TIPS

F O R U M 2003



2003 P A P E R S

Increases in Poverty in South Africa 1999-2002

Charles Meth, Rosa Dias

Development Policy Research Unit
School of Economics, University of Cape Town

Increases in poverty in South Africa, 1999-2002

Paper to be presented at the DPRU/TIPS Forum,
8-10 September 2003, Johannesburg

Charles Meth
School of Development Studies
University of Natal
Durban

and

Rosa Dias
Division of Economics
University of Natal
Durban

Table of contents

Summary

Having stumbled onto the 'fact' that the number of people in the bottom two expenditure classes (whose boundaries remained constant in nominal terms) increased between 1999 and 2002, we have attempted to measure the increase in poverty that this probably implies. First, we looked at the people in the expenditure classes R0-399 and R400-799 in the 1999 October Household survey and the September 2002 Labour Force Survey, in some detail. Once we had sorted them into households of different types (all households, households possibly containing pensioners but no workers although there are people of working age present, and households containing neither workers nor pensioners), we divided them into households containing adults only, and households containing adults and children. With this information to hand, we are able to make a crude estimate of the potential number of 'new' poor—it could lie, we find, between 3.7 and 4.2 million.

Refining the data to allow for child costs, household economies of scale and inflation during the period, we find that in 2002, all but a trivial proportion of the new entrants to these expenditure classes had maximum potential per capita consumption levels well below one of the poverty lines conventionally used in South Africa.

When claims are made that poverty is increasing in the country, government responds by pointing to the failure of the standard socio-economic surveys to consider the contribution of the social wage to alleviation of poverty. Accordingly, we have attempted to simulate the impact of the social wage. Valuing its components is extremely difficult (and contentious). Even after making what we regard as fairly generous allowance for most elements of the social wage, the four million new entrants are mostly still poor. This conclusion is not sensitive to large increases in the assumed values of the components of the social wage. In the lowest expenditure class, those best off would have a maximum of R4.67 to spend each day. In the next expenditure category, this rises to a maximum R7.03 daily (in 2002 prices).

Surveys are well known to understate income and expenditure, especially at the bottom end of the income distribution. To compensate for this, expenditure limits were raised by 66 per cent. This adjustment notwithstanding, all except a few single and double adult households in the two expenditure categories have maximum potential per capita consumption levels lower than the chosen PL. There is room for substantial increases in either the assumed values of the components of the social wage, or the monetary component of expenditure, before the maximum potential expenditure level equals the PL in both expenditure categories. The results of a simulation are presented to show the effect of increases in expenditure on the numbers of potentially poor.

Our conclusion is that there has been a massive increase in the number of people in poverty (about 3.7 million people). Conditions for some of them will have improved because of the social wage. Their daily consumption allowances for items such as food, clothing and transport, however, remain pitifully low. The inadequacy of the existing monitoring systems prevents us from determining the extent of improvement due to the social wage, although Census 2001 will throw some light on this matter when the data become available.

Introduction

As governing party, the ANC knows full well that combating poverty is its most important task. Not surprisingly, government and party spokespersons are extremely sensitive to suggestions that poverty is worsening. Briefing Parliament's communication committee on the work of the Government Communication and Information System (GCIS) in advance of a debate in the house earlier this year on "… whether conditions in SA had improved since the democratic elections in 1994 ...", its CEO, Joel Netshitenzhe, said that the GCIS "… had to correct mistaken views that the poor were worse off than they were during apartheid years…" (*Business Day*, March 26 2003)

Netshitenzhe is quoted as saying that:

> "… the tide had turned on the unemployment front as the economy was beginning to create jobs. A 'social wage' had also been introduced, reflecting government's efforts to deal with poverty. This had contributed to an improved quality of life.
>
> The social wage included social grants, tax relief, the provision of free basic services. In addition, the acquisition of human rights had also improved the quality of people's lives.
>
> While partial data and focus on single points in time may attract shallow claims of no delivery and increasing poverty a contrary conclusion follows from a rounded picture of trends including the social wage, tax relief and social grants over and above cash income from employment… " (*Business Day*, March 26 2003)

By about 2000, analyses of poverty and income inequality based on (or linked to) the 1996 Population Census and the 1995 Income and Expenditure Survey (IES) had reached the end of the road? further developments awaited the publication of the IES results for the year 2000. Taking the analyses as far as they would go, most commentators seemed to agree that between-(race)-group inequalities fallen, while within-group inequalities have risen. Having concluded thus, the examination of South Africa's changing income distribution in the period 1991-96 by Whiteford and van Seventer (2000) argued that:

> "… the rise in inequality within population groups and within society as a whole is driven, on the one hand, by rising employment of well-paid, highly-skilled persons and, on the other hand, declining employment of lower-paid, less-skilled persons who are forced into poorly remunerated informal sector employment or into unemployment." (p.28)

Posing the question of whether the trends they have detected "… which occurred in all population groups" (p.25) were likely to continue into the future, the answer, they insisted, had to be in the affirmative. Their analysis of labour market processes, and projections that one of the authors made in another study, led them to predict that:

> "… the employment of highly skilled persons will continue to rise while the employment of less skilled persons will decline, resulting in rising unemployment.

> Unless there is a fundamental shift in the path along which the economy is moving, there is little hope for a reduction in inequality and income poverty." (Whiteford and van Seventer, 2000, p.28)

Research suggested that up until the mid-1990s, since most households (72 per cent of all households and 64 per cent of African households)[1] contained no unemployed:

> "… most household-level inequality [inequality between households] is driven by income dynamics within households with no unemployed members because most households do not have unemployed members and households with unemployed members tend to be crowded below the poverty line at the lower end of the household income distribution." (Leibbrandt, Woolard and Bhorat, 2000, p.48)

This conclusion no longer holds. Rising unemployment in the period since 1996 makes it likely that the Whiteford and van Seventer prediction on poverty and inequality would have been fulfilled. Not only has the required fundamental shift not taken place—the numbers of unemployed have climbed to record levels, almost doubling between 1995 and 2002. With some large proportion of the unemployed located in the lowest expenditure categories (we discuss the numbers below), it seems almost inevitable that poverty would have worsened.

