Wage Determination and the Bite of Collective Contracts in Italy and Spain: Evidence from the Metalworking Industry

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1. Motivation

•Unions and employer federations bargain skill-specific wage floors in many OECD countries that are binding for all workers and employers.

• **"Explicit" contracts view**: the **whole** wage distribution is bargained infrequently→ wage growth reflects labor market conditions **when the collective contract was** signed (Olivei and Tenreyro, 2007; Bjorklund, Carlsson, and Skans, 2019)

•**Spot markets view:** Wages above the minima react to **contemporaneous** labor market conditions

(Cardoso and Portugal, 2005; Schulten, Eldring and Naumann, 2015)

→ Different implications for the propagation of macro shocks.

2. What we do

•Collect data on union contracts in the Italian and Spanish metalworking industry (15,000 skill-specific **wage floors** and 1,000 **signature dates** → merge to Social Security records.

•Highly unionized industry, tradable, 15% workforce in Italy, 7% in Spain.

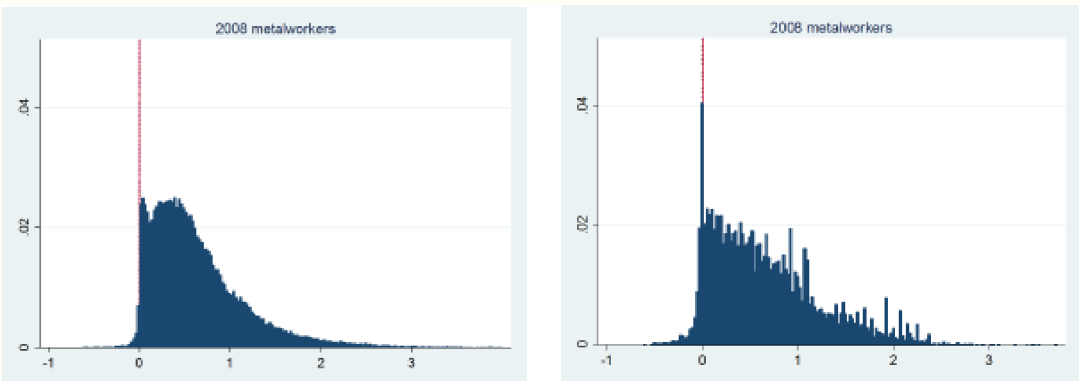
•Compute "**wage cushion**": distance of wages to skill-specific floors.

•Test **explicit contracts vs spot markets** by estimating the response of wages to unemployment rates at time *t* and at *renewal*.

•Responses by **distance to each worker's minimum** illustrate which model works for whom.

•Two countries with different bargaining systems: **national in Italy, provincial in Spain**.

