Everyone agrees we need poverty reduction, but not what this means: does this matter?

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Abstract

While there is worldwide agreement on poverty reduction as an overriding goal, there is little agreement on the definition of poverty. The paper reviews four approaches to the definition and measurement of poverty- the monetary, capability, social exclusion and participatory approaches. It points out the theoretical underpinnings of the various measures, and problems of operationalising them. It argues that each is a construction of reality, involving numerous judgements, which are often not transparent. The different methods have different implications for policy, and also, to the extent that they point to different people as being poor, for targeting. Empirical work in Peru and India shows that there is significant lack of overlap between the methods with nearly half the population identified as in poverty according to monetary poverty not in capability poverty, and conversely. This confirms similar findings elsewhere. Hence the definition of poverty does matter.
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I. Introduction

The elimination of poverty is a key concern of all those interested in the development of poor countries, and now provides the main justification for promoting economic growth and development². The central objective of the Millennium Goals, agreed by 149 countries at the UN Millennium Summit in New York, is the halving of poverty by 2015. In official discourse – for example, by the World Bank and major donors – almost every policy is currently assessed in relation to its impact on poverty, ranging from debt relief to macro economic stabilisation³.

Ironically while the objective of poverty reduction currently has overwhelming support, particularly among the donor community, there is increasing debate about what this objective means.

To devise policies to reduce poverty effectively, it is important to know what we are aiming at. The current approach to the identification of poverty and to policy formulation is rather messy: on the one hand, there is acknowledgement of its multidimensionality, combined with a pick and choose approach in advocacy with little consistency across studies. On the other hand, in practice, the monetary approach mostly retains its dominance in descriptions and analysis, both nationally and internationally. Clarification of how poverty is defined is extremely important as different definitions of poverty imply use of different criteria for measurement, potentially the identification of different individuals and groups as poor, and the use of different policy solutions for poverty reduction. We illustrate this in this paper by presenting a theoretical and an empirical comparison of different approaches to poverty. We concentrate in particular on four alternative understandings of poverty: the monetary approach, the capabilities approach, social exclusion as defining poverty and the participatory approach.

¹ This paper derives from research on “Alternative realities? An empirical investigation into alternative concepts of poverty” funded by DFID. For more details on the approaches surveyed here see Ruggeri Laderchi, C. (2000); Ruggeri Laderchi, C. (2001); Saith, R. (2001a, b); For an overview of the research see Franco, S., B. Harriss-White, et al. (2002). We have benefited greatly from comments and suggestions from the other members of our team, Barbara Harriss-White and Susana Franco.
² This is indicated by the title of Dollar and Kray’s paper: ‘Growth is good for the poor’. Dollar, D. and A. Kraay (2001).
³ Of course, poverty has not always been the prime concern of the ‘development community’. In the 1950s and 1960s, the main objective was economic growth. Recognising that growth alone had not eliminated poverty, a series of poverty-reducing strategies were adopted in the 1970s, including Basic Needs Strategies. But these concerns were again forgotten in the 1980s when stabilisation and adjustment policies and the advance of the market dominated official discourse and policies. The poor economic performance and sharp rise in poverty in many countries in the 1980s led to renewed interest in poverty. Following UNICEF’s Adjustment with a Human Face in 1987, UNDP’s first Human Development Report in 1990, and the World Bank’s 1990 World Development Report on poverty, poverty reduction once more became central to the development agenda. In the early 1990s, the World Bank President, Lewis Preston, declared that ‘poverty is the benchmark against which we must be judged’.
Different interpretations of reality translate into different poverty measures. These differences reflect, in part, different views of what constitutes a good society and good lives. Our main purpose in this paper is to explore these differences and their implications, rather than assessing their merit. It is our view that clearer and more transparent definitions of poverty are essential prerequisites of any development policy that puts poverty reduction at its centre. The next section (Section II) discusses some issues common to any approach to the definition and measurement of poverty. This is followed by a theoretical comparison of the four approaches (Section III). Section IV briefly presents some empirical findings on the extent to which the differences matter in practice. Section V reflects on some implications of the findings.

II. Common problems encountered in defining and measuring poverty

There are a number of general questions about how to define and measure poverty which apply to all approaches, many of which were already apparent in the pioneering work of Rowntree in late 19th and early 20th century. It is helpful to discuss these in general terms before a detailed discussion of different approaches.

First, a fundamental issue – which underlies the differences in the approaches we are considering - is the space in which deprivation or poverty is defined or measured. Is poverty to be measured in the space of resources or utility (broadly adopted by different versions of the monetary approach); or what may be achieved, given the resources available and the prevailing environment, in terms of people’s lives -- that is the ability to be and do a variety of things (i.e. capabilities), or what is actually achieved by individuals (actual beings or doings, or functionings). Further, for any chosen space, what are the “sphere of concerns” which a poverty definition should have: should it be confined to material aspects of life, or include social, cultural and political aspects?

Second, there is the question of the universality of the definition of poverty. Should we expect an approach devised for one type of society to be transferable to other societies, without serious modifications, or even at all? Two of our selected approaches (the monetary and social exclusion) were initially devised for developed countries. In each, there are translation problems in application to developing countries: in the monetary this involves heroic imputations of values for subsistence production; in social exclusion, substantial differences in norms between developing and developed societies mean that the characteristics of social exclusion differ hugely, leading to the question of whether the approach makes sense at all for developing countries. The capabilities approach and participatory methods, on the other hand, were first devised for developing countries, and the reverse question applies. Again the interpretation of the approaches differs between societies with radically different characteristics – this is not just a matter of developed versus developing countries, but also other major societal differences (e.g. between socialist and capitalist societies). To some extent methods are society specific, and may need to be reinterpreted for particular societies for operationalisation, which can make comparisons across societies problematic.

Third, there is the question of whether methods are ‘objective’ or ‘subjective’. Most statements about poverty imply objectivity: i.e. that there is a certain reality ‘out there’ which poverty statistics capture. To the extent that value judgements affect
measurement then the methods are not objective, and the question then is who is making the value judgements: are they made implicitly by the researchers or statisticians who are measuring poverty? Are they made explicitly, and subject to sensitive analysis? Are non-technicians consulted about these judgements, for example, through the political process, or through a participatory process involving the poor themselves?

Fourth, a crucial question is how the poverty line (or lines) is determined. Two related issues arise: first, whether the poverty line is to be defined as relative to average achievements in the society or is intended to reflect some absolute standards of deprivation; and secondly, where the line is to be drawn.

**Absolute versus relative poverty lines.** A fundamental issue in identifying the threshold between the poor and non-poor is how sensitive such identification should be to the characteristics of the overall population. At one extreme, the poverty line between poor and non-poor is defined with reference to some summary measure of the overall distribution (as for example in the case of the member states of the European Union, where the poverty line is set at 60% of the median of ‘equivalised’ income). At the other extreme a poverty line is set in terms of minimal requirements in the dimension of interest which are identified in an absolute sense, for example on the basis of some needs of the individual deemed as essential for survival. In reality it is difficult, perhaps impossible, to identify such absolute needs irrespective of societal standards. For example, in an era before the advent of writing, literacy could not be identified as an absolute requirement, yet now any definition of capability poverty would include this dimension. Most apparently ‘absolute’ approaches contain some relative element. For example, although he did not take an explicitly relative approach, in his second study of York in the 1930s, Rowntree updated his minimum requirements for people to be non-poor to include having a bath and a garden. Sen has pointed out that even if requirements can be set as absolute in terms of needs, anchored to some standards with intrinsic value, they would generally need to be interpreted as relative in terms of resources. For example, if poverty is defined in absolute terms in relation to nutritional requirements, to some extent it is likely to be relative in income terms, since in richer societies people generally need more money to acquire the same nutrition – as cheaper foods are not available, transport is needed to shop, and so on.

While there tend to be relative elements in most ‘absolute’ approaches (particularly in the monetary one, as Sen notes, but even in capability approaches) there remains a difference in choice along the continuum between adopting an overtly relative approach or an intended absolute approach. This choice is ultimately a matter of political and cultural sensitivity. From a political point of view, a relative standard makes sense as people’s toleration of poverty and governments’ willingness to take action against it is generally relative to average standards in that society. It’s also true that the sense of deprivation or unhappiness caused by poverty is greatly influenced by average societal standards. In general, relative standards are mostly adopted in developed countries, but absolute standards are more often adopted in developing countries.

**The position of the poverty line.** Whether a relative or an absolute approach is adopted, there is a need to define the line dividing the poor from the non-poor. As far as relative lines are concerned, there is no technical justification for any particular line
— this essentially constitutes a political decision, albeit often taken by statisticians.

One-third, two-thirds or 60% of average societal performance are commonly adopted relative poverty lines. Since the lines are society-specific, comparisons across countries can say nothing about absolute living standards across different countries, but rather give a somewhat confused picture of inequality of income distribution across countries at the lower end (confused because of differences in the relative lines chosen).

