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Identifying and Measuring Chronic Poverty:
Beyond Monetary Measures

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1. Introduction

Despite the renewed commitment over the past 15 years to poverty reduction as the core objective of international development discourses and policies, progress to this end remains disappointing. This is particularly evident in the extent to which the world is off track to achieve most of the Millennium Development Goals, globally and in most regions and countries (UNDP 2003; UN Statistics Division 2004). This inadequate progress raises important questions about the policies and strategies (centred around economic growth and human development) that have been adopted to achieve poverty reduction, as well as about key international issues including aid, debt, trade and conflict reduction.

It also raises important questions about our very conception and understanding of poverty. While perspectives on poverty have evolved significantly over this period, with widespread acceptance of the multidimensional nature of poverty, and of the importance of considering the depth and severity of poverty, there has been slower progress in recognising and responding to the persistence of poverty over time (Clark and Hulme 2005); in other words, the phenomenon of *chronic poverty*. For many people poverty is a situation from which it is very difficult to escape, most emphatically illustrated by deprivation, which is transmitted from one generation to the next. At present, chronic poverty is still not seen as an

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important policy focus. This is a significant area of neglect both because a substantial proportion of poverty is likely to be chronic (CPRC 2004), and because it is likely to call for distinct or additional policy responses.

Existing work on chronic poverty, and poverty dynamics in general, has so far been conceptualised in very narrow terms, and this has created important limitations in our understanding. In particular, chronic poverty has been studied almost exclusively in relation to income or consumption poverty, and using household panel survey data. Further, much of the focus has been on the identification of chronic poverty and finding correlates, without developing an understanding of the underlying processes by which some people are trapped in persistent poverty while others escape. A broader multidimensional – and multidisciplinary – perspective needs to be brought to the understanding of chronic poverty.

This paper argues for a much stronger focus on chronic poverty in analysis and policy debate, but also that this needs to be based on a broader concept. The argument is set out as follows. The next section discusses current approaches to the analysis of chronic poverty and poverty dynamics, leading into a discussion about the limitations of monetary measures. The following two sections discuss two alternative approaches, one based on assets, and the other on concepts of needs or human development. This leads into a discussion of progress to date in terms of implementing some of these approaches at the micro level. The final section synthesises interim conclusions.

2. Analysing Chronic Poverty

Historically, the idea that some people are trapped in poverty while others have spells in poverty was a central element of analysis. For example, officials and social commentators in eighteenth century France distinguished between the *pauvre* and the *indigent*. The former experienced seasonal poverty when crops failed or demand for casual agricultural labour was low. The latter were permanently poor because of ill health (physical and mental), accident, age, alcoholism or other forms of 'vice'. The central aim of policy was to support the *pauvre* in ways that would stop them from becoming *indigent*.

In contemporary times this durational aspect of poverty has been relatively neglected and conceptual development, and more particularly measurement, has focused on severity/depth and multidimensionality.[1] This has been especially the case in economics where serious work on duration only began to emerge in the late 1980s (Bane and Ellwood

1986; Gaiha 1988 and 1989). An implicit assumption of much research was that the persistence of poverty at the individual and household level was highly correlated with the severity of poverty. During the early 1990s such work began to proliferate based on available panel data sets, and in 2000 the first collection of papers on this topic was published (Baulch and Hoddinnott 2000).

There are three important points to note about the contemporary literature on chronic poverty (see Clark and Hulme 2005 for a fuller discussion). First, it is dominated by economists and econometricians using panel datasets to distinguish chronic poverty from transient or transitory poverty and identify variables that correlate with mobility, or lack of mobility.[2] Second, virtually all of the empirical work economists and econometricians have conducted uses income or consumption measures of poverty as its main variable.[3] Of the 28 panel datasets that cover developing countries and for which information is available, 26 assess poverty or standard of living in terms of income or consumption measures and 23 use these measures exclusively (Lawson, McKay and Moore 2005). Third, these variables were almost entirely quantitative and findings were, at best, only partially contextualised. Examples of the use of combined quantitative and qualitative work have only very recently begun to emerge (Adato *et. al.* 2005; Howe and McKay 2004; Kabeer 2005; Lawson, McKay and Okidi, forthcoming).

There are a number of reasons why the study of chronic poverty in developing countries has followed this path. Here we can only briefly identify them. Most obvious is that the approaches and methods used to analyse chronic and transient poverty in OECD countries, and especially the USA, have been transferred to the panel datasets that belatedly emerged in developing countries. In effect, '[t]he technically sophisticated econometric analysis that forms the basis of the poverty research industry today...' in the USA (O'Connor 2001: 3) colonised work on poorer countries. Second much contemporary empirical economics places a strong focus on quantitative analysis, and adopts a perspective of methodological individualism,[4] rather than work on collectivities such as classes or social groups. In Europe, where the other social sciences are rarely positivist and quantitative, this meant that chronic poverty analysis was seen as the domain of economists and not as a topic for cross-disciplinary efforts. Third, there remained ambivalence within sociology, anthropology, political science and geography (SAPG) about the concept of poverty. Research most often focused on inequality because of doubts about the idea of an objective

poverty line and a belief that it is unequal social and political relations that underpin deprivation and social problems[5] (see Green and Hulme 2005, for a more detailed discussion). Even when exemplary studies were produced – such as Iliffe's (1987), which contrasted structural and conjunctural poverty – this did not lead to further conceptual development or a set of comparative empirical studies. Other social scientists lauded this work but did not systematically extend it.

This situation left a void in policy oriented poverty analysis that was increasingly filled in the 1990s by participatory poverty assessments (PPAs) and participatory methods as exemplified in Narayan *et. al.* (2000). These approaches need to be carefully distinguished from the concepts and methods that SAPG researchers utilise. Indeed, they are criticised by some SAPG researchers (Mosse 1994; Cooke and Kothari 2001) for generating elite-biased and inaccurate accounts of 'who' is poor and 'why' people are poor.

In summary, the prevailing approach in relation to chronic poverty remains dominated by monetary indicators derived from household panel data sets. We now consider the limitations of this approach in more detail, before considering the scope to develop a broader approach in the rest of this paper.

3. The Limitations of Monetary Measures: Conceptual and Empirical

A major reason why income - or consumption-based measures of wellbeing are insufficient for considering wellbeing or poverty is that these indicators relate to the means to achieve ultimate ends rather than the ends in themselves. Such ultimate ends can be conceptualised in terms of Sen's capabilities framework (Sen 1985; 1990), later extended to distinguish instrumental and intrinsic freedoms (Sen 1999). The capabilities framework moves beyond a focus on consumption commodities to emphasise the characteristics of these commodities (Lancaster, Gorman) and the functionings that these commodities – along with other factors such as the environment – enable individuals to achieve. Examples of key functionings may include the ability to avoid preventable premature mortality or an ability to live with dignity in the community.

