# Poverty Dynamics: Measurement and Understanding from an Interdisciplinary Perspective*

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*Introduction to Tony Addison, David Hulme and Ravi Kanbur (Editors), *Poverty Dynamics: Interdisciplinary Perspectives*. The current drafts of papers in the volume are available at http://www.chronicpoverty.org/resources/working_papers.html

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## 1. Introduction

There are three main fronts on which progress must be made if we are to deepen the understanding of why poverty occurs, and significantly improve the effectiveness of poverty reduction policies. First, poverty research needs to focus on *poverty dynamics* — over the life-course and across generations. There is now a wide acceptance that static analyses have limited explanatory power and may conceal the processes that are central to the persistence of poverty and/or its elimination. Second, there is a need to move efforts to measure poverty dynamics beyond mere income and consumption to more *multidimensional concepts and measures* of poverty. This is increasingly common in static analyses but is rare in work on poverty dynamics. This might involve assets, or more ambitiously, using concepts of human development or wellbeing. Third, at the same time there is a growing consensus that a thorough understanding of poverty and poverty reduction requires *cross-disciplinary research*, using the strengths of different disciplines and methods, and of quantitative and qualitative approaches to poverty analysis.

Thus, we believe that the next frontier in poverty research is at the intersection of dynamics and cross-disciplinarity. This paper introduces a significant new multi-disciplinary collection of studies of poverty dynamics, presenting the reader with the latest thinking by a group of researchers who are leaders in their respective disciplines.[1] In this introduction we set the papers in context, beginning in part 2 with the issue of how to bring time in the measurement of poverty and into the analysis of trajectories in and out of poverty. We then compare qualitative and quantitative approaches and address the issue of cross-disciplinarity in section 3. Section 4 presents an overview of the chapters in the volume. Section 5 concludes by highlighting areas where we believe future research on poverty dynamics should focus.

[1] The papers in this volume, together with others, were presented at the CPRC Workshop on ‘Concepts and Methods for Analysing Poverty Dynamics and Chronic Poverty’, held at the University of Manchester, 23-25 October 2006 (www.chronicpoverty.org).

## 2. Time and Poverty[2]

Time is a troubling and ambiguous concept in philosophy and in social analysis. The complexities are apparent in Adam's (2004) characterization,

> 'Time is lived, experienced, known, theorised, created, regulated, sold and controlled. It is contextual and historical, embodied and objectified, abstracted and constructed, represented and commodified' (Adam, 2004, p.1)

Set against the notion of time as an abstract relation between the past, present and the future, in the tradition of St. Augustine and Kierkegaard, is what Adam (2004, p 49) calls the "clock-time perspective" of Aristotle, Newton, Marx, Weber and Durkheim. This is the dominant conceptualization in the social sciences, and one that underpins the papers in this volume[3].

Even within the "clock-time" frame, it is possible to introduce time into the conceptualisation of poverty in one of two ways. The first of these involves treating time as an ordinary dimension of wellbeing and poverty, as in the World Bank's *Voices of the Poor* has (see Narayan et al 2000, esp. pp. 21, 34, 92-3). In this approach time or lack of it, is merely another dimension of poverty. A person is defined as time poor if he or she lacks the necessary time to achieve things of value, such as adequate sleep and rest, being with family and friends or income (see Clark, 2002, ch. 4). In effect, time is viewed as one, of many, scarce resources (Becker, 1965). This approach fits well into approaches that emphasize multidimensionality of wellbeing and poverty.

The second approach may be identified with the "poverty and wellbeing dynamics" perspective, with a focus on how wellbeing evolves over time, what determines this evolution, and how different patterns of evolution are to be evaluated for policy. This is the approach that characterizes the papers in this volume. The chapters in this book provide detailed examples of the ways in which information  about poverty dynamics can be acquired.

[2] Parts of this section derive from Clark and Hulme (2005).
[3] Bevan (2004) distinguishes three approaches: clocks and calendars, rhythms, and histories, and considers ways of incorporating rhythms and histories into poverty analysis.

(i) *Panel data methods* – this method is considered the most reliable by virtually all quantitative researchers and by many qualitative researchers. It involves conducting questionnaire surveys or semi-structured interviews with the same individual or household at different points in time. This permits objective data to be collected for key measures and the collection of information about the ways in which the individual/household explain the changes that are occurring in their lives. Moser and Felton (in this book) illustrate this method for both quantitative and qualitative data. The strengths of this method are its rigour and the comparability of the data it collects at different points in time. Its disadvantages are its costs and the significant delay in analysis that it entails. Additional problems include interviewee fatigue, matching households in large datasets and systematic sample attrition (see earlier).

(ii) *One off indicators* – given the difficulties of collecting panel data it is logical to seek to identify 'one off' indicators (i.e. measures collected at a single point in time) that provide information about poverty duration. The most obvious type of indicator for this purpose are 'nutrition' orientated – on the grounds that certain nutritional measures reveal what has been happening to an individual over an extended period of time. Researchers who have adopted this approach have favoured child stunting as a measure indicating that a child has been undernourished for an extensive period of time and, by implication, that her/his household has been poor for an extended period of time as it has been unable to provide an adequate diet. Radhakrishna et al (2007) have used this method to measure and analyse chronic poverty in India. The great advantage of this method is that it permits partial analyses of poverty dynamics for any population for which an anthropometric survey is available: so, it can be low cost and rapid. There are, however, severe challenges. These include questions about the accuracy of data on height and age; the assumption that stunting is caused by under nourishment, rather than by health problems, cultural practices and/or genetic factors; and, the difficulty of moving beyond simply identifying factors that correlate with stunting.

(iii) *Retrospective data* another means of avoiding the costs and delays of collecting panel data is to ask interviewees to provide data about their past circumstances at the same time as they are providing data about their present condition. Many researchers are highly suspicious of this method, however, because of the well known problems of recall. These include the difficulty of identifying the exact time that is to be recalled and of remembering what conditions were like at that time. For some indicators – attending school, formal employment status – data may be reasonably accurate. But for others – income, consumption, food availability – quantitative data is unlikely to be reliable. In addition, over time people tend to develop selective memories and may be perceived as 'rewriting' parts of their lives[4]. As a result, many researchers do not regard this as a credible method for collecting quantitative, cardinal data. It is used extensively to collect qualitative data, often to triangulate other data, and/or to understand the ways in which people subjectively interpret change over time. In recent years this method has become popular as a component of participatory poverty assessments (PPAs). Arguably, the group-based methods used in PPAs make data more reliable as interviewees' debate each others recall and researchers can triangulate data between groups.

Until the late 1980s the main ways in which time featured in poverty analysis was in terms of poverty trends, seasonality, the timing of experiences and historical accounts of poverty. Poverty trends commonly contrasted headcounts of poverty across a population at two (or more) different times. However, comparing poverty trends in this sense does not tell us whether individuals or households are persistently poor or if they typically move into and/or out of poverty over time (see Hulme, 2006; Hulme and Shepherd, 2003; Carter and Barrett, 2006). For example, Lawson, McKay and Okidi (2003) record that between 1992 and 1999 consumption poverty in Uganda fell by about 20 percent as the headcount rate fell from 55.7 percent to 35.2 percent. However, moving beyond conventional static poverty analysis by looking at the dynamics of poverty (i.e. what actually happened to individual households over time) provides a richer picture. Almost 30

[4] This is not a conscious attempt to lie, but a part of extremely complex psychological and cognitive processes that are common, but highly varied, across humanity.

percent of poor households in 1992 managed to move out of poverty by 1999, but around 10 percent of non-poor households fell into poverty. About 19 percent of households that were poor in 1992 remained poor in 1999 (ibid., p.7 and table 1). Rather than getting the false impression that life has improved for everyone we gain a nuanced understanding of the ups and downs of welfare status.

