According to research by Meth and Dias (2003: 7-9) using expenditure data from the 1999 OHS and the September 2002 LFS, the number of people in poverty rose by between 3.7 and 4.2 million, and this was closely connected to the rise in the number of unemployed (about 2 million) over the same period.

Table 11. Unemployment Rates (%) by Urban/Rural Location and Gender, 1999

	Urban		*Non-urban*		*Total*		
	Male	*Female*	*Male*	*Female*	*Male*	*Female*	*All*
Official (strict) unemployment							
African	24,1	35,0	25,2	34,9	24,5	35,0	29,2
Total population	18,4	25,8	22,7	32,3	19,8	27,8	23,3
Expanded unemployment							
African	33,7	48,9	40,8	55,7	36,7	51,9	44,0
Total population	26,2	37,9	37,4	52,7	30,0	43,2	36,2

Source: OHS, Stats SA *Statistical News Release* P0317, 31 July 2000.

During the late 1990s, there was a debate about the extent and measure of unemployment in South Africa (see Nattrass, 2000a). The most substantive of these criticisms came from Standing *et al.* (1996) who argued that sampling and other measurement problems resulted in an over-estimation of unemployment. But Klasen and Woolard (1999) found that adjusting the data to take these problems into account had an insignificant impact on measured unemployment.

A related debate concerned the size of South Africa's 'informal' sector. Might South Africa's unemployment rate be over-estimated because people working in the informal sector do not classify themselves as doing a 'real job' and hence report themselves as 'unemployed' to survey researchers? The problem with this suggestion is that labour force statisticians classify people as 'employed' if they report conducting *any* income-earning activities, irrespective of whether the respondent self-reports him or herself as unemployed. They make careful use of selection procedures and 'hurdle' questions to allocate people a labour force status (Bhorat, 1999). A person working in the informal sector would have to

lie about all sources of labour-income to be classified as unemployed. Schlemmer and Worthington (1996a, 1996b) and Schlemmer and Levitz (1998) adopted precisely such an argument, saying that differences between the personal income and expenditure of unemployed people probably represented undeclared informal earnings. Klasen and Woolard (1999) questioned the empirical basis of this claim, in part because it is difficult to draw distinctions between household and individual expenditure. Furthermore, the fact that income and expenditure figures from the 1995 IES correlated very well did not support the proposition that there were large amounts of unreported income emanating from unregistered micro enterprises (*ibid*: 6).

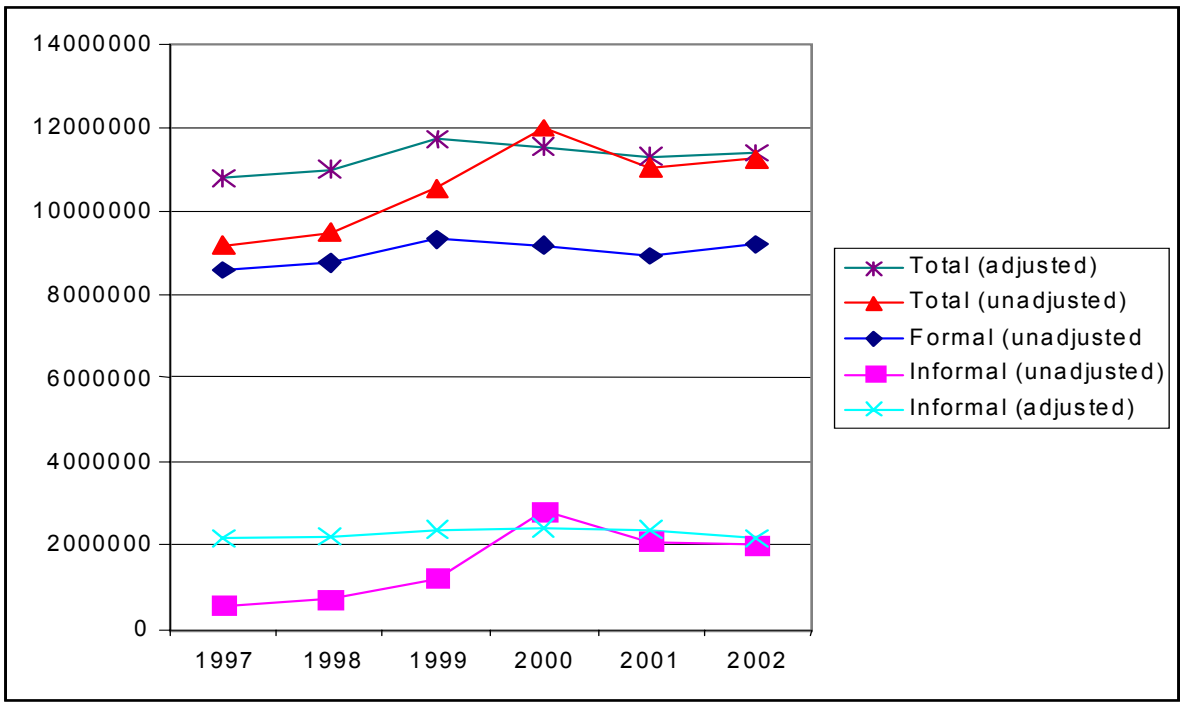
3.2 The Informal Sector

The informal sector is certainly, and notoriously, hard to measure. The operating definition of the informal sector used by Stats SA in the LFS is that the business is not registered as a company or for paying Value-Added Tax (VAT). Anyone who reported informal activity in the past week (if only for an hour) was classified as being in the informal sector. Workers who reported that they were working for an informal sector firm were also counted as being in the informal sector. This results in at least two sources of 'noise' in the data that may account in part for the highly fluctuating measurement of informal activity in the LFS. The first is that those people working irregularly in the informal sector may or may not get recorded as informally employed; it all depends on what they did in the past week. If a high proportion of informally employed people only work for a few hours a week, then this kind of noise is likely. In a 2000 survey in Cape Town (in Khayelitsha and Mitchell's Plain), 21 percent of those reporting self employment worked for ten or less hours a week. The second source of noise arises from uncertainty among workers with regard to the status (formal or informal) of the firms for which they work.

According to the *October Household Surveys*, informal employment rose from 581,639 in 1997 to 743,179 in 1998 and to 1,207,366 in 1999. In 2000, according to the *Labour Force Survey*, it rose to over 2 million (Simkins, 2003: 6). Simkins argues that this 'growth' was implausible and was probably the result of the OHS and the LFS getting better at measuring the informal sector (*ibid*). He accordingly adjusts the estimates for informal sector employment upwards in earlier years. This results in an increase in estimated total employment (i.e. formal plus informal) in all years between 1997 and 2002 (except for 2000) (see Figure 3). What is potentially problematic about this, however, is that the 2001 LFS estimate for the informal sector is over twice that

estimated in the 2001 census (*ibid*). Simkins assumes that the LFS covers the informal sector better than the census, but whether this can account for a difference of this order of magnitude remains an open question.

South Africa is unusual in that it is a middle-income developing country with high unemployment and a relatively small informal sector. In Latin American countries, workers who lose their jobs (or cannot find work) in the formal sector tend to find work in the informal sector (meaning in less secure, poorly regulated and low paying jobs). In South Africa, those who lose formal sector jobs seem to end up in unemployment rather than the informal sector. Simkins (2003) ran paired probit regressions to see what characteristics would predict whether people were more likely to be actively searching for jobs (as opposed to being unemployed and not searching) or informally employed (as opposed to being unemployed and actively searching). He found that Africans were less likely to be informally employed than searching for work, and that women and rural people were more likely to be informally employed. Increasing education also made participation in the informal sector less likely (*Ibid*: 13). This is unsurprising given that those who did end up in the informal sector, tended to earn very low incomes.



Source: Simkins (2003).

