

Collective contract representativeness and Pirate agreements: what are the effects?

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Motivation

- In most of continental Europe, wage setting takes place predominantly through collective bargaining
- The current debate in Europe identifies in compressed wage structures and downward wage rigidity a driver of unemployment and allocative inefficiencies
- In 2015 during an official speech, the ECB Governor Mario Draghi, argued that “[. . .] *firms with flexibility at the plant-level have reduced employment less during the crisis than those bound by centralised wage bargaining agreements, partly because they have been able to adjust wages to economic conditions*” (Di Mauro and Ronchi, 2016).
- In its 2016, 2017, and 2018 Country Reports for Italy the European Commission also expressed concern regarding collective bargaining. Similar conclusions emerge from IMF (2016).

Institutional Background

Italian Collective Bargaining setting

- Italy is one of the few large countries within the European Union characterized by a low and relatively weak legal regulation of industrial relations
- industrial relations are centered around the role of the most representative employers and workers' organizations
 - Trade union density is around 30-40% (private sector)
 - Employers' organization density is over 50% (i.e. figures are uncertain due to the lack of criteria for representativeness)
- the current setting for collective bargaining derives from the 1993 reform (Protocol of 23rd July 1993), which established a two-tier multi-plant level bargaining:
 - industry-wide national level (Contratto Collettivo Nazionale di Lavoro, CCNL) to protect wages from inflation
 - firm or regional level (subordinated to the national level) to distribute productivity gains (i.e. must be linked to firms' economic performance)

Institutional Background

Italian Collective Bargaining setting

- CCNL are binding only for the union(s) signing the contract, and firms' associates of the employers' organization(s)
- no formal extension mechanisms to workers in firms not member of an employers' organization (i.e. no "erga omnes" effect)
 - firm-level bargaining is subject to the "in melius" or "favourability" principle (i.e. wages and working conditions cannot be worse than those agreed at the industry-wide level)
 - pay levels (minimi tabellari) set in CCNL may be used by labour courts as a reference to comply with the provision of Art. 36 of the Italian Constitution ("fair wage")
 - case laws state that collective contracts signed by the most representative social partners should be taken as reference for the Constitutional provision.
- Framework agreement of 2009, institutionalized the possibility to derogate from the national collective agreements (i.e. exceptions concerning the matters that can be derogated: wages cannot be derogated).

Institutional Background

non-compliance and "pirate agreements"

- After 25 years the system is experiencing a progressive erosion of trade unions and employers' associations representativeness
 - increasing of non-compliance to collective bargaining minimum wages
 - emergence of "pirate agreements" signed by non-representative social partners
- Over the last few years, the number of national collective agreements dramatically increased, mostly by associations lacking real representation.
- A total of 860 National industry-level collective agreements are currently registered at the National Council for Economy and Labour (CNEL)
 - 25% more with respect to 2015 and 70% more with respect to 2010.
 - Just one third of the collective contracts signed involve at least one of the largest union confederations (CGL, CISL and UIL) or Confindustria.

Research questions

"pirate agreements"

- Why did the number of CCNL increase?
- What the effects on wages?
- Did the downward wage rigidity of CCNL determine the "dumping effect" on collective contracts?
- Are "pirate agreements" optimal ? or "pirate agreements" just reflect a "rent seeking" behavior ?

Data

Register data from Italian Social Security Institute (INPS)
⇒ longitudinal archives collecting working histories of a 1/90 random sample of private sector employees over the period 1985-2014.

