Crime Perception and Voting Behavior: Evidence from Individual Data

Giovanni Prarolo and Marco Rosso

University of Bologna

BoMoPaV Economics Meeting 2025

Modena, May 28, 2025

Motivation

- Democracies worldwide have been experiencing a **surge in populism**

- "Standard" populist argument: **immigration** & **crime** $\longrightarrow$ politicians amplify this to gain support *(will avoid link to the "Eating the cats" song...)*

- ***What we already known***:
  - ▶ Most important reasons to vote for far-right populist parties [Mudde (2007)]
  - ▶ Crime and immigration are often interconnected in individuals' minds [Ignazi (2003); Keita *et al.* (2023)]

- Crime and immigration $\longrightarrow$ can influence voting behavior

- However, these findings are aggregates or scattered cross-sectional surveys. Want to dig deeper...

Motivation (Cont'd)

- …because issues at the micro-level are far from clear!

- Once long-run patterns are netted out, **small sudden shocks** could have long-lasting effects on policies through **elections** $\longrightarrow$ short run **salience** of crime may matter!

- *Gaps in current literature* $\longrightarrow$ need for micro-level understanding
  - ▶ **Individual** voting behavior across **multiple elections**
  - ▶ **Impact** of **offenders' nationality** on **voting** responses

Research Questions

! Q1: *Do voters change political preferences in response to nearby crimes?*

! Q2: *Do crimes by immigrants trigger different political responses?*

What we do `▸ Literature & Contribution`

- Focus on a setting (i.e., city of Bologna) in which we are able to geolocate crimes *at the street level* and over time

- Survey 5000 geolocated individuals on retrospective voting behavior over **national** and administrative elections `▸ Main differences`

- Analyze **individual-level** voting for different parties:

  - possible to capture movements across the political spectrum

  - disentangle effect of crime itself from *nationality* of the committer

  - simple placebo tests to prove identification close to votes

  - explore potential mechanisms focusing on **voter-specific characteristics**
    $\longrightarrow$ voters with young children, female, education level, etc.

What we find

- When focusing on **general elections**, no clear results when crimes are lumped together

- Somewhat surprisingly, crimes committed by immigrants **reduce** support for populist paries (Lega and M5S) but **increase** that for law & order ones (Center Right)

- Specifically, **high skilled/educated** voters abandon M5S, **low skilled/low educated** abandon Lega, and **female** voters drive the increase of Center Right

- Things are different in **administrative elections**

Data: The Survey

The Setting: City of Bologna

- Case study: Bologna (Northern Italy, 350K to 400K inhabitants in the last 20 years, fastest-growing large city in Italy)

- Electoral and contextual data over the period 2001-2021 $\longrightarrow$ focus on 2011-2021

- High civicness (turnout higher than national, but converging to lower levels)

- Left-wing stronghold (declining but still above 44% in 2021, compared to national 26%)
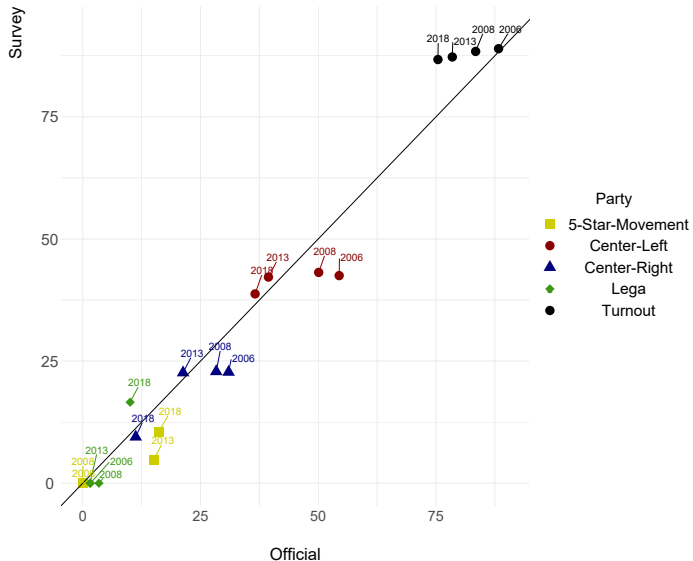
The Survey

- Outsourced, took place in December 2021

- 71% interviewed by telephone (C.A.T.I.), 29% online (C.A.W.I.)

