Defining poverty
The debate continues

Measurements of poverty can be useful tools in negotiations with employers, especially in sectors were low wages persist. But how can poverty meaningfully be measured? **Julian May** looks at some of the methods.

Changes in the incidence and severity of poverty in South Africa since 1995 have recently been the source of debate. This is not surprising since the measurement and analysis of well-being is always complex, particularly in the context of South Africa's history. In addition, the collection of official statistics was severely disrupted during the dying years of apartheid and government data describing living conditions in the Bantustans and townships was often suppressed.

Despite improvements in the availability of data, the analysis of poverty remains under debate. This lies in differing interpretations of the definition of poverty, in the development of an official poverty line, in the most appropriate measure of well-being and in differing survey and analytical methodologies.

WHAT IS POVERTY?

Internationally there has been renewed attention on reducing poverty as the many Poverty Reduction Strategy Papers (PRSP) show. However, the definition and measurement of poverty remains a debate. A mix of three approaches, described below, are commonly used when trying to put poverty definitions into practice.

Firstly, poverty is seen as the inability to attain a minimum standard of living as quantified by an absolute indicator such as a minimum income line that separates the poor from the non-poor.

Secondly, poverty is defined by the lack of resources with which to attain a socially acceptable quality of life. This approach places emphasis on an indicator which would vary according to the standards of the society, and may also take into account issues of distribution.

Finally, poverty is defined as being about a lack of choices, unfulfilled capabilities and exclusion. Measuring this is complex and, as yet, there is no generally accepted approach in use.

All of these approaches have merits. The first is the easiest to calculate and to interpret, while the last tries to draw out the links between economic growth, social structure and human well-being. Rather than seeing these as competing methodologies, it is accepted that the different approaches reflect the multidimensional nature of poverty and should be used in combination.

However, it is evident that analyses that require a numeric measurement prefer an approach in which deprivation is seen in terms of income or expenditure. This approach sees money as the means of purchasing well-being, such as food, clothing and shelter, and a threshold amount can be estimated that serves as a poverty line separating the poor from the non-poor.

DEVELOPING A POVERTY LINE

Many researchers agree that a reliable indicator of well-being is private income or consumption. This is based on an adult's needs in a household unit calculated as a threshold income required to purchase a minimum 'basket of goods' or to obtain a minimum level of calories each day.

For international comparisons, the World Bank promotes the notion of '$1-a-day' as an international money metric threshold which can be adjusted for purchasing power parity (PPP). This involves using an exchange rate that equalises the purchasing power of different currencies, given the relative prices of goods and services in the countries being studied.

Recent critiques of the '$1-a-day' poverty line argue that the measure is flawed. They contend that the selection of commodities in the basket is not grounded in a meaningful definition of poverty. Others have criticised this approach for applying different standards in the measurement for poverty lines to developed countries and developing countries.

While an absolute money poverty line offers an easy way of measuring poverty, the approach does not address the question of relative poverty which is important in the South African context.

Relative poverty is associated with the distribution of income or wealth and recognises that the poverty of an individual is relative to the well-being enjoyed by others. Some analysts argue that the necessities of life vary over time and space, and are adapted as changes occur in society and in the products of society. What constitutes well-being in one time period, or in one country, may not be enough in another.

This concern can be resolved by adjusting the threshold to reflect what is considered to be a socially acceptable standard of living. This threshold will then vary between countries and may be more or less in what is included as being essential and is affected by issues such as tastes and cultural norms. This can be done by directly asking respondents about their idea of what constitutes an acceptable standard of living and building these into the definition of the threshold income.

An alternative approach is to cost a bundle of goods by looking at the expenditure patterns of lower income groups for goods that they see as necessary for an acceptable life-style. By setting a threshold food intake, usually some 2 200 kCal per adult, the minimum requirement of non-food items can be calculated by directly observing what people purchase at this minimum level. This approach has merit in South Africa as data is available from the two income and expenditure surveys that were completed in 1995 and 2000.