The seasonality (or timing) of income, consumption and access to food has been another focus with particular interest in the annual cycles of relative plenty and food shortage/ hunger that occur in many rural areas (Chambers, 1983; Chambers, Longhurst and Pacey, 1981). The significance of specific poverty experiences at certain times in the lifecourse has also been highlighted with a particular focus on lack of access to food/ nutrition for pregnant women and education for children. A lack of access to nutrition, basic health services or education in early life (foetal and infant) can have irreversible effects on the physical stature and cognitive ability of people (Loury, 1981; Strauss and Thomas, 1998). Historical accounts of poverty – seeking to lay out and interpret the main experiences and events in a chronological order – also continued (Geremek, 1994; Haswell, 1975; Hufton, 1974), although Iliffe's (1987) work moved things forward through its contrast of structural and conjunctural poverty in Africa which went beyond the static poverty analyses typical of his era.

Since the late 1980s there has been growing interest in examining the duration of poverty. Economists initially led the way through studies of transitory and chronic poverty, poverty dynamics and patterns of poverty spells (Bane and Ellwood, 1986; Gaiha, 1988). While these studies have helped to put duration on the research agenda, their narrow focus on income or consumption poverty means that they have, at best, only tangentially linked up with the conceptual advances promoted by Amartya Sen and others. This pattern has continued and Hulme and McKay (forthcoming 2007) report that out of the 28 panel datasets available on developing countries, 26 assess the standard of living in terms of income or consumption and for 23 of these datasets they are the only poverty measures available. Baulch and Masset (2003) have produced one of the few studies that broadens panel dataset analysis to human development measures.

We believe that the duration aspect of time merits particular attention for four main reasons. First, there is a simple logic that says if *x* has experienced the same forms and depths of poverty as *y*, but for a much longer period, then a moral concern with helping the more disadvantaged requires that *x* be prioritised and supported as s/he has experienced more deprivation than *y*.[5] Second, a failure to analyse the distribution of spells in poverty in a population is likely to lead to weak analyses of 'why' people are poor and, potentially, to weak policies. For example, hypothetically two different countries might have the same scores for the headcount, depth and severity of poverty. Apparently, poverty in both of these countries is similar. However, in the first country poverty is largely transitory and is a phenomenon that many of its population experience but only for short durations. In the other, most of the population are non-poor but a minority are trapped in poverty for most or all of their lives. In the former country policies need to help those experiencing short spells of poverty – unemployment insurance and benefits, reskilling, microcredit, temporary social safety nets, health services. In the latter, deeper structural problems must be addressed – inclusion of the poor in access to health and education services, asset redistribution, tackling social exclusion, regional infrastructural development. Thirdly, recent important work (Carter and Barrett, 2006; Barrett, 2005) has revealed the linkages between the depth of poverty, in terms of material and social assets, and duration with a focus on household level poverty traps. The assumption behind this work is that low levels of assets lead to persistent poverty (at least in the absence of financial markets and safety nets), but a conceptualisation is needed that will also permit an analysis of the ways in which the duration of poverty leads to depleted asset levels. Finally, the duration of time spent in poverty has important implications for individual or household future strategies. This is in terms of physical and cognitive capabilities and the ways in which past experience shapes the agency (motivation, preferences and understandings) of people.

[5] In effect this is arguing that the breadths, depths and durations of the deprivations *x* and *y* experience should be multiplied and thus *x* will score a higher level of deprivation than *y*. If this computation were pursued it would be necessary to decide whether duration was computed as absolute time or relative time i.e. the proportion of *x and y*'s lives spent in poverty.

## 3. Methods and Disciplines

Over the past decade, there has been growing interaction between two strands of, or two approaches to, poverty analysis in developing countries—the qualitative and the quantitative. Interaction between these two approaches has been forced to some extent by the strengthening (in some cases mandated) requirement by development agencies to expand the traditional quantitative base of their poverty assessments with a qualitative component. The best known cases of this trend are the World Bank's Poverty Assessments. But other agencies such as the United Kingdom Department for International Development have also encouraged and often insisted on the incorporation of qualitative methods in poverty analysis and development analysis more generally. While "mixed methods" frameworks have of course been present in the literature outside of development, and in the academic literature more generally, it is undoubtedly true that the degree of interest in such methods for poverty analysis in developing countries has heightened considerably in the last ten years. There is now a website dedicated to such analysis and a series of conferences attest to the growing body of work in this area.[6]

What exactly is meant by a "quantitative" versus a "qualitative" approach in the context of poverty analysis? From the discussions reported in Kanbur (2003), the following are among the key elements characterizing analyses that the literature recognizes as falling into the "quantitative" category:

*The information base comes from statistically representative income/expenditure type household surveys (which may also have a wide range of modules covering other aspects of wellbeing and activity).

*The questionnaire in these surveys is of "fixed response" type, with little scope for unstructured discussion on the issues.

*Statistical/econometric analysis is carried out to investigate and test causality.

[6] For example, conferences at Cornell in 2001 and at Toronto in 2004, which lead to the publications Kanbur (2003) and Kanbur and Shaffer (2007), and the conference in Hanoi, 2007. Details are available at www.q-squared.ca.

*”Neo-classical homo-economicus” theorizing underlies the development of hypotheses, interpretation of results, and understanding of causality.

Similarly, the following seem to be some of the key characteristics of analyses that fall into the “qualitative” category:

*Unstructured interviews, the outcomes from which are then analyzed with textual analysis methods.

*Related to the above, use of interviews to develop “life histories” of individuals.

*Participatory Poverty Analysis, where a community as a whole is helped to discuss, to define and to identify poverty.

*Ethnography, involving immersion of the analyst into the community in question over a significant length of time to get a deeper understanding of the context.

*Related to all of the above, anthropological and sociological theorizing to understand results and discuss causality.

Three further points can be made on the above characterization. First, notice that while the quantitative category is relatively uniform, the qualitative category is relatively diverse. The unifying (homogenizing) force of the economic method is felt in the former, while the latter is a battle ground across disciplines and indeed within disciplines such as anthropology. Second, some analyses do combine elements of both, and are on a continuum between the qualitative and the quantitative, rather than being strictly one or the other. Thus the qualitative-quantitative distinction might best be viewed as a tendency rather than as a discrete divide. Third, the qualitative-quantitative divide to some extent aligns with, and to some extent cuts across, disciplinary divides in poverty analysis, especially as between economics and the other social sciences.

The advantages and disadvantages of the two types of approaches are becoming better understood and are well illustrated by Adato’s (2007) mixed-methods study on assessing conditional cash transfers. The quantitative part of the appraisal was statistically representative and addressed econometrically the difficulties in attributing causality to the program from “before and after” or “with and without” comparisons. Moreover, it does appear that, at least to some extent, policy makers tend to put greater weight on statistically representative “large sample” assessments than on a small number of case studies. It is now generally accepted that the quantitative assessments of Mexico’s conditional cash transfer program played a key role in convincing a new administration to continue a program started by the previous administration.

