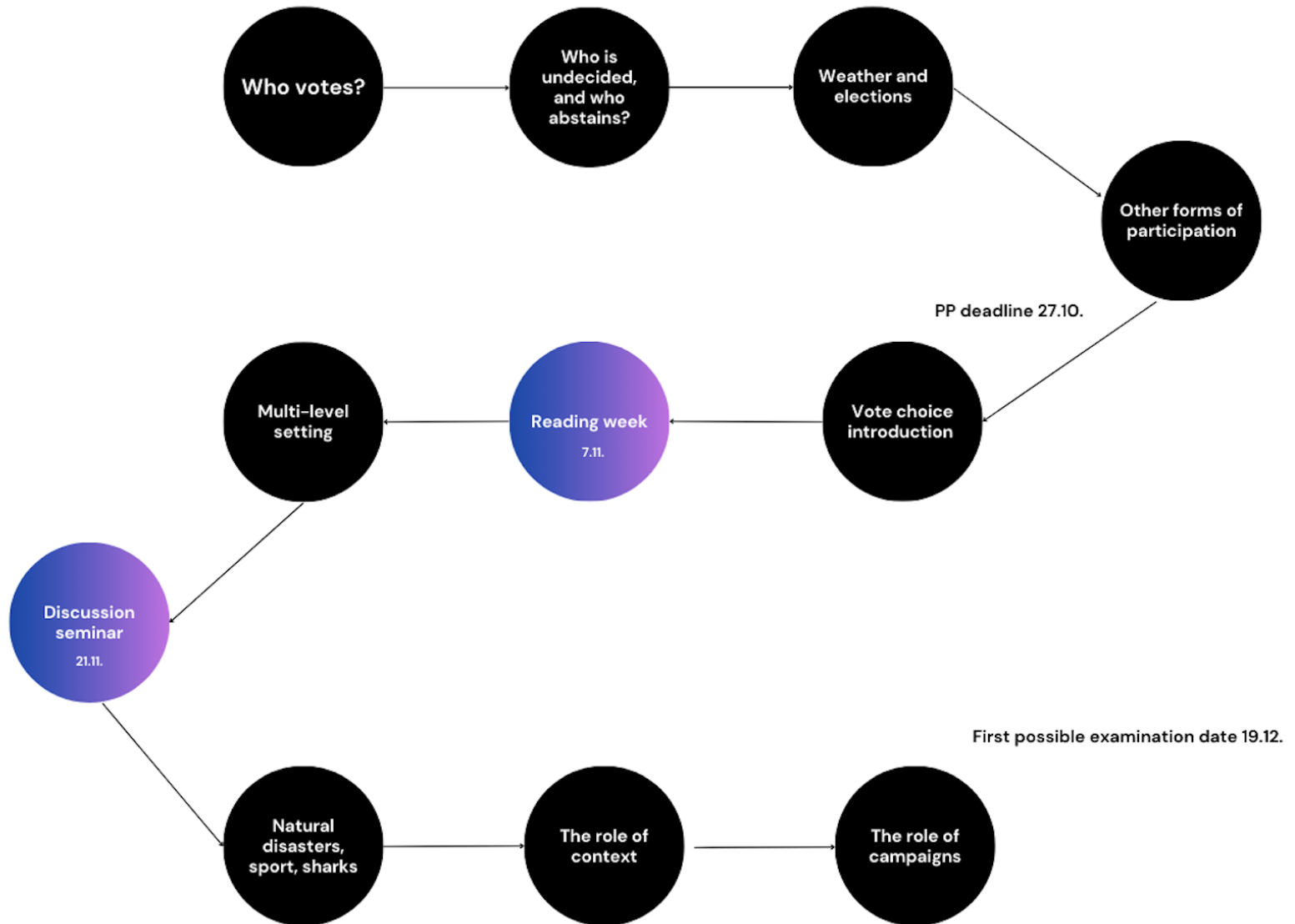


Elections and electoral behavior



M U N I
F S S

Weather and elections

Jakub Jusko

When you both feel awkward so
you just talk about the weather



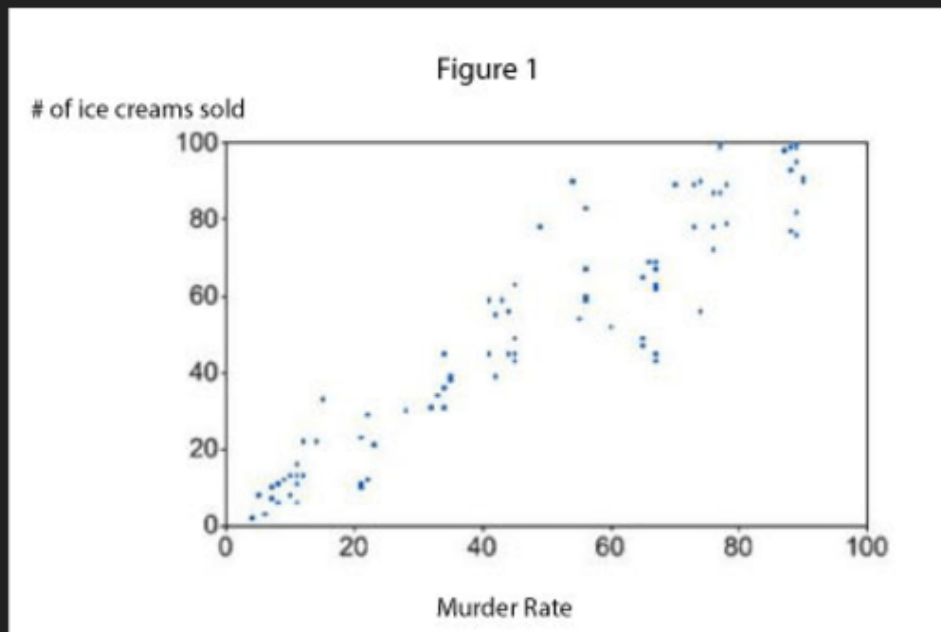
Weather and people

- Reflections on the influence of the weather since Hippocrates, Montesquieu
- The relation of climate and personality, intelligence, fertility, tone of voice,...

Weather and human behaviour:

- Mood
- Cognitive style of thinking
- Aggression, criminality
- Shopping (umbrellas, stock market)
- Selfless help
- Evaluation of the other sex

Ice Cream Sales VS Murder Rate in New York



Weather and politics

- Protests (demonstrations in Denmark, Tea Party movement in the USA)
- Door-to-door campaigns
- Abstention in the US Congress
- Referenda (Switzerland, UK)
- Participation in elections:
 - One of the "hot issues" of political research
 - High turnout as a sign of certain satisfaction with the democratic system
 - Different influences: micro-level, macro-level

Will bad weather have an impact on today's EU referendum vote?

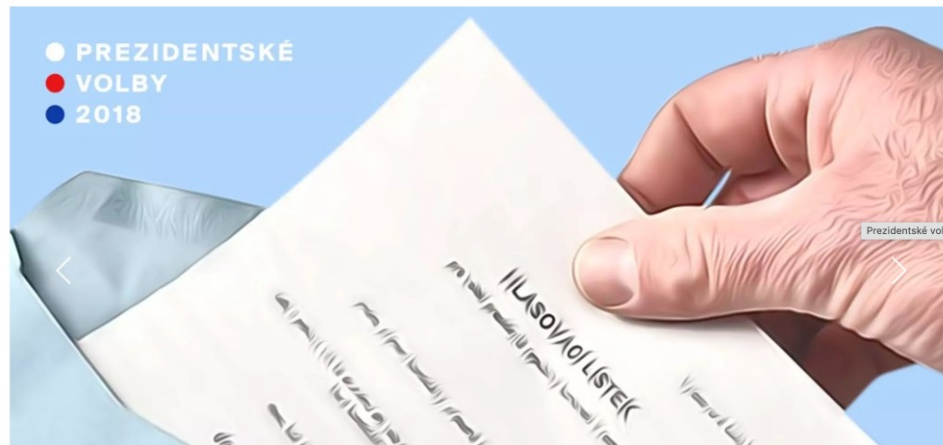


EARTH 23 June 2016

By Jacob Aron



Promluví do volby prezidenta hnusné počasí? Má se ochladit a mohlo by sněžit



Sníh pomůže Babišovi. K vítězství mu ale ani zima stačit nebude, říká expert



Ilustrační foto

FOTO: ČTK / AdobeStock / FORUM 24

EU referendum polling day weather: storm clouds could have silver lining for Leave campaign



rekлама

Kdy jindy, než teď?

