Poverty in South Africa – An analysis of the evidence

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Introduction

A 1995 study of poverty undertaken by the World Bank for the RDP office [World Bank/RDP 1995] found the followings characteristics to be strongly associated with poverty:

- Location (poverty is mainly concentrated in rural areas, particularly former homeland areas, and is more endemic in some provinces where there are many such areas, such as the Eastern Cape and Limpopo);
- Race (a large proportion of blacks are poor, and there is also a large poor segment of the coloured population);
- Household structure (many of the poor are concentrated in large households with many dependants – it will be shown later that to some extent such crowding in certain households is a rational response to lack of income sources on the part of some members);
- Age (children experience more poverty than others, whereas old people are largely protected by the social old age pension);
- Gender (women and female-headed households experience more poverty);
- Unemployment (those without labour market access or skills to sell on the labour market are often poor);

The study also found that the burden of poverty included poor access to services, particularly in rural areas; poor education; the need to spend much time on daily necessities (finding water or fuel) that limits their time for more productive work; and high transport costs and time consuming journeys to and from work.

The report also pointed out that the most vulnerable (the poorest quintile of the population) were particularly poorly linked to the labour market and more dependent on remittances and social pensions as sources of income. [World Bank/RDP 1995]

Much of this analysis still applies. Although a new poverty profile would throw up somewhat different figures, the incomparability of datasets makes it impossible to judge whether real changes in circumstances or only changes in the dataset drives any quantitative changes that may be found. However, as the aggregate picture remains largely unchanged, this paper will not spend much further time on repeating this picture, but rather focus on particular aspects which seem to provide scope for useful further analysis.

Recent research on poverty benefited from the availability of new national household survey datasets. Also, increased attention to poverty has been made desirable by the fact that poverty reduction is an expressed and central objective of government. Unfortunately, the evolution of poverty is more difficult to trace than its broad outlines, because of credibility problems with the recently released Income and Expenditure Survey linked to the Labour Force Survey of 2000 (LFS/IES2000). This has dampened hopes of soon really determining the path of poverty and inequality in the post-transition period. The 2001 Census may offer some hopes for comparative research of poverty and inequality over time, but its very recent release has not allowed time to thoroughly exploit this potential source of information.

This paper can thus not offer a full assessment of the magnitude, nature and path of poverty and even inequality, but will attempt to derive some broad conclusions from the available data. This paper first places South African incomes and distribution in international context, where after turning briefly to distribution. Thereafter it looks at the magnitude and nature of poverty, before moving on to the labour market (access to which is crucial for poverty reduction); access to services; and the situation of the rural poor, particularly migration and patterns of household formation as response to urban income opportunities, for this urban-rural interface is a unique and important feature of South African poverty. The final part deals with the poverty path and prospects, and provides some concluding remarks on policy choices given the centrality of the urban-rural for poverty.

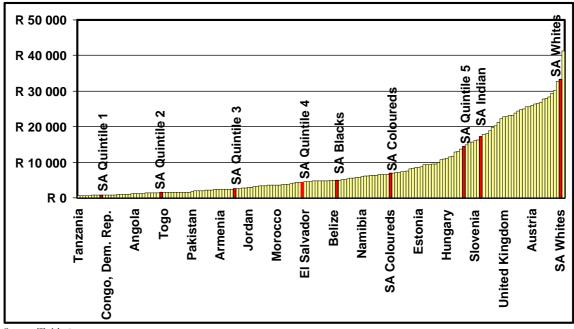
South African incomes and distribution in international perspective

Given the high degree of inequality in South Africa, poverty is more pervasive than in less inegalitarian societies with similar levels of per capita income. Turkey's per capita income of \$2900 per capita is somewhat below South Africa's (\$3160 per capita), but because of lesser inequality, 18.0% of Turkey's population falls below an income of \$2 per capita per day, viz. versus twice as many (35.8%) in South Africa. [Data from World Development Report 2000/2001, Tables 1 and 4].

Figure 1 and Table 1 (the Table is located in an Appendix) show, in 1995 Rand per person, the income of various income groupings in South Africa (the poorest to the richest quintiles (fifths) of the population, as well as that of the four race groups), as against that of the countries of the world. Such international comparison requires some method of conversion of incomes to a common currency, in this case Rand, and all such conversions are subject to methodological uncertainties. One need only think of what happened to the value of the Rand in dollar terms over the past year or two to have an inkling of the difficulty of using exchange rates to compare more than 100 countries, all subject to exchange rate movements. The methodology chosen was to use the so-called PPP (Purchasing Power Parity) conversion rates, which take into consideration that the internal purchasing power of the currencies of poor countries is usually greater than reflected in their effective exchange rates, i.e. the cost of living in such countries expressed in other currencies is usually low. Using 1998 data from the World Bank on PPP-dollar incomes per capita, and combining it with income data from the 1995 OHS/IES, allows us to arrive at the data reflected in the figure and table. These show that South African incomes range over a massively large spectrum

- incomes of whites are just behind the highest recorded for any single country in the world, whereas those of the poorest quintile of the population rank with some of the very poorest countries in the world.

Figure 1: SA incomes and distribution in international context, 1995 (using 1998 PPP comparisons)



Source: Table 1

The seemingly very high income of whites need perhaps to be put into some perspective. Firstly, they are in South Africa mainly concentrated in the top quintile of the population, yet their incomes are being compared not to top earners in other countries, but to the average for other countries. It should be remembered that average incomes more than, for instance, average educational attainment, are much influenced by the values for those at the top. A similar situation also applies to the black population, most of whom are in the bottom three quintiles, although average black incomes are even above that of Quintile 4. Again, the averages are misleading.

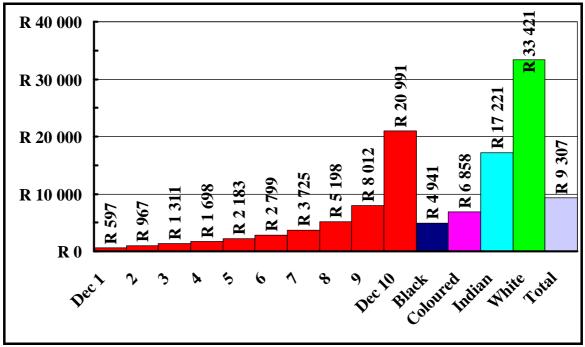
Nevertheless, what this graph and table reveal is that there are very large disparities in the living standards of South Africans, and that the South African poor are in income terms poor even by the standards of poor countries, despite the fact that on some other aspects related to living standards (e.g. access to education or health services) they benefit much from being part of a middle income society.