We focus on

- employees aged 20-60
- with positive earnings between 2005 and 2014
- for workers with multiple jobs within the same year we select the most representative in terms of weeks
- gross weekly wage as measure of earnings (trimmed at 1st and 99th percentiles)

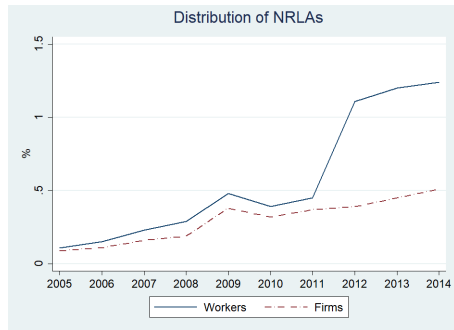
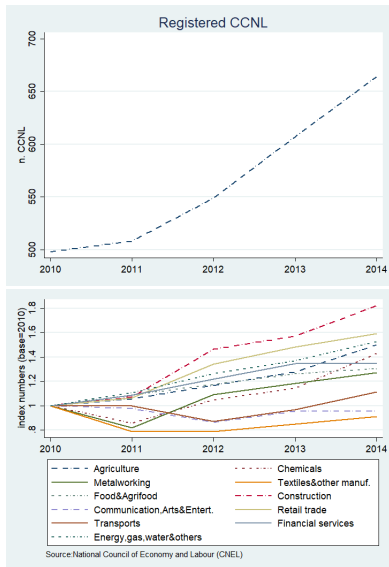
Baseline sample

1,410,648 workers for a total of 8,582,781 observations .

Sample descriptive stats

- average age around 39
- 64⁰% males
- 21% part-time workers, 61% blue-collar and more than 80% with open-ended contract
- 40% works in very small firms (15 empl. or less), 24⁰% in largest firms (300+)
- 1.5% with pirate contract

CCNL and non-representative contracts (NRLAs)



Distribution of CCNL and non-representative contracts within industrial sectors (2014)

Sector	Most repr. CCNL	Other CCNL	NRLAs
Agriculture	0.593	0.398	0.009
Chemicals	0.777	0.217	0.006
Metalworking	0.881	0.081	0.038
Textiles&other manuf.	0.797	0.193	0.010
Food,Agrifood	0.807	0.192	0.001
Construction	0.879	0.120	0.001
Communication,Arts&Entert.	0.367	0.619	0.014
Retail trade	0.815	0.176	0.009
Transports	0.842	0.110	0.016
Financial services	0.888	0.215	0.001
Energy,gas,water&others	0.782	0.180	0.002

Metalworking, chemicals and transports sectors: CCNLs and pirate contracts in detail (2014)

workers and firms

METALWORKING

Contract	Employers' Associations	Unions	Workers		Firms	
			%	Cum.	%	Cum.
Industries	Confindustria; Federmeccanica; Assistal	Fiom-CGIL;Fim-CISL; Uilm-UIL	58.75	58.75	40.08	40.08
S.M.I.	Unionmeccanica CONFAPI	Fiom-CGIL;Fim-CISL; Uilm-UIL	15.45	74.20	20.43	60.51
Artisans	CNA;Confartigianato; Casartigiani;CLAAI	Fiom-CGIL;Fim-CISL; Uilm-UIL	13.88	88.08	31.38	91.90
Other			8.08	96.17	7.94	99.82
NRLAs			3.83	100.00	0.18	100.00

Chemicals

workers and firms

Contract	Employers' Associations	Unions	Workers		Firms	
			%	Cum.	%	Cum.
Chem/Pharma:Ind.	Federchimica; Farindustria	Filctem-CGIL; Femca-CISL; Uiltec-UIL	35.99	35.99	21.35	21.35
Chem/Pharma:S.M.I.	Unionchimica CONFAPI	Filctem-CGIL; Femca-CISL; Uiltec-UIL	3.08	39.07	5.71	27.06
Plast/Rub:Ind.	Confindustria; Federazione G&P; Ass.It.Pneumatici	Filctem-CGIL; Femca-CISL; Uiltec-UIL	27.92	66.99	25.25	52.31
Plast/Rub:S.M.I.	Unionchimica CONFAPI	Filctem-CGIL; Femca-CISL; Uiltec-UIL	6.08	73.07	9.44	61.75
Chem&others: S.M.I.,Coop,Art	Fedarcom;CIFA	Fesica-CONFSAL; Fisals-CONFSAL; CONFSAL	2.72	75.8	7.47	69.23
Energy&Oil	Confindustria Energia	Filctem-CGIL; Femca-CISL; Uiltec-UIL	1.93	77.73	1.00	70.23
Other			21.69	99.41	29.60	99.82
NRLAs			0.59	100.00	0.18	100.00

