Fact-Checking Politicians

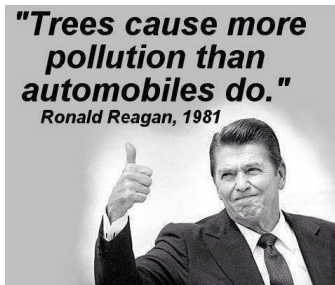Andrea Mattozzi   Samuel Nocito   Francesco Sobbrio
Bologna-CEPR   Sapienza   Tor Vergata-CESIfo

PSE-CEPR Policy Forum

Motivation

- Use of false or unsubstantiated claims is common in politics

"Trees cause more pollution than automobiles do."
Ronald Reagan, 1981

- "Misperceptions threaten to warp mass opinion, undermine democratic debate, distort public policy"

  Nyan, *Journal of Economic Perspectives*, 2020

Fact-checking

- 100+ fact-checking organizations in 50+ countries. 90% after 2010 and majority not affiliated with media organizations

- Does it work?

  - ▶ Impact of fact-checking on voters:

    Swire et al. (2017); Barrera et al. (2020); Nyhan (2020); Henry et al. (2021)

  - ▶ Impact of fact-checking on politicians:

    Nyhan and Reifler (2015)

Empirical Challenges

- Endogenous selection

  ▶ "We especially try to examine statements that are newsworthy or concern issues of importance. [...] We strive to be dispassionate and non-partisan, drawing attention to inaccurate statements on both left and right."
  Washington Post

- Unobserved heterogeneity across politicians and over time

  ▶ Politicians have different underlying likelihood of using misleading statements

  ▶ Periods of more/less intense political debate

Contribution

Assess impact of fact-checking on number of false statements & "verifiability"

1. Randomized "business as usual" field experiment in collaboration with the leading Italian fact-checker

   ⇒ No endogenous selection by fact-checkers

2. Diff-in-Diff looking at treated politicians before and after fact-checking compared to not fact-checked politicians

   ⇒ Control for unobserved heterogeneity across politicians & over time

3. Look directly at universe of politicians' statements

Contribution

Assess impact of fact-checking on number of false statements & "verifiability"

1. Randomized "business as usual" field experiment in collaboration with the leading Italian fact-checker

   ⇒ No endogenous selection by fact-checkers

2. Diff-in-Diff looking at treated politicians before and after fact-checking compared to not fact-checked politicians

   ⇒ Control for unobserved heterogeneity across politicians & over time

3. Look directly at universe of politicians' statements

▶ CF

Contribution

Assess impact of fact-checking on number of false statements & "verifiability"

1. Randomized "business as usual" field experiment in collaboration with the leading Italian fact-checker

   ⇒ No endogenous selection by fact-checkers

2. Diff-in-Diff looking at treated politicians before and after fact-checking compared to not fact-checked politicians

   ⇒ Control for unobserved heterogeneity across politicians & over time

3. Look directly at universe of politicians' statements

   ▸ CF

- First and leading Italian fact-checking organization founded in 2012

- Financed mainly by selling content and services to third parties (e.g., Facebook) and by participating in international projects and calls

- Member of the International Fact-Checking Network (IFCN) since 2017 and one of the signatory of the related Code of Principles

- Politicians follow *Pagella Politica* ▶

▶ Score of Party Leaders   ▶ Reliability of Fact-checkers

Fact-checking scale:

1. Utterly False (*Panzana Pazzesca*)

2. Mostly false (*Pinocchio Andante*)

3. Half false (*Ni*)

4. Almost true (*C'eri quasi*)

5. Completely True (*Vero*)

Similar to the *Pinocchio Test* of the Washington Post

Experimental Design 1

- Sample of 55 mid-rank Italian MPs ▶

  - From list of politicians most present on TV news (AGCOM)
  - Focus on MPs (no party leaders and key government positions)
  - Only politicians with active Twitter account

