

Industrial Relations Research in Germany and the Role of the IAB Establishment Panel

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Industrial relations (IR): data availability

Employer-employee relations are of great importance for the labour market, the world of work, and the functioning of the entire economy.

=> Problem: there are almost no official data on IR in Germany!

Some parts of IR are covered by large data sets like

- ❖ (regular) cross-sectional surveys (e.g. BISS, ALLBUS, ESS)
- ❖ Earnings Structure Survey of Fed. Stat. Office (every four years):
 - ❖ information on earnings, employment relationships, collective agreements
- ❖ Socio-economic Panel (yearly, but gaps in important variables):
 - ❖ information on works councils, collective bargaining agreements, earnings, employment relationships etc. (→ perspective of employees)

Industrial relations in the IAB Establishment Panel

Comprehensive information on IR in the IAB Establishment Panel:

- ❖ annual representative establishment survey, high data quality
 - ❖ information on employment relationships, vocational and further training, composition of the workforce, average wages etc.
 - ❖ information on the presence of certain institutions/organisations:
 - ❖ e.g. bargaining coverage/orientation, worker representation, profit sharing
 - ❖ information on personnel policy, HRM, owners etc.
 - ❖ can be extended to a linked employer-employee data set (LIAB)
- ⇒ closes some large gaps in official statistics
- ⇒ indispensable for research on IR in Germany and beyond!

IR research with the IAB Establishment Panel (1)

An (incomplete) **selection** of topics and empirical studies:

- ❖ incidence and effects of various forms of **worker representation**:
 - ❖ e.g. Ellguth/Kohaut (yearly), Addison et al. (2003, 2007, 2010, 2017), Wagner et al. (2006), Kraft/Lang (2008), Ellguth (2009), Hirsch et al. (2010), Beckmann et al. (2010), Mohrenweiser et al. (2011), Pfeifer (2011a, b), Müller (2011, 2015), Beckmann/Kräkel (2012), Müller/Stegmaier (2017), Oberfichtner (2017), Ertelt et al. (2017)
- ❖ incidence and effects of **coll. bargaining coverage/orientation**:
 - ❖ e.g. Ellguth/Kohaut (yearly), Schnabel et al. (2006), Gürtzgen (2009, 2010, 2016), Addison et al. (2011, 2013a, b, 2014, 2016, 2017), Gartner et al. (2013), Baumann/Brändle (2017)
- ❖ incidence and effects of **financial worker participation**:
 - ❖ e.g. Zwick (2004a), Bellmann/Möller (2010, 2016), Kraft/Lang (2016)

IR research with the IAB Establishment Panel (2)

- ❖ incidence and effects of **company-level employment pacts**:
 - ❖ e.g. Ellguth/Kohaut (2008), Bellmann et al. (2008, 2014), Bellmann/Gerner (2012a, b), Addison et al. (2015)
- ❖ extent and effects of various forms of **atypical employment**:
 - ❖ e.g. Promberger (2007), Hirsch/Müller (2012), Nielen/Schiersch (2016)
- ❖ the statutory **minimum wage** – its bite and effects:
 - ❖ e.g. Bossler/Gerner (2016), Bellmann et al. (2017), Bossler (2017)
- ❖ extent of **wage cushion** (i.e. effective > contract wages):
 - ❖ e.g. Kohaut/Schnabel (2003), Jung/Schnabel (2011)
- ❖ usage and effects of **opening clauses**:
 - ❖ e.g. Kohaut/Schnabel (2007), Ellguth/Kohaut (2010), Garloff/Gürtzgen (2012), Brändle/Heinbach (2013), Ellguth et al. (2014)

IR research with the IAB Establishment Panel (3)

❖ vocational and further training:

- ❖ e.g. Zwick (2004b), Bellmann/Leber (2006), Neubäumer et al. (2006), Dustmann/Schönberg (2009), Görlitz (2010), Stegmaier (2012)

❖ firm ownership and its effects:

- ❖ e.g. Heywood/Jirjahn (2013), Jirjahn/Müller (2014), Mohrenweiser/Jirjahn (2016), Kölling (2017)

❖ working hours, overtime hours, working time accounts etc.:

- ❖ e.g. Schank/Schnabel (2004), Bellmann et al. (2012), Zapf (2016)

❖ personnel policy, HRM and its effects:

- ❖ e.g. Ellguth/Kohaut (2012), Pfeifer (2014)

and many more...

Focus of this keynote: the German model of IR

Its two most important pillars:

- ❖ encompassing collective bargaining agreements
- ❖ worker co-determination (mostly via works councils)

=> **Problem:** “erosion” (Hassel 1999) or “exhaustion” (Streeck 2009) of the system, “demise of a model” (Addison et al. 2017)

Main research questions:

- ❖ how have these two pillars developed over the last 20 years?
- ❖ where do these two pillars still (jointly) exist, where not?
- ❖ which role do less formalised alternative institutions play?

