## The impact of state television on voter turnout.

## Online Appendix

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Appendix A. Descriptive statistics for municipality-level data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) |
|  | N | Mean | Sd.dev. | Min | Max |
| Election year | 9,548 | 1,967 | 12.11 | 1,947 | 1,987 |
| Population size | 9,534 | 8,235 | 24,884 | 244 | 488,377 |
| Eligible voters, % of population | 9,531 | 66.96 | 5.342 | 13.59 | 90.87 |
| Eligible women voters, % of electorate | 9,531 | 49.21 | 1.975 | 37.66 | 58.18 |
| Share of population aged 15 year or more, with higher education | 9,534 | 2.897 | 2.963 | 0 | 26.45 |
| TV-access (TV=1) | 9,534 | 0.576 | 0.494 | 0 | 1 |
| TV licenses per household, 31.12 1964 | 9,471 | 12.99 | 12.93 | 0 | 50.49 |
| Share of population in sparsely populated areas | 9,534 | 0.642 | 0.300 | 0 | 1 |
| TV news production, hours per day if TV=1 | 9,534 | 1.137 | 1.001 | 0 | 2.315 |
| TV total production, hours per day if TV=1 | 9,534 | 3.479 | 3.184 | 0 | 8.047 |
| Voter turnout, national elections | 4,540 | 0.794 | 0.0662 | 0.148 | 0.929 |
| Voter turnout, local elections | 4,993 | 0.712 | 0.0807 | 0.268 | 0.940 |

Notes: Sd.dev.: Standard deviation.

Appendix B. TV-estimates with a linear probability model.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | Local | Local | National | National |
|  |  |  |  |  |
| TV(=1) | 0.012\*\*\* | 0.011\* | 0.009\*\*\* | 0.016\*\*\* |
|  | (0.003) | (0.005) | (0.002) | (0.003) |
| Observations | 4,991 | 4,993 | 4,540 | 4,540 |
| Control variables | YES | YES | YES | YES |
| Municipality FE | YES | NO | YES | NO |
| County FE | NO | YES | NO | YES |
| Election year FE | YES | YES | YES | YES |

Significance levels: \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Notes. The response variables are voter turnout in local and national elections. The models are linear regression models. The standard errors are robust standard errors clustered at the municipality level. The control variables are the size of the electorate relative to the population, share of women in the electorate, share of population living in sparsely populated areas, and share of population with higher education. ‘Local’ refers to estimates for voter turnout in local elections; ‘National’ refers to turnout in the national elections.

Appendix C. TV-licenses and voter turnout in the 1965 national election

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
| Share with TV licenses | 0.0353 | 0.0734\*\*\* | 0.0431\*\*\* |
|  | (0.020) | (0.014) | (0.011) |
| Observations | 451 | 451 | 451 |
| Control variables | YES | YES | YES |
| Turnout 1957 | NO | YES | YES |
| Turnout 1961 | NO | NO | YES |
| County FE | YES | YES | YES |
| Election year FE | YES | YES | YES |

Significance levels: \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Notes. The response variable is voter turnout in the 1965 national election. The models are fractional logistic regression models, and the estimates displayed are (marginal) effects of the of television licenses per household measured in December 31.,1964. The control variables are the size of the electorate relative to the population, share of women in the electorate, share of population living in sparsely populated areas, and share of population with higher education. Model (1) includes no controls for prior voter turnout, model (2) includes control for voter turnout in the 1961 national election, and model (3) take in voter turnout in the 1957 national election. The standard errors are robust standard errors clustered at the municipality level.

Appendix D. Balancing tests.

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
| Voter turnout (logit) in local elections, 1959 | -0.915 | -0.324 | -0.359 |
|  | (1.159) | (1.163) | (1.169) |
| Voter turnout (logit) in national elections, 1957 | 4.653\*\*\* | -0.173 | -0.141 |
|  | (1.234) | (1.287) | (1.314) |
| Difference in voter turnout (logit) in local elections, 1947-1959 | 1.237 | 0.804 | 0.846 |
|  | (0.876) | (0.863) | (0.853) |
| Difference in voter turnout (logit) in local elections, 1949-1957 | -5.372\*\*\* | -2.493 | -2.791\* |
|  | (1.363) | (1.337) | (1.336) |
| Observations | 453 | 453 | 453 |
| R-squared | 0.097 | 0.342 | 0.348 |
| Population FE | NO | YES | YES |
| County FE | NO | YES | YES |
| Covariates | NO | NO | YES |
| F(Trends) | 12.54 | 1.213 | 1.469 |
| P(Trends) > F | 1.12e-09 | 0.304 | 0.211 |
| F(Covariates) | - | - | 1.214 |
| P(Covariates) > F | - | - | 0.304 |