However, Adato’s (2007) assessments from the qualitative approach throw up key issues which policy makers and analysts ignore at their peril. For example, while the quantitative assessments have generally praised these programs for being well targeted to beneficiary groups (low “leakage”), and indeed have recommended tightening up of monitoring to reduce what leakage there is, the qualitative assessments reveal a great deal of incomprehension and resentment on the ground by those who are left out of the beneficiary group, when they see their near neighbours being included. Thus, whatever the “objective” criteria laid out at the centre and developed through quantitative surveys and analysis, what is important is the meaning ascribed to those criteria on the ground. The tensions caused by such factors, identified as being serious in the qualitative assessment, could undermine support for the program.

This suggests that qualitative approaches are better suited to emphasizing deeper processes, and the context generating the outcomes revealed by the study. This is clearly relevant for understanding, and also for the local level implementation of policy. That quantitative studies do not (or cannot) do this is in part the burden of the critique advanced by Harris (this volume) and duToit (this volume), who criticise not only quantitative approaches but also the related economic approaches to measurement and understanding. On the other hand, whether a phenomenon is widespread, or perhaps only locally relevant, is better addressed by studies in the quantitative tradition. Statistical analysis on representative samples is also better suited, for example, in going beyond “before and after” or “with and without” comparisons of policy or other events, as revealed by interviews with individuals, no matter how context relevant.

The benefits of combining quantitative and qualitative approaches are thus not to be doubted, and are revealed in a large number of recent studies.[7] Further, as Harriss (2002, p494) says, “disciplines need to be saved from themselves.” Effective crossdisciplinarity seeks to capture the ‘productive’ aspects of disciplinarity which ‘produces the conditions for the accumulation of knowledge and deepening of understanding’ while avoiding the ‘constraining’ effects of disciplinarity which can lead ‘to the point where it limits thought …and even [becomes] repressive’ (Harriss, 2002: 487-8).

However, this is not to say that there are no problems. While conducting studies side by side, or making quantitative studies a little more qualitative (for example, by conducting a participatory appraisal prior to designing the survey questionnaire, or by adding an unstructured portion at the end of a questionnaire), or by making the qualitative studies a little more qualitative (for example, by choosing the sites for the qualitative assessment on the basis of a national sampling frame, or by generating numerical values from coding of the unstructured interviews), there remain fundamental issues of discipline and epistemology that will not simply go away. Kanbur and Shaffer (2007b) identify some deep philosophical issues about different conceptions of the nature of knowledge in different disciplinary traditions that are bound to bedevil “deep integration” of the different approaches. For example, it is not entirely clear that national level policy making, is well served by community level measures of poverty which are based on community perceptions of what it means to be poor. These practical issues also have their roots in whether poverty can and should be identified “objectively” by “brute data”, or whether it is inherently to do with inter subjective meanings. Kanbur and Shaffer (2007b) come out strongly in favor of mixed methods, but caution that there are pitfalls that we should be aware of.

The above discussion applies to poverty analysis in general. Consider now an application of the above discussion to poverty dynamics in particular, and especially to the papers in this volume. As discussed in the previous section, time adds novel and irreducible dimensions to the conceptualization, measurement and understanding of poverty. For example, the economic

[7] See Kanbur and Shaffer (2007a) at www.q-squared.ca.

theory of poverty measurement is very well developed for the static case. Going back at least as far as Sen's (1976) classic exposition, axioms have been proposed to capture basic intuitions on what constitutes "poverty" and "higher poverty", and poverty measures that satisfy these axioms have been described which are now the workhorse of empirical poverty analysis in the quantitative tradition (for example, the famous FGT measure, Foster, Greer and Thorbecke (1984)). But all this is for the static case. The introduction of time into the economic theory of poverty measurement is relatively recent, and the papers by Foster (this volume) and Dercon and Calvo (this volume) represent the state of the art. The issues that arise hinge on how to aggregate individual poverty experiences over time, in conjunction with aggregation across individuals into a poverty measure for the society as a whole. Defining and separating out risk, vulnerability, transient poverty and chronic poverty are the concerns of the current economic literature on poverty measurement (for example the papers mentioned above and also Klasen and Gunther (this volume) and Carter (this volume).

However, there are significant conceptual, methodological and empirical questions that face the standard economic approach. Empirically, to implement any of these measures we need surveys of panels of individuals or households who are followed over time. If the object is to take a medium term perspective on time, and especially if we wish to take a longer, intergenerational or dynastic, perspective, then panels of 20 years or more are needed by definition. There has been a recent flowering of panel data set collection in a few developing countries. Effective use of this information for analysis to poverty and well being dynamics is well illustrated by the review in Quisumbing (this volume). However, a majority of developing countries do not have panel data at all, certainly not of the national representative variety. And no countries have comparable panels over 20 years or more. Quantitative panel based analysis on poverty dynamics, therefore, is largely an analysis of fairly short run fluctuations in wellbeing and poverty, for the small number of countries that have them.

One way to obtain information about the past when we do not have actual inter temporal panels is to ask people about their past and record and utilize this information. This is often done in quantitative analysis (see papers referred to in Quisumbing (this volume)). The method, of probing people about their past, is related to the life history method in qualitative poverty analysis, as exemplified by Davis (this volume). Each individual is engaged in a semi structured discussion about their life course. The objective is not only to find out about the trajectory of well being, but also the causes underlying it—as seen by the individual. Some quantitative information can be collected, on incomes, purchase of assets, value of dowry, etc. But the main focus is on the narrative and interpretation of the narrative. The “stages of progress” approach of Krishna (this volume) is also a backward looking self assessment, but this operates at the community level, and there is a stronger push towards presenting at least some numerical indicators of changes over time. While there is an interesting discussion to be had on the relative strengths of individual focused versus community based histories, it is clear that both share the feature of semi-structured interviews of the qualitative approach, as distinct from the (largely) fixed response questionnaire method of the quantitative approach. The contextual detail emerging from the narratives is not something that is intended to be replicated in standard panel survey instruments. Moreover, especially if the panel based survey is, say, every few years (which is the case for most panels in developing countries), then (apart from the “attrition bias” from people leaving the sample, which quantitative analysts are well aware of) major twists and turns in the life course will be missed in the panel (except to the extent that they are reflected in the next snapshot of the household or the individual several years later). However, such events can be picked up in a life history discourse, and put to good analytical use, as is shown in Davis (this volume).

The paper by Moser and Felton (this volume) is an interesting amalgam of the qualitative and quantitative approaches. It combines relatively standard quantitative information (sufficient to allow econometric regressions to be run) with ethnographic detail and long term engagement with the communities studied—over twenty years, in fact. There are of course many anthropologists who have had similar long term engagement with small numbers of communities (sometimes only one). But it is unlikely that information they have collected can be fed directly into quantitative type analysis—nor would they wish it to. However, one possibility is to do for analysis of poverty dynamics what Ostrom (1990) and her colleagues did for analysis of the commons, namely build a bridge between qualitative and quantitative analysis by conducting a textual analysis of the reports and using coding to generate quantitative measures for further analysis from different perspectives. We leave this as a suggestion and an open question.