In defining absolute poverty, a crucial assumption is that there is some form of discontinuity between the poor and the non-poor which can be reflected in the poverty line. Such a break can pertain to the behaviour of the poor, or to some salient feature which pinpoints the poor as a category of its own, which either moral or political considerations suggest should be addressed. One political (or moral) approach to defining a poverty line is to identify the characteristics of a full or decent life, or more ambitiously a good society, and set deprivation in relation to this. Essentially, human rights approaches to poverty do this. Some of the capability approaches have also set out to do this (e.g. Nussbaum), and it could be argued to underly Rowntree’s philosophy, and more recently that of Townsend and Atkinson, but it is unusual in modern monetary methods. The idea of a unique dividing line between the poor and non-poor represents a binary approach to poverty, which unavoidably conceals a lot of information in the case of continuous variables such as money income and some capabilities. However, some variables capturing certain capabilities or aspects of social exclusion are intrinsically binary (e.g. literacy; or unemployment). Where the underlying variables are non-binary it is possible to capture this in the way poverty is aggregated.

One approach to this is to adopt more than one poverty line, in particular differentiating between the extreme-poor (or ultra-poor) and the poor (Lipton 1988), a division which can be drawn on the basis of relative or absolute criteria. Again differences in behaviour, and/or outcomes of the deprivation have been used to justify the poor/ultra-poor distinction, which can apply to the capabilities and participatory approaches as well as the monetary approach for which it was devised. More sophisticated ways of incorporating the depth of poverty into its measurement have been suggested. These include the income gap method, which simply weights poverty by the average shortfall from the poverty line, the Sen index, which applies a measure of income distribution to weight those below the poverty line, and the Foster-Greer-Thorbecke index, which gives greater weight to those who fall further below the poverty line with the weights chosen according to the judgement of the observer. The latter has the advantage that it allows for specific value judgement on how far the depth of poverty should matter. The data requirements of these methods are such that they are most easily applied to monetary methods for which they were designed. In principle, they could apply to those capabilities represented by continuous variables, although in practice data may often not be available to do this.

A fifth issue concerns the unit over which poverty is defined - the level of the individual, the family or the geographical unit. While it is individuals who suffer or enjoy their lives, data, particularly of a monetary kind, normally pertains to households, and some resources (not only money income, but sanitation, clean water) come via the household and it is difficult to ascertain their distribution within the household. The geographic unit matters in three ways: first, for identifying the
society against which the relative poverty lines are drawn; secondly, for defining the boundaries of the relevant market, for example, to obtain prices for valuations; and thirdly, in terms of targeting: geographic districts, or regions are sometimes used for targeting purposes, and how the regions are drawn up will affect the efficiency of targeting.

Sixth, a pervasive question is how to deal with multidimensionality: by definition money metrics assumes that heterogeneity can appropriately be dealt with by using market prices, so that one metric captures the essence of deprivation, or proxies other deprivations. The other approaches take a multidimensional view, which raises the issue of whether (and how) a single index can be developed. In general this will be influenced first, by the dimensions selected, secondly, how each is measured, and thirdly how they are aggregated. In general, there is no right way of aggregating: the case for doing so is to simplify, which helps presentation, comparison and policy formulation. But the arbitrariness of aggregation methods can also mean that the results are distorting, and important information is lost.

Seventh, the time perspective needs to be defined for each approach. This is commonly viewed as a matter of the period of time over which poverty should be measured, i.e. whether over a month, a year, or a longer time. Many people move in and out of poverty over seasons and years, and therefore the longer time perspective the less poverty will appear. If the poor have access to mechanisms to smooth their resource access over time (savings/credit…) then a longer time period would seem appropriate. What have been termed the ‘chronic poor’ will then constitute the poor. But with limited access to smoothing devices, especially if a consumption method is adopted which already incorporates some smoothing, there is a case for a shorter time period, and then for differentiating the chronic poor (variously defined as those always below a poverty line, or those, on average, below a poverty line (Hulme and Shepherd 2003) from the transitory poor. Some of the capability and social exclusion measures can be observed at a point in time, but by their nature indicate long-term deprivation (e.g. height for age; or structural characteristics of social exclusion, such as race). In these cases, the question of the time period becomes less important.

Another interpretation of the time issue is the concept and measure of life time poverty. This is partly a statistical question concerning identifying which and how many individuals are poor throughout their lives, which is the same as measuring chronic poverty, defined over an individual’s lifetime. But it could also be approached in terms of life-decisions: what critical decisions or circumstances in a person’s life – pre-birth, in their early childhood, in their school years, as an adult, for example, - led to lifetime poverty (or avoided it). This approach could be useful for causal and policy analysis.

Finally, the question arises as to whether the measure of poverty itself does (or should) indicate the causes of poverty, and also point to policies towards its alleviation. Where they do not, then clearly they need to be supplemented by causal analysis. Some of the methods do intentionally include some causal variables, while others do not. We believe that the approach adopted itself influences the broad thrust of policy-making. We shall return to this issue in the concluding section.

III. An overview of the four approaches
III. The monetary approach

As already noted, the monetary approach to the identification and measurement of poverty is the most commonly used. It identifies poverty with a shortfall in monetary income (or consumption) from some poverty line. The valuation of the different components of income or consumption is done at market prices, which requires identification of the relevant market and the imputation of monetary values for those items which are not valued through the market (such as subsistence production and, in principle, public goods) (Grosh and Glewwe, 2000). The assumptions needed for such imputation are generally somewhat heroic. The key assumption of this way of proceeding is that, with appropriately devised tools, uniform monetary metrics can take into account all the relevant heterogeneity across individuals and their situations.

For economists the appeal of the monetary approach lies in its being compatible with the utility maximising behaviour assumption which underpins microeconomics, i.e. that the objective of consumers and society at large is to maximise utility and that expenditures reflect the marginal value or utility people place on commodities. Welfare can then be measured as the total monetary income or consumption enjoyed, and poverty is defined as a shortfall below some minimum monetary income, which is termed the poverty line.

The validity of the approach then depends in part on:
• whether utility is an adequate definition of well-being;
• whether monetary expenditure is a satisfactory measure of utility;
• whether a short-fall in utility encompasses all we mean by poverty;
• the justification for a particular poverty line.

The use of a monetary approach to poverty can, however, be justified in two quite different ways: first, the human rights approach, where a certain minimum income is regarded as a right without reference to utility (Atkinson 1989; van Parijs 1992). But this view has not been widely accepted, and does not itself inform us about why a particular level of income should be chosen as a human right. Secondly, not because money income measures utility, but because it is a good proxy for other aspects of welfare and poverty and is therefore a convenient short-cut method, based on data that are widely available to identify the poor according to these other aspects. Empirical investigations are needed to explore the validity of this assumption (see Section IV).

Historical antecedents:
The use of a monetary poverty line emanates from the work of two great pioneers, Booth and Rowntree, who studied poverty in London and York, respectively, in the 19th and early 20th centuries.

Booth’s study of the east end of London, in 1887, was prompted by widespread rioting by the poor; he also wanted to check the assertion of socialists that one-third of the population was poor, which was much higher than the rate of poverty defined as those in receipt of poor-relief (which amounted to about 5%).(Booth 1887). Booth used informants (school board visitors) not direct enquiry among the poor. He categorised people into eight social classes, four of which represented different
degrees of poverty. His classification went beyond a pure monetary identification of
the poor, encompassing more sociological concerns such as the ‘conditions attaining
in the home, and the nature and regularity of employment’ (Marshall 1981, p ..).

Rowntree’s 1899 work has been described as the first scientific study of poverty.
Rowntree defined a poverty line by estimating monetary requirements for a
nutritionally adequate diet together with estimated needs for clothing and rent. Those
below this line were defined as in primary poverty. The interviewers also classified
households who were seen to be living in ‘obvious want and squalor’: those who fell
into this category despite being above the defined poverty line were classified as
being in secondary poverty. On the basis of interviews of people around York,
Rowntree identified 30% of the population as in poverty – far above the rate of those
receiving poor law relief.

Both Booth and Rowntree agreed on some important issues -- views which are shared
by most economists adopting a monetary approach today. First, they believed their
assessment was an objective one: i.e. that an objective condition termed poverty
existed, which they were measuring. Secondly, their assessment was an external one,
i.e. carried out by social scientists and others, not by the poor themselves; thirdly, they
took an individualistic view of poverty, i.e. that poverty should be defined with
respect to individual circumstances and behaviour, rather than as a social
phenomenon.

Some outstanding issues concerning definition and measurement of monetary
poverty
The modern monetary approach contains many elements already present in those
early analyses, especially that of Rowntree whose method of identifying and
measuring poverty essentially remains the one used today. Nonetheless, there have
been many methodological advances in the development and standardisation of this
approach to measurement (eg Glewwe and Grosh 2000), although some issues remain
contentious, leading to theoretical and methodological doubts which undermine the
claims of objectivity of this approach.

