

# Work-family policies and the working hours' differences in couples after childbirth

Lena Hipp (WZB/University of Potsdam), Mareike Bünning (WZB), Irene Boeckmann (University of Toronto)

Presentation prepared for the  
6th European User Conference for EU-Microdata

March 8, 2019



Wissenschaftszentrum Berlin  
für Sozialforschung

# Overview

Background and Theory

Hypotheses

Data and Methods

Findings

Conclusion and next Steps

# Children as a driver of gendered labor market inequalities

- Division of paid work within couples contributes to the persistent gender inequalities in the labor market (Boeckmann et al. 2014; Bühlmann et al. 2010)
- Birth of a child alters couples' division of paid and unpaid labor (Kühhirt 2012, Bünning 2015, Grunow et al. 2012))
- Variation in mothers' and fathers' involvement in paid and unpaid labor across countries (Hipp and Leuze 2015; Heisig 2013)
- Public support for parents explains part of this cross-country variation (Boeckmann et al. 2014; Hipp and Leuze 2015; Brady et al. 2019)

# Children as a driver of gendered labor market inequalities

- Existing findings based on either cross-sectional data (e.g., Hipp and Leuze 2015) or single country studies using longitudinal data (Grunow et al. 2012; Kühhirt 2012, Bünning 2015; Schober 2013)
- EU SILC data (theoretically) allow researchers to explore this relationship

# Children as a driver of gendered labor market inequalities

How do children affect couple's division of paid and unpaid work?

1. Reduction in time available for paid work  
(particularly when there is more than one child)
  - time availability approach (e.g., Barnett, 1994; Presser, 1994)
  - availability of (affordable) child care reduces the time burden associated with parenthood
2. Spill-over effects from initial division of labor after birth
  - relative resource: sex-role specialization (Becker 1981) and bargaining (Blood and Wolfe 1960)
  - parental leave, particularly leave reserved for fathers alters the incentive structure for couple's specialization ("learning effects")

# Hypotheses

## Hypothesis 1: main effect

The birth of a child, particularly the birth of the 1st child, is associated with a decrease in the female partner's contribution to the couple's total working hours.

## Hypothesis 2 - 4: interaction effects

This relationship should be weaker . . .  
. . . the more parents can rely on publicly provided childcare.  
. . . the stronger the incentives for male partners to take leave.

# Hypotheses

## Hypothesis 1: main effect

The birth of a child, particularly the birth of the 1st child, is associated with a decrease in the female partner's contribution to the couple's total working hours.

## Hypothesis 2 - 4: interaction effects

This relationship should be weaker ...

- ... the more parents can rely on publicly provided childcare.
- ... the stronger the incentives for male partners to take leave.
- ... the more coherent the design of the available family policies.

# Data

## Individual-level data

- EU-SILC long 2004 – 2016
- Four-year rotational household panel
- ~825,000 observations (~280,000 individuals) from couples in different-sex relationships in 30 countries\*
- ~23,000 births (121 in Croatia, 2,016 in Spain)

## Country-level data

- Eurostat
- Multilinks database

\*Exclusion of Iceland, Croatia, and Serbia in some analyses due to missing country information



# Methods

- country-specific regressions with person and period fixed effects
- multilevel regressions with random slopes and individual fixed-effects  
(cross-classified random slopes as couples are nested in years and countries)

## Individual-level variables

### Dependent Variable

1. Female partner's contribution to couple's total working hours
2. Ranges from 0 (female partner does not work at all) to 1 (only female partner works)

### Independent Variable

1. birth of a child (first and higher order)
2. age of youngest child in HH (plus control for siblings)

## Control variables

- marital status (dummy)
- additional adult in household (dummy)
- couple's total working time (in hours)
- actual year to capture period effects (dummies)

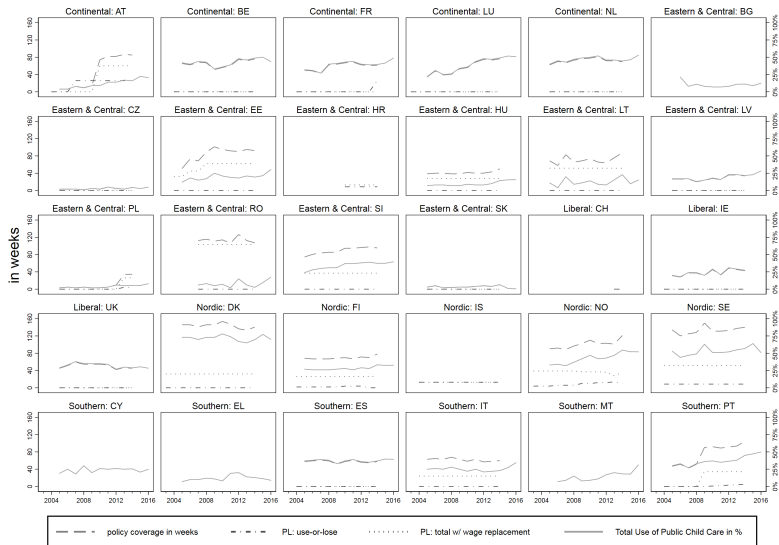
## Country-level variables

- childcare coverage for <3 years, Eurostat
- use-or-lose months in parental leave schemes
- coherence of leave and childcare policies

