

War, Socialism and the Rise of Fascism: An Empirical Exploration

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Introduction

- ▶ As we approach the centenary of March of Rome, right-wing populist movements are in ascendancy and many draw parallels between them and early 20th century fascist movements (e.g., Stanley, 2018).
- ▶ One of the prominent theories of the rise of fascism is that it was related to the threat of Socialism (e.g., Nolte, 1965).
- ▶ The relationship between the “Red Scare” and fascism is particularly important in the Italian context because of
 - ▶ the rise of the socialist threat after WWI, the “red biennium” 1919-20;
 - ▶ the strong anti-socialist violent reaction led by the Fascist party in the following “black biennium” 1921-22;
- ▶ The present work is an empirical exploration of the “red scare” explanation for the rise of fascism in Italy.

Empirical strategies and results

- ▶ We first document how casualties from WW1 are strongly associated with the success of the Socialists in the 1919 elections at municipality level.
 - ▶ this is not explained by pre-existing local characteristics;
 - ▶ we believe it captures the effect of hardship and disillusionment caused by the war;
 - ▶ we also show that casualties are not directly associated with nationalism or pro-war sentiments.
- ▶ We then use this source of variation to isolate the rise of support for Fascists in response to the threat of Socialism. One sd increase in Socialist vote share in 1919 leads to
 - ▶ a 12.9% increase in the Fascist vote share in 1924;
 - ▶ a 8.5% increase in Fascist violence in 1920-2;
 - ▶ a 18% increase in the probability of having a local Fascist branch by Fall 1921.
- ▶ We show that the effect of socialist vote share on Fascist activity is stronger where social elites are more present and better organized.
- ▶ This channel is confirmed when other sources of variation are used (Spanish flu pandemic and drought in 1918-19).
- ▶ We then look at longer term effects of the support for Fascism and shed some light on the deportation of Jews in 1943-5 and the impact on post WWII Italian political landscape.

Previous Literature

- ▶ A large history literature both on Italian fascism and also on various causes of fascism in inter-war Europe.
- ▶ Most closely related are several political science studies investigating the role of the "Red Scare" in the rise of Mussolini's movement (Elazar, 2000; Brustein, 1991 Wellhofer, 2003). But generally using much more aggregated data and not tackling the key issues that are the focus of our paper: sources of exogenous variation in the threat of Socialism and mechanisms.
- ▶ Also related work on the rise of Nazism in Germany (Voigtländer & Voth, 2012, 2019; Satyanath et al. 2017; Adena et al., 2015 King et. al, 2008; Doerr et al. 2020).

History: WWI and post-war turmoil in Italy

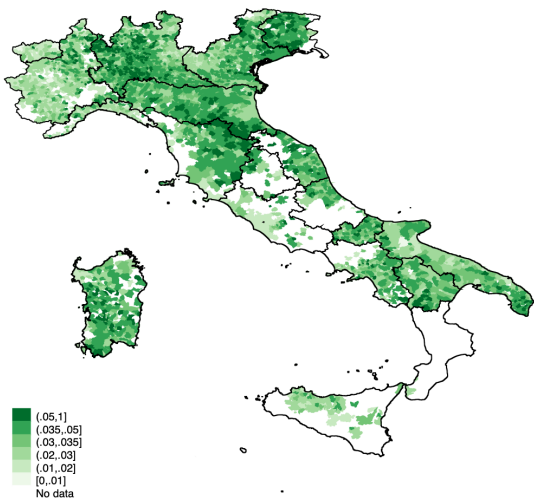
- ▶ Italy entered WWI in May '15 against the will of Parliament and people (Bianchi, 2014).
- ▶ a vociferous minority of pro-war activists (including Mussolini) persuaded the government and the King to join the war against Austria and Germany.
- ▶ the Italian Socialist party (differently from many European socialists) adopted an “absolute neutrality” policy and was the main anti-war force.
- ▶ Italy paid a high price and no victory celebration and no remembrance for 2 years. *“In many ways its post-war experience resembled that of the defeated empires of eastern and central Europe more closely than that of France and Britain.”* (Gerwarth, 2016, p. 6)
- ▶ In the “red biennium” 1919-20 widespread strikes, unrests, land encroachments, factory occupations occurred. Socialism was perceived as an existential threat especially by landowners.
- ▶ in 1918 the revolutionary wing took control of the Socialist party and stipulated: *“The violent conquest of political power on behalf of the workers will signify the passing of power from the bourgeois class to the proletarian class, thus establishing ... the dictatorship of all of the proletariat.”* (Payne, 1996 p.89)
- ▶ In 1919 elections the Socialists doubled their vote share to 32.3%.

History: The rise of Fascism to power

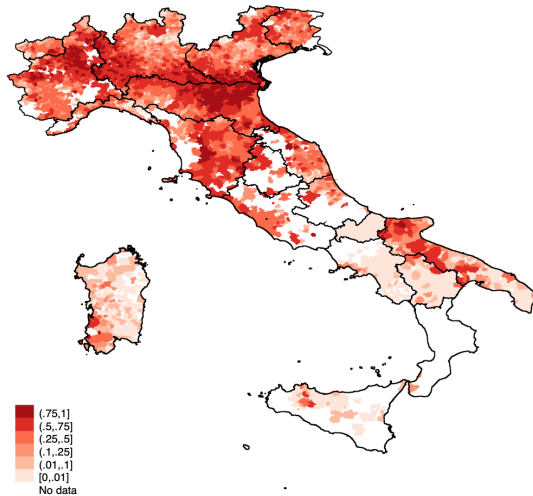
- ▶ In March 1919 Mussolini founded the *Fasci di Combattimento* which performed badly in the 1919 elections (as all pro-war parties), gaining no MPs.
- ▶ But the Fascists gained a reputation for powerful anti-Socialist violent actions. *“The novelty of Fascism lay in the military organization of a political party.”* (Lyttelton, 2003).
- ▶ From late 1920, the Fascist movement spread in the Po valley on the tails of successful paramilitary actions against Socialist strongholds. (De Felice, 1966; Lyttelton, 2003)
- ▶ The center-right government then started courting the Fascists and included them in the conservative coalition (National Block) for the 1921 elections.
- ▶ Fascist violence accelerated, with little resistance from authorities. Franzinelli (2003) reports 727 killings by Fascists in 1920-2. For comparison, in 1919-22 political murders by right-wing paramilitaries in Germany were 354 (Gumbel, 1922).
- ▶ Mussolini led the March on Rome starting October 27, 1922. The king refused to use the army to crush the March and appointed Mussolini as Prime Minister.
- ▶ In the last multiparty elections in 1924 Mussolini’s lists obtained 65% of the votes.

