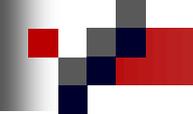# Social stratification and vulnerability to poverty among women with children in the European welfare regimes: a stress-testing exercise

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Aim

- To disentangle the effects of tax-benefit policies, social stratification determinants and life course events on vulnerability to poverty among women with children in European countries.

  - Individual vulnerability – expected exposure to poverty due to income losses.

Previous research: poverty triggers at micro level

- Poverty triggers:

  - persistent factors – social stratification determinants, e.g. gender, ethnicity, education, social class.

  - transient factors – life course events / risks, e.g. childbirth, divorce, unemployment. Individualisation of risk thesis (Beck 1992).

- These two types of parameters are interlinked:

  - life course events are unequally distributed across social groups;

  - negative consequences of life course events are distributed unequally ==> a cycle of cumulative disadvantage.

- Gender inequalities have fallen but inequalities between women are potentially on the rise (Korpi et al 2013).

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Previous research: the role of the welfare state

- The effects of social class and life course events are moderated by the welfare system:
  - □ *socio-democratic*, *conservative*, *liberal* + *Southern-European* + *post-communist*
- Divisions within the conservative cluster:
  - □ *pro-traditional* (e.g. Germany and Austria) and *pro-natalist* (e.g. France and Belgium) family policy models (Gauthier 1996, 2000)
- Different degree of defamilialisation:
  - □ extent to which the system facilitates women's economic independence and undermines their dependency on the family (Taylor-Goody 1996)

Previous research: stress-testing approach

- **Proposed by Atkinson (2009):**

  - ☐ The idea of simulating income shocks from the field of finance.

  - ☐ Can help assess the likely performance of the welfare state in providing an effective safety net.

  - ☐ Approach utilises tax-benefit microsimulation techniques to model hypothetical income shocks.

  - ☐ Previously mainly used for looking at unemployment (e.g. Figari et al. 2011; Fernandez Salgado et al. 2013; Navicke 2015) and for the childbirth (Navicke 2015).

  - ☐ We want to extend this methodology further for:
    - Childbirth
    - Divorce

Our objectives are:

1. To analyze how different types of the EU welfare regimes contribute to women's **capacity to avoid poverty risk after childbirth and divorce.**

2. To confirm **if there is a social gradient to vulnerability** and whether it varies across different welfare regimes.

3. To **extend stress-testing approach** to analysis of the role of the tax-benefit system in mitigating income shocks after life course events.

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Selection of countries

- Different types of welfare regimes:

  - **Denmark, Finland:** socio-democratic

  - **Austria, Germany:** conservative with pro-traditional focus

  - **Belgium, France:** conservative with pro-natalist focus

  - **Italy, Spain:** conservative Southern European

  - **Ireland, the UK:** liberal

  - **Czech Republic, Lithuania:** post-socialist with pro-natalist focus

Methodology I: steps

1. **Simulation of hypothetical income shocks**

2. **Outcome measures:**
   - ☐ income stabilization (replacement & compensation)
   - ☐ expected poverty risk and change

3. **Cluster analysis of country groupings**

4. **Regression analysis of social class effects on vulnerability to poverty**
   - ☐ occupational status categories (ISCO 1st digit) as a proxy
   - ☐ linear probability models with country fixed-effects

Methodology II: simulation of income shocks

- **Microsimulation using EUROMOD**
  - ☐ EU-SILC 2012 data updated to 2015 & 2015 policy rules.
  - ☐ Additional transfers modelled: maternity, paternity and parental leave benefits and birth grants (childbirth), child support payments by non-resident parents and advance maintenance payments (divorce).
  - ☐ First-order intended effects before behavioural adaptation takes place.