- 5000 individuals

- All Italian citizens, resident in Bologna, who can vote

- Balanced across gender, age, and 18 **areas of residency**

- We provide a brief **neutral summary** of the political environment at each point in time to maximize recall when asking about retrospective votes

- To minimize *consistency* bias, we ask voting questions starting from the **earliest**

- Street (**not address**) of residence of individuals were provided by the interviewer

Comparison: Survey and Official Data

Data: Newspaper Articles

- **Free** access (no paywall)

- **Independent** from political parties

- News report archive with around **55k articles** from 2011 to 2022

  ○ **18.5% crime** articles ($\approx$11k) $\longrightarrow$ **41%** committed by **immigrants**

    ▷ **75.7% geolocated** ($\approx$7.8k) $\longrightarrow$ **46%** committed by **immigrants**

!! Thefts and robberies in 2022 in Italy were 45% and 47%

The Algorithm

- **Time**: day/month/year

- Classification of **crime**:

  | theft | | assault | | fraud | | rape | | murder | | kidnapping | | drug |

  1. More than one word belongs to the box
  2. At least one word from crime box $+$ at least one word from | arrest |
  3. At least one word from crime box $+$ at least one word from | reported |

- Classification of **nationalities**:

  | Non Italians | $\longrightarrow$ More than one word belongs to the box `▸ Example`

  | Italians | $\longrightarrow$ Not belonging to "Non Italians" box `▸ Example`

- Classification of the **streets** $\longrightarrow$ matched with municipality database

Geographic Units & Crime Data Construction `▸ WordCloud`

- Spatial structure of newspaper crime data

  - ▶ **Street level**: matched with municipal database for accuracy

  - ▶ **Zones**: 18 neighborhoods (official classification until 1985)

  - ▶ **Districts**: 6 macro-areas (in effect since 2016)

- Crime aggregation strategy:

  - ▶ Crime incidents within a 200-meter radius

  - ▶ **Time frame**: 30 days prior to election

    - ▷ Coincides with *"par condicio"* period (Law 28/2000) $\longrightarrow$ ensures fair public and private media media access for all candidates and parties
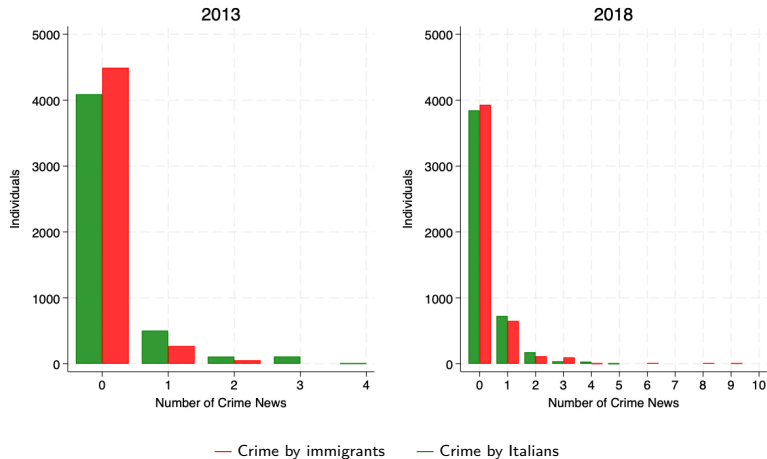
● at least one crime news by immigrants ● at least one crime news by Italians

Individual Crime News Exposure in 2013 and 2018

Empirical Strategy

Empirical Strategy

$$Vote_{it}^P = \alpha CI_{it} + \beta CNI_{it} + \gamma_i + \delta_t \times \theta_d + \epsilon_{it}$$

- $Vote_{it}^P$ = dummy for vote to party P for individual i at election in year t (will be grouped by *type of election*: **national** *vs* **administrative**).
    - Party P: M5S, Lega, Center Left, Center Right, Abstention
    - ▶ Main results are for **National elections**: (i) nets out for local issues and (ii) Lega and Center Right run separate

- CI_{it} = dummy/number of crime articles committed by **Italians** citing a street within 200 (300 or 500) meters from individual i in the 30 days before election t

- CNI_{it} = dummy/number of crime articles committed by **Immigrants (Non-Italians)** citing a street within 200 (300 or 500) meters from individual i in the 30 days before election t

Empirical Strategy (Cont'd)

$$Vote_{it}^P = \alpha CI_{it} + \beta CNI_{it} + \gamma_i + \delta_t \times \theta_d + \epsilon_{it}$$

- OLS estimation with individual, district $\times$ year (or year) fixed effects, error clustered at district level

- **Identification**: by including district $\times$ year FE and exploiting the plausible random variation in the timing (and location) of crimes within the same district $\times$ year

- ▶ with individual FEs this reads as **change in voting behavior** associated with **variations** in the **occurrence/number** of reported **crime articles** while holding **other factors constant**

Main Results: National Elections

National Elections (2013 and 2018) - Total Crimes (Dummy)

Dep.	M5S		Lega		Center Left		Center Right		Abstention	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Total Crimes	-0.012**	-0.011*	-0.005	-0.005	0.007**	0.004**	0.010	0.010	0.007**	0.007**
	(0.004)	(0.005)	(0.010)	(0.012)	(0.003)	(0.001)	(0.006)	(0.006)	(0.003)	(0.002)
Individual fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	✓		✓		✓		✓		✓	
Districts fixed effects × Year fixed effects		✓		✓		✓		✓		✓
R^2	0.05	0.05	0.16	0.16	0.02	0.02	0.11	0.11	0.01	0.01
Observations	9624	9624	9624	9624	9624	9624	9624	9624	9624	9624

Note: OLS estimates. The unit of observation is the individual i at time t. The dependent variable is a dummy that takes the value 1 if the individual votes for parties such as M5S, Lega, Center Left, Center Right, or abstains from voting. The independent variable is a dummy that takes value 1 if there is at least one crime around 200m from the residence street, 30 days before the election day. Robust standard errors are clustered at district level.