Unfortunately, the statistical basis on which reliable judgements about poverty and inequality in the period after 1996 were to be based, the 2000 Income and Expenditure Survey (2000 IES), turned out to be deeply flawed.[2] An analysis of its results, presented in *Earning and spending in South Africa* (Statistics South Africa, 2002), which show an increase in poverty and inequality over the period 1995-2000, were dismissed by government.

This paper uses a different approach to show that between 1999 and 2002, poverty, as measured by a variant of the headcount method, increased substantially. The usual technique for conducting a headcount is to establish a poverty line (PL) and then to count the number of households whose expenditure or income falls below this level. This is usually done after the size of those households containing children has been adjusted for lower costs (estimating adult equivalents), and after allowance has been made for in-kind consumption (the social wage). The number of people in poverty is the total number of people in those households below the PL.

The aim of this paper is not to count the total number of people in poverty. Instead, having observed that there has been an increase in the numbers of people in households in the expenditure categories R0-399, and R400-799 per month over the period 1999-2002, we delve into the relevant Labour Force Survey (LFS), that for September 2002, and the October Household Survey (OHS) for 1999, to uncover more details of these changes. Having carried out that exercise, maximum potential per capita consumption figures (adjusting for adult equivalence, and for household economies of scale) are estimated. In the absence of reliable data on the social wage, a series of simulations are performed to estimate their value in consumption. Total

[1] By 1999, these proportions had fallen to 64 and 57 per cent respectively. They fell still further, reaching 58 and 52 per cent, respectively, by 2002.
[2] The IES figures for the country as a whole are presented in SR P0111, 13 November 2002.

consumption potentials are then estimated. Estimates are then made of the increases in the numbers of people in these categories whose consumption levels are far enough below the poverty line (PL) as to merit their being unequivocally described as living in poverty.

Establishing a poverty line is a fraught business. The PL used in this paper is taken from Bhorat and Leibbrandt (2001, p.80). They used a figure of R293 per month (in constant 1995 prices) to identify workers in poverty in 1995. This is for adult equivalents. In 1999 prices, the PL would amount to about R384, and in 2002 prices, to roughly R467.[3]

Because income and expenditure survey data are held to be unreliable, we present a second set of maximum potential consumption levels to which an error factor of 66 per cent has been applied. These results do not alter our conclusion that the number of people in poverty increased substantially over the period 1999-2002.

Our estimates of the value of the social wage are bound to be contentious—valuation problems encountered in attempting to perform calculations of this sort are always and everywhere almost intractable. If all of those in the lowest expenditure categories received the relevant components of the social wage, poverty among them could be made to disappear by assuming sufficiently high values for these components. While there is room for disagreement with our figures, we would regard assumptions that 'disappear' the poor as intellectually suspect. To prevent this happening, we stress the importance of examining the potential levels of consumption excluding the social wage.

Our results, the basic data from which they were generated, and the simple simulation devices used to perform operations such as adult equivalence calculations, social wage valuation, expenditure under-estimation corrections and the like, are in a spreadsheet called 'Meth-Dias(2003).xls'. It will be distributed with the paper. Using it, anyone can make any changes they wish to the assumptions that we have made. By this means, they can test the sensitivity of our results to variations in those assumptions. But enough—let us, without further ado, turn to the figures.

Counting those in the lowest expenditure categories

Unless it can be shown that the September 2002 Labour Force Survey (LFS) and the 1999 October Household Survey (OHS) suffer from the same weighting defects as the 2000 IES,[4] then it must be concluded that the number of people in the lowest expenditure categories rose substantially over the period 1999-2002. This is illustrated in Table 1 below. Using the results for people in households where expenditure was between R0-399, and R400-799 per month, we identified three different types of household. The first of these includes workers, the unemployed, the

[3] These have been inflated using the CPI in series KBP7032J on the South African Reserve Bank website.

[4] See Meth (2003) for a discussion of some of the more obvious problems with the IES results. Statistics South Africa is in the process of reweighting the survey results to the 2001 Census.

not economically active, pensioners and children, i.e., all of the people in the respective expenditure categories. The second looks at workerless households. Pensioners are excluded from the third type of household, which contains unemployed, not economically active adults and children. They are referred to respectively as Type 1, 2 and 3 households.

In Type 1 households, the numbers of people in the lowest expenditure category grow by about 2.9 million, an increase of roughly 31 per cent. The next expenditure category, R400-799 per month, contained almost 1.4 million more people in 2002 than it did in 1999, an increase of slightly over 11 per cent. It is possible that not all of the new entrants into these categories would fall below our chosen poverty line (about R470 per month in 2002). To deal with the possibility that not all the new entrants are in poverty, it is necessary to sort households by type.

Table 1 divides them into those containing only adults[5] and those containing adults and children. A back-of-envelope estimate suggests that in the expenditure category R0-399 per month, only those in households containing a single individual have any hope of enjoying an income somewhere near the PL. Everyone one else in the category has a potential maximum consumption level well below this, an issue at which we look in greater detail below. For Type 1 households, a feature of note in the figures decomposed by household size, is the 'fact' that the numbers of people in households containing adults and children grew at roughly the same rate as all Type 1 households. Containing about 5.4 people on average, a quick calculation suggests that average monthly per capita consumption could not have been much more than about R70. There were 2.4 million more such people in 2002 than there were in 1999.

In the expenditure category R400-799, the 557 000 people in households consisting of only one adult, it is possible that some significant proportion (possibly pensioners living alone?) enjoyed incomes above the PL—everyone else could have been below it. The numbers of people in households containing adults and children increase more rapidly than the numbers of people in Type 1 households in general (about 1.4 million people).