- **Selection:** we account for selection probabilities among women
  - ☐ logistic regressions for likelihood of childbirth and divorce

- **Main assumptions:**
  - ☐ Only one transition per household; two events modelled separately
  - ☐ Mother stops working after childbirth for a period of a year
  - ☐ No change in mother's work intensity in case of divorce
  - ☐ Previous earnings of mothers and contribution records – from data
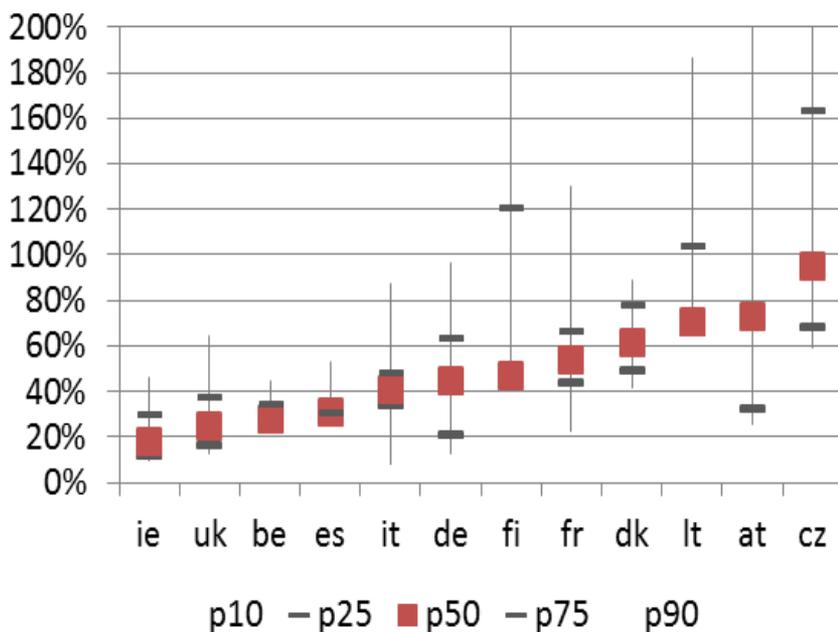
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Results
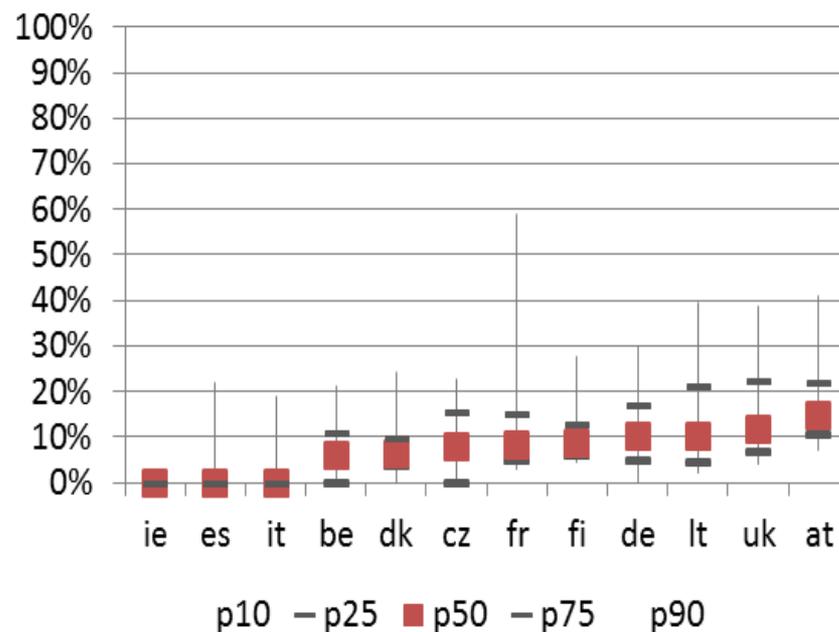
Results: replacement rates