Figure 3. Estimates of Formal, Informal and Total Employment, 1997-2002

This was confirmed by a survey conducted by Stats SA in March 2002 of businesses in South Africa that were not registered for the payment of VAT (Stats SA, 2002). The sample was based on a sub-sample of the LFS. Most (69 percent) of the enterprises were in wholesale or retail, most (76 percent) did not add value through production (i.e. did not use raw materials) and fewer than 10 percent were in manufacturing. About a third operated without electricity and about a third were without a toilet on site. Only 15 percent employed anyone, i.e. this sector comprises overwhelmingly one-person trading or hawking 'businesses'. Average turnover was about R1150 per month, and average profit almost R800 per month, i.e. barely more than the government old-age pension. In another survey, in Khayelitsha and Mitchell's Plain (in Cape Town) in 2000, average monthly profit for the self-employed was R580.

It was sometimes suggested that surveys were not capturing the full extent of the informal sector in South Africa. This claim became less and less credible as more and more household surveys looked for but do not find much evidence of a massive informal sector. Surveys such as the 2000 Khayelitsha / Mitchell's Plain survey probed possible informal sector exhaustively, and failed to reveal widespread activity.

The obvious question is 'why wasn't (and isn't) South Africa's informal sector larger?' Put another way, what constrained prospective entrepreneurs from starting informal businesses, and what inhibited the accumulation of capital? One prime suspect was South Africa's labour market regulations. In a study of 'small, medium and micro enterprises' (SMMEs), Berry *et al*. (2002) documented many of the grievances that small entrepreneurs had with labour regulations, particularly with regard to wage-setting and the costs of retrenchments. Anecdotal evidence suggests that social obligations (including the cost of funerals) and crime often wiped out working capital. Perhaps, also, there was a lack of an entrepreneurial culture and experience, which South Africa's public education system did little to redress. As Berry *et al*. concluded, however, 'we are very far from having sufficient knowledge' of the factors affecting SMME growth (*ibid*: 57).

4. Short-Term Flux in Incomes

The data-sets used above to assess how income distribution changed after the end of apartheid were all cross-sectional. Successive cross-sectional surveys (and censuses) can be compared over time if they have similar samples (or similar

coverage, in the cases of censuses) and ask similar questions. Panel studies provide a different perspective on changes over time, and have a different set of methodological weaknesses. In a panel study, the same 'panel' of respondents is re-interviewed over a period of time. This means that changes over time can be linked to specific characteristics. For example, is poverty generally transitory or chronic, i.e. do people drop in and out of poverty as incomes fall and rise or are they generally stuck in poverty for long periods of time? And, crucially in post-apartheid South Africa, were the changing opportunities for getting rich distributed widely or were they limited to people who were already relatively better off? Panel studies have two major drawbacks. First, the final sample is, at best, representative of the population at the time when the panel study was started, and does not easily allow for births, deaths and related demographic changes. Second, attrition (through the failure to re-interview members of the panel) may render the final sample even less representative.

The first major panel data-set in South Africa that is relevant to the study of income dynamics was the PSLSD/KIDS data-set from KwaZulu-Natal. African and Indian households interviewed in 1993 for the PSLSD were re-interviewed in 1998 by KIDS. The PSLSD/KIDS data have several major limitations, for our purposes. First, the PSLSD/KIDS panel was not designed as a panel study in that the PSLSD was not intended to be the first wave of a panel. Furthermore, the primary purpose of the 1998 KIDS study was to distinguish between chronic and transitory poverty (May and Roberts, 2001), not to probe issues of general opportunity and mobility directly. The consequence of this is that neither the 1993 nor 1998 surveys asked many of the questions required for a thorough study of opportunities and mobility. Secondly, data on income, employment status and so on were collected at just two points in time, five years apart. This interval is both short – in that we can only analyse short-term income dynamics, i.e. dynamics over a fraction of a generation – and too long, in that the data tells us nothing about changes in between these two points in time. There were, unfortunately, no questions in the 1998 survey on employment history during the previous five years. Someone who was employed in both 1993 and 1998 might have been unemployed for most of the intervening period. Thirdly, there are a number of aspects of the sample that require caution in interpreting the results.[3]

[3] With regard to tracking reduced attrition, data on household members was generally provided by a single respondent in each survey, with the possibility that different members answered in 1993 and 1998 respectively. The datasets also had to be pared down to exclude some unreliable fieldwork.

Nonetheless, the PSLSD/KIDS data do indicate clearly the importance of panel studies as opposed to series of cross-sectional studies. When analysed as two cross-sectional surveys, the 1993 and 1998 data suggest that the average real earnings of workers in formal employment rose by 30 percent, i.e. that formally employed workers 'got ahead'. But analysed as a panel data set, a somewhat different picture emerges: the workers in formal employment in 1993 actually experienced, on average, a decline in real wages of 8 percent. The difference was because some of the 1993 workers were no longer in formal employment in 1998, and thus suffered huge declines in earnings. For the workers in formal employment in 1993 who were in formal employment in 1998, real wages did indeed rise, by 20 percent. Conversely, some of the 1998 workers had been unemployed or in informal employment five years previously, and thus experienced big increases in earnings. Cichello *et al.* (2001) conclude that there was significant 'churning' in the labour market, as people's labour market status changed.

Income mobility needs to be analysed in terms of each of household incomes not just individual earnings. Table 12 presents a transition matrix for household incomes, showing the destination quintiles in 1998 of households according to their original quintiles from 1993 (see Leibbrandt and Woolard, 2001). The table shows that 37 percent of households in the poorest income quintile in 1993 were still in the poorest income quintile in 1998, whilst 26 percent had moved up into the second quintile (and so on). A total of three out of eight African households were in the same income quintile in each survey (see the shaded cells on the diagonal in Table 12). Another three out of eight households moved into an adjacent income quintile, for example from the first to the second quintile. One in four households moved into non-adjacent quintiles, for example from the first to the third quintile. Most movement occurred in the middle of the distribution, with much less movement out of the bottom and (especially) top quintiles. Almost two-thirds of the households in the top quintile in 1993 were in the top quintile again in 1998 (and most of the new entrants to the top quintile came from the fourth quintile); put another way, one-third of the households in the top quintile in 1993 had dropped down into lower quintiles by 1997. More than two-thirds of the households in the bottom quintile in 1998 had been in one or other of the bottom two quintiles in 1993. Similar work has been done using expenditure data (see Maluccio *et al.,* 2000; Roberts, 2001 cited in Aliber, 2003).

Table 12: Income quintiles transition matrix, 1993 and 1998, African adults in KwaZulu-Natal

			1998 income quintiles					
			1	2	3	4	5	Total
			%	%	%	%	%	%
1993 income quintiles	1	%	37	26	17	15	5	100
	2	%	32	28	23	11	6	100
	3	%	18	24	29	21	9	100
	4	%	9	20	23	31	18	100
	5	%	4	3	9	22	63	100
	Total	%	100	100	100	100	100	100

Source: Leibbrandt and Woolard (2001): Table 6.

This flux was in part due to changes in individuals' earnings (Cichello *et al*., 2001). Among working people, the individuals who suffered the biggest drop in earnings were those with the highest earnings to begin with, whilst the individuals who gained the most were those with no or low earnings in 1993. This is because the dominant factor behind rising and falling earnings was a change in an individual's labour market status. Only 62 percent of the individuals in regular employment (or what they call 'formal' employment) in 1993 were in regular employment in 1998. About 18 percent were in casual employment or informal sector work, about 15 percent were unemployed and 6 percent were not available for work. The shift from regular employment to non-employment (whether unemployed or not available for work) was, of course, catastrophic in terms of earnings. The mean monthly earnings change among workers who were in regular employment on both dates was a gain of R189 (in 1993 prices), somewhat better than the mean for the sample as a whole of R139. But the mean for workers who changed from 'formal' to 'informal' employment was a loss of R152 per month, and the mean for workers who changed from 'formal' employment to no employment at all was a loss of R797 per month. Viewed from the other end of the labour market, one in five individuals who had been unemployed in 1993 was in regular employment in 1998. Their mean monthly earnings rose by a massive R1278. Slightly fewer had moved into 'informal' employment (with much more modest earnings gains) whilst most remained unemployed (46 percent) or were no longer available for work (17 percent), and hence experienced no change in their earnings.