Although we cannot attach an exact number to the increase in the number of people in poverty in the two expenditure categories, we suspect that it could lie somewhere between a 3.7 million, and 4.2 million,[6] with the possibility that it is closer to the higher of these two figures. We attempt to narrow the range below when we examine potential expenditure levels.

[5] We did not attempt to look at those ghastly phenomena, the child-headed households, or the 'households' consisting only of a single child.

[6] The upper limit is the difference between the sums of numbers in the bottom expenditure categories in 2002 and 1999. The lower limit subtracts from these totals, the numbers of people living in adults only households. Similar calculations performed on the Type 2 and Type 3 households suggests that the increases in the numbers in poverty in each case could lie between 1.2 and 0.96 million, and 0.87 and 0.69 million respectively.

Table 1 Changes in the numbers of people in the poorest households

	R0 - R399			R400-R799		
Type 1 household (all households)	2002	1999	% change	2002	1999	% change
Total number of households in this expenditure category	3 347 390	2 611 439	28.2	2 859 258	2 714 924	5.3
Total number of people in this expenditure category	12 090 072	9 216 928	31.2	13 617 194	12 245 962	11.2
Number of people in households containing only one individual	1 058 104	813 381	30.1	557 378	467 862	19.1
Number of people in households containing two adults	707 266	554 620	27.5	580 078	655 884	-11.6
Number of people in households containing more than two adults	484 685	363 049	33.5	578 692	615 460	-6.0
Number of people in households containing adults and children	9 840 017	7 485 878	31.4	11 901 046	10 506 756	13.3
Average number of people in these households	5.4	5.3		6.4	6.0	
Type 2 household (workerless households)						
Total number of workerless households	1 583 268	1 258 744	25.8	1 120 014	1 150 377	-2.6
Total number of people in workerless households	5 825 268	4 711 573	23.6	5 844 198	5 802 013	0.7
Number of people in households containing only one individual	465 113	346 191	34.4	163 521	152 946	6.9
Number of people in households containing two adults	275 336	233 836	17.7	183 660	207 222	-11.4
Number of people in households containing more than two adults	208 366	176 750	17.9	214 447	199 753	7.4
Number of people in households containing adults and children	4 876 453	3 954 796	23.3	5 282 570	5 242 092	0.8
Average number of people in these households	5.3	5.3		6.5	6.2	
Type 3 household (workerless & pensionerless households)						
Total number of workerless & pensionerless households	1 274 704	965 600	32.0	571 487	527 027	8.4
Total number of people in workerless & pensionerless households	4 271 181	3 378 302	26.4	2 568 809	2 589 322	-0.8
Number of people in households containing only one individual	407 136	291 136	39.8	92 157	65 096	41.6
Number of people in households containing two adults	201 410	159 206	26.5	71 742	84 644	-15.2
Number of people in households containing more than two adults	122 832	102 615	19.7	61 609	68 181	-9.6
Number of people in households containing adults and children	3 539 803	2 825 345	25.3	2 343 301	2 371 401	-1.2
Average number of people in these households	4.8	5.0		5.5	5.5	

In the case of the Type 3 households, arguably the most vulnerable, having neither worker nor pensioner present in them, the numbers of people in the expenditure category R400-799 falls. The possible increase in the number of poor in the lowest expenditure category could lie between 893 000 and 714 000.[7] Growth in the numbers of households containing a single individual in the bottom expenditure category was 40 per cent. Of the 407 000 such people in 2002, 203 000 were unemployed, the others not economically active. It is possible that some of the adults in this category could have received incomes large enough from other sources, e.g., remittances, to allow them to consume at somewhere near the PL. Everyone else in this category has a high probability of being poor.

It is probably useful to point out at this stage that the expenditure categories are in the current prices ruling in the years in which the surveys were undertaken. If the class boundaries were adjusted to take account of inflation, the upper boundary of the lowest expenditure category would be about R485, and that of the next category, roughly R971. Raising the boundary of the lowest class would increase still further, the number of people who had moved into the class of the poor. Since we can estimate neither means nor distributions within these expenditure categories, we cannot say how many people would be involved. Suffice it to say that at first glance, the estimate above of about four million new candidates for poverty seems reasonable.

Given the distribution of the unemployed, this result accords with our expectations. Of the 7.9 million unemployed people in South Africa in September 2002, 5.3 million (67 per cent)[8] were located in the expenditure categories R0-399 and R400-799. The increase in the number of unemployed between October 1999 and September 2002 was a little over two million. Since the largest proportion of the total number of births in South Africa occurs among the poorer paid (or unemployed), we would expect the increase in the number of poor to exceed the increase in the number of unemployed. Rather obviously, we would also expect the increase in the number of poor to exceed the increase in the size of the population. The South African population probably increased in size by roughly 800 000 per annum over the period. This means that the number of new poor is larger (probably by at least 1 600 000) than the population increase over the period.

Now that we have a sense of the distribution of people in the bottom two expenditure categories, and some of the changes that have taken place since 1999, it is time to engage in a little speculation as to what their maximum potential consumption levels might have been.

Maximum consumption potential and the social wage

Government, when pressed on the issue of poverty, invariably responds by referring to the social wage. The LFS and OHS data exclude most of the elements of the social

[7] The lower limit in this case is obtained by subtracting the number of people living in single-adult only households.

[8] In 1999, using the expanded definition, there were 5.8 million people unemployed. Of them, 1.78 million were in the lowest expenditure category (R0-399) and 1.83 in the category above (R400-799). In total, 61 per cent of the unemployed were located in the bottom two expenditure categories.

wage, many of which take the form either of public goods, or of heavily subsidised (or free) public utilities. To examine changes in the conditions of the poor between 1999 and 2002, we first examine their consumption possibilities without any social wage component. Thereafter, we look at the impact of social grants on their living standards. Having done that, we simulate the effect that the social wage might have had. Table 2 contains the results for Type 1 households (i.e., all households in expenditure categories R0-399 and R400-799). Similar exercises performed on the Type 2 and 3 households do not yield vastly different results, so in the interests of brevity, they are not presented here.