- ▶ War casualties
 - ▶ We use the Roll of Honour which provides information about each member of the armed forces who died during the war (name, dates of birth and death, places of birth and death, regiment, force, rank).
 - ▶ We focus on footsoldier (75% of all casualties), less likely to suffer from selection.
- ▶ Fascist violence and local branches
 - ▶ Franzinelli (2003) collected the most relevant episodes of violence of the Fascists up to the March on Rome at the end of October 1922. We digitized these data which include 727 killings and 2566 episodes of political violence of which 2123 were fascist initiatives.
 - ▶ We also collected data on the local branches of the Fascist Party in September 1921 from prefect reports sourced in state archives throughout Italy.
- ▶ Election results
 - ▶ The official (municipality-level) data on the three elections of 1919, 1921 and 1924 have gone missing from the Parliament archive.
 - ▶ We collected data from local and national newspapers and local state archives covering the 3 elections for almost 6000 (out of 8000) municipalities.
- ▶ Other data
 - ▶ Jewish deportations from the Contemporary Jewish Documentation Centre
 - ▶ The 1911 Censuses, the 1885 Parliamentary inquiry on agriculture, etc.

Distribution of Casualties and Socialist Support in 1919

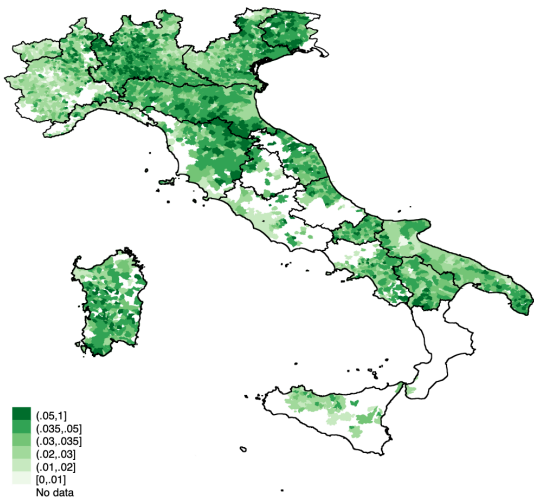


Footsoldier casualties

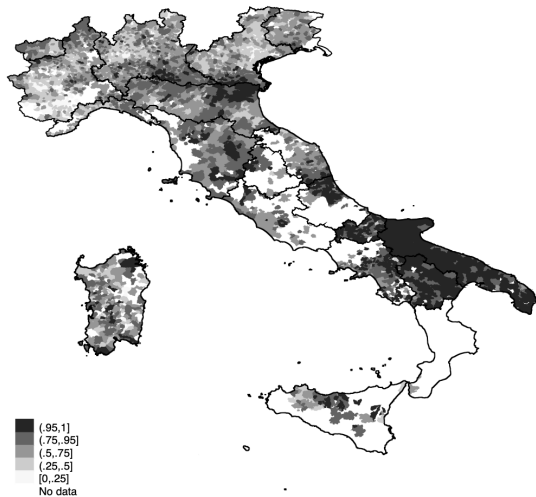


Socialist vote share in 1919

Distribution of Casualties and Fascist Support in 1924



Footsoldier casualties



Fascist vote share in 1924

WWI Casualties and Support for the Socialist Party

The first step is to analyze the relation between WWI casualties and Socialist support in 1919. This is also the first stage when investigating the threat of socialism on the rise of fascism.

$$\text{Socialist Share}_i^{1919} = \gamma \cdot \text{Foodsoldier casualty}_i + X_i' \beta + \varepsilon_i^{\text{firststage}}$$

Dependent var: Socialist vote share in 1919

Excluded instrument: Foodsoldier casualty rate is our preferred measure, less prone to selection.

The set of covariates includes X_i :

Regiment fixed effects: capturing the effects of the experiences in a specific theater of war on political preferences (which could be different from the impact of casualties).

Province fixed effects: so that results are not driven by comparison of different provinces;

Socialist vote share in 1913: to control for the socialist presence before the war;

Demographic: log population (quartic), % population < 6 in 1911;

Geographic: log area, elevation of the main centre, and maximum elevation;

Military: veterans (cohorts 1874-1895 and 1896-1900), dummies for deaths of special assault soldiers, volunteers, and bloody battles;

Agriculture: % of day labourers, of share-croppers, dummy for landowners associations;

Urban: % of indus. workers, per capita indus. firms, and literacy rate in 1911, % of elites (entrepreneurs and rentiers), and of middle class.

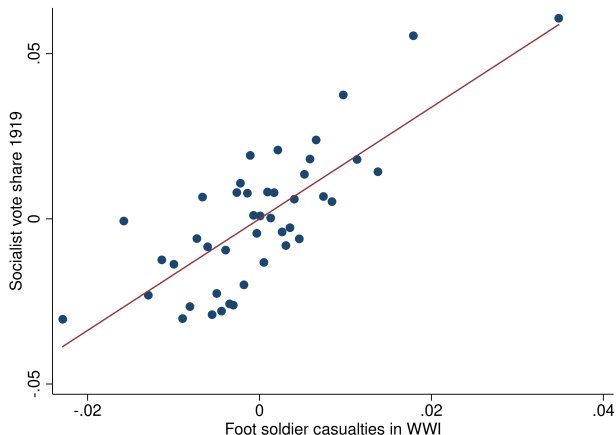
The impact of WWI casualties on Socialist votes in 1919

Dep variable: Socialist vote share in 1919						
	(1)	(2)	(3)	(4)	(5)	(6)
Share of footsoldier casualties	2.034*** (0.315)	1.953*** (0.300)	1.772*** (0.236)	1.752*** (0.231)	1.686*** (0.230)	1.689*** (0.234)
Veterans (cohorts 1874-1895)				0.868** (0.348)	0.791** (0.353)	0.814** (0.349)
Veterans (cohorts 1896-1900)				-1.487*** (0.527)	-1.411** (0.547)	-1.362** (0.538)
Regiment/Province FE	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓
Geographic controls		✓	✓	✓	✓	✓
Socialist share in 1913			✓	✓	✓	✓
Military controls				✓	✓	✓
Agriculture controls					✓	✓
Urban controls						✓
Observations	5,775	5,775	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181	181	181
F-stat	41.61	42.18	56.22	58.57	54.66	52.91

- ▶ standard errors are clustered at district level;
- ▶ A sd increase in footsoldier casualties leads to an increase of 3.3 in Socialist vote share in 1919. Or zero casualties would result in 6.5% lower share of Socialist votes in 1919;
- ▶ we show heterogeneity in the political leaning of veterans.

The First Stage, Visually

Bin scatterplot of the first-stage relationship between Socialist vote share in 1919 and footsoldier casualties. Average binsize 130 municipalities.



