The Effect of Large Monetary Incentives on Survey Completion: Evidence From a Randomized Experiment

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The analysis and conclusions set forth are those of the authors and do not indicate concurrence by other members of the research staff or the Board of Governors of the Federal Reserve System.
Objective

• Overall goal: determine optimal level of incentives for Survey of Consumer Finances 2016
  • Would use of pre-paid incentives and/or larger post-paid incentives get more people to cooperate sooner?
  • Would a quicker escalation strategy with escalated incentives get more people to participate sooner, thus shortening the field period?

• Experiment to analyze how response rates/interviewer effort are influenced by variation in:
  • Pre-paid incentives ($5 vs none)
  • Promised post-paid incentive levels ($50, $100, $150)
  • Escalation of post-paid incentives
Context: Survey of Consumer Finances

- Triennial survey sponsored by Federal Reserve Board, data collected by NORC
- Focus on finances of American families
  - Collects detailed information about assets, liabilities, income, employment and retirement benefits
- Administered by field interviewers either in-person or by telephone
- Dual frame sample: national area probability sample and list oversample of the wealthy
How do incentives influence completion?

• Main theoretic reasons for survey response:
  1. altruistic (contribute to science/research),
  2. egoistic (such as monetary incentives),
  3. reasons associated with survey itself (interest in the topic, trust in the organization behind the survey).

• According to theories of economic and social exchange, incentives
  • Appeal to norms of reciprocity
  • Establish trust and legitimacy of organization

• Can complement efforts to appeal to non-egoistic motivation
• But do effects continue to increase when incentives are larger?
How do incentives influence completion? (2)

• Timing of incentives matter: prepaid typically works better than postpaid
• Amounts matter (but most studies use incentives much lower than the SCF)
• Effect on response of higher amounts may be non-linear?
Current SCF incentive structure (2013)

• $50 base incentive
• Escalations in stages: $75 - $100 in week 16, $150 - $200 in week 28, $300 in week 42.
• Still, substantial difficulties securing interviews from certain subgroups (especially higher income areas)
• Question: do pre-paid incentives or higher base incentives decrease overall cost of achieving target response rate?
Set-up of experiment

• Miami, LA, NYC: 300 cases in each city
  • Focus on census tracts with above average income (~80th percentile)
• Respondents approached for an “SCF 2014”
  • Pre-notification letters in the mail
  • Field Interviewer (FI) visits
  • If R consents to interview, FI will ask a short interview on demographics/income/motivation for responding to interview
• Shortened field period
Experimental groups

• Pre-paid included with invitation letter: $5; no pre-paid

• Post-paid incentive listed on invitation: $50; $100; $150
  • Phase 1: FI works case based on initial offer; phase ends when R makes soft refusal
  • Phase 2: Half of cases eligible for escalated incentive, other half receives same initial incentive (will not discuss today)
  • Interviewer does not know escalation eligibility until after the first soft refusal
PHASE 1
FI attempts contact (808)

Live contact made?

no

yes

R soft refusal

R calls NORC (33)

AA: R accepts interview (22)

AB: R hard refusal (11)

B: Phase 1 incomplete (321) (if no time)

C: R accepts interview (236)

D: R hard refusal (49)

NORC sends more info

R says come back later/need more info

PHASE 2 (not discussed today)
FI attempts contact (200)

Z Out of scope (92)

Initial mailing (900)

R says come back later/need more info

NORC sends more info

R calls NORC (33)
Response rates after Phase 1

Phase 1 response rates, by incentive levels

Overall results of phase 1
• 29% completed a survey
• 6% hard refusal
• 40% no live contact (phase 1 incomplete)
• 25% moved to phase 2 (soft refusal 200 cases, but little time to complete)
Regression results: Phase 1 completion

<table>
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<tr>
<th>Mean dependent variable</th>
<th>0.287</th>
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<tr>
<td>$100 (relative to $50)</td>
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<tr>
<td>$150</td>
<td>0.0717**</td>
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<tr>
<td>N</td>
<td>802</td>
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<tr>
<td>R2</td>
<td>0.202</td>
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</table>

* p<0.1, ** p<0.05, *** p<0.01

- Other controls: locked/gated community; number of contact attempts; city dummies; median household income within census tract; date of first contact; dummy for ever reached
Examining intermediate outcomes

• Goal is not just to achieve completion, but to measure if surveys can be completed with less cost/interviewer effort
  • R calls NORC and completes interview over the phone
    • This saves a lot of money and time
  • FI makes a “live contact” with R
  • Conditional on live contact, R completes the survey
Regression results: R calls NORC and completes survey

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<td>N</td>
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<td>R2</td>
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- Other controls: locked/gated community; number of contact attempts; city dummies; median household income within census tract
Regression results: FI makes live contact

<table>
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<th>Florida</th>
<th>New York + Calif.</th>
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<tbody>
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<td></td>
<td>All</td>
<td>Not locked building</td>
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<td>R2</td>
<td>0.149</td>
<td>0.083</td>
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</table>

- Other controls: locked/gated community; number of contact attempts; city dummies; median household income within census tract
- Sensitive to coding of “live contact”
Regression results: Conditional on live contact, R completes survey

<table>
<thead>
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<tr>
<td>R2</td>
<td>0.107</td>
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- Other controls: locked/gated community; number of contact attempts; city dummies; median household income within census tract; date of first contact
Conclusion

• Prepaid provides a lot of “bang for the buck”

• Potentially different effects of incentives for live contact, completion

• Larger incentives do not appear to improve contact with cases in locked/gated communities in Florida (implications for overall target response rates)

• Experiment targeted higher-income tracts; effects likely a lower bound

• Average case takes approximately 16 hours, so higher incentives could be easily offset by even a small reduction in FI hours/case