To render the expenditure levels in 2002 and 1999 comparable, the reverse of the inflation procedure performed above is carried out. Rather obviously, a 2002 rand buys less (about 18 per cent) than its 1999 counterpart. The 2002 upper bounds of the two expenditure categories fall to R328 and R657 (in constant 1999 prices). The upper panel of Table 2 shows household compositions in 2002 and 1999. From these we estimate maximum potential per capita monthly expenditure. The figures for maximum potential per capita expenditure for those in households containing children are arrived by applying a child cost ratio of 0.5, and an economies of scale parameter of 0.9 to the raw family composition data (the 'unadjusted' figures in Table 2). In this we follow Woolard and Leibbrandt (2001, p.54), who in turn make use of the "widely accepted" (May *et al*, 1995) scales.

As we noted above, only in households consisting of single individuals in the lowest expenditure category was there any chance of consuming at somewhere near the PL—everyone else in that category was likely to be in poverty. In 1999, the members of the 'average' household containing adults and children could not (on average) have consumed more than R107.53 each (in 1999 prices). By 2002, the figure had fallen (been eroded by inflation and by slightly increasing numbers per household) to R87.20 per person. In the next expenditure category, the 1999 maximum was R190.72, while the 2002 figure was a mere R146.90.[9] Because the data are collected by expenditure category, means and distributions, as we noted above, cannot be ascertained. It is possible that the 1999 means were lower than the 2002 means. It is also possible that they were not. Whether they were or not, it is clear, using potential maximum expenditure excluding social grants and other components of the social wage as a gauge, that all people in households containing adults and children would have been classified as being in poverty in 1999 and 2002 (recall that our PL, in 1999 prices, was about R384 per month per adult equivalent). It is clear as well, that most adults in the lowest expenditure category were very poor. So too, were most people in households in the expenditure category R400-799 per month, containing adults and children.

So much for maximum potential per capita consumption using recorded expenditure only. Our next task is to see how consumption is affected by social grants, in particular, by the Child Support Grant, and by the other components of the social wage.

[9] The September 2002 LFS reports that some 353 575 households (about 19 per cent of households in this expenditure category) received the CSG. Some households are therefore in this category than in the lower category by virtue of receipt of the grant income. For the purposes of the exercise carried out here, we ignore this, treating all households as though they had not received the CSG. This assumption is conservative, i.e., it will understate actual poverty levels.

Table 2 Maximum potential consumption levels (constant 1999 prices), 2002 and 1999

Year	1999	2002	1999	2002
Expenditure range (R/month)	0	0	400	329
	399	328	799	657
Composition of households with children				
Total no. of households containing adults and children (unadjusted)	1 422 480	1 808 198	1 761 927	1 869 297
Average number of people per household	5.3	5.4	6.0	6.4
Number of adults per household	2.4	2.5	2.9	3.1
Number of children 7 years or younger per household	1.0	1.3	1.1	1.5
Number of children 15 years or younger per household	2.3	2.5	2.6	2.8
Number of unemployed people per household	0.9	1.1	0.8	1.2
Maximum potential per capita expenditure before social wage: various household compositions				
Single adult	399.00	328.26	799.00	657.35
Two adults	199.50	164.13	399.50	328.67
More than two adults	108.00	86.32	204.07	161.92
Adults and children	107.53	87.20	190.72	146.90
Impact of social grants				
Child support grant				
Child support grant (children up to 7 years of age), R/month		28.00		26.51
Child support grant (children up to 15 years of age), R/month		53.30		50.46
Basic income grant		82.27		82.27
Maximum potential per capita expenditure including social grants				
Per capita expenditure with CSG for children up to 7 years of age (R/m)		115.20		173.40
Per capita expenditure with CSG for children up to 15 years of age (R/m)		140.49		197.35
Per capita expenditure with BIG (R/month)		169.47		229.17
Possible amelioration through the social wage				
Electricity (per household & per capita), R/m		9.19		7.85
Water (per household & per capita), R/m		9.19		7.85
Health (per individual), R/month		50.00		50.00
Housing (per individual), R/month		20.00		20.00
Sanitation (per individual), R/month		10.00		10.00
Education (per individual), R/month		15.00		15.00
Total value of social wage, R/month (2002 prices)		113.38		110.71
Total value of social wage, R/month (1999 prices)		93.28		91.08
Maximum potential monthly per capita expenditure				
Per capita exp with CSG for kids up to 7 years of age & social wage (R/m)		208.47		264.49
Per capita exp with CSG for kids up to 15 years of age & social wage (R/m)		233.77		288.43
Per capita expenditure with BIG & social wage (R/month)		262.75		320.25

After a slow start, coverage of the Child Support Grant has increased rapidly. In 2002, children under the age of seven years were eligible for the grant. This is being extended over a three-year period to children under the age of 15 years. Its current value is R160 per month; in 2002 it was R140 per month. The state reports that some 3.4 million children now receive the grant. It appears from the September 2002 LFS figures that there were about 2.4 million children under the age of seven years in the lowest expenditure category, and about 2.8 million in the next category. Coverage levels are not known. If the LFS estimates of the numbers of children in these expenditure categories are correct (and if they are, they should account for most of the eligible children), then possibly about two-thirds of the eligible children are now covered. For the purposes of the exercise of estimating maximum possible consumption levels, we ignore coverage levels, assuming that everyone eligible receives the grant. We also assume that no-one received the CSG in 1999.

