Fighting Populism on Its Own Turf: Experimental Evidence

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Background discussion

- Positive discussion on whether **populism** is a political strategy (Weyland 2001), a style (Moffitt and Tormey 2014), or an ideology (Mudde 2004)
- Normative discussion on whether populism is a **threat** (Muller 2016) or a **corrective** (Mudde and Rovira Kaltwasser 2017) to liberal democracy
- Growing literature on the socio-cultural and economic **motivations** of populism (Margalit 2019, Guriev and Papaioannou 2020)
- The populist combination of issues, ideas, and communication style has posed a phenomenal challenge to **traditional parties**
- Fewer contributions on how they can **best respond** to populism

How to deal with populist politicians

We investigate the potential "best response" of non-populist parties from a positive perspective... but examine also possible future consequences.

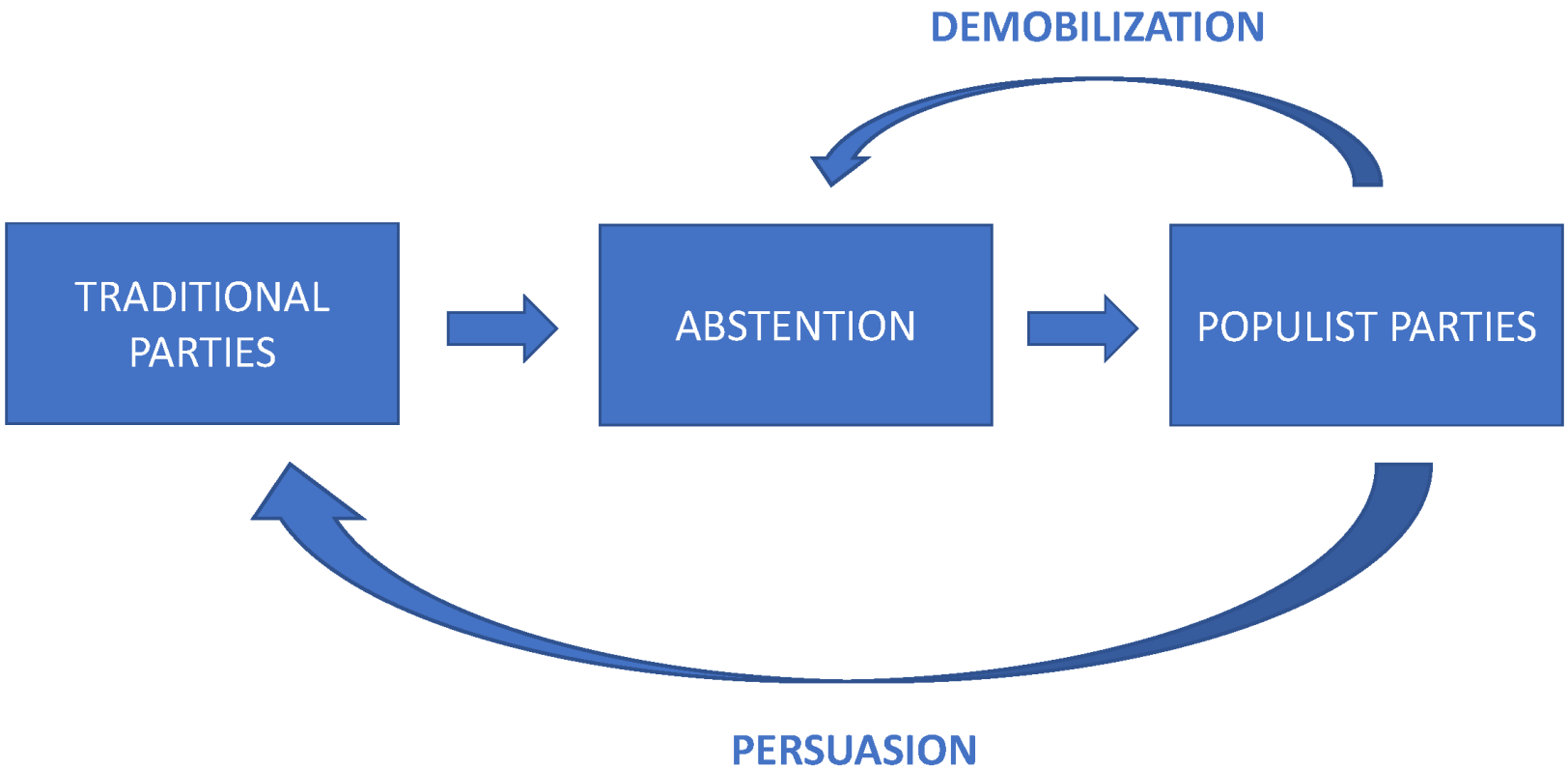
Several aspects are relevant

- **Issue**: Should traditional parties avoid populist friendly issues, such as anti-establishment or anti-immigration sentiments?
- **Strategy**: Persuasion, mobilization, or demobilization?
- **Communication**: If engaging with populists on their own turf, should traditional parties try to:
  1. **Win the argument** by providing facts and information to deconstruct the populist narrative?
  2. **Use the same weapons** by following the populist rhetoric of framing and blame attribution, e.g., depicting populist politicians as opportunistic and a new corrupt establishment?