The overall picture is perhaps most easily grasped by comparing the fortunes of two groups of earners. The first group comprised the approximately 30 percent of working-age African men and women who had the same labour market status in 1993 and 1998. They accounted for very little of the changes in earnings. The second group comprised the 23 percent of the sample who either moved into or out of 'formal' employment. They accounted for the lion's share, probably about two-thirds, of the total change in earnings. It is likely that a high proportion of the individuals who moved out of 'formal' employment did so as a result of involuntary retrenchment. In a situation of very high unemployment, workers who are retrenched probably have advantages over the longer-term unemployed in terms of finding new employment. But having better chances of re-employment does not mean that the chances are good. The result is that turnover in employment results in huge shifts in individual earnings.

Changes in household incomes can be divided into changes due to 'income events', i.e. changes in the household's money income, and changes due to 'demographic events', i.e. changes in the size or composition of the household (see Leibbrandt and Woolard, 2001). Income events accounted for about three-quarters of the movements into or out of poverty (defined in terms of adult equivalent income), with demographic events accounting for the remaining quarter. The key income events were changes in the earnings from work of the household head or other household members. Unsurprisingly, job losses and the acquisition of additional unemployed dependents both correlated with dropping behind. In sum, the PSLSD/KIDS data suggest that there was considerable income mobility in post-apartheid South Africa, due primarily to flux or 'churning' in the labour market as workers lost jobs and unemployed people (or people working in the informal sector) secured employment.

5. Lifetime Patterns in Income Distribution

Flux in the labour market meant, in the context of high unemployment rates, that there was flux in patterns of income distribution. But was this flux spread evenly across different sections of the population? What was the relationship between short-term flux and lifetime earnings and hence household incomes across the long-term? Were the currently poor (at any moment) more vulnerable to flux so that there was a correlation between current poverty and lifetime poverty, or was there so much flux across the board that lifetime earnings and household incomes in the long-term tended to even out?

Long-run panel data (such as the *Panel Study for Income Dynamics* in the USA) can address these questions. In the absence of any similar data in South Africa, we have to resort to retrospective questions about employment histories. The 2000 *Khayelitsha and Mitchell's Plain Survey* (KMPS) asked retrospective questions about employment history as well as family background. The survey was conducted in parts of Cape Town with neither large 'middle class' or farm-worker populations, but with a high unemployment rate (46 percent by the broad definition, 29 percent by the narrow or strict definition; see Nattrass, 2003: 77). All of the adults in the KMPS sample, including the unemployed and people not presently participating in the labour force, were asked questions about what proportion of their weekdays since leaving school they had spent on a number of activities, including 'working as a regular wage earner', 'working as a casual worker', 'self-employed', 'working in the family business or farm', 'looking for work', 'domestic duties / child care', 'post school education and training' and 'other' (in which case, respondents were asked what was this 'other').

Tables 13 and 14 show that there were marked differences by occupational class (albeit using crude occupational classifications). Workers in 'higher' occupations (i.e. managerial, professional, technical and clerical occupations) spent a higher proportion of their lives in regular employment than those in 'intermediate' occupations (service and sales workers, craftsmen and machinists) who in turn spent a higher proportion of their lives in regular employment than workers in 'elementary' (i.e. unskilled) occupations. The proportions of time spent looking for work showed an inverse relationship. Thus, 62 percent of the workers currently in higher occupations had spent 'almost all of the time' in regular employment, and 61 percent had spent 'none of the time' looking for work, compared to 39 percent and 45 percent of workers in elementary occupations. In short, the extent of 'churning' in the work history of people seemed to be closely and inversely related to their occupational class. Given the close relationship between race and class (in Cape Town), these differences were reflected also in different patterns in the work histories of coloured and African workers.

The final columns of Tables 13 and 14 extend this analysis to consider African adults who were currently unemployed. The employment histories of the currently unemployed were quite distinct, exhibiting chronic disadvantage compared even with workers in elementary occupations. Almost half (45 percent) of the African adults currently in wage employment said that they had worked as a regular wage worker for almost all of their lives, with another 22 percent saying that they had done so for more than half of their lives. The corresponding figures for the

currently unemployed were just 8 percent and 10 percent. The comparable figures for African adults currently in casual employment were similar to those who were unemployed.

Table 13: Time spent working as a regular wage worker since leaving school, by current occupation or employment status, Cape Town, 2000

Proportion of time	*Currently in regular employment*			*Currently unemployed (African adults only)*
	Higher occu-pations	*Medium occu-pations*	*Elementary occu-pations*	
	%	%	%	%
Almost all of the time	62	50	39	8
Most of the time (i.e. over half of the time)	21	25	25	10
About half of the time	5	8	12	9
Some of the time (i.e. less than half of the time)	7	11	14	15
None of the time	6	5	9	57
Total	100	100	100	100

Note: Higher occupations defined here as Standard Occupational Classifications (SOC) codes1000-5000; medium occupations are codes 5000-9000 excepting 5169 (security guards); elementary occupations are codes 9000-10000 plus 5169. Some respondents currently categorised as being in regular employment might say they had spent 'none of the time' in regular wage employment because respondents are given labour market positions on the basis of their answers to a set of questions; many working people do not regard their work as 'proper work' or do not see themselves as having 'proper jobs'.
Source: 2000 KMP (Khayelitsha Mitchell's Plain) survey.

Some of these differences might be related to age. African adults currently in wage employment had a very different age profile to self-employed African adults, for example. Analysis of employment histories by age cohort shows that each generation of African adults in Cape Town experienced a high level of 'churning', but there remained marked differences within each age cohort between adults currently in wage employment and those who were currently unemployed. The currently unemployed of all ages report higher levels of lifetime vulnerability.

Table 14: Time spent looking for work since leaving school, by current occupation or employment status, Cape Town, 2000

Proportion of time	*Currently in regular employment*			*Currently unemployed (African adults only)*
	Higher occup-ations	*Medium occup-ations*	*Elementary occup-ations*	
	%	*%*	*%*	*%*
Almost all of the time	5	8	12	31
Most of the time (i.e. over half of the time)	6	6	11	18
About half of the time	5	8	10	11
Some of the time (i.e. less than half of the time)	23	24	23	17
None of the time	61	55	45	24
Total	100	100	100	100

Note: See Table 13 notes.
Source: 2000 KMP (Khayelitsha Mitchell's Plain) survey.

The spectrum of vulnerability to unemployment thus seemed to run from people in the higher occupations at one end, through skilled and semi-skilled workers, to unskilled workers in the middle, then on to casual workers and the unemployed at the other end. Some corroboration for this came from KMPS data on the duration of unemployment (to date, for the unemployed, or prior to current job for the currently employed). Table 15 shows that the duration of unemployment was related to occupation and labour market status. Currently unemployed African adults had been unemployed for, on average, nearly 33 months. The most recent period of unemployment for people currently working in elementary occupations had been 11.5 months, on average, and the equivalent duration of unemployment spells for adults in intermediate and higher occupations was shorter still.

Table 15: Duration of unemployment, Cape Town, 2000

Current labour market status	*Mean duration of unemployment (prior to current job, if working) (months)*
In higher occupations	5.6
In intermediate occupations	9.8
In elementary occupations	11.5
Unemployed (African only)	32.8

Source: 2000 KMP (Khayelitsha Mitchell's Plain) survey.

The KMPS data suggested that there were real class differences within the coloured and African population in Cape Town, at the same time as some 'churning' or flux in terms of earnings and incomes. What is striking is not only that some people 'got ahead' but also that others clearly 'fell behind', dropping into a lifetime of intermittent unemployment and sporadic casual employment or, if they were lucky, occasional spells of regular wage employment in an unskilled occupation.

6. Inter-Generational Mobility and the Reproduction of Inequality

Data from the PSLSD/KIDS panel and from the retrospective questions in KMPS suggest that during the 1990s there was a high level of flux in income due to movements in and out of employment but that this flux was uneven across people's working lives, with higher levels of flux among the poor than among the better off. Disadvantage persisted across lifetimes. Was it also reproduced between generations? Were the children of poor parents destined to remain poor themselves? Or was there a high rate of inter-generational mobility, with the children of poor parents becoming rich and, perhaps, the children of rich parents becoming poor?

