Using a Multi-Mode Design on a Panel Study of New Businesses

Presentation to the Kauffman Establishment Survey Roundtable
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Overview

- Background on Kauffman Firm Survey (KFS)
- Multi-Mode Survey Considerations
- Panel Maintenance
- Level of Effort Analysis
- Conclusions
Background

- Longitudinal survey of new businesses: 4,928 panel members at baseline (2005-2006)
- Five annual follow-up surveys (2006-2010)
- Modes: web, CATI follow-up
- Questionnaire topics:
  - Business Characteristics
  - Strategy and Innovation
  - Business Organization and HR Benefits
  - Business Finances
  - Work Behaviors and Demographics of Owner(s)
# KFS Data Collection Results

<table>
<thead>
<tr>
<th>Year</th>
<th>Sample Size</th>
<th>Comp</th>
<th>Out of Business</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline 2005</td>
<td>32,468</td>
<td>4,928</td>
<td>4,287</td>
<td>43%</td>
</tr>
<tr>
<td>1st Follow-Up</td>
<td>4,928</td>
<td>3,998</td>
<td>297</td>
<td>89%</td>
</tr>
<tr>
<td>2nd Follow-Up</td>
<td>4,561</td>
<td>3,390</td>
<td>335</td>
<td>82%</td>
</tr>
<tr>
<td>3rd Follow-Up</td>
<td>4,295</td>
<td>2,915</td>
<td>425</td>
<td>83%</td>
</tr>
<tr>
<td>4th Follow-Up</td>
<td>3,867</td>
<td>2,606</td>
<td>355</td>
<td>83%</td>
</tr>
<tr>
<td>5th Follow-Up</td>
<td>3,511</td>
<td>2,408</td>
<td>297</td>
<td>83%</td>
</tr>
</tbody>
</table>
KFS Baseline Survey

- Emphasized “web-first” approach
- Primarily CATI, lack of email addresses from D&B sample frame
- Emails collected for 85 percent of panel members
- Low eligibility (35 percent) increased overall LOE
- Total calls made during data collection: 372,000
KFS Follow-Up Surveys

- Continued “web-first” approach, with email contacting
- Evolved into web panel through use of email contacting
- Eligibility screening limited to out-of-business firms
- Total calls made during data collection: average of 40,000 calls per round
Multi-Mode Design – Pros and Cons

- **Pros**
  - Cost advantages of web survey completion
  - Better coverage of establishments by industry
  - Provides flexibility and convenience for respondents

- **Cons**
  - Potential for mode effects
  - More expensive survey management systems requirements
Panel Maintenance

- KFS employs the following strategies to maintain panel member participation:
  - Keeping respondent burden consistent over all rounds
  - Including study results in respondent communications
  - Prompt incentive payments
  - Quick turnaround on respondent questions
  - Panel maintenance mailings after each round including study-labeled gift
Level of Effort (LOE) Analysis: Definitions

- LOE = number of computer-assisted telephone interview (CATI) attempts
- Speed of response = percentage completing within one month of invitation
- Firm size = based on number of employees (non-employers, 1-3 employees, 4-9 employees, 10+ employees)
Overview of LOE Analysis Findings

- Use of multi-mode survey can “train” longitudinal respondents to use and stay with web
- LOE reduced in early follow-up rounds due to email contacting
- LOE increases in later rounds
  - More CATI attempts
  - Longer to respond after invitation
- Larger firms require higher LOE than smaller firms
Average LOE by Completion Status

Number of CATI attempts

- Total Cases
- Completes
- Noncompletes

Axis Title

Total Cases

Completes

Noncompletes

[Graph showing average LOE by completion status over years 2005 to 2010, with lines for total cases, completes, and noncompletes]
LOE per Complete by Mode

Number of CATI attempts

- Total Completes
- Total CATI
- Total Web

Speed of Response

% completing in first 30 days

- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
LOE by Firm Size

Number of CATI attempts

- Non-employers
- 1-3 employees
- 4-9 employees
- 10+ employees

Web Completion by Firm Size

Percent Web Completes

- Non-employers
- 1-3 employees
- 4-9 employees
- 10+ employees

Years: 2005 to 2010
Summary of Changes in LOE

- Use of email contacting in 1st follow-up reduced LOE
  - Total cases by 29 percent
  - Total completes by 22 percent

- LOE rises through middle follow-ups

- Steeper increase from 4th to 5th follow-up, expect last two follow-ups to follow trend

- LOE higher among larger firms
Conclusions

- Training longitudinal respondents can be done
- Cost savings not continuous over multi-round survey program
- Panel fatigue an issue even for respondents comfortable with web survey
- Further research needed on factors correlated with LOE
Contact Information

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KFS Data available at:
http://www.kauffman.org/kfs

KFS papers and methodology reports available at:
http://papers.ssrrn.com