

Abstract for “The Dynamics of Non-Monotonic Poverty: Theory and Application to Time Poverty in Mexico”

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The study of poverty experiences as they unfold across time has been fitted from a mushrooming supply of concepts, measures and statistical toolkits. In addition to the analysis of poverty transitions (e.g. Cappellari and Jenkins (2004)), several proposals have been made in order to identify and understand the plight of the chronically poor vis-a-vis the transiently poor. For instance, Jalan and Ravallion (2000) define the chronically poor as those whose average income across time falls below a poverty line, whereas Foster (2009) identify the chronically poor according to the number of spells in poverty. Likewise, there is a growing literature providing welfare evaluations of lifetime poverty experiences, where, for instance, the timing and contiguity of poverty, and non-poverty, spells is deemed to affect people's well-being. Prominent examples of this latter literature include Hoy *et al.* (2012), Bossert *et al.* (2012), and Gradin *et al.* (2012).

Now all these concepts and methods are applied to a notion of poverty defined by insufficiency of the means to attain a minimally decent state of wellbeing, e.g. insufficient income or consumption (e.g. as is implicitly clear in the neat taxonomy of Hulme and Shepherd (2003)). These concepts have also been applied to leisure time, by regarding an insufficiency of it as time poverty (for a conceptual discussion see, e.g. Bardasi and Wodon (2006)). However, as Apablaza *et al.* (2013) argue, some indicators of functioning (in Sen's terminology) are characterized by a non-monotonic relationship to well-being. For instance, measures of health status, like Body Mass Index (BMI), haemoglobin, cholesterol, etc., for which both scarcity and excess are associated with ill-fare. Likewise, one can argue that both leisure time scarcity and leisure time abundance can be symptomatic of substandard well-being. For the purpose of measuring ill-fare, when both extremes (scarcity and excess) are deemed detrimental to well-being, Apablaza *et al.* (2013) provided a family of poverty measures that satisfies a set of reasonable desirable properties.

In this paper we combine the toolkit of Apablaza *et al.* (2013) with different approaches to inter-temporal poverty measurement, in order to study the dynamics of non-monotonic poverty. Specifically, we propose measures of chronic and transient non-monotonic poverty using both the approaches of Jalan and Ravallion (2000) and of Foster (2009); and then we propose measures of inter-temporal poverty (which do not distinguish between chronic and transient experiences, but are sensitive to the timing of spells) using the approach of Gradin *et al.* (2012). We apply these measures in order to shed light on the patterns of leisure time poverty in the Mexican states using the ENOE panel dataset, which features a rich questionnaire on time use. The measures of inter-temporal non-monotonic poverty are compared against traditional measures of poverty dynamics in order to highlight the empirical contribution of our approach.