Consumption is often argued to approximate welfare more closely than income
(Deaton 1997). It also comes closer to a measure of long-term income, avoiding some
of the short-term fluctuations in income and access to resources -- under the
assumption, of course, that individuals have access to credit and saving instruments.
On the basis of a minimum rights perspective, however, a case has been made for the
use of income (Atkinson 1989). It is theoretically possible to incorporate measures of
non-marketed goods and services in estimates of either income or expenditure (which
is used to approximate consumption, sometimes with adjustments for the use of
services from durables). In practice however, these measures almost invariably only
include private resources, and omit social income (i.e. a variety of goods and services
provided publicly, e.g. schools, clinics, the environment…). This can lead to an
implicit bias in policy choices in favour of the generation of private income as
against public goods provision, and similarly, the identification of the poor for
targeting purposes towards those lacking private income.

The monetary poverty line
A key issue – noted earlier – is how to differentiate the poor and non-poor, and whether there is an objective way of doing so. In the case of the monetary approach various technical solutions have been suggested for this differentiation, notwithstanding the fuzziness of the theoretical framework which in principle should justify it. At a fundamental level, in fact, problems in identifying a poverty line stem from the fact that there is no theory of poverty which would clearly differentiate the poor from the non-poor.

Relative poverty lines can be determined by political consensus. In fact, in many developed countries, a pragmatic way of determining the poverty line is to define those deprived as those who receive support from public sources. Atkinson has written extensively against this practice in the UK, pointing out that considering those poor as those who are entitled to social security benefits leaves the identification of the poor at the mercy of budgetary decisions.\(^4\)

Attempts to find an objective basis for an absolute poverty aim at identifying behavioural breaks between the poor and non-poor. Issues of the nutritional needs for survival, and/or efficiency wages provide the most common basis for such a break. For example, Lewis and Ulph have suggest a model where a discontinuity between the poor and non-poor could be identified from behaviour where (i) minimum positive expenditure is needed on one or more items to escape poverty, and (ii) this minimum provides indirect benefits for participation in other activities, which could be work (reverting to efficiency wages types of arguments), or could be survival. (Lewis and Ulph 1998). The efficiency wage approach has been adopted by Das Gupta and others. Yet there is considerable ambiguity about what constitutes an efficiency wage; questions about whether this should be applied to those outside the workforce (e.g. the old or disabled); and it also raises the moral question of the appropriateness of defining poverty in such an instrumental way.

Ravallion has suggested that the poverty line should be defined as the ‘minimum cost of the poverty level of utility’ (Ravallion 1998). Yet this doesn’t get one much further as the concept of a ‘minimum level of utility’ is itself not well-defined. Ravallion suggests two approaches to giving it more meaning: one is the Food Energy Intake Method, which essentially amounts to a nutritionally based poverty line; the other is a ‘cost of basic needs’ line, either starting with food and adding a non-food component (a method similar to Rowntree’s), or starting with list of basic needs (which of course themselves need to be defined) and costing them.

For the most part, nutritional requirements form the fundamental justification of, and practical basis for, defining the poverty line in the monetary approach. Yet there are problems about nutritionally based poverty lines. Differing metabolic rates, activities, size, gender and age among people mean that what is adequate varies among them. (Sukhatme 1982; Sukhatme 1989; Dasgupta 1993; Payne 1993). Then differing tastes, food availability and prices affect how much money income is needed to secure any particular level of nutrition. Moreover, poverty lines are often drawn up at the level of the household, yet the way resources are distributed within the household affects the nutrition levels of individuals within it (see below). All this suggests that it

\(^4\) An early example of how this approach could lead to different estimates of poverty than those which correspond to other concerns was noted above: in the nineteenth century the poor relief standards led to a poverty rate of just 5%, while Booth and Rowntree came up with estimates of around 30%.
is not possible to draw up a unique poverty line based on nutritional requirements, but rather a range of income, from a minimum line below which everyone is certainly in poverty (diagram 1), to a line above which no-one would be in poverty, in nutritional terms. Such a practice is akin to the fairly common approach of adopting two poverty lines, identifying ‘poverty’ and ‘extreme poverty’. Lipton has argued that there is a natural break in behaviour justifying a distinction between what he calls ‘the poor’ and the ‘ultra-poor’, defining the latter as households spending at least 80% of their income on food, and yet receiving less than 80% of their calorie requirements (Lipton 1988). He argues that empirical work identifies 80% as a maximum that people can spend on food because of other essential needs. However, others have questioned whether the 80%/80% lines hold, and whether there is such a natural break that is universally valid (Anand..).

Diagram 1: Monetary poverty: a range

\[ \begin{array}{c}
Y^4 \\
C^2 \\
Y^3 \\
Y^2 \\
\end{array} \quad Ns
\]

\[ \begin{array}{c}
C^1 \\
Y^1
\end{array} \]

Let \( N \), be a minimum ‘adequate’ nutrition level for any individual.

\( C^1, C^2 \) is the range of calories which may be needed to achieve this nutrition level which varies among individuals according to metabolic rate, age, gender and activity.

In order to achieve calorie consumption for an individual, \( C^1 \), household income of from \( Y^1 \) to \( Y^2 \) may be needed, varying according to numbers in the household, and household consumption and allocation patterns. For calorie consumption, \( C^2 \), household income of between \( Y^3 \) and \( Y^4 \) may be needed.
Below household income $Y^1$, malnutrition is certain; above household income $Y^4$, adequate nutrition is certain.
Other ‘natural’ breaks can be found: for example, evidence on the importance of social networks for provision of informal insurance and support mechanisms, as well as from participatory research, suggests there is a ‘break’ at levels of resources below which people are considered unworthy of support as they would not be able to reciprocate their obligations if needed (see, e.g. Howard and Milward 1997).

*Individuals versus households.* Economists’ approach to welfare is essentially individualistic -i.e. welfare pertains to individuals, and hence poverty (as a welfare shortfall) is a characteristic of individuals too. Such an approach is not appropriate for special groups such as children whose individual ability to access resources independently of an adult provider is severely constrained. Furthermore, income and consumption data are normally collected by household, so that at the very least some adjustment is needed in translating a household resources into individual poverty. Such an adjustment has two stages: one is to estimate the needs of different individuals; the second is to estimate how household resources are allocated to the different individuals within the household.

The issue of estimating individual resource needs involves both theoretical and practical problems. If a minimum rights perspective is adopted and all individuals have the same rights, then it would be wrong to weight individual needs differently. However, if those rights are seen as relating not to resources but to outcomes (eg the right to a certain standard of living, or the right to certain achievements in terms of nutrition), or, alternatively, adopting a utility based perspective, the adjustments that take different individual characteristics into account are justified.

*Equivalence scales and economies of scale.* Equivalence scales have been defined as the ‘ratio of the cost (to a household) of achieving some particular standard of living, given its demographic composition, to the cost of a ‘reference’ household achieving that same standard of living’ (Banks 1993). This assumes that some outside (non-income) way of defining standard of living exists, presumably a nutritional standard in line with the general approach to defining poverty. While this way of defining equivalence scales assumes that these can be calculated by reference to observed behaviour, but in practice there are considerable variations in the estimates, which are sensitive to the specific methods adopted. Other types of adjustments sometimes taken into account to estimates equivalent incomes include economies of scale in consumption. It should be noted that equivalence scales calculations are typically based on patterns of consumption of the ‘average’ household, and do not fully take into account power or bargaining considerations which appear to play a role in the way resources are allocated within the household.

The importance of some adjustments for the empirical estimation of poverty has recently been powerfully illustrated by Szekeley et al who have shown that the poverty rate varies between 13% and 66% of the population in 17 Latin American countries, according to the methods adopted towards calculating equivalence scales, assumptions about the existence of economies of scale in household consumption, methods for treating missing or zero incomes and adjustments to handle misreporting. (Szekely, Lustig et al. 2000) Given the magnitude of this variance, adopting stochastic dominance techniques to test the robustness of poverty estimates to varying assumptions on where the poverty line is set or how differences in needs are taken
into account, as suggested by Lipton and Ravallion (Lipton and Ravallion 1993) would indicate that many monetary estimates of poverty are not robust.

Aggregation issues. The issue of how to translate the identification of poverty at an individual level into an aggregate value is closely linked to the literature on social valuation. Following Sen’s (1979) pioneering contribution, which applied a similar approach to poverty measurement to that used in the measurement of inequality, the literature generally adopts an axiomatic approach in setting the desirable properties of a poverty index. Foster Greer and Thorbeck (FGT) (1985) is a fundamental contribution offering a general formulation, including a valuation parameter of choice, alpha, which incorporates some of the most widely used indexes. It has become standard practice to compute FGT indexes for values of alpha ranging from 0 to 2 in order to test the sensitivity of the poverty assessment to the distribution of resources among the poor.

Some conclusions on the monetary approach
The following conclusions emerge from this brief review of the monetary approach.

• At a theoretical level it has been shown that different theoretical interpretations can underpin the approach. All of them have their weaknesses. The welfarist view, for example, assumes that all relevant heterogeneity between individuals can be controlled for, but this requires rather strong assumptions. Further this approach disregards social resources which are of great importance in determining individual achievements in some fundamental dimensions of human well-being such as health and nutrition. The alternative rights based approach also fails to capture effective achievements in terms of human lives.