Literature review: campaigning against populists

- Populism as an opportunistic **communication strategy** (Moffitt 2016, Heiss and Matthes 2020, Dai and Kustov 2022). Populist messages are more likely to engage voters, particularly on social media (Cassell 2021). Anti-populists give "well-mannered," rationalist, and polished messages (Miller-Idriss 2019)
- **Political advertising**: ambiguous effects of campaign ads on persuasion (Gerber et al. 2011, Kalla and Broockman 2018, Dunning et al. 2019). But effective on electoral turnout of potential supporters/opponents (Green and Gerber 2004, Panagopoulos 2016)
- Effects of **negative campaigning** on turnout: large literature starting from Ansolabehere et al (1994)

How to deal with populist politicians



Populists and turnout in Italian municipalities

	(1) M5S	(2) M5S	(3) M5S+Lega	(4) M5S+Lega
Turnout	0.611***	0.936***	1.062***	1.224***
	(0.011)	(0.011)	(0.014)	(0.016)
Past turnout	-0.592***	-0.179***	-0.995***	-0.976***
	(0.013)	(0.014)	(0.016)	(0.021)
Model	GLS	FE	GLS	FE
Obs	23,573	23,573	23,573	23,573

- Panel of more than 8,000 municipalities in 4 National elections (2008, 2013, 2018, 2022)
- E.g., one within s.d. of turnout (past turnout) correlated with increase (decrease) of 6.1 (-1.4) in the M5S vote share (21%)
- Nannicini and Riva (2013): raining reduces turnout and the M5S vote share (again, National election with fixed supply)

Our contribution

- Run a **large-scale field experiment** (almost 1 million video impressions) to study how to engage with populists on their own turf: the campaign for the 2020 Italian constitutional referendum on a populist-friendly issue: the **cut in the number of MPs**
- Implement **programmatic advertising**, a novel communication tool, to send almost 1 million impressions: 2 pre-roll 30-second videos to geo-targeted eligible voters in 200 municipalities of 6 Italian regions
- Evaluate the effect of two strategies of anti-populist campaign – **"win the argument"** and **"use the same weapons"** – in terms of **persuasion** and **mobilization** and future electoral outcomes.
- Results: **"use the same weapons"** strategy is a cheap (2 euro per person) way of **demobilizing** voters, particularly in low-educated, low-labor-force, small towns, but has future electoral consequences by favoring the next populist in line.

Referendum

Referendum on September 20-21, 2020 to uphold the Constitutional law introducing a reduction of Italian MPs

- Lower House from 630 to 400
- Senate from 315 to 200

Voting

- **YES** = Yes to the reduction of MPs
- **NO** = No to the reduction of MPs

Populist parties, 5 Stars (M5S), League, and Brothers of Italy (FdI), supported the law and the Yes vote
Traditional parties were caught in the middle.

Lopsided issue: Polls predicted 90-10 percent YES victory six months before the referendum and 70-30 the week before

Experimental design

- **Large field experiment** two weeks before the vote
- We randomized electoral materials from a Referendum committee supporting the No vote (*Democratici per il No*)
- **Treatments**: Two 30-second **non-skippable pre-load roll** videos deployed using **Programmatic advertising**.
  - Video 1: Factual-information to "win the argument".
  - Video 2: Trust-reducing arguments to "use the same weapons" of populists

Treatment V1: "Win the argument"

- *Perhaps you have been told that the referendum on September 20 is needed to*

- reduce the costs of politics.

- *They lied to you.*

- The cost savings will amount to only one coffee per year for every Italian. But there will be other consequences. Your municipality and the small regions will not have voice in Parliament. To bring a government down, it will only take a few turncoat senators switching party affiliation. Hence, your vote will be worth less.

- Is all this worth a coffee a year?

- *I vote NO.*

- Background voice (of a professional actor), text displayed
- Faces of professional actors

Treatment V2: "Use the same weapons"

- *Perhaps you have been told that the referendum on September 20 is needed to*

- fight the ruling elite.

- *They lied to you.*

- The aim of this law is to reinforce them: The new ruling elite. Those who would like to replace the Parliament that originated from the Resistance movement with the private online platform run by the Casaleggio&Co. Those who cut 115 Senators to save 28 million Euros, when it would only take one senator, Matteo Salvini, to give back the 49 million Euros stolen by the Northen League.