National Elections (2013 and 2018) - Ita vs. Imm (Dummy) ▸ Intensive margin

▸ 500m (Dummy)

Dep.	M5S		Lega		Center Left		Center Right		Abstention	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Crimes by Italians	-0.004	-0.004	0.000	-0.002	0.004	0.002	0.002	0.004	0.005	0.007
	(0.007)	(0.007)	(0.014)	(0.014)	(0.003)	(0.003)	(0.013)	(0.013)	(0.005)	(0.005)
Crimes by immigrants	-0.023**	-0.021**	-0.015**	-0.010	0.007	0.008	0.021**	0.021**	0.005	0.001
	(0.007)	(0.007)	(0.004)	(0.007)	(0.006)	(0.006)	(0.006)	(0.008)	(0.010)	(0.011)
Individual fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	✓		✓		✓		✓		✓	
Districts fixed effects × Year fixed effects		✓		✓		✓		✓		✓
R^2	0.05	0.05	0.16	0.16	0.02	0.02	0.11	0.11	0.01	0.01
Observations	9624	9624	9624	9624	9624	9624	9624	9624	9624	9624

Note: OLS estimates. The unit of observation is the individual i at time t. The dependent variable is a dummy that takes the value 1 if the individual votes for parties such as M5S, Lega, Center Left, Center Right, or abstains from voting. The independent variables are dummies that takes value 1 if there is at least one crime committed by Italians and by immigrants, respectively, around 200m from the residence street, 30 days before the election day. Robust standard errors are clustered at district level.
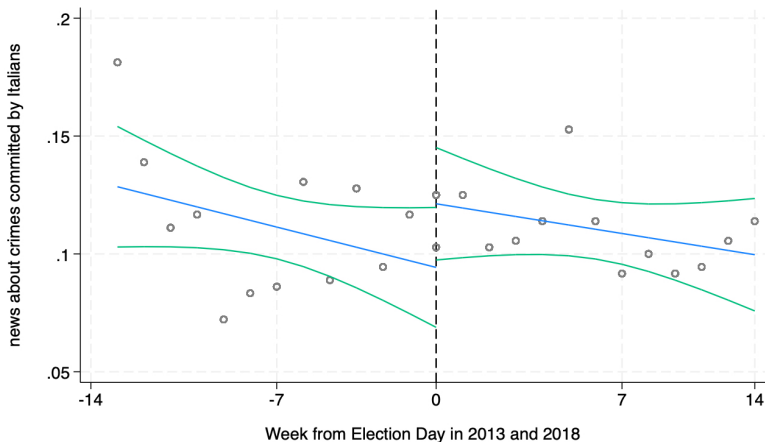
Placebo & Robustness Checks

Placebo: Post National Elections Exposure (2013 and 2018) - Ita vs. Imm (Dummy)

Dep.	M5S		Lega		Center Left		Center Right		Abstention	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Crimes by Italians	-0.010	-0.009	-0.012	-0.011	-0.010	-0.008	0.008	0.009	0.015	0.013
	(0.006)	(0.006)	(0.010)	(0.011)	(0.015)	(0.015)	(0.010)	(0.010)	(0.009)	(0.010)
Crimes by immigrants	-0.001	0.003	0.000	-0.001	0.005	0.006	-0.004	-0.001	-0.001	-0.002
	(0.008)	(0.008)	(0.013)	(0.016)	(0.018)	(0.017)	(0.015)	(0.016)	(0.009)	(0.008)
Individual fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	✓		✓		✓		✓		✓	
Districts fixed effects × Year fixed effects		✓		✓		✓		✓		✓
R^2	0.05	0.05	0.16	0.16	0.02	0.02	0.11	0.11	0.01	0.02
Observations	9624	9624	9624	9624	9624	9624	9624	9624	9624	9624

Note: OLS estimates. The unit of observation is the individual i at time t. The dependent variable is a dummy that takes the value 1 if the individual votes for parties such as M5S, Lega, Center Left, Center Right, or abstains from voting. The independent variables are dummies that takes value 1 if there is at least one crime committed by Italians and by immigrants, respectively, around 200m from the residence street, 30 days **after** the election day. Robust standard errors are clustered at district level.
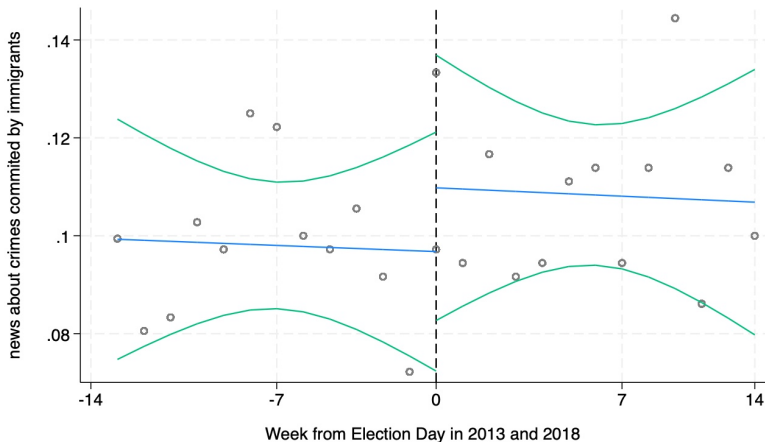
Diff-in-Disc Estimates: Crime by Italians Before National Elections

