

# What do unions do to temporary employment?

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- The paper looks at the effect of unions on the probability that firms use **Fixed-Term** (Agency) workers
- Workplace-level data from 21 EU countries, 2 datasets, several sources of variation
- First evidence of a positive effect in Europe
- **Unions do not limit the flexibility of firms to use temporary contracts and contribute to increasing contract duality**

- 14% of EU employees work on contracts of limited duration (Eurostat Data)
- Temp jobs can be a stepping stone (Booth et al. 2002, Ichino et al. 2008), but less so for low educated (Guell and Petrongolo 2007, Oecd 2008)
- Temp workers are paid less, trained less, less satisfied (Booth et al. 2002, Arulampalam et al. 2004, OECD 2002, Kahn 2007, Brunello et al. 2007)

# Introduction

- Which policy instruments?  $\Rightarrow$  Why do firms use temporary employment?
- Literature on EPL for perms (Booth et al. 2002, Autor 2003, Kahn 2007)
- Unions disproportionately represent perms (LFS, ESS data) and, like EPL, increase their bargaining power

# Theoretical considerations:

If a union mainly represents permanent employees (median voter):

- **Substitution effect**
- **Firing costs:** severance pay or *de facto* firing cost (Booth 1995)
- **Buffer effect:** uncertainty after bargaining fixes the wage
- **Erosion effect:** temp workers are less unionised

- US data, cross-section:
  - Gramm and Schnell (2001): negative effect of union coverage for largest occupation ( <100 Alabama firms)
  - Houseman (2001): negative coefficient of "fraction unionized" for Pr(Temp) at the firm level.(<500 US firms)
- Autor (2003): agency "employment grew relatively faster in (US) states where unions declined more slowly"

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- 2 British dataset (WERS 1998, 2004):
  - To deal with workplace-level unobservables:
    - longitudinal variation
    - variation across occupations within a workplace
  - IV to test for evidence against exogeneity

# The European data

Establishment Survey on Working Time and Work-Life Balance (ESWT)

- 21,000 workplaces from 21 European countries, restricted to Private >10
- Use of fixed-term workers (**FixT**) *in the last 12 months*
- Presence of union *at the workplace*

# The European data

## The multivariate analysis

- Average EU effect +5%
- + effect in 18/21 countries
- stat sign in 4 (Austria, Ireland, Italy, Sweden)
- No apparent relation between estimates and centralisation of the bargaining system

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Now turn to a British dataset to try and address some of the endogeneity issues.

- Two dummies for union:
  - UnionRecognition *at the workplace or higher level*
  - UnionMembers *at the workplace*
- Presence of FixT at the time of the interview
- To remove workplace unobservables:
  - 1 Longitudinal sample (1998, 2004) (+ Strict Exog Test)
  - 2 Variation across occupations within a workplace

Table: First-difference estimates for Pr(FixT)

	Sample 1 <sup>a</sup>				Sample 2 <sup>a</sup>			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
UnionRecogn	-.076 (.094)		-.098 (.082)		-.027 (.080)		-.022 (.077)	
UnionMembers		.159** (.065)		.171** (.066)		.068 (.064)		.123** (.062)
Firm Charact.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Occup. Shares	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RegX2004	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
GeoMkX2004	No	No	Yes	Yes	No	No	Yes	Yes
Ind.X2004	No	No	Yes	Yes	No	No	Yes	Yes
GeoMkXIndX2004	No	No	Yes	Yes	No	No	Yes	Yes
Establishments	495	499	495	499	609	614	609	614
<b>Test of strict exogeneity<sup>c</sup> of union status</b>								
F for H0:Exog	.140	.157	.312	.889	.064	.129	.186	1.058
P-Value	.709	.692	.576	.346	.800	.719	.666	.304

a: Sample 1 restricted to workplaces with external trade in 1998.

- Only 2 waves; are unobservables constant over 6 years?
- Alternative: information on occupations **within a firm**
- Within-workplace transformation to remove unobservables
- Additional benefit: level of bargaining

Table: Within-Firm results for  $\text{Pr}(\text{FixT})$  in the largest occupation

	Spec 1 <sup>a</sup>			Spec 2 <sup>a</sup>		
	Estimate (1)	F Stat (2)	P Value (3)	Estimate (4)	F Stat (5)	P Value (6)
AnyBarg	-.039	.577	.448	-.026	.205	.651
UnionMemb	.045	.982	.322	.077	2.141	.144
IndustryBarg	.037	.181	.671	.064	.477	.490
OrgBarg	-.152	6.408	.011	-.138	3.941	.047
LocalBarg	.032	.144	.704	.016	.034	.854

a: spec 2 controls for Resign and Absence, spec 1 does not.

- General loss of precision
- UnionMemb still +, but smaller than cross-section and panel estimates
- Effect of bargaining depends on the level

Conduct a Hausman test for exogeneity: Empl1998 as IV for Union2004

- Union status is persistent and Empl known determinant of Union status, hence correlation
- Empl1998 unlikely to be correlated with Temp2004:
  - Contracts are typically much shorter than 6 years (Booth et al. 2002)
  - Attempt to control for short-run uncertainty

# WERS 2004

## Cross-section analysis at the workplace level

Table: WERS 2004 cross-section results for Pr(FixT)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
UnionRec	.102*** (.038)	.080* (.045)	.083* (.044)	.088* (.046)				
UnionMemb					.141*** (.034)	.094** (.039)	.082** (.041)	.091** (.042)
FirmCh.	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Ind.D.	No	No	Yes	Yes	No	No	Yes	Yes
Reg. D.	No	No	Yes	Yes	No	No	Yes	Yes
OccSh.	No	No	Yes	Yes	No	No	Yes	Yes
RegXInd	No	No	No	Yes	No	No	No	Yes
IndXGeoMk	No	No	No	Yes	No	No	No	Yes
Obs	1479	1208	1200	1200	1486	1210	1202	1202

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OccSh.	No	No	Yes	Yes	No	No	Yes	Yes
RegXInd	No	No	No	Yes	No	No	No	Yes
IndXGeoMk	No	No	No	Yes	No	No	No	Yes
Obs	1479	1208	1200	1200	1486	1210	1202	1202
<b>Exogeneity Tests using Empl6Ago as an instrument</b>								
Obs.		816	810	810		816	810	810
1st Stage F		1.301	13.417	9.394		1.011	16.546	11.714
P-Value		.254	.000	.002		.315	.000	.001
F for Ho:Exog		2.996	.522	.001		2.892	.526	.001
P-Value		.084	.470	.975		.089	.469	.974

# Summary of results for $\Pr(\text{FixT})$

- EU data: Positive effect of *workplace representation* (+5%)
- WERS:
  - UnionMembers *at the workplace*:
    - Cross-section: +8%, no evidence of endogeneity
    - Panel estimates larger (no endogeneity)
    - Within-firm estimates smaller (and less precise)
  - UnionRecognition (*at any level*):
    - evidence is mixed
    - Within-firm estimates: level of bargaining matters
- **Note that unionization at the workplace is always +**
- Similar results for agency workers

# Conclusions

- In Europe, Unions do not limit the flexibility of firms to use temporary contracts and contribute to increasing contract duality
- Contrary to previous evidence for the US
- The EU evidence suggests that the positive effect is not very large