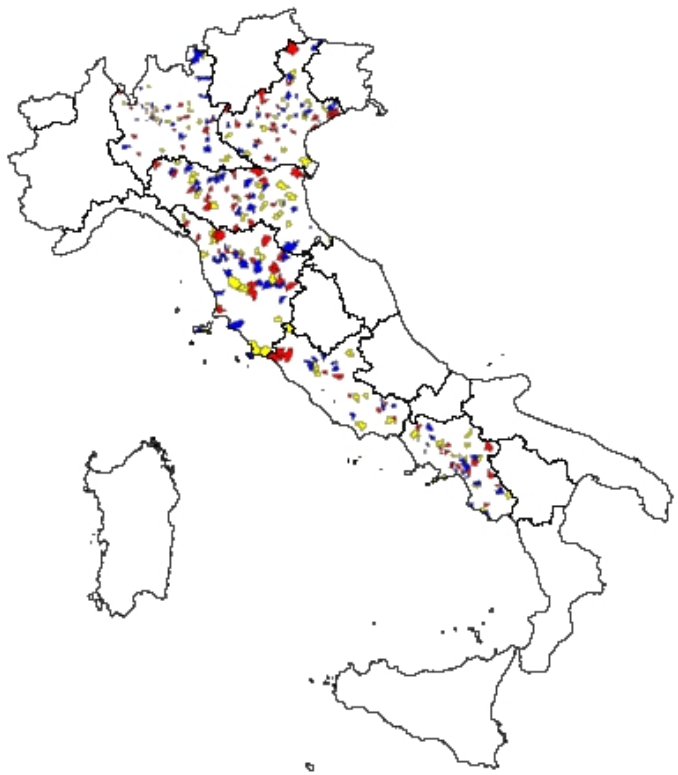
- Do you still want to be fooled by them?

- *I vote NO.*

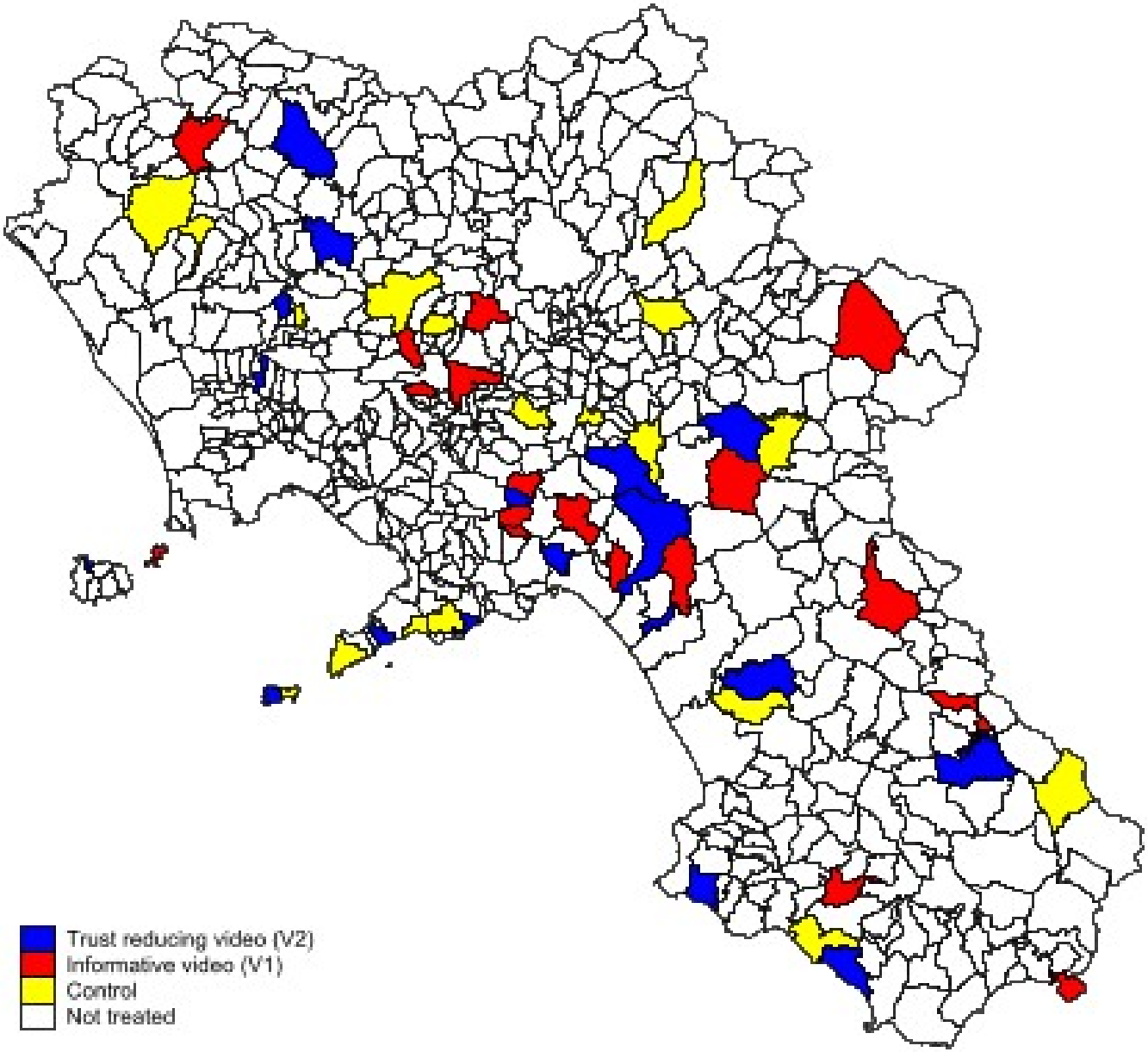
- Background voice (of a professional actor), text displayed
- Video shows images of the politicians, who promoted the law, such as Di Maio and Toninelli (M5S) and Salvini (League)