- Difference in crime exposure between zones historically aligned with Right vs. Left parties, around the electoral cutoff $\longrightarrow$ *differential number of crimes (Right - Left) over time, focusing on the pre- and post-election periods*

Week from Election Day in 2013 and 2018

Diff-in-Disc Estimates: Crime by Immigrants Before National Elections

- Difference in crime exposure between zones historically aligned with Right vs. Left parties, around the electoral cutoff $\longrightarrow$ *differential number of crimes (Right - Left) over time, focusing on the pre- and post-election periods*

Week from Election Day in 2013 and 2018

Heterogeneity Analysis

W/ vs. W/O children: National Elections (2013 and 2018)

Dep.	M5S		Lega		Center Left		Center Right		Abstention	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Crime by Italians × w/ children	-0.009*	-0.008	0.005	0.002	-0.001	-0.003	0.002	0.004	0.005	0.007
	(0.005)	(0.005)	(0.007)	(0.008)	(0.008)	(0.009)	(0.013)	(0.014)	(0.008)	(0.008)
Crime by Italians × w/o children	0.010	0.010	-0.010	-0.012	0.018	0.017	0.002	0.003	0.005	0.006
	(0.020)	(0.020)	(0.039)	(0.039)	(0.026)	(0.025)	(0.035)	(0.035)	(0.023)	(0.024)
Crime by immigrants × w/ children	-0.022**	-0.020*	-0.031**	-0.025	-0.007	-0.005	0.019	0.019	0.000	-0.004
	(0.008)	(0.008)	(0.011)	(0.013)	(0.007)	(0.007)	(0.010)	(0.013)	(0.013)	(0.014)
Crime by immigrants × w/o children	-0.024	-0.023	0.031	0.033	0.049*	0.048*	0.024	0.025	0.017	0.014
	(0.015)	(0.014)	(0.030)	(0.030)	(0.019)	(0.020)	(0.026)	(0.024)	(0.012)	(0.010)
Individual fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	✓		✓		✓		✓		✓	
Districts × Year fixed effects		✓		✓		✓		✓		✓
R^2	0.05	0.05	0.16	0.16	0.02	0.02	0.11	0.11	0.01	0.01
Observations	9624	9624	9624	9624	9624	9624	9624	9624	9624	9624

Note: OLS estimates. The unit of observation is the individual i at time t. The dependent variable is a dummy that takes the value 1 if the individual votes for parties such as M5S, Lega, Center Left, Center Right, or abstains from voting. The independent variables are dummies that take the value 1 if at least one crime is committed by Italians or immigrants, respectively, and interacted with having or not having children, within 200 meters of the residence street, 30 days before election day. Robust standard errors are clustered at the district level.

Male vs. Female: National Elections (2013 and 2018)

Dep.	M5S		Lega		Center Left		Center Right		Abstention	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Crime by Italians × female	-0.002	-0.001	-0.008	-0.010	0.017	0.015	0.006	0.008	0.001	0.003
	(0.007)	(0.007)	(0.022)	(0.023)	(0.009)	(0.009)	(0.015)	(0.016)	(0.013)	(0.013)
Crime by Italians × male	-0.006	-0.006	0.008	0.006	-0.009	-0.011	-0.002	-0.000	0.009	0.011*
	(0.009)	(0.009)	(0.007)	(0.008)	(0.009)	(0.009)	(0.012)	(0.013)	(0.004)	(0.005)
Crime by immigrants × female	-0.028*	-0.026	-0.015	-0.010	-0.002	-0.000	0.020**	0.020*	0.012	0.008
	(0.013)	(0.013)	(0.011)	(0.011)	(0.016)	(0.016)	(0.007)	(0.008)	(0.011)	(0.011)
Crime by immigrants × male	-0.016*	-0.015*	-0.016	-0.011	0.017	0.019	0.021	0.021	-0.004	-0.008
	(0.007)	(0.007)	(0.016)	(0.018)	(0.009)	(0.010)	(0.012)	(0.013)	(0.012)	(0.012)
Individual fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	✓		✓		✓		✓		✓	
Districts × Year fixed effects		✓		✓		✓		✓		✓
R^2	0.05	0.05	0.16	0.16	0.02	0.02	0.11	0.11	0.01	0.01
Observations	9624	9624	9624	9624	9624	9624	9624	9624	9624	9624

Note: OLS estimates. The unit of observation is the individual i at time t. The dependent variable is a dummy that takes the value 1 if the individual votes for parties such as M5S, Lega, Center Left, Center Right, or abstains from voting. The independent variables are dummies that take the value 1 if at least one crime is committed by Italians or immigrants, respectively, and interacted with being either male or female, within 200 meters of the residence street, 30 days before election day. Robust standard errors are clustered at the district level.

