Rich List Data and Adjusting for Nonresponse Bias

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Post-survey weighting adjustments are commonly used to mitigate nonresponse bias, but in most settings it is not possible determine to what extent such adjustments eliminate bias. Using survey records for the entire sample - respondents and nonrespondents - linked to administrative earnings records, this paper examines the degree to which reweighting eliminates nonresponse bias in the Department of Defense's Status of Forces Survey of Reserve Component Members. Unweighted tabulations of the administrative data, as well as tabulations weighting by simple demographics, show considerable unit and item nonresponse bias. However, reweighting using detailed covariates drawn from military personnel records eliminates almost all of this bias. These results provide a striking illustration of the larger point that when rich auxiliary data is available for the entire sample, reweighting using this information may be an effective way to reduce nonresponse bias.