• While the monetary approach has benefited from significant methodological developments in terms of measurement, these technical adjustments require numerous value judgements. Despite their apparent “scientificity”, the estimates of poverty the approach provides, therefore, are open to question — an example is the recent debate on the one dollar a day poverty line. (Reddy and Pogge 2002); (Ravallion 2002). It should be noted that while many of the methodological elements which are part of a monetary poverty assessment are derived from economic theory (eg the literature on equivalence scales) poverty in itself is not an economic category, though efforts have been made to identify natural breaks

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5 The Foster-Greer-Thorbecke formula is \( P_a = \frac{1}{n} \sum_{i=1}^{n} \left( \frac{z - y_i}{z} \right)^a \), where \( P_a \) is the poverty index for value \( a \) which is the weight given to the depth of poverty, \( n \) the total number of individuals in society, \( q \) the number below the poverty line, \( z \) the poverty line, \( y_i \) the income of the \( i \)th individual Foster, J., J. Greer, et al. (1984). “A class of decomposable poverty measures.” Econometrica 52(3): 761-66.

6 A value of alpha equal to 0 corresponds to the headcount ratio, or the percentage of individuals living in poverty, capturing the incidence of poverty; a value of alpha equal to 1 is the income gap index, and is therefore sensitive to the depth of poverty; a value of alpha equal to 2, which is commonly used, is more sensitive to the severity of poverty. It can also be interpreted as a measure of the benefits of perfectly targeting resources to alleviate poverty (ie giving to every poor individual the exact amount which would bring its resources to the poverty line) with respect to giving a universal transfer (to poor and non-poor alike) equal to the poverty line. [CATE; COULD YOU REFORMULATE THIS SENTENCE TO MAKE IT CLEAR; OR OMIT]
between poor and non-poor based on some behavioural characteristics, but none
are really satisfactory in pointing to a unique poverty line.

• It has also been emphasised that this approach is fundamentally addressed to
  individual achievements; social interactions and interdependences are considered
  only from the mechanical point of view of appropriately scaling household
  resources to take into account different household structures.

• The value judgements that form an intrinsic aspect of much of the methodology --
  for example, about what should constitute an essential consumption basket -- like
  many other aspects of the methodology, are performed “externally”, ie without the
  involvement of poor people themselves.

The three other approaches to deprivation reviewed in this paper each address some
of the perceived defects of the monetary approach.

IIIb. The Capability approach

According to Sen, who pioneered this approach, development should be seen as the
expansion of human capabilities, not the maximisation of utility, or its proxy, money
income (Sen 1985; Sen 1999). The capability approach (CA) rejects monetary income
as its measure of well-being, and instead focuses on indicators of the freedom to live a
valued life. In this framework, poverty is defined as deprivation in the space of CA,

or failure to achieve certain minimal or basic capabilities, where ‘basic capabilities’
are ‘the ability to satisfy certain crucially important functionings up to certain
minimally adequate levels’. (Sen 1993, p 41).

The capability approach constitutes an alternative way of conceptualising individual
behaviour, assessing well-being and identifying policy objectives, based on the
rejection of utilitarianism as the measure of welfare and of utility maximisation as a
behavioural assumption. It is rooted in a critique of the ethical foundations of
utilitarianism. It is argued that the only defensible basis for a utilitarian approach is to
ground it in a concept of utility interpreted as ‘desire fulfilment’.  This however
implies letting individuals’ mental disposition play a role in social evaluation while
neglecting aspects such as their physical condition which influence their quality of
life. As a result, people can be ‘satisfied’ with what is a very deprived state (e.g. ill-
health, termed ‘physical condition neglect’ by), while their desires are constrained by
what seems possible (described as ‘valuation neglect’). Furthermore choices are
influenced by the social context not only in terms of its influence on expectations but
also through strategic interactions, making observed behaviour in the market of
dubious value for social valuation. (Sen 1985).

In the CA approach well-being is seen as the freedom of individuals to live lives that
are valued (termed the capability of the individual) . i.e. the realisation of human
potential. In the context of poverty the focus is on “the failure of some basic
capability to function” (Sen 1995, p.15) where basic capabilities are “intended to
separate out the ability to satisfy certain elementary and crucially important
functionings” (Sen 1992, p.45). This emphasis on the “outcomes” characterising the
quality of life of individuals implies a shift away from monetary indicators (which at

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7 Alternative reconstructions of utility such as a simple description of preferences invalidate its
best can represent indirect measures of those outcomes) and a focus on non-monetary indicators for evaluating well-being or deprivation. Monetary resources are considered only as a means to enhancing well-being, rather than the actual outcome of interest. Monetary resources may not be a reliable indicator of capability outcomes because of differences individuals face in transforming those resources into valuable achievements (functionings), differences which depend on different individual characteristics (for example differences between individuals in terms of metabolic rates; differences between able bodied and handicapped individuals) or differences in the contexts individuals live in (eg differences between living in areas where basic public services are provided and areas where those services are absent). If the emphasis is on final outcomes, poverty (and more generally well-being) assessments should take into account the fact that some people need more resources than others to obtain the same achievements. The emphasis is therefore put on the idea of adequacy of monetary and other resources for the achievement of certain capabilities rather than their sufficiency, and the role of externalities and social goods are brought into the picture as other influences over capabilities.

The instrumental role of monetary resources in the achievement of well-being is illustrated in Diagram 2. With their income individuals acquire commodities and the utilisation of these commodities’ characteristics allows individuals to achieve certain functionings. Monetary resources therefore, remain instrumentally related to the achievement of well-being (or, conversely, poverty), but do not exhaust the causal chain.

*Diagram 2: Capability approach – the links*

Private monetary income                      Social context, including public goods

utility

Commodities

Characteristics of commodities

Personal characteristics
Feasible utilisations

CAPABILITY SET

Individual choice within capability set

INDIVIDUAL FUNCTIONINGS
Operational issues in measuring poverty as capability failure

Translating the capability approach into an operational framework for poverty evaluation requires one to deal with a number of issues. Most fundamental is the definition of basic capabilities and of the levels of achievement which are to be considered as essential.

Defining basic capabilities. In his work Sen does not provide a specific list of minimally essential CA (though he suggests that basic concerns such as being well-nourished, avoiding preventable morbidity etc. should be part of such a list) nor guidelines for drawing up a universal list. Alkire has argued that the lack of specification was deliberate in order to allow room for choice across societies and ensure the relevance of the approach to different persons and cultures. (Alkire 1998)

Several attempts been made to define basic capabilities. For example, Nussbaum has argued that there is an ‘overlapping consensus’ between different societies on the conception of a human being and what is needed to be fully human. She hopes to arrive at a theory which is not ‘the mere projection of local preferences but is fully international and a basis for cross-cultural attunement’ (Nussbaum 2000)p 74. [See chart one]. Nussbaum’s claim that her list represents an overlapping consensus is based on casual evidence derived from a very small sample of views, especially in the South. The list does seem to represent a Western late-twentieth century conception of the ‘good life’. Moreover, Nussbaum’s list defines characteristics of a full human life at a very general level, and does not specify cut-off points for defining deprivation.
Chart One: Nussbaum’s list of features essential to full human life

a. Life: normal length of life  
b. Health: good health, adequate nutrition and shelter  
c. Bodily integrity: movement; choice in reproduction.  
d. Senses: imagination and thought, informed by education.  
e. Emotions: attachments  
f. Practical reason: critical reflection and planning life  
g. Affiliation: social interaction; protection against discrimination.  
h. Other species: respect for and living with other species.  
i. Play  
j. Control over ones environment, politically (choice) and materially (property).

Source: (Nussbaum 2000)

The problem of identification of basic CA is similar to that of the identification of Basic Needs. Doyal and Gough attempted to define an objective and non-culturally sensitive list of BN using as a fundamental criterion avoiding serious harm (Doyal and Gough 1991). They include physical health and autonomy (which covers a person’s level of understanding, mental health, and a range of opportunities) as BN. Satisfiers to achieve these needs, or the actual goods and services required, are argued to vary across societies. Other attempts to define the essential capabilities have been conducted by Alkire, Qizilbash, and Desai. (Alkire, 2002 #449) (Desai 1995.) (Qizilbash 1998). Each arrives at similar lists. These lists, and practical applications of the CA approach e.g. by (Dreze and Sen 1995), normally interpret the minimal essential CA as being constituted by health, nutrition and education – broadly the same as the list of basic needs identified in BN approaches (see e.g. (Stewart 1985), (Streeten, Burki et al. 1981); (Stewart 1995) further explores the differences between BN and capabilities approaches).