- ▶ Stable, first-order impact of war casualties on local support for Socialism. The full impact of the war was likely larger, common across municipalities, and therefore not fully captured by the coefficient of casualties.

Falsifications

To check whether municipality with different characteristics have systematically different casualty rates.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A:	Socialists 1913		Literacy 1911		Violent crimes 1874		Crime rate 1874	
Share of footsoldier casualties	0.185 (0.272)	0.227 (0.250)	-0.146 (0.147)	-0.194 (0.142)	0.504 (1.838)	0.094 (1.850)	5.734 (6.965)	2.213 (6.504)
Mean (SD)	0.160 (0.223)		0.751 (0.198)		1.483 (1.549)		6.431 (6.486)	
Panel B:	Ind. workers 1911		Ind. firms 1911		Ind. strikes 1913-4		Ind. strikers 1913-4	
Share of footsoldier casualties	-0.267 (0.357)	-0.284 (0.351)	0.021 (0.019)	0.024 (0.017)	0.002 (0.077)	0.007 (0.077)	-0.003 (0.011)	-0.003 (0.011)
Mean (SD)	0.116 (0.216)		0.012 (0.011)		0.009 (0.094)		0.001 (0.014)	
Panel C:	Large landholding 1885		Landownership 1885		Agr. strikes 1913-4		Agr. strikers 1913-4	
Share of footsoldier casualties	0.236 (0.730)	0.335 (0.678)	0.485 (0.740)	0.525 (0.664)	-0.067 (0.050)	-0.079 (0.054)	0.005 (0.008)	0.002 (0.008)
Mean (SD)	0.416 (0.495)		0.577 (0.494)		0.003 (0.056)		0.0004 (0.011)	
FE, Soc, Dem, Geo, Military	✓		✓		✓		✓	
All controls & FE		✓		✓		✓		✓

The effect of Socialist Vote share in 1919 on Fascist activity

Our main results analyze the effect of the socialist threat on the rise of fascism and fascist activities in 1920-1924.

$$y_i^t = \alpha \cdot \text{Socialist Share}_i^{1919} + X_i' \beta_y^{IV} + \varepsilon_i^{IV},$$

Dependent vars: We use 3 measures of Fascist activity:

- ▶ The share of votes Fascist lists got in the 1924 elections;
- ▶ Episodes of Fascist violence (*squadrisimo*) in 1920-1922;
- ▶ Fascist local branches in Autumn 1921.

Excluded instrument: Fightsoldier casualty rate;

Covariates: as before.

The exclusion restriction is based on two premises:

- ▶ casualties should be uncorrelated with municipality characteristics (conditional on covariates, in particular FEs) impacting voting patterns;
- ▶ the effect of fightsoldiers casualties should be fully captured by the vote share of the Socialist party in 1919.

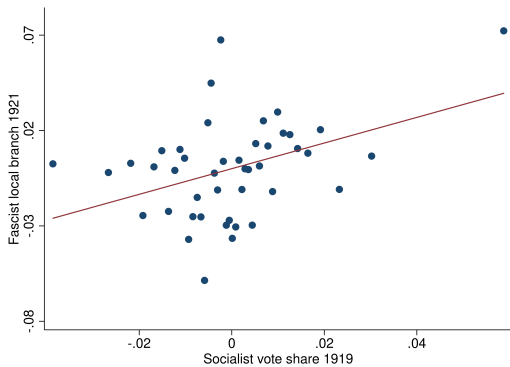
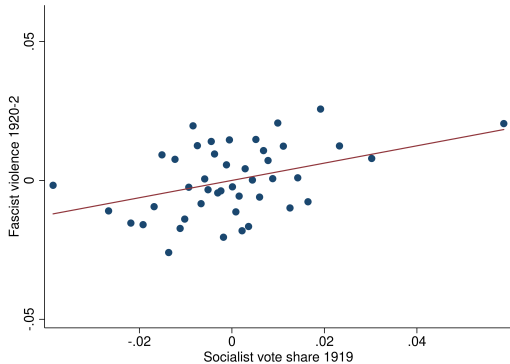
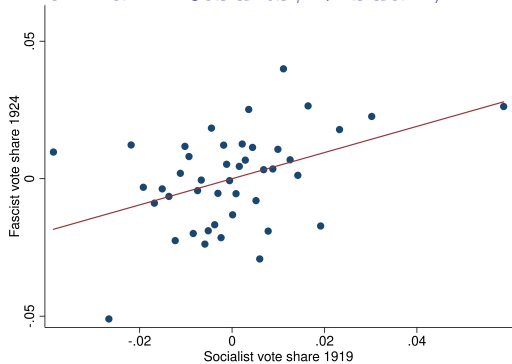
Main Results: Fascist Vote Share

Dep variable: Fascist vote share in 1924						
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: IV						
Socialists in 1919	0.375** (0.162)	0.429*** (0.153)	0.476*** (0.158)	0.504*** (0.156)	0.489*** (0.163)	0.476*** (0.156)
Veterans (cohorts 1874-1895)				-0.837 (0.521)	-0.853* (0.512)	-0.837* (0.491)
Veterans (cohorts 1896-1900)				3.615*** (1.132)	3.505*** (1.109)	3.334*** (1.051)
Panel B: OLS						
Socialist vote share in 1919	-0.016 (0.044)	0.011 (0.039)	0.019 (0.035)	0.024 (0.032)	0.019 (0.032)	0.022 (0.032)
Regiment/Province FE	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓
Geographic controls		✓	✓	✓	✓	✓
Socialist share in 1913			✓	✓	✓	✓
Military controls				✓	✓	✓
Agriculture controls					✓	✓
Urban controls						✓
Observations	5,775	5,775	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181	181	181

Main Results: Fascist Violence and Local Branches

	(1)	(2)	(3)	(4)	(5)	(6)
Dep variable: Fascist violence in 1920-22 (episodes per 1000 inhabitants)						
Panel A: IV						
Socialist vote share in 1919	0.230** (0.112)	0.239** (0.116)	0.254** (0.125)	0.329*** (0.126)	0.311** (0.126)	0.312** (0.122)
Panel B: OLS						
Socialist vote share in 1919	0.064*** (0.014)	0.058*** (0.013)	0.049*** (0.015)	0.050*** (0.015)	0.045*** (0.014)	0.047*** (0.014)
Dep variable: Presence of local branches of the Fascist party in Fall 1921						
Panel C: IV						
Socialist vote share in 1919	0.507** (0.227)	0.527** (0.231)	0.578** (0.257)	0.670** (0.277)	0.670** (0.277)	0.672** (0.266)
Panel D: OLS						
Socialist vote share in 1919	0.080*** (0.026)	0.072*** (0.026)	0.081*** (0.030)	0.086*** (0.030)	0.080*** (0.029)	0.083*** (0.028)
Regiment/Province FE	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓
Geographic controls		✓	✓	✓	✓	✓
Socialist share in 1913			✓	✓	✓	✓
Military controls				✓	✓	✓
Agriculture controls					✓	✓
Urban controls						✓
Observations	5,775	5,775	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181	181	181

The Main Results, Visually



Quantitative Magnitudes, Interpretation, and Robustness

- ▶ One sd increase in Socialist vote share in 1919 leads to a 12.9 percentage points increase in the Fascist vote share in 1924 (50% of its sd).
- ▶ ...a 8.5 percentage points increase in Fascist violence in the municipality in 1920-2 (52% of its sd).
- ▶ ...a 18 percentage points increase in the probability of having a local branch of the Fascist party in the municipality by Fall 1921 (51% of its sd).

