Presentation at the 2nd Biennial Conference "What Does Co-Determination Do? What Can We Learn from Research?

# *Employee Board Representation and Firms' Responses to Crisis*


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# Introduction: Why Study Board Level Employee Representation (BLER)?



- Employees elect a non-majority share of directors to the firms of several European countries (Germany, Austria, Slovenia, France, Denmark, Sweden, Norway)

- Countries apply various models of codetermination that in many aspects differ from the (most researched) German model

- Empirical evidence thus far mostly focuses on the German model and provides mixed conclusions on the economic implications of codetermination (Addison & Schnabel, 2011; Fauver & Fuerst, 2006; Gorton and Schmid, 2004; Jones, 1987; Svejnar, 1981)

# Introduction: Why Study Board Level Employee Representation (BLER)?

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Motivation and background

- **New momentum of this research** with the events of the Great Recession:

  *The importance of the ability of employers and employees to tackle shifting economic conditions was amply demonstrated during the* ***crisis*** *when* ***many employers worked with employees*** *and their representatives, in particular at the company level,* ***to help keep companies afloat, reducing the need for job losses and helping to retain key skills***" (Council of European Employers of the Metal, Engineering and Technology-based industries Report, 2011: p.3).

- **Our research:** *Novel empirical evidence on the link between board level employee representation (BLER) and labor cost adjustments during Great Recession using the case of Scandinavia*

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# Scandinavian model of board-level employee representation (BLER)

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Motivation and background

- **Voluntary board-level employee representation**: workers in firms with at least 35 employees have the right (but not an obligation) to elect their representatives to the board

- BLER currently present in about half of publicly listed firms, in many of them as a result of strong institutional support to codetermination in late seventies, with relatively few changes occurring in time

- Workers elect **a minority share** of representatives to the board for a 4-year period from among **among those employed** in the firm (business group)

- Firm-level employee board participation operates in a system with (traditionally) strong collective bargaining: national, industry and firm-level agreements on a large number of work-related issues (Andersen, 2014)

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# Scandinavian responses to crisis: Institutional setting and case evidence



- Strong unions and collective bargaining, but increasing flexibility and relevance of firm-level agreements during the last years, more leeway for firm-level negotiations (Glassner et al., 2011)

- During Great Recession, the collective bargaining presumably allowed for and provided a steer and procedural certainty for faster company-level cost adjustments and **implementation of solutions alternative to employment cuts**, such as:
  - reorganization of bonus systems (Denmark),
  - renegotiation of flexible time agreements,
  - new types of work sharing agreements and temporary layoffs (Denmark, Norway),
  - reductions of working hours (Sweden)
  - and other innovative solutions (Svalund et al., 2013; Glassner et al. 2011)

# Scandinavian responses to crisis: Institutional setting and case evidence



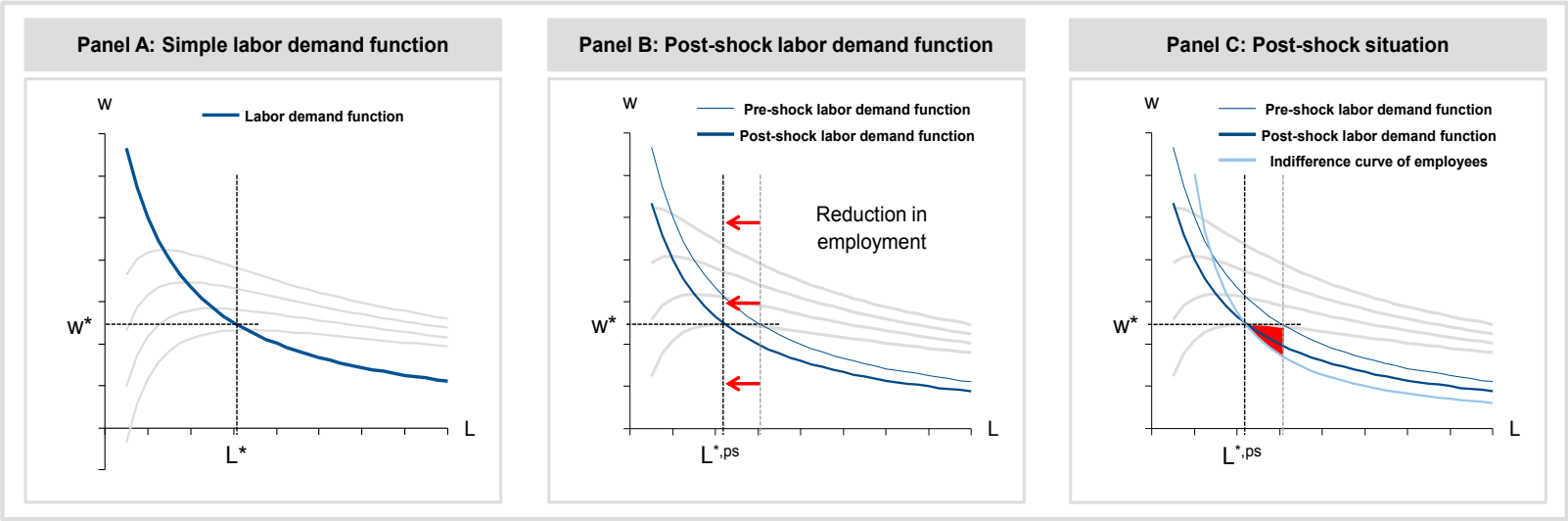
- Case evidence from Scandinavia suggest that the negotiation of such adjustments required significant collaboration between the management and the employee representatives