Finally, it should be recognized, unlike in the static case, the combination of qualitative and quantitative approaches, and indeed cross-disciplinarity, in a single study, or in studying the same specific problem, is relatively rare. The papers in Kanbur and Shaffer (2007a) bear ample testimony to how far things have come in the static case. The papers in this volume, however, show how far we have to go in poverty dynamics in advancing mixed methods approaches. As a collectivity the papers do highlight the benefits form combining quantitative and qualitative approaches, as discussed above. However, except for Moser and Felton (this volume), Boyden (this volume), and Woolcock (this volume), the papers are largely in one tradition or the other. It is to be hoped that the lead given by these papers, and by recent papers such as Baulch and Davis (2007) and Lawson (2007), and the benefits of combination shown by bringing the two traditions together in this volume, will continue in poverty dynamics the trend that is already well underway in the static analysis of poverty.

**4. Poverty Dynamics: Measurement and Understanding**

This volume is divided into three parts. After Part I, which consists of this introduction and overview, Part II explores poverty measurement and assessment, with a focus on cutting edge approaches to incorporating poverty dynamics, using both quantitative and qualitative methods. Part III focuses upon differing explanatory frameworks for understanding poverty dynamics.

Introducing time into poverty measurement and analysis is a major challenge, which researchers in developing countries have only begun to really address over the decade. Dividing the past into discrete time periods ('spells') for the purpose of measuring living standards is a is a well-established practice, often accompanied by analysis of poverty mobility using tools such as 'poverty transition matrices' applied to individuals or groups (Baulch and Hoddinott, 2000). More ambitious are efforts to develop a single intertemporal measure of poverty to summarise different poverty paths; the best known is Ravallion's chronic poverty measure which uses the average poverty level (using the FGT poverty measures over the entire period for which (consumption) data is available). However, to derive satisfactory intertemporal measures we must be very clear about what underlying assumptions are being made. In particular, should we treat all spells of poverty equally and if not then how should they be weighted? How do we incorporate risk into the measure (a big concern of the poor, constantly voiced in surveys), especially when we are concerned to project poverty forward and individuals cannot be assumed to have perfect foresight? Much effort has gone into incorporating vulnerability—the unpredictability and riskiness found in the lives of the poor—into static poverty measures, but the effort is only just beginning with dynamic measures (Elbers and Gunning, 2006). Finally, different individuals and groups will experience different patterns of spells of poverty and non-poverty; how is this information to be combined?

In chapter 2 Cesar Calvo and Stefan Dercon argue that existing approaches have not been explicit enough about their underlying assumpitions, and they set themselves the task of deriving a number of axioms which satisfactory measures should possess. The axiomatic approach is valuable because it forces us to be explicit about our values. Thus, do different time periods carry equal weight? To what extent can a period in poverty be compensated by future higher income (a key question for assessing the poverty impact of policy reforms that often generate short-term adjustment costs with the promise of long term gains)?; And to what extent are you the same person across time (a question raised by the philosophy of identity). Calvo and Dercon illustrate their discussion with a panel of Ethiopian household data, finding substantial differences between static and intertemporal poverty measures.

One of Calvo and Dercon's theoretical propositions is likely to be controversial: they reject the notion of *time-discounting* which prevails in other areas of economics when intertemporal welfare effects are being compared (in the cost-benefit analysis of environmental impacts, for example). Instead, they appeal to the principle of 'universalism' which argues strongly for valuing distress equally whatever the time period in which it has occurred—a principle that is used by Anand and Hanson (1997) to reject the use of time-discounting in deriving intertemporal measures of health status. Some may feel that this goes too far; there is by no means unanimity among health economists as regards the use of time-discounting and there are strong proponents for it (see Smith and Gravelle, 2000). But those who favour discounting poverty (as with health) must consider a major difficulty: what is to be the rate of discount? And if it varies across countries (because of differences in rates of time preference, in their turn influenced by cross-country variation in life expectancies) does this undermine comparing rates of inter-temporal poverty across countries? In summary, in seeking to clarify the theoretical basis of inter-temporal poverty measures, Calvo and Dercon open a Pandora'sbox of important issues for future theoretical and empirical research.

The FGT measure (Foster et al., 1984) has been the most widely used poverty measure of the last two decades but it takes no account of duration. Since the length of time in poverty negatively affects outcomes, especially for children (see chapter 13 by Boyden and Cooper) this is clearly a very important missing dimension of poverty measurement. Yet filling this gap raises major conceptual issues. In Chapter 3 James Foster takes up the challenge of introducing time into the measurement of chronic poverty, specifically by incorporating the duration of time spent in poverty into the FGT poverty measures. He creates a measure which obeys a number of crucial axioms and conditions (such as the need for the measure to be sub-group decomposable) with two cut off points defining the chronically poor: a standard (absolute) poverty line and a duration line. As with Calvo and Dercon, an earlier period in poverty is given the same weight as a later period (i.e. no time-discounting is used). Foster reports on an application of this new poverty measure to a panel for Argentina, with the duration-adjusted FGT measure yielding a significantly different estimate of poverty (with a large variation in spatial chronic poverty). Foster notes one criticism of this new measure: it is confined to income. The next step is to create multi-dimensional, duration-adjusted measures of chronic poverty, but this is an exceptionally demanding task (not least in making commensurate the different dimensions of well-being to construct a single measure). Notwithstanding this remaining challenge, Foster's duration-adjusted FGT measure is work that promises to revolutionize the measurement of poverty dynamics in the way that the original FGT measures revolutionized static poverty measurement.

Part 2 offers a spectrum of different dimensions of wellbeing and poverty. Chapter 4 analyzes the dynamics of non-income poverty measures which are as important as those of income and consumption measures of changes in poverty status. Working within a capabilities framework, Isabel Günther and Stephan Klasen analyze nutrition, health, and education poverty indicators for Vietnamese panel data, selecting households with at least two generations are present. They argue that non-income indicators can be as good (and sometimes better) as income at capturing inter-generational poverty transmission: income tells only part of the story. Vietnam is especially relevant since the economy is experiencing fast growth and structural change. There has been a sharp decline in income poverty, but nutrition and health indicators show fewer households escaping from poverty (overall there is a lower correlation between non-income and income measures than one would expect). Günther and Klasen find intergenerational education poverty remains particularly strong; many households with low education among the older generation also have low education among the young.

In chapter 5 Caroline Moser and Andrew Felton apply a principal components analysis to panel data from urban Ecuador (collected over 1978-2004) and construct an asset index to measure asset accumulation (Moser and Felton, 2007). They inductively construct the index on the basis of longitudinal anthropological research (rather than building an index and then applying it to the data), a methodology they term 'narrative econometrics'. Moser and Felton argue that it is imperative to understand the social context of assets and how they vary in their importance; simply plugging assets into an index is highly unsatisfactory. Their chosen assets are: physical capital (including housing); financial/productive capital; human capital and social capital (natural capital is not included as this is an urban study). Different asset indices deploy different weighting methodologies and the three most common are; weighting by asset prices (but these are difficult to obtain and it is hard to impute a price for non-marketed assets); equal weights (which has obvious problems since it assumes all assets have equal value (a computer and a horse for example); and principal components analysis (using correlations to estimate the underlying unobservable variable, following Filmer and Pritchett, 2000). Moser and Felton adopt the latter. The distribution of each type of capital is then calculated over different points in time to highlight asset shifts.