- Experiment run between March and July 2021

  - Commitment by *Pagella Politica* not to fact-check any politician in the sample other than those treated
  - 16 experimental weeks: 3 pre-intervention, 10 intervention, 3 post-intervention

▶ Mid-rank

Experimental Design 2

In each intervention week:

1. Collect universe of politicians' statement from news agencies

2. Identify Fact-Checkable (FC) statements with ML classifier ▸

3. *Pagella Politica* identifies "false" (grade$\leq$ 3) statements

4. Randomly draw politician from those with false statements

5. Randomly select false statement by drawn politician ▸ Balancing

Experimental Design 3

In each intervention week:

6. *Pagella Politica* fact-checks the randomly selected statement

7. Publication of fact-checking on *Pagella Politica* website

8. To make sure politician is aware of being exposed to fact-checking:

   ▸ Tweet by *Pagella Politica* mentioning politician

   ▸ Fact-checking video: Geo-targeted advertising campaign ⏵

Webpage

Tweet

Rampelli (MP): "The Alitalia brand is worth 1Billion"

Pagella Politica: Mostly false (estimates $\sim$ 50-70 Million)

Empirical Strategy - Stacked DiD

(Cengiz, Dube, Linder and Zipperer, 2019, QJE)

Create 10 event-specific datasets (h): treated $+$ clean controls (NT/not-yet).

$\Rightarrow$ Stack all these event-specific datasets and estimate:

$$Y_{hit} = \beta D_{hit} + \delta_{hi} + \delta_{ht} + \varepsilon_{hit}$$

- Y_{hit}: observed outcome on politician i at time to event t in the event-level h

- $D_{hit} = \mathbb{1}\{t \geq G_{hi}\}$; where G_{hi} is time when i is fact-checked in event-level h

- δ_{hi}, δ_{ht}: politician-event and time-event fixed effects

- Standard errors are clustered at the politician-event level

Results: Number of Incorrect Statements

	(1) CDLZ Baseline	(2) TWFE Model	(3) CS DiD	(4) BJS DiD	(5) Poisson Model
Fact-Checked	-0.378** (0.146)	-0.370** (0.147)	-0.686*** (0.184)	-0.430*** (0.016)	-0.901*** (0.267)
Observations	8,035	880	880	880	3,715
Statistics on treated before treatment:					
Mean	0.67	0.67	0.67	0.67	0.67
SD	1.45	1.47	1.47	1.47	1.45
Politician-event FE	YES	NO	NO	NO	YES
Time-event FE	YES	NO	NO	NO	YES
Cluster SE at politician-event	YES	NO	NO	NO	YES
Politician FE	NO	YES	YES	YES	NO
Time FE	NO	YES	YES	YES	NO
Cluster SE at politician	NO	YES	YES	YES	NO

The dependent variable is the number of incorrect statements (grade 3 and below: half-false, mostly-false, utterly-false) made by a politician in a week. Panel data at the politician-time-event level in columns 1, and 5, and at the politician-time level in columns 2, 3, and 4, over the period from March 22 to July 11, 2021 (16-weeks). *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Results: Number of Incorrect Statements - Pilot Sample

	(1) CDLZ Baseline	(2) TWFE Model	(3) CS DiD	(4) BJS DiD	(5) Poisson Model
Fact-Checked	-0.400*** (0.101)	-0.399*** (0.107)	-0.655** (0.312)	-0.448*** (0.046)	-1.161** (0.525)
Observations	3,350	690	690	690	1,650
Statistics on treated before treatment:					
Mean	0.47	0.47	0.47	0.47	0.47
SD	0.72	0.74	0.74	0.74	0.72
Politician-event FE	YES	NO	NO	NO	YES
Time-event FE	YES	NO	NO	NO	YES
Cluster SE at politician-event	YES	NO	NO	NO	YES
Politician FE	NO	YES	YES	YES	NO
Time FE	NO	YES	YES	YES	NO
Cluster SE at politician	NO	YES	YES	YES	NO