6,28 %

p.a.

Skvělý účet s úrokem 6,28 % p.a. ZALOŽIT ZDARMA A ONLINE

TRINITY BANK

Společnost Vyhoda s marketingovou amlí Skvělý účet. Platí pro nové klienty do 250 000 Kč.

POJĎTE SE POTKAT!



People are caught out in a heavy rain shower in Westminster CREDIT: YUI MOK/PA WIRE

Ballot scanner maker misled NYC over their weakness to humidity: docs

By Nolan Hicks

Published Nov. 23, 2018 | Updated Nov. 23, 2018, 10:56 a.m. ET



Voters wait in long lines at Public School 9 in Brooklyn.

Paul Martinka

Rational choice theory

Downs (1957), Riker and Ordeshook (1968)

- Individual action as a means to a goal
- The citizen calculates the benefits and costs associated with the choice

$$\mathbf{R = PB - C}$$

- A voter should vote when $PB > C$
- Modified version: $R = PB - C + D$

Rational choice theory


- The cost of voting:
 - Need to register before the election
 - Travel from residence to polling place
 - Time to make a decision
 - Time spent travelling
 - Weather (mood, getting dressed, unpleasant journey, risk of injury)

When benefits and costs are roughly equal, even a small change on election day (e.g. weather) can persuade voters

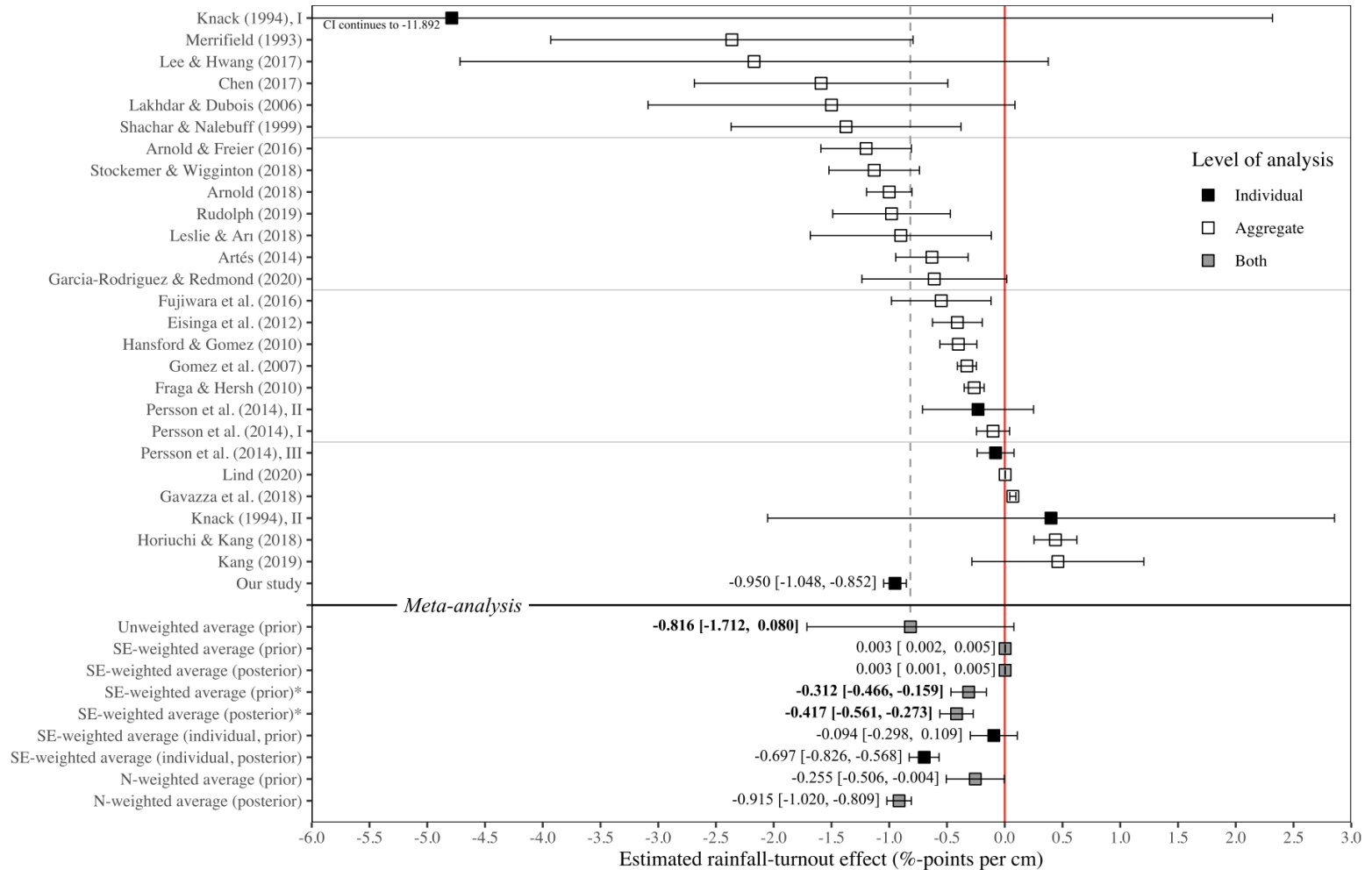
Rational choice theory

- Weather "decomposed" into variables - mainly rain, snow, temperature, solar radiation
- Prevailing evidence:

Rainfall  -> **Voter turnout** 

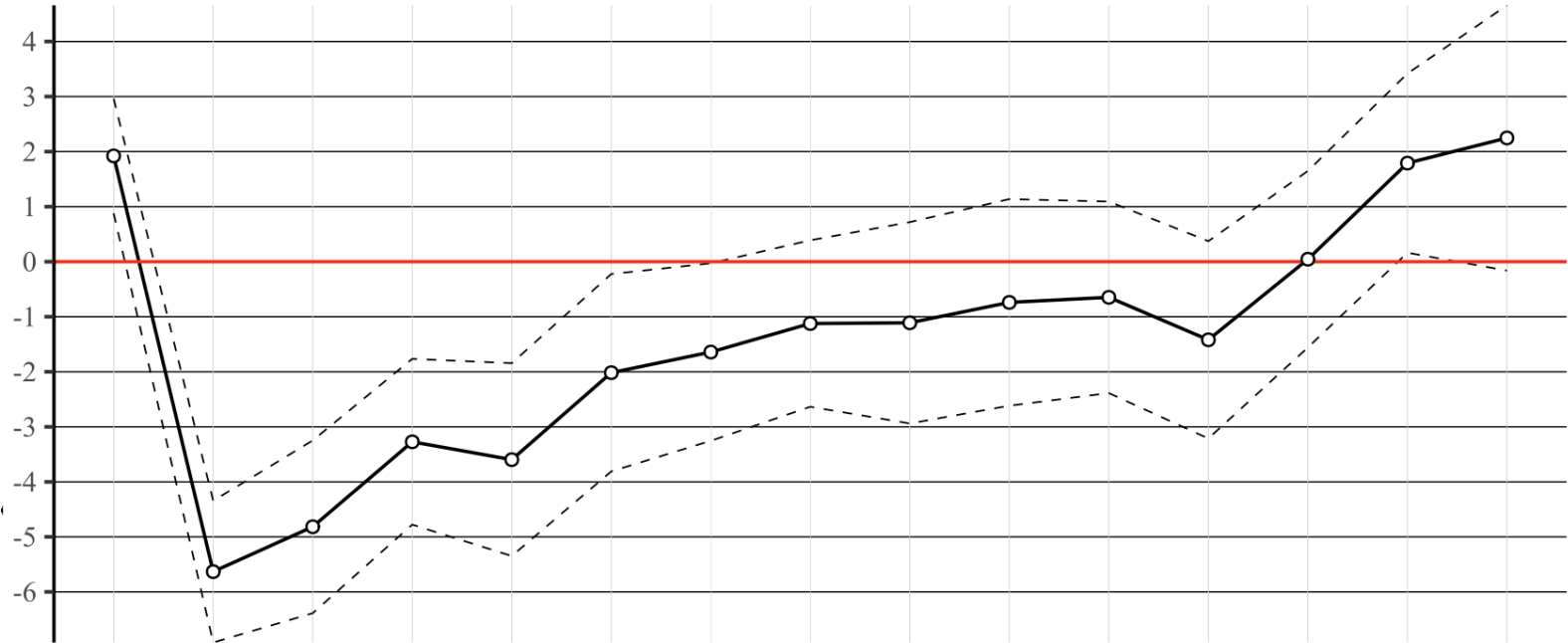
- USA, Canada, Netherlands, Spain, Germany, (exception e.g. Sweden, Norway)
- Turnout reduced from 0.033 to 0.12 pp. per 1 mm of precipitation
- Different scenarios that are important 

