

Self vs. Proxy Reporting in the Consumer Expenditure Survey

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Framing the discussion

- Nature of the Survey Instrument Frames the Research Questions
 - Consumer Expenditure Interview Survey
 - Retrospective Recall
 - How to minimize response error related to long term recall?
 - Consumer Expenditure Diary
 - Completion
 - How to maximize participation by all members of the CU?
- With analytic unit (CU) in mind

Note.....

We know little with respect to the quality of both self and proxy-based reports for the CE, so research aimed at reducing bias associated with proxy-based reports should not ignore the onerous task facing the self-reporter.

Literature.....

- Moore: little support for the notion that self response generally better than quality of proxy reports
 - Exception: Turner's study of crime
- Alwin: Lower reliability for proxy reports
 - education, occupation, hours work
- CE Focus
 - Intra-Household Communication Study
 - Self proxy agreement: 63% of the time
 - Self response: more purchases and higher dollar amounts
 - JPSM Teen-Parent Study
 - 24 hour period: 85% agreement rate
 - Mean underreporting dollar amount: \$6.75

CEI: Cognitive Processing Perspective

- Knowledge/Encoding
 - To what extent does the respondent/recorder have knowledge of the expenditure?
- Retrieval
 - To what extent can the respondent/recorder retrieve the expenditure?
- Reporting
 - To what extent is the respondent/recorder willing to report the expenditure?

Focus on improving proxy reporting.....

- Understand under what conditions proxy reports are more consistent with self
 - Acquisition of the knowledge, richness of the encoded material
 - Relationship between self and proxy
 - Salient vs. mundane purchases; routine or rare occurrences
- Focus on question wording to improve retrieval strategies
 - Episodic vs. Estimation strategies



..or focus on improving overall quality?

- Expand the use of records
 - Usual and expected expenditures
 - Utility bills, mortgages/rent
 - Receipts
- Take advantage of longitudinal nature of CEI
 - Redesign of information book?
 - Inter-interview outreach
 - IVR “tagging” periodically throughout the 3 month period
- Incorporate Technology
 - Barcode readers
 - Smartphone Applications

Diary...

- Multiple respondents per HH
 - Grootaert (1986)
 - Impact on personal item expenditures
 - Not necessary to get complete participation to be effective
 - Arbitron Radio Diary
 - BLS field study
 - Increase in the number of expenditure items
 - Increased dollar value of items
 - Lower RR; increased number of trips per complete

Different problem, similar solution

- Expand the use of records
 - Grocery store receipts, restaurant, convenience stores
- Incorporate Technology
 - Barcode readers
 - Smartphone Applications



Solutions demand full understanding of the problem

- **CEI: how effective is the bounding interview?**
 - To what extent do respondents understand that the use of records would reduce the burden?
- **CEI: what retrieval strategies do respondents use?**
 - Example: CEI as source of expenditures for gasoline
- **CED: what do we know about the communication of the diary to others in the CU?**
 - What reminders exist to help encourage reporting?
 - To what extent do interviewers stress the need for full participation?
- **CED: are there privacy issues within CU that suppresses reporting?**

Cost:Error Tradeoff

- Presumptive Nature of Tradeoff Questions
 - Poorer quality data for proxy
 - Compared to benchmarks, CE underestimates expenditures. But is this a proxy problem? What do we know about CE quality for self reports?
 - Lower Response Rates
 - Nonresponse bias, not rates
 - Full participation may not be the key to improvement
 - Higher Costs
 - Only if implementing the same approach to field operations

Burden: Redefine the task

- Examine source of expenditure for CPI and focus efforts within each instrument
 - Reduce Redundancies
 - “all other products, services, and expenses”
 - Divide and conquer: focus diary on “personal” expenditures/those for which diary provides input for the CPI and the CEI on household-level
 - CED: Food, personal care products & services, prescription and non-prescription drugs, housekeeping supplies, clothing
 - Grootaert findings

Before making changes in the design, consider.....

- Conducting a series of ethnographic and/or observational studies to gather further information about the response process for self and proxy reports.
- Designing studies so as to assess measurement error for both self and proxy reports.
 - Example: partner with Nielson and use their Homescan data as a validation source.
- Expanding the 2006 experimental study of the individual CED.
 - Reduce redundancies between CU level CED and individual diaries.
 - Include non-response follow-up study to address the tradeoff between increased participation and changes in response rates

With respect to design.....

- Redesign CED so as to capture receipts rather than requiring recording of information by hand.
 - Reduce the burden by pre-identifying common purchases that can be checked off rather than written in by hand.
- Experimenting with more aggressive requests for record keeping that involves all CU members during the first CEI interview.
 - Support and encourage record keeping through the use of outreach, including but not limited to postcards, IVR, email, and incentives.

Technology.....

- Test the feasibility of incorporating technology in the CED
- If technology feasibility study is positive, consider altering the design of the CED
 - Longer reporting period.
 - Tradeoff between reduced costs of enrollment vs. increased length of time as a diarist. Examine diary fatigue
 - CEI and CED within the same CU
- Experiment with the use of technology for the CEI