Distribution and inequality in South Africa

Figure 2 shows the racial distribution of income. White per capita incomes are almost seven times those of blacks, but there is also great diversity within the black population, as the income of the black deciles show. In particular, the top decile of the black population had moved far ahead of their counterparts. The income per capita of decile 10 exceeds that of Indians and is not very far below those of whites. This trend is likely to have continued since the political transition, with the consequence that the black elite has probably almost caught up with the white population in aggregate,

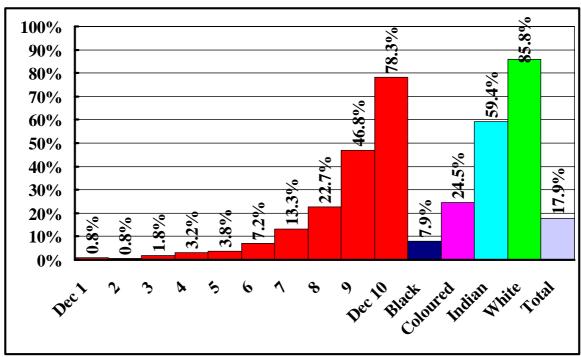
although the top earners within the white population are still probably far ahead. When one looks at another measure of inclusion in the economic mainstream, car ownership (Figure 3), the differentials between the top deciles of blacks and whites were even smaller in 1995 than reflected in income data.

Figure 2: Per capita income by race group and deciles of the black population, 1995



Source: Own calculations from October Household Survey/Income and Expenditure Survey 1995

Figure 3: Car ownership (% of households) by race group and deciles of the black population, 1995



Source: Own calculations from October Household Survey/Income and Expenditure Survey 1995

Still another way of placing South African distribution of income in perspective is presented in Figure 4. It shows the percentiles of the population from poorest to richest, and how these percentiles are composed by race group. The bottom half of the distribution is completely and disproportionately dominated by the black population, with only coloureds also showing a significant presence amongst the poor, whilst whites are disproportionately concentrated in the top quintile. Nevertheless, even by 1995 – before the full consequences of political change had been felt – a substantial part of the black population already found themselves in the top two deciles of the expenditure distribution. Although one cannot have over-confidence in the 2000 LFS/IES, particularly for this sort of comparative perspective over time, it is illuminating that it shows that by 2000 40% of the top quintile of the population was black, and 25% of the top decile.

This provides some evidence to confirm what observers have been suggesting for a while – that although most whites are affluent, they have been joined by large numbers of coloureds, Indians and particularly now also blacks, so that the dividing line between the affluent and the rest of the population is no longer race – although race self-evidently is still a major determinant of affluence. However, as far as the poor are concerned, they are overwhelmingly black and rural, as will be shown in the next section.

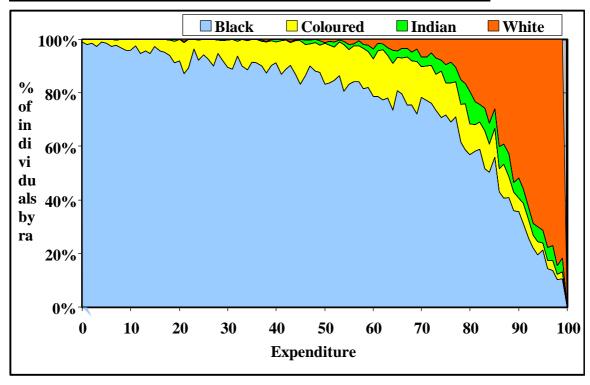


Fig. 4: Distribution of individuals by race and expenditure decile, 1995

Source: Own calculations from October Household Survey/Income and Expenditure Survey 1995

The extent, distribution and nature of poverty

Poverty takes many forms, of which a lack of money to purchase goods is but one, albeit a very important, aspect. Measuring poverty even in terms of income is, however, not unproblematic. The so-called FGT (Foster-Greer-Thorbecke) poverty

measures, which allow not only measurement of the number/proportion who are poor (the headcount ratio or P_0), but also allows for measurement of the depth of poverty or poverty gap index (P_1) and the severity of poverty (P_2), although the last is difficult to interpret and seldom used. However, this approach leans very strongly on the determination of a poverty line, and the choice of this line may sometimes affect the conclusions drawn. Whether it does or not can be determined from stochastic poverty dominance testing, a process which uses cumulative density curves to determine whether there is poverty dominance, in which case the choice of poverty line is not an important issue for the determination of the ordering of the poverty results obtained.

Much recent work using the FGT measures in South Africa seems to show fairly stable patterns of poverty across space and various groupings. This being the case, the headcount ratio is usually adequate to paint the broad picture of money-metric poverty and its associated characteristics. Whilst comparisons across time (i.e. the path of poverty) cannot really be the issue here due to the lack of comparability of OHS/IES95 and LFS/IES2000, this analysis is largely limited to using poverty headcounts. However, to avoid the most extreme problems with the choice of poverty line, two poverty lines were chosen for 2000, based on the highest of per capita income or expenditure of households as given in LFS/IES2000. The line for identifying the moderately poor is set at the 40th percentile of the population arranged by income/expenditure per capita; the line determining the ultra-poor at the 20th percentile. In some of the tables the proportions may seem to deviate slightly from this, but this is only the result of some missing observations in the dataset.

Table 2 shows the estimated distribution of the population across deciles or also poverty status and urban versus rural location for 2000. Although only 51% of the population was urbanised according to the LFS/IES 2000, this proportion rises to 65% amongst the non-poor. But the converse is of particular interest to this study: Less than a quarter of the ultra-poor are urbanised, and not even 35% of the other poor. Of the 19 million people considered poor or ultra-poor, almost 13 million are rural-based. Whilst 56% of the rural population are poor, this applies to less than a quarter (23%) of the urban population. South African poverty is first and foremost a rural phenomenon.