Measurement of capabilities. A second issue, in making a CA operational is the translation of the concept of capabilities (ie all the possible achievements an individual may have, which together constitute the capability set) into something which is measurable. The crucial issue is, of course, that capabilities represent a set of potential outcomes and as such are problematic to identify empirically. Arguably, however, if the capabilities considered are basic enough individuals will not be willing to forego them so that assessing their actual achievements, or functionings, should reveal the constraints they face. The identification of the capability set with the set of achieved functionings can be conceptualised as performing the evaluation of a set through one of its elements, in much the same way as economists value budget sets by considering the bundle of goods chosen (Sen and Foster 1997). But this risks losing the key insight of the CA which is its emphasis on freedom. In practice, there

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8 See Alkire 2002, Chapter Five for a discussion of similarities and differences between the BN and basic capability approaches.

9 A particular problem in this context is provided by the existence of other objectives which might either be deemed irrelevant for the assessment at hand, or might be hard to measure, whose relation with the dimensions of interest is unknown. Consider for example the case of a malnourished individual who might be fasting but “scoring high” in terms of the capability to lead a life which respects religious principles, versus an individual who is starved and does not have the option to be better nourished.
has been a strong tendency to measure functionings rather than capabilities (i.e. life expectancy, morbidity, literacy, nutrition levels) in both micro and macro assessments. Using functionings makes the approach virtually identical with the BN approach to the measurement of poverty.

The poverty line. As in the other approaches, there is a need to identify breaks in the distribution of capabilities, to differentiate the poor and non-poor. The choice of such a break – which is necessary for each CA separately -- appears to be context dependent and somewhat arbitrary. The Human Poverty Index developed by UNDP can be considered as an example since the concept of ‘human poverty’ was primarily derived from the CA approach. UNDP defined human poverty as “…deprivation in three essential elements of human life…longevity, knowledge and decent standard of living….” (UNDP 1997). The indicators adopted in the 2001 Human Development Report for the three elements were having less than 40 years life expectancy at birth, adult illiteracy, and an average of not using improved water sources and under five mortality. It is clear that both choice of dimensions and cut-off standards are somewhat arbitrary and are likely to be revised according to the general standards attained in the world, the region, or the country where poverty assessments are being made. This is exemplified by the fact that UNDP adopted a different Human Poverty Index for developed countries which includes life expectancy of below 60, lack of functional literacy among adults, the long-term unemployment rate, and the population below an income poverty line of 50% of median disposable household income in the country being assessed. 10 Whether a universal conception of poverty from a CA perspective can be reconciled with changing measures has not been much discussed.

Aggregation. The multidimensional emphasis of the capability framework makes the issue of aggregate particularly pertinent. It is arguable that since the different capabilities are incommensurable capability poverty should be presented separately for each capability. Aggregation conceals important information, from an analytic and a policy perspective. Nonetheless it is sometimes desired for political purposes, and to reduce a large amount of information to manageable proportions, for example, for country comparisons. The appropriate method of aggregation then depends largely on the purpose of the aggregation.11 For policy purposes fully aggregative strategies (i.e. those which arrive at full orderings by providing explicit trade-offs in terms of achievement in each dimension) are likely to be more useful than strategies which arrive only at partial ones (consider for example the case of having to identify regions to be given priority for poverty alleviation expenditure). Such strategies include, for example, the use of factor analysis to adopt data driven weights in aggregating deprivations, the use of fuzzy sets applications, borda rankings or the more familiar averages (popularised by the work done by UNDP in constructing its human development and human poverty indexes), to quote those methods which have been commonly used in a CA context. The use of concepts of union (the comprehensive

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11 Brandolini and D’Alessio provide a comprehensive review of different aggregation strategies and the trade-off between obtaining complete orderings and imposing structure in the aggregation.
approach, by which an individual deprived in any dimension is considered poor) or intersection (the overlapping approach, by which only individuals deprived in all dimensions are considered as poor) has also been suggested.

A further issue is whether and how the severity of deprivation in each of the basic dimensions should form part of the aggregation procedures. Bourguignon and Chakravarty (forthcoming), for example, provide a formula which allows for varying rates of trade-off across dimensions. Individuals’ deprivations in each dimension can be weighted by the distance from each cut-off line, for example, differentiating and giving more weight to the extremely malnourished as against the malnourished.

Some conclusions on the capability approach
The CA approach represents a major contribution to poverty analysis because it provides a coherent framework for defining poverty in the context of the lives people live and the freedoms they enjoy. This approach draws attention to a much wider range of causes of poverty and options for policies than the monetary approach. The shift in emphasis to the type of life individuals can live rather than on the private resources to which they have access addresses the neglect of social goods in the monetary approach and its narrow vision of human well-being. Yet like the monetary approach, arriving at operational measures poses a number of methodological choices. Though decisions on these too are somewhat arbitrary, the choices made are arguably more visible, and therefore more easily subject to scrutiny than in the monetary approach.

There are some features common to both CA and monetary approaches. First, in principle, both types of poverty take an individualistic perspective since both utility deprivation and capability failure is a characteristic of individuals, even though, in both cases, communities and households are important determinants of achievements, especially for children and the old. Secondly, both appear to be ‘objective’, yet, investigation of their methodologies shows strong subjective elements. Thirdly, both typically represent external assessments, though, in principle, as we shall suggest below, both could be adapted to include more internal inputs. Fourthly, neither approach captures fundamental causes or dynamics of poverty. They aim to describe the situation at a point in time, providing data for, but not themselves directly involving, fundamental analysis of the causes of poverty, although some studies, of course, do follow up measurement with investigations of the causes of, or processes leading to, monetary and/or capability poverty. (E.g. Dhatt and Ravallion 1998; Baker 1997). Social exclusion and participatory approaches both differ from the monetary and capability in each of these respects.

III.C. Social Exclusion

The concept of social exclusion (SE) was developed in industrialised countries to describe the processes of marginalisation and deprivation which can arise even within rich countries with comprehensive welfare provisions. It was a reminder of the

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12 The first use of the term, SE, has been attributed to Lenoir, French Secretary of State for Social Action in Government in 1974, referring to people who did not fit into the norms of industrial societies, were not protected by social insurance, and were considered social misfits. It included the handicapped,
multiple faces of deprivation in an affluent society. The concept now forms a central aspect of EU social policy; several European Council decisions (starting with the Lisbon Council of March 2000) have adopted strategic goals and political processes aimed at countering the risk of poverty and social exclusion. The concept of SE has been gradually extended to developing countries through the activities of various UN agencies (especially the International Labour Institute), and the Social Summit (Cler 1999).

The EU defines SE as a: ‘process through which individuals or groups are wholly or partially excluded from full participation in the society in which they live’ (European Foundation [1995]). This echoes the earlier work of Townsend who defined deprivation as referring to people who ‘are in effect excluded from ordinary living patterns, customs and activities’. (Townsend 1979, p31; our italics). Somewhat more precisely, Le Grand has defined SE as occurring to when a person is excluded if he/she is (a) resident in society; (b) but for reasons beyond his/her control cannot participate in normal activities of citizens in that society; (c) would like to do so. Others have argued that a person is excluded if conditions (a) and (b) hold, whether or not they actually desire to participate or not (Barry 1998).

Atkinson has identified three main characteristics of SE: relativity (i.e. exclusion is relative to a particular society); agency (i.e. they are excluded as a result of the action of an agent or agents); and dynamics (meaning that future prospects are relevant as well as current circumstances) (see Atkinson 1998; Micklewright 2002). Room concurs with the relational and dynamic aspects and adds three others – the multidimensionality of SE; a neighbourhood dimension (i.e. that poor or absent communal facilities are in question); and that major discontinuities are involved (Room 1999).

The dynamic focus and an emphasis on the processes which engender deprivation are distinguishing feature of this approach, compared to the approaches reviewed earlier. It has been noted for example that SE is ‘...a dynamic process, best described as descending levels: some disadvantages lead to some exclusion, which in turn leads to more disadvantages and more exclusion and ends up with persistent multiple (deprivation) disadvantages’ (Eurostat TaskForce 1998). While the other approaches can study causes and interconnections between different element of deprivation, such investigation is not part of the process of identifying the poor. In contrast, the definition of SE typically includes the process of becoming poor, as well as some outcomes of deprivation.

SE also contrasts with the two previous approaches in making a social perspective central – that is to say SE is socially defined, and is often a characteristics of groups – the aged, handicapped, racial or ethnic categories - rather than pertaining to individuals. This relational emphasis opens up a different policy agenda from the individualistic approaches – e.g. policies addressed to groups, such as eliminating discrimination and various forms of affirmative action. While other approaches can be extended to include these considerations, such as for example the recent drug users, delinquents, the aged, among others, and was estimated to account for one-tenth of French population.

3 At an early meeting of the Centre for the Analysis of Social Exclusion at the London School of Economics – see Burchardt, T., J. Le Grand, et al., 1999, p229.
developments in the studies of vulnerability in a monetary perspective, SE is the only approach where these considerations play a constitutive role.