The state of research on the German model of IR

Appraisals of the German model of IR have changed over time:

- ❖ until end of 1980s: literature assumes encompassing coverage of collective bargaining and works councils (in West Germany)
- ❖ since mid-1990s: some observers notice growing heterogeneity
- ❖ Hassel (1999): coll. agreements and co-determination more and more concentrated in large manufacturing plants, rare in services
- ❖ Thelen (2009): system is formally stable, but segmentalism
- ❖ Streeck (2016): a shrinking core and a growing periphery
- ❖ Schroeder (2016): segmentation into three worlds of IR (traditional model with coll. bargaining and works councils only in first world = manufacturing, exporting and large plants, core of public sector)

Problem: no own empirical analyses or tests of theories in this literature.

Empirical research

Extant empirical analyses on the existence and development of the German IR model (mostly with IAB Establishment Panel data):

- ❖ bargaining coverage and its determinants: e.g. Kohaut/Schnabel (2003), Addison et al. (2013, 2016), Baumann/Brändle (2017)
- ❖ incidence and determinants of works councils: e.g. Addison et al. (2003), Hauser-Ditz et al. (2006), Jirjahn (2009)
- ❖ joint presence of both pillars of IR: see Addison et al. (2017) and Ellguth/Kohaut (yearly) => report obvious erosion tendencies.

Keynote tries to provide a more detailed, long-term analysis of the joint (non-)existence of collective agreements and works councils:

=> (where) does the traditional German model still exist?

=> can the appraisals of the German IR research be confirmed?

Data

IAB Establishment Panel (1996-2015):

- ❖ yearly representative survey of about 16,000 establishments in western (since 1993) and eastern Germany (since 1996)
- ❖ relevant questions include bargaining coverage, works council presence, bargaining orientation (since 1999) and the presence of other forms of worker representation (since 2004)
- ❖ advantage: reliable information on presence of institutions
- ❖ disadvantages: does bargaining coverage/orientation extend to all employees? who is represented by alternative forms?
- ❖ (slight) problem: industry classification has changed over time
- ❖ sample: only establishments with five or more employees; no distinction between coverage by industry- or plant-level agreements.

Development of the two main pillars of German IR

% of plants, all sectors	Collective agreement		Works/staff council		Collective agreement & works council		None of these institutions	
	1996	2015	1996	2015	1996	2015	1996	2015
Germany	65.4	36.8	16.6	11.9	15.5	9.4	33.5	60.7
Western G.	67.5	38.9	17.0	12.2	15.9	9.6	31.4	58.8
Eastern G.	54.5	28.1	14.6	10.6	13.2	8.4	44.1	69.6
Primary sector	74.0	53.7	16.7	19.2	16.1	18.4	25.3	45.5
Manufacturing	74.5	49.9	12.9	9.2	12.1	6.1	24.7	47.0
Private service sector	59.0	31.1	15.8	11.0	14.5	8.5	39.7	66.5
Public sector	97.1	95.5	80.3	72.8	78.6	71.1	1.2	2.8

Source: IAB Establishment Panel, own calculations; only establishments with 5 or more employees; weighted values.

Results for the entire economy

- ❖ bargaining coverage of **plants** has almost halved since 1996
- ❖ representation by works councils is also decreasing
- ❖ nowadays just 9 % of plants with 5 or more employees have both collective bargaining agreements and a works council
- ❖ 61 % of plants have neither coll. agreements nor works councils
- ❖ both coverage rates are lower in eastern Germany
- ❖ coverage rates are falling in manufacturing, the private service sector and the primary sector; but largely stable in the public sector (→ part of the “first world” of Schroeder 2016)
- ❖ picture is less bleak when looking at **employees**: coverage rates are higher but their decrease over time is largely similar
- ❖ 33 % of workers have neither coll. agreements nor works councils!

Development of the two main pillars of German IR

% of employees, all sectors	Collective agreement		Works/staff council		Collective agreement & works council		None of these institutions	
	1996	2015	1996	2015	1996	2015	1996	2015
Germany	81.3	59.3	57.2	47.3	54.4	39.6	15.9	32.9
Western G.	82.2	60.9	58.0	48.3	55.3	40.3	15.0	31.2
Eastern G.	76.7	52.0	53.3	43.0	50.2	36.0	20.2	41.0
Primary sector	87.4	74.2	61.8	59.3	60.7	56.4	11.4	22.9
Manufacturing	86.2	64.0	57.5	54.4	55.4	44.0	11.7	25.6
Private service sector	75.0	52.6	50.1	38.8	46.7	31.2	21.6	39.8
Public sector	97.3	98.4	96.0	94.7	93.6	93.8	0.3	0.7

Source: IAB Establishment Panel, own calculations; only establishments with 5 or more employees; weighted values.

