



# Works Councils and Flexible Collective Bargaining Agreements

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## Motivation

More flexibility in the German system of wage bargaining:

- Decline in collective coverage (Ellguth and Kohaut, 2010, WSI)
  - Emergence of a dual labour market: more fixed-term contracts and temporary agency workers (Antoni and Jahn, 2009, ILRR)
  - Increased decentralisation of collective bargaining agreements:
    - Introduction of opening clauses (Heinbach 2009, IAW)
    - More company level pacts for employment (Ellguth and Kohaut, 2008, IndBez.)
- Implementation based on the firm level



## Research Question

Can we observe different works council behaviour in a system of decentralised collective bargaining and thus adverse effects on performance at the firm level?

Empirical strategy: analysis of recent establishment-level data

- Analysis of interaction of works councils and collective bargaining agreements with recent data (cf. Hübler and Jirjahn, 2003, ScotJPE)
- Analysis of interaction of works councils and opening clauses and/or employment pacts
- Variables of interest: firm wage level and (labour) productivity



## Starting Point

- Hübler and Jirjahn (2003, ScotJPE) analyse the interaction of works councils and collective bargaining agreements.
- Works councils can use their codetermination rights to either generate additional rents and/or to redistribute them (Freeman and Lazear, 1995).
  - Collective bargaining agreements compress wages (Antonzcyk, 2010) and thus reduce distributional conflicts at the firm level.
    - Collective contracts “tame” works council behaviour by reducing the rent-seeking opportunities at the firm level.



## Theoretical Considerations

Analysis of the interaction of decentralised collective contracts and works councils behaviour.

- In decentralised collective contracts works councils have to negotiate over wages, so that we should observe **higher wages** in firms with works councils.
- Wage negotiations at the firm level reduce the resources works councils can spend on productivity-enhancing measures and poison the working atmosphere (Behrens, 2009, ILRR), so that we should observe **lower productivity** in firms with works councils.
  - Indirect adverse effects of collective bargaining decentralisation



## Effects of Codetermination

- Addison (2009), Addison et al. (2004, BJIR) find evidence for both rent-seeking and rent-generating works council behaviour.
- **Productivity:** Wagner et al. (2006, JNS), Wagner (2008, AEL) find positive works council effects in collectively covered firms and firms from manufacturing.
- **Wages:** Gürtzgen (2009, ScandJE), Addison et al. (2010, ILRR) find positive works council effects especially for collectively covered workers, blue collar workers and medium-skilled workers.
- **Profits:** Mueller (2010, BJIR) finds an overall positive effect of works councils only in collectively covered firms.



## Data

### IAB Establishment Panel

- Representative yearly survey of up to 16,000 German establishments
- We use establishments from manufacturing and services (less banking and finance) with at least 5 employees.
- Questions about opening clauses have been asked in 2005 and 2007 (existence, application, type)
- Questions about employment pacts have been asked in 2006 and 2008 (existence, duration, type, ...)
- We access the data through the Forschungsdatenzentrum (FDZ).



## Model

We measure the (simultaneous) impact of works councils and different types of bargaining regimes on the wage and labour productivity level in a firm:

$$y_k = X'_k \cdot \beta_k + WC \cdot \gamma_{k1} + CBA_l \cdot \gamma_{k2} + WC \cdot CBA_l \cdot \gamma_{k1} + \varepsilon_k$$

- Controls: Firm size, firm age, legal form, ownership, export activity, employment structure, industry, region, year dummy variables
- OLS would be biased because of unobserved heterogeneity.





## Model

We use a Heckman two-step procedure (Heckman, 1979):

- First step: bivariate probit model to determine collective coverage and the existence of works councils
- Second step:

$$y_k = X'_k \cdot \beta_k + WC \cdot \gamma_{k1} + CBA_l \cdot \gamma_{k2} + WC \cdot CBA_l \cdot \gamma_{k1} \\ + \lambda_k^{WC} \cdot \delta_{k1} + \lambda_k^{CBA_l} \cdot \delta_{k2} + \varepsilon_k$$

➤ Insertion of inverse Mills-ratios ( $\lambda(z) = \frac{\varphi(z)}{\Phi(z)}$ ) should deliver consistent estimators.