Low vs. High Education: National Elections (2013 and 2018)

Dep.	M5S		Lega		Center Left		Center Right		Abstention	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Crime by Italians × low education	-0.015	-0.014	0.024	0.021	0.008	0.006	0.002	0.004	-0.005	-0.003
	(0.010)	(0.010)	(0.023)	(0.026)	(0.009)	(0.009)	(0.022)	(0.024)	(0.019)	(0.018)
Crime by Italians × high education	0.002	0.002	-0.013	-0.016	0.001	0.000	0.002	0.004	0.011	0.012
	(0.015)	(0.016)	(0.018)	(0.017)	(0.008)	(0.007)	(0.017)	(0.017)	(0.006)	(0.007)
Crime by immigrants × low education	-0.013	-0.012	-0.039***	-0.034**	-0.005	-0.003	0.029*	0.030*	0.016	0.012
	(0.011)	(0.012)	(0.009)	(0.012)	(0.010)	(0.010)	(0.013)	(0.014)	(0.013)	(0.012)
Crime by immigrants × high education	-0.027**	-0.026**	-0.003	0.002	0.013	0.015	0.016	0.016	-0.001	-0.005
	(0.008)	(0.008)	(0.008)	(0.009)	(0.009)	(0.010)	(0.009)	(0.010)	(0.014)	(0.015)
Individual fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	✓		✓		✓		✓		✓	
Districts × Year fixed effects		✓		✓		✓		✓		✓
R^2	0.05	0.05	0.16	0.16	0.02	0.02	0.11	0.11	0.01	0.01
Observations	9624	9624	9624	9624	9624	9624	9624	9624	9624	9624

Note: OLS estimates. The unit of observation is the individual i at time t. The dependent variable is a dummy that takes the value 1 if the individual votes for parties such as M5S, Lega, Center Left, Center Right, or abstains from voting. The independent variables are dummies that take the value 1 if at least one crime is committed by Italians or immigrants, respectively, and interacted with being either low- or high-educated, within 200 meters of the residence street, 30 days after election day. Robust standard errors are clustered at the district level.

Low vs. High Skills: National Elections (2013 and 2018)

Dep.	M5S		Lega		Center Left		Center Right		Abstention	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Crime by Italians × low skills	-0.012**	-0.011*	0.009	0.006	0.017	0.015	-0.011	-0.009	0.001	0.003
	(0.004)	(0.004)	(0.016)	(0.018)	(0.011)	(0.011)	(0.016)	(0.017)	(0.008)	(0.008)
Crime by Italians× high skills	0.013	0.014	-0.019	-0.021	-0.026	-0.027	0.030	0.032	0.014*	0.015**
	(0.015)	(0.016)	(0.027)	(0.025)	(0.017)	(0.017)	(0.024)	(0.024)	(0.006)	(0.005)
Crime by immigrants × low skills	-0.007	-0.006	-0.011	-0.006	0.002	0.003	0.028**	0.028*	0.011	0.007
	(0.012)	(0.012)	(0.007)	(0.010)	(0.015)	(0.016)	(0.010)	(0.011)	(0.012)	(0.014)
Crime by immigrants × high skills	-0.048***	-0.046***	-0.022	-0.017	0.016	0.019	0.008	0.008	-0.006	-0.010
	(0.005)	(0.004)	(0.015)	(0.014)	(0.017)	(0.016)	(0.006)	(0.007)	(0.020)	(0.020)
Individual fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	✓		✓		✓		✓		✓	
Districts × Year fixed effects		✓		✓		✓		✓		✓
R^2	0.05	0.05	0.16	0.16	0.02	0.02	0.11	0.12	0.01	0.01
Observations	9624	9624	9624	9624	9624	9624	9624	9624	9624	9624

Note: OLS estimates. The unit of observation is the individual i at time t. The dependent variable is a dummy that takes the value 1 if the individual votes for parties such as M5S, Lega, Center Left, Center Right, or abstains from voting. The independent variables are dummies that take the value 1 if at least one crime is committed by Italians or immigrants, respectively, and interacted with being either low- or high-skilled, within 200 meters of the residence street, 30 days after election day. Robust standard errors are clustered at the district level.