- ▶ Why is the OLS different? Very intuitive: OLS also reflects places that support Socialists for “endogenous” reasons (a more left-wing electorate).
- ▶ The IV purges this endogenous source of variation and focuses on war-induced exogenous variation in Socialist support.

Robustness checks:

- ▶ using spatially-corrected (Conley) standard errors ▶ Conley SE
- ▶ controlling for fascist vote share in 1919 ▶ Fascist share 1919
- ▶ excluding southern Italy ▶ No south
- ▶ only official Fascist lists ▶ Official lists
- ▶ alternative casualties variables ▶ Alternative casualties vars
- ▶ alternative violence measures ▶ Alternative violence measures
- ▶ Alternative fixed effects to control for war experience ▶ front-month and front-semester FE

Investigating the mechanism

- ▶ Out interpretation of the causal effect on the rise of Fascism in Italy is through the perceived threat of socialism, the “Red Scare”.
 - ▶ hardship and disillusionment of the war strengthened the Socialist Party;
 - ▶ moderate and conservative forces fall behind Mussolini’s Fascist party.

- ▶ To support such an interpretation we provide the following evidence;
 - ▶ Socialist vote share is correlated with agrarian workers’ uprising (the red scare in my backyard); ▶ Agrarian Strikes 1920
 - ▶ The Fascist vote did not come from the Socialists but from other parties; ▶ Socialist vote share in 1924 ▶ Other parties in 1924
 - ▶ No direct effect of war on Fascist support or on nationalistic sentiments (notice also results on veterans in the previous tables); ▶ Nationalism 1919-21
 - ▶ The effect of socialist vote share on Fascist activity is stronger where elites are more present and better organized (heterogeneous effects); ▶ Elites
 - ▶ This is also the case for the financial support to the Fascist party. ▶ Donations

Alternative sources of variation

- ▶ We look at alternative sources of variation of the threat of socialism to check whether they confirm our interpretation. We look
 - ▶ at effect of the Spanish Flu in Italy;
 - ▶ at the drought affecting (some parts of) Italy in 1918-9.
- ▶ The Spanish Flu pandemic:
 - ▶ It killed about 50*m* globally and 0.5*m* in Italy.
 - ▶ We compute excess deaths in 1918 wrt the (pre-war) period 1911-1914.
 - ▶ Data are only available for urban municipalities.
 - ▶ Falsifications on pre-1919 vars of excess deaths in 1918. [▶ Falsifications 1](#)
- ▶ Drought in the winter-spring 1918-9
 - ▶ Data from 427 weather stations to compute relative rainfall wrt long-term average
 - ▶ We interpolate them to compute municipality level relative rainfall
 - ▶ Inverse distance as weights with 30km cutoff
 - ▶ Capped at 1 to use only shortfalls of rain wrt long term average [▶ Rain map](#)
 - ▶ Falsifications with pre-1919 vars [▶ Falsifications 2](#) and rainfall in other years [▶ Falsifications 3](#)
- ▶ results broadly confirm our interpretation.

Results with alternative sources of variation

Dep variable:	Socialist vote share in 1919		Fascist vote share in 1924		Fascist violence in 1920-2		Fascist branches in 1921	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Using excess mortality in 1918 as instrument								
Excess mortality in 1918	0.093*** (0.028)	0.097*** (0.027)						
Socialist vote share in 1919			0.599 (0.397)	0.738* (0.428)	1.567* (0.834)	0.908 (0.756)	0.054 (0.214)	-0.046 (0.195)
1st stage F-stat	10.78	12.84						
Observations	207	207	207	207	231	231	231	231
Number of clusters	159	159	159	159	178	178	178	178
Panel B: Using rainfall in winter and spring 1818-1919 as instrument								
Relative winter-spring	-0.154*** (0.056)	-0.148*** (0.057)						
Socialist vote share in 1919			0.711* (0.372)	0.784** (0.388)	-0.259 (0.274)	-0.217 (0.281)	-0.016 (0.134)	0.044 (0.153)
Rainfall variance	✓	✓	✓	✓	✓	✓	✓	✓
1st stage F-stat	6.957	6.209						
Observations	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500
Number of district clusters	174	174	174	174	174	174	174	174
Number of station clusters	427	427	427	427	427	427	427	427
FE, Soc, Dem, Geo, Military	✓		✓		✓		✓	
All controls & FE		✓		✓		✓		✓

Longer term outcomes

Did the support for and the rule of the Fascist Party in Italy have a longer-term impact?

- ▶ The Fascist takeover of power was an epochal event, which could have altered Italy's subsequent economic or political trajectory;
- ▶ On the other hand, the Fascist government lost most of its legitimacy and disintegrated in the middle of WWII;
- ▶ little consensus on the longer-term impact.

We contribute to this analysis by looking at two issues:

- ▶ The deportation of Jews in 1943-5, mostly under the republic of Salò which was *de facto* ruled by the German Nazis;
- ▶ The post-WWII political alignments.

Jewish deportation in 1943-45

- ▶ almost 8000 Jewish citizens and refugees were deported from Italy, a lower share of Jewish population than in other countries;
- ▶ Early literature downplayed the role of Italians (De Felice, 1961; Zuccotti, 1987);
- ▶ Recent works reached different conclusions (Sarfatti, 2006; Levis Sullman, 2018);
- ▶ We test if (early) support for Fascism affected Jewish deportation 2 decades later.

Empirical strategy:

$$y_i^t = \alpha \cdot \text{Fascist Share}_i^{1924} + X_i' \beta_y^{IV} + \varepsilon_i^{IV},$$

Dependent vars: We use 3 measures of Jewish deportations:

- ▶ Deportation dummy;
- ▶ Share of Jewish population deported based on 1911 Census (capped at 1);
- ▶ as above but excluding municipalities with concentration camps.

Excluded instrument: Footsoldier casualty rate;

Covariates: as before + share of Jewish population in 1911.

