UNIVERSITÀ DEGLI STUDI DI MILANO
DIPARTIMENTO DI
SCIENZE SOCIALI E POLITICHE

SPS TREND

Research lab on social and political change "Hans Schadee"

Combining individual and contextual data to study the dynamics of public opinion during COVID-19 pandemic

Riccardo Ladini, Francesco Molteni

PUBLIC OPINION DURING COVID-19

- Beyond health and economic consequences

- Impact on attitudes, values and opinions

- **Pandemic as context**

- Large diffusion of (CAWI) surveys in the pandemic period

SURVEY RESEARCH DURING THE PANDEMIC

- **Cross-sectional survey without a time-dynamic component:**

  RQ: In the pandemic period, does factor X influence attitudes Y?

  Issues: do results pertain only to the pandemic period? Or can they be extended to other period?

- **Panel survey** (before and after the pandemic, e.g. Reeskens et al. 2020) **and cross-sectional longitudinal surveys:**

  RQ: How does the pandemic change individual attitudes?

- Pandemic as a black box
- What about the dynamics of the pandemic (during the pandemic)?

SURVEY RESEARCH FOR CAPTURING THE DYNAMICS OF THE PANDEMIC

- Panel surveys with several waves during the pandemic (**e.g.** Austrian Corona Panel Project, Kittel et al. 2020)

- Repeated cross-sectional surveys (several rounds across the pandemic)

  RQ: How does the dynamics of the pandemic influence individual attitudes?

- Rolling cross-section surveys

  ▪ Granularity of the daily observations (day of interview as a random variable)

  ▪ Possibility of combining **individual** level-data with **time-varying contextual** characteristics

DATA: ResPOnsE COVID-19

Investigating the social, economic and political consequences of the COVID-19 pandemic: A rolling cross-section approach

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In this article, we present an application of the rolling cross-section (RCS) design to monitor changes in public opinion during the COVID-19 pandemic in Italy (ResPOnsE Covid-19 project, University of Milan Statale). The RCS is a dynamic survey tool used predominantly in the analyses of public opinion during electoral campaigns. Because of its dynamic nature, we argue that it is an ideal instrument to monitor public opinion during a pandemic. Specifically, we present an RCS online survey implemented in Italy from April to July 2020 and we present some illustrative analyses of changes in behaviors, attitudes, and opinions during the Covid-19 crisis to highlight the potential of the design. Ultimately, we assert that RCS surveys could be very powerful instruments to inform policy makers of the dynamics of public opinion during a crisis, especially when inserted within existent high-quality survey infrastructures.

Keywords: COVID-19, survey methods, dynamic analysis, rolling cross-section, policy-making

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THE ROLE OF THE CONTEXT IN SHAPING ATTITUDES, BEHAVIORS AND OPINIONS

Context as:
- Space
- **Time**
- Time and Space

During the pandemic, changing context:
- Time as days, at most weeks

Which contextual time-varying characteristics?

CONTEXTUAL CHARACTERISTICS

- **INTENSITY OF THE PANDEMIC:** How to measure it?

- **Number of COVID-19 deaths, contagions, hospitalizations**

  ISSUE: Representation error (Gaia 2021)

  CONTEXT: Data communicated by the media as a liturgy during the first phase. And later?

  «**Perceived**» intensity of the pandemic

- **Cumulative deaths** (Schraff 2020): monotonic, always increasing

  ISSUE: not suited for capturing variation

- **Number of total daily deaths** (Bucci 2020)

  Objective intensity of the pandemic

CONTEXTUAL CHARACTERISTICS

- **POLICIES/INTRODUCTION OF RESTRICTIVE MEASURES**

Example: Italy, first phase of the pandemic, April-July 2020:
- 09 March – 03 May : strict lockdown
- 04 May – 03 June: partial lockdown
- 04 June- : freedom of movement

Working example

European Journal of Political Research

Research Note | 🔒 Free Access

Political trust during the Covid-19 pandemic: Rally around the flag or lockdown effects?

DOMINIK SCHRAFF ✉

First published: 19 November 2020 | https://doi.org/10.1111/1475-6765.12425 | Citations: 12

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Working example: The dynamics of institutional trust

At least two possible contextual effects:

- **Anxiety effect**
- **Lockdown (response to policies) effect**

Which contextual characteristics?