Share of benefits relative to lost earnings (own / partners):
- *Childbirth: maternity, paternity and parental leave benefits, birth grants;*
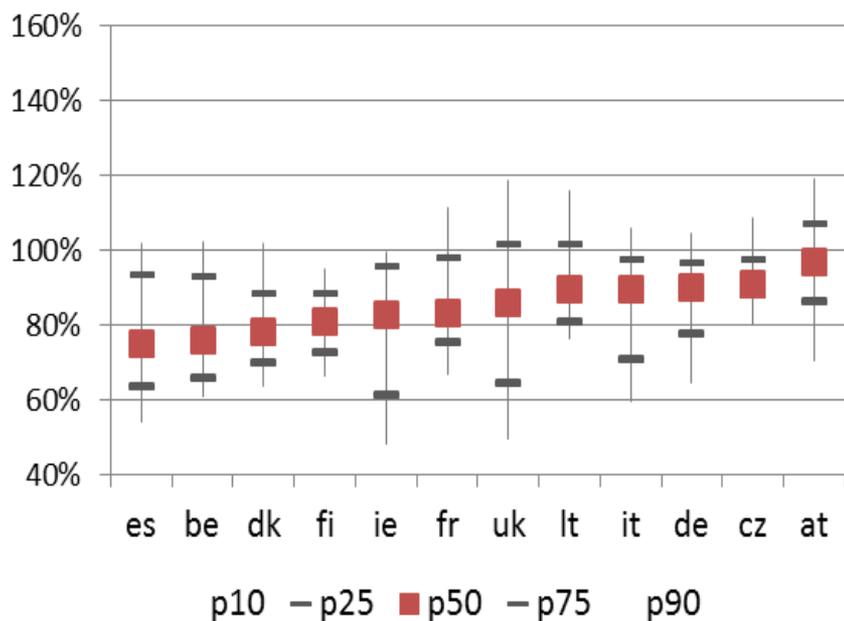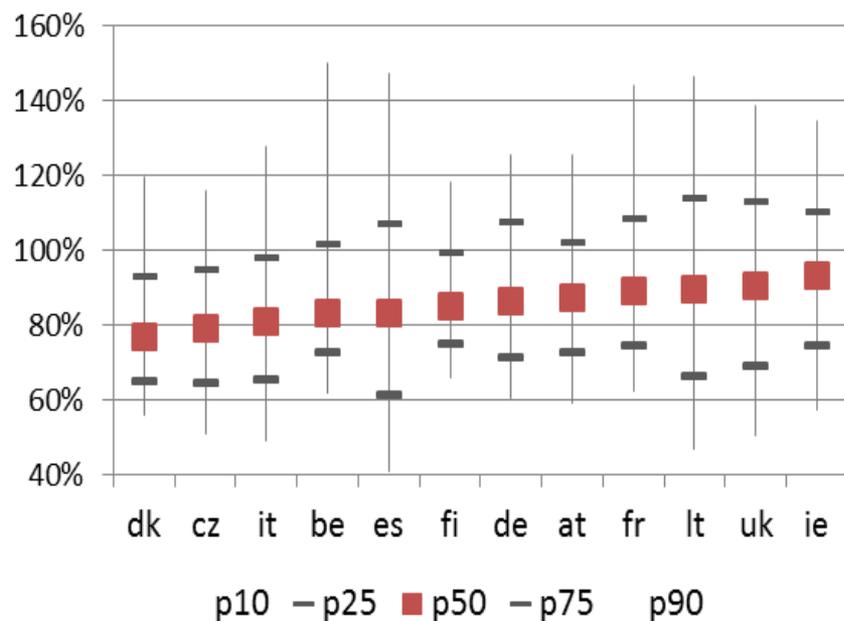- *Divorce: child support by non-resident parents, advance maintenance payments.*