- BLER effects additive to the impact of industry and country-level agreements (Svalund et al., 2013)

- The role of employee representatives as ‘facilitators’ of cooperative agreements has been previously outlined in the theoretical literature (e.g. Aoki, 1984) and is in line with the expectations that drove the implementation of employee board representation in Scandinavia, i.e. proving a platform for employer-employee cooperation for the purpose of long term competitiveness and success of the corporations (Jackson, 2005)

# Employee Representation and Firms' Responses to Crises: Theory






- When managers take the wages as fixed, a negative shock in the product market fully transfers in the reduction in employment (panel B)
- When firms and employees care about employment (high hiring costs, large differences between utility in and out of employment) and are willing to negotiate over wages and employment, Pareto superior (cooperative) outcomes can be achieved (Aoki, 1984; McDonals and Solow, 1981)

# Information Asymmetry and Moral Hazard Problems in Bargaining



Nature draws and state of the world realizes

**Step 1**

Management decides about corporate strategy: specifically, in times of crises, they decide about (L,$\Delta\omega$)

**Step 2**

Employees decide about the level of effort (depending on whether or not they trust the management)

**Step 3**

Corporate outcome realizes, where corporate outcome is a function of employees' effort

- From the perspective of the employees, managers might exaggerate financial difficulties to justify lower wages (Freeman & Lazear, 1995)
- Workers might "adjust" their effort to the lower wages, once employment is secured
- Worker representatives, **employee directors in particular**, might work as intermediary mitigating these issues (Aoki, 1984; Freeman & Lazear, 1995; Glassner et al., 2011)
- **Previous cooperation with owners, established trust, involvement in strategic-decisions implies more responsibility** (Mizrahi, 2002) etc.