Experimental design: Randomization

- **Randomization** at municipality level: in 200 small municipalities in 6 regions providing almost 1 million impressions (clicks on non-skippable pre-roll videos)
- Video 1 to 100 towns, Video 2 to 100 towns, other 100 (or 200) in control group. We **pre-registered** triplets of treated and control municipalities
- This was "the" campaign in those small towns



Experimental groups in Campania



Video completion rates

- Videos could not be skipped, but viewers could close their browser: **59 percent** of the viewers watched them until the end; **74 percent** the first half (15 seconds)
- Almost **850 thousand impressions** deployed; Almost **600 thousand individuals** reached

Table: Video completion rates

	(1) 25%	(2) 50%	(3) 75%	(4) 100%
T2	0.543*	0.581	0.825*	1.194**
	(0.293)	(0.388)	(0.476)	(0.521)
FE	✓	✓	✓	✓
Obs	200	200	200	200

Video completion rate (100%) by outlet

	(1)		(2)		(3)		(4)	
	All	s.d.	T1	s.d.	T2	s.d.	T1-T2	t
General info	0.583	0.261	0.595	0.259	0.570	0.263	0.025	0.676
Newspapers	0.711	0.093	0.704	0.081	0.718	0.104	-0.014	-1.036
Radio & TV	0.595	0.074	0.587	0.063	0.602	0.083	-0.015	-1.433
Fun	0.523	0.141	0.522	0.133	0.524	0.150	-0.002	-0.120
Food	0.569	0.165	0.529	0.164	0.609	0.158	-0.079***	-3.483
Weather	0.542	0.277	0.560	0.280	0.523	0.274	0.038	0.936
Sales	0.545	0.324	0.504	0.298	0.583	0.343	-0.079	-1.582
Business	0.286	0.369	0.338	0.388	0.239	0.346	0.099	1.546
Motors	0.435	0.420	0.410	0.423	0.461	0.418	-0.051	-0.668
Travels	0.466	0.192	0.489	0.186	0.444	0.197	0.044	1.620
Technology	0.554	0.043	0.558	0.043	0.550	0.043	0.007	1.223
Health	0.653	0.052	0.644	0.048	0.662	0.054	-0.019**	-2.587
Real estate	0.574	0.227	0.598	0.215	0.551	0.237	0.047	1.477
Gossip	0.185	0.204	0.195	0.193	0.174	0.216	0.021	0.710
Mothercare	0.273	0.234	0.322	0.255	0.222	0.199	0.099***	2.993
Fashion	0.412	0.095	0.397	0.087	0.427	0.100	-0.031**	-2.302
Games	0.534	0.087	0.537	0.085	0.532	0.091	0.005	0.398
Sports	0.519	0.150	0.526	0.137	0.512	0.163	0.014	0.651
Obs	200		100		100		200	

Main results

Table: Experiment outcomes: 2020 referendum

	Turnout		Yes vote share	
	(1)	(2)	(3)	(4)
T1	-0.003	-0.007	-0.002	-0.007
	(0.008)	(0.008)	(0.006)	(0.006)
T2	-0.013*	-0.018**	-0.011*	-0.016***
	(0.008)	(0.008)	(0.006)	(0.006)
T1 vs T2	0.170	0.185	0.143	0.132
Sample	Triplets	Quadruplets	Triplets	Quadruplets
FE	✓	✓	✓	✓
Obs	300	400	300	400

Notes. Estimated WLS regression: $Y_i = \alpha_1 T1_i + \alpha_2 T2_i + \gamma_k + \varepsilon_i$, where $K \in \{T, Q\}$, γ_T are triplet fixed effects, γ_Q are quadruplet fixed effects. *T1 vs T2* reports the p-value of the Wald test for the null hypothesis: $H_0 : \alpha_1 = \alpha_2$. Robust standard errors are in parentheses. Significance at the 10% level is represented by *, at the 5% by **, and at the 1% by ***.