3. Accumulation around the min

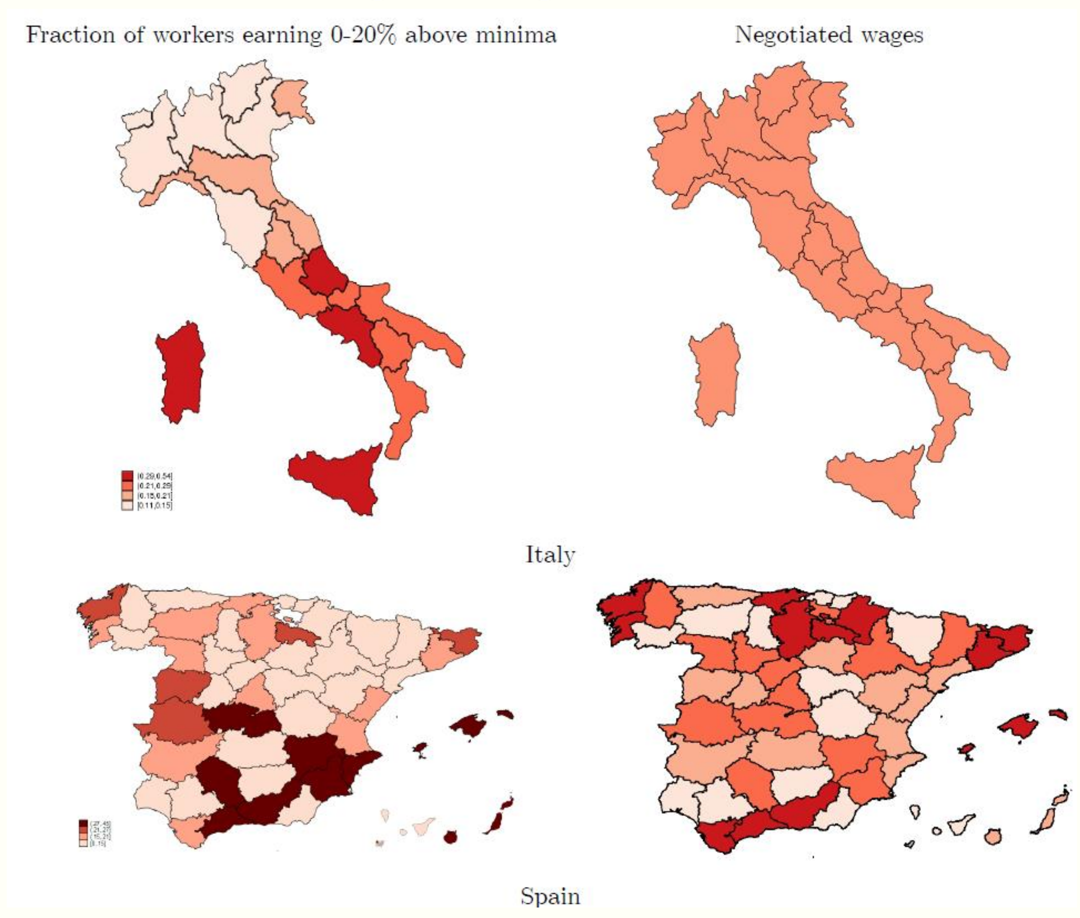


Italy Spain

•Wage floors are **binding** (pretty low non compliance).

•2.5% of metal workers in **Italy** and **4%** in **Spain** earn a wage that is **exactly equal** to their corresponding **wage floor** by occupation and province.

4. The degree of centralization of collective bargaining matters

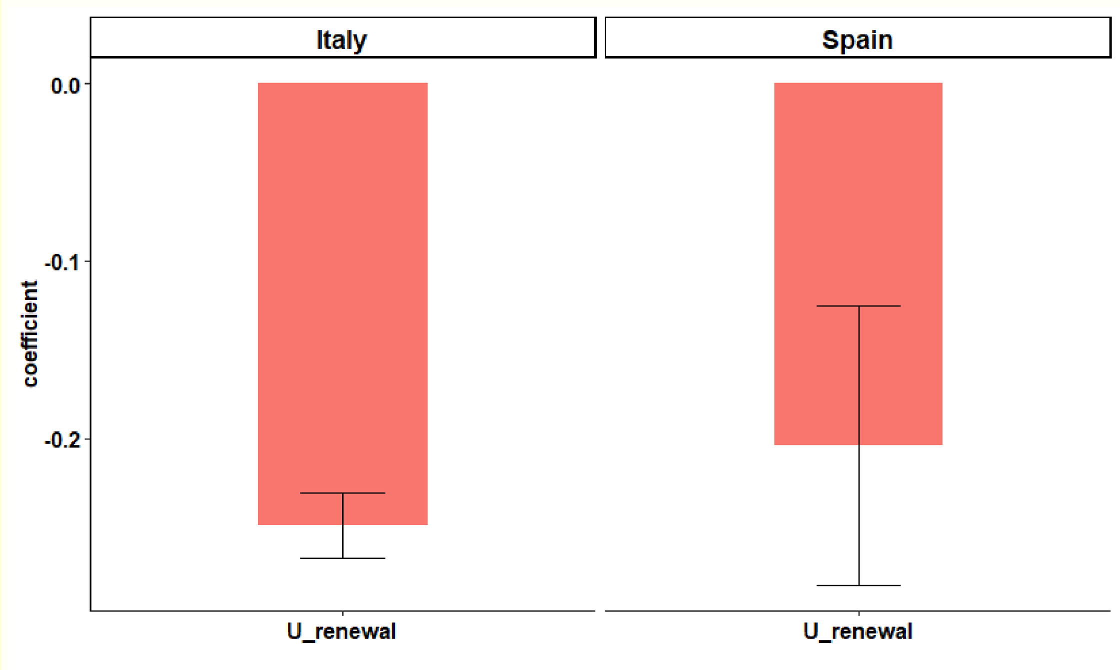


•**Both countries**: **large gap** in economic performance between the **South** and the North.