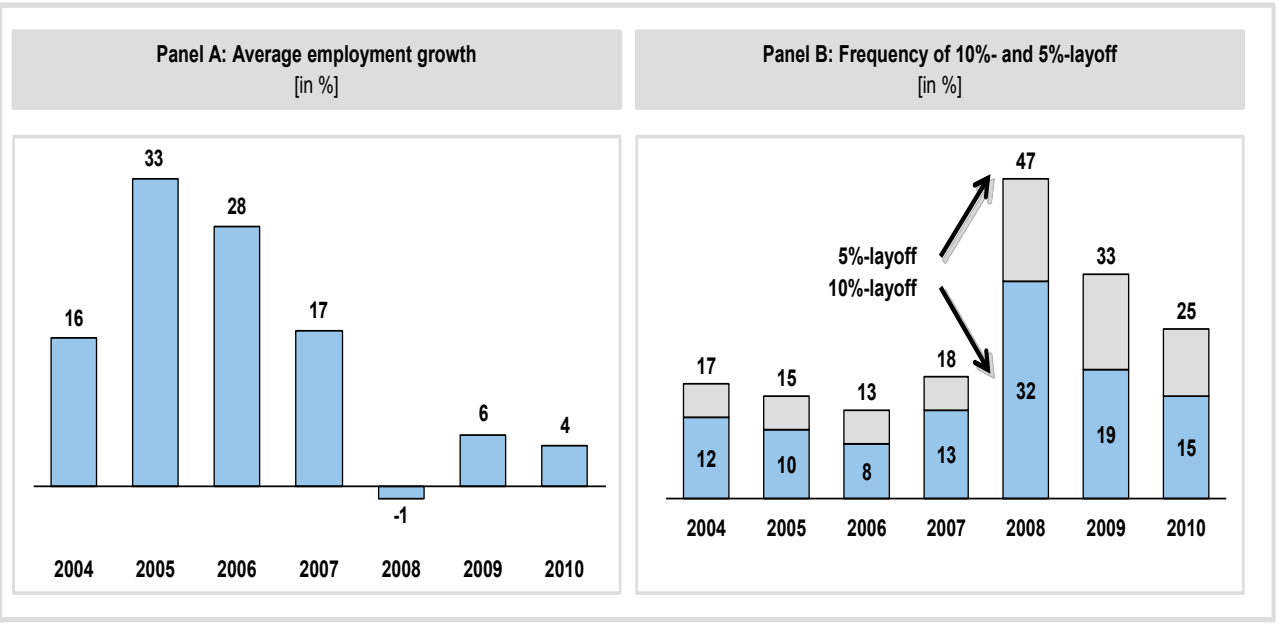
# Our Study: Publicly Listed Non-financial Scandinavia Firms 2004-2010



**Sample**

- Non-financial publicly listed companies
- Three Nordic countries (Denmark, Norway, Sweden)





# Our Study: Publicly Listed Non-financial Scandinavia Firms 2004-2010



**Description (as of 2007)**

| Variable | BLER = 0 | | | BLER = 1 | | | Diff |
|---|---|---|---|---|---|---|---|
| | N | Mean | SD | N | Mean | SD | |
| BLER | 172 | 0.00 | 0.00 | 193 | 1.00 | 0.00 | ... |
| Relative BLER (%) | 172 | 0.00 | 0.00 | 193 | 27.77 | 7.66 | -47.53*** |
| Size | 172 | 11.67 | 1.65 | 193 | 13.13 | 1.81 | -8.02*** |
| Tangibility | 172 | 79.61 | 19.77 | 193 | 80.30 | 17.52 | -0.35 |
| RnD | 172 | 2.93 | 7.06 | 193 | 2.75 | 7.04 | 0.25 |
| ROA | 172 | 1.98 | 20.24 | 193 | 7.46 | 16.08 | -2.88** |
| Leverage | 172 | 20.56 | 19.11 | 193 | 24.86 | 17.47 | -2.25* |
| Age | 172 | 2.88 | 0.73 | 193 | 3.34 | 0.87 | -5.39*** |
| Family | 161 | 0.18 | 0.39 | 182 | 0.24 | 0.43 | -1.27 |
| Block | 172 | 46.91 | 25.67 | 193 | 55.45 | 22.80 | -3.36*** |
| CEO | 172 | 0.30 | 0.46 | 193 | 0.33 | 0.47 | -0.72 |
| Capital Location | 172 | 0.59 | 0.49 | 193 | 0.49 | 0.50 | 1.82 |
| Unionization | 172 | 57.80 | 18.66 | 193 | 62.91 | 18.05 | -2.66** |
| BLER Industry | 172 | 37.03 | 20.51 | 193 | 46.59 | 22.37 | -4.24*** |
| BLER Region | 172 | 50.37 | 12.96 | 193 | 51.36 | 15.22 | -0.66 |

