

# Money is Everything, or is it? Explorations of the Stability of Welfare Inference across Money-metric, Elicited, and Bio-metric Measures of Wellbeing

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## Abstract

Money-based measures of wellbeing constitute the core of welfare assessment for much of economics. However, the comprehensiveness of a money-metric measure with respect to total welfare has long been questioned. This study assesses a broad range of well-being measures from 1550 representative adults in two regions of Peru: one urban and one remote rural. Measures include total household income, consumption, household asset wealth, subjective poverty, evaluative subjective welfare, affect, eudaimonic wellbeing, mental health and depression, perceptions of security and physical health, and biometric measures of the stress experience through both diurnal cortisol measured in saliva and longrun cortisol exposure measured in hair samples.

The inter-relation of (a) money-metric measures, (b) elicited welfare, and (c) biometric measures are varied and differ significantly across setting. Individual autonomy and beliefs of competency/self-worth are more aligned with income in the urban setting than the rural. Concerns with health and physical security predominate among the low-income populations in both settings while concerns with relative status are higher in the urban population. The elicitation of dimensional trade-offs reveals that endowment effects, where individuals who experience scarcity in a particular dimension will prioritize that dimension with respect to others, take precedence. If these stated trade-offs are used to generate weights for a multi-dimensional poverty measure, the elicited weights will systematically vary across setting.

Physical stress, as embodied in high cortisol levels, is generally associated with low money-metric wellbeing, however there are many notable deviations from this general pattern. For example, high cortisol, when assessed in the morning, is beneficially related to life satisfaction, affect, and autonomy.

Access to non-market goods and amenities significantly vary across the urban and rural setting, which in turn renders the standard money-metric wellbeing indicators inconsistent with respect to welfare comparisons across location. The creation of a comprehensive measure that enables welfare consistent comparisons across diverse individuals and settings remains elusive.