# **Welfare Dynamics and Behavioural Economics**

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### **Extended Abstract**

In recent years, the research agenda on poverty in developing countries has moved not only beyond money-metric to multidimensional measurements of poverty but also beyond static assessments of poverty, considering dynamic aspects of poverty. This research acknowledges that (i) the currently observed wellbeing of a given individual might not necessarily be a good approximate of his wellbeing over time as well as (ii) incorporates the notion of risk - which is particularly high in developing countries - into measures of wellbeing.

The current state of the literature of measures of wellbeing over time must still be described as a "let a hundred flowers bloom" phase of research (Hoddinott and Quisumbing, 2003) with numerous concepts, definitions and measures. Moreover, two rather distinct research agendas have emerged, one focusing on ex-post "mobility" (e.g. Baulch and Hoddinott, 2000), and the other focusing on ex-ante "vulnerability" (e.g. Ligon and Schechter, 2003). Only recently have Calvo and Dercon (2006) brought these strands of literature together providing an axiomatic approach to measure wellbeing ex-post and ex-ante over time.

However, all measures of dynamic wellbeing are so far more or less based on the measurement of expected utility. Whereas in decision theory as well as in many other fields of economics expected utility has long been complemented by the insights from behavioural economics, which use insights from psychology to enrich models of individuals' economic choices, welfare measures over time have so far ignored the evidence of behavioural economics. Here, most relevant for dynamic and risk-sensitive welfare measures is the experimental evidence on "loss aversion" and "subjective decision weights", both going back to Kahneman and Tversky (1979). Loss aversion refers to the fact that outcomes (i.e. income) are evaluated with regard to a reference level – in contrast to expected utility theory where absolute outcomes are valued – with losses (to a specific reference level) having a higher impact on wellbeing than gains. Subjective decision weights describe the tendency of

people to perceive probabilities (i.e. risks) – again in contrast to the expected utility literature – in a non-linear way .

These issues should be of high relevance especially for the measurement of welfare dynamics under risk. Only if the downside impact of risk and income fluctuations on current and life-time individuals' wellbeing is properly understood, are reasonable policy recommendations - e.g. with regard to insurance mechanisms - possible.

Hence, in this paper we will first theoretically incorporate the insights from prospect theory ("loss aversion" and "subjective decision weights") into dynamic welfare measures. This could also help to bridge the gap between measurements of ex-post mobility and ex-ante vulnerability. In a second step, the proposed measure will be applied to panel data from one industrialized (Germany) and one developing country (Madagascar) and be compared with other recently proposed dynamic welfare measures (e.g. Calvo and Dercon, 2006; Ligon and Schechter, 2003).

#### References

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