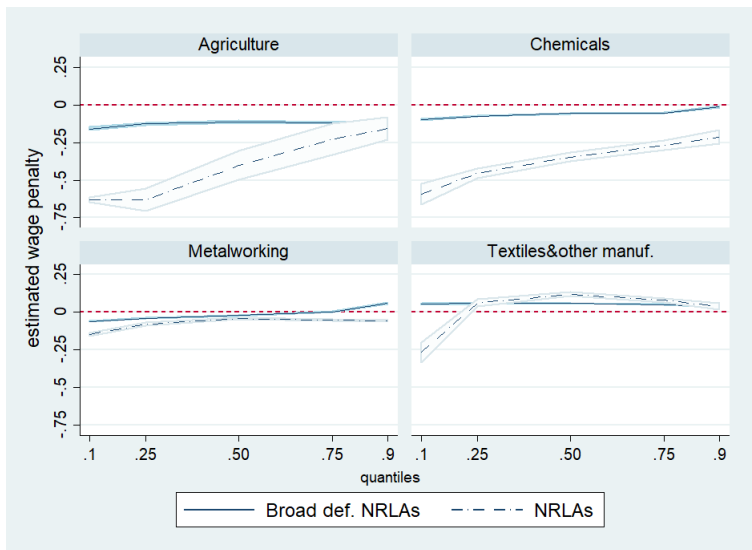
Transports

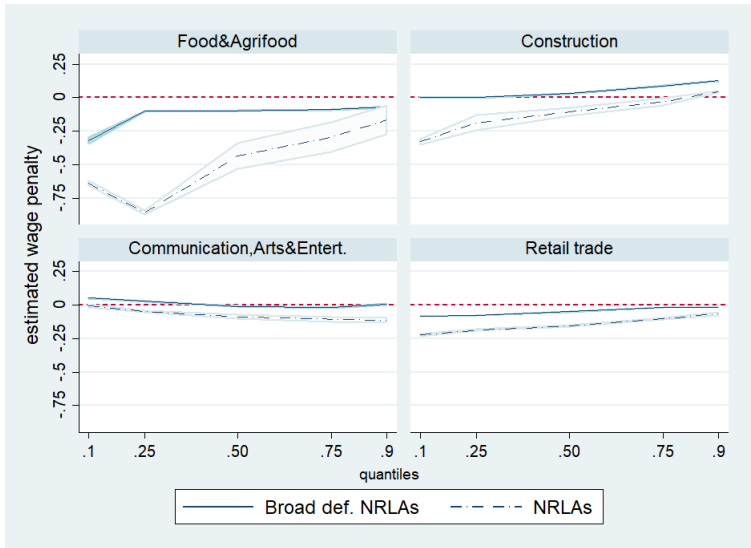
workers and firms

Contract	Employers' Associations	Unions	Workers		Firms	
			%	Cum.	%	Cum.
Trans&Logist	AITE;AITI;Assoespressi; Assologistica;Fedespedi; Trasportounito FIAP;FISI; Confetra;FEDIT;ANITA; FAI;Assotir;Federtraslochi; Federlogistica;FIAP;UNITAI; Conftrasporto;CNA-FITA; Confartigianato TRAS; SNA-Casartigiani;CLAAI	Filt-CGIL;Fit-CISL; Uiltrasporti-UIL	46.47	46.47	54.71	54.71
Trans.S.M.I.,Coop,Art	Federimpreditori	Famar;Confamar	2.07	48.54	3.74	58.45
Pub Trans. workers	AssTra;ANAV	Filt-CGIL;Fit-CISL; Uiltrasporti-UIL	15.45	63.99	4.62	63.07
Car Rent	UNCI	Fast CONFISAL	3.49	67.48	6.03	69.10
Cableways	ANEF	Filt-CGIL;Fit-CISL; SAVT;Uiltrasporti-UIL	1.05	68.54	1.15	70.25
AIR Transport	Assaereo;Assaeroporti; Assohandlers;Assocontrol; Assocatering	Filt-CGIL;Fit-CISL; Uiltrasporti-UIL; UGL-Trasporti	6.23	74.77	2.58	72.83
PORTS: port workers	Assiterminal;Assologistica; Assoporti;FISE-Uniport	Filt-CGIL;Fit-CISL; Uiltrasporti-UIL	1.67	76.43	0.88	73.72
Trade&Serv	Confcommercio	Filcams-CGIL; Fisascat-CISL;Uiltucs-UIL	3.94	80.38	5.81	79.52
Tourism	Confcommercio; Federalberghi;FAITA	Filcams-CGIL; Fisascat-CISL;Uiltucs-UIL	3.80	84.18	6.31	85.83
Other		14.24	98.42	13.37	99.17	
NRLAs			1.58	100.00	0.83	100.00

Preliminary evidence on wage penalties for NRLAs

Quantile regressions - by sector





Empirical Strategy