Multidimensionality is an intrinsic feature of SE. Indeed, in general being deprived in more than one, and perhaps many, dimensions is a key feature of SE, which, of course, raises aggregation issues similar to those of CA. Furthermore, empirical work points to causal connections between different dimensions of exclusion, e.g. between employment and income; housing and employment; formal sector employment and insurance. SE generally is found to have a strong connection with monetary poverty. For example, lack of monetary income is both an outcome of SE (arising from lack of employment) and a cause (e.g. of social isolation and low wealth).

In order to apply SE empirically to particular societies, these rather general statements about SE need to be interpreted rather more specifically. The precise characteristics of SE tend to be society-specific, since they identify exclusion from normal activities. The concept of SE thus necessarily involves a relative approach to the definition of poverty. In industrial countries the indicators adopted in empirical work normally include unemployment, access to housing, minimal income, citizenship, democratic rights, and social contacts.

The application of the concept of exclusion to developing countries raises difficult issues. Characteristics of SE are likely to be different from those in developed countries. On the one hand, the defining features noted by Atkinson and Room are clearly highly relevant. But, on the other, it is difficult to identify appropriate norms to provide the benchmarks of exclusion, since exclusion from formal sector employment or social insurance coverage tend to apply to the majority of the population. Lack of formal sector employment or social insurance coverage therefore does not imply exclusion from normal social patterns or relationships. Since what is ‘normal’ may not be satisfactory in defining the benchmarks of exclusion, to the extent that the normal may not be desirable, there is a serious problem in deciding what would be appropriate SE characteristics. Moreover, a further complication is that exclusion is part of the social system in some societies, as with the caste system. Various solutions to the interpretation of SE in particular societies are possible: one is to take norms from outside the society, e.g. from developed countries. Some of the work on the marginalisation of whole societies in the process of globalisation implicitly does just that (Room 1999). Another is to derive the characteristics through consultation in participatory approaches. A third approach is to derive the characteristics empirically, by exploring what structural characteristics of a population (such as race, or caste, or region) are empirically correlated with multiple deprivations defined in other approaches.

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14 Some empirical work in UK, however, indicated that a relatively low proportion of people excluded on one dimension were also excluded on more than one other dimension. For example, of those without production activity, almost 40% also had low income, but less than a fifth were politically disengaged or socially isolated. (Burchardt, Le Grand et al. 1999, p 237).

Empirical work in developing countries has adopted a variety of approaches to the definition of SE – mostly it seems taking definitions which seem relevant to the reality being studied, but without providing much justification for their particular choice, and rarely making any explicit reference to what is actually normal in the society. For example:

(i) A study in India, (Appasamy, Guhan et al. 1996) defines SE as exclusion from health services, education, housing, water supply, sanitation and social security. This broad definition picks up very large numbers of people as being socially excluded.

(ii) In Venezuela, Cartaya, Magallanes et al. 1997 first define social and political rights and then interpret SE as not having these rights.

(iii) A study of Tanzania identifies certain very poor urban occupations and the rural landless as excluded (Rodgers et al., 1995).

(iv) An ILO study in Tunisia used the perceptions of various groups to define social exclusion – the different groups produced different characteristics: the authors concluded that integration required employment and a guaranteed source of income (Bedoui and Gouia 1995).

(iv) In Cameroon and Thailand, ethnic minorities have been defined as being excluded given the prevalent reconstruction of citizenship. In the case of Thailand other categories also included were poorly educated farmers, informal sector workers and the homeless. (Rodgers et al., 1995).

Some conclusions on SE
SE is perhaps the least well-defined and most difficult to interpret of the concepts of deprivation under review. Indeed, according to Micklewright 2002 ‘exclusion is a concept that defies clear definition and measurement’. Problems of definition are especially great in applying the concept to developing countries because “normality” is particularly difficult to define in multipolar societies, and because there can be a conflict between what is normal and what is desirable. The question of whether there exist relevant discontinuities also arises in a particularly difficult form, since the characteristics defining SE are society specific and therefore researchers in each country need to devise their own methods for identifying dimensions and appropriate breaks.

Nonetheless the approach is the only one that focuses intrinsically, rather than as an add-on, on the processes and dynamics which allow deprivation to arise and persist. Moreover, the analysis of exclusion lends itself to the study of structural characteristics of society and the situation of groups (e.g. ethnic minorities; or the landless) which can generate and characterise exclusion, whereas the two individualistic approaches (the monetary and CA) tend rather to focus on individual characteristics and circumstances. SE also leads to a focus on distributional issues – the situation of those deprived relative to the norm generally cannot improve without some redistribution of opportunities and outcomes – whereas monetary poverty (defined in absolute terms) and capability poverty can be reduced through growth without redistribution. The agency aspect of SE, noted by Atkinson, also points to excludors as well as excludees, with the main responsibility for improving the situation on the former, again a contrast to the monetary and capability approaches which describe a world without analysing or attributing responsibility.
IIID. Participatory methods

As pointed out above, conventional poverty estimates, including both monetary and capability ones, have been criticised for being externally imposed, and not taking into account the views of poor people themselves. The participatory approach – pioneered by Chambers – aims to change this, and get people themselves to participate in decisions about what it means to be poor, and the magnitude of poverty. (Chambers 1994; Chambers 1997)

Participatory poverty assessments (PPA) evolved from PRA (participatory rural appraisal) defined as ‘a growing family of approaches and methods to enable local people to share, enhance and analyse their knowledge of life and conditions, to plan and to act’ (Chambers 1994, p).

Initially intended for small projects, PPA were scaled up by the World Bank as a complement to their poverty assessments. By 1998 half the completed World Bank poverty assessments included a participatory element. An extensive multi-country (23) exercise was also carried out as background to the WB 2000/1 World Development Report, published as Voices of the Poor. (Narayan, et al. 2000) Poverty Reduction Strategy Papers (PRSPs) of the World Bank and IMF, which form an important element in IFI lending to poor countries, include some participatory methods as an essential component. 16

(Cornwall 2000) differentiates three types of PA:
1. those associated with self-determination and empowerment;
2. those associated with increasing the efficiency of programmes;
3. those emphasising mutual learning.

The use of participatory exercises by the World Bank, especially in their poverty assessments has tended to be instrumental, i.e. adopting PPA primarily so that the poor would cooperate with the programmes, rather than to change the nature of the programmes themselves (type 2), while Voices of the Poor, emphasises type 3. There is little of self-determination and empowerment in most of this work.

Method and tools
Contextual methods of analysis are involved, i.e. data collection methods which ‘attempt to understand poverty dimensions within the social, cultural, economic and political environment of a locality’ (David, Holland et al. 1998 p52). The methods derive from and emphasise poor people’s ability to understand and analyse their own reality.

A range of tools have been devised, including the use of participatory mapping and modelling, seasonal calendars, wealth and well-being ranking. The large variety of methods can be used flexibly, according to the situation. This contrasts with the other approaches, where a more rigid framework and methodology is involved. Chart Two illustrates drawing on elements of the approach adopted in a Zambian PRA.

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16 Poverty Reduction Strategy Papers (PRSP) are prepared by the member countries through a participatory process involving domestic stakeholders as well as external development partners, including the World Bank and International Monetary Fund, (IMF website, Jan 29th 2003).
Chart Two: Elements of a PRA in Zambia

<table>
<thead>
<tr>
<th>ISSUES</th>
<th>METHODS</th>
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<td>Perceptions and indicators of wealth, well being and poverty</td>
<td>Wealth/Well-being grouping</td>
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<td></td>
<td>Social mapping</td>
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<td></td>
<td>Semi-structured mapping</td>
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<tr>
<td>Assets of rural communities – including access to services, common</td>
<td>Resource mapping</td>
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<tr>
<td>property resources, other natural resources</td>
<td>Focus group discussion</td>
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<td></td>
<td>Institutional diagramming</td>
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<td></td>
<td>(Venn/Chapati diagram)</td>
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<tr>
<td>Assets of rural households</td>
<td>Wealth ranking/grouping</td>
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<td></td>
<td>Livelihood analysis</td>
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<tr>
<td>Coping strategies in times of crisis</td>
<td>Semi-structured interviews</td>
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<td>Ranking exercises</td>
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<tr>
<td>Community based support mechanisms for the rural poor</td>
<td>Institutional mapping</td>
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<tr>
<td></td>
<td>Semi-structured interviews</td>
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<tr>
<td>Long term environmental trends, for example, declining soil fertility,</td>
<td>Historical transects</td>
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<td>declining rainfall</td>
<td>Community time lines</td>
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<td></td>
<td>Resource mapping at different points in time</td>
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<td></td>
<td>Trend analysis</td>
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</table>


Some criticisms
In principle, PAs are conducted by people themselves – but inevitably it is nearly always outsiders who conduct the assessments and interpret the results. For example, Voices of the Poor identified five types of well-being – material; physical; security; freedom of choice and action; social well-being, a classification which emerged at least partly from subsequent rationalisation of the materials gathered in the various studies. An evaluation of Participatory Poverty Assessments in Africa noted that certain themes were not emphasised in the analysis, and many were omitted altogether. There was obvious ‘selectivity’ due to pressures to highlight what were considered to be policy relevant conclusions. (Booth 2003, Holland, Hentschel, Lanjouw et al)

Although the PA exercises are intended to determine the nature of projects, and even contribute to development strategy, in practice it appears that the relation between participatory exercises and the project or plans are often remote. The Poverty Reduction Strategy Papers, which are prepared before debt relief can be agreed under HIPC, require participatory exercises as inputs. Yet 39 organizations and regional networks in 15 African countries agreed at a meeting in Kampala, May 2001, that PRSPs ‘were simply window dressing’. The statement concluded that ‘the PRSP process is simply delivering repackaged structural adjustment programmes and is not

17 ‘PRSPs are Just PR say Civil Society Groups’ http://www.BrettonWoods project.org/topic/adjustment/a23/prpsstats.html.
delivering poverty focused development plans and has failed to involve civil society and parliamentarians in economic policy discussions’.