The key issue is that individuals differ in their ability to convert commodities and their associated characteristics into the achievement of functionings due to personal, social and environmental factors. Human

functioning also depends on public provision of key services, the value of which is typically not included (and anyway conceptually and practically difficult to value) in monetary measures of wellbeing. Solely emphasizing the income or commodities an individual can command is insufficiently focused on the ultimate ends of well-being. While in practice micro data suggest that income and the achievement of most ultimate ends tend to be positively correlated with each other across individuals or households, such correlations tend to be modest (Appleton and Song 1999). Thus for a given income level there can be a wide variation in non-monetary welfare outcomes. In addition, an increasing literature finds only a weak correlation between income and measures of happiness in comparisons across and within countries (Stutzer 2003; Frey and Stutzer 2001), although it has also been argued by some capability theorists that there is an equally weak association between happiness and well-being.

Another important and widely stressed issue in relation to income or consumption measures is that these will almost invariably (for practical reasons) be measured at the household level and so not capture intra-household variations, which can be substantial (Kabeer 1991; Haddad and Kanbur 1990). In looking at welfare issues the appropriate focus is clearly at the individual level, but it is very difficult to measure individual income or consumption due to factors such as shared income and purchases, or joint consumption, within the household. This also invites an alternative approach.

Aside from these conceptual issues, income or consumption measures of well-being typically show large fluctuations over time, and this is often especially significant for the poorest. Indeed, these fluctuations, and the vulnerability they imply, are a key aspect of ill-being. Many non-monetary indicators, such as adult literacy or nutritional status, are much less subject to fluctuations. Thus monetary indicators (even consumption, which is generally preferred over income) more than almost any others fail to provide an adequate measure of long term well-being status when measured at just one point in time, based on a one-off survey or even on repeated cross sections. This is likely to be particularly the case for the poorest for whom consumption smoothing is most difficult. For this reason panel data offers the promise of looking at longer term dynamics when using income or consumption measures. Thus in Uganda there was a large reduction in consumption poverty over the 1990s from 55.7 per cent in 1992 to 35.2 per cent in 1999; but these figures fail to capture the substantial mobility

over this period revealed by panel data where many households fell into income poverty while at the same time many others escaped (Lawson, McKay and Okidi 2003: 7).

There are also a number of practical issues in using longitudinal income or consumption data to look at poverty dynamics. One is that the number of waves in panel data is typically small, frequently just two or three periods with significant time gaps in between. A second issue is the extent of attrition which typically affects panel data sets, with households dropping out (e.g. due to mobility, or refusal to be re-interviewed), a phenomenon which is likely to show systematic patterns (Alderman *et. al.* 2000; Falaris 2003). Related to this, inevitable changes over time in household composition mean that it is not always easy to identify panel households unambiguously.

Another important limitation is the extent of measurement error typically associated with measuring income or consumption. These are complex variables to measure given the variety of different types of consumption or sources of income; there will inevitably be significant recall error; and measurement methods to increase accuracy (e.g. using short recall methods) also introduce increased volatility into the data (Scott 1992). These issues are less serious when looking at averages (e.g. patterns of poverty) across groups of households, but can be substantial at the individual household level – the level at which poverty dynamics must be considered. It follows that household level income or consumption data in panel surveys display greater volatility over time than is really the case, due to the impact of measurement error. This will mean that mobility will be exaggerated and chronic poverty is likely to be underestimated. While some studies have attempted to correct for measurement error (Dercon and Krishnan 2000; McCulloch and Baulch 2000), such corrections are inevitably imperfect because of the lack of information to form a firm judgement about the extent of measurement error.

In addition, as already noted, the ways in which panel data have been used in analysis have generally been limited to the measurement of chronic and transitory poverty and the identification of correlates of poverty transitions or non-transitions (being trapped in poverty). Typically the range of correlates considered has been quite limited, reflecting the range of information typically collected by surveys. The correlates identified are generally plausible (McKay and Lawson 2003) but cannot provide insights about causes. In general what is required is to develop an understanding of the processes underlying poverty

transitions (or traps) and household surveys are generally not well adapted to provide such insights. This is partly a limitation of a purely quantitative analysis, and this has been recognised in the recent development of combined qualitative and quantitative approaches.[6] For the most part though these still remain strongly focused on money-metric poverty.

There is scope to analyse dynamics of important non-income indicators using panel data sets – e.g. whether children are enrolled at school, or anthropometric indicators. While anthropometric data in particular could offer a major opportunity, this is often not possible in practice because of the common habit of only collecting data on a very limited age range, typically pre-school children.[7] But it is also important to raise questions about alternatives to panel data. On a very practical level, in the large majority of low income countries panel data are not available – but the issue of chronic poverty remains important. The question of alternatives is also important because of the significant cost and also difficulty of collecting panel data e.g. tracking and matching individuals and households, (Wilson and Huttley 2003); is collecting panel data worth the cost it implies, or are there other adequate ways of analysing chronic poverty? One potential opportunity could be offered by pseudo-panel methods (Bourguignon *et. al.* 2004, looking at vulnerability), but such methods typically require large sample sizes. Gibson (2001) claimed to develop a method for distinguishing transitory and chronic poverty without a panel, but in fact his approach is about more accurate measurement of poverty and not about poverty dynamics.

There are many points that might be drawn from the above discussion. The main one, from the perspective of this paper, is that to date the creation of knowledge about chronic poverty remains highly dependent on the work of economists and econometricians. This is much more the case for chronic poverty than it is for poverty in general terms. This leads to two arguments that inform the rest of this paper. The first is that the conceptualisation and operationalisation of chronic poverty, currently largely shaped by economists, need to be as rigorous as possible – otherwise the overall understanding of poverty dynamics may be seriously distorted. The second is the need to look for ways of ensuring that chronic poverty is not analysed through an excessively narrow lens. Table 1 illustrates the ways in which different requirements for human flourishing, derived from a review of six human development listings, relate to chronic poverty. Can economists incorporate concepts from other disciplines into chronic poverty analysis, and/or can cross-

disciplinary or combined quantitative and qualitative approaches be developed? We consider now a range of potential alternative approaches.