Table 2: Estimated population by decile, poverty status and region type, 2000

	Urban	Rural	Total	% urban		
		Deciles				
1	1 014 608	3 317 202	4 331 810	23.4%		
2	1 142 594	3 300 105	4 442 699	25.7%		
3	1 488 784	3 122 765	4 611 549	32.3%		
4	1 693 968	2 908 005	4 601 973	36.8%		
5	2 078 771	2 716 535	4 795 306	43.4%		
6	2 603 877	2 288 524	4 892 401	53.2%		
7	2 859 263	1 752 039	4 611 302	62.0%		
8	3 253 251	1 075 890	4 329 141	75.1%		
9	3 637 563	1 752 704	5 390 267	67.5%		
10	3 878 322	451 813	4 330 135	89.6%		
Total	23 651 001	22 685 582	46 336 583	51.0%		
		Poverty status:				
Ultra-poor	2 157 202	6 617 307	8 774 509	24.6%		
Poor	3 182 752	6 030 770	9 213 522	34.5%		
Non-poor	18 311 047	10 037 505	28 348 552	64.6%		
Total	23 651 001	22 685 582	46 336 583	51.0%		
	% of region type:					
Ultra-poor	9.1%	29.2%	18.9%			
Poor	13.5%	26.6%	19.9%			
Non-poor	77.4%	44.2%	61.2%			
Total	100.0%	100.0%	100.0%			

Source: Own calculations from Labour Force Survey/Income and Expenditure Survey 2000

Interestingly also is the evidence in Table 3 that the poor and ultra poor are not particularly present in urban informal housing. Even amongst the urban poor or ultra poor, they do not dominate numerically, although poverty incidence is higher amongst this group than amongst formally housed urban population.

Table 3: Population by poverty status, location and residence type, 2000

	Non-poor	Poor	Ultra poor	Total
Rural	9 106 821	5 630 459	6 235 682	20 972 962
Urban informal	2 701 612	1 185 530	898 880	4 786 022
Urban formal	16 500 000	2 397 533	1 639 947	20 537 480
Total	28 308 433	9 213 522	8 774 509	46 296 464
Rural	32.2%	61.1%	71.1%	45.3%
Urban informal	9.5%	12.9%	10.2%	10.3%
Urban formal	58.3%	26.0%	18.7%	44.4%
Total	100%	100%	100%	100%

Source: Own calculations from Labour Force Survey/Income and Expenditure Survey 2000

Table 4 shows that poverty and indeed ultra-poverty are most prevalent in the Eastern Cape, followed by Limpopo. This is linked to another feature of rural poverty, viz. the

strong concentration of such poverty in the rural parts of the former homelands. Most of the poor and very poor are resident in former homeland areas.

Table 4: Poverty status by province, 2000

			Ultra		Poor &	Ultra-
	Non-poor	Poor	poor	Total	ultra poor	poor
Western Cape	3 515 766	373 330	126 918	4016014	12.5%	3.2%
Eastern Cape	2 713 617	1 789 600	2 299 636	6802853	60.1%	33.8%
Northern Cape	558 350	176 353	127051	861754	35.2%	14.7%
Free State	1 471 903	604 195	670193	2746291	46.4%	24.4%
KwaZulu-						
Natal	4 859 113	1 953 251	2 118 689	8931053	45.6%	23.7%
Northwest	2 160 548	685 663	701 982	3548193	39.1%	19.8%
Gauteng	6 402 665	847 964	510 421	7761050	17.5%	6.6%
Mpumalanga	1 834 717	667 538	484 386	2986641	38.6%	16.2%
Limpopo	2 400 564	1 550 405	1 602 506	5553475	56.8%	28.9%
Total	25 917243	8 648 299	8 641 782	43 207 324	40.0%	20.0%

Regression analysis on the OHS/IES95 dataset (Table 5) shows that lower rural economic status (per capita household expenditures) result not only from the characteristics associated with being rural (poor education, many female-headed households, racial composition, and unemployment), but that there is a separate additional influence of rural location. This confirms that location has a significant separate influence on household per capita expenditure. Applying the coefficients from the regression, a household headed by a rural black male with 14 years of education has approximately the same expenditure per capita as a household headed by an urban white female with no education. Residing in an urban area brings equivalent benefits as 4 years of additional education for a rural household head. Also, being rural has a similar negative impact as the household head being unemployed.

Table 5: Regression showing effect of head of household's characteristics and location on log of per capita household expenditure, 1995

	Coefficient	t-statistic
Constant	7.8229	438.90
Male	0.24911	22.46
Black	-0.23333	-16.00
White	0.91572	50.95
Years of education	0.10545	81.64
Unemployed (broad)	-0.32636	-20.23
Rural	-0.37176	-32.58
Number of observations	28 349	
F(6, 28342)	5749.68	
Probability > F	0.0000	
\mathbb{R}^2	0.5490	
Adjusted R ²	0.5489	
Root MSE	0.8452	

Source: Nieftagodien (2001:47)

Poverty analysis has traditionally departed from poverty lines, usually set in terms of per capita or per adult equivalent income or consumption/expenditure per capita. However, these lines are intrinsically subjective, even when all care has been taken to determine them in a seemingly non-subjective manner. For this reason, analytical attention has recently shifted to Cumulative Density Curves or Functions, which plot cumulative proportion of the population below each level of per capita income. If such curves for two groups or time periods do not intersect in the poverty-relevant per capita expenditure range, then poverty dominance exists, i.e. the one group is always worse of than the other whatever poverty line is chosen, and irrespective of whether poverty is measured by the headcount ratio, the poverty gap or poverty severity.¹

Figure 2 shows cumulative density curves for per capita expenditure below R3 000 in 1995. [This as well as the following cumulative density curves have been published before in Van der Berg & Bredenkamp 2002.] The per capita expenditure of each household was allocated to all members of that household. Thus from the cumulative density curve for children aged 0 to 6 years, for instance, one can read off on the vertical axis what proportion of children belong to households that have a lower per capita income than any specified level shown on the horizontal axis (e.g. at any poverty line chosen) The graph clearly shows that the proportion of young children (0-6) in poverty is greater than the proportion of pension-aged people (men aged 65 or more and women aged 60 or more) in poverty at any per capita expenditure level at which the poverty line may be drawn, i.e. the cumulative density curve for children always lies above that for the pension-aged. Thus, poverty dominance exists, i.e. young children are poorer than pensioners, and this conclusion is invariant to the poverty line chosen or to whether one judges poverty in terms of the headcount ratio, the poverty gap ratio or the poverty severity index. Thus, if one were to set the poverty line at R1 500 per capita, 31% of young children were in such households in

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¹ For instance, in terms of the well-known Foster-Greer-Thorbecke (FGT) measures of poverty, this would apply to the poverty headcount ratio (P_0), the poverty gap index (P_1) and the poverty severity index (P_2). For application of these and other poverty analysis to South Africa, see Bhorat *et al.* (2001).