The dependent variable is the number of incorrect statements (grade 3 and below: half-false, mostly-false, utterly-false) made by a politician in a week. Panel data at the politician-time-event level in columns 1, and 5, and at the politician-time level in columns 2, 3, and 4, over the period from September 24 to November 24, 2020 (10-weeks). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Number of False Statements: Robustness

	(1) Control for Number Verifiable	(2) Add int. time-event random. pol	(3) Only Never treated	(4) Hom. Time $(-3/+3)$ (& only NT)	(5) Last treated as control	(6) Exclude pol with no incorrect	(7) Any Incorrect statement
Fact-checked	-0.320***	-0.268**	-0.369**	-0.287*	-0.620**	-0.377**	-0.228***
	(0.110)	(0.124)	(0.145)	(0.156)	(0.216)	(0.148)	(0.063)
Observations	8,035	8,009	7,360	3,220	216	3,715	8,035
Statistics on treated before treatment:							
Mean	0.67	0.67	0.67	0.63	0.37	0.67	0.33
SD	1.45	1.45	1.47	1.29	1.14	1.45	0.47
Politician-event FE	YES	YES	YES	YES	YES	YES	YES
Time-event FE	YES	YES	YES	YES	YES	YES	YES

Column 1-6: The dependent variable is the number of incorrect statements (grade 3 and below: half-false, mostly-false, utterly-false) made by a politician in a week. Column 7: the dependent variable is a dummy variable taking value one if the politician makes an incorrect statement in a week. Panel data at the politician-time-event level over the period from March 22 to July 11, 2021 (16 weeks). Standard errors in parentheses are clustered at the politician-event level. *** p<0.01, ** p<0.05, * p<0.1

▸ Only Random. Pol   ▸ Spillovers   ▸ Placebo

Number of Incorrect Statement
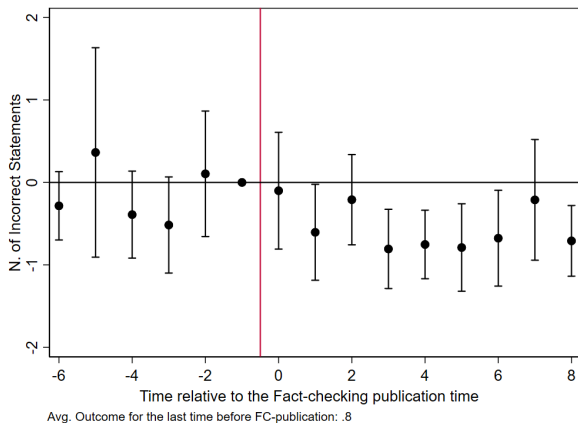
Notes: Stacked panel data at the politician-week level over the period from March 22 to July 11 (16-weeks) per event level. Cluster standard errors at the politician-event level.

Mechanism: Electoral concerns or Direct effect on politicians?

- Negative fact-checking may harm politicians' reputation.
  ⇒Increase the cost of "lying" due to:

  ▸ Lower probability of being re-elected

  ▸ Lower probability of entering party leadership or seeking higher office

  ▸ Social image concerns

Evidence on electoral concerns

- Stronger effects in single-member districts

At the same time:

- Results robust to focusing on politicians in multi-member districts

- Limited audience of *Pagella Politica*

▸ Why respond?

Mechanism: Electoral concerns or Direct effect on politicians?

- Negative fact-checking may harm politicians' reputation.
  $\Rightarrow$ Increase the cost of "lying" due to:

  - Lower probability of being re-elected

  - Lower probability of entering party leadership or seeking higher office

  - Social image concerns

Evidence on electoral concerns

- Stronger effects in single-member districts ▶

At the same time:

- Results robust to focusing on politicians in multi-member districts ▶

- Limited audience of *Pagella Politica*

▶ Why respond?