Table 1: Requirements for Human Flourishing and Their Relation to Chronic Poverty[1]

Requirement	Relationship to Chronic Poverty
Bodily well-being	• Preventable and premature death deprives a person of all capabilities and functionings for the 'lost' years. • Chronic ill health and terminal illness, especially of the main 'breadwinner' of a household, are closely associated with chronic poverty. • Poor people frequently cite ill health as a cause and consequence of chronic poverty. • Disability correlates with chronic poverty.
Material well-being	• Income/consumption poverty is the most commonly used indicator of chronic poverty. Asset measurements have been proposed recently.
Mental development (and mental health)	• Low levels of human capital (education, knowledge, skills) are commonly reported as a factor trapping people in poverty. • Mental health problems are significantly associated with homelessness and extreme poverty in OECD countries. Little is known about mental health in developing countries, but there are reports that mental health problems are common for the homeless and destitute.
Work	• Chronic poverty is closely associated with low paid, irregular and insecure work. • Work related ill health (injuries, lung disease) are causes of chronic poverty.
Security	• Regions and countries experiencing violent conflict have high levels of chronic poverty. • Physical insecurity raises the probability of chronic poverty. • Lack of access to basic social security encourages risk averse behaviour that lower productivity – these can become poverty traps.
Social relations	• Low levels of social capital/social networks are seen as an asset condition predisposing households to chronic

	poverty. • Social relations, in terms of social exclusion and adverse incorporation, are viewed by many SAPG researchers as the fundamental cause of chronic poverty.
Spiritual well-being	• Rarely explored in the literature on chronic poverty. • Anecdotally, chronically poor people explain their circumstances through reference to the spiritual e.g. 'will of God', witchcraft.
Empowerment and political freedom	• Disempowerment and lack of rights/abuse of rights are often argued to be key causes of chronic poverty.
Respect for other species	• In some cases environmental degradation is identified as a factor contributing to chronic poverty. This is not usually framed as [lack of] respect for other species.

[1]The framework is taken from Ranis, Stewart and Samman (2005: 4, Table 1) based on a review of 'six lists' of needs/human development, which have differing philosophical approaches and justifications.

4. What are the Alternatives?

Alternative 1: An Asset-Based Approach

Many of the limitations of monetary measures are quite widely accepted, but a key difficulty has often been to identify alternative approaches, which retain a strong focus on chronic poverty or poverty dynamics. One important potential alternative approach is to focus on asset ownership, given that assets capture longer term dynamics much better than a measure of income at one or two points in time. For this reason having longitudinal data may be less crucial. In addition, assets can in principle be considered in a range of different dimensions, including social capital.

An asset-based approach: static and dynamic thresholds

The assets that a household possesses, or to which it has access, can be related to household income in that the latter may be conceptualised as returns to these assets. In this view a household's income reflects the assets it commands and the returns it is able to earn on these assets, which in turn depend on many factors. But such assets are also likely to be important to households in their own right, besides their role in generating income; as well as representing wealth and status, having a sufficient level of assets also offers security, such that

households can insure themselves against shocks, and gain easier access to credit. Ownership of key assets may be a good indicator of well-being in its own right (although any evidence for this has typically been judged in relation to income or consumption indicators). Compared to income or consumption, assets are likely to be much less subject to fluctuations in the short to medium term. An important issue to consider, however, is which assets should be included in any asset-based measure of well-being.

An important example of placing assets in a central role in the analysis of persistent poverty is the work of Michael Carter and associates (Carter and Barrett 2005; Carter and May 2001). This moves beyond a distinction between chronic and transitory (income) poverty, to introduce asset poverty and distinguish between structural and stochastic poverty. Consider a transitorily poor household that is poor in the first period but above the poverty line in the second period. This may reflect structural change, because for example the household has been able to accumulate assets over this period. Alternatively it may reflect stochastic factors: the fact that the household was poor (non-poor) in the first (second period) may just have been a reflection of bad (good) luck in that specific period. This distinction can be made by considering the assets owned by the household and asking (based on a relationship between income and assets) whether *on average* that level of assets is sufficient to place a household above the poverty line. Thus it is possible to identify an asset poverty line corresponding to a given income poverty line based on an average relationship between income and assets. In this way it is possible to distinguish among the income poor (non-poor) between those for whom this situation appears to be temporary because they have (do not have) a sufficiently high level of assets, and those for whom this seems to be permanent. This enables a more sophisticated understanding of the poor/non-poor distinction, contingent on the relationship between income and assets.

Building on ideas of poverty traps and multiple livelihood strategies, Carter and Barrett (2005) extend this concept to identify a dynamic asset threshold, taking account of households' ability to save or have access to credit. In their model (with two livelihood strategies) the dynamic asset threshold is the level above which households will save and accumulate assets (keeping them above the poverty line), and below which they will reduce their asset holdings and find themselves in a situation of poverty over the longer term. The challenge of course is to estimate this dynamic asset poverty threshold. As part of this a key issue

to consider is which assets should be considered and how diverse categories of assets can be aggregated. There are various solutions to this latter question; for instance, Sahn and Stifel (2000) have used factor analysis to construct a one dimensional household asset index, though this technique does not take account of the relative importance of different assets in generating income.

This focus on assets adds considerably to the distinction between chronic and transitory poverty based on income data alone, but income still plays a central role in this approach; both static and dynamic asset thresholds are still defined in relation to income poverty lines. It has also focused to date on a relatively narrow range of productive assets, and it does not provide much discussion of the factors affecting the returns to these assets. Is there scope to consider assets in their own right as indicators of chronic poverty status?

Assets in a Livelihoods Framework

The livelihoods approach (Carney 1998; DFID 1999-2000; Scoones 1998; Ellis 2000) is now used extensively in poverty analysis. In its orthodox form it recognises five 'capitals' that capture the assets that households utilise to generate consumption and accumulate (or liquidate) for future use. These are natural capital, physical capital, human capital, social capital and financial capital. *Hulme et. al.* (2001; see also Moore 2001) adapt this by dividing social capital into socio-cultural and socio-political assets and by proposing other potential categories (security and psychological).

Potentially, this framework could be utilised to estimate the total asset set that a household controls. A hypothetical example of this is developed by Johnson, Hulme and Ruthven (2005). However, operationally the livelihoods framework falls back on less comprehensive devices to assess the level of poverty or wealth of households. Ellis (2000) points to the conventional economic devices of income and consumption and makes a strong case for consumption measures to be preferred. The example he provides in his book, however, recommends the use of participatory wealth rankings to assess who is poor, and these fall back on a small number of natural and physical assets (presumably because these are the easiest to identify and measure in practice): ownership of land, cattle, housing quality and a number of context specific key physical assets (*ibid*: 206-7).[8] Varying mixes of these natural and physical assets are used to 'designate' whether a household is presently 'low income', 'middle income' or 'high income'.

Low income households are assumed to be poor. The logic behind this is not presented, but it would appear to be that low levels of these key assets reveal directly that the household has low levels of natural and physical capital and indirectly that there are also low levels of financial, human and social capital. In effect, the last three capitals are assumed to closely correlate with the levels of the key assets.

While the livelihood framework appears to have the potential to allow a comprehensive assessment of assets, in practice this seems either difficult to utilise (because of the problems in measuring or placing values on financial, human and social capital) or unnecessary (as the assets that can be easily measured serve as surrogate measures for the others).[9] The latter, however, remains an empirical issue to be demonstrated.

