

The Insights and Illusions of Consumption Measurement: Evidence from a Large Scale Randomization

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Abstract

We challenge the belief that acquisition diaries yield the most accurate measurement of household consumption. Using a large-scale randomization in Iraq that assigns households to survey modules with both recall and diary measurements, our novel strategy non-parametrically unveils the distribution of errors in both measurements and the distribution of true underlying consumption. Identification stems from differences between experimentally-formed groups of respondents to diary and recall interviews, combined with diary-recall differences in measurements from the same households. Our assumptions hinge on the same survey design employed in many national household surveys, like in Canada and the United States, and do not need diaries to be error-free or have classical errors. We find little empirical support for concluding that diaries outperform recall measurements, and offer new insights to interpret and reconcile differences between consumption measurements in the cross-section and over time. Diary errors are of greatest concern for studying the distributional aspects of welfare, as differences between expenditure and consumption rankings for poverty or inequality arise because of heterogeneous purchasing behavior across households. We devise practical suggestions for the design of consumption modules in household surveys that would yield the closest measurement to the true underlying consumption.

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