

# Industria e territorio

---

Giulio Cainelli

Università di Padova

# Industria e territorio

---



# Industria e territorio

---

«Prima dobbiamo studiare l'industria della provincia di Modena», **S. Brusco** (Bologna, primi anni '90);

- come dire, lo **sviluppo industriale** ha sempre una dimensione locale;

# Industria e territorio

---

«La Germania è la Germania perché ci vivono i tedeschi», **R. Prodi** (Bologna, primi anni '80);

- come dire, il ruolo della **società**, dei suoi **valori** e delle sue **istituzioni** è fondamentale per comprendere lo **sviluppo industriale**;

# Industria e territorio

---



- il **distretto industriale** come un'entità **socio-territoriale** caratterizzata dalla **compresenza attiva**, in un'area territoriale circoscritta di una **comunità di persone** e di una **popolazione di imprese industriali**;

**Figure 8: GDP pc ratio between Central-Northern and Southern Italy, 1300-2000**



Notes: upper and lower bounds implied by the 95% confidence intervals of the coefficients of the ag-urb regression (equation 1) applied to macro-areas with a weighted fractional model for the backward extrapolation. Sources: see the text and Appendix B.

# Industria e territorio

---

- **history** matters in **economic geography** and **industrial development**;
- the role of **history** and its long-term effects (Nunn, 2009, 2020; Voth, 2021);

# Industria e territorio

---

- a relevant role played by **state-capacity-building reforms** and **historical institutions**;



# Industria e territorio

---

- **past historical administrative reforms and institutions** can have a long-lasting effect on:
- **present-day economic/industrial outcomes** (Engerman and Sokoloff, 1997; La Porta et al., 1997, 1998; Acemoglu et al., 2001; Nunn, 2009, 2020; Tabellini, 2010; Dell, 2010; Michalopoulos and Papaioannou, 2013; Spolaore and Wacziarg, 2013; Guiso et al., 2016; Dell et al., 2018);
- **current cultural norms, beliefs, civic capital, and preferences** (Putnam, 1993; Nunn, 2009; Tabellini, 2010; Guiso et al., 2016; Lowes et al., 2017; Bazzi et al., 2020; Alesina and Fuchs-Schündeln, 2007; Becker et al., 2020);

# Industria e territorio

---

la **prima storia**:

- la **geografia economica** interna al Mezzogiorno;

# Industria e territorio

---

Cainelli G., Ciccarelli C. and Ganau R. (2023), Napoleonic Administrative Reforms and Development. *Lessons from the Italian Mezzogiorno*.

# Industria e territorio

---

- large consensus that **past institutions** contribute to explaining **current economic development differentials** (Acemoglu et al. 2001; Spolaore and Wacziarg 2013; Nunn 2020);
- **administrative reforms** matter as well, especially for **urbanization and regional industrial development** (World Bank 2000; Bo 2020; Bai and Jia 2021);

# Industria e territorio

---

- the **long-run effects** in terms of **city-population dynamics** and **industrial development** of a **radical administrative reform** “imposed” by the Napoleonic authorities in the Kingdom of Naples in 1806;
- we exploit this administrative reform as a **historical (quasi-natural) experiment**;
- we study the **underlying mechanisms** related to **public goods provision** and **transport network accessibility**;

# Industria e territorio

---

[1.] **pre-Napoleonic Bourbonic period (1734-1806):**

- the presence of the state was concentrated in the **provincial capitals** where the **judicial courts** were located (Giustiniani 1797);

# Industria e territorio

---

## [2.] Napoleonic reformism (1806-1815):

- this picture radically changed with **Law No. 132 of 8 August 1806**:
- *“never has a society witnessed greater upheaval or greater transformation in so short a space of time than the Kingdom of Naples at the beginning of the nineteenth century” (Colletta 1848, p. 214, translation in Davis 2006, p. 161)*

# Industria e territorio

---

## [2.] Napoleonic reformism (1806-1815):

- this picture radically changed with **Law No. 132 of 8 August 1806**:
- establishment of a **multi-layer territorial administrative system**;
- introduction of the **district** as a new intermediate geographical-administrative unit between municipality and province;
- the historical provinces were divided into **40 districts**;



# Industria e territorio

---

- **within each district**, a municipality was selected as the **district capital** based on its **geographical centrality** to generate “*the greatest convenience or least inconvenience to the population ... of the district*” (ASN, II fs. 734);
- selection of district capitals and attribution of **supra-municipal administrative functions** to these cities;
- municipalities selected as district capitals became **centers of power** at the local level;