Other Results: Administrative Elections

Administrative Elections (2011, 2016, and 2018) - Ita vs. Imm (Dummy)

Dep.	M5S		Center Left		Center Right & Lega		Abstention	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Crimes by Italians	0.003	0.002	-0.015*	-0.015**	0.005	0.007	0.005	0.003
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Crimes by immigrants	-0.003	-0.002	-0.011	-0.007	0.004	-0.000	0.012**	0.014**
	(0.006)	(0.006)	(0.011)	(0.013)	(0.012)	(0.012)	(0.005)	(0.005)
Individual fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	✓		✓		✓		✓	
Districts × Year fixed effects		✓		✓		✓		✓
R^2	0.05	0.05	0.14	0.14	0.27	0.27	0.00	0.00
Observations	14436	14436	14436	14436	14436	14436	14436	14436

Note: OLS estimates. The unit of observation is the individual i at time t. The dependent variable is a dummy that takes the value 1 if the individual votes for parties such as M5S, Lega, Center Left, Center Right, or abstains from voting. The independent variables are dummies that takes value 1 if there is at least one crime committed by Italians and by immigrants, respectively, around 200m from the residence street, 30 days before the election day. Robust standard errors are clustered at district level.

Conclusion

Recap & Conclusion

- 4812 non-moving individuals over 5 elections (2 national, 3 administrative) with crime articles as a proxy of **crime salience right before elections**

- Focus on general elections: no local confounders $\Rightarrow$ higher external validity

- Mixed overall results, and **no effects** on voting when crimes committed by **Italians**

- When crimes are committed by **immigrants**:
    - ▶ voters **abandon the populist party** with ambiguous views on immigration (M5S) while **reward** the law & order party (Center Right)
        - ▷ mainly driven by **female** voters
    - ▶ **high skilled/educated** voters abandon M5S, **low skilled/low educated** abandon Lega

- In **administrative elections** the **Italian** crimes lead to punishing the incumbent, while crimes committed by *Immigrants* bring **abstention**: *(socially) costly for the leftist voter to change party??*

Thank you!

giovanni.prarolo@unibo.it and marco.rosso4@unibo.it

Literature & Contribution

- Literature on Media and Individual Behavior
  [Eisensee and Stromberg (2007); Entman (2007); Lim *et al.* (2015); Dewenter et al. (2016); Gulino and Masera (2022)]
  ⇒ *individual data: no composition effects, study switching in voting, thanks to individual FEs*

- Literature on Economics of Crime
  [Drago and Galbiati (2012); Drago *et al.* (2020); Philippe and Ouss (2018); Dustmann and Fasani (2016); Braakmann (2012); Buonanno *et al.* (2013); Blanes i Vidal and Mastrobuoni (2018); Kirchmaier *et al.* (2020); Vargas *et al.* (2022)]
  ⇒ *examining the impact of individualsâ beliefs about local crime on their political party preference*

- Literature on the Influence of News Media on Political Outcomes
  [Dellavigna and Kaplan (2007); Enikolopov *et al.* (2011); Durante and Knight (2012); Barone et al. (2015); Mastrorocco and Minale (2018); Couttenier *et al.* (2021)]
  ⇒ *examining the influence of media-reported crime on individual voting behavior over multiple years*

Main Differences between National and Administrative Elections in Italy

Aspect	National	Administrative
Government	Parliament	Municipality
Coalitions	Stable, national level	Flexible, local level
Main Parties	Dominated by national parties	Local parties and civic lists
Strategy	Centralized	Localized
Campaign	National policies economy, **security**, **immigration**...	Local issues transport, public services...

Survey Questions

- Birth date

- Family composition

- Education

- Job description (skills)

- Did they move between 2013 and 2021?

- **Whether** and **what** they voted in all elections between 2004 and 2021 included

  - National elections: 2006, 2008, 2013, 2018

  - Administrative elections: 2004, 2009, 2011, 2016, 2021

Descriptive Statistics

Variable	Observations	Mean	Std. Dev.	Min	Max
Individual Characteristics					
Birth Year	4812	1970.145	18.41787	1927	2003
Female	4812	.5367	.4986509	0	1
Household Members	4812	2.954	.922489	1	6
Education (1=PhD,7=Primary School)	4812	5.145	1.109011	1	7
Working	4812	.5054	.4999766	0	1
Student	4812	.1140	.3179048	0	1
Retired	4812	.2640	.4408551	0	1
Homemaker	4812	.0723	.2590022	0	1

4812 individuals (the non-movers) over 9 elections

BolognaToday: Audience Demographics

- Gender Distribution:
    - Female: 41.72%
    - Male: 58.28%

- Age Distribution:
    - 18-24: 14.79%
    - 25-34: 23.06%
    - 35-44: 21.70%
    - 45-54: 18.77%
    - 55-64: 12.75%
    - 65+: 8.94%

Source: similarweb.com

BolognaToday: Traffic and Engagement

- Monthly visits: 2.968M

- Monthly unique visitors: 1.086M

- Visit duration: 01:45

- Pages/Visit: 1.57

- Bounce rate: 35.99%

Source: similarweb.com

Example of Article on Crime Committed by Immigrants

BT

Redazione

17 luglio 2013 12:41

CRONACA SANTO STEFANO / VIA SAN MAMOLO

Rapinano giovane in strada: al palo specialisti in furti 'hi-tech'

L'ultimo colpo è andato storto: dopo aver alleggerito un passante di telefono cellulare e portafogli sono stati catturati mentre fuggivano a bordo di un furgone carico di telefonini di ultima generazione, hi-pod, navigatori satellitari ...