Heterogeneity

- Heterogeneity (1): ▶
  - Ever FC/Never FC before
  - Experienced/Inexperienced politician
  - Single/Multi-member district

- Heterogeneity (2): ▶
  - Leftist/Rightist
  - Populist/Non-populist

- Heterogeneity (3): ▶
  - FC Score

- Heterogeneity (4): ▶
  - High/Low Video Impressions/Clicks/CTR

Mechanism: Other Outcomes

	(1) Number of Statements	(2) Number of Verifiable Statements	(3) Number Verifiable Statements	(4) Any Verifiable Statements	(5) Any Verifiable Statements
Fact-checked	-6.526**	-0.417	-0.318	-0.153*	-0.154*
	(2.857)	(0.382)	(0.346)	(0.089)	(0.088)
Observations	8,035	8,035	8,035	8,035	8,035
Statistics on treated before treatment:					
Mean	52.17	1.73	1.73	0.63	0.63
SD	49.54	2.44	2.44	0.48	0.48
Politician-event FE	YES	YES	YES	YES	YES
Time-event FE	YES	YES	YES	YES	YES
Control for N. of St	NO	NO	YES	NO	NO
Control for Any St	NO	NO	NO	NO	YES

Panel data at the politician-time-event level over the period from March 22 to July 11, 2021 (16-weeks). Standard errors in parentheses are clustered at the politician-event level. *** p<0.01, ** p<0.05, * p<0.1

▸ Pilot

Conclusions

👍 : less incorrect statements (for at least 2 months)

Yet: also evidence of increase in "ambiguity" ($\downarrow$ prob. of verifiable st.) 👎/👍

Plausible channel:

- Direct effect on politicians (e.g., self-image/career concerns)

Appendix

Why do treated politicians respond to fact-checking?

Politicians face the same expected risk of being fact-checked in the future

$\Rightarrow$ Hence, why do treated politicians behave differently?

- Convex cost from being repeatedly exposed to negative fact-checking
  - ▸ Consistent with significant effects for ever fact-checked ▸

- Priming normative concerns against "lying"
  - ▸ Consistent with more negative fact-checking having larger effects ▸

Other Outcomes - Pilot Sample

	(1) Number of Statements	(2) Number of Verifiable Statements	(3) Number Verifiable Statements	(4) Any Verifiable Statements	(5) Any Verifiable Statements
Fact-checked	-5.900 (7.038)	-0.795** (0.362)	-0.512* (0.303)	-0.175* (0.092)	-0.159 (0.114)
Observations	3,350	3,350	3,350	3,350	3,350
Statistics on treated before treatment:					
Mean	25.20	1.87	1.87	0.67	0.67
SD	21.99	1.76	1.76	0.47	0.47
Politician-event FE	YES	YES	YES	YES	YES
Time-event FE	YES	YES	YES	YES	YES
Control for N. of ST	NO	NO	YES	NO	NO
Control for Any ST	NO	NO	NO	NO	YES

Panel data at the politician-time-event level over the period from September 24 to November 24, 2020 (10-weeks). Standard errors in parentheses are clustered at the politician-event level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

- Video ads on websites and social media
- Campaign runs Monday-Friday of week when fact-checked

Two targeted zip-codes around Italian Parliament

Geo-Targeted Campaign
other areas
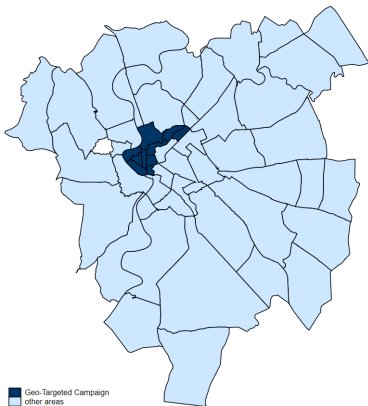
"The Alitalia brand is worth a billion euro"

Fabio Rampelli

PINOCCHIO ANDANTE

pagella politica

◀ Back

Do Politicians Respond to Fact-Checking?