# Industria e territorio

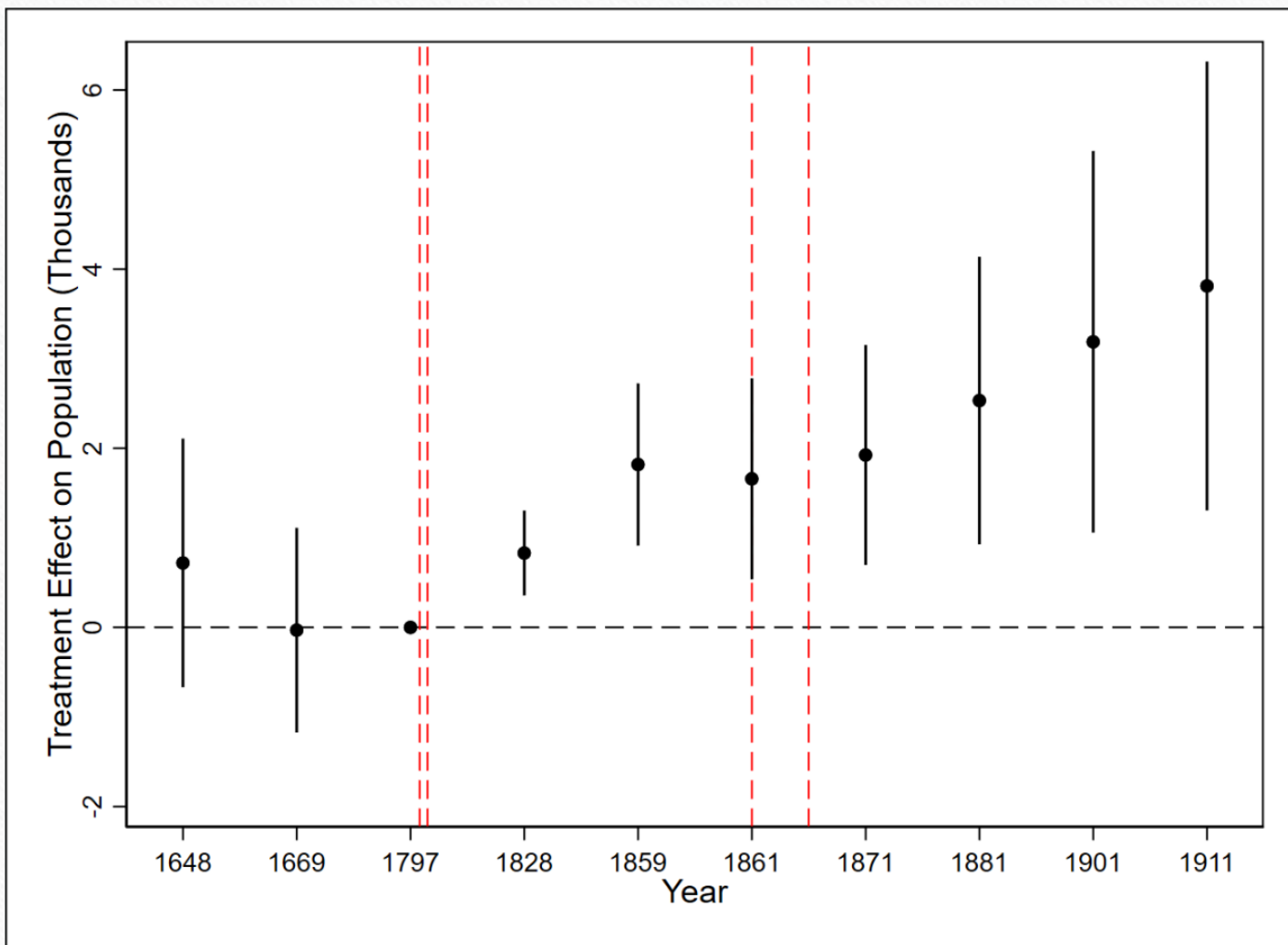
---

- the **Congress of Vienna** sanctioned the return of the Bourbons to the Kingdom of Naples on June 9, 1815;
- Ferdinand I became King of the Kingdom of the Two Sicilies (continental *Mezzogiorno* plus the Kingdom of Sicily) in December 1816;
- the **French Napoleonic administrative system** was maintained during the **Restoration period 1816-1860**;

# Industria e territorio

---

- the **Italian unification process** (1861) was accompanied by administrative reforms (Pavone 1964);
- **Law No. 2248 of 20 March 1865** (Lanza Law) confirmed the administrative geography of the Kingdom of the Two Sicilies and assigned to **district capitals** various **administrative functions** in fields such as public security, justice, public health, and regulation;
- the district capital was the seat of the **Sub-Prefect**, who worked, with the help of a staff of bureaucrats, under the direction of the Prefect of the reference province;