Alternative 2: Needs and Human Development Approaches

Asset-based approaches to identifying and measuring poverty and deprivation have also been heavily criticised, for instance, because of the limited range of assets, because of difficulties of measurement, and because they are insufficiently linked to ultimate ends. An early alternative to this was the basic needs approach originally developed by the ILO in the 1970s (with a focus on goods and services), and revamped in the early 1980s by Streeten *et. al.* (1981), and Stewart (1985) and associates (with a focus on outcomes) (see Stewart, forthcoming). This was in recognition of the fact that economic growth was frequently not associated with improvements in key education and health outcomes. However, basic needs approaches have also been criticised for seeing poverty reduction as essentially about access to goods and services, as well as for their universalist nature. While this criticism is appropriate for the early version developed by the ILO in the 1970s, it is not applicable to more recent variants of the needs approach (see Alkire 2002b; Clark, forthcoming; Stewart, forthcoming).

Later work by Doyal and Gough (1991) sets out a much more comprehensive needs-based perspective. As with the basic needs approach, they argue strongly for the importance of recognising fully universal needs and they reject arguments based on cultural relativism that purport to challenge this. Doyal and Gough identify health and autonomy as the two key basic needs that,

"[all] *humans must satisfy in order to avoid the serious harm of fundamentally impaired participation in their form of life*…" (Gough 2004)

Individual autonomy of agency depends on three key variables (Gough 2004)

- Cognitive and emotional capacity
- The level of cultural understanding an individual has about his or herself; and
- Critical autonomy: "the capacity to compare cultural rules, to reflect upon the rules of one's own culture, to work with others to change them and, *in extremis*, to move to another culture" (Doyal and Gough 1991: 187).

These basic needs are universal but the means of satisfying them (the basic needs *satisfiers*) can be culturally specific. But Doyal and Gough (1991) seek to identify universal satisfier characteristics - characteristics of goods, services, activities or relationships which enhance physical health or autonomy in all cultural contexts, by identifying a set of 11 intermediate needs (Table 2). This list, they argue, is drawn up based on codified and experiential knowledge. How these intermediate needs are satisfied, however, still depends on the social context.

In practice there remains a major challenge in how to identify indicators for these basic and intermediate needs. Another major criticism, which has been levelled at this approach, is its paternalistic approach.

Table 2: Doyal and Gough's 11 Intermediate Needs

Nutritional food and clean water
Protective housing
A non-hazardous work environment
A non-hazardous physical environment
Safe birth control and child-bearing
Appropriate health care
A secure childhood
Significant primary relationships
Physical security
Economic security
Appropriate education

Source: *Gough (2004).*

Another approach has been developed by a prominent group of philosophers and social scientists, such as Sen (1984; 1985; 1999), Haq (1995) and Nussbaum (1988; 1995; 2000), which can be loosely grouped

under the heading of human development.[10] Many lists of the dimensions of human development have been published.

Alkire (2002a: 39) identifies 139 of these,[11] Saith (2001) reviews 6 and Clark (2002) provides an overview of over 15 lists. Here, to illustrate the space that human development covers, we reproduce Nussbaum's list (Table 3). Her list is not definitive and can, according to the author, be revised. This list overlaps with Doyal and Gough's basic and intermediate needs but there are also significant differences (Gough 2004, sets out a comparison between these two approaches).

While there are many differences, and sometimes disagreements, between these approaches a number of common features (many of which they share with the Needs approaches discussed above) can be observed.

i. Their focus is on the achievement of ultimate ends, often envisioned as 'human development' or 'well-being', rather than on the means to achieve ends.
ii. They are much more multi-dimensional than asset-based approaches, usually recognising at least 6 dimensions of human development and in some cases more than a dozen (and often dimensions are divided into several distinct sub-dimensions and multiple indicators may be used to assess these).
iii. They temper the materialism of flow and asset-based approaches through a focus on non-material aspects of human development such as affection, friendship, autonomy and security (the last though is sometimes defined, at least in part, in material terms).
iv. To varying degrees,[12] they allow for participatory processes in the identification and specification of the dimensions of poverty so that different cultures, or the preferences of poor people, influence the lists that are produced.
v. Concepts and methods from moral philosophy and ethics are used extensively and economics often plays only a secondary role.

While such 'lists' make great efforts to present a conceptually coherent account of human well-being and/or the 'good life', they all aspire to making some practical contribution to identifying, measuring and understanding poverty and low levels of well being, so that more effective action can be undertaken. In terms of the identification, measurement and analysis of chronic poverty one can argue that all of

them have failed to have a significant impact. They have pointed out the severe limitations of commodity-based approaches but have not managed to generate a widely used operational alternative for empirical studies on poverty or specifically in relation to chronic poverty. There have been many attempts to make the capability approach operational, but here are very few attempts to introduce time dimensions into the capabilities approach (though see Clark and Hulme 2005).

Why have they failed to make more headway? According to Alkire (2002b: 193) a synthesis has not emerged from this work for three main reasons; they are biased to Western sources, the mechanisms for 'empirical testing' and/or 'participatory processes' are unclear, and the items on the lists 'vary slightly'. One can also add that the intellectual leader of this field, Amartya Sen, refuses to provide a list while his esteemed peer, Nussbaum has provided a list and is accused of 'overspecifying' the concept.

Philosophically there may be strong grounds for resisting a synthesis that inevitably compromises the internal logic of each individual approach to some degree. Practically, however, there are dire consequences: the analysis of chronic poverty and poverty dynamics remains dominated by 'commodity fetishists' or by researchers who simply 'do what everyone else is doing'. As Qizilbash (2002) points out, most of the human development literature has 'shared values' and confronts 'common foes' but it has focused excessively on examining differences within its constituent parts.

While Sen's capabilities framework has much to recommend it, there are at least three significant problems. First, the focus on a very broad range of capabilities may be appropriate when thinking of well being and flourishing, but in poverty studies it may be better to focus on a smaller sub-set of 'basic capabilities' (Stewart quoted in Alkire 2002: 184). Secondly, while there are strong grounds for arguing for pluralist and/or participatory strategies to identify capabilities (Alkire 2002b; Clark 2002, etc), this makes empirical work time consuming and expensive and may make cross-community, cross-national and longitudinal analysis difficult or even infeasible. Thirdly, there are questions about whether commodities and capabilities are mutually separable (Clark 2002; forthcoming 2005), leading to questions about whether commodities need to be a component of a capability approach (as for the HDI).

Table 3: Nussbaum's Central Human Capabilities

Life

Bodily health
Bodily integrity
Senses, thought, imagination
Emotions
Practical reason
Affiliation
Other species
Play
Control over one's environment

***Source** : Nussbaum (2000:74-75)*

But the opportunity to operationalise human capabilities approaches remains open. Here we illustrate possible ways of applying these theories for empirical work. The challenge now is to move beyond using capabilities frameworks to criticise income/consumption and asset measures, and to generate alternatives that can challenge or displace these.