Crucially the importance of assets can vary over time due to structural changes in the economy as well as economic policy which affect the returns to specific assets (asset indices can be used to identify the effect of macro-economic shocks). Thus Guayaquil has seen large changes in labour demand due to globalization; imports of cheap Chinese-made goods have reduced the demand for artisinal male skills which provided a reasonable income in the 1970s. And the shift from community-based services to market-provided services (the result of privatization) is showing up in changes in social capital at the community level.

Assets are a long-running theme in the poverty debate from the 1970s paradigm of 'redistribution of growth' (Chenery et al., 1974) through to the WDR-2000 and WDR-2005 policy discussions, and in livelihood approaches to poverty analysis (Ellis, 2000; Scoones, 1998). Assets (*stocks*) generate income and consumption *flows* (and stocks may be more easily measured than flows); they enable households to withstand shocks (within limits); the level and composition of assets determines whether a household is in a poverty trap (and its chances of escape): and helping the poor to build assets (including human capital) has policy traction—although there is much debate about which assets are the most important in the many livelihood contexts that the poor face (Hulme et al. 2001). Fundamentally, assets bring the *production* dimension into poverty measurement, adding to the income, consumption, and human development dimensions (and telling us more about how levels of these latter three dimensions arise in households).

The methodology of assets-based approaches has become increasingly sophisticated (and is (panel) data-intensive), particularly in incorporating time into the formal models to address a key question: who among the presently poor are likely to be poor in the future? Dynamics are therefore centre stage in this approach, with a theory of poverty traps underlying empirical applications (Buera, 2005; Carter and Barrett, 2006). Drawing upon this recent literature, and in a model applied to data from KwaZulu-Natal, Michael Carter and Munenobu Ikegami (chapter 6) introduce new theory-based measures of chronic poverty and vulnerability and illustrate their feasibility using South African data. They identify three types of poor people each with different future prospects: (i) the low-skilled with few livelihood possibilities who are in a low-level equilibrium trap (the *Economically Disabled*) (ii) a middle-ability group that will move either up or down the income scale depending upon their initial asset level (the *Multiple Equilibrium Poor)* and (iii) a high-ability group who can move out of poverty given enough time (the *Upwardly Mobile*).

Forward-looking measures of poverty are then derived. In the FGT measure poverty is measured using an income gap, but it is possible to see poverty as an asset gap as well, and this is what Carter and Ikegami do, to calculate the percentage of people who will stay poor under different assumptions of asset dynamics. Asset shocks are then simulated in this model, with individuals reacting to the risk of shocks by, for example, being unwilling to forgo present consumption in order to accumulate assets that they may well lose. Different policy recommendations are developed for each group. The economically-disabled are candidates for social protection while the middle-ability group need protection to reduce their risk and asset transfers to put them over the asset threshold and to give them a fighting chance of exiting poverty.

The final two chapters in Part 2 focus on the measurement and assessment of poverty through subjective approaches.  Peter Davis's chapter examines the role of individual/household life history methods in assessing poverty dynamics while Anirudh Krishna uses participatory methods to assess changes in poverty and well-being at the community level.

By providing contextual and historical detail, life histories constitute a valuable complement to quantitative approaches. Peter Davis (chapter 7) demonstrates their ability to reveal phenomena concealed by other methods, including: events with multiple causation; 'last straw' threshold effects (the culmination of a series of adverse trends); outcomes based on the ordering of a sequence of events; and events associated with household breakdown which tend to be masked in household survey approaches. For rural Bangladesh, Davis constructs household resource profiles before conducting the life history interviews and seeks out a high level of historical and contextual detail (both Davis and Krishna use 'referencing' - mapping events and changes at the household level to a template of easily recalled national events). Davis finds that most improvements tend to only happen gradually, whereas declines are often more sudden (in this Davis' work links to that of Paul Farmer (2005) on the structural violence that poor people face) and he develops trajectory patterns: saw tooth patterns in trajectories are more common among the poor than smooth paths. Davis also deploys the methodology of 'fuzzy sets' in identifying chronic poverty. However, the very richness of life histories means that the number of cases studied is generally small, limiting generalization across larger populations.

Whereas Peter Davis focuses on one country (Bangladesh), Anirudh Krishna (chapter 8) tracks households in five countries: four developing countries and the United States. He aims to capture poverty dynamics through the 'stages of progress' methodology. This has seven steps: (i) get together representative community group; (ii) discuss the objectives of the exercise (iii) define poverty collectively in terms of stages of progress. Then ask the question: if a poor household gets a bit more money what do they do with it? Typically they specify food for the family as their first priority. (iv) define ‘X years ago’ in terms of a well-known signifying event (v) list all village households, and then ask about each household’s stage at the present time and X years ago (vi) categorize all present-day households into chronically poor or not and then (vii) take a random sample within each category to ascertain reasons for change or stability. To cross-check the reliability of the method the researchers share the results with key informants, before leaving the community, to see whether they agree with the findings.

Krishna finds that health and health care expenses were a primary event in the descent into poverty (41 per cent of cases in North Carolina and 88 per cent in Gujarat, India). Other reasons were more context specific: funerals and marriage (important in 4 countries), debt (important in India), drought and loss of land (Uganda and Peru). Among the reasons for successful escape from poverty, interviewees cited a supplemental income source (mainly city based informal sector) as the most important.

As will have become clear, many of the chapters in Part II, although primarily about measurement, also address the understanding of poverty dynamics. Indeed, in some of the chapters measurement is a route into understanding, so a simple division between the two is not possible. Similarly, the chapters in Part III, although primarily about understanding, also broach questions of measurement.

Part III begins with two chapters that offer a critique of measurement. In chapter 9 Harriss argues that most poverty research is working with a model of knowledge from the natural sciences, that is to say: there are objective facts to be discovered; methods for uncovering these facts improve over time as better techniques are discovered and employed; and, predictive theories that can be universally applied across all societies will eventually emerge. But this approach is doomed to disappointment, argues Harriss, for the focus is on measurement and on the characteristics of individuals and households with very little attention to the structural processes that move people in and out of poverty. Numerous studies identify the same set of factors (assets, household characteristics, demographics) as being associated with poverty dynamics, yet these are proximate factors only. This supposedly ‘value-neutral’ approach depoliticises poverty. Harriss highlights similarities between the new asset-based approaches and research during the 1970s on agrarian differentiation and class formation — although the social context is much less explicit in the former (a consequence of the household being the primary unit of analysis). Thus a key but outstanding question is why the poor come to have so few assets and the role of wealthy elites in blocking their asset-accumulation strategies (including historical and contemporary expropriation). Clearly, there is considerable scope for qualitative research to inform quantitative data collection in this area.

In Chapter 10 Andries du Toit emphasises the need to engage with the structural dimensions of persistent poverty and therefore with social relations, agency, culture and subjectivity. He illustrates his argument with examples from South Africa. While welcoming the recent dialogue between quantitative and qualitative research, he emphasises the need to go beyond the positivist assumptions underlying econometric approaches which at their worst constitute a 'mystifying narrative' of what poverty means and how we come to understand it. Drawing on the work of James Scott (1998) and others, du Toit argues that the process of abstraction in poverty measurement results in a de-contextualization of poverty; certain information (that which can be standardized and quantified) is given preference in building a narrative of the poor and the processes that result in impoverishment. In South Africa, government officials have become fixated on finding unambiguous and quantifiable systems of indicators of structural vulnerability, to the detriment of really understanding the role of national and local history and power relations. By focusing on what is readily measurable at the individual and household level, measurement approaches neglect culture, identity, agency and social structure that are central to creating wealth and poverty (see Chambers 1983; Bevan 2004) and the policy conclusions do not connect to the realities of poor societies.