As a starting point, we evaluate the wage penalty associated with NRLA estimating a FE linear regression model of the form:

$$\log Y_{it} = \beta \text{NRLA}_{it} + X'_{it} \gamma + \alpha_i + \epsilon_{it} \quad (1)$$

where

- $\log Y_{it}$ is the log of weekly nominal wages of worker i in year t ;
- NRLA_{it} is a binary variable that takes value 1 if the worker is covered by a NRLA contract;
- X_{it} is a vector of demographic, job and firm characteristics;
- α_i are individual fixed-effects;

We further:

- analyze alternative definitions of non-representativeness
- explore heterogeneous effects across sectors, firm size and job title
- investigate minimum wage compliance
- investigate "efficient opting-out" vs "rent-seeking" behavior of firms applying NRLAs

Estimated wage penalty for NRLAs

	(A)	(B)	(C)
NRLAs	-0.168*** (0.00300)	-0.0762*** (0.00216)	-0.0491*** (0.00250)
Individual FE		✓	✓
Firm FE			✓
R^2	0.437	0.817	0.879
N	8,582,781	8,415,239	8,178,655

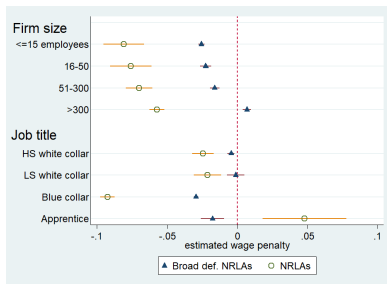
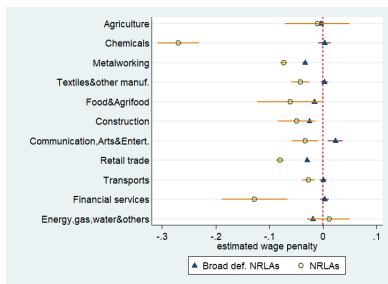
Note: Each model includes the full set of controls for age (quadratic), region of work, type of contract, job title, part-time, firm size, industrial sector, year.

Alternative definition of non-representativeness

	(1)	(2)
Broad def. of NRLAs	-0.0201*** (0.0007)	
Other CCNL		-0.0157*** (0.0007)
NRLAs		-0.0795*** (0.0022)
Individual FE	✓	✓
R^2	0.817	0.817
N	8,415,239	8,415,239