A further problem arises from heterogeneity within the community: the question, in that case, is whose voices are being heard. Where there are conflicts within a community, the PPA has no agreed way of resolving them to arrive at a single community view. Moreover, certain groups are likely to be fearful of voicing opposition to powerful members of the community. It has been argued that PA tends to condone and reinforce existing social relations. (da Cunha and Junho Pena 1997)

Some people are not included at all. Groups often identify others, outside the group, as being really poor. Those who are not reached generally consist of people who no longer have social relations with the rest of the community – typically the poorest. The method does not compensate for such exclusions. In general, the intensive process involved means that only small numbers are included, who tend to be got together on an ad hoc basis, and rarely constitute representative samples of the population.

There is a deeper problem about exclusive reliance on participatory methods, which goes back to Sen’s criticisms of the utilitarian approach. People’s own assessment of their own condition can overlook their objective condition and can be biased as a result of limited information and social conditioning (i.e. these methods also suffer from ‘physical condition neglect’ and ‘valuation neglect’). The generally public aspect of assessments may also make it difficult to get honest assessments, and could involve participants in some risk.

**Some conclusions on PA**

The major advantage of this approach is that PPAs largely get away from externally imposed standards. They also provide a way of solving some of the problems encountered in the other methods. For example helping to define: an appropriate minimum basket of commodities for the monetary approach; basic capabilities in the capability approach; and whether SE make sense in particular society, and what the main dimensions of SE are.

There are two major differences from the other approaches: the main one is that the perspective is that of the poor, who, at least in theory, make the judgements which in other approaches are imposed from outside. The other is in the small samples – even in the scaled up version – relative to other methods. It is therefore difficult to carry out statistical significance tests on material gathered in this way. The method is complex and invariably contains multidimensional analysis. Like the SE it includes processes, causes and outcomes of poverty, as perceived by the poor. The method is apparently cost-effective, but the community spends much more time on these exercises – estimated at 5 times in one study (de Graft Agyarko 1998) – which is not usually costed.

**III. A comparative overview**

Each of the different approaches to poverty relies derives from a different perspective on development. For operationalisation, each requires a set of methodological assumptions, which are often not transparent. Because of the major differences in
definition, who counts as poor is likely to differ according to the approach, and the
decision about the income also used for each approach. Moreover, the different approaches have
different implications for policy, including targeting, as discussed below.

Chart Three provides an overview of comparisons between the approaches, on a
number of criteria that we have discussed earlier.

Two important issues that we have not discussed above are data availability and
policy implications. Currently, for most countries data are available at regular
intervals for the measurement of monetary poverty -- from household consumer
surveys or sometimes national income data\(^1\); moreover, the data are usually available
on a continuum so it is possible to vary the poverty line, and to measure the depth of
poverty. In contrast, data for different types of capability poverty are often
unavailable on a regular basis and rely on one off surveys, with some capabilities not
measured at all, and others with deficient indicators. There are similar data
deficiencies with respect to dimensions of social exclusion. These deficiencies reflect
prior preoccupation with monetary poverty, not any intrinsic property of the data.
Participatory data is different in this respect. By its nature it requires intensive
dialogue with groups of the poor, and is difficult to organise nationally or at short
intervals. However, a modified form of consultation can be carried out
comprehensively and regularly, along with other surveys.

From a policy perspective, the particular approach adopted has important implications
for how one goes about addressing the problem:

- The use of a monetary concept suggests that the solution is generation of
  money incomes. The development of capabilities might be also recommended
  but only as a means of increasing money incomes among the poor.
- The use of the capability approach in general suggests emphasis on a wider
  range of mechanisms – the social provision of goods, improved allocation of
  goods within the family and the more efficient use of goods to achieve health,
  nutrition and education, as well as money income as a means for promoting
  some capabilities.
- In this paper basic capabilities have been interpreted in material terms, but
  potentially the approach can readily be extended to other spheres, such as
  political or cultural life. This is not the case with the monetary approach.
- Both monetary and capability approaches are fundamentally concerned with
  absolute poverty in most developing country contexts. Hence one important
  policy response is to to raise the level of the sea so that all boats may rise too
  (‘Growth is good for the poor’ as Dollar and Kray put it). Distributional issues
  are present but not at the forefront.
- In contrast, the relative element in poverty is at the forefront in the social
  exclusion approach. Indeed, for this it is unlikely that growth alone can ever
  eliminate social exclusion. Hence redistributive polices and structural policies
  get priority and growth may be irrelevant.
- The monetary and capability approaches are essentially individualistic. Group
  features are consequently often ignored in policies (which tend to be focussed
  on individual access to resources or transfers), and at best are regarded as

\(^{1}\)There are severe disadvantages to the use of national income data -- an assumption about the
distribution of income is required to derive poverty lines (see Deaton, 2002).
instrumental. Yet in social exclusion particularly, and also to a considerable extent in participatory approaches the prime focus is on group characteristics. For social exclusion therefore such policies as correcting racial discrimination, or class barriers, or citizenship restrictions, are likely to form a central role.
Chart Three
IV. Some empirical evidence on the approaches to poverty measurement
A critical issue is whether the four approaches identify broadly the same people as poor because if they do the theoretical differences may be unimportant in policy or targeting terms. Despite its theoretical deficiencies, monetary poverty could be used as a proxy for other types of poverty if broadly the same people are identified as poor under the different measures.

Any empirical comparison has to first decide how the particular approach is to be used, solving many of the difficult issues discussed above. In the comparisons we adopt, we try and use commonly assumed solutions to these issues, since, the aim is to explore differences that occur in practice when alternative methods are used.

For countries as a whole and for regions of the world, it appears that poverty rates differ significantly according to the approach adopted – this is indicated in Table One and Graphs 1 and 2\(^1\), which shows that country ranking differs in comparing capability poverty and both international and national monetary poverty lines. The correlation coefficient between the proportion of people in poverty according to the UNDP’s Human Poverty Index and the proportion according to the international poverty line of $1 a day is 0.67, while the rank correlation coefficient between human poverty and poverty estimates adopting national poverty lines is 0.59. Moreover, even where the numbers are similar the different measures may be capturing different populations.

\(^1\) Data for international poverty covers a range of years from 1983-2000 and that for national poverty lines from 1987-2000; all the data including for the Human Poverty Index, which is derived from data for 1995-2000, come from UNDP 2002, Table 3.
Table 1

Monetary and capability poverty compared – selected countries
% of population in poverty

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Costa Rica</td>
<td>4.0</td>
<td>1</td>
<td>12.6</td>
<td>4</td>
<td>22.0</td>
<td>5</td>
</tr>
<tr>
<td>Chile</td>
<td>4.1</td>
<td>2</td>
<td>&lt;2</td>
<td>1</td>
<td>21.2</td>
<td>4</td>
</tr>
<tr>
<td>Mexico</td>
<td>9.4</td>
<td>3</td>
<td>15.9</td>
<td>6</td>
<td>10.1</td>
<td>2</td>
</tr>
<tr>
<td>Peru</td>
<td>12.8</td>
<td>4</td>
<td>15.5</td>
<td>5</td>
<td>49.0</td>
<td>9</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>17.6</td>
<td>5</td>
<td>6.6</td>
<td>3</td>
<td>25.0</td>
<td>7</td>
</tr>
<tr>
<td>China</td>
<td>14.9</td>
<td>6</td>
<td>18.8</td>
<td>7</td>
<td>4.6</td>
<td>1</td>
</tr>
<tr>
<td>Egypt</td>
<td>31.2</td>
<td>7</td>
<td>3.1</td>
<td>3</td>
<td>22.9</td>
<td>6</td>
</tr>
<tr>
<td>India</td>
<td>33.1</td>
<td>8</td>
<td>44.2</td>
<td>10</td>
<td>35.0</td>
<td>10</td>
</tr>
<tr>
<td>Morocco</td>
<td>35.8</td>
<td>9</td>
<td>&lt;2</td>
<td>1</td>
<td>19.0</td>
<td>3</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>36.1</td>
<td>10</td>
<td>36.0</td>
<td>9</td>
<td>25.5</td>
<td>8</td>
</tr>
<tr>
<td>Uganda</td>
<td>40.8</td>
<td>11</td>
<td>na</td>
<td>na</td>
<td>55.0</td>
<td>11</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>56.5</td>
<td>12</td>
<td>31.2</td>
<td>8</td>
<td>na</td>
<td>na</td>
</tr>
</tbody>
</table>

Source: UNDP, Human Development Report 2002

a. Human Poverty Index = geometric average of % people not expected to live to 40 years; adult illiteracy rate; and average lack of access to safe water and sanitation.

b. Monetary poverty = percentage of population with less than one dollar a day, valued at purchasing power parity.
World Poverty, 1987 and 1998

Graph One
A study of India and Peru, drawing both on national data sets and micro-surveys found that significantly different people\textsuperscript{20} were identified as poor in the two countries according to whether the monetary, capability or participatory approach was adopted.\textsuperscript{21}

The national data sets showed that in India, using the national poverty line, monetary poverty, at 38\%, was below capability poverty; 52\% of adults were education poor (illiterate); and 26\% of children were education poor (not attending primary school); 70\% percent of children less than 13 years old were undernourished, 44\% severely; but only 7\% percent of individuals between 7 and 59 suffered from chronic illness.