Costs of getting non-voters

- **Total cost of the experiment**
  Programmatic advertising for both videos: 30,000 Euros
  Video making (paid by the politician): 5,000 Euros
  Hence: 17,500 Euros per V2

- **Eligible voters** in V2 municipalities: 658,834
  - *No targeting*. Treatment effect over baseline sample: 0.013. **Induced non-voters: 8,565**
  - *Targeting on digital penetration*. Treatment effect over target sample: 0.019. **Induced non-voters: 12,518**

- **Unitary cost per induced non-voter**: **2 Euros** (or even **1.4 Euros** with better digital targeting)

Treatment heterogeneity by socioeconomic variables

	Education		City size		Labor force	
	(1) Turnout	(2) Yes	(3) Turnout	(4) Yes	(5) Turnout	(6) Yes
T1	-0.011	-0.007	-0.010	-0.008	-0.006	-0.007
	(0.014)	(0.010)	(0.012)	(0.009)	(0.016)	(0.011)
T2	-0.036***	-0.028***	-0.026**	-0.026***	-0.038***	-0.032***
	(0.013)	(0.010)	(0.013)	(0.009)	(0.015)	(0.011)
T1 × Education	0.008	0.001				
	(0.019)	(0.014)				
T2 × Education	0.039**	0.024*				
	(0.019)	(0.014)				
Education	-0.016	-0.025***				
	(0.012)	(0.009)				
T1 × City size			0.007	0.004		
			(0.017)	(0.012)		
T2 × City size			0.023	0.025**		
			(0.017)	(0.012)		
City Size			0.022	0.014		
			(0.016)	(0.012)		
T1 × Labor force					-0.000	0.001
					(0.019)	(0.014)
T2 × Labor force					0.037**	0.028**
					(0.018)	(0.013)
Employment					-0.020	-0.015
					(0.013)	(0.010)
Sample	Quadruplets	Quadruplets	Quadruplets	Quadruplets	Quadruplets	Quadruplets
FE	✓	✓	✓	✓	✓	✓
Obs	400	400	400	400	400	400

Treatment heterogeneity by Political Parties

	Democrats		Populists		Centrists	
	(1) Turnout	(2) Yes	(3) Turnout	(4) Yes	(5) Turnout	(6) Yes
T1	-0.017	-0.013	-0.006	-0.009	-0.002	-0.004
	(0.014)	(0.010)	(0.010)	(0.008)	(0.010)	(0.007)
T2	-0.041***	-0.031***	0.005	-0.003	-0.001	-0.003
	(0.015)	(0.011)	(0.011)	(0.009)	(0.009)	(0.007)
T1 × Democrats	0.020	0.012				
	(0.016)	(0.012)				
T2 × Democrats	0.046***	0.030**				
	(0.017)	(0.013)				
Democrats	-0.018	-0.018				
	(0.020)	(0.013)				
T1 × Populists			-0.000	0.004		
			(0.016)	(0.012)		
T2 × Populists			-0.039**	-0.023*		
			(0.017)	(0.013)		
Populists			-0.002	0.008		
			(0.013)	(0.009)		
T1 × Centrists					-0.009	-0.005
					(0.018)	(0.013)
T2 × Centrists					-0.033**	-0.025**
					(0.016)	(0.012)
Centrists					0.013	0.012
					(0.014)	(0.011)
Sample	Quadruplets	Quadruplets	Quadruplets	Quadruplets	Quadruplets	Quadruplets
FE	✓	✓	✓	✓	✓	✓
Obs	400	400	400	400	400	400

Treatment heterogeneity: sum-up

- Stronger effects of V2 in reducing **turnout** and **Yes vote** in towns with more low-educated individuals, with lower labor force and in smaller towns.
- Stronger effects of V2 in reducing **turnout** and **Yes vote** in towns leaning towards Populist (M5S and Lega) or Centrists (FI). Lower in towns leaning Democrats (PD)

Indirect Outcomes: Results on 2022 elections

	(1) Turnout	(2) Democrats	(3) Populists	(4) Centrists	(5) Brothers of Italy
Baseline specification					
T1	0.004	-0.007**	-0.002	-0.003	0.010***
	(0.005)	(0.003)	(0.004)	(0.002)	(0.004)
T2	0.006	-0.006*	-0.003	-0.003	0.014***
	(0.004)	(0.003)	(0.004)	(0.002)	(0.004)
T1 vs T2	0.641	0.908	0.780	0.931	0.377
Controls					
Additional specification					
T1	0.005	-0.006**	-0.002	-0.002	0.010***
	(0.004)	(0.003)	(0.003)	(0.002)	(0.004)
T2	0.006*	-0.004*	-0.005	-0.003*	0.013***
	(0.004)	(0.002)	(0.004)	(0.002)	(0.004)
V1 vs V2	0.691	0.470	0.503	0.754	0.459
Controls	✓	✓	✓	✓	✓
Sample	Quadruplets	Quadruplets	Quadruplets	Quadruplets	Quadruplets
FE	✓	✓	✓	✓	✓
Obs	400	400	400	400	400