Heterogeneity

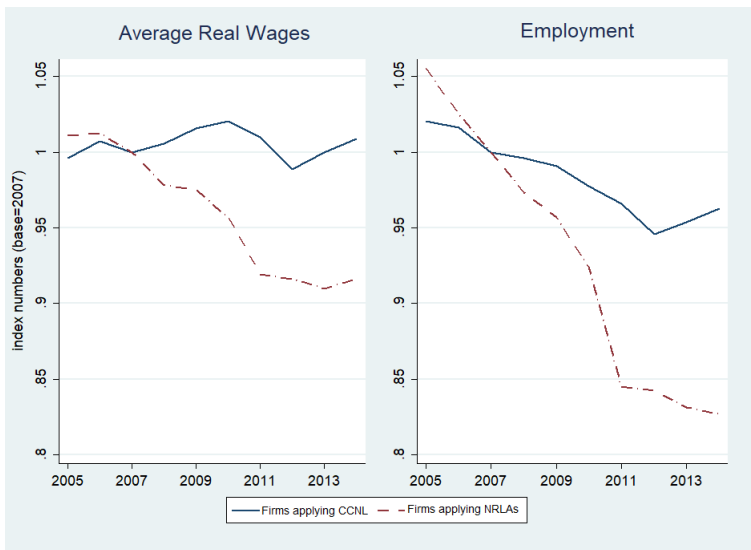
by sector, firm size and job title



Note: coefficients are obtained from Model B, estimated separately on each group.

Firms' efficient opting-out or rent-seeking?

Time trends in average real wages and employment



Dynamic Diff-in-Diff

We set 2007 as baseline period and estimate the following model, at the firm level

$$Y_{jt} = \sum_{k \neq -m}^q \gamma_{t+k} \text{Year}_{t+k} + \sum_{k \neq -m}^q \beta_{j,t+k} (\text{NRLA}_j * \text{Year}_{t+k}) \\ + \sum_j \sum_t \delta_{jt} (S_j * \text{Year}_t) + \sum_j \sum_t \lambda_{jt} (R_j * \text{Year}_t) + \alpha_j + \epsilon_{jt}$$

where

- Y_{jt} represents either the log of real average wages paid in firm j in year t , or firm j 's number of employees in year t ;
- NRLA_j is a binary variable that takes value 1 if the firm applies a non-representative contract;
- δ_{jt} and λ_{jt} measure sector and region-specific time trends, respectively;
- α_j are firm fixed-effects;



Robustness checks

- replicate with two-way fixed-effects 1 2
- clustering at firm level 3

to be done

- change sample \Rightarrow age range 20 – 55 to exclude confounding effects associated with early retirement
- use daily wages
- exploit the 2009 framework agreement on firm-level opting-out from CCNL provisions

Concluding remarks and policy implications

- We document the effect of the increase in NRLA contracts on wage levels
- Evidence that NRLA had a depressing effects both on wage levels as well as on CCNL minimum wage levels
- heterogeneous effects by industry and larger negative effects for low-skilled low-paid workers
- evidence that NRLA were signed by firms with largest employment losses during the crises, and that lower wages had a beneficial effects on employment levels vis-à-vis most representative contracts, pointing to an "efficient opting-out" behavior of firms applying NRLAs

Two-way FE (1)

Estimated wage penalty

	(B)	(C)	(B)	(C)
Broad def. of NRLAs	-0.0201*** (0.0007)	0.0081*** (0.00101)		
Other CCNL			-0.0157*** (0.0007)	0.0185*** (0.00104)
NRLAs			-0.0795*** (0.0022)	-0.0453*** (0.00252)
Individual FE	✓	✓	✓	✓
Firm FE		✓		✓
R^2	0.817	0.879	0.817	0.879
N	8,415,239	8,178,655	8,415,239	8,178,655

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Firm-level clustering (1)

Estimated wage penalty

	NRLAs		Broad def. NRLAs	
NRLAs	-0.0762*** (0.0115)	-0.0491** (0.0205)	-0.0201*** (0.00325)	0.00814 (0.00787)
Individual FE	✓	✓	✓	✓
Firm FE		✓		✓
R^2	0.817	0.879	0.817	0.879
N	8,415,239	8,178,655	8,415,239	8,178,655

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