•**Italy:** Collective bargaining takes place at the **national level** → **larger bite** of collective contracts in the **South**.

•**Spain:** decentralization of collective bargaining at the **province level** → more **homogeneous bite** across the territory.

5. U renewal determines negotiated W

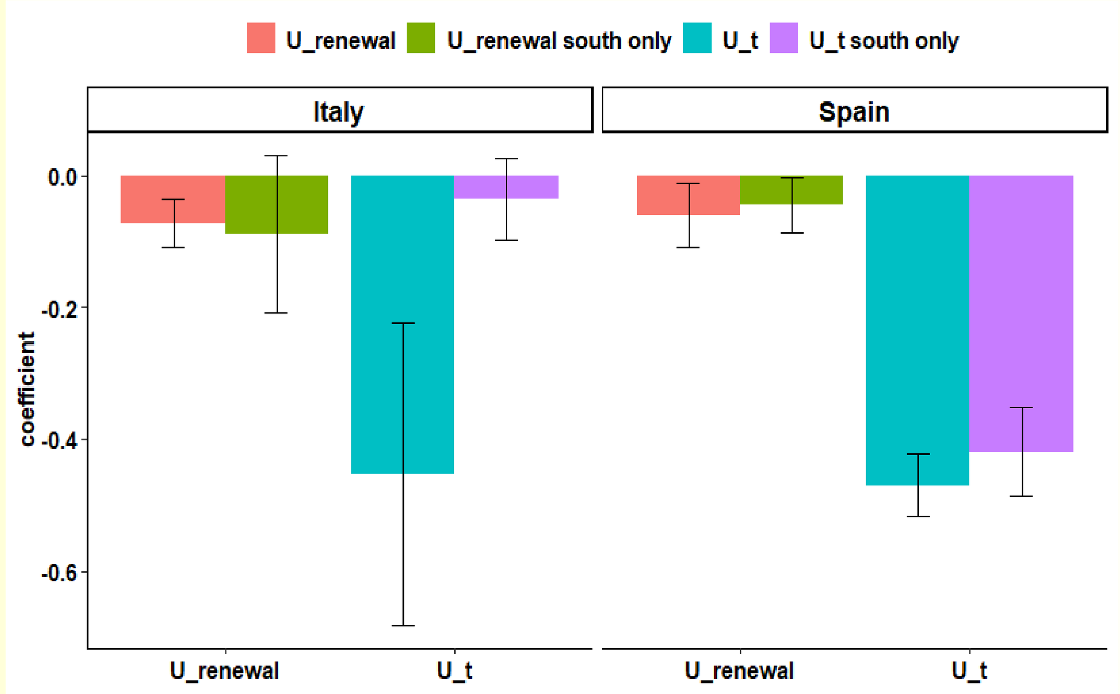


•The **unemployment rate** (national in Italy, provincial in Spain) is taken into account while setting **negotiated wages**.

6. Test spot markets vs explicit contracts

$$Italy : w_{ift} = b_0 + b_1 U_{rt} + b_2 Urenewal_t + c_1 t + c_2 t^2 + \mu_f + \mu_i + \epsilon_{ift}$$

$$Spain : w_{ift} = b_0 + b_1 U_{pt} + b_2 Urenewal_{pt} + c_1 t + c_2 t^2 + \mu_f + \mu_i + \epsilon_{ift}$$