Conclusion

- When fighting populist parties on their own turf, (de)mobilization seems to work better than persuasion
- Negative anti-populist attacks are more effective in drawing voters' attention and selectively reduce turnout
- These effects are larger in areas with lower employment and education levels, in smaller towns and towns leading towards Populists or Centrists.
- With programmatic ads, the cost of inducing a non-voter in the competing camp is 2 euros (1.4 euros with better targeting)
- Potential long-term effects: Gains for the next-populist-in-line

2023 survey on broader outcomes

Survey currently undergoing:

- Interest in politics
- Participation in social activities
- Participation in protests
- Impact on family life
- Tax evasion (item-count elicitation)
- Trust in political and nonpolitical institutions
- Political affiliation
- Open question on distrust of politicians

Assumption: cognitive dissonance in political behavior

The politics of the referendum

Populist parties, 5 Stars (M5S), League, and Brothers of Italy (FdI), supported the law and the Yes vote

5 Stars were the main promoters from the beginning to the end (flagship proposal), and their slogans always stressed the populist cleavage

- NOW OR NEVER: VOTE YES TO CUT 345 SEATS
- -345 MPs +1 BILLION FOR THE CITIZENS

The politics of the referendum (contd.)

- **Traditional parties** were caught in the middle.
- **Dem** (PD) and **Forza Italia** (mildly) suggested to vote YES, with dissenting interventions
- A few small parties endorsed the NO vote to STOP POPULISM!

Lopsided issue: Polls predicted 90-10 percent YES victory six months before the referendum and 70-30 the week before

Doing experiments with politicians

We apply 5-rule protocol (Galasso and Nannicini 2022)

- R1 Campaign costs for the realization of the electoral materials should be borne by the politician. Costs for the distribution of the materials should also be borne by the politician if the size of the experiment could affect the electoral outcome
- R2 The researcher should not disclose the exact randomization outcome to the politician
- R3 The politician should disclose the non-experimental part of the campaign to the researcher
- R4 The informational treatments should be devised by the researcher based on campaign messages provided by the politician
- R5 The interpretation of the informational treatments should be tested ex ante on out-of-sample individuals and ex post on treated individuals

Programmatic advertising

To deploy our videos online, we used **programmatic advertising**

- Automated transaction of buying and selling online ads, through the algorithmic software of exchange platforms in a fraction of a second
- A publisher lists on the supply side platform (SSP) the ad space for a viewer (info via cookies, etc.), who is currently on a webpage
- Demand side platforms (DSPs) review this information to match users with the budget and targeting parameters of their advertisers
- In real time, DSPs make bids on behalf of their advertisers. The SSP picks the winner and shows the ad to the user on the publishers site
- The entire process happens while the page is loading for the user in milliseconds

Programmatic advertising (contd.)

- Programmatic advertising allows granular targeting (based on timing, message, individual type, webpage) on several devices (mobile, desktop, tablet, TV)
- Our field experiment was managed by a professional company
- Instructions to the professional company: To use a bidding strategy allowing each city to receive a number of impressions (videos) proportional to its size
- **Target ratio: around 65 percent of eligible voters**
- Instructions to reduce difference in treatment proportion between cities in the same triplet, rather than to maximize impressions

Randomization protocol

- Focus on municipalities with 2,500-15,000 inhabitants (in 2018) with unique ZIP code in 6 regions (Campania, Veneto, Toscana, Emilia-Romagna, Lazio, Lombardia): **992 municipalities**
- Select municipalities with sufficient digital penetration (on data collected on August 2020): **596 municipalities**
- Form **triplets** of municipalities within each region, minimizing a measure of distance on population, 5 Stars and Dem votes in 2018 elections, turnout, and Yes votes in 2016 referendum
- Randomly select a subset of these triplets in each region to obtain **300 municipalities** (100 triplets)
- Within each triplet, we randomly assign a town to be treated with V1, a town with V2, and a town as control
- Use residual controls to form **quadruplets** as backup to gain power
- We **pre-registered** treated and control municipalities

Comparing informational treatments

V1 ("Win the argument"): Informative, but negative

- Information on the possible costs in terms of representativeness of the Parliament and stability of the government
- Negative advertisement: "They lied to you"
- No images of politicians