1995, as against only 21% of pension aged adults. The fact that the cumulative density curve for pensioners lies below that of the whole population indicates that, generally speaking, there is less poverty amongst the former – clear evidence of the value of the social old-age pensioner as device for reducing poverty amongst older members of society.

70% Under 7s - Children 7-14 60% Narrow unemployed % of individuals below each income level ← Total population 50% Pension aged 10% 0% R 500 R 2 000 R 2 500 R_0 R 1 000 R 1 500 R 3 000 Per capita income of household containing individual

Fig. 5: Cumulative density curves for total population, pension aged, children (0-6 and 7-14) and narrowly unemployed, 1995

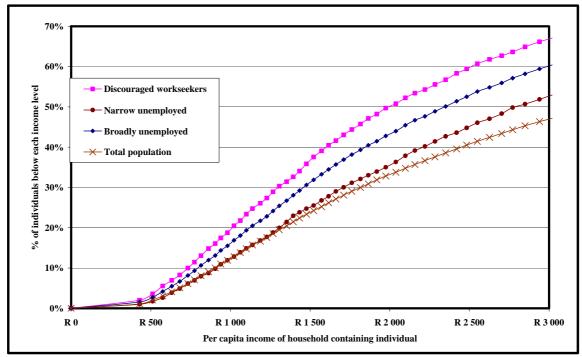
Source: Own calculations from October Household Survey/Income and Expenditure Survey 1995

Figure 5 indicates that the most effective categorical (i.e. non means-tested) social security transfer in terms of alleviating poverty would be one directed at children (the curves for children aged 0-6 and those aged 7-14 are indistinguishable on the graph). Such a transfer would be better targeted at the poor even than targeting the unemployed (narrowly defined), and increasing the values of social old-age pensions would also be less well targeted at the poor. But this is based on 1995 data, before the institution of the Child Support Grant, which targeted precisely this group (young children). If funds were available, even a non-means tested CSG would be better in targeting the poor than either a grant to all individuals, or an increase in social old-age pensions for all old people (given the existing old-age pension). Moreover, broadening the CSG to also include older children, as was recently announced by the government, would be as well-targeted.

Figure 6 shows cumulative density curves for the narrowly unemployed and discouraged work seekers. Together, these two groups constitute the broadly unemployed. Although poverty amongst the narrowly unemployed is worse than for the population as a whole for somewhat higher poverty lines (poverty dominance only applies beyond a per capita expenditure level of about R1 300), their situation is far better than that of discouraged work seekers (those who would like to have a job but have stopped actively looking for one, usually because they know that the probability of finding a job is extremely small). Unlike many of the narrowly unemployed, who are attached to households where other members have formal employment,

discouraged work seekers are often the least educated, women, and located in deep rural areas. Kingdon & Knight [2000:6] regard them as "the most deprived among all economically active groups".

Fig. 6: Cumulative density curves for narrowly and broadly unemployed, discouraged workseekers and total population, 1995



Source: Own calculations from October Household Survey/Income and Expenditure Survey 1995

Figure 7 shows that poverty is much worse in female-headed than in male-headed households. Indeed, South African evidence points to household per capita income being 27 per cent lower for households headed by females compared to cases where a male head resides at home, after standardising for other factors (Leibbrandt and Woolard 2001: 142).

70% 60% **─** Total population % of individuals below each income level 50% Male-headed Female-headed 40% 30% 20% 10% R 500 R 0 R 1 000 R 1 500 R 2 000 R 2 500 R 3 000 Per capita income of household containing individual

Fig. 7: Cumulative density curves for male-headed and female-headed households and total population, 1995

Source: Own calculations from October Household Survey/Income and Expenditure Survey 1995

Thus at least four categories of people can be identified for whom poverty is much worse than for the population as a whole: Young children (0-6), older children (7-14), discouraged work seekers, and members of female-headed households. Figure 8 shows that all four these groups have cumulative density curves that lie considerably above that for the population as a whole, illustrating their greater preponderance of poverty. Any social security transfer of funds to these groups, even if non-means tested, would be better targeted than a general transfer of funds to the population as a whole.

70% 60% Discouraged workseekers % of individuals below each income level Female-headed 50% Under 7s Children 7-14 Total population 30% 20% 10% R 500 R 1 000 R 1 500 R 2 000 R 2 500 R 0 R 3 000 Per capita income of household containing individual

Fig. 5: Cumulative density curves for children (0-6 and 7-14), discouraged workseekers, female headed households and total population, 1995

Source: Own calculations from October Household Survey/Income and Expenditure Survey 1995

Poverty, social grants and the labour market

In a recent book, Bhorat et al [2001] show convincingly that South African poverty is strongly linked to the labour market. Nevertheless, the existence of a relatively large social safety net in the form of means tested social assistance transfers makes a large difference to the position of the poor; this is particularly the case for Social Old Age Pensions, Disability Grants and now the rapidly expanding Child Support Grants. Together these grants already make a substantial difference in ameliorating poverty; the further expansion of CSGs will further contribute to this end. The Social Old Age Pension has had a considerable effect on South Africa's poor, with considerable impacts also on household formation (unemployed adults with little resources rather remain in pensioner households than setting up own households), migration and labour force participation (the unemployed in pensioner households may be reluctant to move away in search of scarce and uncertain jobs), and the position of old people, particularly the many female pensioners (as these incomes increase their bargaining power in the household).

The importance of access to the labour market for the distribution of economic outcomes can clearly be seen in Figure 9 and Table 6. The lower deciles of the distribution are encumbered by many more children and old people (although the presence of the latter tends to reduce poverty due to the pensions they have access to, as is increasingly also the case with children), and also some others outside the labour force. In contrast, the top deciles have fewer members outside the labour force. Of those in the broad labour force (almost 30% in the case of the bottom decile, and 60% for the top decile), the poor have more who become discouraged work seekers as well as more who remain unemployed. Consequently, only 10.4% of the poorest decile have jobs, as against 56.2% of the richest decile – a ratio of almost 5½:1. Thus a considerable portion of the gap between the richest and the poorest can be ascribed to

differential access to the labour market. Add the fact that the wages of the poor are often very low due to poor education and skills, and it is clear that outcomes for the poor would have been very different if they were differently placed in the labour market.