# Distribution of employee representation across firms

| Dependent variable | | BLER | | | Relative BLER (%) |
|---|---|---|---|---|---|
| Method | | Probit | | | OLS |
| Sample | | | All firms in 2007 | | |
| Specification | I | II | III | IV | V |
| Size | 0.317*** | 0.334*** | 0.317*** | 2.254*** | 2.481*** |
| | [5.50] | [5.69] | [5.77] | [5.02] | [5.08] |
| Tangibility | -0.006 | -0.007 | -0.007* | -0.039 | -0.063* |
| | [-1.21] | [-1.39] | [-1.68] | [-0.95] | [-1.67] |
| RnD | 0.029** | 0.029** | 0.023* | 0.215** | 0.210* |
| | [2.24] | [2.14] | [1.86] | [1.98] | [1.85] |
| ROA | 0.001 | 0.003 | 0.002 | 0.036 | 0.052 |
| | [0.20] | [0.45] | [0.47] | [0.84] | [1.19] |
| Leverage | -0.003 | -0.006 | -0.006 | -0.014 | -0.061 |
| | [-0.62] | [-1.09] | [-1.34] | [-0.30] | [-1.35] |
| Age | 0.352*** | 0.304** | 0.343*** | 2.363** | 2.955** |
| | [2.95] | [2.45] | [2.98] | [2.18] | [2.53] |
| Family | | -0.276 | -0.154 | | -2.817 |
| | | [-1.19] | [-0.79] | | [-1.54] |
| Block | | 0.011*** | 0.008** | | 0.078** |
| | | [3.03] | [2.28] | | [2.55] |
| CEO | | | -0.073 | | -1.631 |
| | | | [-0.39] | | [-0.94] |
| Capital Location | | | -0.399** | | -2.682 |
| | | | [-2.23] | | [-1.62] |
| Unionization | | | 0.001 | | 0.066 |
| | | | [0.22] | | [1.15] |
| BLER Industry | | | 0.013*** | | 0.093*** |
| | | | [3.49] | | [2.63] |
| BLER Region | | | -0.003 | | -0.009 |
| | | | [-0.52] | | [-0.14] |
| Industry effects | yes | yes | no | yes | no |
| Country effects | yes | yes | yes | yes | yes |
| Observations | 351 | 329 | 329 | 365 | 343 |
| Adj.R^2 | | | | 0.259 | 0.230 |

# Employee representation and labor costs during 2008-2009 crisis

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EBR and firms' responses to the financial crises

## Methodology…

- ***First***, we regress **layoff measures** (in a panel setting) on firm performance (ROA) interacted with BLER and a crisis dummy, firm and board characteristics
- ***Second***, we test the relationship between the different layoff propensity of BLER firms and other labor cost adjustments by regressing the **labor costs per employee** on a measure of 'Excess Employment' during crisis in BLER firms
- We use SEs that allow for clustering on firm-level and, in most of the specifications, include firm fixed effects
- BLER measured as of 2007
- Further check: Fixed-effects regression for changes in the BLER in the pre-crisis period, other robustness tests

**1**

**Layoff decision:**
EBR mitigates the performance-sensitivity in crisis

**2**

**Wage decision:**
Higher employment in BLER firm (compared to similar non-BLER firms) led to higher downward adjustments in labor costs per employee

# Layoffs and BLER

| Dependent variable | Layoff 5+ Percent | | | |
|---|---|---|---|---|
| Method | OLS | | Fixed effects | |
| Sample | BLER=0 | BLER=1 | All firms | |
| Specification | I | II | III | IV |
| ROA | -0.004*** | -0.006*** | -0.003*** | -0.004** |
| | [-3.69] | [-3.97] | [-3.67] | [-2.43] |
| ROAxCrisis | -0.002 | 0.005** | -0.002 | 0.000 |
| | [-1.26] | [2.31] | [-1.35] | [-0.31] |
| **BLERxROAxCrisis** | | | **0.007*** ** | **0.007** ** |
| | | | **[2.65]** | **[2.30]** |
| BLERxCrisis | | | -0.053 | -0.054 |
| | | | [-1.07] | [-1.00] |
| BLER | | | 0.052 | 0.000 |
| | | | [1.60] | [.] |
| BLERxROA | | | -0.003 | -0.003 |
| | | | [-1.64] | [-1.01] |
| Size | 0.020 | -0.025** | -0.008 | 0.089* |
| | [1.53] | [-2.00] | [-0.88] | [1.86] |
| Tangibility | 0.000 | 0.000 | 0.001 | -0.001 |
| | [0.14] | [0.25] | [0.66] | [-0.58] |
| RnD | -0.001 | 0.000 | -0.002 | 0.004 |
| | [-0.57] | [-0.15] | [-0.97] | [1.03] |
| Leverage | 0.001 | 0.002* | 0.001* | 0.003** |
| | [0.73] | [1.82] | [1.79] | [2.12] |
| Age | -0.027 | 0.003 | -0.010 | 0.289 |
| | [-0.86] | [0.12] | [-0.53] | [1.49] |
| Block | 0.000 | 0.000 | 0.000 | -0.003** |
| | [-0.48] | [-0.26] | [-0.61] | [-2.34] |
| Firm effects | no | no | no | yes |
| Industry and country effects | yes | yes | yes | no |
| Year effects | yes | yes | yes | yes |
| Observations | 699 | 901 | 1,600 | 1,600 |
| Adj.R^2 | 0.11 | 0.13 | 0.11 | 0.13 |