- **Anxiety effect**: Intensity of the pandemic
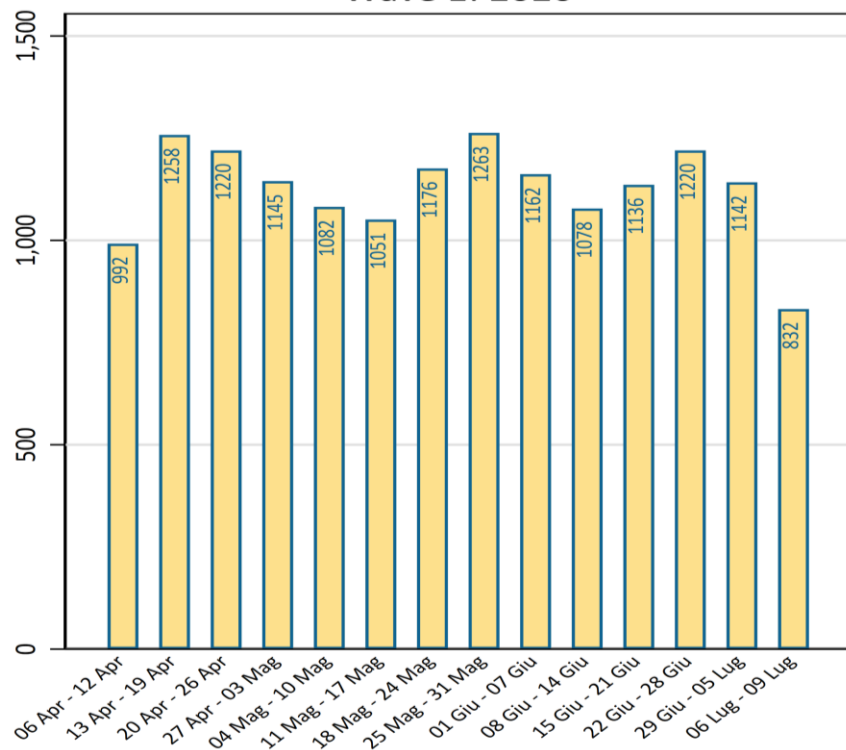- **Lockdown effect**: Restrictive policies/measures

DATA: ResPOnsE COVID-19

Rolling Cross-Section Survey (RCS): daily interviews
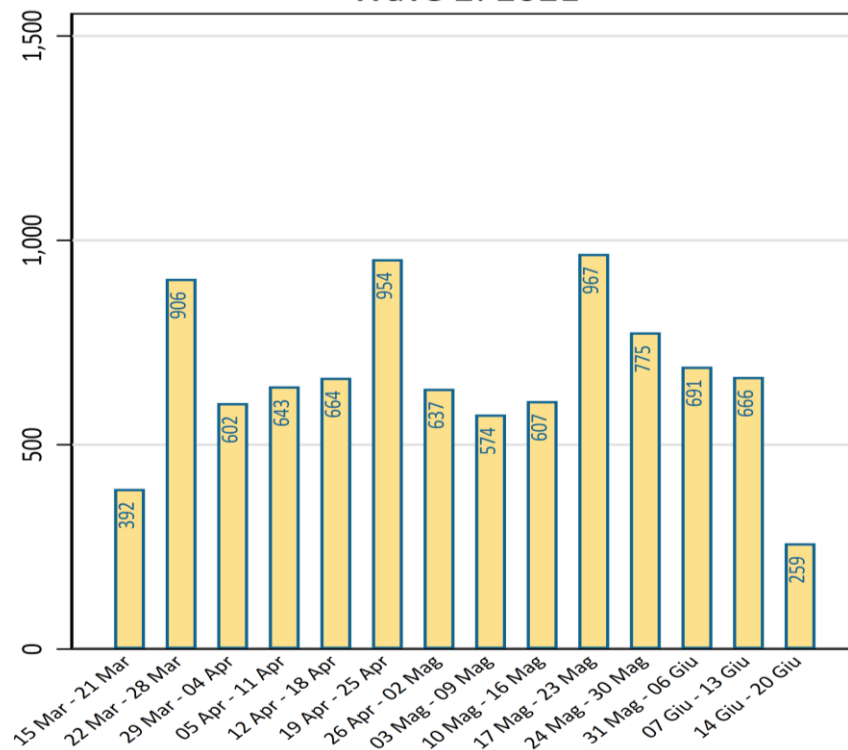CAWI method, quotes for area and age. Non probabilistic survey: opt-in panel