Exclusion restrictions: firm founded after 1990, owner present in firm



## Works Councils and Collective Bargaining

Dep. variable	Log wage	Log prod.	Log wage	Log prod.
Works council	0.1070*** (0.0096)	0.1857*** (0.0244)	0.1024*** (0.0107)	0.1383*** (0.0275)
Collective Bargaining Agreement	0.0140* (0.0074)	0.0662*** (0.0178)	0.0107 (0.0093)	0.0273 (0.0200)
Works council * CBA			0.0089 (0.0122)	0.1046*** (0.0313)
$\lambda_k^{WC}$	0.2882*** (0.0537)	-0.5538*** (0.1180)	0.2890*** (0.0537)	-0.5444*** (0.1178)
$\lambda_k^{BR}$	-0.5785*** (0.0992)	0.6681*** (0.2066)	-0.5830*** (0.0993)	0.6159*** (0.2063)
Observations	24206	24206	24206	24206
R <sup>2</sup>	0.53	0.44	0.53	0.44

IAB Establishment Panel 2005-2008; Cluster robust standard errors; \* p<0.10, \*\* p<0.05, \*\*\* p<0.01

➤ Higher productivity effect confirmed, but no different wage effect



## Works Councils and Opening Clauses

Dep. variable	Log wage	Log prod.	Log wage	Log prod.
Works council	0.0962*** (0.0151)	0.2094*** (0.0389)	0.0964*** (0.0164)	0.1669*** (0.0417)
Opening clause	0.0392*** (0.0096)	0.0841*** (0.0253)	0.0395** (0.0162)	0.0128 (0.0323)
Works council * OC			-0.0006 (0.0194)	0.1283*** (0.0470)
$\lambda_k^{WC}$	-0.0027 (0.0804)	-0.6135*** (0.1903)	-0.0026 (0.0804)	-0.6267*** (0.1901)
$\lambda_k^{BR}$	0.4879 (0.3843)	-0.1999 (0.8561)	0.4872 (0.3840)	-0.0521 (0.85600)
Observations	8732	8732	8732	8732
R <sup>2</sup>	0.54	0.50	0.54	0.50

IAB Establishment Panel 2005-2008; Collectively covered firms; Cluster robust standard errors;

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01

➤ No different wage, but higher productivity effect



## Works Councils and Employment Pacts

Dep. variable	Log wage	Log prod.	Log wage	Log prod.
Works council	0.1040*** (0.0143)	0.2116*** (0.0368)	0.1010*** (0.0143)	0.2088*** (0.0373)
Employment pact	-0.0015 (0.0126)	-0.0377 (0.0328)	-0.0572 (0.0437)	-0.0885 (0.0611)
Works council * EP			0.0653 (0.0455)	0.0596 (0.0711)
$\lambda_k^{WC}$	0.0491 (0.0751)	-0.4986*** (0.1714)	0.0474 (0.0751)	-0.5002*** (0.1714)
$\lambda_k^{BR}$	-0.7817*** (0.2078)	-2.2242*** (0.4948)	-0.7580*** (0.2077)	-2.2026*** (0.4962)
Observations	9783	9783	9783	9783
R <sup>2</sup>	0.53	0.51	0.53	0.51

IAB Establishment Panel 2005-2008; Collectively covered firms; Cluster robust standard errors;

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01

➤ No significant change in works council behaviour



## Robustness Checks

- Results hold for medium-sized establishments (20-100 employees) and for estimating subsamples instead of interaction terms.
- Results hold for other instruments (insourcing of plants, share of quits, existence of working-time accounts).

## Work in Progress

- Using other instruments (reorganisation of working environment, team work etc.)
- Use of panel structure to account for unobserved heterogeneity



## Summary

We support the Jirjahn and Hübler (2003) hypothesis:

- Higher productivity effect of works councils in collectively covered firms
- Comparable wage effects of works councils throughout different bargaining regimes

We conclude that there are **no indirect adverse effects** of collective bargaining decentralisation induced by works councils.

- No additional rent seeking (Behrens, 2009, ILRR: works councils without right to call strikes)
- Additional rent generation through higher productivity (works councils have more room to negotiate)