

Perverse Effects of Multi-level Bargaining

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Outline

- Defining and characterizing two-tier bargaining
- Does it encourage productivity-related pay?
- Does it encourage wage and hours vs employment adjustment?
- Does it reduce inequality in pay?

What are we talking about?

Literature on bargaining centralization and co-ordination typically compares multi-employer bargaining over wages (RTM) with single-employer bargaining over wages and employment (efficient bargaining). But many countries have *two-tier bargaining* structures, where

- 1 there is both multi-employer (centralized) and single-employer (decentralized) bargaining, and
- 2 the plant level can only add-up to centralized agreements based on the *favourability principle*

Some exceptions are provided to this rule (derogations to the 1st tier), but under rather extreme circumstances

Why two-tier?

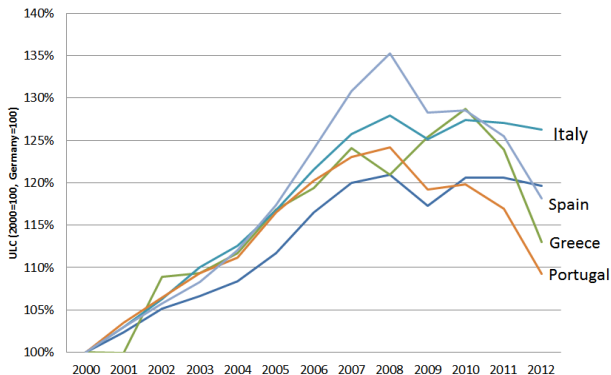
- Way of unions to resist to pressures for decentralization of bargaining
- *Controlled decentralization* preventing firms to undercut wages (Bertrand competition) in countries where many (small) firms are not unionized
- In practice two-tier takes place only in large firms as unions impose second-level to (reluctant) employers.
- Declining power of unions implies that only centralized bargaining survives...
- .. and where both levels are present, the advantages of decentralization may not materialize
- but you do not have the benefit of centralized bargaining in terms of economic stability

Which countries?

Most of the Club-Med, Eurodebt crisis countries

- Italy since 1993
- Spain until 2012
- France (slightly less so since 2004)
- Greece until 2010
- Portugal until 2011
- Ireland officially until 2008, de facto before

The Troika diagram

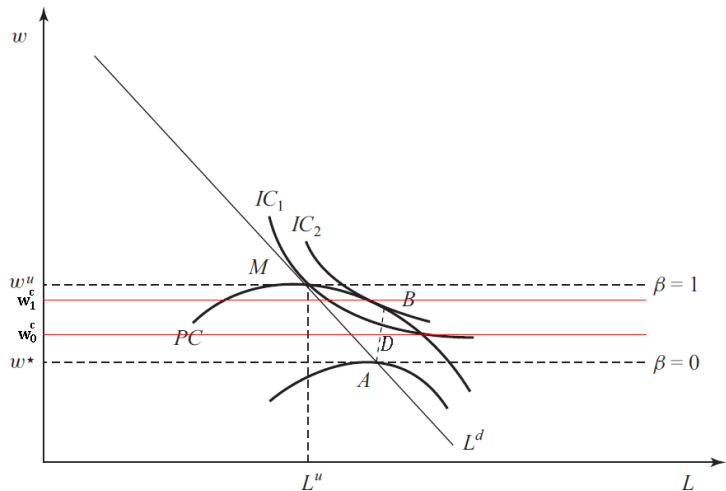


Unit labor costs in countries with two-tier bargaining structures (2000=100)
relative to Germany (=100 in all periods)

WDN dataset

- ECB-run firm-level survey on collective bargaining
- Medium-sized firms (generally above 20 employees)
- Version available to researchers
- Cross section. 13 countries (not Germany!) including France, Greece, Italy, Ireland, Portugal and Spain as well as Austria, Czech Republic, Estonia, Hungary, Lithuania, the Netherlands, and Slovenia
- Regrettably no information on wages and productivity

