

PSC 400

SYRACUSE UNIVERSITY

DATA ANALYTICS

FOR POLITICAL

SCIENCE

ESTIMATING CAUSAL EFFECTS WITH

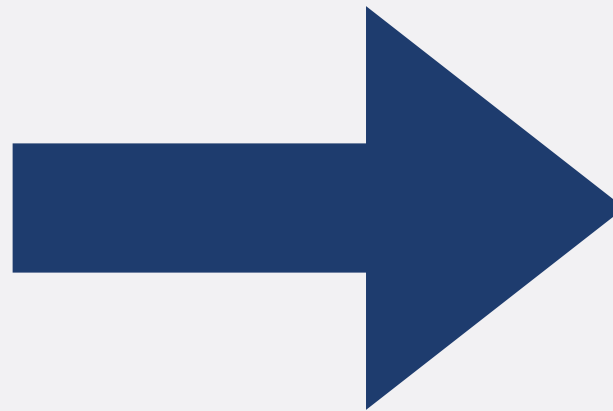
OBSERVATIONAL DATA

EXERCISE

- **Quality of Government data**
 - **Codebook: https://www.qogdata.pol.gu.se/data/codebook_std_jan24.pdf**
- **DV: Corruption perceptions index: ti_cpi**
- **IV: pick a (numerical) variable**
- **Scatterplot, linear regression line, R-squared**

RUSSIA AND UKRAINE

**Receiving
Russian TV**



**Pro-Russian
Voting Behavior**

RUSSIA AND UKRAINE

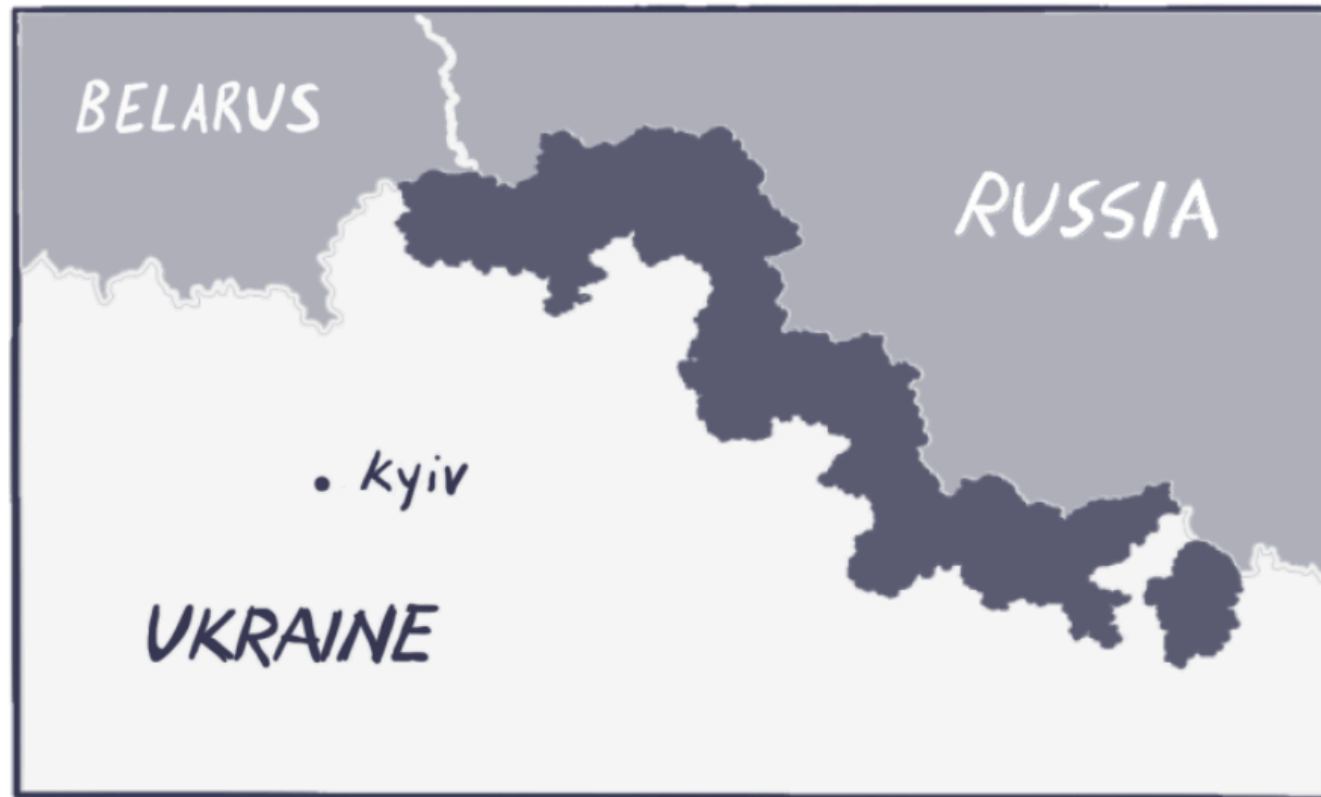


Figure 5.3: In this section, we analyze the effects of receiving Russian TV on Ukrainians living in precincts within 50 kilometers of the border with Russia, which are shown in dark blue.