Damsbo-Svendsen and Hansen (2023)

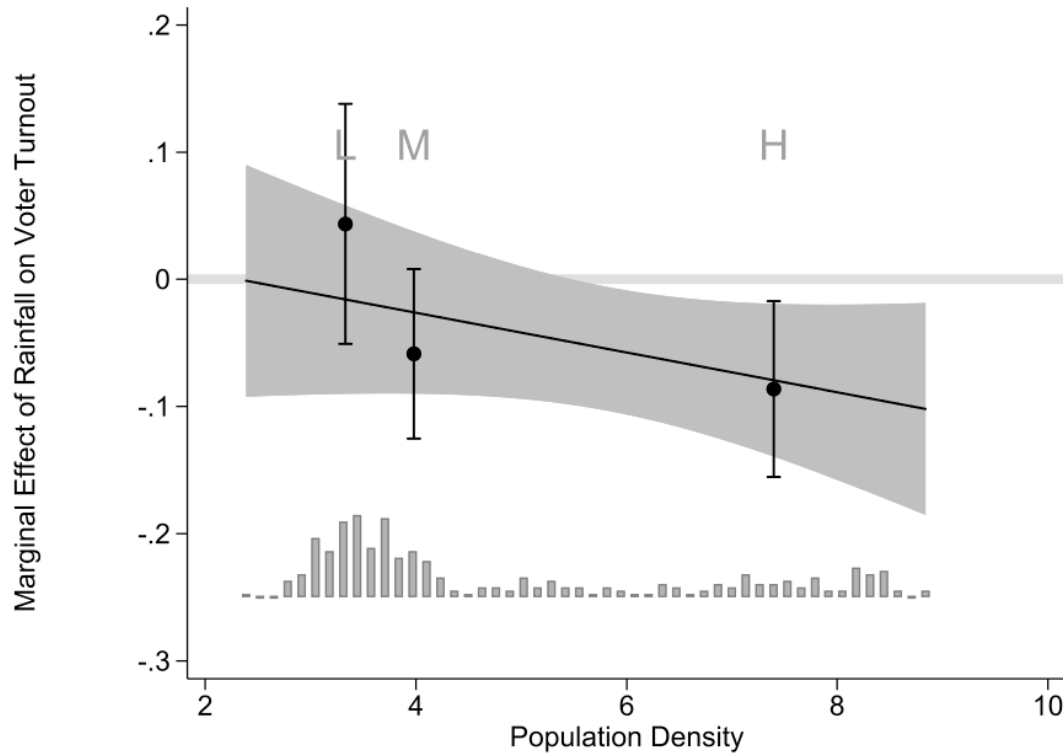


Damsbo-Svendsen and Hansen (2023)

Rainfall



Abian Garcia-Rodriguez and Paul Redmond (2020)



Interaction Effects (OLS)

Arnold and Freier (2016)

Table 3
Main results.

Dependent variable:	(OLS)		(IV)	
	SPD	SPD	Turnout	SPD
<i>Panel (1): municipal elections</i>				
Turnout	0.335*** (0.041)	0.325*** (0.042)		0.755*** (0.253)
Rain in mm		-0.004 (0.003)	-0.012*** (0.002) [26.25]	
N	3162	3081	3084	3081
R ²	0.57	0.57	0.95	0.54
<i>Panel (2): state elections</i>				
Turnout	0.069* (0.038)	0.063 (0.038)		0.694*** (0.258)
Rain in cm		-0.006*** (0.002)	-0.005*** (0.001) [16.67]	
N	3168	3113	3113	3113
R ²	0.80	0.80	0.96	0.75

Rational choice theory

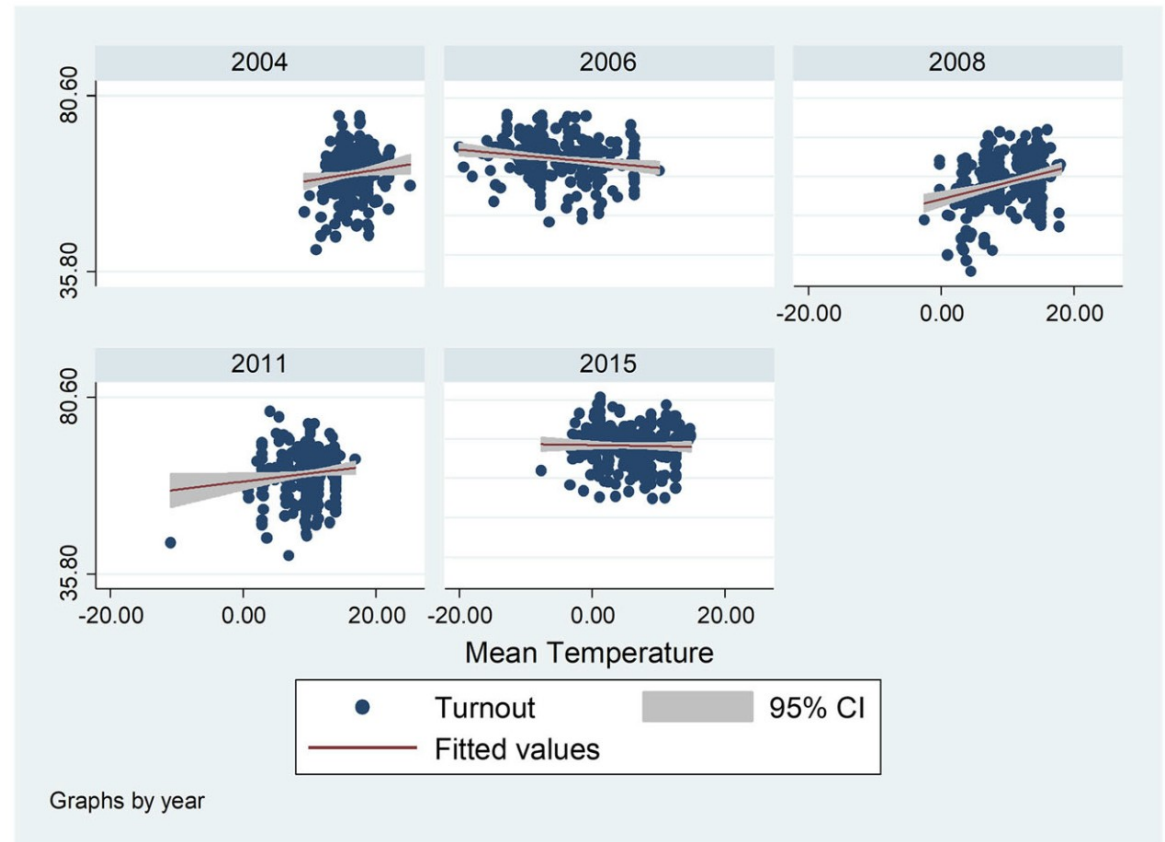
- Prevailing evidence:

Average temperature ↑ -> Voter turnout ↑

- Canada, Netherlands, France
- Turnout increased from 0.05 to 0.44 pp. per 1 °C of temperature

Stockemer and Wigginton (2018): Canada

Fig. 2 Scatterplot: Mean temperature on turnout for the June 28, 2004, January 23, 2006, October 14, 2008, May 2, 2011, and October 19, 2015 elections, respectively