Results: compensation rates

Share of total disposable equivalized income after and before the event
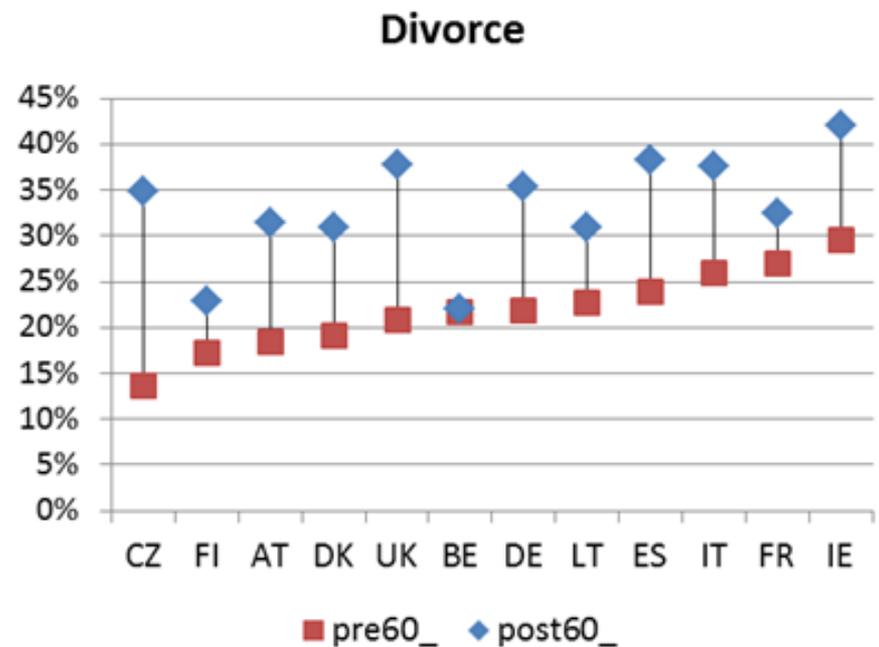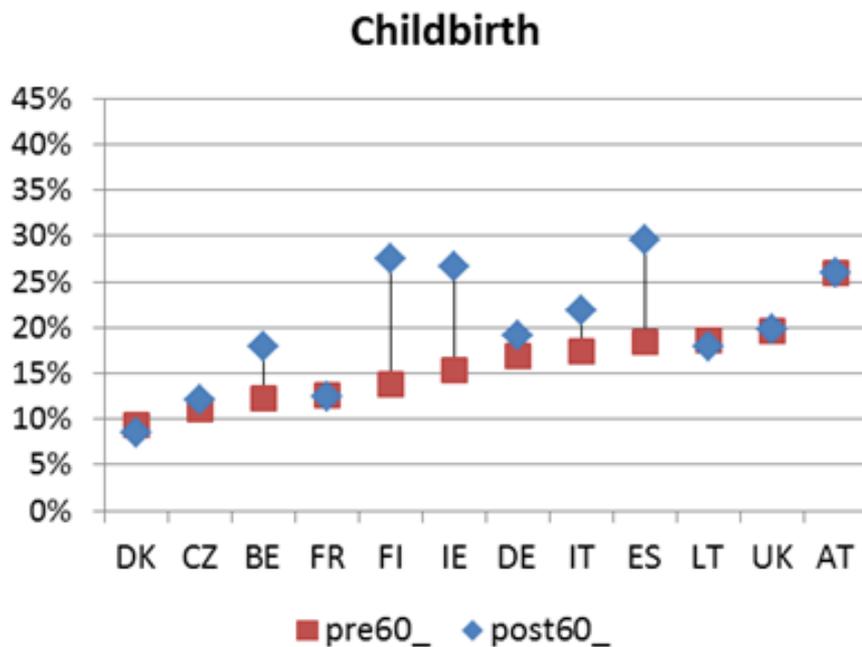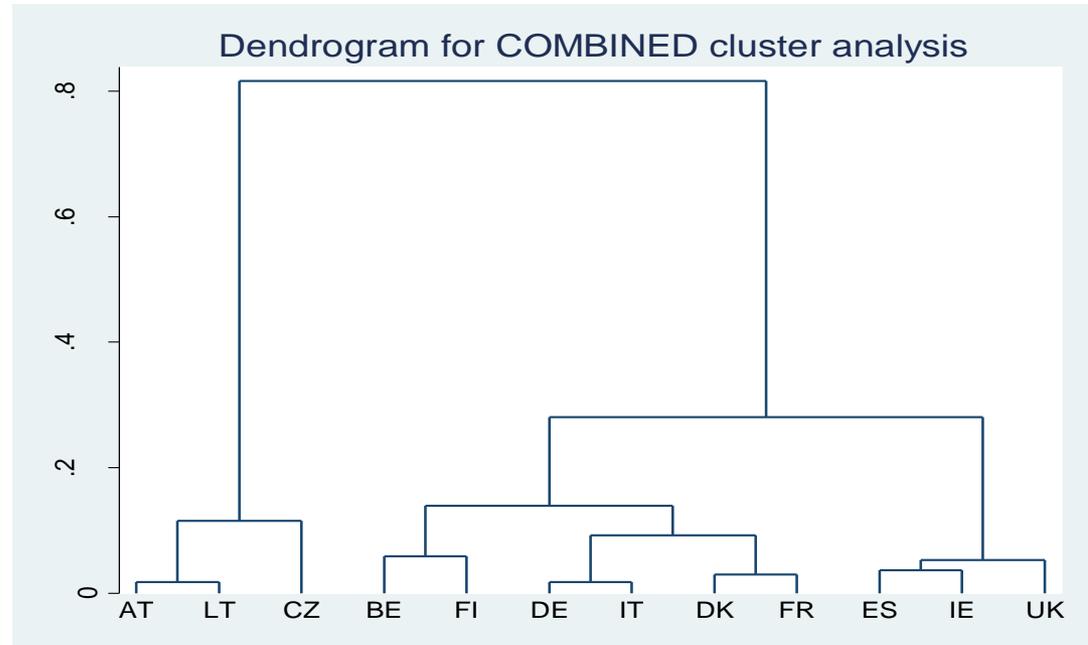*Equivalized size of the household taking change in its composition into account*