Developments in private sector, western Germany

% of employees	Collective agreement		Works council		None of these ("blank area")	
	1996	2015	1996	2015	1996	2015
Manufacturing	80.5	57.6	54.2	44.5	16.7	33.8
5-19 employees	77.5	53.6	5.6	1.8	22.5	46.0
20-99 employees	84.1	49.0	36.9	25.9	13.8	40.4
100-499 employees	94.4	63.0	89.5	76.4	2.3	16.3
≥ 500 employees	98.7	92.4	99.3	96.5	0.4	2.2
Services	74.8	53.8	49.7	39.4	21.7	38.2
5-19 employees	57.2	30.2	11.1	7.5	42.1	68.0
20-99 employees	71.7	47.8	36.8	26.6	24.4	45.8
100-499 employees	87.8	65.6	73.1	63.1	8.5	16.5
≥ 500 employees	87.9	87.6	91.9	82.9	5.6	5.6

Source: IAB Establishment Panel, own calculations; only establishments with 5 or more employees; weighted values.

Results for the private sector

- ❖ in **western Germany** the majority of employees are still covered by collective agreements, but clear differences w.r.t. to plant size
- ❖ differences between manufacturing and services are small
- ❖ worker representation via works councils mainly in larger plants.
- ❖ the majority of employees in plants with less than 100 employees neither have collective agreements nor works councils
- ❖ in **eastern Germany** the rates of coverage and representation are somewhat lower, but the broad picture is largely similar
- ❖ “blank areas” are increasing: in small plants in the service sector, 80/68 % of employees in eastern/western Germany neither have collective agreements nor works councils; the situation is not much better in manufacturing
 - ❖ these areas are part of the “third world” identified by Schroeder (2016).

Developments in private sector, eastern Germany

% of employees	Collective agreement		Works council		None of these ("blank area")	
	1996	2015	1996	2015	1996	2015
Manufacturing	69.2	46.2	37.3	39.7	26.2	39.7
5-19 employees	52.7	42.6	1.8	0.9	47.3	57.0
20-99 employees	67.4	33.6	26.8	24.8	27.0	56.0
100-499 employees	82.7	51.8	77.4	66.2	7.7	22.1
≥ 500 employees	95.4	74.9	94.1	97.6	2.2	2.4
Services	75.7	47.0	51.9	36.0	21.3	47.2
5-19 employees	47.4	18.1	9.3	6.3	52.1	80.2
20-99 employees	75.2	43.0	39.6	26.1	20.1	51.4
100-499 employees	87.2	67.6	72.1	60.4	8.3	21.2
≥ 500 employees	94.2	85.6	90.9	87.5	3.9	11.2

Source: IAB Establishment Panel, own calculations; only establishments with 5 or more employees; weighted values.

Informal coverage and worker participation

- ❖ German employers may make use of other, less formalised and not legally mandated forms of coverage and representation:
 - ❖ voluntary orientation rather than formal coverage by (sectoral) agreements
 - ❖ (management-initiated) worker participation by speakers of the workforce, round tables etc. rather than by elected, more powerful works councils.
- ❖ potential reasons:
 - ❖ avoids “straightjackets” of coll.agr. and woco → more flexibility, lower costs
 - ❖ reduces transaction costs (compared with having no institutions at all).
- ❖ these developments hardly reduce the “blank areas” (2015):
 - ❖ about 30 % of plants in the private sector neither have bargaining coverage or orientation nor a works council or other forms of worker participation
 - ❖ picture differs in large plants: “blank areas” are rare, the traditional IR model with coll. agreement & works council is still present => different worlds!

Formal and informal coverage and participation

2004 (% of plants), private sector	Collective agreement	Orientation at agreement	Neither coll. agr. nor orientation
Works council	8.7	1.4	0.8
Other forms of worker participation	5.7	2.9	1.9
Neither works council nor other forms	32.8	21.3	24.6
2015 (% of plants), private sector	Collective agreement	Orientation at agreement	Neither coll. agr. nor orientation
Works council	8.0	1.5	1.1
Other forms of worker participation	5.2	3.9	2.6
Neither works council nor other forms	22.0	26.3	29.5

Source: IAB Establishment Panel, own calculations; only establishments with 5 or more employees; weighted values.

Coverage and participation by plant size (2015)

Plants with < 500 employees	Collective agreement	Orientation at agreement	Neither coll. agr. nor orientation
Works council	7.7	1.5	1.1
Other forms of worker participation	5.2	3.9	2.6
Neither works council nor other forms	22.1	26.4	29.6
Plants with ≥ 500 employees	Collective agreement	Orientation at agreement	Neither coll. agr. nor orientation
Works council	78.2	4.9	4.5
Other forms of worker participation	4.2	0.7	1.5
Neither works council nor other forms	2.3	1.8	1.9

Source: IAB Establishment Panel, own calculations; only private sector establishments with ≥ 5 employees; weighted values.

