A Validation Study on Voter Turnout Bias in Switzerland

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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 subpopulation, 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

**Representation**
- Target population
- Sampling frame
- Sample
- Respondents
- Postsurvey adjustments

Survey estimate

- Validity
- Measurement error
- Processing error

(Groves et al. 2009:48)
Our Study

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

Polling cards
- Citizens who took part in the vote 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 in the September 22 vote and other votes, social desirability of voting, key indicators of political participation research, social demographics.
- Wording experiment for the September 22 voting question.
Main Results

59.2% N=4559 Population

Gross sample
No telephone
Net sample
No interview
Interviewed sample
Self-report

Turnout (in percent)

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Main Results

- Population: 59.2% (N=4559)
- Gross sample: 59.3% (N=2000)
- No telephone
- Net sample
- No interview
- Interviewed sample
- Self-report

Turnout (in percent)
Main Results

- Population: 59.2% (N=4559)
- Gross sample: 59.3% (N=2000)
- No telephone: 35.5% (N=304)
- Net sample: 63.4% (N=1696)
- Interviewed sample: 59.2% (N=4559)
- Self-report: 59.3% (N=2000)
- Turnout (in percent)
Main Results

Population:
- Refused: 59.2% (N=4559)
- Not reached: 59.3% (N=2000)
- Unable: 35.5% (N=304)
- Interviewed: 63.4% (N=1696)
- Self-report: 53.1% (N=803)
- Turnout: 72.6% (N=893)

Population (Gross sample):
- No telephone: 35.5% (N=304)

Population (Net sample):
- No interview: 53.1% (N=803)

Population (Interviewed sample):
- Self-report: 72.6% (N=893)
Main Results

Turnout (in percent)

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

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### Over- and Underreporting

<table>
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<tr>
<th>polling cards</th>
<th>did not vote</th>
<th>voted</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>– did not vote</td>
<td>69.6</td>
<td>30.4</td>
<td>100.0</td>
</tr>
<tr>
<td>– voted</td>
<td>0.4</td>
<td>99.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(N = 893)
Sociodemographic Profiles

Average marginal effects from logistic regressions
Determinants of Overreporting

- 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

Control group (N = 438)  Experimental group (N = 455)

polling cards  self-report
Wording Experiment: Results

- Control group (N = 438)
- Experimental group (N = 455)

- Bias
- Overreporting
- Underreporting
Summary and Conclusions

- Undercoverage, nonresponse, and overreporting jointly contribute to the participation bias in survey data.

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<tbody>
<tr>
<td>Sampling error</td>
<td>0.4%</td>
</tr>
<tr>
<td>Undercoverage</td>
<td>19.2%</td>
</tr>
<tr>
<td>Nonresponse</td>
<td>43.0%</td>
</tr>
<tr>
<td>Overreporting</td>
<td>37.4%</td>
</tr>
<tr>
<td>Total bias (21.5 pp)</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

- Undercoverage, nonresponse, and overreporting have differential sociodemographic profiles.

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

- Effort should be put into improving survey measurements of political participation and new correction methods should be developed.

- However: Surveys will always remain an approximate science.
References