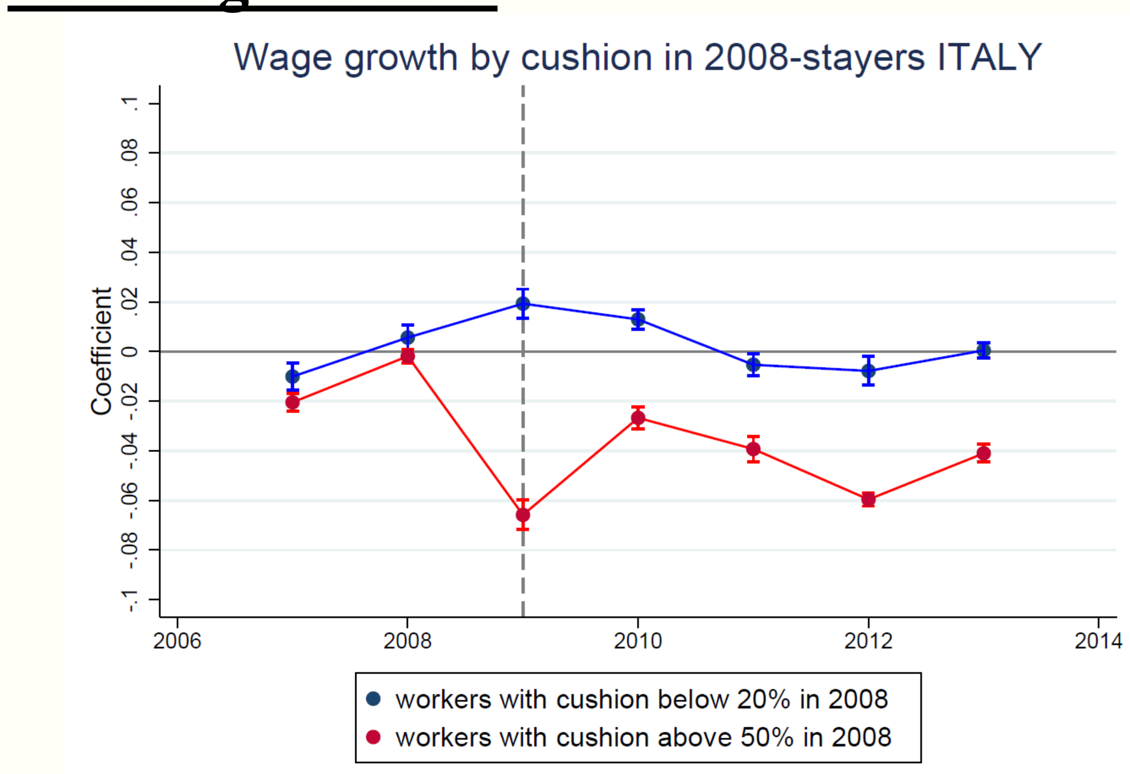


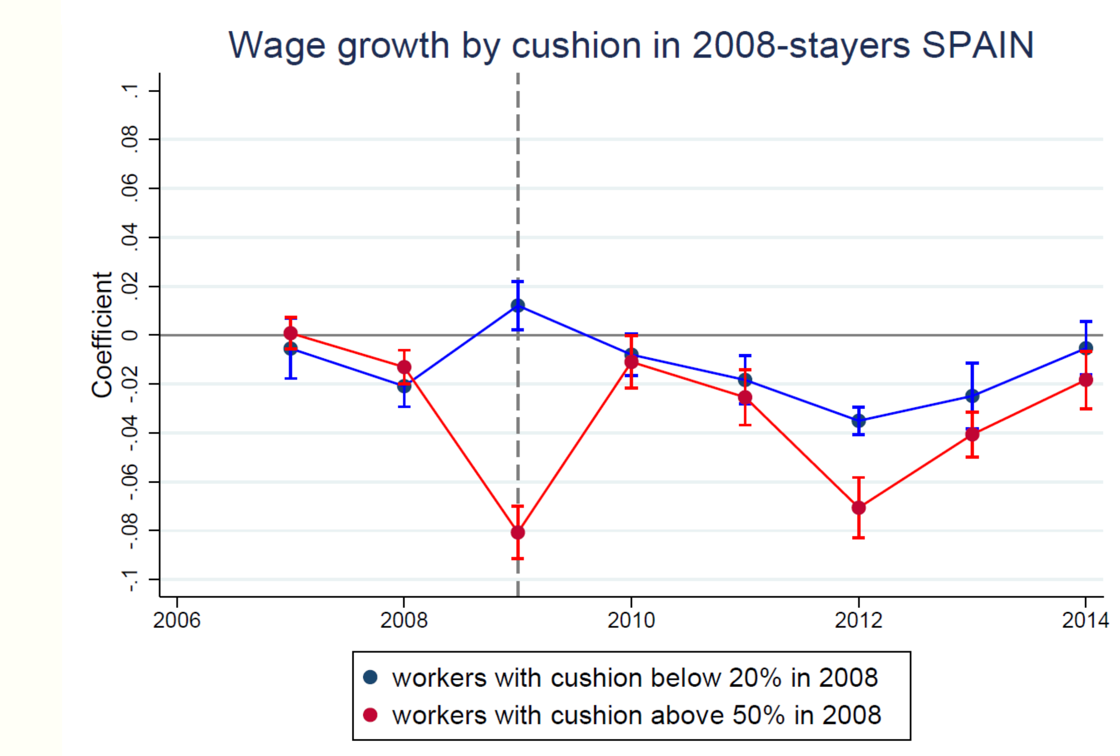
•Wages do **adjust to current local unemployment** conditions.