Results: vulnerability to poverty

At-risk-of-poverty rate before and after event
Poverty risk line at 60% of the median equivalized income

Results: combined vulnerability clusters for childbirth & divorce

Dendrogram for COMBINED cluster analysis

- **Cluster 1: AT, LT, CZ**
  - ☐ High degree of protection at childbirth, low at divorce
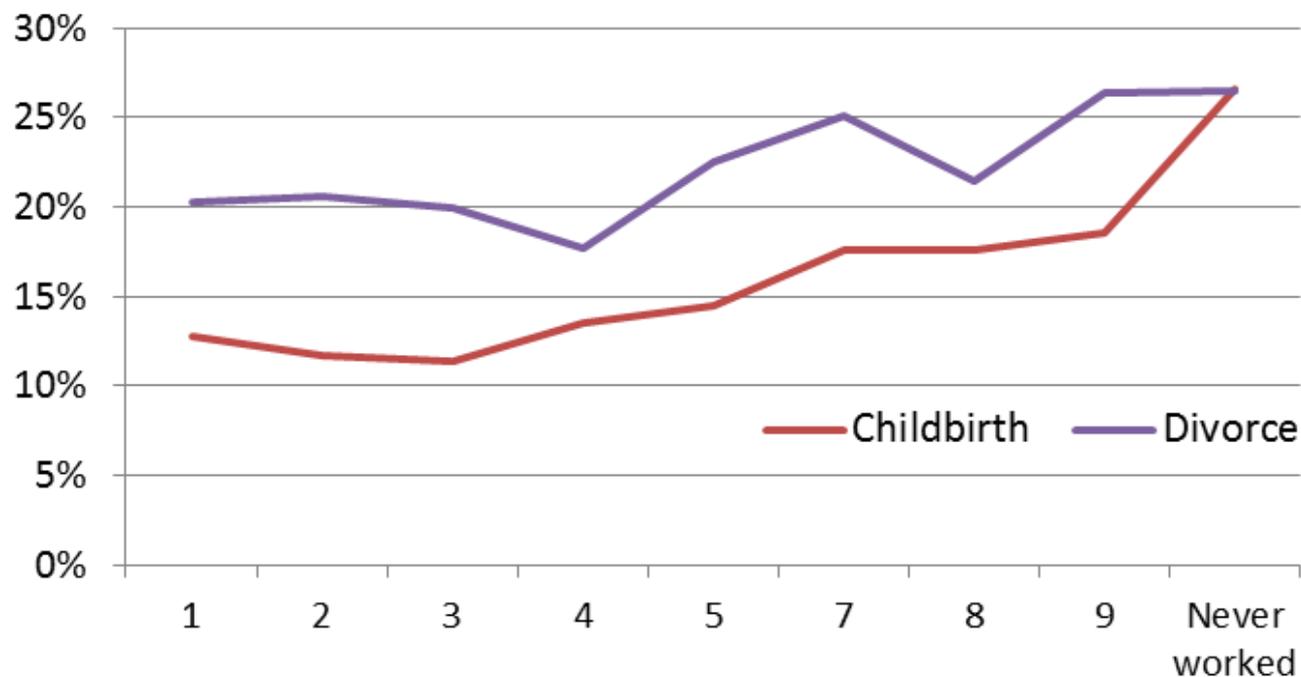- **Cluster 2: BE, FI, DE, IT, DK, FR**
  - ☐ High degree of protection for both types of events
- **Cluster 3: IE, UK, ES**
  - ☐ Low degree of protection for both types of events