Significance levels: \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Notes. The response variable is number of years with access to television during the 1960-1987 period. The table shows estimates for levels and trends in voter turnout prior to the introduction of television in 1960. Model (1) comprises no controls, (2) includes controls for county fixed effects and population size (log), and (3) also takes in a set of additional controls (the size of the electorate relative to the population, share of women in the electorate, share of population living in sparsely populated areas, and share of population with higher education). The F(Trends) is a simultaneous test of the effects of levels and trends in voter turnout prior to 1960 being significantly different from zero. The F(Covariates) is a corresponding simultaneous test of the covariates (except population size) being significantly different from zero. The standard errors are robust standard errors.



Appendix G. First difference estimates

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
|  | Local | Local | Local | National | National | National |
|  | Logistic | Linear | M | Logistic | Linear | M |
| TV(=1) | 0.0354 | 0.0043 | 0.0374\*\* | 0.0186 | 0.0035 | 0.0163\* |
|  | (0.019) | (0.004) | (0.013) | (0.011) | (0.002) | (0.008) |
| Observations | 4,536 | 4,536 | 4,536 | 4,086 | 4,086 | 4,086 |
| R-squared | 0.352 | 0.317 | 0.333 | 0.584 | 0.520 | 0.546 |
| Control variables | YES | YES | YES | YES | YES | YES |
| Election year FE | YES | YES | YES | YES | YES | YES |

Significance levels: \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Notes. The response variables are voter turnout in local and national elections. Models (1) and (4) are linear models using the logistic transformation of voter turnout, and estimated with first differences. Models (2) and (5) are standard linear probability models, estimated with first difference models. Models (3) and (6) employ the mobilization indicator (M) as response variable (see main text). The first differences are defined by four-year lags, corresponding to the election periods. The control variables are the same as in the baseline model. ‘Local’ refers to estimates for voter turnout in local elections; ‘National’ refers to turnout in the national elections. The standard errors are robust standard errors clustered at the municipality level.

Appendix G. Summary statistics for Election Surveys. Averages.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 1961 | 1965 | 1969 | 1973 | Total |
| TV(=1) | 0.47 | 0.82 | 1.00 | 1.00 | 0.82 |
| TV consumption | - | 0.55 | 0.60 | 0.80 | 0.66 |
| Radio consumption | - | 0.31 | 0.13 | 0.06 | 0.18 |
| Newspaper subscriptions | - | 1.56 | 1.73 | 1.79 | 1.68 |
| Political interest | - | 0.34 | 0.43 | 0.43 | 0.36 |
| Interest in election outcome | - | 0.66 | 0.50 | - | 0.58 |
| Political knowledge | - | 0.68 | 0.70 | 0.64 | 0.68 |
| Political discussions | - | 0.44 | 0.56 | 0.55 | 0.51 |
| Voter turnout | 0.86 | 0.94 | 0.92 | 0.92 | 0.91 |
| Gender | 0.51 | 0.51 | 0.52 | 0.54 | 0.52 |
| Age | 43 | 47 | 47 | 50 | 47 |
| Education | 0.43 | 0.43 | 0.51 | 0.50 | 0.47 |
| Income | 29 | 29 | 42 | 42 | 34 |
| Individual-level panel (=1) | 0.58 | 0.58 | 0.60 | 0.78 | 0.63 |
| (Number of respondents) | (1623) | (1623) | (1589) | (1223) | (6058) |

Notes. TV(=1) is the dummy variable indicating whether television signals could be received in the municipality. TV consumption, Radio consumption, Newspaper subscriptions, Political interest, Interest in the election outcome, Political discussions and Voter turnout are documented in the main text. Education is a dummy variable equal 0 if the respondent had primary schooling (i.e. 7 years), and 1 if the respondent had additional education. Respondents’ annual (gross) income levels were coded as the mid-points of the intervals applied in the surveys, i.e. 15.000 NOK, 30.000 NOK, 50.000 NOK or 70.000 NOK.

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