

How Can We Better Measure the Household Savings Function: Stocks, Flows and the Balance Edit

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The field of household finance examines the financial circumstances of households and the behaviours by which they seek to shape those circumstances. This is a very active area of research but also one in which critical issues remain unresolved. One issue is in measuring the saving rate of households and understanding how it varies with household income. This is key not just to estimating the aggregate savings rate, but to identifying whether households have sustainable balance sheets.

As one example, at present there is considerable uncertainty over identifying true levels of household saving at the micro level. Survey data from the UK, the US and Canada suggest that households with very low income spend considerably more, implying large amounts of dissaving. But such households also report spending more than households with slightly higher incomes (Bee, Meyer and Sullivan 2015; Brewer, Etheridge and O’Dea in press; Brzozowski and Crossley 2011; Meyer and Sullivan 2003). It is not clear whether this is because of (i) reporting error, with low-income households under-reporting income and/or over-reporting spending, (ii) low income households smoothing their consumption in periods of temporary low income by using savings, or borrowing in a rational and sustainable way, or (iii) very low income households engaging in unsustainable borrowing.

The main obstacle to resolving this and other puzzles is a lack of data. For a given household in a given period, income less spending must equal net saving (i.e. new saving and retirement of debt less dissaving and borrowing): this is the household budget identity. However, household surveys typically specialise in

the collection of one of income or expenditure, or perhaps the stock of assets and debts; sometimes, surveys will collect two of these three. As a result, unless we assume no measurement error, the covariances between income, expenditure and assets and debts are not observed, and this means we cannot distinguish reliably between competing hypotheses.

In 2016 we fielded two versions of an experimental module in Understanding Society's Innovation Panel, a mixed mode survey administered to a representative sample of 1,500 households in Great Britain. The new module collected information from singles and couples on their income (in detail) and spending (in a one-shot) over the same period. In addition, one version of the module asked about changes in the stocks of each form of asset or debt, and the others asked about overall flows of saving/repayments and dis-saving/borrowing. In both cases, respondents were confronted, in a summary screen, with the household budget identity, and were given the opportunity to update their results where their responses failed to balance (but without being required to provide consistent information). We record both initial responses and subsequent revisions. The design builds on earlier experimental evidence that reconciliations and balance checks can improve the quality of household finance data collected in surveys (Brzozowski and Crossley 2011; Fricker, Kopp and To 2015; Hurd and Rohwedder 2010; Samphantharak and Townsend 2010).

Our focus is on what this means for the savings function. Initially, there is a large gap between the amount of net savings reported by households (the median of which is £0), and that implied by simply calculating "income less spending" (the median of which is around £500 a month). The budget reconciliation reduces this gap: reported income hardly changes, but mean reported spending and mean reported net saving both rise, moving households closer to balance on average and across the distribution. The budget reconciliation leads to a clear flattening of the savings function (i.e. savings as a function of income), and it is noticeably less steep for those households who are in balance after reconciliation. However, despite the opportunity to correct (but in line with findings from other surveys) many households are still out of balance after the reconciliation; the mean respondent is doing some combination of over-reporting income, under-reporting spending, or under-reporting net saving.

We find only small differences in the initial and corrected responses according to which version of the questions on changes in net assets were presented to households. There are no significant survey-mode effects in initial responses, but there are mode effects in how households respond to the budget reconciliation: about a half of face-to-face respondents whose initial responses were out of balance reduced the imbalance, but only a third of on-line respondents. Consequently, 8ppt more face-to-face respondents were in balance after reconciliation than on-line respondents. Including the time taken to correct initial imbalances, asking about the change in every savings and debt account took an average of 96 seconds longer than asking about net flows, and this was driven by face-to-face respondents.