Tackling survey nonresponse:
The role of geocoded auxiliary data

Thursday 26th May 2016  17:00 – 19:15
London Art House

Low response rates - and the potential this has to lead to bias - is one of the major challenges facing survey research today. To understand and address the issue of nonresponse requires information to be available for the entire sample, both respondents and non-respondents. For surveys with address-based samples there is often little information available via the sample frame whilst collecting interviewer observations can be costly and introduce measurement error. Increasingly, therefore, researchers are considering the potential offered by external sources of auxiliary data which can be appended to the sample frame using geocodes such as postcode to address nonresponse either during fieldwork using responsive design or post-fieldwork via weighting. There is certainly a growing amount of auxiliary data available - In the UK the Open Government initiative aims to make increasing amounts of administrative data publically available whilst the application of geographic information systems (GIS) is opening up access to a wealth of new contextual data.

However, can auxiliary data help us tackle the problems associated with nonresponse in social surveys? Appending auxiliary data to surveys can be a time-consuming and frustrating task. There are a number of known limitations regarding the accuracy and accessibility of auxiliary data. Existing research has struggled to identify auxiliary variables which are sufficiently correlated with both response propensity and the survey variables of interest to be useful.

This event presents findings from the ESRC-funded ADDResponse Project (www.addresponse.org), a collaboration between City University London, LSE and Ipsos MORI which investigates the scope that auxiliary data provide to understand and overcome nonresponse bias in the European Social Survey (www.europeansocialsurvey.org) in the UK. Incorporating auxiliary data from a variety of sources and at multiple levels of aggregation - including small-area government data, household level commercial data and local geographic information - the project provides a uniquely in-depth insight into the potential afforded by geocoded auxiliary data to address problems of nonresponse in social surveys.

There will also be a discussion led by an expert panel of survey methodologists and practitioners on the future prospects for using geocoded auxiliary data to tackle survey nonresponse. Panellists will discuss what they consider to be: the main findings on nonresponse generated by auxiliary data to date, the greatest challenges to the future use of auxiliary data, and the most promising areas for further investigation.

The event is aimed at anyone with an interest in issues around survey nonresponse and auxiliary data. We are particularly keen to welcome survey practitioners and producers of auxiliary data as well as academic researchers.
Programme

16:30 Registration, tea and coffee available

17:00 – 17:15

Welcome
Rory Fitzgerald, Director ESS ERIC and Principle Investigator ADDResponse

Introducing the multi-level multi-source approach to studying survey nonresponse
Tom W. Smith, NORC at the University of Chicago

17:15 – 18:15

Using auxiliary data to explore nonresponse to the European Social Survey in the UK: Findings from ADDResponse
Getting to grips with different types of auxiliary data: Was it worth it? Sarah Butt, City University London

Predicting Nonresponse with small area auxiliary data Kathrin Thomas, City University London

18:15 – 19:15

Panel discussion: The future of auxiliary data in nonresponse research and practice
Chair: Rory Fitzgerald

Participants:
- Patrick Sturgis, University of Southampton and NCRM
- Tom W. Smith, NORC at University of Chicago
- Patten Smith, Ipsos MORI
- Michael James, ONS

Questions for discussion:
- What are the key findings emerging on using auxiliary data to study nonresponse bias, from ADDResponse and/or other research projects you are aware of?
- What are the main challenges associated with using auxiliary data to explore survey nonresponse?
- What are the most promising areas for further research combining auxiliary and survey data?
- How will/should the growing availability of auxiliary data influence survey practice in the future?

19:15 Drinks reception
**Presentation abstracts**

**Introducing the multi-level multi-source approach to studying survey nonresponse**

*Tom W. Smith, NORC at the University of Chicago*

The multi-level, multi-source approach augments questionnaire/interview data with information from the sample frame, paradata, and auxiliary databases at both the micro and aggregate levels. This can be utilized for methodological purposes such as the detection of, modelling of, and correction of nonresponse bias and for studying substantive matters such as neighbourhood- and community-level contextual effects.

**ADDResponse: Getting to grips with different types of auxiliary data: Was it worth it?**

*Sarah Butt (City University London) and Kaisa Lahtinen (University of Liverpool)*

This presentation will discuss our experiences of accessing, merging and analysing different types of auxiliary data as part of the ADDResponse project. These include: small-area data from administrative sources including Census 2011, ONS’ Measuring National Wellbeing programme, Home Office, DfE, DECC, and other government departments; household level data from commercial sources and local geographic information from Ordnance Survey and OpenStreetMap. The presentation will evaluate these different data sources in terms of their availability, transparency, timeliness, completeness and accuracy and will consider the potential these data offer for analysis of both survey nonresponse and substantive research questions.

**ADDResponse: Predicting nonresponse with small area auxiliary data**

*Rainer Schnell, Kathrin Thomas, Sarah Butt, Rory Fitzgerald (City University London) and Chris Skinner (LSE)*

The focus of this presentation is the development of a meaningful non-response model with the help of auxiliary information, especially small area administrative data, as well as the construction of weights on the basis of the results. We follow an empirical strategy to systematically explore the data quality, reduce the data into meaningful dimension and derive area classifications. Next, we use classification trees to predict non-response. Our non-response model is then used to develop a weighting strategy and recommendations for application as well as a validation of our findings. We close by discussing the value and implications of our analysis for predicting non-response in survey research.