In the later apartheid period, there were high absolute rates of mobility, as white, coloured, Indian and finally African people advanced up the occupational hierarchy. For white South Africans, there were also high relative mobility rates, as racially discriminatory policies reserved high-paying occupations for them whilst racially discriminatory and massive public investment in education meant that they secured preferential skills. For African people, absolute rates of mobility were high but relative rates were clearly low: their opportunities to benefit from a changing economy were restricted by racial discrimination and educational disadvantage. Within the African population, however, some groups were better placed than others to take advantage of new opportunities. As Schneier (1983) found, urban 'insiders' were better placed than migrant 'outsiders'. If the most advantaged section of the black population were the urban 'insiders' (with Section 10(1)(a) through (c) residential rights under the pass laws), then the most disadvantaged section were the families of farm-workers evicted off white-owned farms in the 1970s and dumped in remote bantustan settlements at a time of high

unemployment; resettled without any access to agricultural land, and lacking education, non-agricultural skills, access to schools or contacts in urban areas, they – and their children – were sentenced to enduring poverty. By the mid-1990s, the African population can be divided into discrete classes, including an 'underclass' of households doubly disadvantaged in that they had neither any employed members nor the social capital necessary to secure employment (Seekings, 2003b).

Unfortunately, there is little quantitative evidence on inter-generational mobility at the end of apartheid. Education is the only aspect of this topic for which there is any data. By the 1990s, education serves as a key mechanism by which inequality was transmitted or reproduced across generations. We have data on, first, the importance of education in determining earnings and hence household incomes. This data typically comes from retrospective questions about the highest grade attained by working people together with questions on their current earnings. Education is a major determinant of earnings (see further Moll, 2000; Lam, 1999; Case and Deaton, 1999; Schultz and Mwabu, 1998; Anderson *et al*., 2001; Bhorat *et al*., 2001; Keswell and Poswell, 2002). Secondly, we have some data on the relationship between family background and a child's educational progress. Lam (1999) and Anderson *et al*. (2001: 46-7) use 1995 OHS data to show that children's schooling (measured in terms of grade attainment at specific ages) rises with mothers' and fathers' education. Children living with both parents also perform better than children living with one or neither parent (Anderson *et al*., 2001: 49-50). The combination of high returns to education with a wide dispersion in schooling explains a very large part of South Africa's very high level of inequality in the distribution of income (Lam, 1999).

Most surveys only provide this data on education for co-residential generations, which means that it is generally limited to adolescents and their parents. Unusually, the 1998 KIDS survey of African households in KwaZulu-Natal also collected data on the educational achievement of *absent* parents, allowing analysis of inter-generational correlations for older generations. Burns (2000) uses these data to demonstrate a clear correlation between the educational attainment of household members and the education of their parents (see also Hertz, 2001). Nimubona and Vencatachellum (2003) show that the correlation between successive generations' education is strongest amongst poor households, i.e. that educational *dis*-advantage is reproduced between generations especially strongly.

The relationship between family background and children's education can be demonstrated using class categories (see Seekings, 2003a). In 1993, fifteen year-old children in upper-class, semi-professional and intermediate class households had, on average, completed grade 7, whereas children of the same age in core working-class households had, on average, completed grade 6 only, whilst children in marginal working-class households had only completed grade 5. By the age of nineteen, differences had widened, with class making a difference of up to three grades. Given the importance of education in determining earnings, children from marginal working class backgrounds are much more likely to end up in marginal working-class occupations, and children from upper-class backgrounds are much more likely to end up in upper-class occupations. Inequality thus tends to be reproduced over time. Whilst the relationship between class and schooling is not dissimilar to the relationship between race and schooling as shown in other studies (e.g. Case and Deaton, 1999; Lam, 1999), there are also marked differences in schooling by class *within* racial groups (see Seekings, 2003a).

The reasons why inequality is reproduced through education are not difficult to identify. Under apartheid, resources were allocated unequally to schools attended by poor and rich children (see Van der Berg, 2001, 2002). Pupil-teacher ratios varied (although how important this is, remains unclear – see Case and Deaton, 1999), and the quality of teachers probably varied (see Lemon and Stevens, 1999: 223, 229). This must have some enduring effect. In schools in poor areas there might be no 'culture of learning'. Poor parents spend less than richer parents on their children's education (Case and Deaton, 1999), especially perhaps at the pre-school level. They provide a less conducive home environment, and probably are also less motivated. Within racial groups, educational achievement is also related to parental (especially mother's) schooling, with the children of well-educated parents completing more grades than those with less-educated parents (Anderson *et al.*, 2001). All of these factors were recognised by the post-apartheid Department of Education (RSA, 2000).

Children enter the labour market with very different amounts of human capital, reflecting both the time they spent in school and, no doubt, the quality of that schooling, as well as the home environment. In the past, poor children often left school early because of poverty: their parents could not afford to pay fees or buy uniforms, or children were required to find employment to supplement household income. (Incentives to leave school declined in the 1990s amidst very high levels of unemployment and reformed state policy on fees). Table 16 shows the mean grade attainment of adults in each occupational or labour market category, using KMPS data for Cape Town, as well as the mean grade attainment of key adults in

the households in which they were children and of non-resident fathers (i.e. fathers who were not resident in the household where the respondent had spent his or her childhood).

Table 16: Education and vulnerability, Cape Town, 2000

Current labour market status	*Human capital: Mean highest school grade attained*	*Mean highest school grade attained by head of household during childhood*	*Mean highest school grade attained by head of household's partner during childhood*	*Mean highest school grade attained by father if not resident in the household during childhood*
Higher occupations	10.6	7.4	7.1	7.0
Intermediate occupations	8.8	5.6	5.8	6.7
Elementary occupations	8.3	4.7	5.0	4.6
In casual employment	7.8	4.0	4.3	4.9
Unemployed (coloured)	8.6	6.6	6.3	n/a
Unemployed (African)	8.7 [8.3-9.0]	4.5 [4.0-4.8]	5.0 [4.3-5.5]	5.4 [4.6-5.5]

Notes: The figures in square brackets in the final row give the range of means for the different types of unemployed defined by Nattrass (2003): the higher figures are for active searching unemployed, the lowest for passive unemployed, with network-searchers in between; the exception is the final column where these sub-categories of the unemployed do not line up in the expected direction. It is important to note that the final column is almost entirely African.

Social capital is also important in securing employment (see also Seekings, 2003b). It might well be the case that people with identical educational qualifications have different prospects in the labour market because of the different information, attitudes and networks that they inherited or acquired through their contrasting social backgrounds. Employers fill vacancies primarily through word-of-mouth via their existing workforce. Almost two-thirds of the KMPS sample got their first job through either friends or family, and almost as high a proportion got their current or most recent jobs the same way. South Africa is not alone in this, of course (see Granovetter, 1974, on the USA), but these tendencies may be more pronounced in South Africa. It appears that the bureaucratic allocation of black labour under apartheid (with advantage corresponding to pass law status) was replaced, by the

end of the twentieth century, by a market allocation according to skill and social capital.

7. AIDS and Inequality

Studies of distribution often pay insufficient attention to demographic changes. Under apartheid, population growth had important consequences for processes of social and economic change, including deagrarianisation. After apartheid, the major demographic factor affecting inequality was the mortality and morbidity resulting from the AIDS pandemic. As of 2003, an estimated 11 to 14 percent of all South Africans were HIV-positive. This was (and is) a socio-economic crisis of major proportions. AIDS reduced the economic security of households by reducing the productivity of (and eventually killing) income-earners whilst simultaneously diverting scarce household resources towards medical expenditure (Nattrass, 2004). Women are especially hard-hit because they carry the burden of the disease and yet are expected to care for other, HIV positive members of the household (Walker and Gilbert, 2002: 82).

