

Appendix for "Strongmen Cry Too: The Effect of Aerial Bombing on Voting for The Incumbent in Competitive Autocracies"

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A Appendix info

This Appendix is organized in three parts. In the first part, I display the descriptive statistics. Table A1 shows the summary statistics, Figure A1 displays the correlation matrix for the covariates used in the data analysis, and Figure A2 presents the aggregated polling results on voting for the regime (1992-2000) using the data from the Institute of Social Sciences. The second part shows the regression tables for the main model in which the dependent variable is replaced with the share of votes for the democratic opposition (Table A2, column 1), and the share of votes for the democratic opposition multiplied by voter turnout (Table A2, column 2). Table A3 shows the results for the main model using a modified specification of the bombing variable: included are only strikes against the party HQs, communications infrastructure, and police stations to test Allen and Vincent (2011). In Table A4, displayed are the results of logit regression model of being bombed as a function of the pre-treatment variables. Because the population per doctor has an effect on being bombed, this variable is excluded in the model in Table A5. Finally, the third part concludes with a codebook for the municipality-level dataset used in the main analysis.

A.1 Part I: Descriptive Statistics

Table A1: Summary Statistics

Statistic	N	Mean	St. Dev.	Min	Max
Vote-share (Milosevic, %)	480	38.6	14.4	2.5	95.8
Vote-share (Radicals, %)	466	13.6	8.7	0.1	45.7
Vote-share (Opposition, %)	470	25.1	14.2	0.01	68.6
Turnout (%)	480	73.8	8.7	19.3	90.1
Bombed	480	0.675	0.469	0	1
Employed per 100,000 inhabitants	480	2.312	1.469	0.390	14.690
Population per doctor	477	634	261	170	1367
Refugees (%)	480	5.9	6.7	0.01	33
Minority (%)	480	20.3	24.5	0.8	95.8
Females (%)	480	50.6	0.9	47.8	54.3

Figure A1: Correlation Matrix.

