

Title:

The effect of events between waves on panel attrition

Authors:

Tobias Gramlich (Uni Duisburg), Frauke Kreuter (IAB/ UMaryland - JPSM), Alexander Mosthaf (IAB/Uni Mainz), Mark Trappmann (IAB)

Presenter:

Mark Trappmann

Abstract:

Panel surveys suffer from attrition. If this attrition process does not occur completely at random (MCAR) there is a threat that estimates for longitudinal populations and cross-sectional populations at later waves will be biased. There is a vast literature on the correlates of panel attrition that proves that usually dropout does not occur completely at random and that attrition due to non-contact and attrition due to refusals can be explained by partly different variables measured in a previous wave or taken from the paradata of the study (e.g. Watson and Wooden 2009, Tortora 2009). Those variables are then used in response propensity models that build the base for correcting for attrition in many panel studies.

Propensity weighting works if the dropout process is a missing at random (MAR) process: That is, conditional on observed covariates it is random. For attrition in panel studies the adequacy of this assumption is often doubted: Many researchers argue and several studies prove (e.g. Heller and Schnell (2000) for health, van den Berg et al. (2006) for employment status) that not the attributes of the persons or households at the previous wave are the most important predictors for nonresponse, but changes of these attributes between waves should at least explain a large proportion. This would have implications especially on longitudinal estimates as change could be dramatically underestimated if that was true.

Usually in panel studies events or changes between waves are only available for those cases who again take part in later waves while for attritors these variables are usually missing. The panel study PASS (Trappmann et al. 2009) is a novel dataset in the field of labor market, welfare state and poverty research in Germany. In PASS survey data on the employment and unemployment history, income and education of participants can be linked to corresponding data from respondents' administrative records.

In our presentation we will use the combined PASS and administrative data to answer the following research questions:

- i) To what extent does change in variables like household composition, receipt of unemployment benefits or employment status between waves influence contact and co-operation rates in wave 2?
- ii) Does this still lead to biased estimates of the amount of change after the propensity weights of the survey are applied?
- iii) Can additional variables – that are usually not used in propensity weighting models – help reduce this bias? We try variables from wave 1 that might help predict change in key variables (e.g. indicators for quality of partnership) and we pick up the idea of Kreuter and Jäckle (2008) that changes between waves can be inferred from changes in the patterns of the contact protocols.