# Industria e territorio

1

Dependent Variable	Industrial City in 1850-1860					
Estimation Method	Probit		LPM		IV-LPM	
	(1)	(2)	(3)	(4)	(5)	(6)
District Capital	1.617**** (0.408)	1.541**** (0.418)	0.242** (0.110)	0.236** (0.111)	0.321** (0.138)	0.311** (0.140)
Municipality-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Province-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. Municipalities	974	974	974	974	974	974
No. Treated Municipalities	15	15	15	15	15	15
No. Control Municipalities	959	959	959	959	959	959
Pseudo-R <sup>2</sup>	0.16	0.17	...	...	...	...
R <sup>2</sup>	...	...	0.07	0.08	0.07	0.07
First-Stage F Statistic on Excluded IVs	...	...	...	...	12.98	12.93
Hansen J Statistics (p-value)	...	...	...	...	0.124	0.125

# Industria e territorio

Dependent Variable	Employment Per Inhabitant in 1911					
	Total Employment		Industrial Employment		Services Employment	
Estimation Method	OLS	IV	OLS	IV	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)
District Capital	0.030** (0.012)	0.061*** (0.023)	0.027** (0.012)	0.057** (0.023)	0.002** (0.001)	0.004*** (0.001)
Municipality-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Province-Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
<i>Compartimento</i> 1871 Dummies	Yes	Yes	Yes	Yes	Yes	Yes
No. Municipalities	974	974	974	974	974	974
No. Treated Municipalities	15	15	15	15	15	15
No. Control Municipalities	959	959	959	959	959	959
R <sup>2</sup>	0.07	0.06	0.07	0.06	0.08	0.06
First-Stage F Statistic on Excluded IVs	...	13.57	...	13.57	...	13.57
Hansen J Statistics (p-value)	...	0.827	...	0.805	...	0.293

Notes: Standard errors (in parentheses) are clustered at the municipality level. \*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ , \*\*\*\*  $p < .001$ . Panel A: Columns (2), (4) and (6) include also provincial railway density in 1859.

# Industria e territorio

---

una **seconda storia**:

- **istituzioni, capitale sociale e sviluppo locale;**

# Industria e territorio

---

Balestra M., Cainelli G., Ganau R., Matsiuk N., Pasquato M. and Pierdicca R. (2023), Institutional instability and local development.



# Industria e territorio

---

- the relationship between **sovereignty instability** and **current economic development** at the local level;
- we explain this relationship through a **mechanism** related to **civic capital**;
- we combine **spatial data** on **centuries of sovereignty changes** (1000-1861) with current information (2018) on **labor productivity** and **civil capital** at the **Local Labor Market (LLM)** level in Italy;

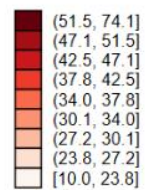
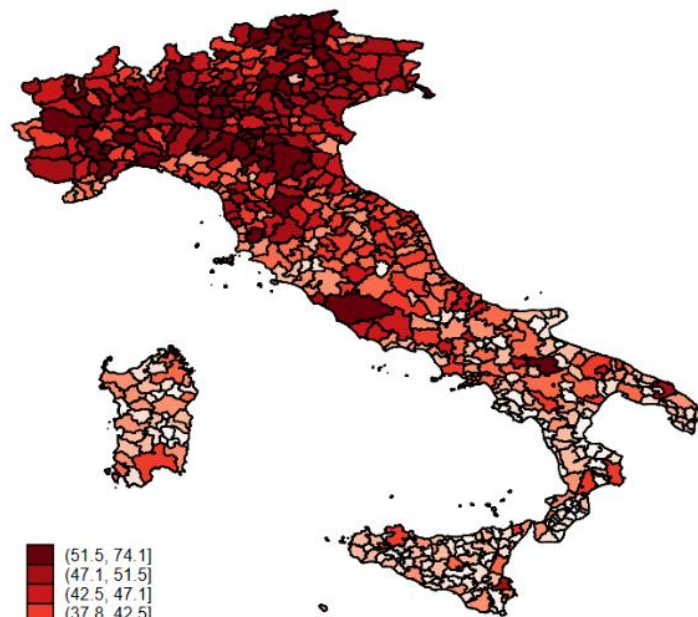
# Industria e territorio