2SLS: Fascist share in 1924 on Jewish deportations 1943-45

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Jews deportation dummy (1943-45) - IV						
Fascist vote share in 1924	0.884*	0.810*	0.817**	0.805**	0.866**	0.862**
	(0.462)	(0.419)	(0.416)	(0.382)	(0.427)	(0.437)
Panel B: Deportations over Jewish population (capped at 1) - IV						
Fascist vote share in 1924	0.886**	0.817**	0.815**	0.787**	0.854**	0.844**
	(0.412)	(0.362)	(0.357)	(0.316)	(0.359)	(0.367)
Panel C: Deportations over Jewish population (capped at 1 no camps) - IV						
Fascist vote share in 1924	0.783**	0.727**	0.721**	0.694**	0.751**	0.744**
	(0.382)	(0.341)	(0.334)	(0.295)	(0.335)	(0.341)
share of Jewish pop in 1911	✓	✓	✓	✓	✓	✓
Regiment/Province FE	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓
Geographic controls		✓	✓	✓	✓	✓
Socialist share in 1913			✓	✓	✓	✓
Military controls				✓	✓	✓
Agriculture controls					✓	✓
Urban controls						✓
1st Stage F-stat	6.467	9.095	9.714	11.13	9.510	9.649

- Magnitude: one sd increase of Fascist share in 1924 is associated with an 22% increase in the likelihood of deportation (Panel A column 6).

Long-Run Implications of Local Fascism.

We investigate durable political consequences of Italian Fascism

- ▶ We look at the long-term political effect of the vote share of Fascisms in 1924;
- ▶ we test this effect on all the political elections from 1946 to 2018;
- ▶ We consider the main parties in extreme right (neo-fascist), Center-right, Left, extreme left.
- ▶ results are reported in the following picture [▶ Post WWII politics](#)
- ▶ Persistent declines in support for center-right/Christian Democrats.
- ▶ Why? One interpretation is that the center-right support for Fascists in the 1920s damaged the center-right's reputation in the area.

Conclusions

- ▶ This paper revisited the rise of Fascism in Italy.
- ▶ Our analysis focuses on Italy but it explores a channel to explain the rise of right-wing dictatorships around the world.
 - ▶ the Nazi party may have had additional support from those fearing socialists and communists in Germany (Evans, 2006);
 - ▶ the Spanish civil war and the rise of Franco closing the experience of the Spanish Second Republic (Jackson, 1965; Perston, 2007; Domenech, 2013);
 - ▶ a number of military coups in South America, the most notable in Chile in 1973.
- ▶ An open question for today is whether some other perceived threat (disruptive cultural change, migration, etc.) may embolden far right political movements and broaden their support in the same way as the “red scare”.
- ▶ An additional element to consider is the crucial role played by the elites: without their support, especially in the rural areas, we might never witnessed the rise of the Italian Fascism. And this may be relevant nowadays as well.

Alternative Instruments: First Stages

Dep variable: Socialist vote share in 1919	(1)	(2)	(3)	(4)	(5)	(6)
Casualties among reservist & drafted footsoldiers	1.622*** (0.213)	1.563*** (0.214)				
Casualties among drafted footsoldiers			2.002*** (0.303)	1.860*** (0.303)		
Casualties among all soldiers					1.250*** (0.162)	1.210*** (0.158)
Regiment/Province FE	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓
Geographic controls	✓	✓	✓	✓	✓	✓
Socialist share in 1913	✓	✓	✓	✓	✓	✓
Military controls	✓	✓	✓	✓	✓	✓
Agriculture controls		✓		✓		✓
Urban controls		✓		✓		✓
Observations	5,775	5,775	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181	181	181
F-stat	57.87	53.16	43.58	37.72	59.84	58.67

OLS & 2SLS with spatially-corrected (Conley) standard errors

▶ Back

Dep variable:	Socialist vote share in 1919		Fascist vote share in 1924		Fascist branches in 1921		Fascist violence in 1920-2	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Share of footsoldier casualties	1.752*** (0.252)	1.689*** (0.248)						
Socialist vote share in 1919			0.504*** (0.131)	0.476*** (0.139)	0.329** (0.142)	0.312** (0.126)	0.670** (0.275)	0.672*** (0.227)
Regiment/Province FE	✓	✓	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Geographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Socialist share in 1913	✓	✓	✓	✓	✓	✓	✓	✓
Military controls	✓	✓	✓	✓	✓	✓	✓	✓
Agriculture controls		✓		✓		✓		✓
Urban controls		✓		✓		✓		✓
1st stage F-stat	48.34	46.38						
Observations	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775

▶ cutoff at 1.5 degrees of latitude & longitude.

2SLS estimates of the effects of Socialist vote share in 1919 on Fascist vote share in 1924 controlling for Fascist vote share in 1919

[▶ Back](#)

Dep variable: Fascist vote share in 1924						
	(1)	(2)	(3)	(4)	(5)	(6)
Socialist vote share in 1919	0.373** (0.161)	0.426*** (0.152)	0.473*** (0.156)	0.493*** (0.152)	0.478*** (0.159)	0.463*** (0.152)
Fascist share in 1919	0.138 (0.161)	0.336*** (0.119)	0.333*** (0.121)	0.293** (0.122)	0.287** (0.123)	0.318** (0.125)
Regiment/Province FE	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓
Geographic controls		✓	✓	✓	✓	✓
Socialist share in 1913			✓	✓	✓	✓
Military controls				✓	✓	✓
Agriculture controls					✓	✓
Urban controls						✓
Observations	5,775	5,775	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181	181	181
1st Stage F-stat	41.93	42.70	57.31	58	54.55	52.83

OLS & 2SLS excluding the South of Italy from the sample [▶ Back](#)

Dep variable:	Socialist vote share in 1919		Fascist vote share in 1924		Fascist violence in 1920-2		Fascist branches in 1921	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Share of footsoldier casualties	2.164*** (0.268)	2.066*** (0.274)						
Socialist vote share in 1919			0.444*** (0.141)	0.400*** (0.140)	0.273** (0.112)	0.251** (0.111)	0.777*** (0.281)	0.810*** (0.282)
Regiment/Province FE	✓	✓	✓	✓	✓	✓		
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Geographic controls	✓	✓	✓	✓	✓	✓	✓	✓
Socialist share in 1913	✓	✓	✓	✓	✓	✓	✓	✓
Military controls	✓	✓	✓	✓	✓	✓	✓	✓
Agriculture controls		✓		✓		✓		✓
Urban controls		✓		✓		✓		✓
Observations	4,571	4,571	4,571	4,571	4,571	4,571	4,571	4,571
Number of clusters	122	122	122	122	122	122	122	122
1st stage F-stat	65.19	57.04						

