A Validation Study on Voter Turnout Bias in Switzerland

Simon Hugi and Ben Jann

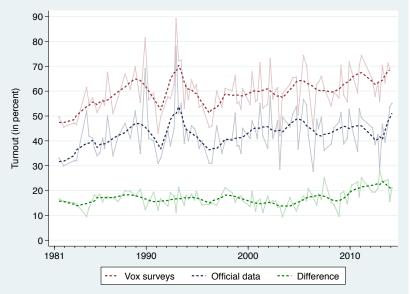
University of Bern, ben.jann@soz.unibe.ch

Rational Choice Sociology: Theory and Empirical Applications Venice International University, November 16–18, 2015

Outline

- Introduction
- Our study
- Results
- Conclusions

Introduction: Voter Turnout Bias in Switzerland



Source: Own calculations based on the most recent VOX dataset

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)

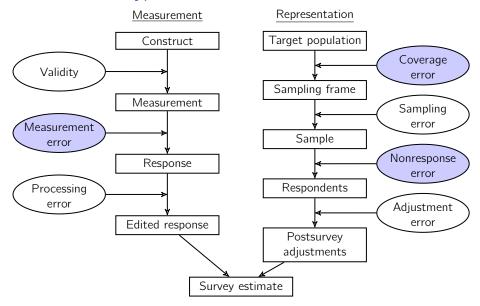
Nonresponse

 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



(Groves et al. 2009:48)

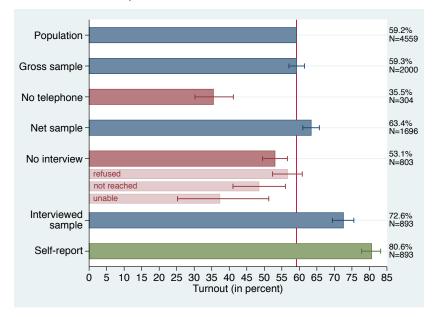
Our Study

- 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.

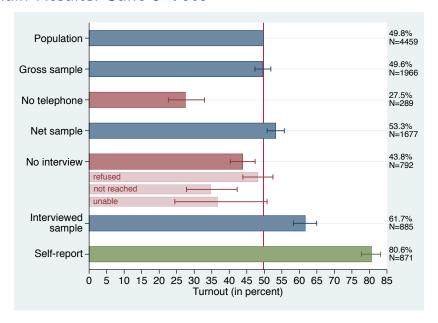
Survey

- ▶ 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



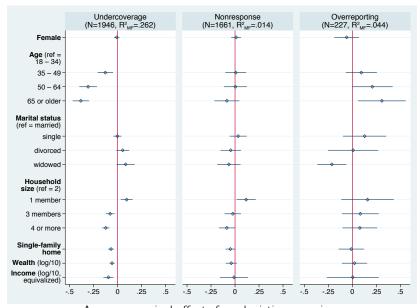
Main Results: June 9 Vote



Over- and Underreporting

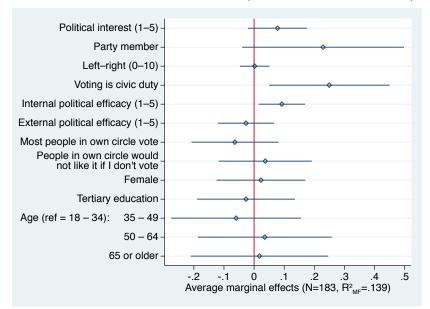
September 22	self-rep			
	did not vote	voted	Total	
polling cards				
did not vote	69.6	30.4	100.0	
voted	0.4	99.6	100.0	
			(N = 893)	
June 9	self-rep			
	did not vote	voted	Total	
polling cards				
did not vote	45.8	54.2	100.0	
- voted	3.2	96.8	100.0	

Sociodemographic Profiles (September 22 Vote)



Average marginal effects from logistic regressions

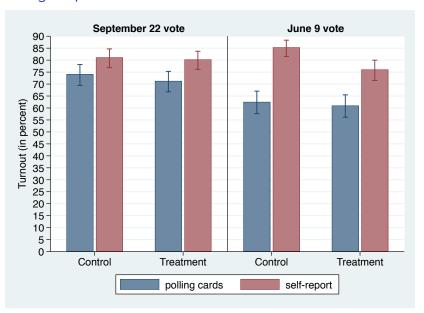
Determinants of Overreporting (September 22 Vote)



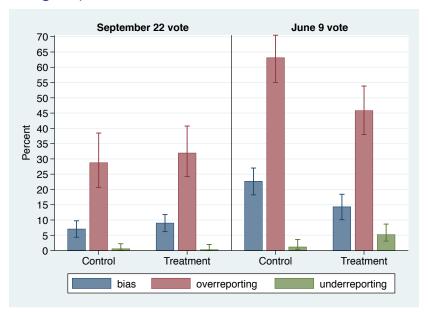
Wording Experiment

- 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



Wording Experiment: Results



Summary and Conclusions

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

	Sept 22		June 9	
	PP	%	PP	%
Sampling error	.1	0.4	2	-0.5
Undercoverage	4.1	19.2	3.7	11.9
Nonresponse	9.2	43.0	8.4	27.3
Overreporting	8.0	37.4	18.9	61.3
Total bias	21.5	100.0	30.8	100.0

- 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.

References

- Belli, Robert F., Michael W. Traugott, Margret Young, Katherine A. McGonagle. 1999. "Reducing Vote Overreporting in Surveys: Social Desirability, Memory Failure, and Source Monitoring." *Public Opinion Quarterly* 63(1):90–108.
- Blumberg, Stephen J. und Julian V. Luke. 2007. "Coverage Bias in Traditional Telephone Surveys of low-Income and Young Adults." *Public Opinion Quarterly* 71(5):734–749.
- Brehm, John. 1993. The Phantom Respondents. Opinion Surveys and Political Representation. Ann Arbor: University of Michigan Press.
- Groves, Robert, M., Floyd J. Fowler Jr., Mick P. Couper, James M. Lepkowski, Eleanor Singer, Roger Tourangeau. 2009. Survey Methodology (2nd. ed.). Hoboken, NJ: Wiley.
- Jackman, Simon. 1999. "Correcting Surveys for Non-Response and Measurement Error Using Auxiliary Information." *Electoral Studies* (18):7–27.
- Mokrzycki, Michael, Scott Keeter und Courtney Kennedy. 2009.
 "Cell-Phone-Only Voters in the 2008 Exit Poll and Implications for Future Noncoverage Bias." Public Opinion Quarterly 73(5):845–865.
- Tourangeau, Roger und Ting Yan. 2007. "Sensitive Questions in Surveys." Psychological Bulletin 133(5):859–883.
- Voogt, Robert J. J. und Willem E. Saris. 2003. "To Participate or not to Participate: The Link Between Survey Participation, Electoral Participation, and Politica Interest." *Political Analysis* 11(2):164–170.