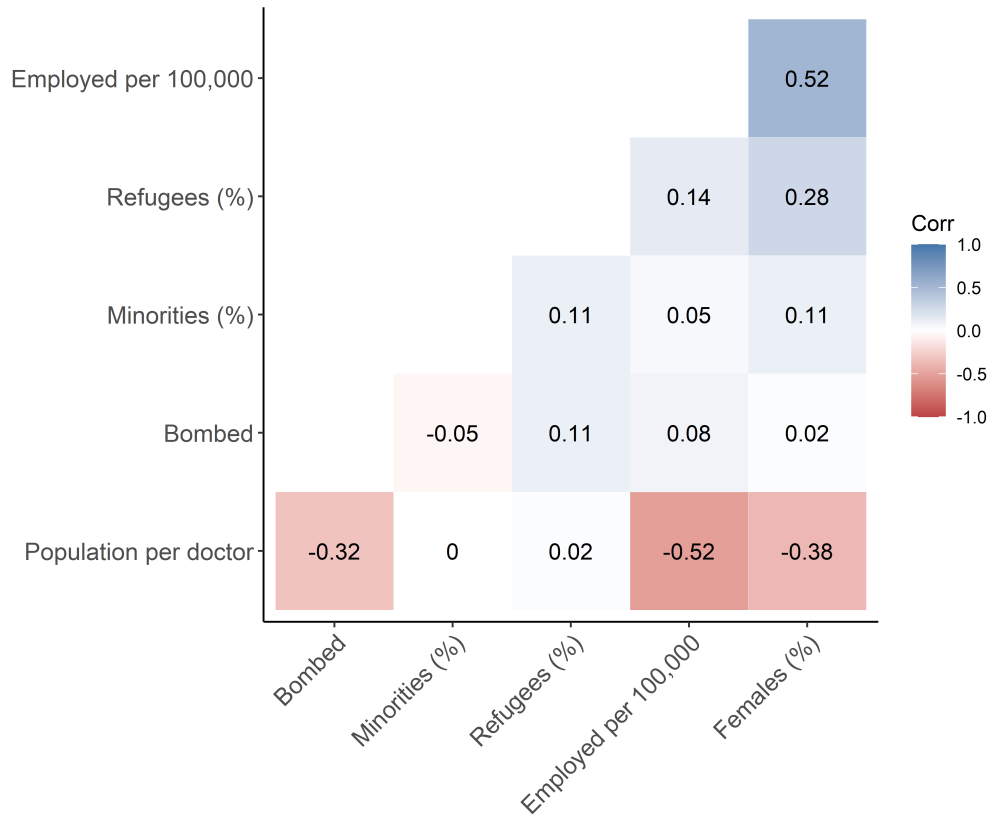
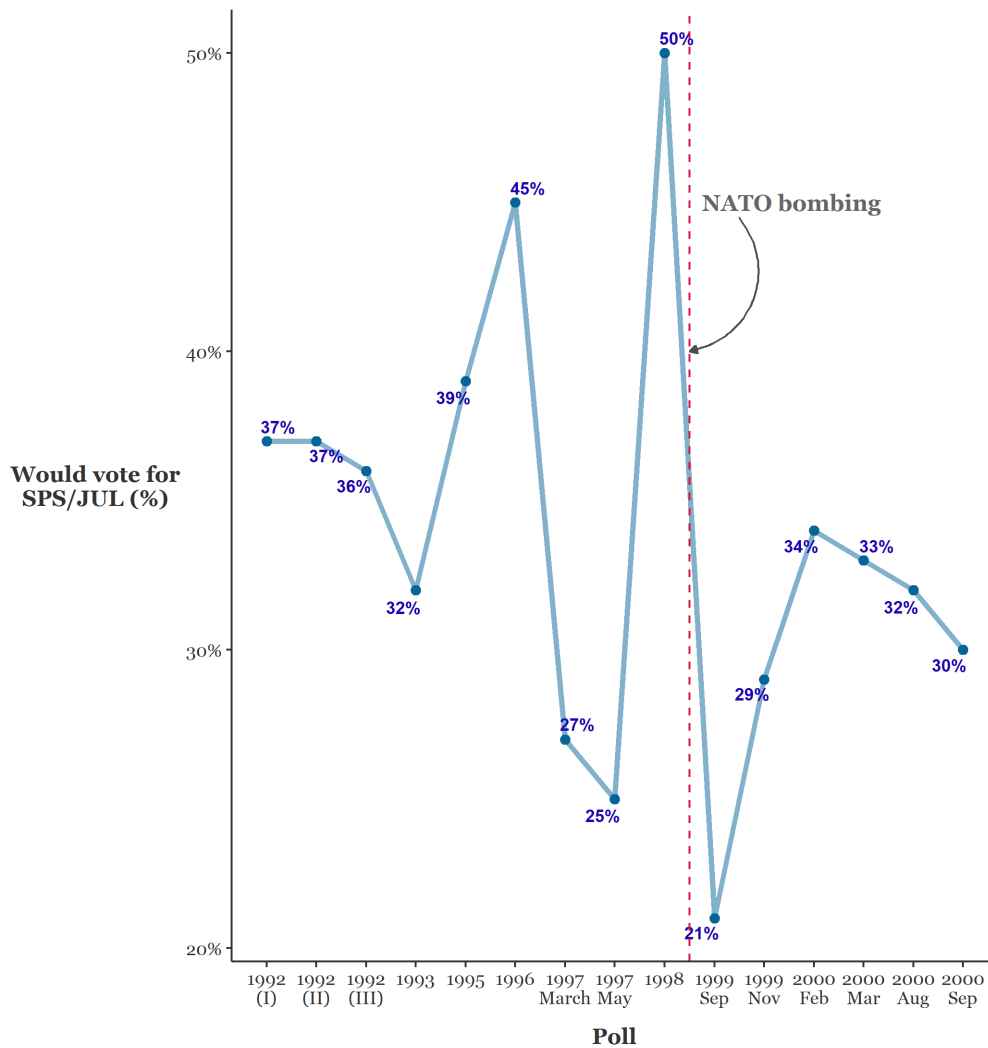