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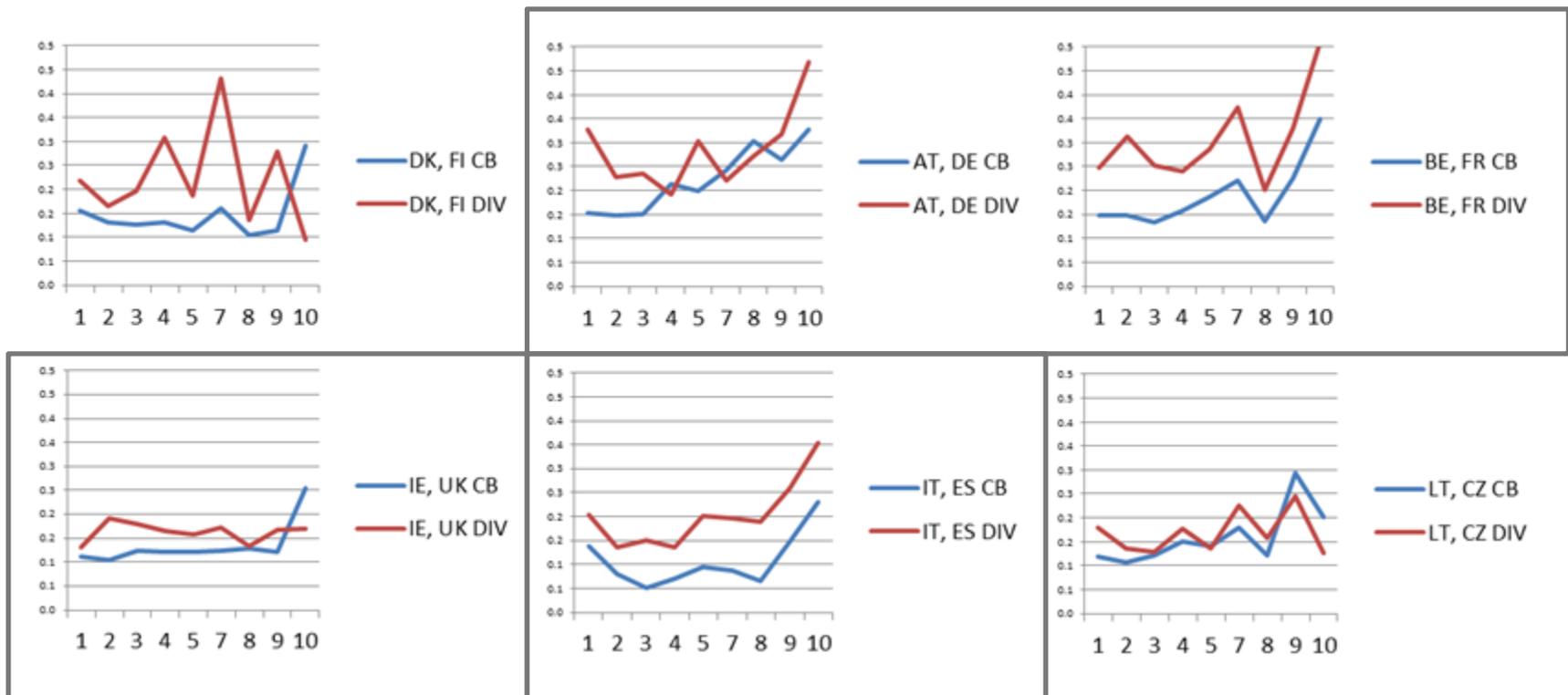INSTITUTE FOR SOCIAL & ECONOMIC RESEARCH