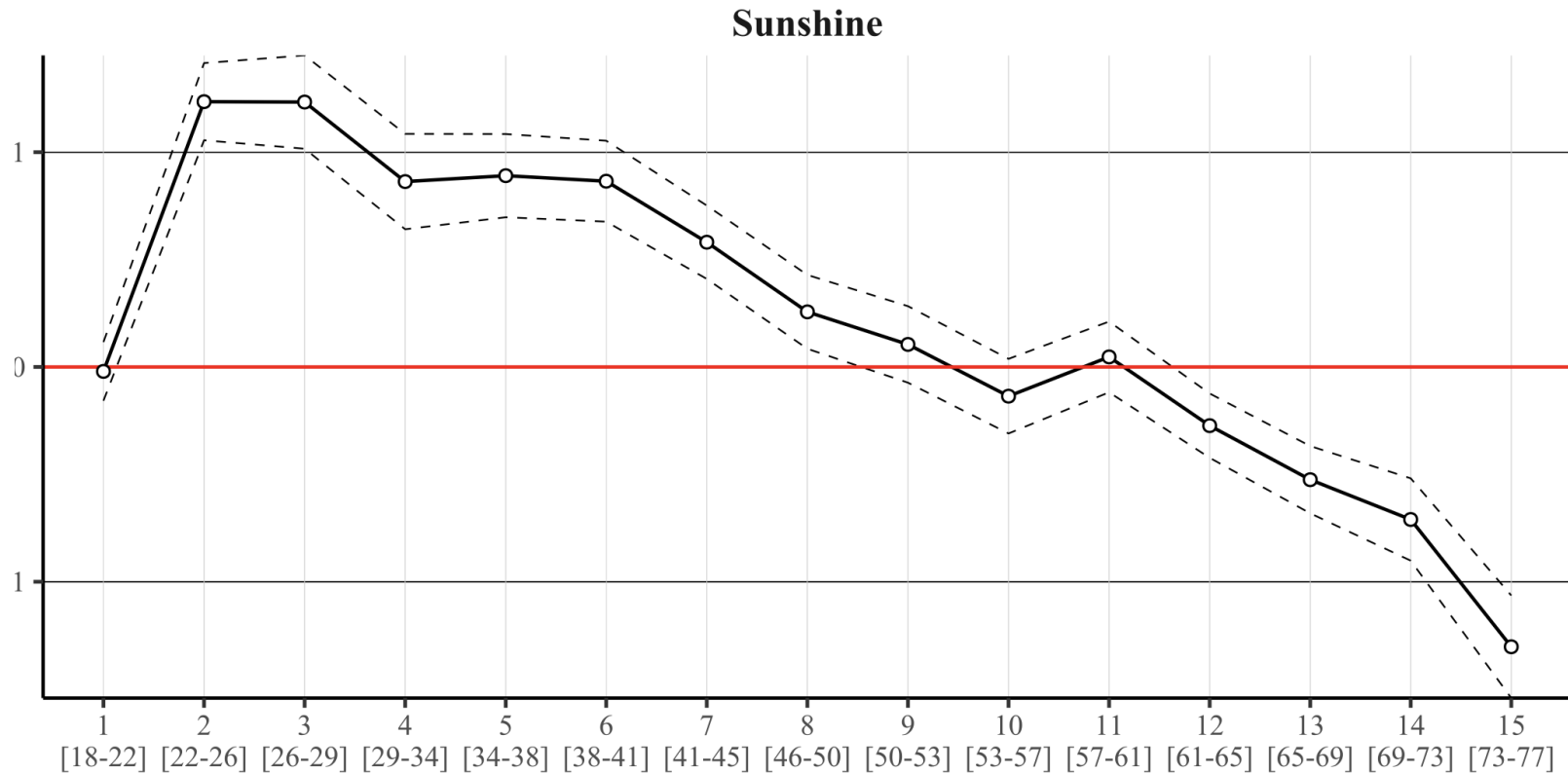
Rational choice theory

- Prevailing evidence:

Sunlight ↑ -> Voter turnout ↑

- Netherlands, Denmark
- A change from the lowest to the highest recorded level of sunshine (6.2–42.8 W/m²) increases the probability of voting by 1.55 percentage points (Denmark)

Damsbo-Svendsen and Hansen (2023)



Election cohort: number of elections as eligible voter [age]

Is it a problem?

NO:

- It is “just” about turnout
- Small effect (10 mm of rain -> 1 pp. lower turnout)

YES:

- Elections themselves close (even a small change can decide):
weather influence on party voters is not the same - indirect influence on the composition of the electorate
- New findings: weather can influence voters' decision-making (Bassi 2019)

Who should "pray" for rain?

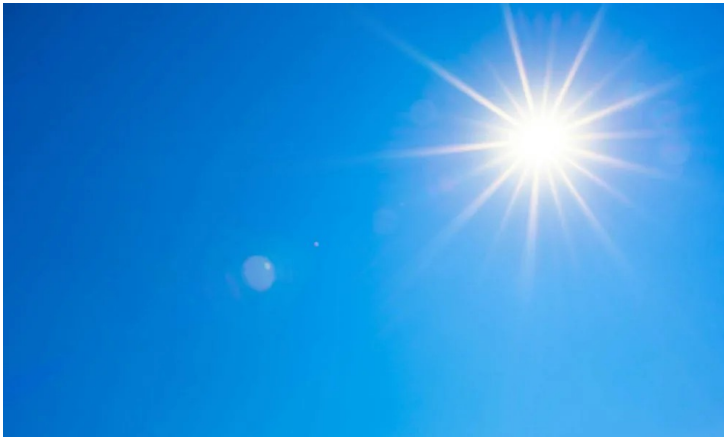
- **Republicans (USA) – Gomez et al. 2007**
 - "Conventional turnout effect model" by Tucker et al. 1986
 - Every inch of rain above election day normal -> +2.5 %
 - Every inch of snow above election day normal -> +0.6 %
- **Conservatives (Germany) – Arnold and Freier 2016**
 - Turnout increase by 1 pp. -> SPD gained +0.76 pp.
 - Turnout decrease by 1 pp. -> CDU lost -0.85 pp. (*...and rain decreases turnout*)
- **Christian democrats (Netherlands) – Eisinga et al. 2012**
- **Smaller parties (Spain) – Artes 2014**

Who should "pray" for rain?

Table 3 Predicted mean deviations in number of parliamentary seats from party's estimated mean seat count by rainfall (mm) and temperature (°C), 1971–2010

Temperature (°C)	Rainfall (mm)		
	0	5	10
GL (mean 7.94, SE 0.11)			
5	0.06 (0.20)	0.40 (0.23)	0.74 (0.33)
10	−0.04 (0.13)	0.16 (0.13)	0.36 (0.18)
15	−0.14 (0.13)	−0.08 (0.13)	−0.01 (0.15)
SP (mean 6.72, SE 0.04)			
5	1.17 (0.18)	−0.15 (0.21)	−1.48 (0.30)
10	0.56 (0.08)	−0.19 (0.09)	−0.94 (0.14)
15	−0.06 (0.06)	−0.23 (0.06)	−0.41 (0.09)
PvdA (mean 39.15, SE 0.09)			
5	0.88 (0.33)	−0.74 (0.39)	−2.36 (0.59)
10	0.48 (0.14)	−0.37 (0.16)	−1.23 (0.28)
15	0.08 (0.16)	−0.13 (0.16)	−0.11 (0.22)
D66 (mean 10.04, SE 0.08)			
5	−0.57 (0.17)	−0.37 (0.20)	−0.16 (0.29)
10	−0.24 (0.09)	−0.06 (0.10)	0.12 (0.15)
15	0.09 (0.10)	0.25 (0.10)	0.41 (0.12)
CDA (mean 41.97, SE 0.10)			
5	−1.20 (0.37)	0.17 (0.44)	1.53 (0.67)
10	−0.74 (0.16)	0.32 (0.18)	1.38 (0.31)
15	−0.28 (0.18)	0.47 (0.18)	1.22 (0.24)

How to measure?



