

Research Briefing N° 12

Using Administrative Data as an Alternative Sampling Frame for the Family Resources Survey

This research is of value to those interested in sampling issues more widely, and those with an interest in making more use of administrative data for improving data quality and for achieving cost savings from conducting large-scale surveys.

Key words: sampling; FRS; large-scale data; administrative data



Key findings

- Department for Work and Pensions (DWP) held administrative data have the potential to provide a good alternative for sampling the Family Resources Survey (FRS) by linking to socio-demographic data held administratively. This would be advantageous for sampling specific sub-populations (e.g. types of benefit recipients or households with children).
- The match rate of postcode data held on the Royal Mail's 'Postcode Address File' to the administrative data is quite high; the match rate of addresses between the two sources offers good coverage of the British population.
- The DWP's 'Customer Information System' offers better potential than the 'Address Hierarchy File'.
- However, comparing FRS questions and income data held administratively, suggests little overlap. Therefore, limited gains may be realised from shortening the length of the FRS by using income data from administrative sources.

What we did

Relative to other countries, the UK underutilises its administrative data for sampling purposes. However, using administrative data for statistical research purposes has been of growing interest in the UK. Benefits include:

- a reduction in costs associated with conducting large-scale surveys;
- an improvement in data quality;
- diminished respondent burden and public opposition to completing surveys;
- using administrative data to validate survey data and to study ways of improving questionnaire design to improve data quality.

Recognising the wider potential benefits of utilising administrative data, the DWP, in collaboration with the Economic and Social Research Council (ESRC), commissioned this research (February 2010 to March 2011) to investigate the feasibility of using DWP administrative data as an alternative sampling frame for the Family Resources Survey.

Further information

Two publications have been produced from this research:

Simon, A. (2012). Using administrative data for constructing sampling frames and replacing data collected through surveys. *International Journal of Research Methodology*, 2012, 1–12, iFirst Article. DOI:10.1080/13645579.2012.733176.

Simon, A. (2011). Using administrative data held by DWP as an alternative sampling frame for the Family Resources Survey. *Economic & Labour Market Review*, Volume 5, 4, pp.15-21.

How we did it

The research crucially discusses the methodological challenges of using administrative data for constructing an alternative sampling frame for the FRS and for replacing income data collected in the FRS.

To assess the feasibility of creating an alternative sampling frame, the current FRS sampling frame (the Royal Mail 'Postcode Address File') was compared with two administrative data sources:

- the Address Hierarchy (AH) File - the address file for the Work and Pensions Longitudinal Study (WPLS); and
- the Customer Information System (CIS) – a list of all individuals allocated a National Insurance Number (NINO).

Analysis compared the match-rate of 'valid' postcodes (alphanumeric and between five and eight characters long) and addresses, and examined reasons for non-match.

To assess the feasibility of replacing income data in the FRS with income data held administratively, the extent of overlap between the income content of the two data sources was examined.

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