Two possible counterfactual (contingent on making any incorrect statement)

1. Politicians at risk of fact-checking vs. politicians with zero probability of being fact-checked

   - Effects of the existence of fact-checking per se: not what we do

2. Politicians that have been exposed to fact-checking vs. politicians that have not but face same risk of being fact-checked in the future

   - Effects of being exposed to fact-checking: our analysis

Mid-rank Politicians

- Minimize potential spillover effects on control group

- No general equilibrium effect as *Pagella Politica* de-facto monopolist of fact-checking on mid-rank politicians

- Larger sample

- Comparability and external validity: mid-rank politicians more comparable among themselves (and across countries)

- Commitment by *Pagella Politica* not to fact-check any politician in our sample other than those randomly selected by our procedure

Vero

I dati o i fatti sono riportati in maniera precisa, o arrotondati in maniera corretta, e riscontrabili in documenti ufficiali o altre fonti attendibili

C'eri quasi

I dati o i fatti sono riportati in maniera leggermente imprecisa, ma vicina al vero, oppure i dati sono pressoché corretti ma le conclusioni tratte ne distorcono il significato

Ni

Vengono citati più fatti o dati in contemporanea, alcuni dei quali non riportati in maniera precisa: la dichiarazione risulta quindi corretta solo in parte.

Pinocchio andante

La dichiarazione parte da un dato o da una asserzione non del tutto irrealistica, ma come minimo vaga o eccessivamente generale, per poi trarne conclusioni scorrette.

Panzana pazzesca

Il dato o fatto è assolutamente inventato o riportato in maniera totalmente distorta, per sostenere una tesi sostanzialmente falsa.

1. Utterly false: The fact is absolutely invented or reported in a totally distorted way, to support a substantially false thesis.

2. Mostly false: The fact is not entirely unrealistic, yet very vague or excessively general, and then draws incorrect conclusions from it.

3. Half false: Several facts or data are cited at the same time, some of which are not reported precisely.

4. Mostly true: The data or facts are reported slightly inaccurately but close to the truth.

5. Completely True: The data or facts are reported accurately, or rounded off correctly, and can be found in official documents or other reliable sources

• Investimenti di alto moltiplicatore occupazionale per creare nuove opportunità di lavoro e nuove professioni
• Investimenti in nuova tecnologia, nuove figure professionali, internet delle cose, auto elettriche, digitalizzazione PA

REDDITO DI CITTADINANZA: RIMETTIAMO L'ITALIA AL LAVORO

Luigi Di Maio

Il M5S ha realizzato metà del programma?

«Nel giro di quattro mesi e mezzo abbiamo portato a casa metà del programma elettorale votato da un terzo degli italiani».

Pubblicato:	Data origine:	Macroarea	
23 nov 2018	29 ott 2018	istituzioni	Fonte dichiarazione

▸ Back

- Fact-checkers are trained to acquire skills allowing them to judge the veradicity of information more quickly and accurately than other groups (Wineburg and McGrew 2017)

- Fact-checkers outperforms crowd-sourced evaluations of news stories (Godel et al. 2021)

- High level of agreement across different fact-checkers in the US (Amazeen, 2014)

Fact-checking versus journalism (Dobbs 2012)

- One school of journalism demands that the reporter avoid inserting his "subjective" opinions into the story, and report only what he is told by third parties. To preserve his "objectivity" and "fairness," he is obliged to tell "both sides of the story" in a flat "he said, she said" manner. It is up to the readers—not the reporter—to determine who, if anybody, is telling the truth. The "fair and balanced" approach to journalism is encapsulated by the Fox News slogan, "we report, you decide."

- The rival school of journalism sees the reporter as a "truth seeker." The journalist's primary obligation, according to this approach, is to tell the truth as best as he or she can determine it.

Dobbs on Fact-checking

"Candidates rarely admit that they have made a mistake or told an untruth. The most that they are usually willing to do is stop repeating the falsehood which, in my experience, happened in perhaps 20-30 per cent of the cases I fact checked, depending on the level of embarrassment."