There is a growing body of South African research which indicates that the impact of AIDS has been devastating at the household level (e.g. Cross, 2001; Desmond *et al.*, 2000; Steinberg *et al.*, 2002; Booysen, 2002). In most of Sub-Saharan Africa, where agriculture accounts for a significant portion of employment and output, there is evidence that HIV/AIDS is having an especially detrimental impact on rural households engaged in peasant agriculture and hence on food security (IFAD, 2001; de Waal and Tumushabe, 2003). By contrast, South Africa's experience of de-agrarianisation and the destruction of peasant agriculture under apartheid resulted in a situation where most food is produced by large, capital-intensive commercial farms. The impact of AIDS on the economic security of poor households in South Africa is thus felt primarily through declining employment and earnings rather than declining food production.

Survey data from the Free State province indicates that AIDS-affected households are in a particularly vulnerable position as they have higher rates of unemployment and are more dependent on non-employment income like pensions (Booysen, 2002). This suggests that one or more of the following is the case:

- people living in households with limited (if any) access to wage employment are more vulnerable to HIV/AIDS infection;
- AIDS-affected households have experienced disproportional employment losses because of AIDS; and
- people living with AIDS migrate to households with pensioners in order to be taken care of.

What does this mean for overall inequality? All else being equal, households which lose a breadwinner through AIDS will fall further down the income distribution. If the job is taken by a previously unemployed person, then that new employee's household will move up the income distribution. The overall Gini coefficient will thus remain broadly unchanged. But if firms react to AIDS by shedding employment, then the number of households without any breadwinner will rise, thus worsening the Gini coefficient. If average wages rise at the same time (perhaps in response to increased pressure from workers to compensate them for the burden of higher medical insurance and health expenditure, or perhaps because the average worker is becoming more skilled as firms get rid of unskilled workers first) then inequality will worsen further.

Any discussion of the impact of AIDS on distribution requires information about the size of the pie (the GDP) and the number of people in need of a slice (the population). Different macro-economic models come up with different predictions about the impact of AIDS on economic growth (Nattrass, 2004). All predict that AIDS will slow growth but some predict a greater impact than others.

If the population falls faster than income, then *per capita* income will rise. While this is theoretically possible, it is not common. Econometric research indicates that AIDS has either had an insignificant impact on the growth of *per capita* income in developing countries (Bloom and Mahal, 1997) or has reduced it (Bonnel, 2000). Bonnel's results indicate that 'in the case of a typical sub-Saharan country with a prevalence rate of 20 percent, the growth rate of *per capita* income would be reduced by 1.2 percentage points a year because of AIDS (*ibid*: 846). Most studies show a decline in *per capita* income as a result of the AIDS pandemic (see Barnett and Whiteside, 2002: 286-7). But whether absolute *per capita* income is higher or lower as a result of AIDS in any particular country is ultimately an empirical question. Two of the three major South African models predict a rise in *per capita* income, whereas the third predicts a fall (see Nattrass, 2004). However, such results have to be treated with great caution because the results of the modelling work are highly

contingent on the underlying theoretical assumptions, data, and parameter estimates and guess-timates.

According to De Waal, AIDS is likely to increase inequality in Africa as, for example, some commercial farmers are able to buy up land cheaply from families stricken by AIDS, and to employ unskilled labour at low rates (De Waal, 2003: 11). This is unlikely to be significant in South Africa, where there is little peasant or subsistence agriculture and it is access to jobs rather than to land that drives inequality. In South Africa, the impact of AIDS on inequality is mediated in large part by how government and private firms react to the AIDS pandemic by changing the level and type of employment, and the benefits available.

If firms react by continuing to decrease their reliance on unskilled labour (a trend that started before the AIDS pandemic) and by moving out of economic sectors whose customer-base comprises lower-income consumers, then poor households will find themselves doubly disadvantaged. Not only will their access to the labour market become ever more tenuous, but the products that they purchase may become scarcer (and more costly). Conversely, relatively skilled workers could benefit from greater employment opportunities (as production becomes more skill- and capital-intensive) and higher wages (as the relative demand for skilled labour increases). They will probably also live longer and more productive lives as firms provide them with greater access to antiretroviral treatment. They will probably also be the first in line to receive antiretroviral treatment from government hospitals as the treatment roll-out is likely to start in urban hospitals in major industrial areas. As the cost of antiretrovirals decreases, more and more firms are likely to help extend the lives of their HIV-positive employees by providing them with access to life-prolonging medication. The size of the pie may shrink as a result of AIDS, but employed (especially skilled) workers will enjoy a growing share.

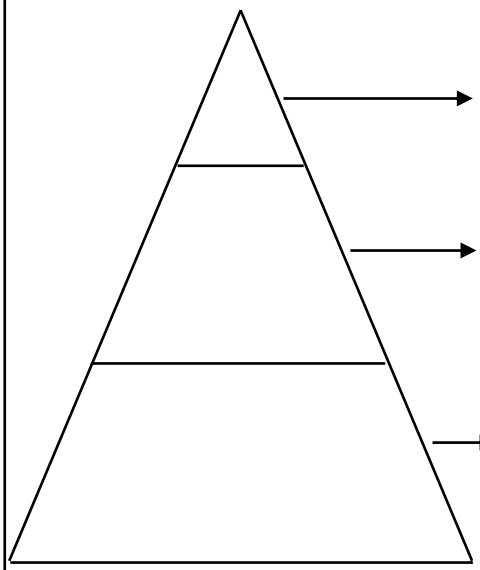
South Africa is increasingly divided along class lines with the gap between the employed and unemployed being of major importance. The horrifying element that AIDS brings to the picture is that the divide will mean the difference between life and death for many people (Nattrass, 2004). Those without access to jobs (especially good jobs) are bearing and will continue to bear the brunt of the AIDS pandemic. Whether inequality is lower or higher twenty years from now is a moot point. But over the next couple of decades, inequality will probably rise as AIDS lowers growth and slices its way through the poor and disadvantaged in South Africa.

8. Conclusion

This analysis of post-apartheid trends in income distribution is bedevilled by the highly uneven quality of available data. But it seems clear that improved opportunities for some did not mean improved opportunities for all. Many households, especially African, coloured and Indian households, 'got ahead', enjoying upward mobility into high-earning occupations. Workers in formal employment generally benefited from rising real wages. But there was considerable flux in incomes, as some workers lost jobs, plunging their households into poverty, whilst some unemployed people found employment, improving greatly household welfare. Overall, inequality widened because of the deepening unemployment crisis. Moreover, rapidly changing patterns of mortality and morbidity due to AIDS meant many already poor households were pushed deeper into poverty, and many poor people experienced poor health and died young. People from disadvantaged backgrounds were more vulnerable to the 'shocks' of unemployment and ill-health, and poorly placed to take advantage of the opportunities that were opening at the top end of the income distribution.

South African society might be viewed in terms of a game of 'snakes' and 'ladders'. The 'ladders' are the jobs that people find, whilst the 'snakes' are retrenchment, morbidity and mortality of household members. There are a lot of snakes and ladders, but they are not distributed randomly. At the bottom end of society there are few ladders. Lacking social and human capital, and being more vulnerable to AIDS-related illness, households at the bottom face few ladders, i.e. few opportunities for upward mobility. The further up the board one proceeds, the more ladders there are: opportunities favour the already advantaged. En route, there are many snakes, but the incidence of snakes declines just as the incidence of ladders rises, as one proceeds up the board.

Seekings (2003b) derived a figure representing the major lines of stratification in South African society. This is reproduced in Figure 4. After apartheid, the top cluster of classes had become more multi-racial, with upward mobility into the top clusters by African as well as coloured and Indian households. There are, therefore, ladders from the middle cluster of classes into the top cluster. At the bottom end, there are some snakes running down from the middle to the bottom cluster, but few ladders leading up in the opposite direction, from the bottom into the middle clusters. Children from households in the top cluster of classes generally start the game of snakes and ladders near the top, whilst most children from households in the bottom cluster start right at the bottom. Children from households in the middle cluster of classes tend to enter the game half way up.