2SLS estimates of the effects of Socialist vote share in 1919 on Fascist vote share in 1924 defined using only the official lists [▶ Back](#)

Dep variable: Fascist vote share in 1924 (official lists only)						
	(1)	(2)	(3)	(4)	(5)	(6)
Socialist vote share in 1919	0.317* (0.166)	0.369** (0.159)	0.408** (0.167)	0.434*** (0.165)	0.419** (0.171)	0.407** (0.164)
Regiment/Province FE	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓
Geographic controls		✓	✓	✓	✓	✓
Socialist share in 1913			✓	✓	✓	✓
Military controls				✓	✓	✓
Agriculture controls					✓	✓
Urban controls						✓
Observations	5,775	5,775	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181	181	181

2SLS estimates of the relationship between Socialist vote share in 1919 and Fascist support using alternative measures of WWI casualties

[▶ Back](#)

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A - Dep variable: Fascist vote share in 1924						
Socialist vote share in 1919	0.533*** (0.159)	0.512*** (0.162)	0.604*** (0.234)	0.628** (0.250)	0.554*** (0.162)	0.535*** (0.160)
Panel B - Dep variable: Fascist violence in 1920-2						
Socialist vote share in 1919	0.369*** (0.141)	0.360*** (0.139)	0.315* (0.173)	0.313* (0.181)	0.344*** (0.123)	0.337*** (0.120)
Panel C - Dep variable: Fascist local branches in 1921						
Socialist vote share in 1919	0.599** (0.266)	0.611** (0.256)	1.134*** (0.337)	1.191*** (0.344)	0.600** (0.296)	0.630** (0.279)
Casualties among reservist & drafted footsoldiers	✓	✓				
Casualties among drafted footsoldiers			✓	✓		
Casualties among all soldiers					✓	✓
Regiment/Province FE	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓
Geographic controls	✓	✓	✓	✓	✓	✓
Socialist share in 1913	✓	✓	✓	✓	✓	✓
Military controls	✓	✓	✓	✓	✓	✓
Agriculture controls		✓		✓		✓
Urban controls		✓		✓		✓
Observations	5,775	5,775	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181	181	181

2SLS estimates of the relationship between Socialist vote share in 1919 and alternative definitions of Fascist violence [▶ Back](#)

	(1)	(2)	(3)	(4)	(5)	(6)
Dep variable:		Fascist killings in 1920-2	Political violence in 1920-2		Non-fascist violence in 1920-2	
Socialist vote share in 1919	0.091** (0.046)	0.093** (0.045)	0.326** (0.128)	0.307** (0.123)	-0.006 (0.021)	-0.008 (0.021)
Observations	5,775	5,775	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181	181	181
Regiment/Province FE	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓
Geographic controls	✓	✓	✓	✓	✓	✓
Socialist share in 1913	✓	✓	✓	✓	✓	✓
Military controls	✓	✓	✓	✓	✓	✓
Agriculture controls		✓		✓		✓
Urban controls		✓		✓		✓

2SLS estimates of the main results using alternative fixed effects

▶ Back

Dep variable:	Fascist vote share in 1924				Fascist violence in 1920-2				Fascist local branches in 1921			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Socialist share in 1919	0.457*** (0.174)	0.406** (0.168)	0.391** (0.159)	0.352** (0.159)	0.316** (0.131)	0.281** (0.119)	0.305** (0.131)	0.281** (0.122)	0.700** (0.307)	0.655** (0.276)	0.683** (0.330)	0.664** (0.311)
Province FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Geographic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Socialist share in 1913	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Military controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Agriculture controls		✓		✓		✓		✓		✓		✓
Urban controls		✓		✓		✓		✓		✓		✓
Front Semester FE	✓	✓			✓	✓			✓	✓		
Front Month FE			✓	✓			✓	✓			✓	✓
Observations	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181	181	181	181	181	181	181	181	181
1st Stage F-stat	42.17	42.45	39.72	37.74	42.17	42.45	39.72	37.74	42.17	42.45	39.72	37.74

OLS estimates of the relationship between Socialist vote share in 1919 and agrarian strikes in 1920

[▶ Back](#)

Dep variable: Agrarian strikes in 1920.						
	(1)	(2)	(3)	(4)	(5)	(6)
Socialist vote share in 1919	0.204*** (0.069)	0.186*** (0.070)	0.190*** (0.072)	0.197*** (0.073)	0.200*** (0.070)	0.200*** (0.071)
Regiment/Province FE	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓
Geographic controls		✓	✓	✓	✓	✓
Socialist share in 1913			✓	✓	✓	✓
Military controls				✓	✓	✓
Agriculture controls					✓	✓
Urban controls						✓
Observations	5,775	5,775	5,775	5,775	5,775	5,775
R-squared	0.777	0.778	0.778	0.779	0.784	0.785
Number of clusters	181	181	181	181	181	181

2SLS estimates of the relationship between Socialist vote share in 1919 and Socialist vote share in 1924 [▶ Back](#)

Dep variable: Socialist vote share in 1924						
	(1)	(2)	(3)	(4)	(5)	(6)
Socialist vote share in 1919	0.132 (0.080)	0.118 (0.078)	0.102 (0.083)	0.096 (0.084)	0.117 (0.086)	0.128 (0.084)
Regiment/Province FE	✓	✓	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓	✓	✓
Geographic controls		✓	✓	✓	✓	✓
Socialist share in 1913			✓	✓	✓	✓
Military controls				✓	✓	✓
Agriculture controls					✓	✓
Urban controls						✓
Observations	5,775	5,775	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181	181	181

Heterogeneous effects of Socialist in 1919 on Fascist support

Dep variable:	Fascist share 1924		Fascist violence 1920-2		Fascist branch 1921	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: IV regressions for the presence of landowner associations						
Socialist vote share in 1919	0.503*** (0.156)	0.473*** (0.155)	0.316*** (0.121)	0.318*** (0.120)	0.642** (0.253)	0.680*** (0.257)
Socialists x landowner association dummy	-0.442 (0.340)	-0.380 (0.319)	0.825* (0.486)	0.834* (0.474)	0.934* (0.494)	0.930* (0.487)
K-P F-stat	27.37	25.53	27.37	25.53	27.37	25.53
Panel B: IV regressions for the presence of elites (entrepreneurs and rentiers)						
Socialist vote share in 1919	0.484*** (0.156)	0.458*** (0.165)	0.307*** (0.116)	0.295** (0.117)	0.666** (0.268)	0.670** (0.264)
Socialists x elites	13.953* (7.939)	19.041** (9.185)	15.370** (6.195)	16.860** (7.623)	3.054 (14.681)	2.467 (16.731)
Kleibergen Paap F-stat	16.73	13.41	16.73	13.41	16.73	13.41
Panel C: Reduced-form regressions for the presence of landowner associations						
Share of footsoldier casualties	0.876*** (0.264)	0.803*** (0.258)	0.532*** (0.202)	0.507*** (0.195)	1.094** (0.423)	1.109*** (0.413)
Casualties x landowner association dummy	-0.032 (1.337)	0.075 (1.346)	5.222*** (1.784)	5.297*** (1.729)	7.081** (3.294)	7.212** (3.294)
Panel D: Reduced-form regressions for the presence of elites (entrepreneurs and rentiers)						
Share of footsoldier casualties	0.828*** (0.238)	0.743*** (0.238)	0.522** (0.203)	0.475** (0.192)	1.147*** (0.435)	1.114*** (0.403)
Casualties x elites	37.817* (20.007)	41.562** (19.138)	37.447** (17.774)	35.112** (17.375)	18.702 (27.983)	14.784 (27.126)
FE, Soc, Dem, Geo, Military	✓		✓		✓	
All controls & FE		✓		✓		✓
Observations	5,775	5,775	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181	181	181