V2 ("Use the same weapons"): No info, negative aggressive

- No information provided on content of the referendum
- Negative advertisement: "They lied to you"
- Aggressive: Direct attack to the promoters of the law cutting the MPs and to the (only) source of information on the referendum
- Images of politicians

Estimation and samples

- Linear model:

$$Y_m = \alpha_1 T1_m + \alpha_2 T2_m + \beta_{j(m)} + \varepsilon_m, \quad (1)$$

with outcome variables at municipality level m, $j(.)$ maps municipality m to its triplet j, and β_j is a triplet fixed effect

Samples

- **Baseline** (triplets): 300 municipalities in 100 pre-registered triplets
- **Large** (quadruplets): 400 municipalities, to increase power by forming quadruplets using pre-registered controls
- **Target** (trimming): 260 municipalities, to increase treatment intensity by dropping units where actual impressions deviated more from target (note: digital penetration unrelated to treatment, only to number of individuals accessing online contents)

Balance tests

	(1) 5 Stars 2018	(2) Dem 2018	(3) Yes 2016	(4) Turnout 2016	(5) Population
V1	0.21	-0.31	-0.27	-0.32	186.61
	(0.32)	(0.34)	(0.36)	(0.27)	(258.29)
V2	0.39	-0.49	-0.29	-0.36	-161.30
	(0.35)	(0.34)	(0.36)	(0.26)	(258.61)
Obs	300	300	300	300	300

- Of course no pre-treatment unbalances
- Same holds in the other samples (*large* and *target*) and for socio-economic variables

Persuasion rates

We calculate the **persuasion rates** of V2, following Della Vigna and Gentzkow (2010), as

$$f = \frac{y_T - y_C}{e_T - e_C} \frac{1}{1 - y_0} \tag{2}$$

- $y_T - y_C$ treatment effect; $y_C = y_0$ baseline in the control group
- $e_T = 0.28$ is the fraction of agents (unique impressions) exposed to V2, not adjusted for completion rate, and $e_C = 0$
- Treatment effect is 0.019 for turnout and 0.005 for the No vote; the baseline is $y_0 = 0.394$ for turnout and $y_0 = 0.301$ for the No vote

- **V2 persuasion rate for turnout**: $f = 0.112$
- **V2 persuasion rate for voting No**: $f = 0.026$

Costs of GOTV (Green and Gerber 2004)

Table 12-1. Cost-Effectiveness of Get-Out-the-Vote Tactics[a]

GOTV effort	*Start-up and overhead costs*	*Ongoing management*	*Effectiveness per contact[b]*	*Is effect statistically reliable?*	*Dollar cost per vote (excluding start-up and management costs)*
Door-to-door	Recruit, prepare walk lists	Substantial ongoing training and supervision	One vote per 15 contacts plus effects of spillover on housemates	Yes	At $16 per hour and 6 contacts per hour, one vote costs $31
Leafleting	Recruit, prepare walk lists and leaflets	Monitor walkers, check work	One vote per 189 voters reached by leaflets	Not significantly greater than zero	*
Direct mail, advocacy	Design, print, distribute	Intensive during start-up, then postal service takes over	No detectable effort	Yes, large number of studies	*
Direct mail, nonpartisan (conventional message)[c]	Design, print, distribute	Intensive during start-up, then postal service takes over	One vote per 273 recipients	Yes, large number of studies	At $0.50 per piece, one vote costs $91
Phone, volunteer	Recruit enthusiastic callers	Ongoing training and supervision	One vote per 35 contacts	Yes, large number of studies	At $16 an hour and 16 contacts per hour, one vote costs $35
Commercial live calls	Obtain phone list	Requires monitoring to ensure quality	One vote per 125 contacts	Yes, large number of studies	At $0.50 per contact, one vote costs $63
Robo calls	Obtain phone list, recording talent	None	One vote per 900 individuals called	Not significantly greater than zero	*
E-mail	Amass e-mail list, compose message(s), distribute	Most of the work is in the start-up	No detectable effects, except when sent by registrar	Large number of studies show average effect cannot be large	*
Election Day festivals	Find site, organize event, advertise	Requires staff on hand to host and supervise events	Raises precinct-wide turnout by 1–2 percentage points	Yes, but based on few studies	Roughly $33 per vote
Television GOTV	Produce and place ads	None	Raises turnout by 0.5 percentage point	Not significantly greater than zero	*
Radio GOTV	Produce and place ads	None	Raises turnout by 1 percentage point	Not significantly greater than zero	*