1. Increase in turnout in case of PARL+LOCAL

2. Decrease in turnout in case of PRESID+REG

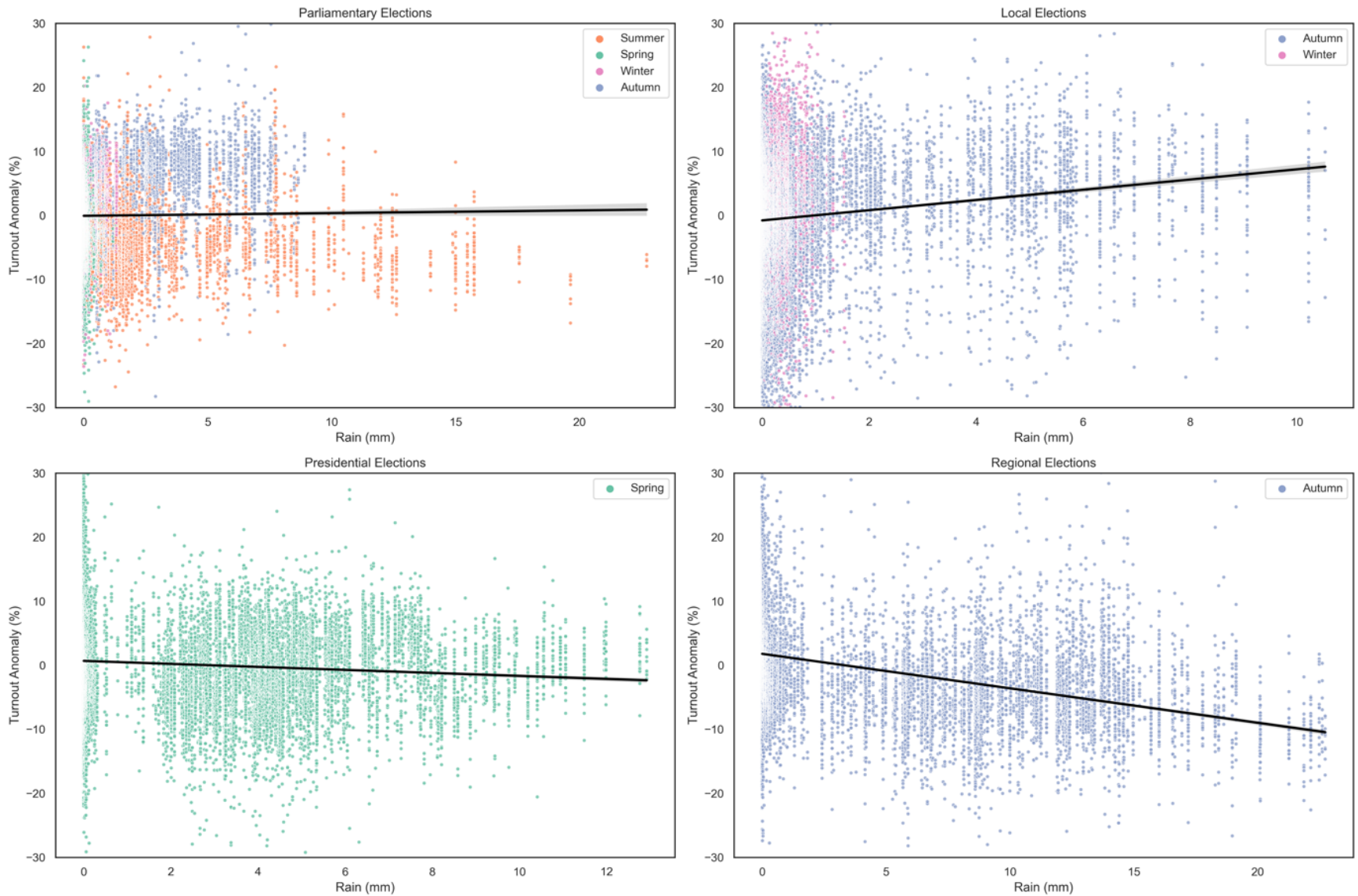
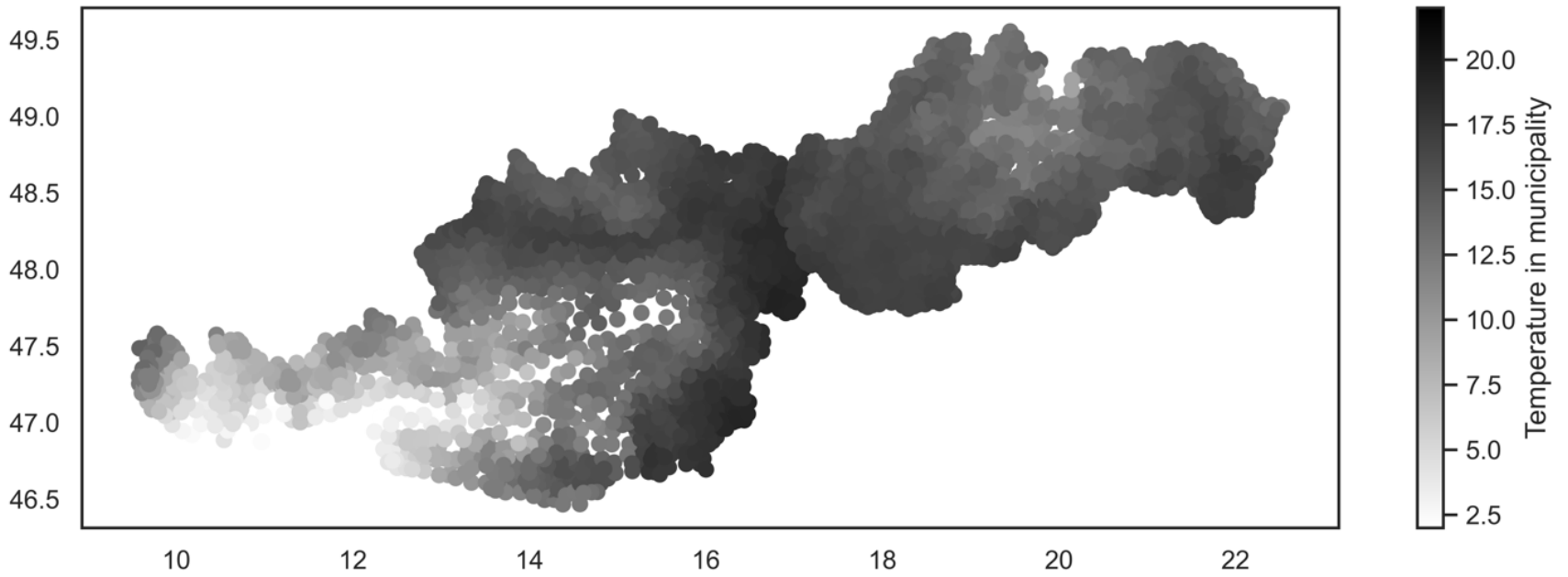
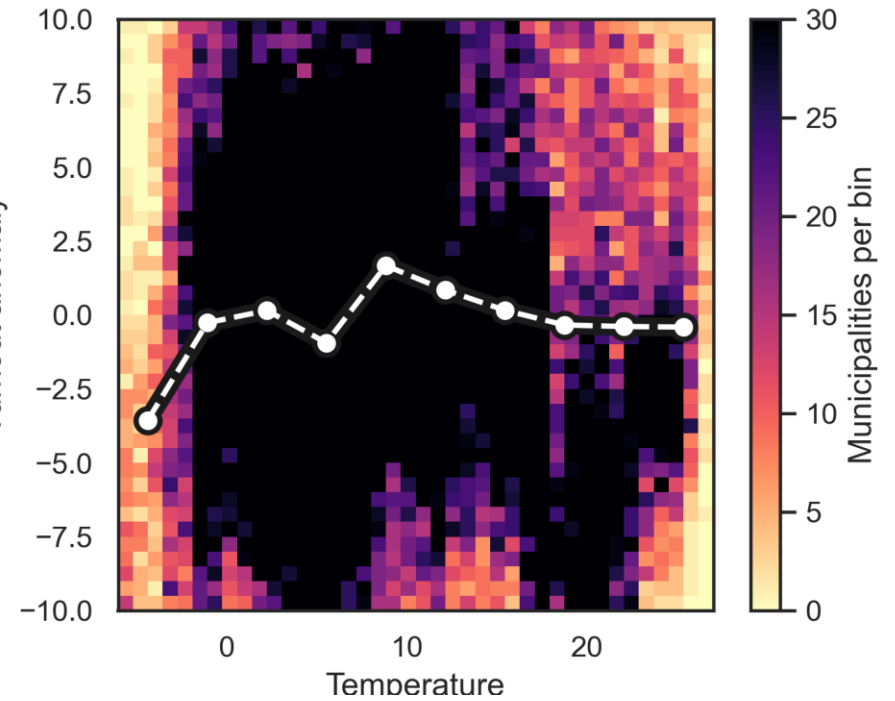
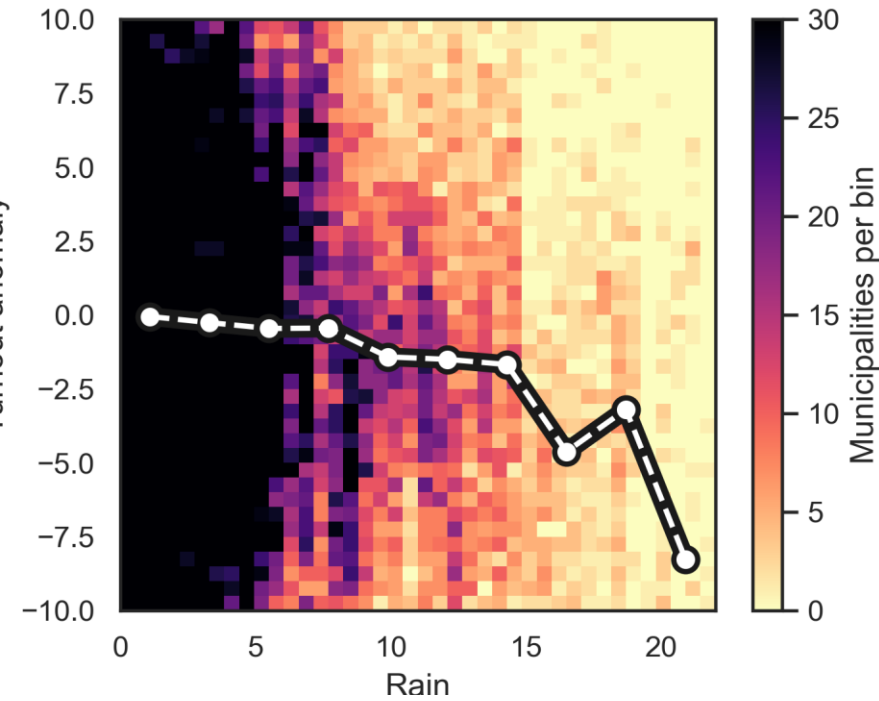