Class	Probable trend
Upper class	deracialising and better off
Semi-prof. class	)
Intermediate class	) shrinking, but
Core working class	) better off
Petty traders	)
Marginal working class	) growing, and mostly
Underclass/other	) worse off

Source: Adapted from Seekings (2003b: 2).

Figure 4. Stratification after apartheid

Local studies allow us to describe in more detail the kinds of households at the bottom of the post-apartheid social structure. After apartheid, the poor were overwhelmingly 'rural'. Unemployment underpinned poverty, and unemployment remained especially high in the former bantustans. A core group of the rural poor were former farm-workers, removed to quasi-urban settlements in the bantustans under apartheid. One such area was the QwaQwa bantustan, on the border between the (Orange) Free State and Lesotho. In the mid-1980s, three distinct groups could be identified in QwaQwa. The richer of these comprised businessmen able to benefit from the dense population resulting from removals. The intermediate group comprised better educated and connected households in and around the town of Phutaditjaba, most of whom had been removed when entire Free State townships had been evicted. In the last years of apartheid, this group enjoyed privileged access to the manufacturing jobs available in state-subsidised enterprises in the bantustans or as commuters to the nearer 'white' towns (such as Harrismith in the case of Qwa-Qwa). These jobs were poorly-paid, but they were greatly preferable to unemployment. The mass of poorer households comprised primarily former farm-workers settled in the remoter settlements outside Phutaditjaba; in this group, unemployment was high and poverty deep (Sharp, 1994).

One reason why these former farm-workers were so poor is that they were evicted from farms, without skills, at a time when the mines were cutting back on unskilled employment and only rehiring experienced and skilled mineworkers. The former safety-net provided by unskilled employment on the mines was pulled away. These former farm-workers also lacked the connections that were so important in securing employment in manufacturing or services in the larger towns. Not only were they poor, but their children were disadvantaged by attending poor schools.

In the period 1998 to 1999, researchers revisited Qwa-Qwa. The closure of many of the formerly subsidised businesses had resulted in a rising tide of unemployment that affected everyone, including the formerly better-off households in Phutadjitaba itself. The value of remittances had also declined steadily. By the end of the 1990s, poverty was mitigated only when households had access to the meagre incomes earned in the informal sector or to old-age pensions (Slater, 2001, 2002). A survey conducted in Phutadjitaba in 1998 revealed the desperation of households in the town. Three-quarters of the unemployed said they would work for R63 per week, which was below the statutory minimum wage and about one-half the value of the old-age pension at the time (Nattrass, 2000b).

The end of apartheid meant that farm-workers evicted from farms in the 1990s and 2000s were not forced into the former bantustans. Murray examined one group of ex-farm-workers in the Free State, who had moved into a shack settlement on the edge of the nearest town. Across the Free State as a whole, the 'overwhelming majority' of the people in such shack settlements were evicted farm-workers (Murray, 2000: 122). Without local employment, such households relied on remittances from migrants or old-age pensions. A survey conducted in the rural Western Cape in 2002 revealed the extent of poverty among households that moved off farms into shack settlements around towns, generally because farms both reduced their permanent labour-force and were anxious about the liability of housing workers on the farms. Unemployment was rife, and scarce jobs were often seasonal only (Du Toit, 2003).

These kinds of households, whether in the Western Cape or the Free State, comprised the 'underclass'. At best, they rose into the 'marginal' working class, securing employment on farms, perhaps on a seasonal basis. Some – including especially the immediate family, i.e. wives and children, of migrant workers – received remittances, but the value of remittances sent to rural areas was probably declining (as rural kin with urban connections moved to town). Having a job meant that farm- and domestic workers were better off then the 'underclass', but wages were generally so low as to leave many in poverty as the working poor.

When statutory minimum wages were gazetted for these sectors in 2002-03, the state was heedful of job losses and kept the minima low, between R600 and R800 per month, depending on location.

Given the absence of opportunities in such rural areas, including in small towns, why don't these households migrate to the bigger metropolitan or industrial areas? Most local studies of the poor left behind in rural areas don't address this question. In Phutaditjaba, unemployed people interviewed in 1998 said that they remained there because they did not know anyone in the bigger towns and cities (Nattrass, 2000b). People of working age who had contacts in the opportunity-richer urban labour markets did move. Given that social – as well as human – capital were often spatially located, meaning that some 'communities' had more of each than others, some rural areas were much less vulnerable to poverty than others. A case-study of neighbouring areas on the Eastern Cape coast, in the far south of the former Transkei, illustrates this. In Dwesa (Willowvale), a history of mission education, entrepreneurial traditions and migration linkages to Cape Town under apartheid resulted, in Dwesa being better off than in Cwebe and Hobani after apartheid (in Elliotdale, just across the river from Dwesa). As Fay and Palmer write, post-apartheid differentiation had historical origins (Fay and Palmer, 2000).

References

Aliber, M. 2003. 'Chronic Poverty in South Africa: Incidence, Causes and Policies', *World Development,* 31 (3), 473-490.

Anderson, K. G., Case, A. and Lam. D. 2001. 'Causes and Consequences of Schooling Outcomes in South Africa: Evidence from Survey Data'. *Social Dynamics*, 27 (1), 37-59.

Barnett, T. and Whiteside, A. 2002. *AIDS in the Twenty-First Century*, New York: Palgrave Macmillan.

Berry, A., von Klottnitz, M., Cassim, R., Kesper, A., Rajaratnam, B. and D. Van Seventer. 2002. The Economics of Small, Medium and Micro Enterprises in South Africa. Johannesburg: Trade and Industrial Policy Strategies.

Bhorat, H. 1999. 'The October Household Survey, Unemployment and the Informal Sector: A Note'. *South African Journal of Economics,* 67 (2), 320-6.

Bhorat, H. 2003. 'The Post-Apartheid Challenge: Labour Demand Trends in the South African Labour Market, 1995-1999', *DPRU Working Paper* 03/82, Cape Town: Development Policy Research Unit, University of Cape Town.

Bhorat, H. and J. Hodge. 1999. "Decomposing Shifts in Labour Demand in South Africa", in *South African Journal of Economics*, 67 (3), 348-380.

Bhorat, H., Leibbrandt, M., Maziya, M., Van der Berg, S. and I Woolard. 2001. *Fighting Poverty: Labour Markets and Inequality in South Africa*. Cape Town: University of Cape Town Press.

Bloom, D. and Mahal. 1997. 'Does the AIDS Epidemic Threaten Economic Growth?' *Journal of Econometrics*; 77, 105-124.

Bonnel, R. 2000. 'HIV/AIDS and Economic Growth: A Global Perspective, *The South African Journal of Economics*, 65 (5), 820-855.

Booysen, F. 2002. 'Financial responses of households in the Free State Province to HIV/AIDS-related morbidity and mortality', *South African Journal of Economics*, 70 (7).

Brown, M., D. Kaplan and J.B.Meyer. 2002. 'The Brain Drain: An Outline of Skilled Emigration from South Africa', in D.McDonald and J.Crush (eds), *Destinations Unknown: Perspectives on the Brain Drain in Southern Africa*, Pretoria: Africa Institute of South Africa.

Bunting, Ian. 2002. 'Students'. In Nico Cloete, Richard Fehnel, Peter Maassen, Teboho Moja, Helene Perold and Trish Gibbon (eds), *Transformation in Higher Education: Global Pressures and Local Realities in South Africa*, Cape Town / Pretoria: Juta / Centre for Higher Education Transformation, pp.147-170.

Burns, J. 2000. 'Inheriting the Future from the Past: Intergenerational Persistence in Educational Status in South Africa', Paper presented to the Seminar on Theoretical Institutional Economics, Amherst: University of Massachusetts.

CDE (Centre for Development and Enterprise). 1995. "Post-Apartheid Population and Income Trends: A New Analysis". *CDE Research* no. 1 (September).

Case, A. and A. Deaton. 1999. 'School Inputs and Educational Outcomes in South Africa', *Quarterly Journal of Economics*, 458 (August), 1047-84.