Wave 1: 2020

Period	Value
06 Apr - 12 Apr	992
13 Apr - 19 Apr	1258
20 Apr - 26 Apr	1220
27 Apr - 03 Mag	1145
04 Mag - 10 Mag	1082
11 Mag - 17 Mag	1051
18 Mag - 24 Mag	1176
25 Mag - 31 Mag	1263
01 Giu - 07 Giu	1162
08 Giu - 14 Giu	1078
15 Giu - 21 Giu	1136
22 Giu - 28 Giu	1220
29 Giu - 05 Lug	1142
06 Lug - 09 Lug	832

Wave 2: 2021

Period	Value
15 Mar - 21 Mar	392
22 Mar - 28 Mar	906
29 Mar - 04 Apr	602
05 Apr - 11 Apr	643
12 Apr - 18 Apr	664
19 Apr - 25 Apr	954
26 Apr - 02 Mag	637
03 Mag - 09 Mag	574
10 Mag - 16 Mag	607
17 Mag - 23 Mag	967
24 Mag - 30 Mag	775
31 Mag - 06 Giu	691
07 Giu - 13 Giu	666
14 Giu - 20 Giu	259

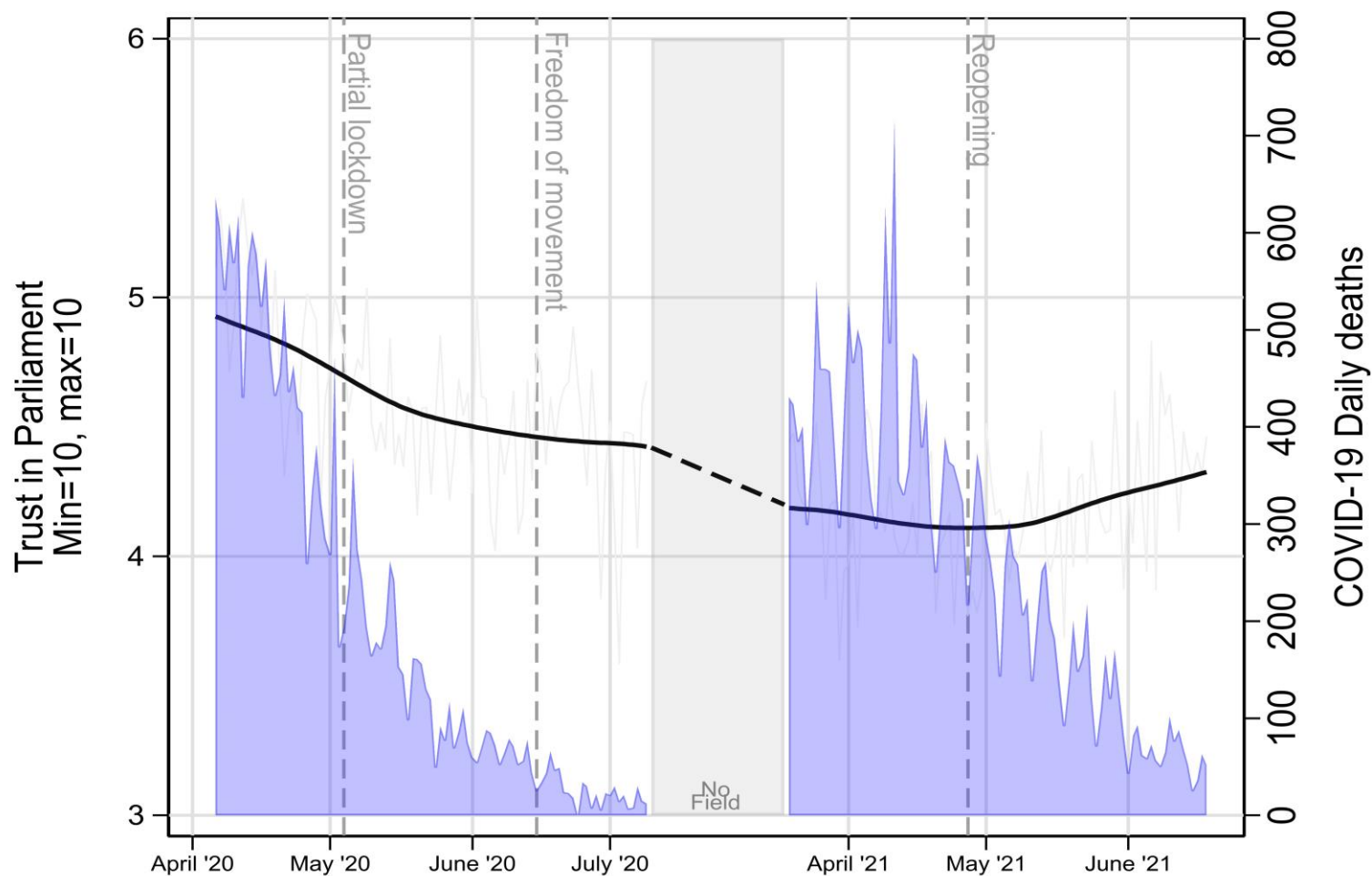N=15,757, Daily obs ≈ 150   N=9,337, Daily obs ≈ 115