100% ■ Others outside 90% labour force 80% ■ Children under 70% 15 60% Discouraged 50% 40% Unemployed 30% 20% ■ Employed 10% 0% 1 2 3 4 5 6 7 8 9 10 Decile (highest of inc or exp)

Fig. 9: Labour force status by decile, 2000

Source: Own calculations from Labour Force Survey/Income and Expenditure Survey 2000

Table 6: Labour force status by decile, 2000

		Labou	r force		Out	of labour f	orce	
	Employed	Unem-	Discou-		Children			Total
Decile		ployed	raged	Total	under 15	Others	Total	
	Numbers:							
1	448 385	451 200	391 194	1 290 779	2 112 751	928 280	3 041 031	4 331 810
2	539 614	424 878	344 275	1 308 767	2 002 871	1 015 936	3 018 807	4 327 574
3	613 630	444 412	294 573	1 352 615	1 870 298	1 107 424	2 977 722	4 330 337
4	729 880	462 631	285 662	1 478 173	1 745 549	1 107 170	2 852 719	4 330 892
5	860 233	476 251	274 967	1 611 451	1 648 413	1 069 408	2 717 821	4 329 272
6	1 085 385	522 862	259 589	1 867 836	1 458 067	1 007 278	2 465 345	4 333 181
7	1 304 430	466 737	246 119	2 017 286	1 278 878	1 030 234	2 309 112	4 326 398
8	1 640 300	433 316	194 581	2 268 197	1 165 019	895 925	2 060 944	4 329 141
9	2 003 446	255 854	123 045	2 382 345	1 053 944	893 278	1 947 222	4 329 567
10	2 432 819	108 776	49 695	2 591 290	863 791	875 054	1 738 845	4 330 135
Total	11 658 122	4 046 917	2 463 700	18 168739	15 199 581	9 929 987	25 129 568	43 298 307
			9/	of popula	tion:			
1	10.4%	10.4%	9.0%	29.8%	48.8%	21.4%	70.2%	100.0%
2	12.5%	9.8%	8.0%	30.2%	46.3%	23.5%	69.8%	100.0%
3	14.2%	10.3%	6.8%	31.2%	43.2%	25.6%	68.8%	100.0%
4	16.9%	10.7%	6.6%	34.1%	40.3%	25.6%	65.9%	100.0%
5	19.9%	11.0%	6.4%	37.2%	38.1%	24.7%	62.8%	100.0%
6	25.0%	12.1%	6.0%	43.1%	33.6%	23.2%	56.9%	100.0%
7	30.2%	10.8%	5.7%	46.6%	29.6%	23.8%	53.4%	100.0%
8	37.9%	10.0%	4.5%	52.4%	26.9%	20.7%	47.6%	100.0%
9	46.3%	5.9%	2.8%	55.0%	24.3%	20.6%	45.0%	100.0%
10	56.2%	2.5%	1.1%	59.8%	19.9%	20.2%	40.2%	100.0%
Total	26.9%	9.3%	5.7%	42.0%	35.1%	22.9%	58.0%	100.0%

Source: Own calculations from Labour Force Survey/Income and Expenditure Survey 2000

It is of interest to note here that trade union membership amongst the employed is quite uncommon amongst the poor (Table 7). Whereas 36% of the non-poor are union members, amongst the poor and the ultra-poor this declines to just over 7% and 3% respectively. Only 2.5% of union members are poor or ultra-poor.

Table 7:	Trade unio	n membershi	n by	decile, 2000

Decile	Members	Members as % of Employed*	% of all trade union members
1	5 784	3.3%	0.2%
2	7 555	3.5%	0.3%
3	16 713	4.1%	0.6%
4	39 831	10.6%	1.4%
5	83 699	16.9%	2.9%
6	237 306	26.0%	8.2%
7	319 126	29.4%	11.0%
8	396 094	32.3%	13.7%
9	1 014 969	45.2%	35.0%
10	776 485	41.2%	26.8%
Total	2 897 562	32.1%	100.0%
Ultra-poor	13339	3.4%	0.5%
Poor	56544	7.2%	2.0%
Non-poor	2827679	36.0%	97.6%

^{*} Note that these figures are based on responses to the survey question and may not exactly match actual union membership. Moreover, almost 3% of the employed did not know whether they were union members and were ignored in the proportions shown here.

Source: Own calculations from LFS/IES 2000

The poor, assets and access to services

Thus far, our focus has been on money-metric poverty, which is an important part of poverty analysis. But poverty is a multi-faceted phenomenon, and access to assets and to services also affects the living standards and vulnerability of the poor.

In other work, I have shown that access to public spending has improved considerably for the poor in the early post-apartheid period, and that this is likely to have continued (see e.g. Van der Berg 2001a). But a shift in fiscal resources is no guarantee of a shift in real resources – resources such as teachers or medical personnel cannot easily be shifted to alternative applications by fiscal reallocations alone. Neither does a shift in real resources necessarily mean improved services, for such a translation of inputs into outcomes implies efficiency in service delivery, which is far from universal.

Stark differences between urban and rural areas were apparent in access to services in 1995, with large differentials for access to running water in the dwelling (70% vs. 16%), sanitation on site (64% vs. 38%), and grid electricity (87% vs. 26%). Table 8 shows that there has been progress with service delivery. Formal housing provision has improved, but there are some problems regarding housing quality; clean water provision is also much improved, but there are still some 16% of the population without access to clean water; sanitation has remained largely unchanged; and electricity availability has increased much (though many of the poor use it solely as a source of lighting).