Main Results: Digital Penetration

	Turnout		Yes vote share	
	(1)	(2)	(3)	(4)
	Penetration above 25%			
T1	-0.006	-0.008	-0.003	-0.007
	(0.009)	(0.009)	(0.008)	(0.007)
T2	-0.015**	-0.019**	-0.013**	-0.017***
	(0.008)	(0.009)	(0.006)	(0.007)
T1 vs T2	0.351	0.269	0.199	0.161
Sample	Triplets	Quadruplets	Triplets	Quadruplets
FE	✓	✓	✓	✓
Obs	250	350	250	350
	Trimming 5%			
T1	-0.003	-0.007	-0.003	-0.008
	(0.008)	(0.008)	(0.007)	(0.006)
T2	-0.014*	-0.018**	-0.012*	-0.017***
	(0.008)	(0.008)	(0.006)	(0.006)
T1 vs T2	0.196	0.202	0.176	0.167
Sample	Triplets	Quadruplets	Triplets	Quadruplets
FE	✓	✓	✓	✓
Obs	280	380	280	380
	Trimming 10%			
T1	-0.006	-0.009	-0.006	-0.010
	(0.009)	(0.009)	(0.007)	(0.006)
T2	-0.019**	-0.021**	-0.016**	-0.019***
	(0.009)	(0.008)	(0.007)	(0.006)
T1 vs T2	0.139	0.214	0.163	0.209
Sample	Triplets	Quadruplets	Triplets	Quadruplets
FE	✓	✓	✓	✓
Obs	260	360	260	360

Survey experiment

- A professional survey company interviewed 2,000 individuals two weeks before the referendum (on September 9-19, 2020)
- All interviews were online and lasted 8 minutes on average
- Randomization at municipality level (as in the field experiment)
- Individuals in the two treatment groups watched V1 or V2. Individuals in the control group watched an informational video on how to vote at the referendum released by the Italian Parliament
- Videos could not be skipped
- After the video, individuals were asked their voting intentions and an open question on what the video made them think
- Linear probability model:

$$Y_i = \alpha_{1g(i)} T1_{m(i)} + \alpha_{2g(i)} T2_{m(i)} + \varepsilon_i, \tag{3}$$

$g(.)$ maps individual i to groups (males vs females, traditional vs populist parties, interest in politics)

Control group: party preferences and referendum

	(1) Yes	(2) Undecided	(3) No
Traditional parties	-0.209***	0.047	0.162***
	(0.067)	(0.050)	(0.058)
Obs	304	304	304

All groups: ATE

	(1) Yes	(2) Undecided	(3) No
V1	-0.189***	0.129***	0.060**
	(0.034)	(0.030)	(0.027)
V2	-0.180***	0.130***	0.050**
	(0.034)	(0.030)	(0.025)
V1 vs V2	0.785	0.966	0.690
Obs	1,726	1,726	1,726

Treatment heterogeneity by party preferences

	All parties			Traditional			Populist		
	(1) Yes	(2) Undecided	(3) No	(4) Yes	(5) Undecided	(6) No	(7) Yes	(8) Undecided	(9) No
V1	-0.207***	0.105***	0.102***	-0.230***	0.110*	0.120*	-0.178***	0.098***	0.080**
	(0.039)	(0.031)	(0.034)	(0.071)	(0.057)	(0.066)	(0.046)	(0.038)	(0.038)
V2	-0.180***	0.105***	0.075**	-0.126*	0.071	0.055	-0.187***	0.119***	0.067*
	(0.039)	(0.033)	(0.032)	(0.076)	(0.055)	(0.067)	(0.047)	(0.041)	(0.037)
V1 vs V2	0.496	1	0.422	0.116	0.473	0.289	0.855	0.624	0.752
Obs	1,178	1,178	1,178	404	404	404	774	774	774

Text analysis

- After having watched any of the three videos, respondents were asked to report their thoughts about the video in an open question.
- Answers were short, ranging from one to sixty words. Hence, text analysis based on libraries is not well equipped.
- We classify answers in seven categories:
  1. negative aggressive vs the video (f.e., this is bullshit)
  2. negative vs the video (f.e, it sends a false message)
  3. dubious (f.e., it makes me undecided; I do not know)
  4. neutral (f.e., nothing, it deals with the referendum)
  5. favorable to the video (f.e., it made me think; it confirmed my intentions to vote NO)
  6. generally aggressive, but not against the video (f.e., all crooks)
  7. else (f.e, xxxx).

Results on text analysis

	(1) Aggressive	(2) Negative	(3) Dubious	(4) Neutral	(5) Favorable	(6) Gen. aggr.	(7) Else
V1	0.016***	0.112***	0.047***	-0.363***	0.097***	0.086***	0.004
	(0.006)	(0.021)	(0.013)	(0.028)	(0.019)	(0.016)	(0.010)
V2	0.024***	0.177***	0.014	-0.402***	0.029*	0.140***	0.018
	(0.006)	(0.024)	(0.011)	(0.029)	(0.017)	(0.017)	(0.011)
V1 vs V2	0.292	0.006	0.009	0.104	0.001	0.005	0.196
Obs	2,003	2,003	2,003	2,003	2,003	2,003	2,003