Results: vulnerability to poverty by mother's social class

Predicted poverty rates after the event, pooled dataset with country fixed-effects

Results: vulnerability to poverty by mother's social class and original welfare clusters

Pooled dataset with interactions between social class and original welfare regimes
Models by original welfare regimes, predicted poverty rates after the event

Results: Vulnerability to poverty by mother's social class and new country clusters

Pooled dataset with interactions between social class and vulnerability clusters
Models by vulnerability cluster, predicted poverty rates after the event
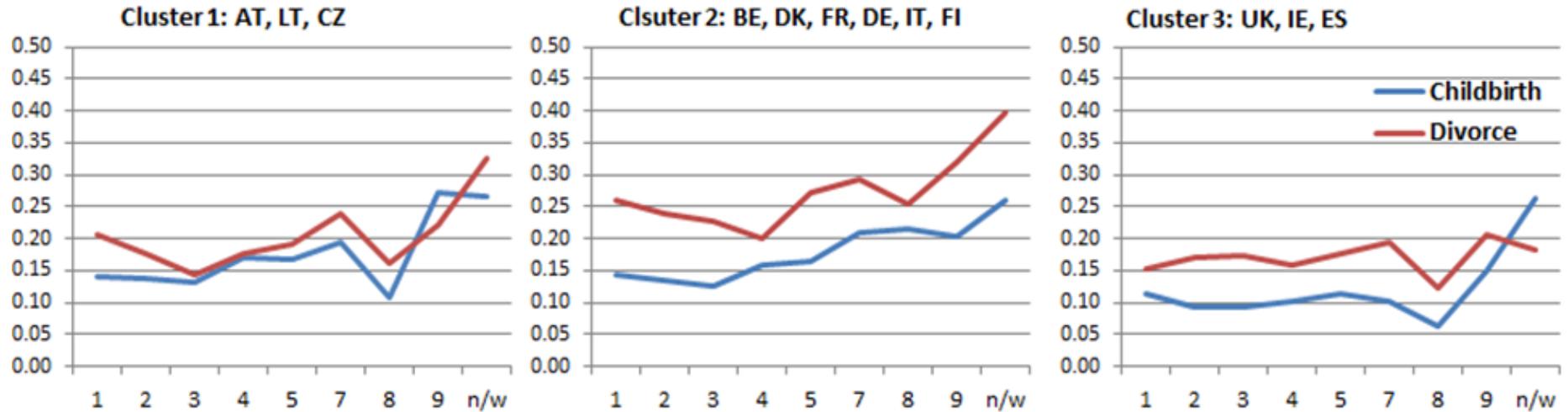
Conclusions

1. Three clusters of countries:
   - ☐ High protection at both events: DK, FI, DE, FR, BE, IT
   - ☐ High protection at childbirth, low at divorce: AT, LT, CZ
   - ☐ Low protection at both events: IE, UK, ES

2. Statistically significant effect of mother's social class on vulnerability to poverty after both events.

3. Higher vulnerability to poverty in case of divorce, but a higher social gradient in case of childbirth.

4. No single group of countries has been identified as achieving better results in mitigating effects of social class.

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Thank you!