Cichello, P. Fields, G. and M. Leibbrandt. 2001. 'Are African Workers Getting Ahead? Evidence from KwaZulu-Natal, 1993-1998', *Social Dynamics*, 27 (1): 120-39.

Cloete, N. Bunting, I. 2000. *Higher Education Transformation: Assessing performance in South Africa*, Pretoria: Centre for Higher Education Transformation.

Cooper, D. and Subotzky, G. 2001. *The Skewed Revolution: Trends in South African Higher Education, 1988-1998*. Cape Town: University of the Western Cape, Education Policy Unit.

Crankshaw, O. 1997. 'External Labour Market Flexibility: Is there Employment Flexibility in South African Industry?', paper presented at the *Workshop on*

Labour Markets and Enterprise Performance in South Africa, 30 January, Johannesburg.

Cross, C. 2001. 'Sinking deeper down: HIV/AIDS as an economic shock to rural households', *Society in Transition*, 32 (1).

De Waal, A. 2003. 'How will HIV/AIDS Transform African Governance?', *African Affairs*, no.102: 1-23.

Desmond, C., Michael, K. and Gow, J. 2000. 'The Hidden Battle: HIV/AIDS in the Household and Community', *South African Journal of International Affairs*, 7 (2).

Dinkelman, T. and F. Pirouz. 2002. Individual, Household and Regional Determinants of Labour Force Attachment in South Africa: Evidence from the 1997 October Household Survey, *South African Journal of Economics*, 70, (5), 865-891.

Du Toit. A. 2003. 'Hunger in the Valley of Fruitfulness: Globalisation 'Social Exclusion' and Chronic Poverty in Ceres, South Africa", paper presented at the Conference 'Staying Poor: Chronic Poverty and Development Policy' at the University of Manchester, April.

Edwards, L. 2001. Globalisation and the Skills Bias of Occupational Employment in South Africa, *South African Journal of Economics* 69 (1), 40-71.

Fay, D. and R. Palmer. 2000. "Prospects for redistribution of wealth through land reform in Dwesa-Cwebe", in Cousins, B. (ed). *At the Crossroads: Land and Agrarian Reform in South Africa into the 21st Century*, published by the National Land Committee and the Programme for Land and Agrarian Studies (PLAAS), University of the Western Cape, Cape Town.

Fedderke, J. and M. Mariotti. 2002. 'Changing labour market conditions in South Africa: A sectoral analysis of the period: 1970-97, *The South African Journal of Economics*, 70 (5), 830-864.

Fedderke, J., Manga, J., and F. Pirouz. 2003. Challenging Cassandra: Household and Per Capita Household Income Distribution in the October Household Surveys 1995-1999, Income and Expenditure Surveys 1995 and 2000, and the Labour Force Survey 2000. Paper delivered at the Development Policy Research Unit and Trade and Industrial Policy Secretariat Forum, Johannesburg.

Granovetter, Mark. 1974. *Getting a Job: A Study of Contacts and Careers*. Cambridge, MA: Harvard U.P.

Hertz, T. 2001. 'Education, Inequality and Economic Mobility in South Africa', Unpublished PhD thesis, Amherst: University of Massachusetts.

House, K. and A. Williams. 2000. 'The Status of Employment in the South African Clothing Sector: Diverting a Race to the Bottom', Paper presented at the *TIPS Forum*, Muldersdrift, September.

IFAD (International Fund for Agricultural Development), 2001. Strategy Paper on HIV/AIDS for East and Southern Africa, International Fund for Agricultural Development, October.

ILO. 1999. (drafted by Hayter, S., Reinecke, G. and R. Torres). *South Africa: Studies on the Social Dimensions of Globalisation*, Final Draft, February 1999, Task Force on Country Studies on Globalisation, International Labour Office, Geneva.

Kenny, B. and E. Webster. 1998. "Eroding the Core: Flexibility and the Resegmentation of the South African Labour Market", *Critical Sociology*, 24(3): 216-243.

Keswell, M. and L. Poswell. 2002. 'How Important is Education for Getting Ahead in South Africa?', *CSSR Working Paper,* no. 22, Cape Town: Centre for Social Science Research, University of Cape Town.

Klasen, S. and I. Woolard. 1999. 'Levels, Trends and Consistency of Employment and Unemployment Figures in South Africa', *Development Southern African,* 16(1).

Lam, D. 1999. *Generating Extreme Inequality: Schooling, Earnings and Intergenerational Transmission of Human Capital in South Africa and Brazil*. Research Report no. 99-439, Population Studies Center at the Institute for Social Research, University of Michigan.

Leibbrandt, M. and I. Woolard. 2001. The Labour Market and Household Income Inequality in South Africa: Existing Evidence and New Panel Data. *Journal of International Development*, vol. 13: 671-689.

Lemon, A. and L. Stevens. 1999. 'Reshaping Education in the New South Africa'. *Geography*, 84(3): 222-232.

Maluccio, J., L. Haddad and J. May. 2000. 'Social Capital and Household Welfare in South Africa, 1993-98'. *Journal of Development Studies*, 36(6), 54-81.

May, J. and B. Roberts. 2001. 'Panel Data and Policy Analysis in South Africa: Taking a Long View', *Social Dynamics*, 27(1), 96-119.

McGrath, M. 1983. *The distribution of personal income in South Africa in selected years over the period from 1945 to 1980*. Unpublished Ph.D. dissertation, University of Natal, Durban.

Meth, C. and R. Dias. 2003. Increases in Poverty in South Africa: 1999-2002, paper delivered at the *Development Policy Research Unit and Trade and Industrial Policy Secretariat Forum*, Johannesburg.

Moll, P. 2000. 'Discrimination is Declining in South Africa but Inequality is Not', *Studies in Economics and Econometrics*, 24(3), 91-108.

Murray, Colin. 2000. 'Changing Livelihoods: The Free State, 1990s', *African Studies*, 59(1): 115-142.

Nattrass, N. 2000a. 'The Debate about Unemployment in the 1990s', *Studies in Economics and Econometrics*, 4(3), 73-90.

Nattrass, N. 2000b. 'Wage-Strategies and Minimum Wages in Decentralised Regions: The Case of the Clothing Industry in Phuthaditjhaba, South Africa', *International Journal of Urban and Regional Research* 24(4) (December): 873-888.

Nattrass, N. 2003. 'Unemployment and the Labour Force'. In SALDRU, *Khayelitsha/Mitchell's Plain Survey 2000: Survey Report and Baseline Information.* Cape Town: South African Labour and Development Research Unit (SALDRU), University of Cape Town.

Nattrass, N. 2004. *The Moral Economy of AIDS in South Africa*, Cambridge: Cambridge University Press.

Nimubona, A. and D. Vencatachellum. 2003. 'Intergenerational Mobility in Education in South Africa', paper presented to the Department of Economics, University of the Witwatersrand.

Oosthuizen, M. 2003. 'Expected Labour Demand in South Africa: 1998-2003'. *DPRU Working Paper,* no. 03/81, Cape Town: Development Policy Research Unit, University of Cape Town.

RSA. 2000. *Education for All: The South African Assessment Report*. Pretoria: Department of Education.

Schlemmer, L. & C. Levitz. 1998. 'Unemployment in South Africa: The Facts, the Prospects and an Exploration of Solutions'. *Spotlight series* no.1. Johannesburg: South African Institute of Race Relations.

----- & Worthington. 1996a. 'Unemployment: How Bad is It?' *Fast Facts*. Johannesburg: South African Institute of Race Relations.

----- & -----. 1996b. 'New Evidence on Unemployment.' *Fast Facts*. Johannesburg: South African Institute of Race Relations.

Schneier, S. 1983. 'Occupational Mobility among Blacks in South Africa'. *SALDRU Working Paper* no.58, Cape Town: South African Labour and Development Research Unit (SALDRU), University of Cape Town.

Schultz, T. P. and G. Mwabu. 1998. 'Wage Premia for Education and Location, by Gender and Race in South Africa'. Economic Growth Centre, Yale University, *Center Discussion Paper* no. 785, February.