The next two chapters offer attempts at understanding poverty dynamics within a recognizably economics/quantitative framework. In chapter 11 Siddiqur Osmani develops a dynamic approach to capabilities; people may develop or lose specific capabilities over time, and their opportunities are often changing as economic change favours some skills, and downgrades others. Poverty traps for both households and individuals then result from a mismatch between the structure of endowments and the structure of opportunities. Osmani contrasts the roles of level and structure of assets/endowments in explaining chronic poverty. Chronic poverty has an inherent time dimension, but the analysis to date is insufficiently explicit — for example how long do people have to be poor to be categorized as chronically poor? Most discussion adopts a backward-looking approach, whereas in Osmani's view we need to be more forward looking — someone is in a poverty trap indefinitely unless something changes for the better. Since even a chronically poor person can move above the poverty line, the key point is that for most of the time a chronically poor person is below the poverty line - unable to accumulate to get out during their working lifetime. He develops a definition of chronic poverty with *expected* income as its core, with expected income in turn conditional on the expected accumulation of assets over time as well as initial exogenous circumstances. If that conditional expected income lies below the poverty line then that person is chronically poor. With limited endowments a person can be chronically poor without being caught in a poverty trap (for the fortunate their income may be on a time path to move them out of a poverty even if they are chronically poor at present). For policy it is then essential to look at the *pattern* of growth and not just its rate for the former restructures the pattern of opportunities, devaluing some initial asset investments while raising the returns on others (as will economic policy change, for example market liberalization). Targeted interventions to improving endowments and putting people on upward accumulation paths out of chronic poverty must take account of the changing pattern of growth. Assets are also socially constructed (a theme echoed by Maia Green) and a mismatch between endowments and opportunities can arise when social relations, not just the economy, change.

A key assumption in existing models is that individuals cannot borrow against their future earnings to build present assets (which in turn yield higher (future) income flows) and must save instead. A threshold of initial assets exists below which accumulation through saving is not a viable strategy for moving out of poverty and, with a binding credit constraint, the household cannot become a successful entrepreneur—even if it has the skills and knowledge to do so.[8]

[8] There is a growing literature on modelling credit constraints; using United States data, Buera (2006) finds that the welfare cost of such constraints is significant (about 6 per cent of the household's lifetime consumption), and there is clearly much scope for applying these tools to simulate the impact of micro-finance on future poverty trajectories.

Conceptually, many different types of asset have been identified: natural capital, physical capital, human capital, social capital, and financial capital, with further refinements within each (for example Hulme et al. (2001) divide social capital into socio-cultural and socio-political assets). But data on human capital and physical capital are the most readily available, and in chapter 12 Agnes Quisumbing focuses on these in an analytical survey of how intergenerational asset transfers can create (or block off) escape routes from poverty. The poor are typically constrained in their ability to trade-off present for future consumption (exacerbated by credit constraints) and an inability to invest in human capital persists across generations (there is plenty of evidence from the Philippines that the children of parents with little schooling and/or assets have lower school participation, and the children of credit-constrained households are shorter than unconstrained households).

Quisumbing argues that context matters greatly in determining which assets work best for poverty reduction. Thus in Ghana more land is better for increasing women's income than more education given the low returns to female schooling in rural labour markets. If asset accumulation takes time and is difficult for the poor, then assets at marriage largely determine lifetime prosperity. The marriage market therefore plays a central role, and evidence from Ethiopia shows that assortative mating increases inequality and reduces social mobility (due to intergenerational transfers at marriage) — thereby continuing social stratification from one generation to the next. For the poor to transfer assets across generations they must first accumulate them; hence the need to strengthen property rights, reduce the initial costs of acquiring capital, and provide savings instruments (and provide mechanisms to maintain the poor people's asset base in the face of shocks). More mechanisms for human capital investment by the credit constrained are essential (Mexico's PROGRESA is a model).

An alternative disciplinary approach is presented by Jo Boyden and Elizabeth Cooper (chapter 13) to address the concept of 'resilience' in research and practice concerning children's poverty and the lifecourse and intergenerational transmission of poverty. 'Resilience' means the strategies that people use to cope with adversities, such as income poverty or violent conflict. For children much attention has been paid to the issue of whether they can in some way overcome initial disadvantages. Unfortunately children are more susceptible to the effects of poverty than adults, particularly to the effect of under-nutrition.  Boyden and Cooper argue that while superficially attractive the resilience concept has not yet proved to be a useful tool for poverty research. Resilience lacks a satisfactory definition, it is impossible to observe directly, and indeed the concept disguises multivariate phenomena. Thus the correlation between inputs (mother's education, for example) and outputs (child health, for example) are derived from the analysis of data sets that cover many different parental and community characteristics. In short, research in this area has been highly mechanistic (prematurely identifying direct cause and effect), thereby failing to take account of moderating forces. Moreover, what is often taken for granted in the policy debate is not borne out by recent research; for example, current research challenges assumptions about the foundational role of the family in child development.  Static models of human development often underpin the conventional wisdom on the effects of deprivation in early childhood, whereas more dynamic approaches are called for in which child-development trajectories are constantly modified (implying that it is better to speak in terms of probabilities). Boyden and Cooper argue that much more attention must be given to the interaction of genetic and environmental impacts on poverty, as well as the structural influences.

In much of the analysis of assets there have been attempts to understand the social context that gives assets their value, a point emphasized by Moser and Felton (this volume) and further developed in chapter 14 by Maia Green who argues that the 'mystery of capital' lies in social relationships; hence entitlements do not exist in the abstract but within networks of moral relationships. The latter determine what different categories of people can expect. Most importantly, these categories can shift radically. Building on Barbara Harris-White's (2005) work on social exclusion, Green argues that social ordering sanctions harm to some, but not to others, illustrating this point with an examination of witchcraft in contemporary Africa which is used to change relationships within and between families (including control over assets and the value attached to them).  In Green's view the concept of chronic poverty usefully highlights a situation but does not really explain it, tending to yield frameworks that are far from local conceptions of poverty, and local concerns. To get deeper insights we need to develop the idea of *durable* poverty (based on deprivation) rather than chronic poverty, for the former concepts is better able to handle the institutional factors that keep people poor.

The idea of the multi-dimensionality of poverty is now firmly embedded in the policy discourse, and we have already discussed non-income poverty dynamics in the contribution by Günther and Klasen to this volume. Yet there is still much to do. In chapter 15 Michael Woolcock highlights how the need for a broader social theory of chronic poverty must look to systems of social relations, rules and meaning. Thus understanding how groups are defined is key to a better understanding of the social relations that underly chronic poverty (a point also made by Maia Green). Rules systems, which constitute everything from constitutions and contracts too languages and social norms can lie at the heart of 'legal inequality traps' that condemn people to chronic poverty. A better understanding of meaning systems (how people make sense of what happens in the world and to them) is essential to deepen our knowledge of chronic poverty since groups can sometimes subvert practices that are 'clearly' in their best interests. A clear model of human behaviour is needed (one that goes beyond micro-economics); better explanations of why poverty persists as part of broader processes of economic and social change; more insight into how power is created, maintained and challenged; and more attention to how we can best learn from the new generation of poverty reduction policies and practices. Woolcock illustrates his argument with cases from Australia, Cameroon, and China. Each of these cases shows how social relations are central to understanding responses to economic and social change. Fundamentally, Woolcock argues for a shift away within social theory from what he terms 'endless critiques' and yet more 'conceptual frameworks' and a more constructive engagement with the most pressing and vexing concerns around chronic poverty. Much of development can be said to be about facilitating 'good struggles' in areas where there is no technical solution, but rather progress is crafted by dialogue and negotiation.

