The impact of unions on the patterns of in-work poverty

Marco Gießelmann / University of Cologne
theoretical model

Union Bargaining Power

- Entrants
- Re-Entrants

In-Work Poverty

- Education
theoretical model

Union Bargaining Power

Deregulation

(H2a,b,c)

+ (H1a)

+ (H1b)

- (H1c)

Entrants

Re-Entrants

In-Work Poverty

Education
Data

• **Desired properties of Sample:**
  – Many Macro-Units
  – Many Micro-Units per Macro-Unit

• **Sample: EU-25 (+ NO, IS)**

• **Data:**
  – Micro: EU-SILC // Longitudinal
  – Macro: OECD Database; ICTWSSD Database
Operationalisation

• **Micro-Characteristics**
  - **Income**: Yearly Household Income (mod. OECD-Scale)
  - **Poverty Threshold**: 60% from Median
  - **Employed**: At least 7 months in gainful employment during income reference period
  - **Education**: ISCED; *high, mid, low*
  - **Entrants**: Year of first Job
  - **Re-Entrants**: Calendar data

• **Macro-Characteristics**
  - **Union Bargaining Power**: Degree of centralisation
  - **Labour Market Regulation**: Strictness of regulation on temporary and fixed-term employment
Descriptive Analyses
Degree of Centralisation and (relative) poverty-risk (EU-SILC 2007):

Entrants
Degree of Centralisation and (relative) poverty-risk (EU-SILC 2007):

Re-Entrants

Datenbasis: EU-SILC 2003-2007
Degree of Centralisation and (relative) poverty-risk (EU-SILC 2007):

*Low educated*

![Graph showing the relationship between degree of centralisation and relative poverty-risk for low-educated individuals across different countries. The graph includes data from EU-SILC 2003-2007.](image)

Datenbasis: EU-SILC 2003-2007
Multivariate Analysis (EU-SILC 2007)

- Binary DV $\rightarrow$ Logistic Regression (logged odds)
- Clustered Data $\rightarrow$ Random Effects Estimation
- Standardized macro variables
**Logistic regression:**
*Micro and macro determinants of in-work poverty (logged odds), random effects specification*

<table>
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<th>A. Main Effects: Makro</th>
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| Regul |
| ISCED 3 | -0.07***(-0.01) |
| ISCED 4-6 | -0.15***(-0.02) |

| Cent*Regul |
| ISCED 3 | -0.14***(-0.03) |
| ISCED 4-6 | -0.06(-0.04) |

*p<0.10, **p<0.05, ***p<0.01, Standarderrors in parantheses*

Source: EU-SILC 2003-2007, n=352.337
Logistic regression: Micro and macro determinants of in-work poverty (logged odds), random effects specification

A. Main Effects: Makro
Degree of Centralisation (Cent) -0.21**(-0.1)
Degree of Regulation (Regul) 0.17*(-0.1)
Cent * Regul 0.11(-0.19)

B. Main Effects: Mikro
Position on the labor market (ref.: other Employees)
  Entrant 0.08*(-0.04)
  Re-Entrant 0.59***(-0.02)

Education (ref. ISCED 0-2)
  ISCED 3 -0.71***(-0.02)
  ISCED 4-6 -1.55***(-0.02)

C. Mikro/ Makro Interactions

Entrant specific Effects
  Cent 0.13***(0.04)
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  Cent*Regul -0.39***(-0.08)

Re-Entrant specific Effects
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Postestimation

Fitted Values (Pr%)
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Micro and macro determinants of in-work poverty,
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Fitted Values (Pr\%)
theoretical model

Union Bargaining Power

Deregulation

+ √
(H2a,b,c)

In-Work Poverty

Entrants

Re-Entrants

Education

+ (H1a)

f (H1b)

- √
(H1c)
Summary

(1) A high degree of union bargaining power reinforces the poverty risk of entrants to the labour market

(2) A high degree of union bargaining power weakens the effect of education on the poverty risk

(3) The impact of the mechanisms (1) and (2) increases with the degree of deregulation

(4) Methodological Issues: CS vs Long