5. The Scope to Implement Non-Moneymetric Alternatives

As discussed above, a number of attempts have been made to implement asset-based approaches to poverty (and chronic poverty) measurement. However, these have been based on a relatively narrow range of assets (typically physical and natural, and sometimes human capital) as in the construction of asset indices or the implementation of livelihoods frameworks; and/or have been strongly linked to income poverty in any case (as in the work of Carter and Barrett). These approaches are typically limited to forms of assets that are in some sense measurable, and asset indices have frequently been criticised because of the relatively arbitrary – and non-context specific – weightings that they employ. An analogous criticism of course is levelled at the Human Development Index.

Here we consider some alternative approaches that have been implemented.

Klasen's Deprivation Measure

Stephan Klasen has pointed to the shortcomings of moneymetric measures of poverty and deprivation and experimented with a '…deprivation index [that] examines capability outcomes directly' (Klasen 1997; 2000: 57). Here our focus is on the deprivation measure itself and not on empirical comparisons of the deprivation and expenditure poverty measures. Klasen refers extensively to Sen's work as the conceptual inspiration for his measure, which assesses deprivation in

terms of 14 'components' of well-being (Table 4). This is not an attempt '…to propose the definitive measure of well-being, but simply to contribute to a debate about possible ways to capture well-being more directly than relying on expenditures…' (*ibid*: 43).

This measure has clear advantages over the monetary measure for assessing chronic poverty as: (i) it focuses on capabilities rather than means, (ii) it does not assume perfect markets, (iii) it bypasses many of the problems associated with aggregation and equivalence scales, and (iv) it is less sensitive to measurement error.

However, it is not unproblematic. In particular it can be challenged in terms of its choice of components, its scoring system and the weighting of components in the index, as Klasen (*ibid*: 36) recognises (though he argues some of these things are likely to be uncontroversial). Clark and Qizilbash (2005) point out that Klasen does not clearly explain the choice of components. Essentially, they appear to be selected pragmatically from all of the possible PSLSD (1994) indicators that relate to capabilities. Arguably, only 11 of the components selected can be directly related to capabilities. Two are commodities – income and wealth – and one, perceived well-being, is a measure of utility. So, conceptually, the measure can be challenged for mixing indicators of capabilities with commodities and utility. However, Klasen also constructs a 'core deprivation index' of seven components concentrating on '…the most basic human capabilities' (see Table 4). This simpler measure has the conceptual advantage of not including commodities or utility as components. Practically, it has the advantage of requiring less data. It also has the advantage of using variables which are easier to measure. Empirically, it produces results that are very similar to the fuller index.

Table 4: Components of a Composite Measure of Deprivation (Klasen)

Component	Description of indicator used
Education[1]	Average years of schooling of all adult (16+) household members
*Income	Expenditure quintiles (as used throughout paper)
*Wealth	Number of household durables (list includes vehicles, phone, radio, TV, geyser, stoves, kettle, bicycles)
*Housing [1]	Housing characteristics
*Water[1]	Type of water access
Sanitation	Type of sanitation facilities
Energy	Main source of energy for cooking
*Employment[1]	Share of adult members of households employed

Transport	Type of transport used to get to work
Financial Services	Ratio of monthly debt service to total debt stock*
*Nutrition[1]	Share of children situated in household*
*Health Care[1]	Use of health facilities during last illness*
Safety[1]	Perception of safety inside (i) and outside (o) of house, compared to 5 years ago
Perceived Well-being	Level of satisfaction of household

*Note : *Households with missing values in these indicators were assigned a value based on their race, location (rural/urban/metro), and expenditure quintile.*

[1] These seven components are used for the 'core deprivation index'.

***Source**: Klasen (2000: 40).*

The second major criticism is of the cardinal scoring system used for each indicator. While Klasen argues that '…in most cases…the scoring system is quite intuitive and unlikely to stir much debate' (*ibid*: 39), Clark and Qizilbash do query the arbitrariness of this and there are quite obvious challenges that might be made. For example, why should a non-poor individual who has a luxury flat close to his work and the privilege of walking to work each morning (despite owning two cars) be scored as deprived in terms of transport/mobility? Similarly, why should a domestic servant living in almost slave-like conditions be assessed as least deprived in terms of housing when she sleeps on the kitchen floor in her employer's house? In addition, the way in which these scores operate means that the measure is of relative and not absolute deprivation.

Third, there is the inevitable questioning of the weighting of components in the index. While giving all components the same weight might appear to be 'fair', there is a complex set of value judgements built into such an assumption. For example, can nutrition (child stunting that may reduce an individual's capabilities over her lifecourse) be weighted the same as transport/mobility (where a low score may be a temporary inconvenience)?

There is a final challenge that Klasen does not mention: that this approach is paternalistic, in that it does not allow respondents to say what well-being, or more accurately lack of well-being, means for them. Although the PSLSD asked about perceived levels of well-being, and about what the state should prioritise, it did not directly ask interviewees to define deprivation in their own terms.

Despite these problems Klasen's index, or something similar, would appear to offer strong advantages over the income/ consumption/expenditure approaches that have dominated chronic

poverty analysis in South Africa and elsewhere. They may focus on relative deprivation – but in countries with large numbers of poor people such as South Africa, those who are relatively deprived in terms of capabilities are likely to be in absolute poverty.

Clark and Qizilbash's Core Poverty

Over recent years Qizilbash (2000; 2003; 2005) has been exploring approaches that explicitly deal with the vagueness of what poverty is, and of how boundaries distinguishing the poor from the non-poor might be specified. These ideas have been empirically operationalised with David Clark in an approach that is strongly linked to capabilities and especially Sen's work (Clark and Qizilbash 2002; 2005). Their approach seeks to deal with the 'horizontal vagueness' of the dimensions of poverty and the 'vertical vagueness' of the minimal critical levels (for given dimensions) at or below which someone must fall to be classed as poor (Qizilbash 2003: 50).

Following Fine's 'supervaluationalist' approach (Qizilbash 2003) they develop a method that can identify admissible specifications for poverty. A statement about poverty is 'super true' only if it is true in all admissible ways of making it more precise. They refer to someone who is poor in this sense as 'core poor', meaning that they are unambiguously poor. To be core poor, a person must be poor in any single core dimension of poverty (i.e. one that is part of all admissible specifications for poverty) and must fall at or below the lowest critical level in that dimension. Other people who are ambiguously poor in a core dimension (i.e. poor in terms of at least one but not all admissible specifications of the corresponding poverty threshold), are classed as 'vulnerable'. In this usage, '…vulnerability relates to the possibility of being classified as poor, rather than any risk of becoming poor' (Qizilbash 2003: 52). It is important to note that this approach does not aggregate scores in different dimensions. If a person is below the critical minimum level in a core dimension s/he is unambiguously poor regardless of their scores in all other dimensions.