There is evidence that significant benefit dilution occurs (Waddell, 2002). In the table we assume that the CSG is equally divided among all household members. If that were the case, those in the lowest expenditure category would each receive an additional R28.00. In the slightly more populous households in the next expenditure category, each individual would receive an extra R26.51. The CSG would thus raise consumption levels to R115.20 and R173.40 respectively in these two expenditure categories. The net increase in maximum possible expenditure over the period 1999-2002 in the lowest expenditure category if all eligible children received the CSG would thus be R7.66. In the next expenditure category, the possible maximum fell (by R17.31) even after the CSG is paid, because of the combined effect of inflation and increasing household size.

If the CSG had been extended to children aged less than 15 years, consumption levels would have been R140.49 and R197.35 respectively. If a Basic Income Grant (BIG) of R100 in current prices (R82.27 in 1999 prices) were paid, and the CSG abandoned, it would leave the average individual considerably better off (R169.47 and R229.17 respectively). One reason for preferring the BIG is obvious from the table—there are too few children in the average household to affect consumption levels significantly.

And so to the other components of the social wage: electricity; water; health; housing; sanitation and education. It is obvious that with the exception of the first two of these, that valuation is going to present extreme, possibly insuperable difficulties. The value of electricity and water received by the poorest households is set at R50 each per household (in 2002 prices). Distributed among the household members, this gives the individual consumption figures listed in the table. Whether the state is able to supply the poorest of the poor with these utilities is an open question.

Free health care is possibly the most important element of the social wage. Let us assume that the average worker spends about R500 per month to buy medical aid (mainly catastrophe cover) coverage for a family of say, five people. Poor people would, if they had the income, of necessity, spend less, say, R50 per household occupant. Accordingly, that figure has been used in the simulation.

The monetary value of living in an ‘RDP’ house, as opposed to an ‘informal (shack) dwelling’ (from which people are assumed to have moved) cannot readily be

ascertained. Anecdotally, one of the important advantages of moving from the former to the latter appears to be the increased security levels afforded by formal housing. Improved protection against the elements is obviously also important. In the absence of a market (or, in the absence of knowledge of prices in such markets where they do exist) we can but guess at the extent to which people's wellbeing is improved by virtue of their access to formal housing. In any case, the numbers of people living in shacks is vast, and apparently, growing. For purposes of this paper, a value of R20 per individual (in current prices) has been assumed. Like all of the guesstimates for the elements of the social wage, its value may be varied at will.

Sanitation, apart from the increase in convenience that it brings, is also important for public health. It has been assigned a value of R10 per individual, once more, on fairly arbitrary grounds.[10] The external benefits, even more difficult to value, of proper sewerage, are obviously substantial.

Education, the last item, would normally be treated as investment in human capital, and valued using tried but not trusted techniques. Since most school leavers appear to be joining the ranks of the unemployed, not to say unemployable, the value of education as an investment good, at least in the medium-term, may well be negative. Viewed in purely financial terms, the cost of education (poor parents have to pay school fees and buy school uniforms) could exceed the benefits. Education (as consumption good) is valuable in its own right, so we have (arbitrarily) assigned a value of R15 per month per individual to it.

From the figures in Table 2 we conclude that if in 2002:

- Every poor household containing children under the age of seven years received the CSG of R140 per month
- Every poor household received its full allocation of free electricity; free water; free health care; free housing; free sanitation and free education[11]
- There is agreement that the values assumed above for the components of the social wage are realistic

Then, maximum potential per capita consumption levels would have been R100.94 higher in the lowest expenditure category than they were in 1999. The corresponding increase in consumption in the next expenditure category would have been R73.77. If the social wage had reached only half of the intended beneficiaries, these increases would have amounted to R54.30 and R28.23 each respectively. The truth of the matter probably lies somewhere between. Ignoring distributional effects, the probable maximum consumption levels would have lain between R208.47 and R161.64 in the lowest expenditure category, and between R264.49 and R218.95 in the expenditure category R400-799 per month. This compares with values of R107.53 and R190.72 respectively in 1999. To raise consumption levels to our assumed PL of R384 per month (in 1999 prices) would require the health, housing, sanitation and education components of the social wage to increase in value from the R95 presently assumed

[10] R10 per household member, spent over four years (about R2600), would probably pay for a VIP latrine.

[11] Although tremendous progress has been made, sight should not be lost of the numerous disconnections; clinics and hospitals without drugs, bandages, shortages of nurses and doctors; schools without books, pupils excluded for non-payment of fees, jerry-built RDP houses.

(in 2002 prices), to R308 for those in the lowest expenditure category, and to R240 in the next category (both estimates in 2002 prices). Even if the social wage could be shown to be this high in value, it would still leave individuals in the lowest expenditure category with a maximum of R115 (in 1999 prices, or R140 in 2002 prices) per month after receipt of the CSG, on which to feed, clothe, transport and entertain themselves. If 60 per cent of it went on food (R2.80 per day in 2002 prices), that would leave R1.87 per day for the rest (2002 prices). These consumption possibilities, it should be borne in mind, are enjoyed only by those with an income sufficient to land them at the upper boundary of the category. People who can spend so little each day are desperately poor—those with lower incomes, even more so. Comparable figures for those in expenditure category R400-799, if they had similar spending patterns, would see them being able to spend R4.22 per capita on food each day, and R2.81 (in 2002 prices) on everything else.

With the possible exception of water and electricity, the social wage barely addresses income poverty. For each individual, the assumed values of water and electricity consumed were equal to R7.56 and R6.46 each in the expenditure classes R0-399 and R400-799 respectively (1999 prices). It is doubtful whether households would have spent this much on these two services (or, in the case of electricity, on its substitutes) before the free provision. While their supply constitutes an important welfare improvement for those households that receive them (little progress has been made to date with deep rural electrification), the amount of income freed for use on other important items of consumption is probably less than the value of water and electricity supplied.