•The relevance of **unemployment rate at renewal is limited**.

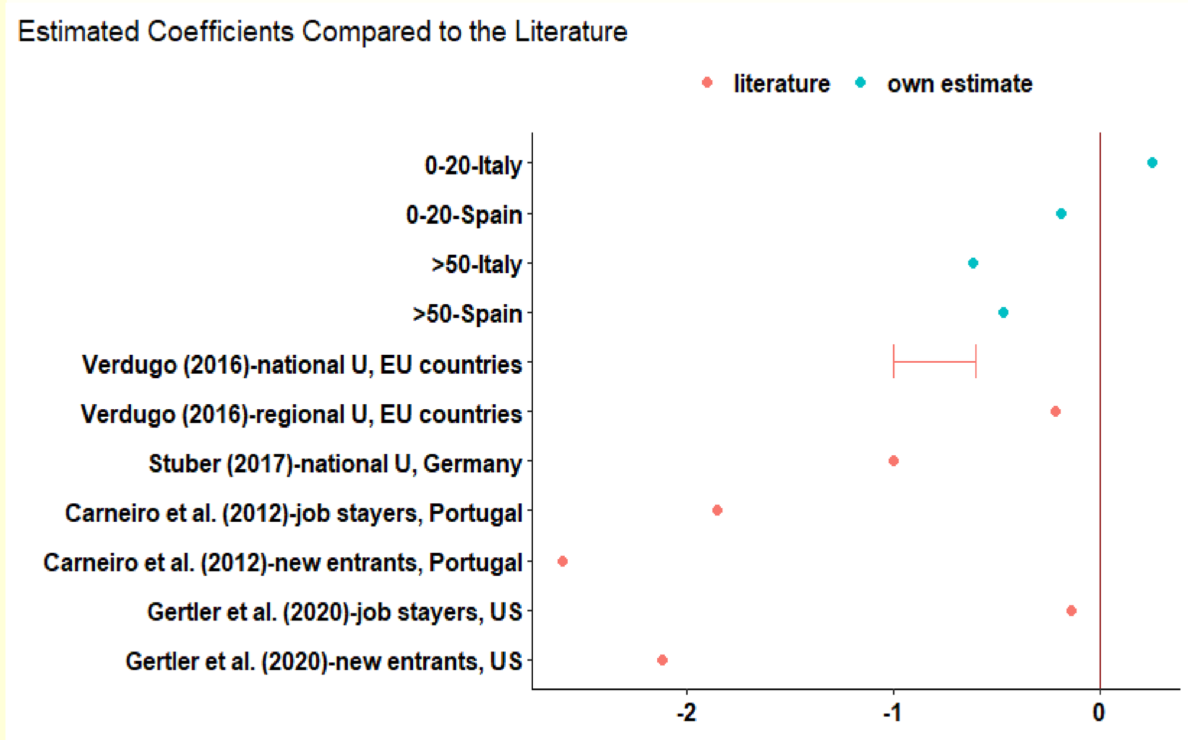
•**Decentralization** of collective bargaining in Spain results in a more **homogeneous wage response** across the territory.