Ancora un'altra rapina sulle nostre strade, ma questa volta gli autori del reato, non nuovi a 'colpi' del genere, sono finiti al palo. Il colpo 'gobbo', che li ha incastrati, è avvenuto nella nottata del 16 luglio scorso, quando la 'banda' ha accerchiato un 17enne che camminava in via San Mamolo, intorno alla mezza notte, per far ritorno a casa. Dopo averlo bloccato, gli ha strappato di mano l'Iphone e sfilato dalla tasca dei jeans il portafoglio per poi fuggire a bordo di un furgone.

Ad intervenire l'equipaggio di una Volante della Polizia, allertato sul posto da una vicina di casa del giovane: dopo un breve inseguimento gli agenti sono riusciti a rintracciare e fermare i fuggiaschi. A **finire in manette per rapina aggravata in concorso sono stati quattro** cittadini marocchini, rispettivamente del 1992, 1982 e due del 1990, già gravati da precedenti.

Example of Article on Crime Committed by Italians ▸ Back

BT
Redazione
08 luglio 2013 10:15

Si parla di

borseggi

furti

mercati
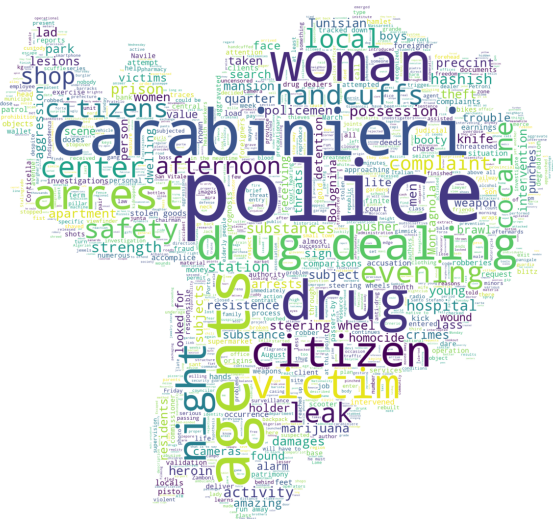
CRONACA CENTRO STORICO / PIAZZA DELL'8 AGOSTO

Borseggio in Montagnola: ladro incastrato da un solerte cittadino

Aveva rubato una borsetta da donna e dopo essersi impossessato del contenuto l'ha abbandonata per darsi alla fuga con la refurtiva, ma è stato sorpreso ...

Borseggio **venerdì scorso tra le bancarelle della Montagnola,** andato a monte grazie all'intervento di un solerte cittadino. L'autore del furto - di origini foggiane, classe 1964 - aveva approfittato della distrazione di una ragazza intenta ad effettuare acquisti per rubarle la borsa. Dopo averla svuotata del contante trovato all'interno e di un paio di auricolari, ha quindi abbandonato la borsetta per poi allontanarsi.

Ma la scena non è passata inosservata ad un solerte cittadino, che notando con sospetto l'uomo intento a fugare all'interno ad una borsa da donna ha allertato la Centrale Operativa fornendo così agli agenti della Volante del Commissariato "Due Torri – San Francesco" le indicazioni necessarie per identificare e fermare il ladro.
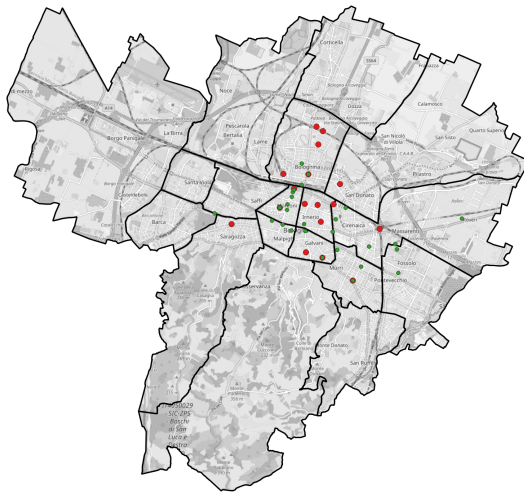
Il reo è quindi stato intercettato velocemente e denunciato per furto con destrezza.