Figure A2: The percentage of participants from Serbia who would vote for the Socialist Party of Serbia and Yugoslav Left in the next elections (1992-2000)



Source: Klingemann and Bacevic (1997a,b,c,d,e,f); Institute of Social Sciences (1997a,b, 1999, 2000a,b,c,d, 2006).

Methodology: The polls are based on face-to-face interviews with a standardized questionnaire. Each poll consists of responses from persons ages 18 years and older who resided in Serbia (without Kosovo) at the time of the interview. The results shown in this Figure are based on questions related to the respondent’s voting preference for either Milosevic or his party/party of his wife. The questions are consistent across the polls and formulated approximately in the following form: “What party will you vote for in the forthcoming election?”. I excluded abstaining and undecided responses. The data are available upon request.

A.2 Part II: Regression Tables

Table A2: Linear regression models for the democratic opposition

	DV: opposition vote-share	DV: Turnout \times opposition vote-share
Bombed \times Year2000	0.020 (0.023)	0.019 (0.017)
Bombed	0.002 (0.011)	-0.003 (0.008)
Year2000	0.176* (0.020)	0.136* (0.015)
Year1996	0.120* (0.009)	0.073* (0.006)
Employed per 100,000 inhabitants	-0.002 (0.005)	-0.0002 (0.004)
Population per doctor	-0.068 (0.027)	-0.053 (0.021)
Refugees (%)	-0.351* (0.082)	-0.266* (0.062)
Minority (%)	-0.119* (0.035)	-0.114* (0.026)
Females (%)	2.676* (0.774)	1.855* (0.572)
Constant	-1.057* (0.392)	-0.728 (0.291)
Observations	467	467
Adjusted R ²	0.588	0.598
F Statistic	21.132*	21.973*

Note: Reported are coefficient estimates with robust standard errors clustered on the municipal level in brackets. All models include district-level fixed effects. P-value: *p<0.05; **p<0.01

Table A3: Linear regression models of bombings (DV: Vote-share for the incumbent)

	Allen and Vincent (2011)
Bombed \times Year2000	0.001 (0.014)
Bombed	0.020 (0.016)
Year2000	0.081* (0.009)
Year1996	0.192* (0.009)
Employed per 100,000 inhabitants	-0.0001 (0.004)
Population per doctor	0.014 (0.047)
Refugees (%)	-0.031 (0.121)
Minority (%)	-0.147 (0.063)
Females (%)	-1.309 (1.135)
Constant	0.904 (0.588)
Observations	477
Adjusted R ²	0.611
F Statistic	23.665*

Note: Reported are coefficient estimates with robust standard errors clustered on the municipal level in brackets. All models include district-level fixed effects. P-value: *p<0.05; **p<0.01

Table A4: Logit regression model of pre-treatment variables

	DV: being bombed
Employed per 100,000 inhabitants	−0.241 (0.145)
Population per doctor	−3.239** (0.969)
Refugees (%)	4.058 (4.251)
Urban population (%)	0.501 (1.121)
Illiterate (%)	−2.291 (9.342)
Constant	3.190** (1.194)
Observations	159
Log Likelihood	−89.719
AIC	191.437

Note: Reported are coefficient estimates with robust standard errors clustered on the municipal level in brackets. P-value: *p<0.05; **p<0.01

Table A5: Linear regression model of bombings without the population per doctor variables (DV: Vote-share for the incumbent)