TRUST IN PARLIAMENT ACROSS THE PANDEMIC
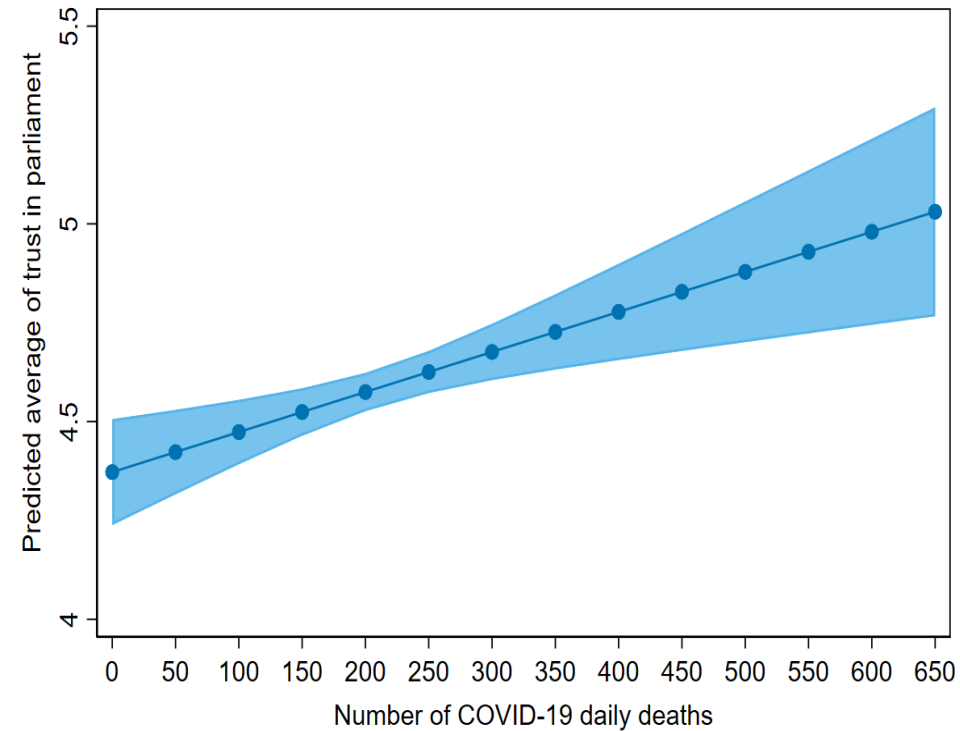
TESTING HYPOTHESES: MEASURES AND METHODS

- Dependent variable: **Trust in Parliament** (0: not al all – 10: a lot)

- Independent variables (contextual-level):
o **Number of COVID-19 daily deaths**
o **Time span by restrictive policies**

- **Multilevel linear regression models: individuals nested into days of interview** (two different models: apr-jul 2020; mar-jun 2021)

- Individual-level controls: sex, age, education, geographical area, left-right position