Multivariate analyses

- ❖ probit estimations with IAB Establishment Panel data for 2015
=> only relationships, no causal interpretation intended.
- ❖ three dependent variables (dummies: 1 = yes):
 - ❖ Plants with collective agreement and works council (= traditional model)
 - ❖ Plants with collective agreement or orientation and with works council or other forms of worker participation (= less formal model)
 - ❖ Plants with none of these institutions (= blank area).
- ❖ explanatory and control variables (taken from the literature):
 - ❖ Size, age and industry affiliation of plants, located in eastern Germany
 - ❖ Ownership, legal status, management and export status of plants
 - ❖ Composition of the workforce, presence of profit sharing in the plant.
- ❖ sample restricted to manufacturing and service sector and to plants with 5 or more employees; unweighted data.

Determinants of the (non-)existence of the G. model

Probit estimations (marginal effects)	Collective agreement & works council	Coll. agreement/ orientation & woco/other form	None of these institutions
Plant size (4 categories)	+ **	+ **	- **
Plant age (* before 1990)	+ **	+ **	- **
Managed by the owner	- **	- **	+ **
Single plant	- **	- **	+ **
Foreign ownership	- *	-	+ **
Exporting plant	- *	-	+ **
Located in eastern G.	-	- **	+ **
Industry affiliation	**	**	**

Notes: plants with ≥ 5 employees; 9986 observations; additional controls as on slide 20; */** = 5/1% level of significance

Insights from the empirical analyses

- ❖ where does the trad. German model (coll. barg & woco) still exist?
 - ❖ more likely to be found in larger and older plants
 - ❖ less likely in plants with owner-managers and foreign owners, in single plants, and in exporting plants

=> the traditional model more and more retreats into restricted areas
=> "progressive encapsulation" (Streeck/Hassel 2013).
- ❖ where are the "blank areas" (= no formal/informal institutions)?
 - ❖ more likely to be found in smaller and younger plants, in plants with owner-managers and foreign owners, in single plants, in exporting plants and in eastern Germany.

=> the blank areas have reached a size that must be alarming for the proponents of the German IR model (including government).
- ❖ all in all we see a large and increasing heterogeneity of IR institutions => the German model does not exist anymore!

Predicted probabilities (from the probits on slide 21)

Plant characteristics	Plant 1	Plant 2	Plant 3	Plant 4
Plant size (# employees)	≥ 500	100-499	20-99	5-19
Plant age (* before 1990)	yes	no	no	no
Managed by the owner	no	yes	yes	yes
Individually-owned firm	no	no	no	yes
Exporting plant	yes	yes	no	no
Eastern Germany	no	yes	no	yes
Industry	manufacturing		business services	
Foreign owner/profit sharing	no			
Single plant	yes			
Workforce composition	average sample values			
Prob for coll. agr. & woco	78.7 %	12.3 %	2.2 %	0.06 %
Prob for no institutions	1.6 %	27.8 %	37.0 %	59.4 %

Notes: own calculations based on the results of the probit estimations presented on slide 21

Explanations for the erosion of the German model

- ❖ structural change towards services / smaller plants / private sector
 - ❖ but: coverage & participation also fall within sectors / plant size categories
- ❖ closure and foundation of (non-)covered plants, outsourcing
 - ❖ but: Addison et al. (2017) show that these are not the root of the problem
- ❖ decreasing membership and regulatory power of unions and employer associations, decentralisation of bargaining and IR
 - ❖ chicken-and-egg problem, developments are probably inter-related
- ❖ (dis)advantages of certain levels of regulation change over time
 - ❖ transaction cost reduction by centralised regulations less important now
 - ❖ globalisation and technical change require flexible adjustments. Firms leave the traditional system of rigid regulation via wocos & coll. agreements
- ❖ the German model is exhausted, its time is simply over
 - ❖ Streeck (2009): institutions break down if they do not fit anymore into the changing environment (→ their efficiency falls, maintenance costs rise).

Conclusions

- ❖ The German model of industrial relations more and more resembles a swiss cheese: rather solid from outside but many holes inside.
- ❖ Erosion of the trad. model with coll. agreement & works council:
 - ❖ This model predominantly exists in larger and older plants and in manager-led manufacturing plants, also in western Germany and the public sector.
 - ❖ New informal institutions like collective bargaining orientation and alternative forms of worker participation have only partly attenuated the erosion.
 - ❖ Blank areas without any kind of IR institution are getting larger.
- ❖ Heterogeneities between plants increase (particularly w.r.t. size).
- ❖ Appraisals of non-quantitative IR research are largely confirmed.
- ❖ Erosion tendencies are also visible in other data sets and can be expected to continue => the German model is in extreme danger!