Heterogeneous effects of Socialist vote share in 1919 on the presence of large donors for the Fascist party [▶ Back](#)

Dep variable: Large donor dummy (1919-25)				
	(1)	(2)	(3)	(4)
Socialist vote share in 1919	0.013 (0.095)	0.033 (0.096)	-0.005 (0.102)	0.020 (0.105)
Socialists x elite variable	0.438** (0.217)	0.421** (0.209)	8.555 (5.606)	10.783* (6.472)
Elite variable		Landowner ass. dummy		Share of elites
Regiment/Province FE	✓	✓	✓	✓
Demographic controls	✓	✓	✓	✓
Geographic controls	✓	✓	✓	✓
Socialist share in 1913	✓	✓	✓	✓
Military controls	✓	✓	✓	✓
Agriculture controls		✓		✓
Urban controls		✓		✓
Observations	5,775	5,775	5,775	5,775
Number of clusters	181	181	181	181
Kleibergen Paap F-stat	27.37	25.53	16.73	13.41

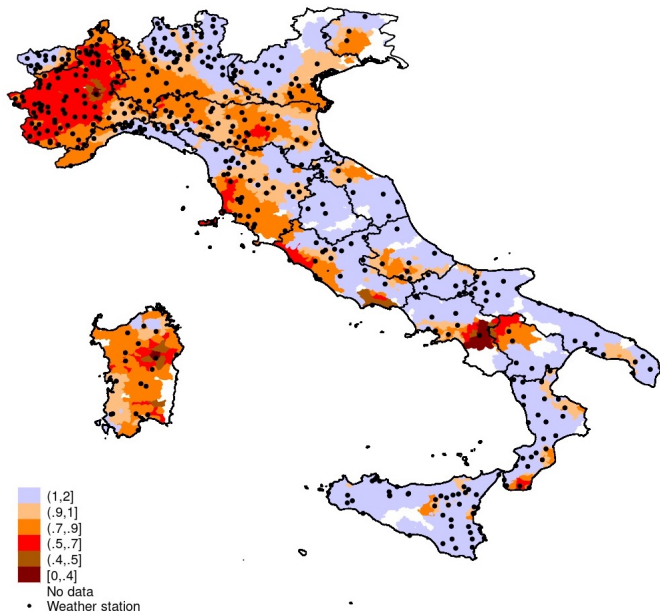
Falsification exercises for the Spanish flu excess mortality

[▶ Back](#)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A:								
Dep variable:	Socialists in 1913		Literacy in 1911		Violent crimes in 1874		Crime rate in 1874	
Excess Mortality in 1918	-0.027 (0.035)	-0.045 (0.035)	0.033* (0.017)	0.022 (0.016)	0.285 (0.236)	0.352 (0.240)	-1.351 (1.031)	-1.399 (1.007)
Mean (SD)	0.207 (0.217)		0.685 (0.188)		1.932 (1.576)		8.174 (5.840)	
Panel B:								
Dep variable:	Ind. workers in 1911		Ind. firms in 1911		Ind. strikes in 1913-4		Ind. strikers in 1913-4	
Excess Mortality in 1918	0.039** (0.017)	0.019 (0.017)	0.001 (0.002)	0.000 (0.002)	-0.129* (0.066)	-0.146** (0.073)	-0.000 (0.000)	-0.000 (0.000)
Mean	0.185 (0.162)		0.018 (0.008)		0.106 (0.309)		0.0005 (0.003)	
Panel C:								
Dep variable:	Large landhold.		Many landowners		Agr. strikes in 1913-4		Agr. strikers in 1913-4	
Excess Mortality in 1918	0.011 (0.112)	0.053 (0.112)	0.132 (0.095)	0.117 (0.098)	-0.012 (0.014)	-0.002 (0.016)	0.001 (0.002)	0.002 (0.003)
Mean	0.391 (0.489)		0.454 (0.499)		0.015 (0.120)		0.001 (0.019)	
FE, Soc, Dem, Geo, Military	✓		✓		✓		✓	
All controls & FE		✓		✓		✓		✓

Relative rainfall in winter-spring 1918-9

[▶ Back](#)



Falsification exercises of winter-spring rainfall in 1918-19

[▶ Back](#)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A:								
Dep variable:	Socialists in 1913		Literacy in 1911		Violent crimes in 1874		Crime rate in 1874	
Relative winter-spring	-0.223*** (0.073)	-0.216*** (0.071)	-0.041* (0.023)	-0.028 (0.021)	0.000 (0.274)	0.056 (0.270)	-4.486** (1.806)	-4.301** (1.748)
Mean (SD)	0.162 (0.223)		0.760 (0.198)		1.466 (1.578)		6.334 (6.315)	
Panel B:								
Dep variable:	Ind. workers in 1911		Ind. firms in 1911		Ind. strikes in 1913-4		Ind. strikers in 1913-4	
Relative winter-spring	-0.078** (0.031)	-0.067** (0.028)	-0.002 (0.002)	-0.001 (0.002)	-0.013 (0.010)	-0.010 (0.011)	-0.002* (0.001)	-0.002 (0.001)
Mean (SD)	0.121 (0.226)		0.013 (0.011)		0.009 (0.094)		0.001 (0.014)	
Panel C:								
Dep variable:	Large landholding 1885		Landownership 1885		Agr. strikes 1913-4		Agr. strikers 1913-4	
Relative winter-spring 0.031	-0.056 (0.196)	-0.437*** (0.187)	-0.320*** (0.129)	-0.003 (0.122)	-0.007 (0.006)	-0.001 (0.006)	-0.002 (0.001)	-0.002 (0.001)
Mean	0.432 (0.497)		0.581 (0.494)		0.002 (0.048)		0.0004 (0.0119)	
FE, Soc, Dem, Geo, Military	✓		✓		✓		✓	
All controls & FE		✓		✓		✓		✓

