

Can internet voting affect turnout? Evidence from the canton of St. Gallen

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Research Question & Motivation

Political participation is declining in most Western Democracies which potentially undermines the legitimacy of democratic decisions. Policy makers aim to address this issue by implementing policies that reduce voting costs with the expectation of increasing turnout. This paper analyses the effect of one such policy: internet voting. Specifically, we will analyse the effect of internet voting on turnout as well as party voter shares by exploring a pilot project in the canton of St. Gallen, where five municipalities offered internet voting while the majority did not.

Previous studies (see literature) either find no or rather low positive effects on turnout. However, we will use more recent election data. Since one would assume that voters are becoming more digitally savvy, this might lead to different estimates compared to previous research.

Dataset

We will obtain most of the data from the official website of the canton of St. Gallen and the Swiss Federal Statistical Office. This includes PDF and CSV files on voting behaviour at municipality level.

The dataset will allow us to examine changes in voter turnout and party shares before and after the introduction of internet voting in St. Gallen. By comparing municipalities that adopted internet voting with those that did not (control group), we can use the DiD approach to isolate the effect of internet voting on electoral participation and party preferences.

We will have to merge the datasets and organize the data into structured format such as a CSV or SQL database with columns for each feature (municipality, district,...). Then we will inspect the dataset for missing values and inconsistencies.

Possible preprocessing steps may include:

- Handle missing or incomplete values
- Normalize data where necessary, for example, converting all dates to a uniform format
- Ensure that all municipal IDs match across different data tables if they come from multiple sources

Method

The basic diff-in-diff specification is going to be: $Y_{it} = \alpha_i + \gamma_t + \beta X_{it} + \epsilon_{it}$

- Y_{it} is the outcome variable (voter turnout or voter share) for municipality i at time t .
- α_i is a municipality fixed effect and γ_t a time fixed effect that controls for common shocks.
- X_{it} is a dummy that is set to one if internet voting is available.
- ϵ_{it} is an idiosyncratic error term.

The key assumption with DiD is that in the absence of the policy change, the differences between the treatment and control group should remain constant. While this assumption can never be verified, we will look at the pre-trends to provide evidence in favour or against the assumption.

We will then expand this basic specification with additional control variables to see if the results remain robust.

Literature

[Alvarez, R. M., Hall, T. E. and Trechsel, A. H., 2009. Internet voting in comparative perspective: the case of Estonia. *PS: Political Science & Politics*, 42\(3\), pp. 497-505.](#)

[Bochsler, D., 2009, September. Can the internet increase political participation? An analysis of remote electronic voting's effect on turnout. In *An Analysis of Remote Electronic Voting's Effect on Turnout \(August 5, 2009\)*. APSA 2009 Annual Meeting, Toronto \(pp. 3-6\).](#)

[Ehin, P., Solvak, M., Willemson, J. and Vinkel, P., 2022. Internet voting in Estonia 2005–2019: Evidence from eleven elections. *Government Information Quarterly*, 39\(4\), p.101718.](#)

[Germann, M. and Serdült, U., 2014. Internet voting for expatriates: The Swiss case. *eJournal of eDemocracy & Open Government*, 6\(2\), pp.197-215.](#)

[Germann, M. and Serdült, U., 2017. Internet voting and turnout: Evidence from Switzerland. *Electoral studies*, 47, pp.1-12.](#)

[Goodman, N.J., 2014. Internet voting in a local election in Canada. In *The internet and democracy in global perspective: Voters, candidates, parties, and social movements* \(pp. 7-24\). Cham: Springer International Publishing.](#)