

Institutions at the Helm of Industrial Policy

Evidence from EU Cohesion Funds

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July 4, 2025

Paper Summary

- Great review of the different view on industrial policy over the decades.
- Empirical question: do changes in *institutional quality* determine how much growth EU Cohesion Policy spending delivers across regions?
- Using cross-regional evidence (NUTS3, EU), the paper shows that the growth payoff of Cohesion Funds is three times larger where governance improves. Where institutions stagnate or deteriorate, funds have little measurable impact.
- Application to Spain: recent slide in quality of government puts new industrial initiatives at risk.

Data at a Glance

- **Cohesion Investment:** Total ERDF, Cohesion Fund, and ESF expenditure per capita, aggregated 2000–2013 (two EU budget cycles).
- **Governance:** European Quality of Government Index (EQI) ; *level* in 2010 and *change* 2010–2017 (Δ EQI). Captures perceptions of corruption, government effectiveness, and the rule of law in public services.
- **Outcome:** Regional GDP per capita growth, 2006–2024 (ARDECO).
- **Controls:** Initial GDPpc (2006) and baseline EQI (2010); country fixed effects.
- **Sample:** 900+ NUTS3 regions across the EU; long horizon mitigates cyclical noise.

Theory

- Institutional mechanisms such as public-private councils, transparent criteria, sunset clauses and rigorous evaluation all require **bureaucratic competence and integrity**.
- With **weak institutions**, subsidies risk becoming patronage; with strong institutions, they tackle market failures and build new capabilities.
- At the EU level a concern is that the EU itself lacks **market-directing capacities** and that **fiscal integration** at the European level is limited. **Governance coherence** is needed to avoid chaos in the return of industrial policy.

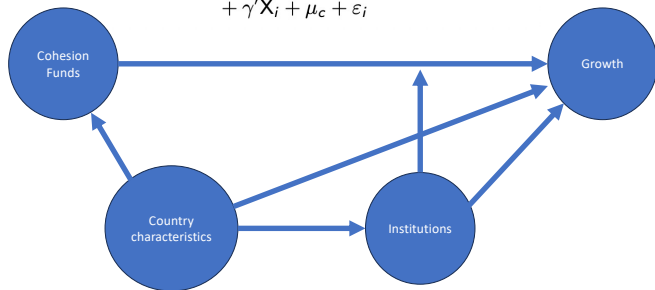
Empirical Specification

$$\begin{aligned}\text{Growth}_i = & \beta_1 \text{Cohesion}_i \\ & + \beta_2 \Delta \text{Instit. Quality}_i \\ & + \beta_3 (\text{Cohesion}_i \times \Delta \text{Instit. Quality}_i) \\ & + \gamma' X_i + \mu_c + \varepsilon_i\end{aligned}$$

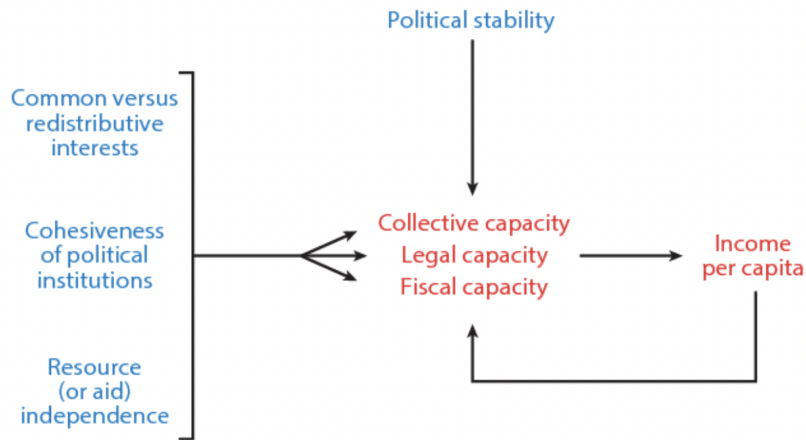
- Interaction term β_3 : complementarity between spending and improving governance.
- μ_c = country fixed effects.

Summary

$$\begin{aligned}\text{Growth}_i = & \beta_1 \text{Cohesion}_i \\ & + \beta_2 \Delta \text{Instit. Quality}_i \\ & + \beta_3 (\text{Cohesion}_i \times \Delta \text{Instit. Quality}_i) \\ & + \gamma' \mathbf{X}_i + \mu_c + \varepsilon_i\end{aligned}$$



Enter State Capacity



Source: Besley and Persson (2014, Annual Review of Economics)