## 5. Conclusion

In this volume the reader will encounter a rich menu of perspectives and methodologies in some of the latest research on poverty. Our introduction has provided the first course. Conceptually and methodologically poverty dynamics are challenging but a number of clear conclusions emerge.

The first of these is about the duration of poverty. It is imperative to bring time into analytical frameworks for measuring and understanding poverty. There are many ways forward, including panel data sets (of which we need many more, since they are still confined to a small subset of countries) and life history methods. Major conceptual problems do however remain. These include the degree to which we do or do not place equal value on different spells in poverty (time-discounting).

Second, multi-dimensionality is essential. It is time to get out of the rut of income/consumption measures. Poverty dynamics can look very different when non-income measures are used, and these are critical as both a cross-check on trends in income measures, as well as giving us a broader picture of how well-being in all its dimensions is moving over time (essential if we are to track the poverty impact of growth). Multi-dimensional, duration-adjusted measures of poverty remain the next big challenge in measurement.

Third, interdisciplinary work is possible and desirable, despite the difficulties discussed in this chapter. In other words, the boundaries of our interdisciplinary conversation are becoming clearer, and the points of commonality and difference are now more sharply in focus. We need to encourage further the trend towards combining qualitative and quantitative approaches in the analysis of poverty dynamics. The present conversation about poverty dynamics reveals a divide, between economists and other social scientists (sociology, anthropology, politics and geography). However, it also reveals that there is a strong desire, and increasingly frequent attempts, to bridge this divide. We hope that this volume will support that process, encouraging others to join in the debate, and to tackle the conceptual and methodological hurdles that still lie ahead.

**References**


Adam, B. (2004), *Time*, Polity Press, Cambridge.

Adato, M. 2007. "Combining Survey and Ethnographic Methods to Evaluate Conditional Cash Transfer Programs." Paper presented at the conference on Q-Squared in Policy. Hanoi, July 7-8, 2007.

Adato, M., Carter, M. and May, J. (2004) Sense and sociability: social exclusion and persistent poverty in South Africa, BASIS background paper for the conference on Combating Persistent Poverty in Africa, 15–16 November, University of Wisconsin-Madison, accessed at: http://www.basis.wisc.edu/persistentpoverty_papers.html

Anand, S. and K. Hanson (1997). 'Disability-Adjusted Life Years: A Critical Review', *Journal of Health Economics*, 16: 685-702.

Bane, M. and Ellwood, D. (1986), 'Slipping into and out of poverty: the dynamics of spells', *Journal of Human Resources*, 21(1), 1-23.

Barrett, C. B. (2005), 'Rural Poverty Dynamics: Development Policy Implications', in D. Colman and N. Vink (eds), *Reshaping Agriculture's Contributions To Society*, Blackwell, Oxford.

Barrett, C. B. (2005). *The Social Economics of Poverty: Identities, Groups, Communities, and Networks*, London: Routledge.

Baulch, B. and Davis, P. (2007) "Poverty Dynamics and Life Trajectories in Rural Bangladesh." Paper presented at the conference on Q-Squared in Policy. Hanoi, July 7-8, 2007.

Baulch, B. and Hoddinott, J. (2000). 'Economic Mobility and Poverty Dynamics in Developing Countries: Introduction to a Special Issue', *Journal of Development Studies*, 36(1) 1-24 .

Baulch, B. and Masset, E, (2003), 'Do Monetary and Non-Monetary Indicators Tell the Same Story about Chronic Poverty? A Study of Vietnam in the 1990s', *World Development*, 31(3), 441-453.

Becker, G.S. (1965) 'A theory of the allocation of time', *Economic Journal*, 299, 495-517

Bevan, P. (2004), 'Exploring the Structured Dynamics of Chronic Poverty', *WeD Working Paper*, No.6, University of Bath, UK.

Bourguignon, F., C. Goh, and Kim D. (2004). 'Estimating Individual Vulnerability to Poverty with Pseudo-Panel Data', *Policy Research Working Paper* 3375, Washington DC: World Bank.

Boyden, J. and Cooper, E. 'Questioning the Power of Resilience: Are Children Up to the Task of Disrupting the Transmission of Poverty'. (This Volume).

Buera, F. (2005). 'A Dynamic Model of Entrepreneurship with Borrowing Constraints', Processed Paper, Northwestern University.

Buera, F. (2006). ‘Persistency of Poverty, Financial Frictions and Entrepreneurship’, Processed Paper, Northerwestern University (March).

Burawoy, M. 1998. “The Extended Case Method. *Sociological Theory*, 16 (1): 4-33.

Calvo, C. and Dercon, S. (2006). ‘Chronic Poverty and All That: The Measurement of Poverty over Time’. (This Volume)

Carter, M.R. and Barrett, C. B. (2006). ‘The Economics of Poverty Traps and Persistent Poverty: An Asset-Based Approach’, *Journal of Development Studies*, 42 (2): 178-199.

Carter, M. R. and Ikegami, M. (2007). ‘Theory-Based Measures of Chronic Poverty and Vulnerability: Concepts and Application to South Africa’. (This Volume)

Chakravarty, S. and D’Ambrosio, C. (2006). ‘The Measurement of Social Exclusion’, *Review of Income and Wealth*, 52 (3): 377-398.

Chen, M., R. Jhabvala, R. Kanbur and C. Richards (eds.) (2007). *Membership-Based Organizations of the Poor*, London: Routledge.

Chenery, H., M.S. Ahluwalia, C.L.G. Bell, J.H. Duloy, and R. Jolly (1974). *Redistribution with Growth*, Oxford: Oxford University Press.

Chambers,R.(1983)*Rural Development: Putting the Last First* . London, Heinemann.

Chambers, R., Longhurst, R., and Pacey, A. (eds) (1981), *Seasonal Dimensions to Poverty*, Frances Pinter, London.

Clark, D. A. (2002), *Visions of Development: A Study of Human Values*, Edward Elgar, Cheltenham.

Clark, D. A. (2006), ‘Development Studies in the Twenty First Century’ in D. A. Clark (ed.), *The Elgar Companion to Development Studies*, Edward Elgar, Cheltenham, pp. xxvi-xli.

Clark, D. A. and Hulme, D. (2005) ‘Towards A Unified Framework for Understanding the Depth, Breadth and Duration of Poverty’, *GPRG Working Paper 20*, Universities of Manchester and Oxford, UK.

Dasgupta, P. and Weale, M. (1992), ‘On Measuring the Quality of Life’, *World Development*, 20(1), 119-131.

Davis, P. (2007). ‘Poverty in Time: Exploring Poverty Dynamics from Life History Interviews in Bangladesh’. (This Volume)

Du Toit, A. (2007). ‘Poverty Measurement Blues: Some Reflections on the Space for Understanding ‘Chronic’ and ‘Structural’ Poverty in South Africa’. (This Volume)

Elbers, C. and Gunning, J. W. (2006). ‘Poverty, Risk, and Accumulation: Pro-Poor Policies when Dynamics Matter’, Paper presented at the CSAE 2006 Conference.

