A Validation Study on Voter Turnout Bias in Switzerland

Simon Hugi and Ben Jann

University of Bern, ben.jann@soz.unibe.ch

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Outline

- Introduction
- Our study
- Results
- Conclusions
Introduction: Voter Turnout Bias in Switzerland

Source: Own calculations based on the most recent VOX dataset.

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Introduction: Research Questions

- What are the mechanisms that lead to the observed turnout bias in Swiss voting and election studies?
- How much do the different mechanisms contribute to the total bias?
- Is it possible to reduce the bias by special questioning techniques or weighting schemes?
Introduction: Types of Biases

- **Undercoverage**
  - Sampling frames typically do not cover the whole population.
  - Political participation is likely to be lower among uncovered subpopulations (e.g. young people without landline) than among covered subpopulations, leading to a positive bias in survey estimates of voter turnout (Mokrzycki, Keeter und Kennedy 2009, Blumberg und Luke 2007)

- **Nonresponse**
  - Participation in surveys correlates with political interest and political participation (Voogt und Saris 2003, Jackman 1999, Brehm 1993).

- **Misreporting**
  - Due to social desirability (Tourangeau und Yan 2007) and recall errors (Belli et al. 1999), respondents tend to overreport their participation behavior.
Introduction: Types of Biases

Measurement

Construct

Measurement

Response

Edited response

Survey estimate

Representation

Target population

Coverage error

Sampling frame

Sampling error

Sample

Nonresponse error

Respondents

Adjustment error

Postsurvey adjustments

Validity

Measurement error

Processing error

(Groves et al. 2009:48)
Our Study

- Voter turnout validation study comparing survey data to polling cards at a small municipality in Switzerland.

Polling cards
- Federal votes of September 22 and June 9, 2013.
- Citizens who took part in the votes can be identified from the collected polling cards.

Survey
- Gross sample of 2000 citizens from the municipality’s register.
- Net sample of 1696 (84.8%) citizens whose households could be found in the telephone register.
- CATI survey between September 23 and October 20 with 893 respondents (52.7% of net sample).
- Questions on: political interest, participation the votes, social desirability of voting, key indicators of political participation research, social demographics.
- Wording experiment voting question.
Main Results: September 22 Vote

- **Population**: 59.2% (N=4559)
- **Gross sample**: 59.3% (N=2000)
- **No telephone**: 35.5% (N=304)
- **Net sample**: 63.4% (N=1696)
- **No interview**: 53.1% (N=803)
- **Interviewed sample**: 72.6% (N=893)
- **Self-report**: 80.6% (N=893)

Turnout (in percent):
- No interview:
  - refused: 40% (N=803)
  - not reached: 45% (N=803)
  - unable: 40% (N=803)
- Interviewed sample:
  - Total: 72.6% (N=893)
Main Results: June 9 Vote

Population
- 49.8% (N=4459)
- 49.6% (N=1966)
- 27.5% (N=289)
- 53.3% (N=1677)
- 43.8% (N=792)
- 61.7% (N=885)
- 80.6% (N=871)

Turnout (in percent)

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- 49.8% (N=4459)
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## Over- and Underreporting

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<th>September 22</th>
<th>self-report</th>
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<td></td>
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<tr>
<td>– voted</td>
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<td>(N = 893)</td>
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<th>June 9</th>
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<td>– did not vote</td>
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<td>(N = 864)</td>
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Average marginal effects from logistic regressions
Determinants of Overreporting (September 22 Vote)

- Political interest (1–5)
- Party member
- Left–right (0–10)
- Voting is civic duty
- Internal political efficacy (1–5)
- External political efficacy (1–5)
- Most people in own circle vote
- People in own circle would not like it if I don't vote
- Female
- Tertiary education
- Age (ref = 18 – 34): 35 – 49, 50 – 64, 65 or older

Average marginal effects (N=183, $R^2_{MF}=.139$)
Wording Experiment

- The sample was randomized into a control group and a treatment group.
- The control group received a standard voting question.
  - „How about you, did you vote or not?“
- The treatment group received a modified voting question intended to minimize social-desirability bias and recall errors.
  - „Please try to remember whether you read the voting documents and whether you voted in person or by mail. Which of the following statements does apply to you?“
    - I did not vote.
    - I thought about voting, but did not.
    - I usually vote, but did not this time.
    - I am sure I did vote.
Wording Experiment: Results

- September 22 vote
- June 9 vote

Turnout (in percent)

Control | Treatment | Control | Treatment

polling cards | self-report

Hugi/Jann (University of Bern)
A Validation Study on Voter Turnout Bias
Venice, 18.11.2015
Wording Experiment: Results

![Bar chart showing voter turnout bias and over/underreporting on September 22 and June 9 votes.]

- **September 22 vote**
  - Control: Bias
  - Treatment: Overreporting
  - Control: Underreporting

- **June 9 vote**
  - Control: Bias
  - Treatment: Overreporting
  - Control: Underreporting

*Hugi/Jann (University of Bern)*
Summary and Conclusions

Undercoverage, nonresponse, and overreporting jointly contribute to the participation bias in survey data; contribution of overreporting increases over time.

Undercoverage, nonresponse, and overreporting have differential sociodemographic profiles.

The errors potentially affect associations and regression models estimated from survey data. Overreporting appears particularly problematic.

Alternative wording to minimize social-desirability bias and recall errors did not lead to substantial improvement.

<table>
<thead>
<tr>
<th>Error Type</th>
<th>Sept 22 PP</th>
<th>Sept 22 %</th>
<th>June 9 PP</th>
<th>June 9 %</th>
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<tr>
<td>Overreporting</td>
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<td>37.4</td>
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<td>30.8</td>
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References