Clark and Qizilbash (2002; 2005) have applied this approach by asking a randomly selected sample of 'ordinary people' from disadvantaged regions in South Africa about '…which needs and capabilities …are basic, and where they draw the line between the poor and non-poor' (*ibid*: 9). The focus is on 'the essentials of life' rather than broader living conditions. Their interviewers administered a questionnaire that '…asked people about the level of achievement

required to 'get by' as opposed to that to 'live well" (*ibid*: 10). Interviewees were asked open ended questions about what they regarded as essential to 'get by' in their context and later were asked about a set of pre-defined human needs or capabilities.

A method was required to identify which of the dimensions specified by interviewees were 'core', and what counts as critical minimal levels. A natural criterion for a dimension to class as core poverty would be 100 per cent endorsement by all 941 respondents, however no dimension received such a complete endorsement and 'it is sensible to allow for some margin of error in the interviewing process and to allow for at least a tiny proportion of answers which can be excluded' (*ibid*: 13). Consequently Clark and Qizilbash select a 'relaxed 95 per cent rule' i.e. any dimension of the essentials of life that is endorsed by 95 per cent of respondents (*ibid*: 15). Correspondingly, a relaxed 5 per cent rule is used to identify the critical minimum level of a dimension i.e. the level at which a person is held to be unambiguously poor is that level at which just less than 5 per cent of interviewees say a person is definitely poor.

Table 5: Ordinal Ranking of the Top 30 Essentials of Life in three impoverished communities in South Africa (Clark and Qizilbash)

1	Housing/Shelter	16	Land and Livestock
2	Food	17	Own business/Enterprise
3	Water	18	Religion
4	Work/Jobs	19	Furniture
5	Money/Income	20	Happiness and Peace of Mind
6	Clothes	21	Community Development
7	Education/Schools	22	Love
8	Health/Health Care	23	Freedom/Independence
9	Electricity/Energy	24	Better Life
10	Safety and Security	24	Oxygen
11	Transport/Car	24	Respect
12	Family and Friends	27	Blankets
13	Sanitation	27	Heat/Temperature
14	Infrastructure	29	Sexuality
15	Leisure/Leisure Facilities	29	Sunlight

Source: *Clark and Qizilbash (2005: 32)*

This exercise suggests a large number of admissible dimensions of poverty (Table 5) of which the top 12 are core dimensions (i.e. 95 per cent of people identified these dimensions in their responses to open ended questions). In the later parts of their paper the data from the nationally representative 1993 PSLSD survey of South Africa are analysed in terms of these core dimensions and minimum critical levels. Fascinatingly, all seven components of Klasen's (2000: 43) 'core deprivation index [of] the most basic capabilities' are included in this list of 12 'core dimensions'.

What would such an approach mean for the identification, measurement and analysis of chronic poverty? Potentially, it offers a number of advantages. The method means that the selection of the capabilities/components/dimensions that are sufficient to 'get by' (avoid poverty), can be held to be legitimate not because of 'intuition' Klasen 2000 : 38-39, esp n. 12) or authorative judgement (Barrientos, see below), but because impoverished communities have specified them. The argument for the setting of the minimum level has a similar legitimacy. In addition, the procedure used can avoid challenges of paternalism as the people who experience poverty, or live alongside those who do, are selecting the measures and criteria that are to be used. A final advantage of this approach is that it does not require the construction of an index or the computation of adult equivalence. Challenges about the scoring and weighting of components do not arise.

Inevitably, there are potential disadvantages with this approach. The first, and perhaps most obvious, relates to the justification of the 95 per cent and 5 per cent rules – why not 99 per cent or 90 per cent …why not 1 per cent or 10 per cent? Clark and Qizilbash (2005) argue that their rule is robust. The setting of these rules can be argued to be arbitrary – the method deals with vagueness by making a vague assumption. In fairness to Clark and Qizilbash, the selection of these cut off points is discussed in detail, but still these end up as judgements rather than unambiguous criteria.

A second challenge relates to the issue of not aggregating data. According to this approach it would be possible for someone who is just above the lowest admissible threshold in all dimensions to be classed as vulnerable (i.e. not unambiguously poor) despite their relatively desperate circumstances. Someone else who is well above all of the highest admissable critical minimum levels in all dimensions except work/jobs (because they lost their job yesterday/recently) would be classed as core poor. Can this be justified?

A third problem is that this approach might be difficult or impossible for comparative work.[13] As it is likely that people in different countries, or even in different parts of a country, would come up with different sets of dimensions and different minimum levels for unambiguous poverty, could these measures ever be used for cross country comparisons? It is also not likely to be applicable in longitudinal studies – the key approach for analysing poverty dynamics. If the full method is applied each time a panel dataset is to be analysed, should the analyst apply the criteria (dimensions and levels) from the original survey or should a new exercise be conducted? If one opts for the former, one is imposing an old value set on the people interviewed, and not permitting them to revise their values over time. If one opts for the latter, then the criteria are likely to change, making it difficult to track the dynamics of poverty? This issue would need clarification.

Finally, there is the issue of the additional costs that this approach would impose on poverty analysis. At the very least it would require an additional survey to be undertaken in each country (or region of a country) to derive the dimensions and levels that 'ordinary people' feel are important. This is not a vast amount, but it is likely to mean additional costs of $100,000 to $200,000 in most countries. It might of course be included in standard existing household surveys, but does represent a significant change in methodology.

Clark and Hulme (2005) have conceptually outlined a means by which Clark and Qizilbash's core poverty framework might be integrated with chronic poverty. However, this has already been challenged by Qizilbash (2005, note 9) and their approach has not been empirically tested as yet. Clark and Hulme (2005) have begun to explore ways of integrating the core poverty framework with the chronic poverty approach (see also Qizilbash 2005 for some early reactions). Most of the work that has taken place is conceptual and typically involves introducing an additional layer of vagueness (vagueness about the duration of poverty) and a new sub-set of analytical categories, which are basically hybrids of those used in the core poverty and chronic poverty frameworks (see Clark and Hulme 2005, Table 2). To qualify as *chronically core* poor in the extended framework, a person must fall at or below the lowest admissible poverty threshold in any core dimension for *all* admissible time periods (Clark and Hulme 2005: 27; Qizilbash 2005: 19). Much work remains to be done in terms of refining this framework and making these ideas operational.

Barrientos's Measure of Multidimensional Deprivation

The third example is Barrientos's (2003) construction of a multidimensional measure of deprivation to assess the impacts of non-contributory pensions on older people in Brazil and South Africa. His focus is '…on developing basic tools of multidimensional analysis of well being, and demonstrating that these can be effective in the evaluation of public policy'. He makes it clear that he has concerns about the inadequacies of standard monetary measures of poverty, and that Sen, along with Doyal and Gough and Nussbaum, have provided theoretical guidance in this exercise. His approach is explicitly less ambitious than Clark and Qizilbash's as he has a policy evaluation goal and strives for simplicity.