---

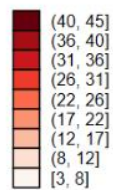
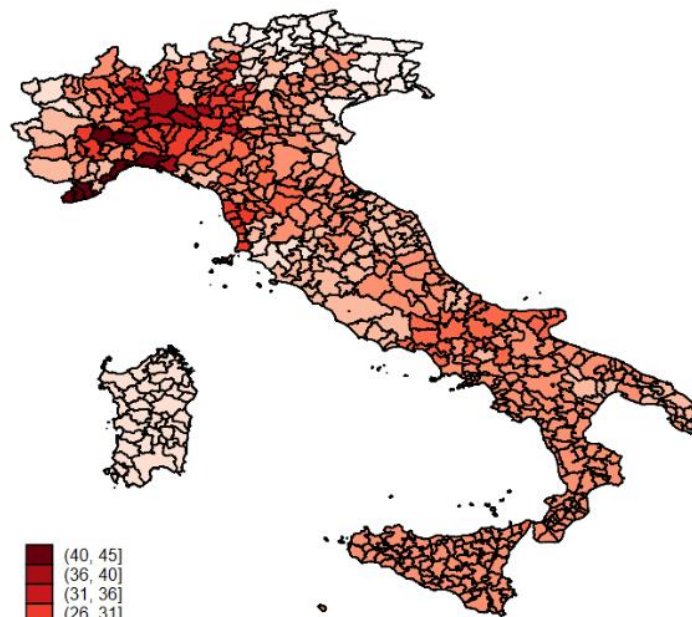
- we compute how many times over the relevant period (1000-1861) the **centroid of each LLM changed sovereignty**, defined as a **change in owner** with respect to the previous year;
- statistical source: the **Centennia Historical Atlas Research Edition**;



Labor Productivity (2018)



Sovereignty Instability (1000-1861)



# Industria e territorio

Dependent Variable	Labor Productivity in 2018			
	(1)	(2)	(3)	(4)
Sovereignty Instability 1000–1861	-0.099*	-0.111**	-0.141***	-0.117**
	(0.059)	(0.055)	(0.053)	(0.057)
Geographical Controls	Yes	Yes	Yes	Yes
Demographic and Economic Controls	No	Yes	Yes	Yes
Infrastructural Controls	No	No	Yes	Yes
Historical Controls	No	No	No	Yes
Observations	611	611	611	611
R <sup>2</sup>	0.60	0.66	0.66	0.68

Robust standard errors in parentheses. All specifications include a constant term. \*\*\*\*, \*\*\*, \*\*, \* indicate significance at 0.1-, 1-, 5-, and 10-% level, respectively.

# Industria e territorio

---

- in LLM characterized by a high level of **sovereignty instability** during a very long period (1000–1861) – i.e. in geographical areas where **sovereignty changed** frequently over time – **current labor productivity at the LLM** is lower;

# Industria e territorio

---

- we explain this result through a **mechanism** related to **civic capital**:
- **civic capital** proxied by:
  - **voter turnout in at June 2011 Referendum** (defined in  $[0, 1]$ );
  - **volunteering activity in 2011** (number of volunteers per 1,000 inhabitants);

# Industria e territorio

Dependent Variable	Voter Turnout					Volunteering
	Question #1	Question #2	Question #3	Question #4	Average	
	(1)	(2)	(3)	(4)	(5)	
Sovereignty Instability 1000–1861	-0.002 (0.000)**** [0.000]**** {0.001}***	-0.002 (0.000)**** [0.000]**** {0.001}***	-0.002 (0.000)**** [0.000]**** {0.001}***	-0.002 (0.000)**** [0.000]**** {0.001}***	-0.002 (0.000)**** [0.000]**** {0.001}***	-1.435 (0.276)**** [0.352]**** {0.563}**
Geographical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Demographic and Economic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Infrastructural Controls	Yes	Yes	Yes	Yes	Yes	Yes
Historical Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	611	611	611	611	611	611
R <sup>2</sup>	0.44	0.44	0.44	0.44	0.44	0.72

Robust standard errors in parentheses. Standard errors corrected for spatial dependence a la Conley (1999): in brackets with distance cut-off set at 50 km; in braces with distance cut-off set at 200 km. All specifications include a constant term. The dependent variables for voter turnout refer to the referendum held in June 2011: question #1 concerns the entrusting and management of local public services with economic relevance; question #2 concerns the determination of the integrated water service tariff based on an adequate return on invested capital; question #3 concerns the production of nuclear electric power on the national territory; question #4 concerns the legitimate impediment of the Prime Minister and the Ministers to appear in criminal hearings. \*\*\*\*, \*\*\*, \*\*, \* indicate significance at 0.1-, 1-, 5-, and 10-% level, respectively.

# Industria e territorio

---

[1.] **Sovereignty instability** has contributed to lower **civic capital**;

- people living in local systems where **sovereignty frequently changed over time** show lower levels of **civil capital**;



# Industria e territorio

---

why?

- a high number of **sovereignty changes** over time may have:

(a.) reduced the **homogeneity** of the geographical area in terms of **cultural, political, and social values**;

(b.) inhibited **interpersonal relationships** and the formation of **social networks**: modern-day examples of these phenomena are the Berlin and the Jerusalem Walls where individuals lost the possibility to commute to their jobs or to visit family members (Getmansky et al., 2019);

[2.] low **civic capital** increases **transaction costs**, thus being detrimental for economic activity;

# Industria e territorio

---

Grazie a tutti per l'attenzione!!