A bit of theory 1



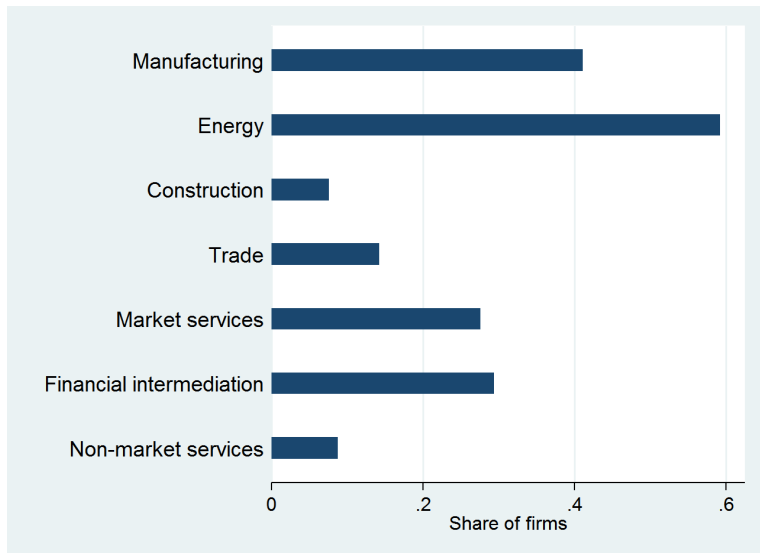
A bit of theory 2

Cost minimization in presence of

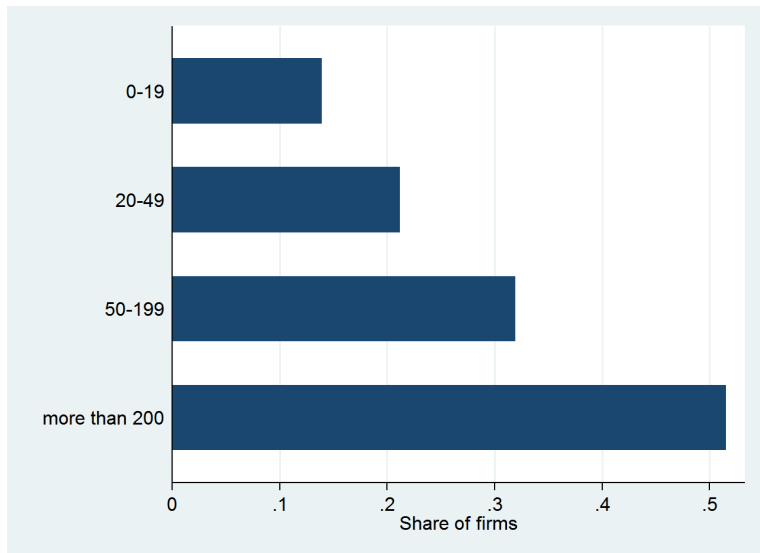
- 1 fixed (and recurrent) costs per worker, and
- 2 predetermined wages

makes hours of work, unlike employment, independent of output levels all adjustment on the extensive margin

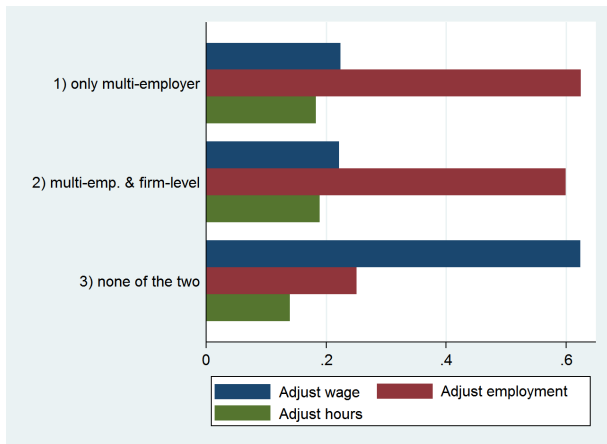
Who does both levels under two-tier?



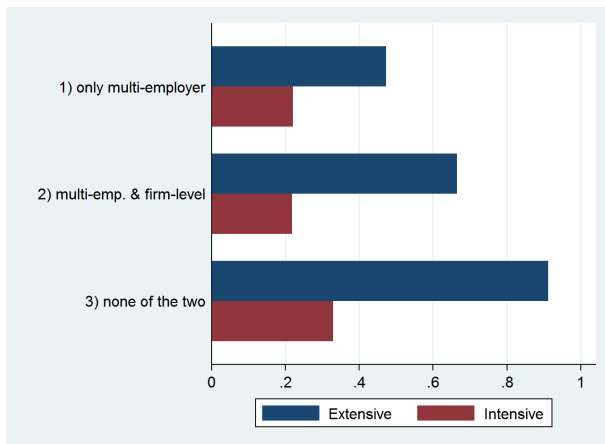
Who does both under two-tier?



Does it allow for wage-hours adjustments under temporary shocks?