Ellis, F. (2000), *Rural Livelihoods and Diversity in Developing Countries*, Oxford: Oxford University Press.

Farmer, P. (2005) *Pathologies of Power*, Berkeley, University of California Press.

Fitzgerald, J. and Gottschalk, P. and Moffitt, R. (1998), 'An Analysis of Sample Attrition in Panel Data: The Michigan Panel Study of Income Dynamics', *NBER Technical Working Papers 0220*, National Bureau of Economic Research, USA. Available online at http://ideas.repec.org/p/nbr/nberte/0220.html

Foster, J. (2007), 'A Class of Chronic Poverty Measures'. (This Volume)

Foster, J., J. Greer, and E. Thorbecke (1984). 'A Class of Decomposable Poverty Measures', *Econometrica*, 52 (3): 761-766.

Gaiha, R. (1988), 'Income Mobility in Rural India', *Economic Development and Cultural Change*, 36(2), 279-302.

Geremek, B. (1994), *Poverty: A History*, Blackwell, Oxford. (Original Italian edition published in 1986).

Green, M. (2007). 'The Social Distribution of Sanctioned Harm: Thinking through Chronic Poverty, Durable Poverty and Destitution'. (This Volume).

Günther, I. and Klasen, S. (2007). 'Measuring Chronic Non-Income Poverty'. (This Volume)

Haddad, L and Kanbur, R. (1990), 'How Serious is the Neglect of Intra-Household Inequality?', *Economic Journal*, 100: 866-881.

Harriss, J. (2002), 'The case for cross-disciplinary approaches in international development', *World Development*, 30(3), pp. 487–96.

Harriss, J. (2007). 'Why Understanding of Social Relations Matters More for Policy on Chronic Poverty than Measurement'. (This Volume).

Harriss-White, B. (2005), 'Destitution and the problem of its politics – with special reference to South Asia', *World Development* 33(6), 881-892.

Haswell, M. (1975), *The Nature of Poverty: A Case History of the First Quarter-century after World War II*, MacMillan, London.

Hicks, N. and Streeten, P. (1979), 'Indicators of Development: the Search for a Basic Needs Yardstick', *World Development*, 7(6), 567-580.

Hufton, O. (1974), *The Poor of Eighteenth Century France*, Clarendon Press, Oxford.

Hulme, D. (2006), 'Chronic Poverty' in D. A. Clark (ed.), *The Elgar Companion to Development Studies*, Edward Elgar, Cheltenham, 61-67.

Hulme, D. and McKay, A. (forthcoming 2007), 'Identifying and Measuring Chronic Poverty: Beyond Monetary Measures', in N. Kakwani and J. Silber (eds), *The Many Dimensions of Poverty*, Palgrave, London.

Hulme, D., K. Moore and A. Shepherd (2001). 'Chronic Poverty: Meanings and Analytic Frameworks', *Chronic Poverty Research Centre Working Paper* 2, CPRC, University of Manchester.

Hulme D. and Shepherd, A. (2003), 'Conceptualizing Chronic Poverty', *World Development*, 31(3), pp.403-424.

Hulme, D. and Toye, J. (2006), 'The Case for Cross-Disciplinary Social Science Research on Poverty, Inequality and Well-Being', *Journal of Development Studies*, 42(7), pp. 1085–1107.

Iliffe, John (1987), *The African Poor: A History*, Cambridge University Press, Cambridge.

Kanbur, R. (2002), 'Economics, social science and development', *World Development*, 30(3), pp. 477–86.

Kanbur, R., (ed.), (2003), *Q-Squared: Combining Qualitative and Quantitative Methods in Poverty Appraisal*. Delhi, Permanent Black.

Kanbur, R. and Mukherjee, D. (2006), 'Premature Mortality and Poverty Measurement', Unpublished Paper, Cornell University, March. Available online at http://www.arts.cornell.edu/poverty/kanbur/Pov&Death.pdf

Kanbur, R. and Shaffer, P. (eds.), (2007a), *Experiences of Combining Qualitative and Quantitative Approaches in Poverty Analysis*. Special Issue of *World Development*. Volume 35, Number 2, February.

Kanbur, R. and Shaffer, P. (2007b), "Epistemology, Normative Theory and Poverty Analysis: Implications for Q-Squared in Practice." *World Development*. 35 (2), 183-196.

Klasen, S. (2000). 'Measuring Poverty and Deprivation in South Africa', *Review of Income and Wealth*, 46: 33-58.

Krishna, A. (2007). 'Subjective Assessments, Participatory Methods and Poverty Dynamics: The Stages of Progress Method'. (This Volume)

Lawson, D. (2007), "Methodological Issues Associated with Combining Quantitative and Qualitative Approaches in Understanding Poverty Dynamics: Evidence from Uganda." Paper presented at the conference on Q-Squared in Policy. Hanoi, July 7-8, 2007.

Lawson, D., McKay, A. and Okidi, J. (2003), 'Poverty Persistence and Transitions in Uganda: A Combined Qualitative and Quantitative Analysis', *CPRC Working Paper 38*, Institute for Development Policy and Management, University of Manchester, UK.

Loury, G. (1981), 'Intergenerational transfers and the distribution of earnings', *Econometrica*, 49 (4), 843-867.

Moser, C. and Felton, A. (2007), 'The Construction of an Asset Index: Measuring Asset Accumulation in Ecuador'. (This Volume)

Narayan, D., Chambers R., Shah M. K., and Petesch, P. (2000), *Voices of the Poor: Crying Out for Change*, New York, Oxford University Press for the World Bank, New York.

Osmani, S. (2007), 'When Capabilities and Opportunities Don't Match: Understanding Chronic Poverty'. (This Volume)

Ostrom, E. (1990), *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.

Quisumbing, A. (2006). 'Investments, Bequests, and Public Policy: Intergenerational Transfers and the Escape from Poverty'. (This Volume).

Radhakrishna, R., K Hanumantha Rao, C. Ravi, and B. Sambi Reddy (2006). 'Estimation and Determination of Chronic Poverty in India: An Alternative Approach', Paper presented at the CPRC Workshop on 'Concepts and Methods for Analysing Poverty Dynamics and Chronic Poverty', Chancellors Conference Centre, University of Manchester, 23-25 October 2006.

Scoones, I. (1998). 'Sustainable Rural Livelihoods: A Framework for Analysis', *IDS Working Paper* 72, Brighton: Institute for Development Studies.

Scott, J. (1998), *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, New Haven: Yale University Press.

Sen, Amartya. 1976. "Poverty: An Ordinal Approach to Measurement." *Econometrica*. 44.

Sen, A. K. (1998), 'Mortality as an Indicator of Economic Success and Failure', *Economic Journal*, 108(446), 1-25.

Sen, A. (1999). *Development as Freedom*, Oxford: Oxford University Press.

Smith, D.H. and Gravelle, H. (2000). *The Practice of Discounting in the Economic Evaluation of Health Care Interventions*, Centre for Health Economics, University of York.

Strauss, J. and Thomas, D. (1998), 'Health, nutrition and economic development', *Journal of Economic Literature*, 36(2), 766-817.

Woolcock, M. (2007). 'Toward an Economic Sociology of Chronic Poverty: Enhancing the Rigor and Relevance of Social Theory'. (This Volume)