The Impact of Non-Consent to Record Linkage on Administrative Estimates Obtained from Linked PASS and IEB Administrative Data

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Administrative records are increasingly being linked to survey records to enhance the survey data and increase research opportunities for data users. A usual prerequisite to performing direct record linkage is obtaining informed consent from respondents. Unfortunately not all respondents consent to record linkage, raising concerns about the quality of inferences obtained from linked data sets. Several studies have found systematic differences between consenting and non-consenting respondents across sociodemographic and economic characteristics collected in the survey. However, whether the selectivity of consent introduces significant biases for key administrative estimates remains an open question. Estimating non-consent biases for administrative estimates is complicated by the fact that administrative records are typically not available for the non-consenting cases. We overcome this limitation by utilizing data from the first wave of the German Labour Market and Social Security Study (PASS). PASS respondents were asked for consent to release their employment and benefit recipiency records for data linkage, and about 80% of them agreed to do so. We link the consent indicator to the administrative records (available for the full sample) to estimate non-consent biases for several descriptive administrative estimates obtained from the "Integrated Employment Biographies" (IEB) data. In addition, we use the administrative data to estimate more traditional forms of survey error, including nonresponse and measurement error, and assess their relative contributions to the overall error in the linked data set. A key question we address is whether the effort of getting consent (and the possible consequences of doing so) pays off in terms of improved data over asking respondents for this information – the presumption is certainly yes, but this has not been tested. In general, we find that non-consent biases are small for most variables and very small compared to nonresponse and measurement error biases.