Monitoring the effects, especially the poverty alleviating impact, of public programmes of all sorts is in its infancy in South Africa. Until such time as the many monitoring initiatives currently under development begin to bear fruit, careful and critical use of the available data must be made to prevent fragile inferences from becoming the received wisdom. As we shall see in the conclusion, government asserts that the 'overwhelming evidence' is that it has met most of its 'immediate RDP objectives'. If so, those objectives must be exceedingly modest—the evidence presented in this paper suggests that while those elements of the social wage that have been put in place have brought about improvements in the lives of many of the poor, these have not been sufficient to bring them anywhere near to an acceptable standard of living. So much, for the meanwhile, of the social wage. The topic clearly needs much more attention than it has received here.

Compensating for understatement of expenditure

Surveys have a reputation for understating income and expenditure.[12] To counter the injustice such understatement might do to government efforts to address poverty, a separate set of estimates of potential maximum consumption levels has been prepared to allow for understatement of any magnitude. Assumed understatement errors can be set to different levels for 1999 and 2002. There is, however, little reason to suppose that bias in data collection would operate in different directions (or be of different

[12] In the case of both the 1996 Population Census and the 2000 IES, Charles Simkins of the University of the Witwatersrand estimated that the two instruments captured only about 60 per cent of the income that the national accounts would lead us to expect to find. (*pers. comm.*)

magnitudes) in different years. If we assume that the reported expenditure of everyone in a particular expenditure category has understated their actual expenditure by the same amount, and, if we assume further, that everyone was consuming at their maximum potential level, the effect would be to raise the upper bound of the expenditure category. For our first examination of the effect of an understatement of expenditure on the conditions (and number) of those probably in poverty, we set the level of error at 66 per cent for both 1999 and 2002. This is tantamount to raising the upper bounds for expenditure classes R0-399 and R400-799 for the year 2002, to R545 and R1091 (in 1999 prices) respectively. Corresponding values for 1999 are R662 and R1326.

Under these conditions, the possibility exists that many of the 334 000 or so people in single-adult households would not be not in poverty. If we assumed that all of them had expenditure levels greater than R384 per month (an unlikely eventuality, since we know that the number of unemployed among them increased by about 127 000, that would leave 3.9 million of the new entrants as the minimum potential number. Maximum potential consumption for all of the other entrants into these two bottom categories of expenditure would be below our PL. Table 3 shows the effects of the adjustment.

Table 3 Effects of adjustment for understatement of expenditure

Maximum potential per capita expenditure - various household compositions (R/month)	**1999**	**2002**	**1999**	**2002**
	0	**0**	**400**	**329**
	662	**545**	**1326**	**1091**
Single adult	662	545	1326	1091
Two adults	331	272	663	546
More than two adults	179	143	339	269
Adults and children	179	145	317	244
Per capita expenditure with CSG for children under 7 years of age (R/month)		173		270
Per capita expenditure with CSG for children under 15 years of age (R/month)		198		294
Per capita expenditure with BIG (R/month)		227		326
Per capita exp with CSG for kids under 7 years of age & social wage (R/m)		266		361
Per capita exp with CSG for kids under 15 years of age & social wage (R/m)		291		385
Per capita expenditure with BIG & social wage (R/month)		320		417

Note: Values in constant 1999 prices. Size of adjustment = 66 per cent.

The expenditure of those in households in the lower expenditure category containing children, after receipt of the social wage, and after payment of the CSG to all children under seven years of age, and after inclusion of all elements of the social wage, could have been a maximum of about R266 per month (1999 prices). In the next

expenditure category it could have amounted to roughly R361 per month. This is still more than R20 per month away from the R384 PL. In short, even if a generous allowance for understatement of expenditure is made, the bulk of the people in the bottom two expenditure categories are very poor.

The spreadsheet from which these results are drawn allows for an adjustment for understatement of expenditure of any magnitude to be made. Using this facility, the spreadsheet churns out the maximum number of people among those who have joined the ranks of those in (nominal) expenditure categories R0-399 and R400-799, whose expenditure levels could conceivably be above the PL of R384 (1999 prices) per capita per month. The total number of people entering these categories between 1999 and 2002 is known. Subtracting from it the numbers of those whose expenditure could possibly exceed the PL, yields the minimum number of new poor (see cell B101 in worksheet 'T2' of spreadsheet 'Meth-Dias(2003).xls'). Rather obviously, as the assumed size of the understatement of expenditure rises, the probable minimum number of poor falls. In Table 4 below, we present the results of a simulation exercise performed to determine the boundaries at which it becomes possible that members of different types of household could be spending in excess of the PL.

Table 4 Minimum probable numbers of new poor

Size of understatement (% of 2002 expenditure)	0-68	69-81	82-201	202-243
Maximum possible number not joining ranks of poor	334 239	486 885	1 881 175	4 235 314
Minimum probable number of new poor	3 910 137	3 757 491	2 363 201	9 062

As may be seen, even if expenditure in the surveys were understated by as much as 81 per cent, it would be the case that only 487 000 of the new entrants to these bottom two expenditure categories might not fall below the PL. For understatement of up to 200 per cent (an improbably large error), there would still be about 2.4 million new poor. The possibility that all among the new entrants could have (not would have) expenditure levels above the PL only starts to become a reality for errors in excess of about 250 per cent.

It remains but to demonstrate that the increase in the number of poor between 1999 and 2002 is statistically significant. To do so, we referred, in the first instance to the tables and the chart published with the LFS meta-data.[13] The numbers of potential new poor in the relevant expenditure categories are large.[14] Confidence intervals, therefore are relatively small. Assuming that the estimated value of the number of potentially poor is equal to that given in the first column of Table 4 above, i.e., 3 910 137 (all of the new entrants to the two bottom expenditure categories except those in single-adult households), then by our calculation, the true value lies between 2.94 and 4.88 million. In both expenditure categories, the increases are statistically significant.

[13] To estimate standard errors, we used the routine, produced by Charles Simkins at the behest of the Statistics Council and the HSRC Employment Dynamics Committee.