7. Wage growth adjusts among workers with large cushion





8. Comparison w/ the literature



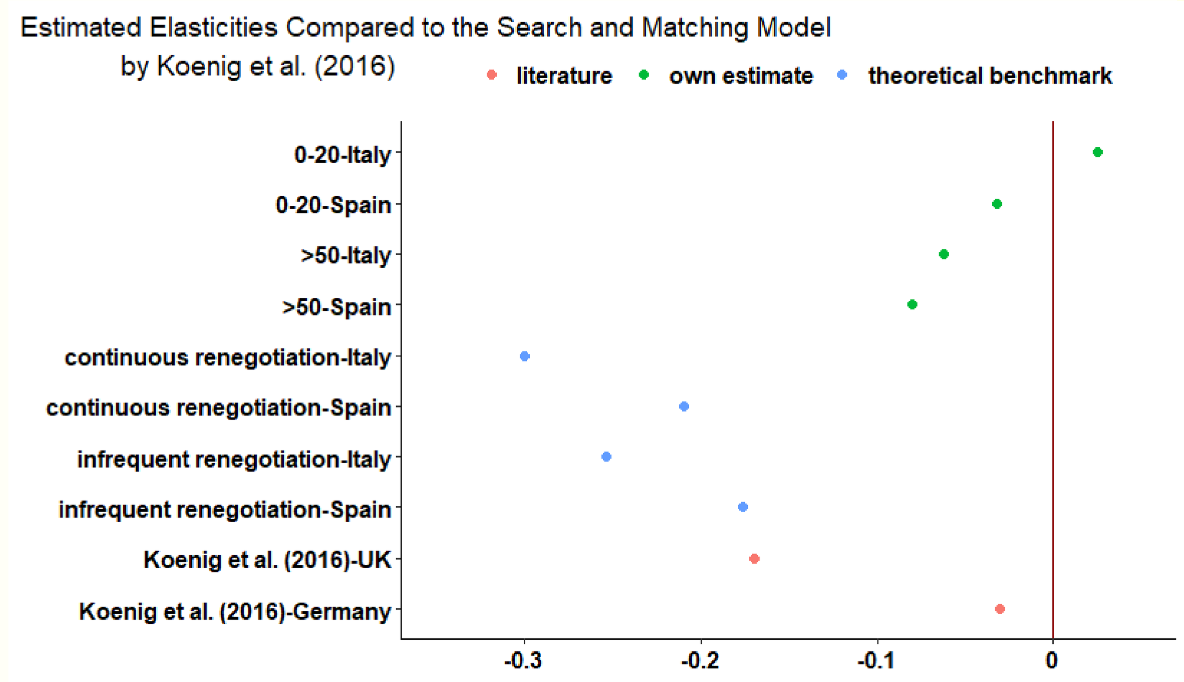
•Our estimates are in the **same range** as those for the **EU** and the **US** (stayers).

•**Bigger cyclical component of wage complements** in Italy and Spain than in Portugal.

9. Comparison w/ theoretical benchmark

	Italy	Spain
Unemployment replacement rate	0.70	0.79
Job separation rate	0.04	0.14
Interest rate	0.04	0.04
Steady state unemployment rate	0.10	0.17
Persistence of unemployment	0.04	0.06
Renegotiation frequency of existing matches	0.40	0.50

Data sources: replacement rates are those of year 2010 for Italy and Spain from OECD, separation rates are computed as the average involuntary separation rate in Social Security data for the metalworking industry, unemployment rates (average unemp. rate during the period of analysis) come from ISTAT and INE, unemployment persistence is the coefficient of AR(1) of national unemployment on its lag, the frequency of contract negotiations is one over the average duration of collective contracts (2.5 y in Italy, 2 y in Spain).



•**Estimated elasticities** for **Italy** and **Spain** are **smaller** than the **theoretical benchmark**.

•This is the case also for the **UK** and **Germany** where collective bargaining in limited.

•The **gap narrows** if we consider workers with a **large cushion.**

10. Conclusions

•Wage floors in the metalworking industry of both Italy and Spain are **binding**.

•**Accumulation** of 2-4% right at the skill-specific wage floors.

•The data do **not support the explicit contract** hypothesis.

• The economic **conditions** at the **time of bargaining** explain the evolution of wages **close to the wage floors**.

•For **the rest of the distribution**, wages respond predominantly to changes in **current** economic **conditions**.

•**Elasticity falls short of** the predictions of an off-the-shelf search and matching **model**.

•Wage responses to the **local cycle vary across Italian regions**, less so in Spain.

•Possible **role of national** (IT) **vs provincial bargaining** (ES).