Dobbs (founder of the Washington Post fact-checking column) 2012

"Truthfulness" Score

Giorgia Meloni

128 analisi

- Vero | 23%
- C'eri quasi | 23%
- Nì | 27%
- Pinocchio andante | 20%
- Panzana pazzesca | 7%

Matteo Salvini

272 analisi

- Vero | 21%
- C'eri quasi | 19%
- Nì | 31%
- Pinocchio andante | 22%
- Panzana pazzesca | 7%

Silvio Berlusconi

131 analisi

- Vero | 24%
- C'eri quasi | 26%
- Nì | 19%
- Pinocchio andante | 15%
- Panzana pazzesca | 17%

Matteo Renzi

412 analisi

- Vero | 40%
- C'eri quasi | 23%
- Nì | 22%
- Pinocchio andante | 12%
- Panzana pazzesca | 3%

Enrico Letta

87 analisi

- Vero | 52%
- C'eri quasi | 29%
- Nì | 14%
- Pinocchio andante | 6%
- Panzana pazzesca | 0%

Giuseppe Conte

28 analisi

- Vero | 21%
- C'eri quasi | 21%
- Nì | 25%
- Pinocchio andante | 29%
- Panzana pazzesca | 4%

Back

FC versus Non FC Statements

- FC (Rampelli - FDI, April 21, 2021):

  "The Alitalia Brand is worth a billion Euro"

- Not FC (Rampelli - FDI, April 20, 2021):

  "[...] most of the anti-covid measures presented in the last 12 months by the government have been ineffective from a health perspective and deadly for our economy."

FC versus Non FC Statements

- FC (Molinari - Lega, April 19, 2021):

  "We have lost almost a million jobs in the last year and the employment rate in pre-covid italy was still one of the lowest in Europe."

- Not FC (Molinari - Lega, April 19, 2021):

  "Setting to zero the contributions to be paid by companies for the new hiring of workers for two or more years could help, on the one hand, the growth of companies and, on the other hand, mitigate the employment crisis."

Number of False Statements: Robustness

	(1) Add int. time-event random. pol	(2) Sample of Random Politicians
Fact-checked	-0.268**	-0.268*
	(0.124)	(0.147)
Observations	8,009	452
Statistics on treated before treatment:		
Mean	0.67	0.67
SD	1.45	1.45
Politician-event FE	YES	YES
Time-event FE	YES	YES

The dependent variable is the number of incorrect statements (grade 3 and below: half-false, mostly-false, utterly-false) made by a politician in a week. Panel data at the politician-time-event level over the period from March 22 to July 11, 2021 (16 weeks). Standard errors in parentheses are clustered at the politician-event level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Spillovers

Control group politicians may respond to fact-checking on treated politician

- Likely to "work against us": downward bias our estimates
- Test: attribute FC to politicians in the same party/party-chamber

	(1)	(2)	(3)	(4)
FC party peer	0.003	0.006		
	(0.022)	(0.020)		
FC party-chamber peer			0.005	0.009
			(0.023)	(0.021)
Observations	4,416	4,416	5,600	5,600
Statistics on treated before treatment:				
Mean	0.08	0.08	0.05	0.05
SD	0.33	0.33	0.21	0.21
Control for N. FC	NO	YES	NO	YES
Politician-event FE	YES	YES	YES	YES
Time-event FE	YES	YES	YES	YES

Panel data at the politician-time-event level over the period from March 22 to July 11, 2021 (16-weeks). Standard errors in parentheses are clustered at the politician-event level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Electica: Geo-targeted Campaign

Table: Electica - Average Stats per Experimental Week

Impressions	Video Started	Video Compl. 50%	Video Compl. 100%	Click-to Rate	Completion Rate
19825	1898	16587	14792	0.00528	0.779

Sample of Politicians

Party	Number of Politicians	Percentage of Politicians
Fratelli d'Italia	7	12.72
Lega Nord	8	14.54
Forza Italia	8	14.54
Italia Viva	10	18.18
Partito Democratico	11	20.00
Movimento 5 Stelle	11	20.00
Total	55	100.00