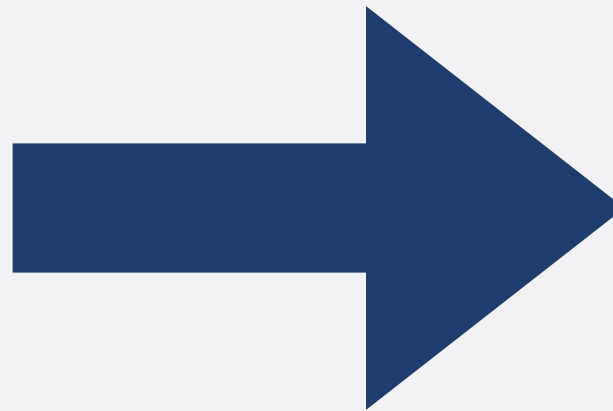


UA_SURVEY.CSV

variable	description
<i>russian_tv</i>	identifies whether the respondent's precinct receives Russian TV: 1=there is reception or 0=there is no reception
<i>pro_russian_vote</i>	identifies respondents who reported having voted for a pro-Russian party in the 2014 parliamentary election: 1=voted for a pro-Russian party or 0=did not
<i>within_25km</i>	identifies whether the respondent's precinct is within 25 kilometers of the Ukraine-Russia border: 1=it is within 25 kilometers of the border or 0=it is not

RUSSIA AND UKRAINE

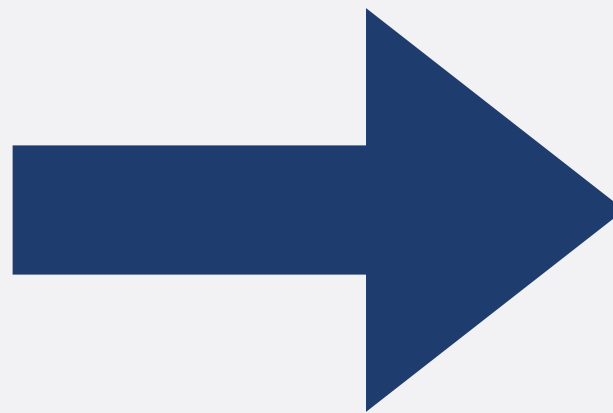
**Receiving
Russian TV**



**Pro-Russian
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RUSSIA AND UKRAINE

**Receiving
Russian TV**

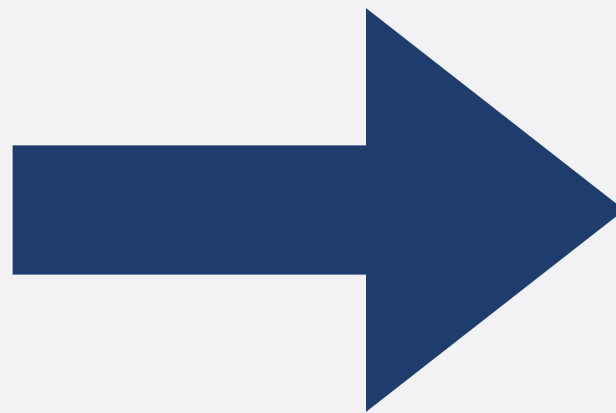


**Pro-Russian
Voting Behavior**

- **Difference-in-means: Pro-Russian vote share of those who receive Russian TV - Pro-Russian vote share of those who don't receive Russian TV**

RUSSIA AND UKRAINE

Receiving
Russian TV



Pro-Russian
Voting Behavior

- Regression:
- Pro-RUS vote = $\alpha + \beta * \text{RUS_TV}$

RUSSIA AND UKRAINE

- **Pro-RUS vote = 0.1709 + 0.1191 * RUS_TV**
 - **RUS_TV is 1 if receives Russian TV, 0 if not**