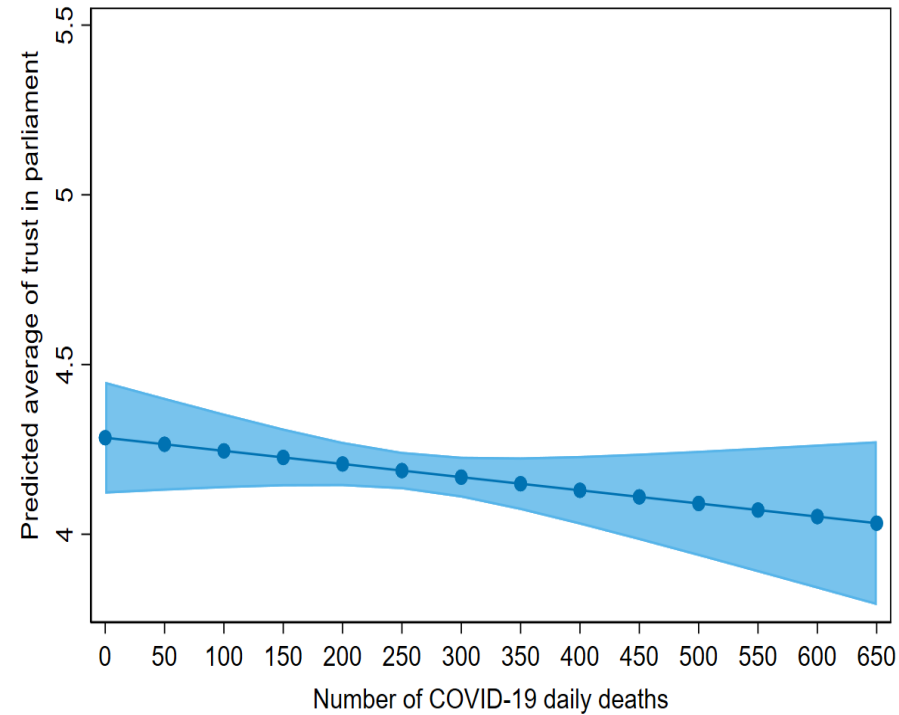# RESULTS – First wave of the pandemic

April-July 2020

Anxiety effect: Yes

Policies effect: No

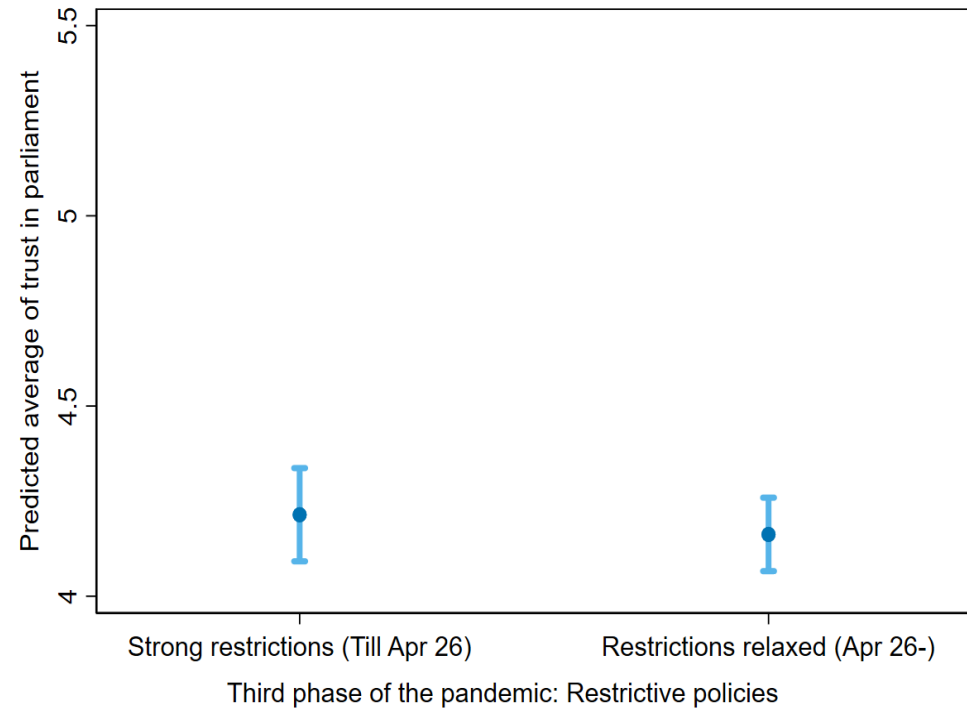# RESULTS – Third wave of the pandemic

March-June 2021

Anxiety effect: No

Policies effect: No

CONCLUSIONS

- **Effect of contextual time-varying characteristics?**
  It depends on the <u>context itself</u> (within phase vs between phases)

- **Distinguishing between intensity of the pandemic and introduction of policies: Attention to multicollinearity!**

- **Intensity of the pandemic:**
  o Measures interchangeable (high correlation among them and with time)
  o Take caution of absolute values of COVID-19 deaths when comparing different phases of the pandemic
  o Measurement issues (e.g. number of COVID-19 deaths) less relevant when used as IV and referred to a single phase
  o Official fatalities: Objective vs perceived intensity of the pandemic. Different impact?

Thank you!

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NEXT (POTENTIAL STEPS)

- Space: Intensity of the pandemic at the regional level
- Time and Space: Variation of the intensity of the pandemic at the regional level
- Other contextual characteristics: number of vaccines...

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