Does it allow for productivity-related pay?



Share of firm paying prp (Extensive)

Av. share of the wage that is productivity-related among those who pay prp
(Intensive)

Caveats

Correlations resist to controls for size, sector and country (see IZA DP). No time-series as yet. Hard to identify causal effects.

	Share of the wage that is PRP	Firm pays PRP
Only multi-employer	-7.055 (0.00)***	-0.044 (0.21)
both	-9.870 (0.00)***	0.024 (0.51)
<i>N. Observations</i>	4,079	6,176

*p<0.1; ** p<0.05; *** p<0.01

Note: Regressions include controls for size, country and sector.
Regression on the left is run only on firms paying PRP.

Does it reduce earning inequality?

Ongoing work with Andrea Ichino and Enrico Moretti. We use the Istat Quarterly Labor Force Survey to compute:

- average hourly wages for each Italian province (2009-2013);
- net of workers characteristics (education, experience, gender, etc.)
- net of *exogenous* amenities like : population, housing density, coastal/mountain dummies

and the data from the Osservatorio Mobiliare Italiano to compute:

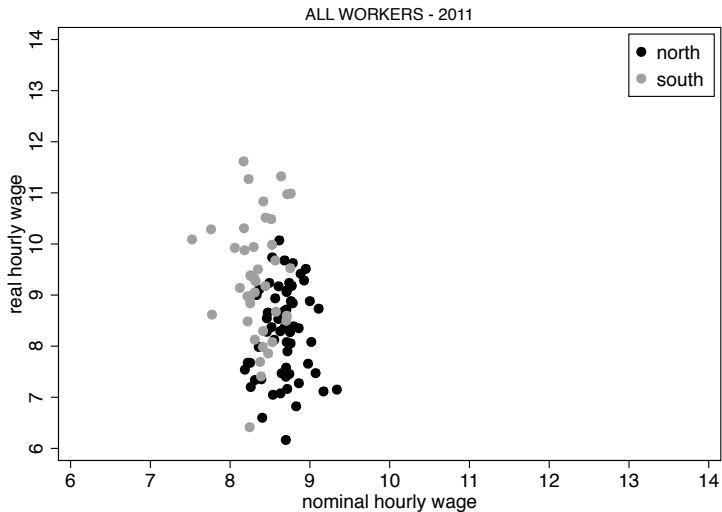
- the housing price per square meter (2004-2011)
- net of housing characteristics (size, zoning, etc)

Measuring inflation across space

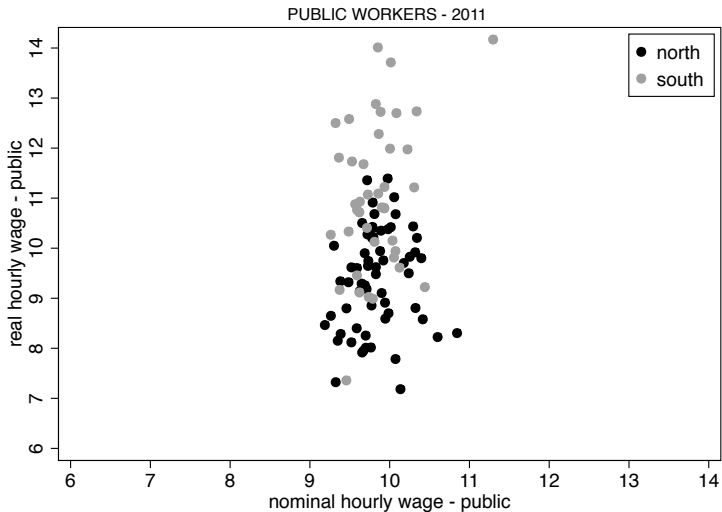
We follow Moretti (2013) to obtain Consumer Price Index at the level of each province (local labor market) that

- gives to local housing expenses their correct importance in the family consumption basket (34% in 2011 compared to 9% of Istat)
- adjust other local prices for the attraction effect of housing prices