USEFULNESS OF POVERTY LINES

An analysis of poverty that uses a threshold amount should focus not only on the number of poor households but on the depth and severity of their poverty. Not all households categorised as poor suffer the same degree of deprivation, while the placement of the line is arbitrary in terms of those who are just above or below the threshold amount. In recognition of this, analysts are increasingly making use of three measures of poverty. Known as the Foster-Greer-Thorbecke (FGT) class of poverty measures, they are:

- The headcount index or incidence of poverty. This is the easiest to interpret of the three measures which shows the proportion of the population that are below a given poverty line and is usually expressed as a percentage of the total population.
- The poverty gap index, which measures the depth of poverty given by the gap between actual income of poor households and the poverty line. This measure is somewhat more complex to interpret than the headcount, but can be thought of as the percentage of the poverty line income needed to bring those below the threshold up to the poverty line.
- The poverty severity index, which gives more weight to the shortfall in incomes further below the poverty line. This index is expressed as a score, with higher numbers indicating increasing severity, and is best used to compare the severity of poverty at different times or in different regions or social groups.

Numerous other approaches to the measurement of poverty and inequality are possible, including the fancifully named Robin Hood Index. This estimates the share of total income that has to be transferred from households above the average income to those below the average to achieve equality in the distribution of incomes. Each of these has some merit.

Despite their advantages, one-dimensional indicators of poverty such as a money approach will not adequately address the complexity of poverty. Consumption poverty does not constitute the only form of deprivation. There are critical capability-related measures, such as access to services and employment, which could be considered in conjunction with conventional money-metric measures. As an example, access to assets that generate income is increasingly thought to be a more useful measure of long term or chronic poverty. 'Asset poverty', 'social exclusion' and 'capabilities' may be fruitful directions for future analysis.

WHAT DO SURVEYS TELL US?

The application of these concepts, definitions and measurements in South Africa has resulted in a confusing situation in which poverty trends are unclear. Using the Income and Expenditure Surveys of 1995 and 2000, and an institutional poverty threshold, Statistics South Africa reported that both poverty and inequality may have increased. However, although the average annual per capita income in 1995 of R12 135 adjusted to 2000 prices appears higher than the per capita income of R11 755 per annum reported in 2000, this difference is actually not statistically significant.

In addition, researchers have raised serious concerns with the quality of the data collected by this survey. They point to methodological and weighting problems and evidence of sloppy fieldwork and data processing.

Various attempts have been made to manage some of these data quality problems in order to examine the changing poverty profile of South Africa during the 1990s. Hoogeveen and Özler estimate that 12.6m South Africans were living on less than PPP$1 per day in 1995 compared to 14.4m in 2000, an increase of 1.8m people, and that 22.9m South Africans were living on less than PPP$2 per day in 1995 rising to 25.2m in 2000, an increase of 2.3m. They also show an increase in both the poverty gap index and the severity measure of poverty while the headcount index increased slightly from 0.32 in 1995 to 0.34 in 2000 using the PPP$2 per day poverty line. Data for the period between 2000 and 2004 are limited, but some initial findings suggest that poverty may finally be on the decline.

Reacting to the findings that money-metric poverty increased between 1995 and 2000, the South African government has correctly argued that poverty is multi-dimensional, and that access to services has the effect of improving the well-being of poor households, and also of reducing their exclusion.

May and Woolard (2005) dispense with a poverty threshold altogether and provide four indicators of service delivery for the years 1995 and 2003 and compare changes in access by income group. They show that from the perspective of basic service delivery, the gap between the poor and non-poor has narrowed in the post-apartheid era. It must be said however that these results do not comment on the quality of the service, or on whether the supply of the service has been disconnected.

CONCLUSION

Poverty persisted in South Africa during the 1990s in terms of consumption based poverty, with perhaps some improvement since 2000. If poverty measurement is extended beyond simple money-metric measures, then there is strong evidence of an improvement in the well-being of money-poor South Africans in terms of their access to services. However, in the absence of income to pay for these services, the sustainability of this form of poverty reduction must be questioned. The suspension of services and bad service provision is emerging as an important source of social conflict in post-'First Decade' South Africa.

To resolve these debates, an official poverty line is needed that makes appropriate adjustments for:

- the resources needed to attain a socially acceptable lifestyle in South Africa;
- the consumption needs of children; and
- the composition and size of households.

In addition, an annual poverty survey is required in order to monitor progress being made in all forms of poverty reduction, including income, access to services and human rights. Acceptable methodologies have been developed to deal with these issues and this important gap in South African official statistics and policy analysis should now be filled as a matter of urgency.

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