Seekings, J. 2000. 'Visions of Society: Peasants, Workers and the Unemployed in a Changing South Africa'. *Studies in Economics and Econometrics,* 24 (3): 53-72.

Seekings, J. 2001. 'The Uneven Development of Quantitative Social Science in South Africa', in *Social Dynamics*, 27(1): 1-36.

Seekings, J. 2003a. 'Social Stratification and Inequality at the End of Apartheid', *CSSR Working Paper* no.31, Cape Town: Centre for Social Science Research, University of Cape Town.

Seekings, J. 2003b. 'Do the Unemployed Constitute an Underclass?', *CSSR Working Paper* no.32, Cape Town: Centre for Social Science Research, University of Cape Town.

Seekings, J. Nattrass, N. 2004. The Post-Apartheid Distributional Regime, *CSSR Working Paper* no 76, Cape Town: Centre for Social Science Research, University of Cape Town.

Sharp, J. 1994. "A World Turned Upside Down: Households and Differentiation in a South African Bantustan in the 1980s". *African Studies*, 53(1): 71-88.

Simbi, T. and M. Aliber. 2000. "The Agricultural Employment Crisis in South Africa", paper presented at the *Development Policy Research Unit and Trade and Industrial Policy Secretariat Forum*, Muldersdrift, September.

Simkins, C. 1979. The Distribution of Personal Income among Income Recipients in South Africa, 1970 and 1976, *DSRG Working Paper,* no. 9, University of Natal Pietermartzburg.

Simkins, C. 2003. "Employment and Unemployment in South Africa". Unpublished paper.

Slater, Rachel. 2001. "De-industrialisation, multiple livelihoods and identity: Tracking social change in Qwaqwa, South Africa'. *Journal of Contemporary African Studies*, 19,1: 81-92.

Slater, R. 2002. "Differentiation and Diversification: Changing Livelihoods in Qwaqwa, South Africa, 1970-2000", *Journal of Southern African Studies*, 28(3): 599-614. September.

Standing, G., Sender, J. and J. Weeks. 1996. *The South African Challenge: Restructuring the South African Labour Market,* Geneva: International Labour Organisation.

Stats SA. 2002. *The Contribution of Small and Micro Enterprises to the Economy of the Country: A Survey of Non-VAT-Registered Businesses in South Africa*. Pretoria: Statistics South Africa.

Steinberg, J., Johnson, S., Schierhout, G. and D. Ndegwa. 2002. Hitting Home: How Households Cope with the Impact of the HIV/AIDS Epidemic: A Survey of Households Affected by HIV/AIDS in South Africa. Kaiser Family Foundation and the Health Systems Trust.

Thompson, K. and I. Woolard. 2002. Achieving Employment Equity in the Public Service: A Study of Changes between 1995 and 2001. *DPRU Working Paper,* no. 02/61. Cape Town: Development Policy Research Unit, University of Cape Town.

Valodia, I. 2000. 'Economic Policy and Women's Informal and Flexible Work in South Africa', paper presented at the *TIPS Policy Forum,* Muldersdrift, September.

Van der Berg, S. 2001. 'Resource Shifts in South African Schools after the Political Transition', *Development Southern Africa*, 18(4): 405-417.

Van der Berg, S. 2002. Education, Poverty and Inequality in South Africa, paper presented at the *Conference of the Centre for the Study of African Economies*, Oxford, March.

Walker, L. and L. Gilbert. 2002. 'HIV/AIDS: South African Women at Risk'. In *African Journal of AIDS Researc,* 1(1): 75-85.

Whiteford, Andrew and Michael McGrath. 1994. 'The Distribution of Income in South Africa'. Pretoria: Human Sciences Research Council.

Whiteford, A. and M. McGrath. 1998. "Income Inequality over the Apartheid Years", *SANER Working Paper,* no. 6*,* Cape Town: South African Network for Economic Research.

Whiteford, A. and Van Seventer, D. 2000. "Understanding Contemporary Household Inequality in South Africa", *Studies in Economics and Econometrics*, 24(3): 7-30.

The Centre for Social Science Research
Working Paper Series

RECENT TITLES

Vasquez, G. 2004. *Body Perceptions of HIV and AIDS: The Memory Box Project*. Cape Town, CSSR Working Paper No. 64.

Ardington, C. Lam, D. Leibbrandt, M. Levinsohn. 2004. *Savings, Insurance and Debt over the Post-Apartheid Period: A Review of Recent Research*. Cape Town, CSSR Working Paper No. 65.

Ardington, C. Leibbrandt, M. 2004 *Financial Services and the Informal Economy*. Cape Town, CSSR Working Paper No. 66.

Russell, M. 2004. *Understanding Black Households in Southern Africa: The African Kinship and Western Nuclear Family Systems*. Cape Town, CSSR Working Paper No. 67.

Leclerc-Madlala, S. 2004. *Transactional Sex and the Pursuit of Modernity*. Cape Town, CSSR Working Paper No. 68.

Davis, G. 2004. *Media Coverage and the Elections: Were some parties more equal than others?* Cape Town, CSSR Working Paper No. 69.

Alemika, E. 2004. *Legitimacy, Rule of Law and Violent Conflicts in Africa*. CSSR Working Paper No. 70.

Coetzee, C. Nattrass, N. 2004. *Living on AIDS Treatment: A Socio-Economic Profile of Africans Receiving Antiretroviral Therapy in Khayelitsha*, Cape Town. CSSR Working Paper No. 71.

Mozaffar, S. 2004. *How context mediates the effects of electoral institutions on the structure of party systems in Africa's emerging democracies*. Cape Town. CSSR Working Paper No. 72.

Ndegwa, D. Horner, D. Esau, F. 2004. *The links between migration, poverty and health: Evidence from Khayelitsha and Mitchell's Plain*. Cape Town. CSSR Working Paper No. 73.

Maughan Brown, B. 2004. *Measuring HIV/AIDS stigma*. Cape Town. CSSR Working Paper No. 74.

The Centre for Social Science Research

The CSSR is an umbrella organisation comprising five units:

The Aids and Society Research Unit (ASRU) supports quantitative and qualitative research into the social and economic impact of the HIV pandemic in Southern Africa. Focus areas include: the economics of reducing mother to child transmission of HIV, the impact of HIV on firms and households; and psychological aspects of HIV infection and prevention. ASRU operates an outreach programme in Khayelitsha (the Memory Box Project) which provides training and counselling for HIV positive people

The Data First Resource Unit ('Data First') provides training and resources for research. Its main functions are: 1) to provide access to digital data resources and specialised published material; 2) to facilitate the collection, exchange and use of data sets on a collaborative basis; 3) to provide basic and advanced training in data analysis; 4) the ongoing development of a web site to disseminate data and research output.

The Democracy in Africa Research Unit (DARU) supports students and scholars who conduct systematic research in the following three areas: 1) public opinion and political culture in Africa and its role in democratisation and consolidation; 2) elections and voting in Africa; and 3) the impact of the HIV/AIDS pandemic on democratisation in Southern Africa. DARU has developed close working relationships with projects such as the Afrobarometer (a cross national survey of public opinion in fifteen African countries), the Comparative National Elections Project, and the Health Economics and AIDS Research Unit at the University of Natal.

The Social Surveys Unit (SSU) promotes critical analysis of the methodology, ethics and results of South African social science research. One core activity is the Cape Area Panel Study of young adults in Cape Town. This study follows 4800 young people as they move from school into the labour market and adulthood. The SSU is also planning a survey for 2004 on aspects of social capital, crime, and attitudes toward inequality.

The Southern Africa Labour and Development Research Unit (SALDRU) was established in 1975 as part of the School of Economics and joined the CSSR in 2002. SALDRU conducted the first national household survey in 1993 (the Project for Statistics on Living Standards and Development). More recently, SALDRU ran the Langeberg Integrated Family survey (1999) and the Khayelitsha/Mitchell's Plain Survey (2000). Current projects include research on public works programmes, poverty and inequality.