Sample of Treated Politicians

Party	Number of Politicians	Percentage of Politicians
Fratelli d'Italia	2	20
Lega Nord	2	20
Forza Italia	3	30
Italia Viva	0	0
Partito Democratico	1	10
Movimento 5 Stelle	2	20
Total	10	100.00

Balancing

Table: Whole Sample

	n	Control mean	sd	n	Treatment mean	sd	Diff
Woman	45	0.29	0.46	10	0.20	0.42	-0.089
Age	45	51.42	9.00	10	54.60	7.68	3.178
Education level	45	1.89	0.53	10	2.00	0.47	0.111
Ever fact-checked	45	0.71	0.46	10	0.70	0.48	-0.011
Lower-chamber MP	45	0.71	0.46	10	0.50	0.53	-0.211
1st parliamentary experience	45	0.40	0.50	10	0.40	0.52	0.000
Elected single-member district	45	0.31	0.47	10	0.30	0.48	-0.011
N. of parliamentary commissions	45	1.67	1.00	10	2.10	1.37	0.433
Right wing	45	0.36	0.48	10	0.70	0.48	0.344**
Populist	45	0.56	0.50	10	0.90	0.32	0.344***
Opposition	45	0.11	0.32	10	0.20	0.42	0.089

Test of differences in means across samples. Standard errors are clustered at the politician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Balancing

Table: Sample of politicians with at least one incorrect statement

	n	Control mean	sd	n	Treatment mean	sd	Diff
Woman	18	0.22	0.43	10	0.20	0.42	-0.022
Age	18	52.33	10.50	10	54.60	7.68	2.267
Education level	18	1.94	0.64	10	2.00	0.47	0.056
Ever fact-checked	18	0.83	0.38	10	0.70	0.48	-0.133
Lower-chamber MP	18	0.61	0.50	10	0.50	0.53	-0.111
1st parliamentary experience	18	0.50	0.51	10	0.40	0.52	-0.100
Elected single-member district	18	0.50	0.51	10	0.30	0.48	-0.200
N. of parliamentary commissions	18	2.06	1.11	10	2.10	1.37	0.044
Right wing	18	0.44	0.51	10	0.70	0.48	0.256
Populist	18	0.50	0.51	10	0.90	0.32	0.400**
Opposition	18	0.22	0.43	10	0.20	0.42	-0.022

Test of differences in means across samples. Standard errors are clustered at the politician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Summary Outcomes

	N	Mean	SD
Panel A: Whole Sample			
N. of Statements	880	26.71	35.20
N. of FC-statements	880	0.72	1.41
Any False ST	880	0.08	0.28
Any True ST	880	0.30	0.46
Panel B: Politicians with Any-False ST			
N. of Statements	448	35.36	42.83
N. of FC-statements	448	0.98	1.63
Any False ST	448	0.16	0.37
Any True ST	448	0.38	0.48

Summary Outcomes Detailed

		Control			Treatment	
	n	mean	sd	n	mean	sd
Panel A: Whole Sample						
N. of Statements	720	22.84	32.58	160	44.13	40.92
N. of FC-statements	720	0.50	1.03	160	1.70	2.25
Any False ST	720	0.04	0.19	160	0.28	0.45
Any True ST	720	0.26	0.44	160	0.49	0.50
Panel B: Politicians with Any-False ST						
N. of Statements	288	30.49	43.16	160	44.13	40.92
N. of FC-statements	288	0.59	0.95	160	1.70	2.25
Any False ST	288	0.10	0.30	160	0.28	0.45
Any True ST	288	0.31	0.46	160	0.49	0.50

Is it Fact-checking or Video?

