Understanding Household Finance Through Better Measurement

Summary of Project Outputs

The following is a brief summary of what we have achieved with this project.

This project has generated new knowledge on how to measure household finances; collected previously non-existent data on British households' income, spending and saving; and generated new evidence on previously unanswered policy relevant questions.

We have shown that the reporting of income improves over time in a panel study and this is in part due to interviewing methods that check the inter-temporal consistency of responses, leading to fewer omissions, and in part due to improvements in respondent reporting behaviours over time.

We have developed improved methods to impute data about household budgets, using multiple surveys that contain partially overlapping information. Our work demonstrated that existing methods lead to biased estimates of the effects of interest, and our methods correct this problem in a tractable way.

We have shown that Editable Summary Screens implemented within an interview are an effective tool to reduce misreporting of income in surveys: respondents are willing to revise their answers across a wide range of income sources and the revisions are large enough to affect some measures of income inequality.

In a second reconciliation experiment, we have collected data on the three elements of the intertemporal budget constraint of households and asked respondents to revise their responses when their spending, saving and income do not balance. We find that this is an effective way to reduce measurement error in such data. We used those data to re-examine the slope of savings with respect to long-run income, which we find much flatter than uncorrected data would suggest. This relationship is key to several important policy questions including the incidence of consumption taxes.

[March 2020]

We have reviewed [process generated data sources and new technologies that could be used to measure household finances](#). Focusing on what information the data or method capture, and about whom, the review illustrates promising avenues to supplement survey data collection and highlights potential sources of bias resulting from errors that affect who is represented in the data and which concepts are measured.

We have developed [methods to code expenditure data captured from images of shopping receipts](#) and shown that [data collected with a receipt scanning app closely match data about total expenditure from the UK benchmark spending data](#) (the Living Cost and Food Survey).

Going beyond the measurement of household finances, we have generated new knowledge about how best to implement mobile app-based data collection: we have shown that in Great Britain [users of mobile devices](#) are far from representative of the general population and that those who participate in mobile app studies are even more selected; that the [mobile devices participants use can affect the data collected with the app](#); that offering a browser-based version of the app as an alternative can greatly [increase participation rates](#) and reduce the selectiveness of who participates; that participation rates are substantially higher if the app study is introduced within an interview rather than by sending a letter; and that [offering participants feedback about their spending](#) does not increase participation in the study or alter the spending they report.

The findings from our research on mobile apps are summarized in a keynote on *["Using mobile apps for data collection: 10 things we've learnt from experimental testing on the Understanding Society Innovation Panel"](#)* that Annette Jäckle gave at the [CIPHER 2020](#) conference.

[March 2020]