Effects of Data Collection Methods on Estimated Household Consumption and Poverty, and on Survey Costs: Evidence from an Experiment in the Marshall Islands

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Household Income and Expenditure Surveys (HIES) are the main source of household-level consumption and expenditure information in many countries. These data serve many purposes, including poverty and food security monitoring, updating the CPI basket, and as an input to National Account calculations. In the Pacific, these surveys have historically gathered expenditure data with open form diaries completed on paper. This methodology, however, is costly to collect and burdensome for respondents, leading to long lags between rounds, substantial processing time, and decreased policy relevance due to a lack of frequency and timeliness. Also, non-compliance and partial-compliance with the diary-keeping method complicates analyses because it is hard to separate households with low consumption from those who lose enthusiasm for keeping the diary. This paper reports on a survey experiment carried out in the Marshall Islands where two variants of existing 14-day diary-keeping HIES used in the Pacific are compared with a 14-day diary survey that uses computer-assisted personal interviewing (CAPI) and with two variants of 7-day recall surveys using CAPI. Variable costs for the status quo diary survey design are between 2.8 and 4.4 times as expensive as for a single-visit 7-day recall survey, while the CAPI diary is even more costly. Despite the high cost of the diary-keeping surveys, they yield data that are, overall, of worse quality. The effective completion rate with less monitored diaries is only two-thirds and apparent consumption is significantly lower (and poverty higher) compared to all other modules. The highly monitored diaries give similar results to using recall, but at much greater cost.

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