Fig. 1: The effect of a **rainfall** on turnout anomaly in different types of elections



Non-linear results for all elections



Solution?

Abstainers (note from previous lecture)

Relevance of abstention

- Two assumptions about abstainers:
 - 1) Abstention affects all alternatives in equal measure
 - 2) The voter's preferred alternative will be less likely to win if that voter abstains

Peripheral + core voters

No-Show Paradox (Fishburn and Brams, 1983)

Short-term reasons vs. global decline

- Two arguments for why recent generations are less prone to vote:
 - 1) **Context school** - the result of certain characteristics of elections that particularly affect new voters (less competition, lowering the voting age...) -> P+habit
 - 2) **Generation school** – larger cultural value change in generations (less interest, priorities, voting not perceived as a duty)

Blais and Rubenson (2013) – support for generation school -> young generation less inclined to vote because they are less prone to construct voting as a moral duty and are more sceptical about politicians' responsiveness to their concerns

↳ “People like me don’t have any say about what the government does”

“I don’t think public officials care much what people like me think.”

How do we increase turnout?
New research on electoral participation

1) personal state effects

when you're sleeping but someone
keeps talking to you

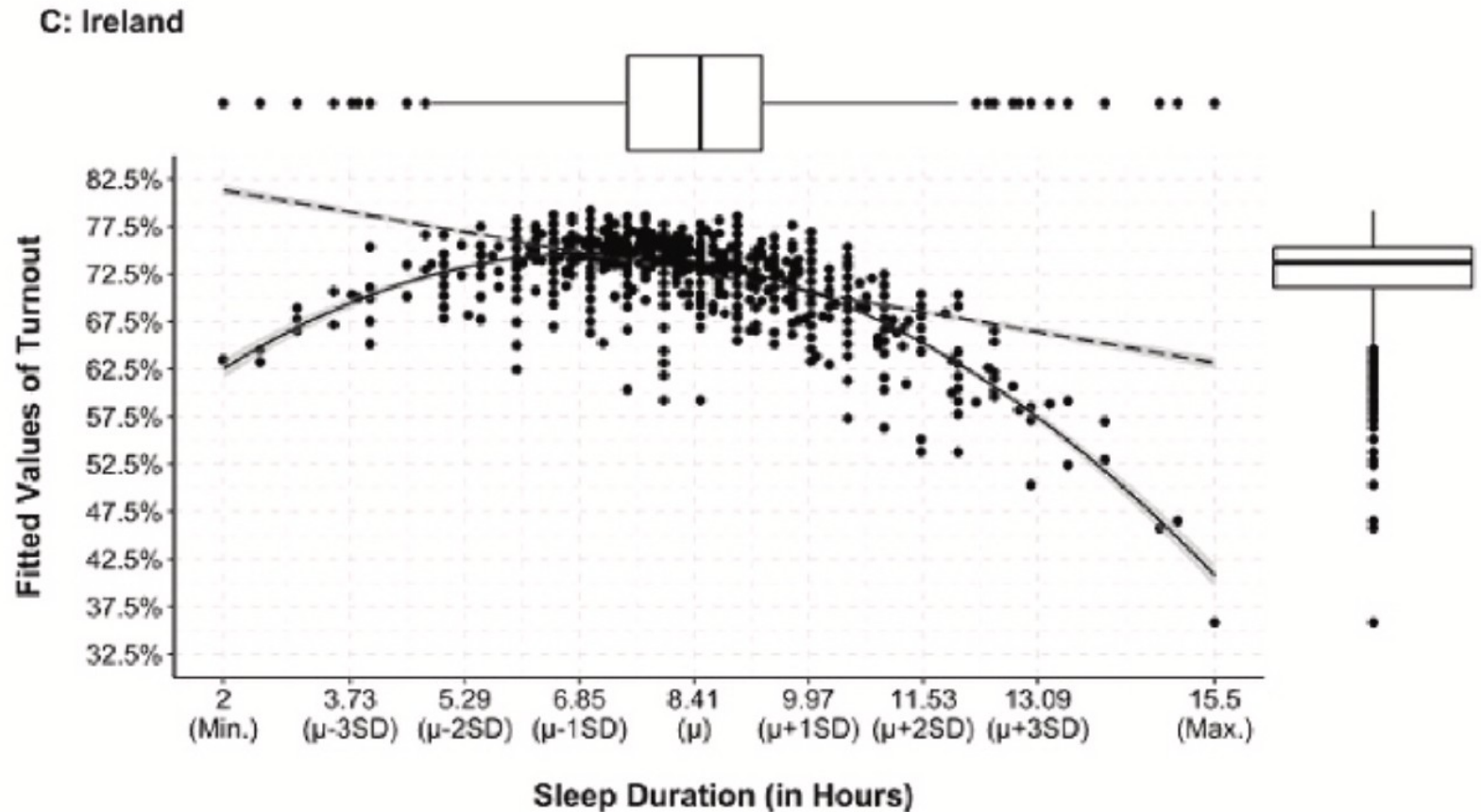


Personal state

Ksiazkiewicz and Erol 2022 - Too tired to vote: A multi-national comparison of election turnout with sleep preferences and behaviors

- Analysis of 9 countries (Finland, Greece, Ireland, Mexico, the Netherlands, New Zealand, the Philippines, Russia, and South Korea), questionnaires
- Is there an association between sleep, chronotype and turnout?
- "those who sleep too little or too much are less likely to vote" -> non-linear relationship, sleep as a resource
- Morning chronotype - higher T (but not always)

Personal state



SLEEP

1. Conservation of limited energy
2. Mental and physical health impacts
3. Memory and abilities

Personal state

- **General health:**

- 20 EU countries -> decreases turnout (0.48 pp.)
- Sweden -> decreases turnout BUT increases in other forms (contact, protest)

- **Hampered by daily activities:**


- 20 EU countries -> decreases turnout BUT increases in other forms (boycott, petition, contact a politician)
- USA – disabled 5.7 pp. turnout gap

- **Depression:**

- USA (mediated by education and partisanship)

Why important?

Lonely Hearts, Empty Booths? The Relationship between Loneliness, Reported Voting Behavior and Voting as Civic Duty

Alexander Langenkamp , Faculty of Social Sciences, Goethe University Frankfurt, Theodor-W.-Adorno-Platz 6, Frankfurt, Hessen, 60323, Germany

Objective. The study investigates the relationship between perceived loneliness and the individuals' attitude whether voting is a civic duty. With that, it is the first study to shed light on the mechanism linking perceived loneliness to voting behavior. *Methods.* Two independent, cross-sectional, and representative datasets from Germany ($n = 1641$) and the Netherlands ($n = 1431$) are analyzed. *Results.* The regression results and effect decomposition techniques show that loneliness is associated with reduced intention to vote as well as a lower sense of duty to vote. The effect of loneliness on voting behavior is partially mediated through a reduced sense of duty. *Conclusion.* Loneliness is associated with political disengagement. The study provides empirical evidence that the relationship between loneliness and turnout is partially mediated through sense of duty. This showcases that lonely individuals tend to feel detached from society and are less likely to feel obligated to participate in the electoral process.

