

Title: *Measurement Error in the Dating of Income Receipt: Reducing Bias in Duration Models through Dependent Interviewing*

Author(s): Annette Jäckle

Institution/Country: University of Essex

Data on income sources collected in panel surveys typically display a concentration of transitions at the seam between waves of data collection. This concentration is caused by constant wave response (reporting receipt for 'all' or 'none' of the months in the reference period) and wave under-reporting (reporting receipt in some but not all relevant waves). The resulting 'seam effect' is likely to lead to errors in estimated durations of benefit receipt, attenuation of the estimated effects of explanatory factors on conditional exit probabilities and biases in estimated duration dependence. Little is however known about the nature of errors in histories from panel data, or about their effect on estimates. This paper uses benefit histories from survey reports and matched administrative records covering a four-year period to assess the extent of bias in key estimates, such as the distribution of spell lengths, their determinants and duration dependence. The paper also evaluates the effectiveness of dependent interviewing techniques, where information collected in a previous interview is used to remind the respondent of sources reported previously, or to verify that sources no longer reported have truly ended, at reducing bias.