The indicators (Table 6) he selects (and he does call these indicators rather than specifying components or dimensions and then choosing indicators) fix '…on a range of achieved functionings rather than on capabilities, as the latter involves greatly more demanding information on opportunity and choice' (*ibid*: 7). Deprivation is envisaged as failure in terms of certain basic functionings and these are chosen pragmatically in the light of data availability.

How the minimum levels that identify deprivation are selected is not clearly explained. These seem to have been set by personal judgements after consultations with other evaluators and older people in Brazil and South Africa. Each indicator is scored on a scale, ranging from 1 to 3 or from 0 to 11, and a different cut-off point is specified for each (see Table 6).

Aggregation at the individual level is computed by simple addition/counting, so that each person has a deprivation score out of 10. A score of zero indicates that a person is experiencing no deprivations, while a score of 10 indicates that someone is experiencing deprivation in all of the assessed dimensions. Barrientos is fully aware of the implications of equally weighting all dimensions in this way – 'aggregating the different indicators into a single measure of deprivation involves strong ethical implications, and it is important to bring these out…this amounts to assuming perfect substitution across deprivations' (*ibid*: 9).

Table 6 : Wellbeing Indicators (Barrientos)

Label	Description	Values	Deprivation
Health	Self-reported health status	1 very poor 2 poor 3 average 4 good 5 very good	1
Life satisfaction	Self-reported assessment "Taking everything into account, how satisfied is this household with the way it lives these days?"	1 very dissatisfied 2 dissatisfied 3 neither satisfied not dissatisfied 4 satisfied 5 very satisfied	1, 2
Safety	Change in perception of safety from two years before	1 worse 2 same 3 better	1
Social participation	Number of social organisations the respondent belongs to	0-8 (Brazil) and 0-10 (South Africa). Brazil: senior centre, church group, community organisation, sports club, school organisation, political party, trade union. South Africa as Brazil plus: women's club, stokvel, burial society.	0
Political participation	Number of citizen actions	0-4 (participation in community meeting, or general meeting, complaints to authorities, work for political candidate)	0
Financial control	Responses to the question: "How much of own money are you able to keep for yourself?"	1 none 2 very little 3 some 4 a reasonable amount 5 all	1
Debt service	Monthly debt repayments as proportion of total	1 if x=>0.5; 2 if 0.5>x>=0.2; 3 if 0.2>x>=0.1; 4 if	1, 2

	debt	0.1>x=>0.001;5 if 0.01<x	
Durables	Number of durables in household	0-11 (phone, stove electric or gas, stove paraffin or wood, electricity, tv, radio or stereo, fridge or freezer, sewing machine, car, bicycle, motorcycle)	1-5
Water	Main source of drinking water	1 other (river, dam, rainwater) 2 borehole 3 public tap/water carrier 4 piped water on site, neighbour 5 piped water in dwelling	1
Expenditure	Quintiles of equivalised per capita household expenditure	1-5	1, 2

Source: *Barrientos (2003)*

Barrientos sums up his approach as follows: 'The strategy adopted here – involving the counting approach, binary indicators of deprivation, and the assumptions regarding the weights attached to different deprivations, and their relationship – delivers the simplest approach to multidimensional evaluation' (*ibid*: 10). Indeed, it has great simplicity, is readily understood by policy makers and a lay public, and produces persuasive findings about the contribution that non-contributory pensions can make to the well being of older people.

As with all of these examples of operationalisation of a human development approach to poverty assessment, it is open to many challenges. The first relates to the choice of indicators. His pragmatic approach has clear policy implications but there are significant conceptual concerns about the method. While the indicators clearly derive from the literature on well being there is no explicit theoretical rationale for their selection. The measures involve functionings (e.g. health, social participation, political participation), capabilities (financial control, level of debt servicing), commodities (expenditure quintile and durables) and utility (self-reported satisfaction with life). This is more complex than the 'basic functionings' discussed in the methodology would suggest. Can all of these different things be put together? There

are also omissions of key dimensions of deprivation that appear on many analysts 'lists'. For example, the analysis of both Klasen (1997; 2000), Clark and Qizilbash (2005) (see above) include education, housing, employment and nutrition in their basic dimensions. Why are these excluded from Barrientos's list? For education and employment it may be that for public policy purposes for older people it is 'too late' for intervention, or at least perceived as such. If that is the case it would be good to know it. However, for nutrition and housing it is much more difficult to explain why these are not included in the indicators.

The second criticism is the issue of thresholds. There is no clear explanation of how these have been selected. While their levels may seem reasonable they are not unproblematic. For example, a score of zero for political participation could mean an individual has full capability in this space but has exercised their agency by deciding not to function in the political sphere. So, a zero functioning reflects a 100 per cent capability. Similarly, why 5 or less durables should be a threshold, rather than 4 or 6, needs some explanation.

Then there is the issue of aggregation. While his method is elegantly simple it faces standard challenges. For example, can the deprivation of poor health be equated to the lack of one or two durables? The former may be a catastrophic capability failure occasioned by weaknesses in public policy. The latter may reflect the capability of someone to function in a way that is environmentally friendly and leaves their life uncluttered.

Finally, there is the criticism of paternalism. By selecting the dimensions and indicators and choosing threshold levels has Barrientos deprived older people in Brazil and South Africa of their right to say what deprivation means for them?

As with the other examples, there are a long list of theoretical and methodological criticisms, but these need to be offset by considering the purpose of the exercise. It provides substantial evidence that non-contributory pensions can improve the well being of older people, rather than just their income or expenditure, and reduces the measurement errors that a purely monetary assessment would have introduced to the evaluation. It is highly imperfect, but still may be better than the alternative - a uni-dimensional approach!

6. Conclusions: The current situation and possible future options

As our exploration has shown, monetary measures for assessing chronic poverty, and especially flow measures, are inadequate both in conceptual and practical terms. Their apparent precision masks the evidence that, at best they are rough and partial surrogates; indeed they may be quite imprecise due to measurement problems. Thus they are likely to give a false understanding of the poverty dynamics of households and populations. There are grounds for both optimism and pessimism about the prospects for rapidly progressing the identification and analysis of chronic poverty beyond the conventional monetary approaches that have dominated research. Assets based approaches (section 4) offer new insights into the nature of poverty traps and there is much room for further elaboration.

The needs and human development approaches discussed in sections 5 and 6 provide detailed insights into the dimensions that might be included in a measure and of the operation of aggregation and dominance rules. Is there any way that these varying attempts to operationalise human development approaches might be brought together to agree to a single common, practical measure that can be used over time and across countries? There are two potential alternatives here. Saith (2001) argues that common ground can be identified. In the six human development lists she reviews, health, nutrition and education emerge as commonly agreed capabilities (see also Clark 2002). An individual or household level common capabilities index (CCI) might be constructed using a health indicator (e.g. quality of access to basic health services last period of illness or a subjective assessment of health status), a nutrition indicator (e.g. BMI or degree of stunting and/or wasting) and an education indicator (years of schooling).

