Response Rates in European Business Tendency Surveys

Gerhard Schwarz (WIFO)
Brussels, 14 November 2013
Overview

Response rates and survey quality

Driving factors of response rates

Survey experiment
Response rate and data quality

Metadata provided by ECFIN

Quality indicators:
- Corr.Coeff. of BCS and reference series
- MCD1
- MCD2

Correlation analysis and OLS
OLS-Predictors

• Response rate
• Type of institute: national bank or statistical institute (yes/no)
• Panel (yes/no)
• Quota sampling (yes/no)
• Sector (industry, construction, services, retail trade)
• Fieldwork method (postal, fax, email/online, telephone)
• Type of member state (New member state or candidate country, yes/no)
• Country size (inhabitants in millions)
• Effective sample size (in thousands)
Findings

No relation between response rates and quality measures. However, response rates could be used to measure “efficiency” of a survey process.
Drivers of response rates

OLS regression - predictors:
• Type of institute: national bank or statistical institute (yes/no)
• Panel (yes/no)
• Quota sampling (yes/no)
• Sector (industry, construction, services, retail trade)
• Fieldwork method (postal, fax, email/online, telephone)
• Type of member state (New member state or candidate country, yes/no)
• Country size (inhabitants in millions)
• Effective sample size (in thousands)
• Means to increase response rates (yes/no)
Significant findings

Statistical Offices & National Banks: +23 %-points
Quota samples: +35 %-points
Postal surveys: -11 %-points

Measures to increase response rates: insignificant
Caveats

Different concepts of “response rates” - depending on sampling methods

Metadata sometimes idiosyncratic, ambiguous

Metadata is cross sectional, quality indicators are longitudinal
Survey experiment

TDM (Dillman) and behavioral economics give clear indications how response rates could be improved.

WIFO tested some of them in an experiment.
Sample and fieldwork

3,728 Austrian firms from manufacturing, construction, services (and tourism)
6 or more employees
Not yet part of WIFO’s panel
All treatments were assigned randomly
Respondents were addressed by mail (online option)
Fieldwork during September 2013 (well into October)
Definitions

WIFO’s panel is based on voluntary participation.

We distinguish two rates when recruiting new participants:

- **Response rate**: % of respondents answering the questionnaire
- **Conversion rate**: % of respondents joining the panel
What didn’t work

• Layout of the cover/reminder letter (alternative, S-shaped layout)
• Adding WIFO’s red logo to the questionnaire & marking the questions red
• Avoid printing a firm identifier on the cover letter
• Call to action in the post scriptum
• Format of the envelope (B4 or C5)
• Sealing the envelope
• Changing the researcher signing the cover/reminder letter
• Naming the EU (ECFIN) as partner/sponsor on questionnaires
Authoritarian cover letter

Response rate: 14 %
+4 %-points compared to base level

Conversion rate: 10%
+4 %-points compared to base level

Other letters showed no effect (social proof, self-interest)

Researcher’s acad. title maybe detrimental
Token of appreciation

Token: Pen with survey’s logo
Appropriate, logical link, stays around for months
Response rate: 13 %
   +3 %-points compared to base level
Conversion rate: 7%
   +2 %-points compared to base level
Frequency of participation

No influence on response rate
Conversion rate in initial contact: 7%
  +2 %-points compared to base level
Conversion rate in reminder wave: 7%
  +4 %-points compared to base level
94% opted for the quarterly frequency
Additivity of these three measures

Response rate: from 7% (0 measures) to 12% (1 measure) to 27% (2 or 3 measures)
  +5 and +20%-points comp. to base level
Conversion rate: from 3% (0 measures) to 6% (1 measure) to 23% (2 or 3 measures)
  +3 and +20%-points comp. to base level
Gap between response and conversion closes
Reminder

1,062 firms, subset of those not responding to the initial contact
The reminder turned out to be highly efficient, adding to the initial response/conversion:
Reminder response rate: 12%
Reminder conversion rate: 6%
Firm and social demographics

No sector effects, no size effects, no sex effect

(Academic) title of contact person:

Response rate in initial contact: 12%
  +3 %-points compared to base level

Conversion rate in initial contact: 7%
  +2 %-points compared to base level

Response rate to reminder: 16%
  +6 %-points compared to base level

Conversion rate of reminder: no effect
Summary

No effect of response rate on survey quality
Higher response rates by statistical offices & national banks, quota sampling (!), lower for postal, increasing measures: no effect (?)
Metadata carry some complexities
Measures derived from TDM & behavioral economics highly effective