2) facilitation procedures

Activity: Barriers to Voting

- **Objective:** Explore the challenges that prevent people from voting and think about solutions.








- **Instructions:**

1. Small groups -> assigning each group a different barrier to voter turnout (e.g., voter ID laws, registration requirements, lack of political interest, accessibility for people with disabilities).

2. Brainstorming for 5 minutes on **how** these barriers impact turnout and potential **solutions** to overcome them.

3. Presenting ideas to the class.

Research: how to increase turnout

- **Vote by mail** tend to be preferred by disabled voters (Kincart, 2023) 
- **Long lines** 
- **Opening new polling stations** (abroad): Latvia 
- **Changing the location of polling stations:** Los Angeles County during California's 2003 gubernatorial recall election -> -1.8 pp. 
- **Automatically registering voters** -> + 2.1 pp. 
- **All-mail-voting:** Colorado -> +8 pp. (young, less-educated, voters of colour)  

before the election receives a ballot by mail. Voters may choose to mail back their completed ballot, drop it in one of many secure collection boxes, or bring it to a vote center, where professional staff serve those who prefer to vote in person; in 2014, the first year in which Colorado

Prepaid postage

- Yin et al. 2021 – all Swiss cantons
- You could send it by mail or bring it to the town government's mailbox
- Positive effect about +1.1-1.3 pp.
- Effect stronger in larger municipalities

Table 2
Difference-in-differences estimation of turnout on prepaid postage.

	Turnout	
	(1)	(2)
Prepaid postage	0.257 (0.637)	-0.577 (0.669)
Large population	-1.435** (0.725)	
Population		-0.868** (0.397)
Prepaid postage* large population	2.265** (1.102)	
Prepaid postage* population		0.241*** (0.055)
Controls	✓	✓
Municipal FE	✓	✓
Vote Day FE	✓	✓
Observations	31,393	31,393
R ²	0.018	0.014

Note:

*p < 0.1.

**p < 0.05.

***p < 0.01.

E-voting?

Electoral Studies 71 (2021) 102245



Contents lists available at [ScienceDirect](#)

Electoral Studies

journal homepage: <http://www.elsevier.com/locate/electstud>



Does E-Voting matter for turnout, and to whom?



Adrien Petitpas^{*}, Julien M. Jaquet, Pascal Sciarini

University of Geneva, Department of Political Science and International Relations, Boulevard du Pont-d'Arve 40, 1205, Geneva, Switzerland

ARTICLE INFO

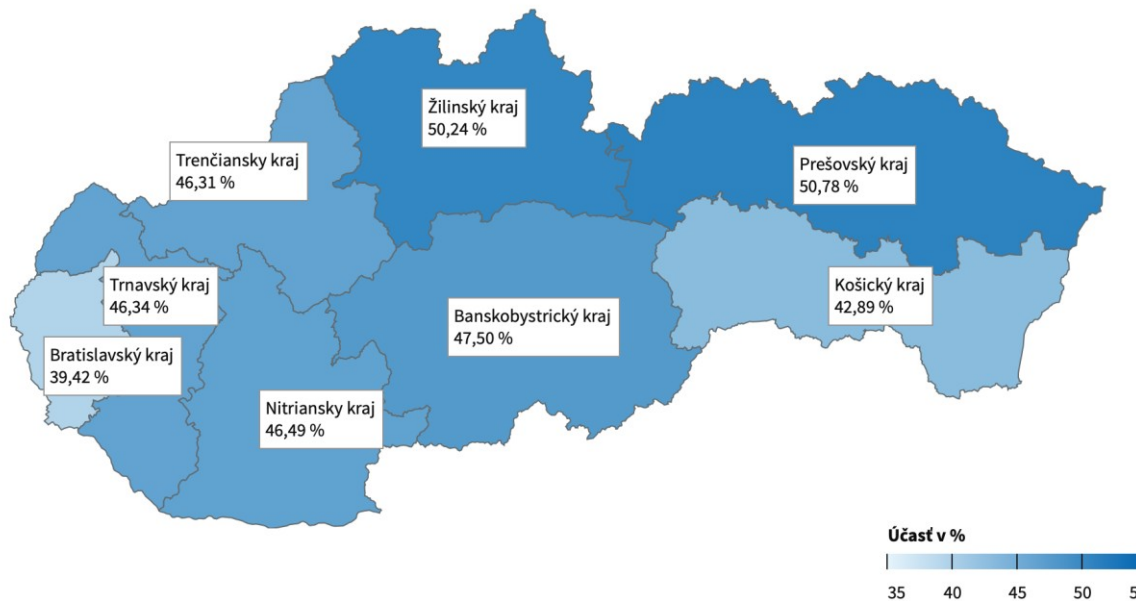
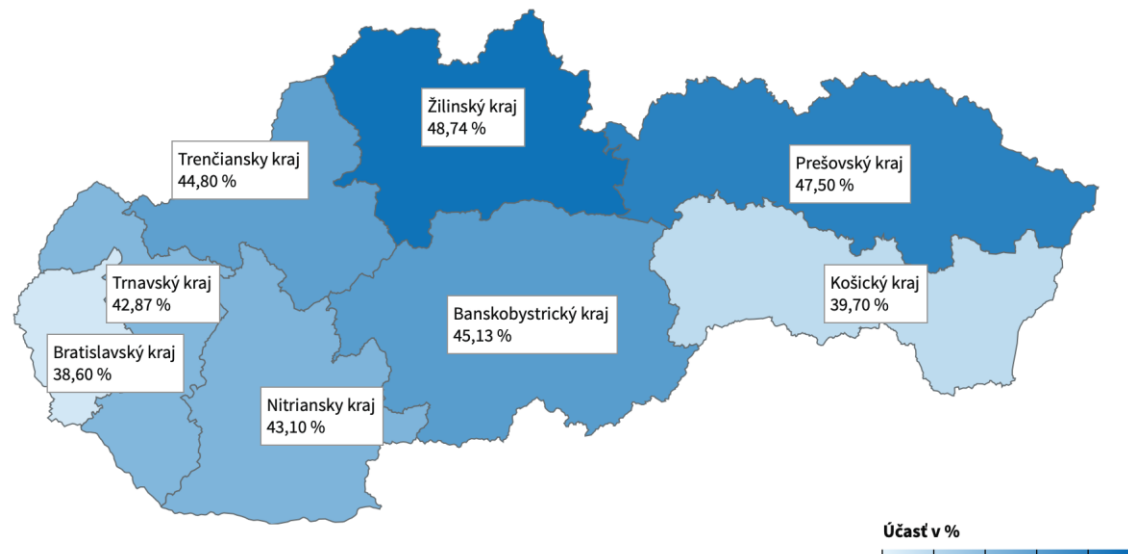
Keywords:

Turnout
Participation
Internet voting
E-voting
Direct democracy

ABSTRACT

Empirical evidence suggests that e-voting has no measurable effects on turnout. However, existing studies did (or could) not look at e-voting effects on the individual level. We innovate by analyzing whether and to what extent the availability of e-voting fosters turnout among specific groups of citizens, and how this influences the equality of participation. To that end, we estimate Bayesian multi-level models on a unique set of official data on citizens' participation covering 30 ballots between 2008 and 2016 in Geneva, Switzerland, which has the most far-reaching experience with e-voting worldwide. Despite the fact that e-voting was added to an easy-to-use form of postal voting, we find that offering e-voting has increased turnout among abstainers and occasional voters. By contrast, the effects of e-voting availability on the equality of participation are mixed with respect to the age cohorts and gender.

Concurrent elections?



Incentives to "persuade" abstainers?

Does the monetary cost of abstaining increase turnout? Causal evidence from Peru[☆]



Germán Feierherd^{a,*}, Guadalupe Tuñón^b, Gerson Julcarima-Alvarez^c

^a *Universidad de San Andrés, Vito Dumas 284, Buenos Aires, Victoria, B1644BID, Argentina*

^b *Princeton University, 409 Robertson Hall, Princeton, NJ 08544, United States of America*

^c *University of Lethbridge, 4401 University Drive, Lethbridge, Alberta, T1K 3M4, Canada*

ARTICLE INFO

Keywords:

Compulsory voting

Electoral fines

Regression discontinuity

Voter turnout

Peru

ABSTRACT

We study the elasticity of turnout on the size of the monetary fines that governments impose on those who fail to vote. We leverage a discontinuity in the size of monetary fines in Peru, where voters in districts above an arbitrary cutoff in poverty rates face higher fines for not voting relative to voters who reside in districts below the cutoff. Using individual-level data on millions of voters for every regional and national election between 2010 and 2016, we find that turnout increases slightly in districts with higher fines—an effect of roughly one percent. This modest effect is similar across socioeconomic groups and elections. Our results highlight a challenge that governments face in designing the sanctions in compulsory voting systems: how to increase turnout without disproportionately hurting the poor or raising turnout inequality.

