Abstract for "Chronic and Transient Poverty in Rural Ethiopia, 1994 - 2009: A New Decomposition"

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I propose and characterise a new class of chronic poverty measures with attractive properties. These measures are applied to household consumption data to determine the chronic and transient components of poverty in rural Ethiopia in the period 1994 to 2009. The measures will find wider applicability for the evaluation of poverty in other contexts, when longitudinal household data is available.

Chronicity or persistence of poverty, perhaps arising from an inability to accumulate human or physical capital, is recognised to present a different set of policy challenges from transient poverty, perhaps arising from an inability to smooth consumption in the face of income fluctuations. It is therefore important to be able to distinguish between chronic and transient poverty when analysing poverty over time, and several indices to measure chronic poverty have been proposed recently. Many of these measures are not sensitive to persistence or duration of poverty and thus, while they may serve as good measures of the total burden of poverty in an intertemporal context, they do not capture chronicity as such. Conversely, other measures have been proposed which are sensitive to persistence but at the cost of discontinuities in the aggregation over time, leading to perversities in the ordering of trajectories of wellbeing embodied by these measures.

I show that there is no fundamental incompatibility between sensitivity to duration and persistence of poverty, and continuity. I propose a set of attractive properties for a measure of chronic poverty, including these, giving ethical motivations for the properties. I characterise the class of measures which satisfy these properties. The ordering of trajectories of wellbeing is shown to be non-separable and concave. The measures of chronic poverty are combined with a measure of the total burden of poverty, calibrating for societies of constant-wellbeing trajectories, to decompose total poverty into chronic and transient components.

The new measure is applied to real equivalised household consumption data from the Ethiopian Rural Household Survey to analyse poverty in 15 villages in rural Ethiopia during the period 1994-2009. Total poverty is decomposed into chronic and transient components and the results are contrasted with the decomposition according to Jalan and Ravallion's (1998) method. The incidence and burden of total and chronic poverty are found to vary widely across different communities. The burden of chronic poverty evaluated by both methods is found to be strongly correlated with the burden of total poverty. The proportion of poverty evaluated to be chronic according to the new method varies between 0% and 25% across different villages. Interestingly, according to the new method the proportion of chronic poverty is only weakly correlated with the total burden of poverty across villages. This perhaps reflects the different economic environments and vulnerabilities in the different agrico-climatic zones represented by the different villages. The correlation between proportion of chronic and burden of total poverty appears stronger when using Jalan and Ravallion's decomposition, reflecting the properties of their "chronic" measure which actually reflects time-averaged levels of poverty rather than chronicity per se.