Falsification exercise - Reduced-form relationship between winter-spring rainfall and Fascist vote share in 1924 between 1917-18 and 1927-28

[▶ Back](#)

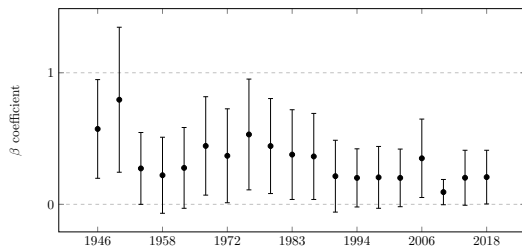
Dep variable: Fascist vote share in 1924	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Relative winter-spring rainfall	-0.116** (0.055)	-0.057 (0.070)	-0.056 (0.068)	-0.101 (0.082)	-0.064 (0.063)	-0.015 (0.057)	-0.087 (0.105)	0.030 (0.057)	-0.118* (0.062)	-0.086 (0.069)	-0.021 (0.096)
All controls & FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rainfall variance	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Year	1918-9	1917-8	1919-20	1920-1	1921-2	1922-3	1923-4	1924-5	1925-6	1926-7	1927-8
Mean	0.849	0.959	0.875	0.855	0.779	0.939	0.886	0.945	0.906	0.917	0.995
SD	0.166	0.0838	0.191	0.133	0.155	0.0975	0.107	0.105	0.159	0.120	0.0256
Observations	5,500	3,809	5,333	5,286	5,407	5,441	5,407	5,426	5,429	5,415	5,412
Number of district clusters	178	104	176	177	178	176	175	177	178	178	178
Number of station clusters	427	282	403	399	406	408	400	405	407	404	394

- ▶ Standard errors reported in parentheses are clustered over two dimensions: the administrative district and the closest weather station.

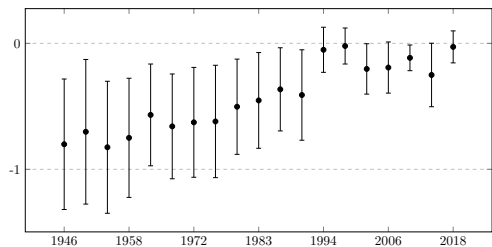
Long-Run Implications of local Fascist support

[▶ Back](#)

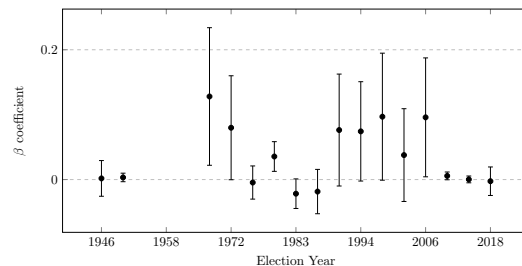
Left vote share (90% CI)



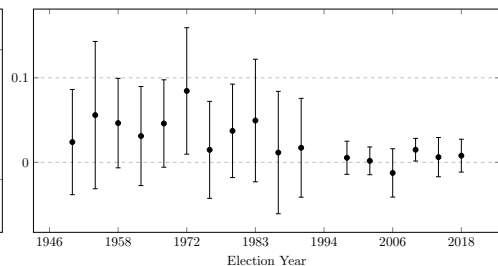
Centre-right vote share (90% CI)



Extreme left vote share (90% CI)



Extreme right vote share (90% CI)



Variable	Obs	Mean	Std. Dev.	Min	Max
Dependent variables:					
Fascist vote share in 1924	5,775	0.619	0.257	0	1
Fascist violence in 1920-2	5,775	.042	0.164	0	2.225
Fascist local branches in Autumn 1921	5,775	0.145	0.352	0	1
Agrarian Strikes in 1920	5,775	0.303	0.600	0	4
Jews deportation dummy (1943-45)	5,775	0.070	0.255	0	1
Deportations over Jewish population (capped at 1)	5,775	0.050	0.21	0	1
Deportations over Jewish population (cap at 1 no camps)	5,736	0.044	0.197	0	1
Left vote share (1946-2018)	109,725	0.224	0.134	0	0.880
Centre-right vote share (1946-2018)	109,725	0.363	0.179	0	0.992
Extreme right vote share (1946-2018)	98,175	0.026	0.029	0	0.729
Extreme left vote share (1946-2018)	92,400	0.029	0.032	0	0.632
Main excluded instruments:					
Foot-soldier casualties over male pop above 6	5,775	0.032	0.016	0	0.385
Excess mortality in 1918	231	0.892	0.387	-0.191	3.482
Relative winter-spring rainfall 1918-9	5,500	0.849	0.166	0.213	1
Socialist support:					
Socialist vote share in 1913	5,775	0.160	0.223	0	1
Socialist vote share in 1919	5,775	0.316	0.271	0	1
Socialist (+ Communist) vote share in 1921	5,083	0.258	0.227	0	1
Socialist (+ Communist) vote share in 1924	5,751	0.152	0.153	0	0.866

Descriptive Statistics II

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Variable	Obs	Mean	Std. Dev.	Min	Max
Demographic controls:					
(log) Population in 1911	5,775	7.653	1.071	3.970	13.427
Share of below 6 population in 1911	5,775	0.158	0.033	0.054	0.928
Geographic controls:					
(log) Municipality area	5,775	7.454	1.133	2.303	12.243
Elevation of the major centre	5,775	318.195	280.476	1	1816
Maximum elevation	5,775	836.126	840.759	1	4810
Military controls:					
Dummy for casualties in assault troops	5,775	0.238	0.426	0	1
Dummy for casualties in voluntary troops	5,775	0.013	0.112	0	1
Dummy for casualties in deadly battles	5,775	0.960	0.195	0	1
Veterans (classes 1874-1895) over male pop above 6 in 1911	5,775	0.234	0.057	0.099	0.406
Veterans (classes 1896-1900) over male pop above 6 in 1911	5,775	0.132	0.023	0.069	0.204
Agriculture controls:					
Share of day labourers in 1921	5,775	0.214	0.118	0.010	0.678
Share of share-croppers in 1921	5,775	0.052	0.071	0	0.421
Landowner association dummy	5,775	0.050	0.218	0	1
Urban controls:					
Industrial workers over male population in 1911	5,775	0.116	0.216	0	6.028
Industry firms over male population in 1911	5,775	0.012	0.011	0	0.138
Literacy rate in 1911	5,775	0.751	0.198	0.101	1
Share of elites (entrepreneurs and rentiers) in 1921	5,775	0.026	0.012	0	0.088
Share of bourgeoisie in 1921	5,775	0.085	0.032	0.028	0.240