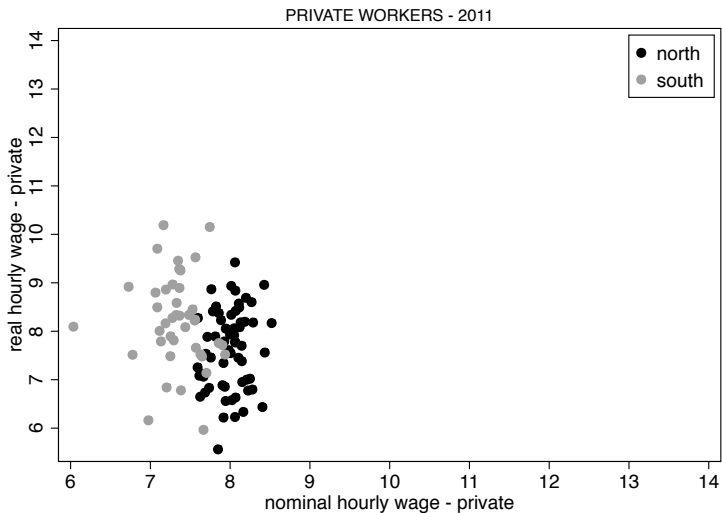
Nominal and real wages across provinces



Nominal and real wages across provinces - public sector



Nominal and real wages across provinces - private sector



Nominal and real wage dispersion - all workers

	75-25 percentiles % change		99-01 percentiles % change		Coefficient of variation in %		Variance of logs	
	nominal	real	nominal	real	nominal	real	nominal	real
2009	4.90	18.24	18.74	85.97	3.55	13.91	0.13	1.95
2010	4.80	18.99	18.32	77.92	3.48	13.19	0.12	1.74
2011	4.76	18.65	18.17	76.53	3.45	12.99	0.12	1.69

Nominal and real wage dispersion - public workers

	75-25 percentiles % change		99-01 percentiles % change		Coefficient of variation in %		Variance of logs	
	nominal	real	nominal	real	nominal	real	nominal	real
2009	4.07	20.88	17.00	96.17	3.52	15.64	0.12	2.39
2010	4.02	20.07	16.76	92.87	3.47	14.88	0.12	2.15
2011	4.09	19.83	17.10	91.35	3.53	14.68	0.12	2.10

Nominal and real wage dispersion - private workers

	75-25 percentiles % change		99-01 percentiles % change		Coefficient of variation in %		Variance of logs	
	nominal	real	nominal	real	nominal	real	nominal	real
2009	9.65	17.08	26.78	74.16	5.79	12.47	0.36	1.62
2010	9.41	18.27	26.05	71.52	5.66	11.85	0.34	1.44
2011	9.18	17.95	25.37	70.20	5.53	11.70	0.32	1.41

Real and nominal wage diffs. between north and south

	All		Public		Private	
	Nominal wage	Real wage	Nominal wage	Real wage	Nominal wage	Real wage
% wage diff north-south	0.040 (0.003)	-0.128 (0.014)	0.000 (0.004)	-0.167 (0.014)	0.090 (0.004)	-0.078 (0.013)
Year FE	YES	YES	YES	YES	YES	YES
N. obs.	309	309	309	309	309	309

Underlying mechanism

Large differences in productivity but nominal wages cannot adjust because of national union contracts and, given prices of traded products, real output cost is higher in the South.

As a consequence:

- Less productive South has high unemployment but low housing prices
- North has low real wages (because of high housing prices)
- South has high real wages (because of low housing prices)
- Real expected incomes and consumption are more equalised

Pay differences in sectors not covered by collective bargaining

The nominal wage of full-time employees in lawyer's office with 4 to 6 years of experience in 2011 was

- 1659 € in the North
- 1502 € in the South

This 10.5% differential in favor of workers in the North compensates almost fully a 16% difference in the costs of living, between the two macro-areas

In the case of a bank teller differences in nominal wages compensate only 1/6 of the differences in the costs of living

Why don't we see migration from the north to the south?

Housing is cheaper in the South:

⇒ Real wages are higher in the South

⇒ Those who have a job are better off in the South

Nevertheless, we do not see massive migration to the south because:

- nominal wage equality with differences in productivity cause
⇒ higher unemployment in the South;
- taking wages, housing costs and employment probabilities into consideration:
⇒ standard of living are not very different and if anything favour North

But all this implies striking distributional inequities and an inefficient allocation of resources that hamper growth

Conclusions I

Two-tier structures do not seem to allow for

- ① A closer link between productivity and pay
- ② bargaining over employment **and** wages
- ③ bargaining at higher frequencies
- ④ less inequality in real earnings

Conclusion II

Two-tier structures

- generate significant iniquity wherever there are large productivity differentials
- and inefficiency in terms of
 - ① inefficient allocation of human resources, that are kept artificially far away from more productive working opportunities
 - ② larger total unemployment and lower total GDP