# Robustness

- Alternative definitions of dependent variable (Layoff 10+ percent; Layoff as negative employment growth, censored at zero)

- Additional interaction terms:
  - Block × ROA × Crisis
  - Family × ROA × Crisis
  - Capital Location × ROA × Crisis
  - Large firm dummy (i.e. at least 250 employees) × ROA × Crisis
  - Industry level union density × ROA × Crisis

- Further investigation of BLER effects in the firms with above-average and below-average union density

- Note on average union density: 69.7 percent in Denmark, 44 percent in Norway, 64 percent in Sweden

# Labor cost reduction decision: Wages

| Dependent variable | Relative change in labor costs per employee (%) | | | | |
|---|---|---|---|---|---|
| Method | OLS | | | | |
| Sample | BLER firms only | BLER firms in industries with low level of unionization | BLER firms in industries with high level of unionization | BLER firms only | |
| Specification | I | II.a | II.b | III | IV |
| ExcessEmployment | -60.504*** | -135.325*** | -33.838** | | |
| | [-2.85] | [-2.89] | [-2.35] | | |
| ExcessEmployment(5 perc) | | | | -8.803*** | |
| | | | | [-3.12] | |
| ExcessEmployment(10 perc) | | | | | -7.382** |
| | | | | | [-2.11] |
| ROA | 0.095* | 0.017 | 0.045 | 0.141** | 0.137** |
| | [1.78] | [0.18] | [0.57] | [2.31] | [2.24] |
| Size | 0.567 | 1.370 | 0.795 | 0.009 | 0.188 |
| | [0.89] | [0.83] | [1.08] | [0.01] | [0.29] |
| Tangibility | -0.035 | 0.053 | -0.098* | 0.004 | 0.028 |
| | [-0.60] | [0.49] | [-1.71] | [0.05] | [0.42] |
| RnD | 0.164 | 0.216 | -0.102 | 0.098 | 0.046 |
| | [1.23] | [0.99] | [-0.35] | [0.53] | [0.23] |
| Leverage | -0.061 | -0.074 | -0.029 | 0.000 | -0.026 |
| | [-1.21] | [-0.71] | [-0.48] | [0.01] | [-0.47] |
| lnAge | -2.604** | -3.713 | -2.315** | -1.875 | -2.284* |
| | [-2.07] | [-1.28] | [-2.01] | [-1.39] | [-1.73] |
| Block | 0.006 | 0.015 | -0.031 | -0.050 | -0.017 |
| | [0.15] | [0.13] | [-0.70] | [-1.14] | [-0.41] |
| Industry effects | yes | yes | yes | yes | yes |
| Country effects | yes | yes | yes | yes | yes |
| Year effects | no | no | no | no | no |
| Observations | 310 | 131 | 179 | 271 | 277 |
| Adj.R^2 | 0.321 | 0.406 | 0.270 | 0.298 | 0.278 |

# Summary and conclusion

**A**

We hypothesize that employee directors on board enable co-operative solutions in crisis, facilitating the transfer of credible information between the managers and employees, and reducing the probability of post-contractual opportunism (on both sides).

**B**

Examining the behavior of Scandinavian corporations during the recent financial crisis, we find evidence supporting the hypotheses: Firms with BLER implement lower layoffs during crisis and seem to compensate by adopting alternative solutions, thus reducing the labor costs at the current level of employment.

**C**

While our results are not clear of endogeneity concerns, they are robust to including various controls (additional interaction terms), alternative model specifications, and in line with theoretical and case evidence on the issue.