Table 8: Household access to housing, water, sanitation and energy, 1995 & 2000

	1995	2000
Type of housing:		
Formal	65.8%	72.6%
Informal	7.5%	14.0%
Traditional	15.3%	9.9%
Other	11.4%	3.5%
Main water source:		
Clean water	78.5%	84.3%
Borehole/rain water	10.0%	3.5%
Stream/dam/well/spring/other	11.4%	12.2%
Sanitation:		
Flush/chemical toilet	56.9%	58.3%
Pit latrine	29.7%	28.0%
Bucket toilet	5.2%	2.8%
Other/none	8.3%	10.5%
Main energy source for lighting:		
Electricity	63.5%	71.7%
Paraffin	13.6%	7.8%
Candles	22.9%	19.7%
Other	0.0%	0.8%

Sources: OHS/IES 1995 and LFS/IES 2000

Analysis of the 1998 South African Demographic and Health Survey (DHS) shows that urban-rural inequalities in access to health care services (antenatal care, delivery attendance and place of delivery, access to medical aid, and health service utilization) continue to persist (see Table 9). Levels of service delivery are consistently worse in rural areas. The public-private divide in health care delivery means that, compared to people living in urban areas, rural people are generally more dependent on public than on private services. Hence, in urban areas <u>public</u> health services appear to be an inferior good (i.e. consumption falls as income increases due to a shift to private services), whilst in rural areas public health services take on the nature of a luxury good (i.e. consumption increases as income increases), which acts to underlines the importance of public service delivery in rural compared to urban areas.

Table 9: Poverty and health in South Africa (1998)

Indicator		Wealth quintile				
	1	2	3	4	5	
1. Antenatal care visits (%) – live births in the past 5 years						
Medically trained person	93.7	95.0	95.2	94.4	92.5	94.2
Doctor	9.9	19.8	25.1	39.5	66.7	27.1
Nurse or trained midwife	83.8	75.1	70.1	54.9	25.8	67.0
2+ visits	82.4	84.4	85.8	86.2	88.4	84.9
2. Delivery attendance (%) – liv	e births in	n the past	5 years			
Medically trained person	66.6	81.6	88.8	94.4	97.8	83.0
Doctor	13.5	17.8	27.3	39.4	69.1	28.4
Nurse or trained midwife	53.1	63.8	61.6	55.0	28.7	54.6
% in public facility	65.6	79.2	83.4	85.7	56.9	74.7
% in private facility	0.7	1.9	2.4	8.0	41.0	7.4
% at home	30.3	16.4	12.0	4.2	1.4	15.4
3. Access to medical aid – person	n covered	by medi	cal aid or	medical	benefit so	cheme
Percentage	1.1	2.3	4.7	15.6	51.7	15.0
4. Health service utilization (%)	4. Health service utilization (%) – visits to health services in past month					
No visits to any facility	70.9	69.6	68.2	63.7	51.9	64.9
Any public facility	70.7	69.3	66.0	50.4	28.7	54.4
Any private facility	27.9	31.8	37.8	53.8	78.5	49.1
Any other services	15.6	17.3	14.8	12.0	8.9	13.2

Note: Respondents could have visited more than one of the three types of services during the past month. Source: Booysen 2002: Appendix C.

Economic progress for the poor is often inhibited by the limited quantity and poor quality of the former black education system. Rural location is an impediment to escaping from poverty even for the better educated. As some 70% of black schoolaged children (6-19) are in rural areas, inequalities, inefficiencies and poor quality in the formerly black school system crucially affect their educational attainment and quality. Massive fiscal resource shifts since the political transition to redress the apartheid inequalities did not improve the efficiency of spending in poor schools, which are largely rural, but school level data did not directly allow strong geographical distinctions.

Rural poverty and rural responses to poverty

Rural income sources

Apartheid created a rural population largely dependent upon urban sources of income for their survival. Locating themselves relative to these income sources is the major reality the rural population has to deal with. The urban/rural interface largely determines who is poor and how poor they are. Optimisation for the rural poor involves finding ways of accessing urban income opportunities whilst retaining as far as possible their rural arrangements which ensures access to land-based natural resources (water, wood, land for cultivation, grazing rights, gathering), a much cheaper alternative than urban cash-based services.

Thus a central issue is the sources of urban income of the rural poor, particularly the process of migration (both rural-to-urban and rural-to-rural) which allows them to

relocate in a way which optimises the mix between urban incomes and rural resources (particularly cost-of-living reducing access to natural resources). The migrant labour system became a way in which two needs of many rural inhabitants were reconciled, viz. access to urban incomes and opportunities with retention of rural living arrangements ensuring continued access to land-based natural resource use (water, wood, land for cultivation, grazing rights, gathering) rather than cash-based services.

A study of income distribution within the former homeland areas showed their dependence on remittances (14%), social assistance payments to rural beneficiaries (18%), and wages (often earned in urban areas) (52%). Agricultural production is a very minor source of income (less than 5%) [Leibbrandt, Woolard and Woolard 2000; Leibbrandt 2002]. Wage income contributes most to rural homeland inequality, due to huge inequality in access to wage income in homeland rural areas. Remittance and social transfers are more evenly distributed and not closely correlated with the distribution of total incomes, thus households with such income sources are usually not those with high wage income.

Remittances from migrants who have found urban jobs form an important tie between the rural population and the urban economy. Means-tested old age pensions and disability grants are the major form of social security for the rural population. The impact of these grants is great, given their large magnitude compared to rural sources of income. Three out of eight black households in the former homelands benefit from such state transfers and their overall magnitude is four times as large as that of agricultural production[Leibbrandt, Woolard and Woolard 2000]. It has been estimated that more than R9 billion entered rural areas in 1997 in the form of social grants [Van der Berg 2001a] — only slightly less than the value of health or educational services provided to the rural population. These transfers are massive in the context of great rural poverty: R383 per rural person in 1993, rising to R641 by 1997.

Migration as response to rural poverty

Bekker [2000:10-11] notes that in previous periods it was more common for men to prefer to leave their families behind when migrating in search of jobs, even after the abolition of influx control, due to perceptions about inadequate urban schooling for blacks and urban crime and violence. Now, however, children migrate in significant numbers. The aggregate pattern of net migration is not appreciably different from the historical pattern of movement from largely rural provinces to largely urban provinces, but census evidence indicates that return migration is becoming less common. Most migration appears to be driven by labour market factors. For many of the rural unemployed, urban employment probabilities are still better than rural. Unfavourable labour market characteristics and lack of access to information about employment opportunities make it hard for rural unemployed to compete in the labour market. They are forced to respond to this through joining households that give them access to income but also make it harder for them to integrate effectively into the labour market. Thus households themselves change and reshape in response to economic circumstances, a feature we return to in the next sub-section.

