Incentives in the Consumer Expenditure Survey: One Payment, Lasting Effects

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Overview

- Consumer Expenditures Quarterly Interview Survey (CEQ)
- Motivation for incentives experiment
- Experimental design
- Results
- Summary
Background: CEQ

- One of two BLS surveys that together provide a detailed picture of spending patterns and income of American consumers
- Difficult survey for respondents and for interviewers
  - Sample units interviewed 5 times over 13 months; each interview is a "wave"
  - Respondent asked to report purchases and expenditures for all household members
  - Primarily personal interviews, increasingly conducted over the telephone
  - Average interview takes about an hour
- Data collected for BLS by the Census Bureau
Motivation for Incentives Experiment

- Falling response rates: early 1990s, mid-80 percent range, 2004 mid-70s (AAPOR RR1)
- Incentives effective in raising response rates
- Singer et al. (1999) meta-analysis of interviewer-mediated surveys
  - Incentives still effective with interviewer involvement
  - The higher the initial response rate, the smaller the difference between no-incentive and incentive
  - Effects relatively modest after controlling for other variables
- SIPP’s experiments with incentives in mid-1990s
- Many similarities between CEQ and SIPP
Primary Research Questions

- Can an incentive stem the decline in CEQ response rates?
- Will that effect hold across the five waves of the panel survey?
- Will the incentive affect data quality?
- Will the incentive affect the overall sample composition?
- Will the incentive affect field costs?
Experimental design

- Conduct experiment within production data collection
- Use prepaid monetary incentive: debit card
- Distribute the incentive only in wave 1
- Four treatment groups

<table>
<thead>
<tr>
<th>Mail method</th>
<th>Experimental condition</th>
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<tbody>
<tr>
<td>Priority Priority</td>
<td>No Incentive Priority Mail</td>
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<tr>
<td>First Class</td>
<td>No incentive Control</td>
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</tbody>
</table>

- Incentives distributed November 2005--July 2006
- Details in McGrath (2006)
## Sample Sizes by Treatment Groups

<table>
<thead>
<tr>
<th>Wave</th>
<th>Control Regular Mail</th>
<th>No Incentive Priority Mail</th>
<th>Incentive $20</th>
<th>Incentive $40</th>
<th>Total</th>
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<tbody>
<tr>
<td>1</td>
<td>1,922</td>
<td>1,759</td>
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<td>1,395</td>
<td>1,466</td>
<td>1,396</td>
<td>5,774</td>
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<tr>
<td>Total</td>
<td>8,336</td>
<td>7,681</td>
<td>8,047</td>
<td>7,793</td>
<td>31,857</td>
</tr>
</tbody>
</table>
Results: Response Rates

- Control
- No incentive Priority Mail
- Incentive $20
- Incentive $40

Wave 1
Wave 2
Wave 3
Wave 4
Wave 5
Results: Refusal Rates

- Control
- No incentive Priority Mail
- Incentive $20
- Incentive $40

Wave 1 wave 2 wave 3 wave 4 wave 5

Percent

Wave 1  Wave 2  Wave 3  Wave 4  Wave 5

0  5  10  15  20  25  30

125 YEARS BLS
Results: Noncontact Rates

- Control
- No incentive
- Priority Mail
- Incentive $20
- Incentive $40

Wave 1  Wave 2  Wave 3  Wave 4  Wave 5
Percent
Data Quality

- Direct measure: Reported expenditures
  - “More is better” in CEQ
  - Increasing expenditures across the experimental groups, most not statistically significant

- Indirect measures:
  - Number of expenditure questions answered (more)
  - Whether respondent consulted records (more)
  - Number DK/Refused responses (fewer)
  - No imputation/allocation required (more)
Indirect Data
Quality Measures

- Waves 2-5: Statistically significant at p < .05 $40 incentive versus control

- Control
- No Incentive Priority Mail
- Incentive $20
- Incentive $40
Indirect Data
Quality Measures (cont.)

- Statistically significant at $p < .05$ $40$ incentive versus control
Results: Sample Composition

- No statistically significant differences at wave 1 or in later waves
- Demographic characteristics
  - Trend toward more black respondents in incentive groups, as compared to control group, in wave 1 and in later waves
- Household characteristics
  - Trend: $40 incentive group had more 1-person households than control
  - Trend: $20 and $40 incentive groups had more respondents from urban than rural areas
- Household income
  - Median reported income: control group and $40 incentive group are roughly equal
  - Mean income increases from control to $40 incentive condition
  - Distribution of income quintiles is fairly similar across treatment groups
Effect on Field Collection

- Statistically significant at $p < .05$ $40$ incentive versus control

Contact Attempts

Days between First and Last Attempt
Summary

- Incentives experiment was successful in increasing response rates
- Effects of the $40 incentive lasted through 5 interviewing waves
  - Some positive effects on data quality
  - No effect on sample composition
- $20 incentive not significantly different from no incentive
- Field Costs: $40 incentive resulted in fewer contacts, shorter field period
Contact Information

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