WordCloud ▸ Back

Spatial Crime Distribution: 2011 ▸Back

● at least one crime news by immigrants   ● at least one crime news by Italians

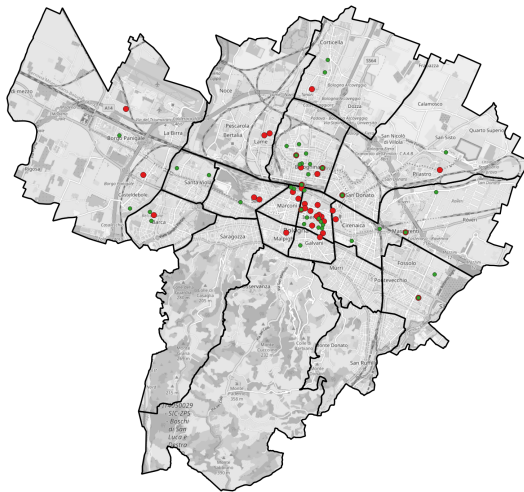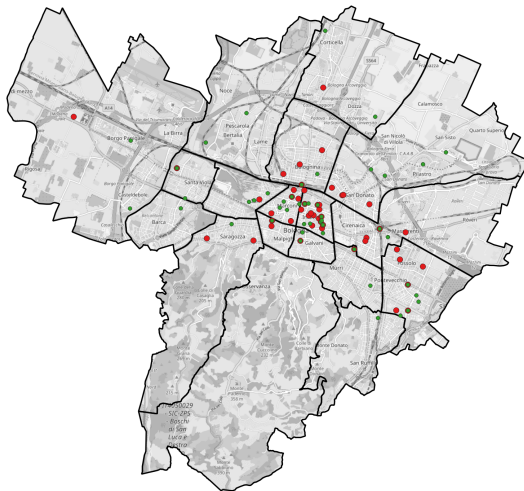● at least one crime news by immigrants   ● at least one crime news by Italians

Spatial Crime Distribution: 2016

● at least one crime news by immigrants ● at least one crime news by Italians

Spatial Crime Distribution: 2018

● at least one crime news by immigrants   ● at least one crime news by Italians

● at least one crime news by immigrants   ● at least one crime news by Italians

Individual Descriptive Statistics

Year	Obs.	Total			Immigrants			Italians		
		Mean	Std. Dev.	Max	Mean	Std. Dev.	Max	Mean	Std. Dev.	Max
2011	4812	0.25	0.69	5	0.10	0.34	3	0.15	0.51	4
2013	4812	0.30	0.73	5	0.08	0.30	2	0.22	0.60	4
2016	4812	0.41	1.13	12	0.19	0.63	7	0.22	0.71	8
2018	4812	0.55	1.17	13	0.28	0.78	9	0.27	0.63	5
2021	4812	0.28	0.97	12	0.15	0.54	5	0.12	0.56	8

4812 individuals (the non-movers) over 5 elections, 30 days before the elections, within 200-meter radius

Dep.	M5S		Lega		Center Left		Center Right		Abstention	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Crimes by Italians	-0.001	0.000	0.002	-0.001	0.006**	0.005*	-0.003	-0.001	-0.002	-0.000
	(0.004)	(0.004)	(0.008)	(0.009)	(0.002)	(0.002)	(0.008)	(0.008)	(0.004)	(0.004)
Crimes by immigrants	-0.012**	-0.011**	-0.013**	-0.011	0.003	0.006**	0.013	0.014	0.002	-0.001
	(0.004)	(0.003)	(0.005)	(0.007)	(0.002)	(0.002)	(0.006)	(0.008)	(0.005)	(0.004)
Individual fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	✓		✓		✓		✓		✓	
Districts × Year fixed effects		✓		✓		✓		✓		✓
R^2	0.05	0.05	0.16	0.16	0.02	0.02	0.11	0.11	0.01	0.01
Observations	9624	9624	9624	9624	9624	9624	9624	9624	9624	9624

Note: OLS estimates. The unit of observation is the individual i resident in street z at time t. The dependent variable is a dummy taking value 1 if the individual votes for parties such as M5S, Lega, Center Left, Center Right, or abstains from voting. The independent variables are the numbers of crimes committed by Italians and by immigrants, respectively, around 200m from the residence street 30 days before the election day. Robust standard errors are clustered at district level.

Dep.	M5S		Lega		Center Left		Center Right		Abstention	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Crimes by Italians	-0.010	-0.009	-0.005	-0.008	0.002	0.000	0.007	0.010	0.004	0.007
	(0.008)	(0.008)	(0.007)	(0.006)	(0.006)	(0.007)	(0.011)	(0.011)	(0.008)	(0.008)
Crimes by immigrants	-0.016*	-0.014	-0.009	-0.003	-0.000	0.001	0.004	0.007	-0.004	-0.011***
	(0.006)	(0.008)	(0.010)	(0.010)	(0.004)	(0.005)	(0.008)	(0.011)	(0.005)	(0.003)
Individual fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year fixed effects	✓		✓		✓		✓		✓	
Districts fixed effects × Year fixed effects		✓		✓		✓		✓		✓
R^2	0.05	0.05	0.16	0.16	0.02	0.02	0.11	0.11	0.01	0.02
Observations	9624	9624	9624	9624	9624	9624	9624	9624	9624	9624

Note: OLS estimates. The unit of observation is the individual i at time t. The dependent variable is a dummy that takes the value 1 if the individual votes for parties such as M5S, Lega, Center Left, Center Right, or abstains from voting. The independent variables are dummies that takes value 1 if there is at least one crime committed by Italians and by immigrants, respectively, around 500m from the residence street, 30 days before the election day. Robust standard errors are clustered at district level.