Holidays?

Forget about voting, we are going on vacation! Examining the effect of school holidays on turnout

JAKUB JUSKO AND PETER SPÁČ

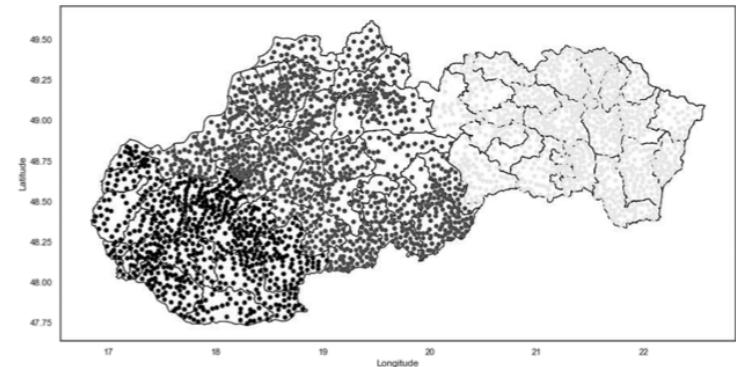


Politics in Central Europe (ISSN 1801-3422)
Vol. 19, No. 3
DOI: 10.2478/pce-2023-0025

Abstract: Media and politicians widely debate the relationship between holidays and political participation, but research in the field is underdeveloped. To test the impact of holidays on election turnout, we use a natural experimental setting in general elections in Slovakia with respect to the presence of holidays near election day. More specifically, while a part of the country had no holidays, other regions either experienced holidays for the first time or had the holiday in a repeated manner. The results from difference-in-differences and OLS regressions employed in the analysis show that experiencing a holiday near election day decreases electoral turnout. However, this negative effect of holidays on turnout is found to be significant only in territories that experienced holidays for the first time, while it is absent in territories that had holidays near elections repeatedly. This finding points to a potential habituation of the electorate and the holidays' influence in the long run. The paper thus contributes to our understanding of how different time aspects of holidays affect electoral turnout.

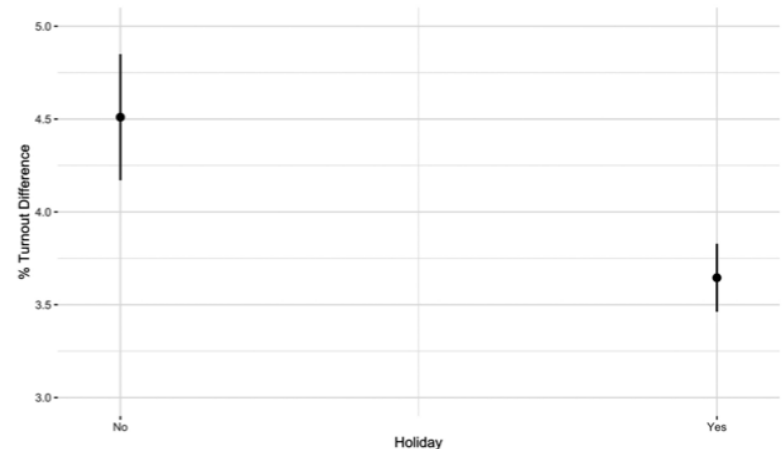
Keywords: holidays, turnout, elections, Slovakia, difference-in-differences

Figure 1: The Slovak municipalities divided by the time of their spring holidays



Note: The black spots represent municipalities with no holidays around the election day, the grey spots represent municipalities with holidays in the 2020, and 2016 elections, and the light grey spots represent the municipalities with holidays only in the 2020 elections
Source: Statistical Office of the Slovak Republic, and authors' computations

Figure 2: Mean difference in turnout (2016–2020) depending on the character of a municipality (Without holidays vs With holidays)



Note: Confidence intervals are displayed at 90%
Source: Authors

How do we increase turnout?

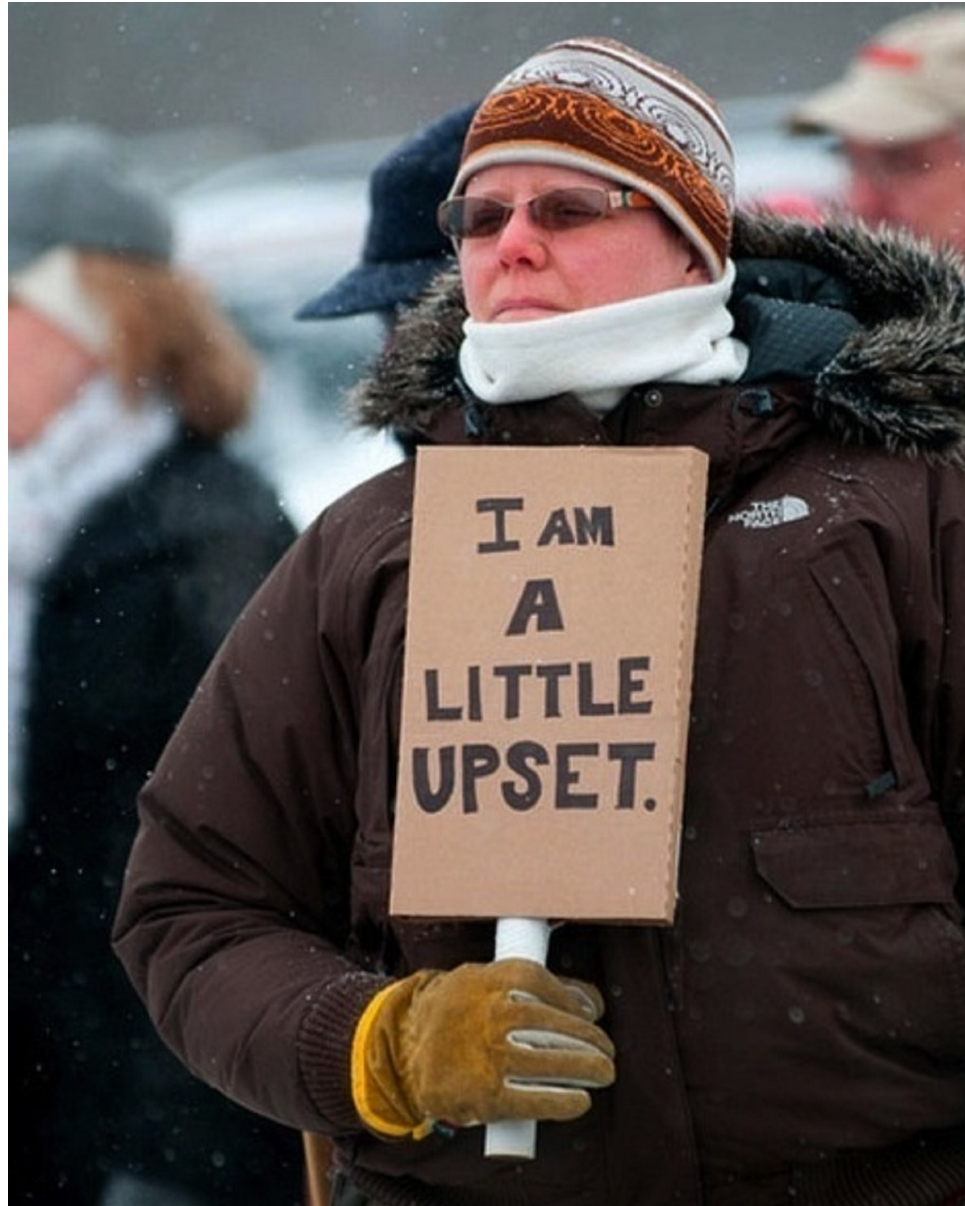
- 1) decreasing costs for voting – monetary (postage), polling-stations related, registration, shorter ballot list
- 2) increasing availability of voting – all-mail-voting, e-voting, concurrent elections, multiple day voting and no holiday voting (probably)

Conclusion

- The weather impacts humans, therefore, it also impacts human activities (one such is elections)
- Rain (usually) decreases turnout (depends on age, density, electoral contest)
- Temperature (usually) increases turnout
- Rain helps certain types of political parties

- Different tools to increase turnout

Next...



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