[14] Within these categories, more than 88 per cent of the new poor come from households containing adults and children.

Unemployment and other incidental matters

As will be evident from many of the papers presented at this conference, the Labour Force Surveys and their predecessors, the October Household Surveys, warts and all, are a treasure trove of information on the workings of the South African economy. In the course of extracting the information necessary to argue the case made above, a mass of other information came to light. In this last section of the paper, we examine some of it both for the light it can throw on the conditions of the poor, as much as for the (tentative) confirmation of some of the hypotheses one could make about household size; household composition, participation rates, and the like. This last activity is of particular significance if one is to have confidence in the survey data. Some of the variables in which we are interested are given in Table 5. The results are for Type 2 (workerless) and Type 3 (workerless and pensionerless) households only.

Table 5 Household composition and participation, 2002

	Type 2 households		Type 3 households	
	R0-399	R400-799	R0-399	R400-799
Proportion of people living in households containing children (%)	83.7	90.4	82.9	91.2
Participation rate (%) in adults-only households	58.5	38.6	67.1	54.0
Participation rate (%) in adult and child households	58.6	48.9	65.1	55.4
Discouraged as % of total unemployed, adults-only households	34.8	37.1	33.3	32.0
Discouraged as % of total unemployed, adult & child households	48.8	47.1	47.6	45.9

When reading these figures, it is important, as we noted above, to bear in mind that they are maxima. This has been done because we have not (guess)stimated means . It is conventional, when doing so, to place the mean for the bottom class at about two-thirds of the upper bound. For the next category, use is sometimes made of the arithmetic, and at others, of the geometric means. Using these would paint a far less optimistic picture of consumption levels.

Firstly, it is among the very poorest people (the lowest expenditure category) that the highest proportion of adults-only households is found (between 16-17 per cent of the people in the category live in such households). In the next expenditure category (R400-799 per month), this falls to about nine per cent. For those households containing workers (not shown in the table), these percentages rise to 21 and 15 per cent, respectively. One possible explanation is that non-earned income, be it from pensions, the CSG, remittances or any other source, acts as a magnet, keeping young

adults in households that they leave in the absence of such support. The results from the households containing workers suggest in addition, that they also leave when the opportunity for gainful economic activity presents itself.

Differences in participation rates in Type 2 and 3 households, suggest that the presence of a pensioner may exert some influence on the decision to seek work. The difference in rates between those in the adults-only households in the expenditure category R400-799 in Types 2 and 3 households is striking. The generally higher participation rates in the Type 3 (workerless and pensionerless) households might point to the greater compulsion of need. It looks as though workseekers in the adults-only households are less easily discouraged than those in households containing adults and children. We need to delve more deeply into the figures to see whether this is explained by a gender bias in the figures, indicative of a need to carry out child care duties. Most importantly though, the figures suggest strongly that the poor want to work, and that some large proportion of them seek actively for jobs. The presence of a pensioner, or other income source, may cause people to give up the search for work that does not exist. Conservatives will claim that this is bad—those who take a less jaundiced view of the world would regard it as possibly a rational economic response.

Conclusion

Announcing the results of Cabinet's deliberations at the July 2003 *lekgotla*, *ANC Today* reported that:

> "MASSIVE PROGRESS has been made in building a democratic state, tackling poverty and neglect, setting the economy on a sustainable growth path, entrenching safety and security, and placing South Africa at the forefront of Africa's development and equitable global relations, cabinet said at its mid-year lekgotla, held last week.
>
> Briefing the media after the lekgotla, President Thabo Mbeki said the overwhelming evidence is that government has met most [of] its immediate objectives as set out in the Reconstruction and Development Programme, the ANC's policy for transformation adopted in 1994." (Vol.3, No.30, 1-7 August 2003)

'Massive progress' would have to be defined in a very particular way, if the results presented in this paper are correct. Using the headcount measure, there has been a substantial increase in poverty over the period 1999-2002. Probably about four million people joined the ranks of those in poverty during this period. This conclusion has been arrived by estimating maximum per capita expenditure levels of the people in the bottom two expenditure categories in the economy, corrected (adjusted) for child costs, household economies of scale and under-statement of expenditure levels. The increase in the number of those in poverty is almost two-thirds as much again the population increase over the three years. Such an outcome is not unexpected, given the large increase in the number of unemployed. The increase in the number in poverty is, however, substantially larger than the increase in the number of unemployed. Government's claims to have made 'massive progress in

tackling …. poverty and neglect' look a little weak in the face of this massive rise in human misery.

There is substance to government claims about the contribution of the social wage to people's wellbeing. In absolute terms, the numbers of houses built, clinics constructed, water and electrical connections made, VIP toilets provided, roads upgraded is large, very large.[15] Even after account has been taken of this (and there is room for extensive argument over the valuation of the components of the social wage) those in the bottom two expenditure categories are still badly off.[16] With the possible exception of the Child Support Grant (CSG), the social wage, which government insists has done much to ameliorate the sufferings of the poor, has but little impact on the spending power of the poor. Although government's achievements in the field of social provision are significant, the large increase in numbers of those requiring assistance goes a long way towards nullifying those achievements.

Some of the people in poverty are now better off than they were in 1999, but there were many, many more of them in 2002 than there were in 1999. The debate about whether they are worse off now than what they were under apartheid is a pointless waste of time—no sensible counterfactual could see the National Party delivering what the ANC has. Nevertheless, government's energetic attempts to persuade the public that it is winning the war against poverty are misguided. Unless every statistic produced, including the latest census figures, can be shown to be incorrect, there are now more unemployed people (or people earning so little that it amounts to almost the same thing) than ever before. Given the location of these people in the distribution of income, an inevitable consequence is the increasing poverty that government is so keen to deny.