Due to differential rural-urban migration, rural areas have higher female ratios. In 1995 there were 89.9 males per 100 females in rural areas, compared to 103.8 in urban areas, and in the age group 30-39, the rural male: female ratio was as low as

76.1:100. As women and female-headed households are concentrated in rural areas, it is not surprising that the experience more poverty. Rural areas also have a larger dependency burden (0.91 versus 0.49 in urban areas), indicating a higher ratio of people of economically dependent age groups (0-14 and 65 or more) compared to the economically-active age group (15-64 years). The cause is a high preponderance of children in rural areas, as well as the absence of many working-age adults. The age pattern of the population reflects the impact of this migration. The highest rural deficit amongst both males and females occurs in the 20-29 and 30-39 age category.

Household formation response to rural poverty

Models of bargaining power within the household, intra-household resource allocation, and effects of intra-household dynamics are used to illuminate matters such as the differential impact of female as opposed to male pension receivers on labour force participation or health of grandchildren. However, such models generally treat household size and composition as given (exogenous). A unique feature of the South African rural experience lies in the magnitude of the impact of migration, remittances and social transfers on household formation, implying household formation is shaped by (endogenous to) economic processes and consequently poverty. These have had powerful effects on black family structures and complexity of household organisation. In rural areas, households often form around sources of income. Unemployed adults often attach themselves and their dependants to pensioner households. Along with intra-household distribution, this plays a key role in rural poverty.

Many discouraged unemployed in poor households no longer actively seek work. Furthermore, poor households have more dependants. Hence, for rural households demographic factors exacerbate the effect of inadequate labour market linkages. One way in which poor households are indeed structurally different from better off households is in the greater prevalence of multi-generation households, probably due to young adults failing to leave the parental household in the face of high unemployment.

Change in poverty, future prospects and some policy conclusions

The incomparability in datasets means that the debate whether poverty has declined is raging on without respite. It is likely, however, that the actual situation is not as easily summarised as some of the protagonists in the debate would have it. The answer is likely to be one that depends on where the poverty line is drawn, or what measure of poverty is used.

The only panel data set available, the KwaZulu-Natal Income Dynamics Study (KIDS), provides some data for analysis of inter-temporal income mobility for a relatively short period early in the transition, but provides little information to generalise from for the experience of poverty nationally. The Gini coefficient for black households in KwaZulu-Natal rose from 0.47 to 0.53 between 1993 and 1998, reflecting a rise in income inequality. Altogether 63% of households who were in the richest quintile in 1993 remained there in 1998 and another 22% moved down just one quintile, whilst 37% of those who began in the poorest decile were still there 5 years later and another 26% had moved up just one quintile. Three-quarters of all

households did not change their position by more than one quintile in the five year period, and most mobility occurred in the middle of the distribution [Leibbrandt 2002]. Although most households who became poor did so because of a fall in income, more than one-quarter who moved into poverty did so because of a change in demographic composition. A significant number fell into poverty because of a decline in remittance income or non-labour earnings (usually the loss of a state pension or grant). One-quarter of households who escaped poverty did so as a result of shedding household members, although many households moved out of poverty because they gained state support or other non-labour income. Not surprisingly, households where additional people obtained employment were most likely to experience upward income mobility.

But perhaps more useful for judging the path of South African poverty is to turn to some of the forces affecting poverty and judge their effect. In previous work [Van der Berg 1989], this author has argued that three main forces have had a major impact of distributional outcomes for the black population since the mid-seventies:

- Rising unemployment and that certainly continued in the last decade, mainly because of inadequate employment growth;
- Rising black wages, continuing despite a slowing of earlier wage pressure due to increased upwards mobility for blacks made possible by growing skills and affirmative action policies;
- A fiscal shift towards the black population, that certainly continued (see Van der Berg 2001a, 2001b, & Van der Berg & Burger 2002).

Determining the net effect of these forces on the magnitude of poverty in the past decade is presently a matter of conjecture. But the impact on inequality is likely to have increased, because an insider group (employed) have gained whilst outsiders have had growing problems gaining access to jobs.

The future is likely to see some moderation of wage trends, and unless growth much accelerates, it is also likely to mean that fiscal resources available to the black population would grow more slowly as redistribution of service provision nears its limits. An important factor here is whether service provision in rural areas would improve, but this more concerns the quality of delivery than the quantity of fiscal resources spent.

In the final analysis, prospects for poverty revolve around the labour market. Access to this market is one aspect, and here improved education can assist; the magnitude of job creation is a second, and here economic growth is paramount as determinant; and a third aspect is the changing demography situation brought about by decelerating population and labour force growth under the impact of declining fertility but also, unfortunately, of AIDS. The combined impact of these three factors will be crucial for future poverty outcomes.

South African poverty is largely rural, whilst paradoxically, rural income sources are largely urban in origin. Thus rural poverty reflects *inter alia* poor linkages of many households to urban sources of income. The most important factors determining rural poverty are not necessarily related to land and agriculture, but to income flows and access to sources of (mainly urban) income, e.g. the rules, norms and conventions determining <u>migration</u> (both whether to migrate, and what relationship to maintain

with the rural area of origin), <u>remittances</u>, access to and take-up of <u>social transfers</u>, and rural <u>household formation</u> and dissolution. These institutions require attention, as do the attempts of those rural people who try to combine access to urban income with continued access to free <u>rural natural resources</u> instead of cash-based urban services (e.g. water, energy, sanitation).

Some possible areas where this research has a bearing on policy are the following:

- Subsistence agriculture does not offer much scope as a source of rural income. However, that does not detract from the fact that access to land where people can continue a rural lifestyle is still very important to many people. The chief use of this land is for access to natural resource based rather than cash-based urban services: water, energy, some agriculture, grazing, hunting and gathering. However, even on existing traditional land, serious questions need to be asked about the sustainability of such use of natural resources. The problem is particularly severe on land where rapid densification takes place, due often to the good access which it provides to the desirable urban-based income sources, often through commuting.
- The recent expansion of the social security system will further strengthen its role as an alleviator of rural poverty the one public policy that has had particularly beneficial effects in rural areas. But more and larger child support grants are also likely to have implications for household formation and structure, in the same way that social old-age pensions have had. Further research is essential to determine whether this impact is mainly benign, particularly for the intended beneficiaries.
- No direct intervention by government can have as great an impact on the position of the rural poor as an acceleration of economic growth accompanied by considerable employment expansion, to provide jobs for both the urban and the rural population and the fiscal resources required for the rural poor to share in expansion and improvement of education, health services and social transfers. Jobs remain the priority for a rural population which has long ceased to be a peasantry and depends for its survival on access to urban incomes, albeit whilst retaining rural living arrangements. Jobs also remain a priority for the urban poor, whether they are long term residents or new migrants to urban areas in search of such jobs.

