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

Observations

- Interesting contribution that seeks to enlighten us on the challenge of assessing accuracy in a world with an illusive truth.
- Leading to many interesting and strong policy/practical conclusions.
- Observation on the aggregates
 - Very few recall questions, so very surprising that we observe higher consumption for recall than diary.
 - The assumption of diary being better than recall, as i know it, is based on the observation that people report
 higher consumption in diaries, and that underreproting is assumed to be a larger problem than overreporting.
 Not sure that people also claim dairies are free from measurement error or have less per ser.
 - I believe there are also diaries that measure consumption similarly to recall, ei not the aquisition type, though these might be most prevelant.
- But does assumptions hold?
 - It seems like Assumption 3 E[Y d] = E[Y], serves as an anchoring of the true distribution, and therefore also key in comparison between diaries and recall.
 - Can we substantiate this?
 - would results be change/be reversed if we assumed E[Y r] = E[Y]?

Ideas for further contributions

- Generating a calorie aggregate could provide some insights:
 - It could give some outerbound indication on the accuracy and level of both the recall and diary aggregates, by showing average, as well as tails outside "reasonable" calorie consumption.
 - Could provide support for statements as
 - "Errors in recalled consumption are far from being classical in form, with over-reporting being more likely than under-reporting."
 - "While diaries provide a more reliable measurement of consumption averages, we have shown that the cognitive errors arising from the process of recalling consumption lead to overstate average consumption."

Ideas for further contributions

- Limiting consumption to items that are frequent also limits differences between measures
- There seems to be a subcomponent of consumption, the consumption of non purchased items, that are recorded similarly in diaries and recall. Can this component be used to make a "cleaner" comparison of recall vs diary, not driven by measurement of slightly different concepts?

Other stuff

- Most credible evidence of true consumption (or a gold standard) could come from the medical evidence of energy expenditures.
- Doubly Labeled Water, provides a direct estimate of energy expenditures at individual level
 - The method works through people drinking water with an isotope that splits in a fix relationship to energy expenditures/use. Measurering the presence of the isotope in urine show how much energy was spent since intake.
- The paper draws on other papers with similar approaches, it remains a little unclear to me, how and when this papers approach differ.