Co-Evolving

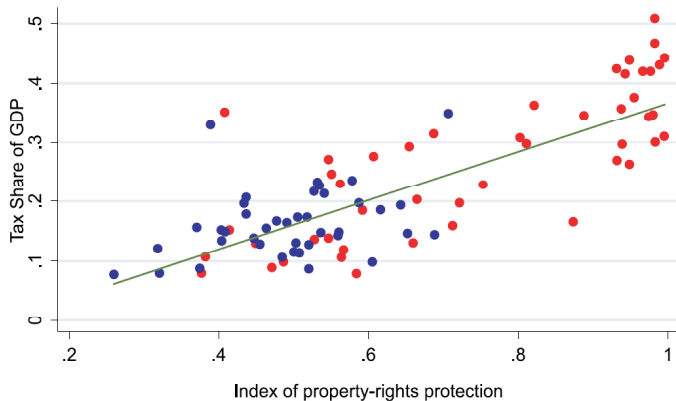
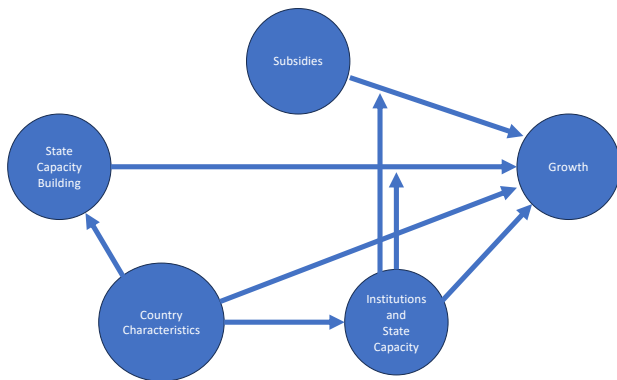


FIGURE 1.—Patterns of fiscal and legal capacity. ● denotes above median income in 1980; ● denotes below median income in 1980; — denotes fitted values.

Interpretation



Subsidies: Business Support, Energy, Information Technology (IT)

State capacity: Social Infrastructure, Technical Assistance & Institutional Capacity

Mueller, IAE (CSIC), Institutions at the Helm (Discussion)

Align Theory and Empirical Specification

- Theory seems to link *level* of institutional quality to spending outcomes:
 - bureaucratic competence and integrity
 - strong institutions can manage conflicts and resist capture
 - EU level market-directing capabilities
 - EU fiscal integration and coherence
- Main results are derived with changes:
 - Δ Instit. Quality;
- Proposal:
 - Align by using early or overall long run average of institutions.
 - Theorize about cohesion funding as capacity building/subsidies.
 - Building state capacity in a sustainable way?

Panel Proposal

$$\begin{aligned}\text{Growth}_{it} = & \beta_1 \text{Cohesion}_{it-1} \\ & + \beta_2 \text{Instit. Quality}_i \\ & + \beta_3 (\text{Cohesion}_{it-1} \times \text{Instit. Quality}_i) \\ & + \gamma' \mathbf{X}_{it} + \mu_c + \mu_t + \varepsilon_i\end{aligned}$$

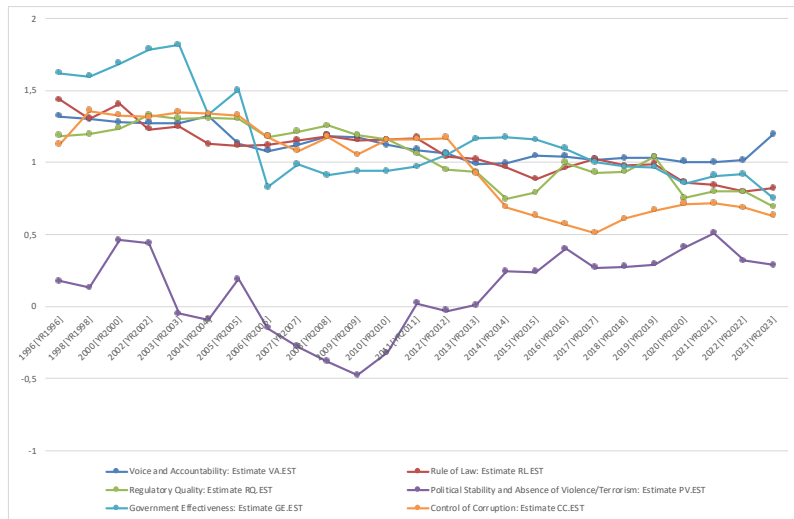
Panel with three periods 2005(5)2019

- *Institutions_i* average 2010-2014
- *Cohesion_{it-1}* period average, 2000-2004, 2005-2009, 2010-2013
- *Growth_{it}* period average, 2005-2009, 2010-2014, 2015-2019

More Ideas

- Cluster/group cohesion funding?
- More recent cohesion/EU investment?
- What happens without fixed effects and why?
- Split governance indicators?

WB Governance Indicators



Industrial policy: What is it maximizing?

- The AI race
- Energy independence
- Maintaining industrial base in times of war