Speaking of the many millions of families in poverty in the USA, Schiller drew his reader's attention to a warning given by Michael Harrington way back in 1962, to the effect that:

> "… statistical quibbling" should not be allowed "to obscure the huge, enormous, and intolerable fact of poverty in America." (Cited in Schiller, 2001, p.28)

Similar advice could be given for South Africa—government would do well to heed it. It were more profitable for the poor, the constituency whose interests government claims with the greatest fervour to represent, if government redirected the energy it presently devotes to reflex dismissals of the claim that poverty is increasing, into a more critical and dispassionate assessment of the available evidence. If the findings in this paper are robust, existing and planned poverty reduction and alleviation policies need urgently to be rethought—demonstrably, they cannot cope.

---

[15] When Census 2001 data disks become available, we will be able to see which groups have benefited most from this provision.

[16] As was the case with expenditure levels before the adjustment for possible understatement was made, this conclusion is not very sensitive to upward adjustment of the value of the social wage, although less insensitive than is the case with unadjusted figures. To bring those at the maximum consumption level up to the PL, the value of the health, housing, sanitation and education components of the social wage would have to be increased from R95 per capita per month to R238 for those in the bottom expenditure class, and to R122 (2002 prices) for those in the category above it (R400-799).

References

Bhorat, H; Leibbrandt, Murray; Maziya, Musi; van der Berg, Servaas, and Woolard, Ingrid. *Fighting Poverty: Labour Markets and Inequality in South Africa*, Cape Town: UCT Press, 2001.

Bhorat, Haroon, and Leibbrandt, Murray. "Correlates of Vulnerability in the South African Labour Market", in Bhorat *et al* (eds), 2001, pp.74-106.

May, J, Carter, M, and Posel, D. "The composition and persistence of rural poverty in South Africa: an entitlements approach", *Land and Agriculture Policy Centre Paper No. 15*, Land and Agriculture Policy Centre. (Cited in Woolard and Leibbrandt, 2001).

Meth, Charles. "What to do until the doctor comes: Relief for the unemployed and for poorly paid-workers", draft manuscript, June 2003, (http://www.nu.ac.za/csds). Referred to as Meth (2003)

Schiller, Bradley R. *The Economics of Poverty and Discrimination*, (Eighth Edition), Upper Saddle River, New Jersey: Prentice Hall, 2001.

Statistics South Africa. *October Household Survey 1999*, Statistical release P0317, 31 July 2000, Pretoria.

Statistics South Africa. *Income and expenditure of households 2000*, Statistical release P0111, 13 November 2000, Pretoria.

Statistics South Africa. *Earning and spending in South Africa: Selected findings and comparisons from the income and expenditure surveys of October 1995 and October 2000*, Pretoria: Statistics South Africa, 2002.

Statistics South Africa. *Labour force survey September 2002*. Statistical release P0210, 25 March 2003.

Waddell, Jasmine. "A Comparative Analysis of Social Welfare Grant Administration in South Africa", mimeo, Department of Social Policy and Social Work, Oxford University, May 2002.

Whiteford, A and van Seventer, D E. "South Africa's Changing Income Distribution in the 1990s", *Studies in Economics and Econometrics*, November 2000, 24(*3*), pp.7-30.

Woolard, Ingrid and Leibbrandt, Murray. "Measuring Poverty in South Africa", in Bhorat *et al* (eds), 2001, pp41-73.

Appendix on data extraction

The data for this study were extracted from the 1999 October Household Survey and the Labour Force Survey of September 2002. Both surveys were conducted by Statistics South Africa. The 1996 population Census was used as a basis for the weighting in both surveys.

Three household types were identified for the purpose of this study and range in degree of economic desperation – from households with some access to earned income to those with neither a single employed nor pensioner member and as a result no access to either earned income nor pension / retirement income. The first household type included all households, in other words, the total number of individuals living in the various expenditure categories.

The second category termed 'workerless households' comprised households in which no member was employed. In essence these households are made up of individuals who are either economically inactive, unemployed or children. Any household in which a member held full-time, part-time or casual seasonal employment was eliminated from this category. These households subsist mainly on remittance income and/or on social grants.

Finally the third type of household identified was the 'workerless and pensionerless' household. Members of this type of household are either unemployed or children or economically inactive but not pensioners. Any household with at least one person of pensionable age was excluded from this last category. It was necessary to exclude pensioners on the basis of age in order to maintain consistency in the categorisation of households between the October Household (1999) and Labour Force (2002) surveys.

The OHS 1999 asks "During the past year did... get income from any of the following sources", with question 4.1 identifying "Old age pension from the government", and question 4.2 identifying "Pension from work/retirement benefits". If the point of the third household category is to identify the most destitute households in the economy, any households with members answering 'yes' to either of these questions should be excluded. The data in the October Household Survey could have led to a more accurate definition of a household not receiving pension or retirement income.

However, with regards to the LFS (2002:2), question 7.23 asks "Does any member of this household receive any of the following welfare grants?" with option 1 being an old age pension. Workerless households who receive an old age grant could be eliminated on this basis but this leaves the possibility that some households receiving retirement income would remain in this third household category. These consistency problems relating to the gathering of data on pensions across the data sets, lead to a pensionerless household in this study being defined as a workerless household without women over the age of 59 and men over the age of 64.

To what extent is this categorisation of pensionerless households problematic in terms of a headcount of the poor? Using the October Household Survey as a reference point, 81 percent of those of pensionable age in the bottom two expenditure categories receive a state old age pension. Since the state pension is means tested, some of the

remaining 19 percent may not receive a pension because they have access to other income. A further 7 percent of the individuals of pensionable age respond that they receive some form of retirement or other income. This leaves 12 percent of pensionable age individuals whose households may have been eliminated from the third household type unfairly since they clearly have no access to pension or other income. Since these households are also workerless, it is impossible for these pensionable age people to have been working. Consequently, the number of households classified as 'workerless and pensionerless' has probably been underestimated in this study.