In the final analysis, improved distribution and reduced poverty require a sustained rise in employment, which in turn depends strongly on economic growth. In the absence of such growth, there are limits to how far poverty can be alleviated through policy interventions.

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Appendix: Table 1: Per capita income in 1995 South African Rand per capita, 1998

Tanzania Malawi Burundi Ethiopia	GNP per capita, PPP R 542 R 618 R 629
Malawi Burundi Ethiopia	R 542 R 618
Malawi Burundi Ethiopia	R 618
Burundi Ethiopia	
Ethiopia	D 620
	K 029
	R 635
Guinea-Bissau	R 643
Yemen, Rep.	R 738
Mali	R 754
Zambia	R 760
SA Quintile 1	R 783
Niger	R 818
Congo, Dem. Rep.	R 823
Nigeria	R 830
Mozambique	R 830
Madagascar	R 832
Chad	R 945
Congo, Rep.	R 950
Benin	R 962
Burkina Faso	R 971
Kenya	R 1 082
Eritrea	R 1 104
Angola	R 1 121
Tajikistan	R 1 168
Uganda	R 1 203
Central African Republic	R 1 232
Nepal	R 1 325
Sudan	R 1 391
Cambodia	R 1 397
Sao Tome and Principe	R 1 446
Senegal	R 1 455
SA Quintile 2	R 1 505
Togo	R 1 516
Haiti	R 1 547
Cameroon	R 1 565
Comoros	R 1 570
Bangladesh	R 1 578
Gambia, The	R 1 602
Bhutan	R 1 613
Mongolia	R 1 641
Cote d'Ivoire	R 1 664
Mauritania	R 1 683
Pakistan	R 1 853
Lao PDR	R 1 888

Vietnam	R 1 894
Guinea	R 1 932
Ghana	R 1 946
Nicaragua	R 2 127
Solomon Islands	R 2 137
Moldova	R 2 238
Uzbekistan	R 2 293
India	R 2 311
Armenia	R 2 327
Azerbaijan	R 2 432
Lesotho	R 2 462
Papua New Guinea	R 2 473
Bolivia	R 2 474
SA Quintile 3	R 2 491
Kyrgyz Republic	R 2 521
Honduras	R 2 623
Indonesia	R 2 701
Zimbabwe	R 2 793
Jordan	R 2 934
Syrian Arab Republic	R 3 032
Albania	R 3 213
Vanuatu	R 3 245
Sri Lanka	R 3 304
Ecuador	R 3 369
China	R 3 423
Ukraine	R 3 512
Guyana	R 3 521
Egypt, Arab Rep.	R 3 529
Morocco	R 3 577
Cape Verde	R 3 581
Jamaica	R 3 752
Georgia	R 3 847
Maldives	R 3 854
Guatemala	R 3 897
Philippines	R 4 179
Samoa	R 4 324
Kiribati	R 4 353
SA Quintile 4	R 4 462
El Salvador	R 4 496
Fiji	R 4 593
Lebanon	R 4 649
Peru	R 4 690
Tonga	R 4 698
Swaziland	R 4 706
Macedonia, FYR	R 4 739
1.1400401114, 1 110	11 137

Paraguay	R 4 838
Kazakhstan	R 4 843
Dominican Republic	R 4 866
Belize	R 4 900
SA Blacks	R 4 941
St. Vincent & Grenadines	R 5 030
Algeria Algeria	R 5 155
Bulgaria	R 5 254
Dominica	R 5 360
St. Lucia	R 5 494
Panama Panama	R 5 526
Iran	R 5 745
Tunisia	R 5 799
Namibia	R 5 923
Thailand	R 6 197
Grenada	R 6 235
Romania	R 6 251
Gabon	R 6 300
Venezuela	R 6 401
Latvia	R 6 481
	R 6 503
Botswana Costa Rica	R 6 520
Colombia	R 6 576
SA Coloureds	R 6 858
Russian Federation	R 6 933
Lithuania	R 7 048
Belarus	R 7 048
Brazil	
	R 7 247 R 7 398
Turkey	
Croatia Trinidad and Tabasa	R 7 514
Trinidad and Tobago	R 8 087
Mexico	R 8 358
Poland	R 8 462
Estonia	R 8 484
Malaysia	R 8 637
Mauritius	R 9 240
South Africa	R 9 307
Total	R 9 307
Chile	R 9 544
Uruguay	R 9 582
Antigua and Barbuda	R 9 973
Slovak Republic	R 10 796
St. Kitts and Nevis Sources: International data in PPP	R 10 983

TT	D 11 020
Hungary	R 11 030
Seychelles	R 11 427
Saudi Arabia	R 11 778
Bahrain	R 12 964
Argentina	R 13 157
Czech Republic	R 13 684
SA Quintile 5	R 14 502
Korea, Rep.	R 14 906
Bahamas, The	R 15 695
Greece	R 15 700
Slovenia	R 16 155
Portugal	R 16 345
SA Indian	R 17 221
Spain	R 17 905
New Zealand	R 18 045
Israel	R 18 915
Cyprus	R 19 744
Ireland	R 20 184
United Arab Emirates	R 21 171
Sweden	R 22 267
United Kingdom	R 22 790
Italy	R 22 847
Finland	R 23 157
Hong Kong, China	R 23 294
France	R 23 799
Australia	R 24 451
Germany	R 24 710
Netherlands	R 25 046
Canada	R 25 595
Malta	R 25 693
Austria	R 25 965
Japan	R 26 467
Belgium	R 26 501
Denmark	R 26 763
Iceland	R 27 793
Brunei	R 27 918
	R 28 378
Singapore	R 28 378 R 29 389
Norway Switzerland	
	R 30 152
United States	R 32 804
SA Whites	R 33 421
Luxembourg	R 41 176

Sources: International data in PPP-dollars from World Bank datasets for 1998; South African data from 1995 OHS/IES. The ratio between the South African PPP-dollar figure from the World Bank dataset and the average South African income from the 1995 surveys was used to convert all figures to 1995-Rand.