Abstract for "Measuring Chronic Multidimensional Poverty: A counting approach"

Sabina Alkire (University of Oxford, UK) Mauricio Apablaza (University of Oxford, UK) Satya Chakravarty (Indian Statistical Institute, India) Gaston Yalonetzky (University of Leeds, UK)

Sen (1976) argued that an index of poverty should capture the incidence of poverty, the extent of individual poverty, and inequality among poor people. His seminal contribution has motivated the proposal of numerous unidimensional indices of poverty based on cross-sections of income or consumption data1.

However, the duration of poverty at the individual, or household, level is a crucial issue for understanding people's experiences of poverty. A persistent condition of insufficiency might precipitate detrimental effects on wellbeing. For instance, an increase in the duration of poverty increases the likelihood of impairment and illness2. A person stricken by a long duration of poverty can become socially excluded, and/or lose allegiance to the wider community (Walker, 1995). This, in turn, may lead to social unrest. Furthermore, it is important to know who among the poor are chronically poor and to understand their condition in order to improve policy predictions and responses (Lybbert et al., 2004; Carter and Barrett, 2006). Therefore it often becomes desirable to measure individual poverty dynamically using panel data.

Recently an important development in poverty measurement research has been the definition of a robust multidimensional framework. The reason is that the well being of a population depends on both monetary and non-monetary dimensions of life (see Kolm, 1977; Streeten, 1981; Sen, 1985, 1987; Anand and Sen, 1997; and Foster and Sen, 1997). Examples of non-income dimensions are housing, schooling, nutrition, etc. A person with sufficiently high income may not always be well off with respect to some non-monetary dimension of life. For example she may have an insufficient quantity of a non-club public good. Likewise, a pavement dweller with good nutritional status may have a low income. It may not be possible to trade-off income and some non-income dimensions. It also may be necessary to develop policies to address specific deprivations or combinations of deprivations. If so, then the construction of a multidimensional index of poverty and its analysis may be worthwhile.

Combining these two approaches to study chronic multidimensional poverty is a highly important issue. Hulme et al. (2001) and Hulme and Mckay (2005) argued explicitly that

¹ For reviews of this literature see Foster and Sen (1997), Zheng (1997), Lambert (2001), Chakravarty (2009), and Foster (2011).

² For a discussion of duration issues, see Bane and Ellwood (1986), Gaiha (1989), Gaiha and Deolikar (1993), Morduch (1994), Baluch and Masset (2003), Hulme and Shepherd (2003), Carter and Barrett (2006), and Dercon and Shapiro (2007).

measurement of chronic poverty should focus on multidimensional situations. 'Chronically poor are commonly multi-dimensionally deprived' (Hulme, 2004, p.3). Furthermore interesting analyses are possible when chronic and transient poverty measures can be broken down by dimension. For example, one can analyse whether chronic poverty has distinctive components, which may comprise 'poverty traps'.

This paper extends the Alkire-Foster multidimensional approach toward chronic poverty and, relatedly, transient poverty, using the Foster (2011) duration approach3. The latter is chosen because it is parsimonious and easy to understand; and it is based on the same axiomatic foundations as the Alkire-Foster family of multidimensional poverty indices. Moreover, unlike other inter-temporal poverty approaches, Foster's identification criteria explicit identify the chronically poor; while it can easily be adjusted to identify the transiently poor. The Alkire-Foster (2011) approach has been chosen for the empirical illustrations because it can be computed with ratio-scale or ordinal data, and is widely applied. A set of empirical illustrations is provided using the Chilean panel (CASEN) with observations for 1996, 2001 and 2006.

³ The proposed measures can be easily extended using the Jalan and Ravallion strategy to identify longitudinally poor individuals and household. The Jalan and Ravallion strategy relates chronicity with the average level of aggregated deprivation across years.