Evaluating the Association of Initial Expressions of Reluctance with Panel Survey Behavior

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Outline

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- Research Questions
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- Data and Methods
- Findings
  - Variability in households’ overall concerns over survey panel
  - Response patterns
  - Respondent effort, reporting quality
  - Perceived survey burden
- Conclusions & Caveats
Background
Consumer Expenditure (CE) Survey

- National household panel survey that collects information about buying habits of consumers
- Used to calculate the weights of items tracked by the Consumer Price Index (CPI), also used by economists, academics, and market researchers
- Study focus: Quarterly Interview Survey (CEQ) – survey of larger, easier-to-recall purchases
  - Designed as CAPI survey, with proxy reporting, conducted quarterly for 5 waves
  - About 1-hour in duration
Background:
Doorstep Concern Data

- Contact History Instrument’s Doorstep (DS) Concerns
- Interviewer-Assessed DS Concern(s) at Contact

<table>
<thead>
<tr>
<th>DS Concern Items (‘Mark All That Apply’)</th>
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<tbody>
<tr>
<td>1 Too busy</td>
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<tr>
<td>2 Not interested</td>
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<td>3 Privacy concerns</td>
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<tr>
<td>4 Scheduling difficulty</td>
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<tr>
<td>5 Survey voluntary</td>
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<td>6 Does not understand survey</td>
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<td>7 Interview too time consuming</td>
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<td>8 Anti-government</td>
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<td>9 Talk to specific HH member</td>
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<td>10 Intends to quit survey</td>
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<td>11 Family issues</td>
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<tr>
<td>12 Broke appt-puts off int. indefinitely</td>
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<td>13 Hangs up/slams door</td>
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<td>14 Too many interviews</td>
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<td>15 Hostile/threatening</td>
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<tr>
<td>16 Survey content not applicable</td>
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<tr>
<td>17 Other HH members say don’t do survey</td>
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<tr>
<td>18 Too many questions previously</td>
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<tr>
<td>19 R requests same interviewer</td>
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<tr>
<td>20 Interview too long previously</td>
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<tr>
<td>21 Information previously given</td>
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<tr>
<td>No concerns</td>
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<tr>
<td>Other specify</td>
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Research Questions

1. Do households’ overall DS concerns vary over survey panel?
2. Are respondents with DS concerns responding throughout survey panel?
3. Do these respondents provide poorer data quality?
4. Do pre-survey DS concerns lead to greater perceptions of survey burden after panel completion?
### Data

- **Sample units combined from 6 panels from October 2011 to March 2013 (N=3,000)**

<table>
<thead>
<tr>
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<th>Wave 1 (N=3,000)</th>
<th>Wave 5 (N=3,000)</th>
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<tr>
<td>Unit response (completed interviews)</td>
<td>86%</td>
<td>83%</td>
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<tr>
<td>No DS concerns</td>
<td>52%</td>
<td>46%</td>
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<tr>
<td>Top DS concerns (of HH with DS concerns)</td>
<td>-Too busy (22%) -Not interested (14%) -Privacy concerns (13%) -Scheduling difficulty (12%)</td>
<td>-Too busy (24%) -Not interested (15%) -Privacy, scheduling difficulty, too many interviews (12%)</td>
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</table>
Developed composite scores for each wave based on 21 DS concern items using principal components analyses (per Henderson et al., 1990), and divided scores into 3 groups:

Wave 1 DS concern groups:
- High concerns (N=715)
- Low concerns (N=742)
- No concerns (N=1,561)
Findings

1. Change in DS Concern Groups Over Survey Panel

Across survey panel, some households moved to a higher DS concern group (27%) but most remained in the same group at Wave 5 as at Wave 1 (52%).

- Higher group (N=747): 27%
- Same group (N=1,650): 52%
- Lower group (N=603): 21%
Findings

2. Panel Response Patterns for DS Concern Groups

- Respondents in High DS concern group completed fewer interviews

No concerns (N=1,561)

- 5 interviews completed

Low concerns (N=742)

- 4 interviews completed

High concerns (N=715)

- 3 interviews completed
Findings
3. Respondent Effort and Data Quality (Wave 5)

Interviewer rating measures:

1) Effort: “How much effort would you say this respondent put into answering the expenditure questions during this interview?”
   A lot of effort, a moderate amount of effort, a bare minimum of effort

2) Record Use: “Did respondent use records for questions?”
   90% of time or more, 50% to 89% of time, 10% to 49% of time, less than 10% of time

3) Consult Others: “Did the respondent get information from other household members when answering the questions?”
   Yes, No, Don’t Know
Findings
3. Respondent Effort and Data Quality (Wave 5)

Interviewer ratings for respondents in High DS concern group:

1) Effort – Half as many (19%) rated as exerting ‘a lot of effort’

2) Record Use – Almost half as many (11%) reported to use records at least 90% of the time

3) Consult Others – Significantly fewer (11%) reported to get (expenditure) information from other household members
Findings

3. Respondent Effort and Data Quality (Wave 5)

Data quality measures for respondents in High DS concern group:

- Significantly higher proportion of edited expenditure records (21%)
- More likely to require refusal conversion (26%)
- Almost twice as likely to be reassigned to a different interviewer (11%)
Findings
4. Perceived Survey Burden (Wave 5)

- Used burden composite scores (similar to DS composite scores) based on questions respondents answered in Wave 5

- Found significant correlation between respondents’ burden composite scores and their DS concern scores: Spearman $\rho=0.38$ ($p<0.0001$)
Conclusions

- Most households did not exhibit significant change in DS concern ranking over survey panel.
- Households with higher concern rankings in Wave 1 were less likely to complete all 5 interviews.
- Among responding households, those with higher concern rankings were less likely to exhibit optimal reporting behavior and provide high-quality data.
- Respondents with higher concern rankings at last interview also perceived survey burden to be higher.
Caveats

- Unclear how consistently interviewers record various DS concerns that are expressed
- No data available on the construct validity of DS concern items
- Unclear how often person expressing DS concern is the same person responding to survey
- Did not control for household characteristics in this study
Contact Information

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Disclosure: Any opinions expressed in this paper are those of the authors, and do not constitute policy of the Bureau of Labor Statistics.
Examined DS concern themes ("No concerns," "not interested/hostile," "survey content/privacy," "time") and panel response
Themes by DS Concern Group

Figure 3. Prevalence of doorstep concern themes across survey panel

- Not interested / hostile
- Survey content / Privacy
- Time
- Prior wave (n/a in Wave 1)
- Gatekeeping

Low concerns group
High concerns group

Percent reporting

Wave 1 (n=724)
Wave 2 (763)
Wave 3 (787)
Wave 4 (879)
Wave 5 (808)
Wave 1 (n=715)
Wave 2 (764)
Wave 3 (793)
Wave 4 (741)
Wave 5 (805)