The second approach would be to construct a household level human development index (HHDI) based on the dimensions used in UNDP's national level HDI. This would have a similar degree of legitimacy and criticism as the HDI. While there would be plausible arguments pointing out the imperfect nature of the HHDI it is hard to see what arguments could be made to demonstrate that the HHDI is inferior to per capita household income or consumption as a measure of human development. An HHDI would comprise a life expectancy indicator (e.g. district/sub-district life expectancy adjusted for occupation of head of household[14]), an education/literacy indicator (e.g. percentage of literate adults and average years of schooling per adult)

and an income/consumption indicator (income or consumption per adult equivalent).

In both cases though significant difficulties arise, especially in relation to current and likely future data availability. In the former case it is difficult to derive satisfactory comparative measures within and across countries of some dimensions, including quality of access to health care services and (more problematically) subjective health care status. Stunting and wasting are typically only measured for young (often preschool) children, who obviously will not be present in many households. In the latter case enrolment cannot be used in an indicator defined across all households because many households will not have school aged children, and estimating variations in life expectancy across households is particularly problematic. In both cases also there is a need for aggregation to the household level, losing variations between individual household members.

This then raises the issue of why a single multidimensional measure of poverty is required. At national level the HDI has been convenient in providing a unique ranking of countries, but performance across different dimensions varies – and the specific dimension is often of greater relevance for policy purposes. A similar point arises at the household level: education indicators are the ones of greatest relevance for education sector policy. In other words there is a strong argument for *not* aggregating different dimensions into a single indicator, but to consider different dimensions separately. In any case any proposed single indicator of multidimensional chronic poverty will inevitably omit some dimensions.

Whatever progress is made with assets-based or human development frameworks two foundational difficulties remain: one is conceptual and ideological and the other is ethical.

(i) How to capture social relations and power within an analytical framework; and,

(ii) 'who' has the moral right to specify what poverty is.

With regard to the first, the main device that is currently used is to view social relations as social capital, based on Coleman's (1990) conceptualisation rather than Bourdieu (1986), and to measure social capital in terms of a household's social network. An oft-cited example is Narayan and Pritchett (1996) who measured social capital in Tanzania in terms of households involvement with local and community

organisations. This has the great advantages of being operationally feasible and providing a measure that can be incorporated into assets and/or livelihoods frameworks. Unfortunately, this ignores the case that social relations is about much more than 'civic engagement' and that social relations are of many different qualities (weak or strong, cooperative or exploitive, mutual or asymmetric, universal or particularistic). In Harriss's (2001: 113) words this '...obscure[s] class politics and power...[and provides] a way of talking about 'changing social relations' – but without seriously questioning existing power relations and property rights'. It also ignores the 'dark side' (*ibid*: 115) of social capital – mafias, gangs and cartels, which are actively anti-social. It depoliticizes development so that policy options are presented as technical decisions rather than political choices. To get around these criticisms this version of social capital has been deepened to recognise bonding capital (ties that give communities a sense of identity and common purposes), bridging capital (ties that transcend various social divides) and, linking capital (that connects the poor and marginalised to the more powerful), but these still do not respond to many of the key concerns raised above. However, recent innovative work by Kabeer (2005) suggests that it is possible to undertake quantitative work that examines the assets of households and, alongside it, use qualitative data collection and analysis methods to explore social relations and power, but without seeking to measure social capital or relations.

The second foundational problem concerns 'who' should determine what poverty is and how it might be assessed. While much of this paper has looked at the feasibility of reconciling different conceptual approaches and/or different lists of needs, capabilities or functionings (theorist versus theorist) there is the question of whether the abstract ideas of elites should over-ride the experiences and understandings of those living in poverty (theorists versus poor people). Letting a theorist, or an amalgam of theorists, determine what poverty is can be seen as paternalistic and even disempowering. Qizilbash and Clark (see section 6) provide a mechanism for permitting poor communities to set the parameters for poverty assessment. They point out that most of the parameters set by poor South Africans are not dissimilar to the human development lists produced by theorists. However, as mentioned earlier, this approach might not allow for comparisons over space and over time as it has a non-universalist view of poverty.

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Endnotes:

1 This paragraph and the next draw heavily on Clark and Hulme (2005).

2 The Chronic Poverty Research Centre (CPRC) has explicitly set out to be multidisciplinary but a high proportion of its publications remain based on quantitative analyses of panel data (see www.chronicpoverty.org and Hulme and Shepherd 2003).

3 For a rare exception see Baulch and Masset (2003).

4 Even when the unit of analysis is the household this is commonly treated as behaving like *homo economicus*.

[5] A fine example is sociologist/social historian Charles Tilly's (1998) *Durable Inequality*. Much of the content of this volume could be viewed as exploring the persistence of poverty in the USA. However, the term poverty is not even listed in the index. Tilly's insistence that analysis must focus on social relations and social categories means that methodological individualism, and phenomenalogical individualism, are ineffective tools at best.

[6] But do note that du Toit (2005) argues that most attempts at combination simply 'add on' a little qualitative analysis. They do not seriously attempt to relate quantitative work to critical social theory.

[7] A notable exception is the Young Lives Research Project, which has been collecting longitudinal data on child poverty and well-being in Ethiopia, India, Peru and Vietnam (See http://www.younglives.org.UK).

[8] Note, however, that in practice getting reliable responses on land and livestock ownership is often difficult due to the sensitivity of these issue, and because these assets are less easily observed than, say, housing quality.

[9] The LADDER project (2001-2003), directed by Frank Ellis, elaborated on his earlier work. However, its focus was on key natural assets (LADDER Research Team, 2001) and data collection on social capital was most notable for its absence.

[10] See also the volumes edited by Hawthorn (1987), Sen and Nussbaum (1993), Nussbaum and Glover (1995), and Fukuda-Parr *et. al.* (2003). The human development approach incorporates the basic needs approach to development as well as the capability approach, the emerging literature on development ethics and the UNDP's highly influential *Human Development Reports*. The Human Development and Capability Association's web site can be accessed at http://www.hd-ca.org.

[11] However, only 15 are listed in a journal article published in the same year (Alkire 2002b).

[12] To what degree is a heated debate. For example, Nussbaum (2000 and 2003) claims to allow for additions and modifications to her list that permit agency and different cultures to shape the content of what constitutes well being. However, many would say this is mere lip service.

[13] Arguably, this is an empirical question that philosophers are poorly equipped to answer (Clark 2002 a). Comparative empirical studies (such as Clark 2002, 2003; Okin 2003) would be needed to prove/disprove this point.

[14] The computation of such an indicator is probably the greatest challenge to an HHDI and merits a paper in its own right.