	DV: Milosevic's vote-share
Bombed × Year2000	−0.025* (0.012)
Bombed	−0.007 (0.013)
Year2000	0.099** (0.009)
Year1996	0.193** (0.009)
Employed per 100,000 inhabitants	−0.001 (0.005)
Refugees (%)	0.025 (0.111)
Minority (%)	−0.133* (0.065)
Females (%)	−1.118 (0.895)
Constant	0.825 (0.448)
Observations	480
Adjusted R ²	0.613
F Statistic	24.706**

Note: Reported are coefficient estimates with robust standard errors clustered on the municipal level in brackets. All models include district-level fixed effects. P-value: *p<0.05; **p<0.01

A.3 Part III: Codebook

county

The string shows the name of municipality.

id

This numeric code indicates the unique identifier for each municipality in the dataset and ranges from 1 to 160.

okrug

The string shows the name of county (*okrug*).

okrug_id

This integer code denotes the unique identifier for each of the 25 counties and ranges from 0 to 24.

year

Indicates the year when a local election was held (1992, 1996 or 2000).

vote_milosevic

The share of votes (in %) for the Socialist Party of Serbia and Yugoslav Left in the first round of respective local elections.

Source: The Statistical Office of the Republic of Serbia

vote_opposition

The share of votes (in %) for the democratic opposition bloc (DEMOS, DEPOS and DOS) in the first round of respective local elections.

Source: The Statistical Office of the Republic of Serbia

vote_srs

The share of votes (in %) for the Serbian Radical Party (SRS) in the first round of respective local elections.

Source: The Statistical Office of the Republic of Serbia

turnout

This column indicates the proportion (in %) of eligible voters who voted in a local election.

Source: The Statistical Office of the Republic of Serbia

bombed

Whether a municipality was bombed (treatment group) or not (control group). Please see more about the measurement and coding issues in the paper.

year00

This dummy equals 1 for bombed municipality in the post-1999 period (otherwise it is zero).

employed_per_1000inh

The employment rate measured as the number of working-age individuals employed in the state-owned or private sector per 1000 inhabitants of municipality.

Source: The Statistical Office of the Republic of Serbia

pop_per_doctor

This variable shows the number of inhabitants of municipality per one medical doctor working in the observed municipality.

Source: The Statistical Office of the Republic of Serbia

refugees_perc_pop

The proportion of refugees from the Yugoslav wars in the total population (in %) for every municipality.

Source: Commissariat for Refugees and Migration of the Republic of Serbia

minorpc91

The proportion of minorities in the total population (in %) for every municipality, according to the 1991 census.

Source: The Statistical Office of the Republic of Serbia

femalepc91

This column indicates the proportion of females in the total population (in %) for every municipality, according to the 1991 census.

Source: The Statistical Office of the Republic of Serbia

pop_chng_98_02

The percentage change in municipal population between the year of 1998 (one year prior to the bombing) and 2001 (one and a half years after the bombing). Information on the population for 1998 is an official estimate of the Serbian Statistical Office, taking into account the natural change of the population, while the 2001 data originate from the 2002 census.

Source: The Statistical Office of the Republic of Serbia

irp

The percentage of internally displaced persons (IDPs) from Kosovo in the total population for every given municipality.

Source: Commissariat for Refugees and Migration of the Republic of Serbia

urbanpc91

This column indicates the proportion of the urban population in the total population (in %) for every municipality, according to the 1991 census.

Source: The Statistical Office of the Republic of Serbia

age20_34pc

The percentage of the total population ages 20–34 (youth), according to the 2002 census.

Source: The Statistical Office of the Republic of Serbia

illiterate_pc

Illiterate population measured as the percentage of the total population which has not completed primary school, according to the 1991 census.

Source: The Statistical Office of the Republic of Serbia

allen_vincent_2011

The column measures whether a municipality is bombed or not but including only strikes against the government and communications targets in order to test the mechanism by Allen and Vincent (2011).

bombed_econ

The column measures whether a municipality is bombed or not but including only strikes against the civilian, industrial, and infrastructure targets in order to test the retrospective theory's mechanism.

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