In Peru, in contrast, monetary poverty at 54\% (again using a national poverty line) was greater than capability poverty: 20\% of the adults and 7 percent of the children were education poor; 10\% of adults were health poor and 29 percent of the children below 5 years were undernourished.

The extent of the lack of overlap in individuals falling into monetary and capability poverty is shown in Table 2.

Table 3: Lack of overlaps between monetary and CA poverty

<table>
<thead>
<tr>
<th>Capability poverty measured as</th>
<th>Education</th>
<th>Nutrition/health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>children</td>
<td>adults</td>
</tr>
<tr>
<td>% of CA-poor not in monetary poverty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>43</td>
<td>60</td>
</tr>
<tr>
<td>Peru</td>
<td>32</td>
<td>37</td>
</tr>
<tr>
<td>% of monetary poor not CA-poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>65</td>
<td>38</td>
</tr>
<tr>
<td>Peru</td>
<td>93</td>
<td>73</td>
</tr>
</tbody>
</table>

Source: Franco et al. 2002

For example:

- In India, 43\% of children and over half adults of adults who were capability poor, using education or health as the indicator were not in monetary poverty; and similarly, over half the nutrition poor children were not in monetary poverty.

- In Peru, around a third of children and adults who were education-capability poor were not monetary-poor; while one fifth of children and over half adults who were capability poor (health/nutrition) but not monetary poor.

\textsuperscript{20} There were significant distributional differences between monetary and capability poverty in each country, as signified by low levels of Cramer’s V.

\textsuperscript{21} In this study national poverty lines were used for monetary poverty; capability poverty was interpreted as not being at school (for children) and illiteracy for adults; and health poverty was interpreted as undernutrition, for children, and self-reported chronic illness for adults.
One question that arises is whether the large proportions of individuals who are monetary poor but not capability poor, or conversely, are an artifact of the particular poverty lines selected. However, investigation of the extent of capability poverty for different monetary deciles showed that altering the monetary poverty line would not greatly alter the results. For example, in India although levels of education poverty were lower in higher deciles, 33% of the richest tenth of the population were illiterate (compared with 64% among the lowest decile). The proportion of health poor in the highest decile is quite similar to that in the lowest decile. Among those with incomes even as high as the 7th monetary decile more than 50% are poor in either education or health. In Peru, 12% of the top decile are education poor among adults, and 5% among children – compared with 32% in the lowest decile for adults and 9% for children. The incidence of child undernutrition is 5% for the top decile of money incomes compared with 9% for the lowest decile. Hence changing the cut-off line for monetary poverty would not eliminate the weak overlaps with capability poverty in either country.

Micro-studies permitted a comparison of poverty magnitudes according to capability and monetary approach, and using participatory methods. Again big differences were apparent.

- In India, in the urban areas only around half of those ranked as ‘low well-being’ by participatory methods were also monetarily poor. Even the highest monetary decile had 34% individuals ranked ‘low well-being’. In Peru, in the rural area, 48% of the monetary non-poor were identified as poor according to the well-being ranking, while 39% of the extremely poor, by well-being ranking, were not monetary poor. In the urban area, 49% of the monetary non-poor were ranked as poor while 44% of those ranked as poor were not monetary poor.
- In Peru, a lack of overlap also showed between self-perceptions of poverty and monetary poverty. In the rural area, 29% of the self-declared poor were non-poor according to the monetary indicator, while of the monetary poor, 42% did not believe themselves to be poor. In the urban area, 40% of the self-declared poor were not monetary poor, and 42% of the monetary poor did not state that they were poor.

The evidence from India and Peru thus points to significantly different populations identified as poor according to the different approaches. The findings of substantially different distributions of people in monetary and capability poverty have been paralleled in research on Chile and Vietnam (Ruggeri Laderchi 1997; Baulch and Masset 2003). In Uganda, participatory estimates of poverty at times have differed from monetary even in direction of change over time (McGee 2000). These large discrepancies in those defined as poor according to different methods mean that one cannot rely on a monetary indicator to identify those in other types of poverty, nor conversely. Consequently, the theoretical differences between the various methods have serious practical implications.

22 For India, for the participatory data comparisons involving the monetary approach could only be done on urban data due to problems with estimation of home-grown consumption in rural areas.
The India/Peru study had problems estimating social exclusion. It had been intended that the participatory focus groups would define social exclusion, and this definition would then be applied to the data set. But none of the participatory activities generated a definition of social exclusion -- none of the groups saw themselves as being socially excluded. For example, in India, even those belonging to the lower castes, while aware of boundaries with upper castes, did not consider themselves as socially excluded. The study, therefore, did not generate a good definition of social exclusion for these societies. In India, however, a rural group suggested the concept of 'social boycott' to describe a (very few) individuals who were no longer socially accepted by local people. The two reasons for such a boycott were mixed marriage (across religions or castes) and suffering from leprosy.

Although we were unable to identify social exclusion from participatory methods, the analysis of the incidence of different types of poverty pointed to certain groups as being particularly vulnerable to different types of poverty. In India these were: those belonging to scheduled castes or tribes. For Peru, they were the landless and those speaking local languages, not Spanish; and, in the urban areas, those having only precarious (or no) employment.

Conclusions

This review of the different approaches to the identification and measurement of poverty makes clear that there is no unique, or 'objective' way of defining and measuring poverty. There is a large element of 'construction' involved in each of the poverty measures (by outsiders generally in the monetary, capability and SE approaches, by a combination of outsiders and the people themselves in PPA). All definitions of poverty contain some arbitrary and subjective elements, often imposed by the outside observer. But this is of most concern with respect to conceptualisation and measurement in the monetary approach, since it gives the false impression of being the most accurate and objective of the methods, while the judgements made in order to arrive at a measure of monetary poverty are generally not apparent. The limited empirical consistency with capability approaches poses particular problems since it means that monetary poverty does not consistently point to failure to achieve certain material objectives, such as adequate nutrition. In contrast, capability poverty – albeit also subject to relatively arbitrary decisions – transparently means that people are unable to function in some ways that are universally accepted as important for human development. Capability poverty may not amount to everything we think we mean by poverty, but it definitely constitutes part of it, and the more one extends the basic capabilities included, the greater the range of deprivations covered. While participatory methods have a lot to offer – both in helping to make methodological decisions about the other methods, and in providing a valuable (but not exclusive) definition of poverty – i.e. as perceived by the poor themselves – they should not be the exclusive approach as the perceptions of the poor (and even more the expression of these perceptions) is necessarily limited and conditioned by their circumstances.

A focus on measuring individual deprivation, whether it is monetary or capability, can neglect, or even draw attention away from, fundamental causes of deprivation. In this respect the SE approach is particularly important. Yet we have found social exclusion
difficult to define in the developing country context, but believe the effort to do so is important because it points to processes of impoverishment, and structural characteristics of societies responsible for deprivation, and group issues which tend to be neglected in other approaches.

Conceptualisation, definitions and measurement have important implications for targeting and policy. The considerable lack of overlaps empirically between the different approaches to poverty means that targeting according to one type of poverty will involve serious targeting errors in relation to other types. Thus if the monetary poverty is used as the targeting criteria, it will have to be supplemented by other criteria if these errors are not to be very large. Moreover, definitions also have implications for policy. While a monetary approach suggests a focus on increasing money incomes (by economic growth, or redistribution), a capability approach tends to lead to more emphasis on the provision of public goods. Social exclusion draws attention to the need to break down exclusionary factors, for example, by redistribution and anti-discrimination policies.

Definitions do matter. Clearer and more transparent definitions of poverty are an essential prerequisite of any development policy that puts poverty reduction at its centre.
REFERENCES


Holland, Herschel and Lanjou

Howard and Millward


Szekely, M., N. Lustig, et al. (2000). Do we know how much poverty there is? Washington DC, IADB.