RUSSIA AND UKRAINE

- What is the pro-Russian vote probability for someone who does not receive Russian TV?
- Pro-RUS vote = $0.1709 + 0.1191 * \text{RUS_TV}$
 - RUS_TV is 1 if receives Russian TV, 0 if not

RUSSIA AND UKRAINE

- What is the pro-Russian vote probability for someone who does not receive Russian TV?
- Pro-RUS vote = $0.1709 + 0.1191 * \text{RUS_TV}$
 - RUS_TV is 1 if receives Russian TV, 0 if not
- Pro-RUS vote = $0.1709 + 0.1191 * 0 = 0.1709$

RUSSIA AND UKRAINE

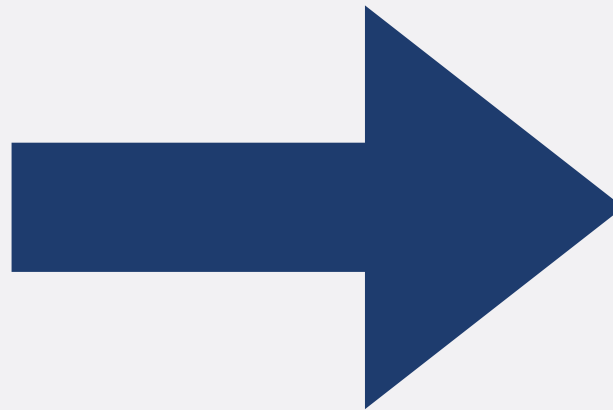
- What is the pro-Russian vote probability for someone who does receive Russian TV?
- Pro-RUS vote = $0.1709 + 0.1191 * \text{RUS_TV}$
 - RUS_TV is 1 if receives Russian TV, 0 if not

RUSSIA AND UKRAINE

- What is the pro-Russian vote probability for someone who does receive Russian TV?
- Pro-RUS vote = $0.1709 + 0.1191 * \text{RUS_TV}$
 - RUS_TV is 1 if receives Russian TV, 0 if not
- Pro-RUS vote = $0.1709 + 0.1191 * 1 = 0.29$

RUSSIA AND UKRAINE

**Receiving
Russian TV**



**Pro-Russian
Voting Behavior**

RUSSIA AND UKRAINE

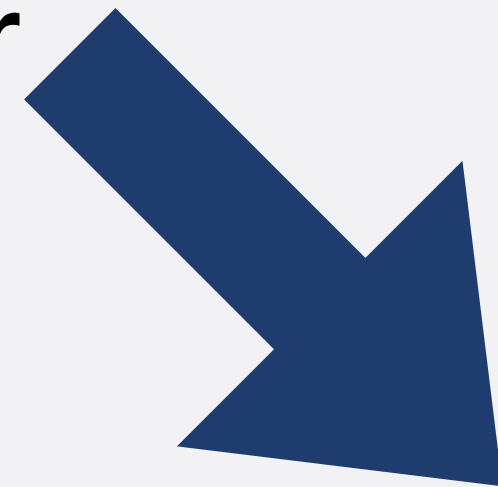
In the months leading up to the 2014 election, Ukraine prepared to defend itself from a possible Russian invasion by deploying its army to the border. The Ukrainian army built military fortifications (trenches and defensive walls) at a distance of up to 10 km from the border, depending on local terrain and road access. Within that buffer zone, the Army positioned tanks and troops in strategic locations and set up military checkpoints. Residents of a precinct located very close to the border (such as within 25 km of it) were either in immediate proximity of a military fortification or, at the very least, aware of its existence, making them especially cognizant of the threat of a Russian invasion and, therefore, more fearful of Russian influence.

RUSSIA AND UKRAINE

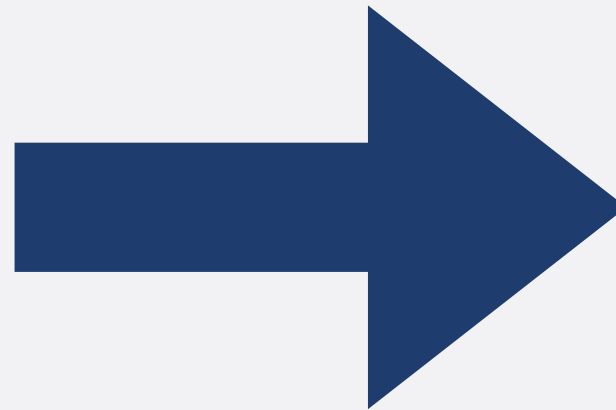
Living within
25km of border



Receiving
Russian TV



Pro-Russian
Voting Behavior



- A potential problem