If our results were mostly driven by the video, we would observe that politicians more "exposed" by the video respond more

▸ Heterogeneity by video impressions

Heterogeneity (1)

	(1) Never Fact Checked	(2) Ever Fact Checked	(3) First legislature	(4) Experienced	(5) Single member district	(6) Multi members district
Fact-checked	-0.134 (0.096)	-0.466** (0.185)	-0.351*** (0.123)	-0.388* (0.234)	-0.277** (0.123)	-0.410** (0.200)
Observations	2,290	5,745	3,250	4,785	2,558	5,477
Statistics on treated before treatment:						
Mean	0.22	0.86	0.42	0.83	0.11	0.90
SD	0.42	1.67	0.64	1.78	0.32	1.66
Politician-event FE	YES	YES	YES	YES	YES	YES
Time-event FE	YES	YES	YES	YES	YES	YES

Panel data at the politician-time-event level over the period from March 22 to July 11, 2021 (16-weeks). Standard errors in parentheses are clustered at the politician-event level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Heterogeneity (2): by Ideology/Populism

	(1) Right-wing	(2) Left-wing	(3) Populist	(4) Non populist
Fact-checked	-0.431** (0.188)	-0.186*** (0.051)	-0.410*** (0.157)	-0.071*** (0.024)
Observations	3,113	4,922	4,711	3,324
Statistics on treated before treatment:				
Mean	0.90	0.11	0.74	0.00
SD	1.66	0.32	1.51	0.00
Politician-event FE	YES	YES	YES	YES
Time-event FE	YES	YES	YES	YES

Panel data at the politician-time-event level over the period from March 22 to July 11, 2021 (16-weeks).
Standard errors in parentheses are clustered at the politician-event level. *** p<0.01, ** p<0.05, * p<0.1

Heterogeneity (3): by Fact-checking score

	(1) Half-false	(2) Mostly-false	(3) Utterly-false
Fact-checked	-0.159*** (0.039)	-0.500* (0.262)	-0.538*** (0.016)
Observations	3,209	4,022	804
Statistics on treated before treatment:			
Mean	0.67	0.67	0.67
SD	1.45	1.45	1.47
Politician-event FE	YES	YES	YES
Time-event FE	YES	YES	YES

Panel data at the politician-time-event level over the period from March 22 to July 11, 2021 (16-weeks).
Standard errors in parentheses are clustered at the politician-event level. *** p<0.01, ** p<0.05, * p<0.1

Heterogeneity (4): Electica Statistics

	(1) Above median impressions	(2) Below median impressions	(3) Above median clicks	(4) Below median clicks	(5) Above median CTR	(6) Below median CTR
Fact-checked	-0.449*	-0.308**	-0.137	-0.590***	-0.137	-0.590***
	(0.256)	(0.135)	(0.121)	(0.219)	(0.121)	(0.219)
Observations	4,017	4,018	4,018	4,017	4,018	4,017
Statistics on treated before treatment:						
Mean	0.67	0.67	0.67	0.67	0.67	0.67
SD	1.45	1.45	1.45	1.45	1.45	1.45
Politician-event FE	YES	YES	YES	YES	YES	YES
Time-event FE	YES	YES	YES	YES	YES	YES

Panel data at the politician-time-event level over the period from March 22 to July 11, 2021 (16-weeks). Standard errors in parentheses are clustered at the politician-event level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Placebo

Underlying cycle in political communication, reversion to the mean?

$\Rightarrow$ If so: similar effects if fictionally attribute FC to politicians in random pool

Placebo (*a la* Random Inference Test):

- Randomly attribute FC to politician j in randomization pool of event h:
  - $D_{hjt} = \mathbb{1}\{t \geq G_{hj}\}$; where G_{hj} is time when j enters in the randomization pool in event-level h

Placeba

Number of Incorrect Statements

Avg. Placebo Coefficient: -.181
Benchmark Coefficient: -.407
N. of Placebos: 226

- No placebo coefficient larger than actual estimates
- Actual estimates more than twice larger than average placebo ▸ Back

Placebo - **Controlling for Randomizable Politicians FE**

Number of Incorrect Statements

p-value= 0.009

Avg. Placebo Coefficient: -.009
Benchmark Coefficient: -.268
N. of Placebos: 226

- Additional FE: interaction time-event-randomizable pol
- Average placebo close to zero.