## Policy coherence (coverage in weeks)

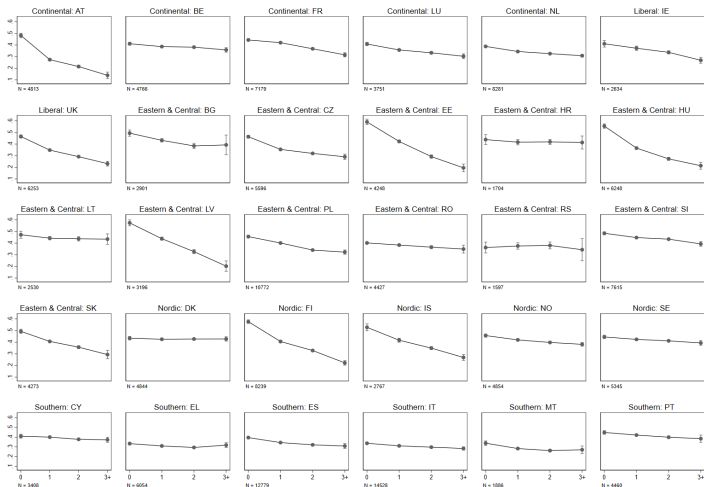
- captures # of months of the first three years of a child's life are covered either by wage-related leave or by formal childcare
- proportion childcare enrollment transformed into # of months a 0-2 year old on average could attend childcare
- see Saraceno and Keck (2010) for a similar approach on *care gaps*

# Family Policies by Year and Country



# Women's % at couples' total working hours

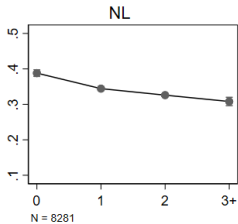
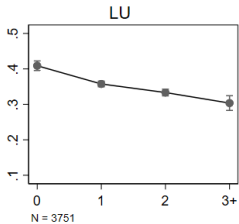
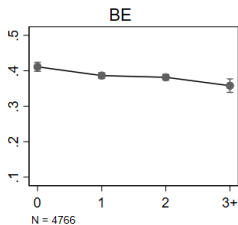
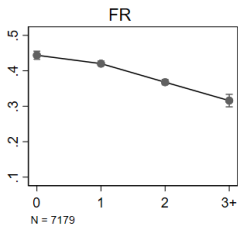
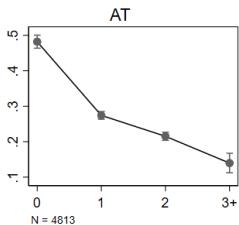
## Predictions with 95 percent CIs (2004-2016)



# of children

# Women's % at couples' total working hours

## Continental

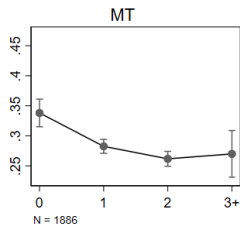
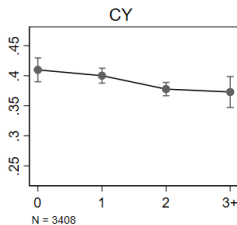
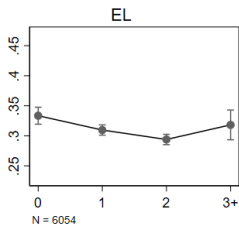
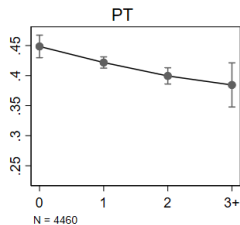
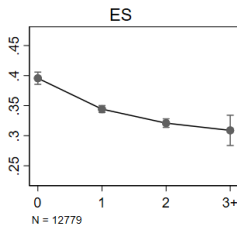
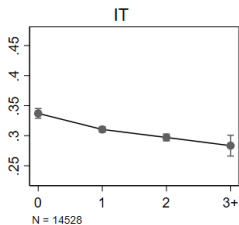


# of children



# Women's % at couples' total working hours

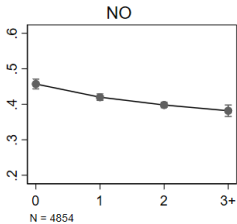
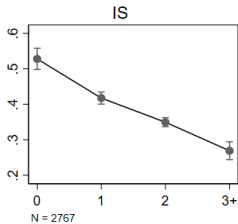
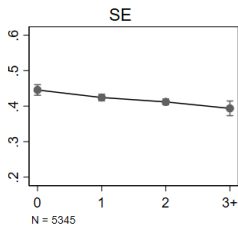
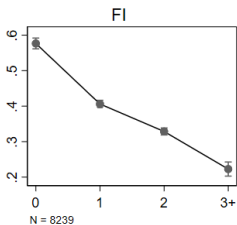
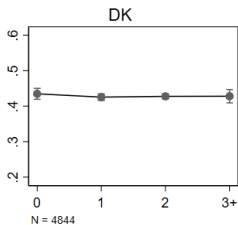
## Southern



# of children

# Women's % at couples' total working hours

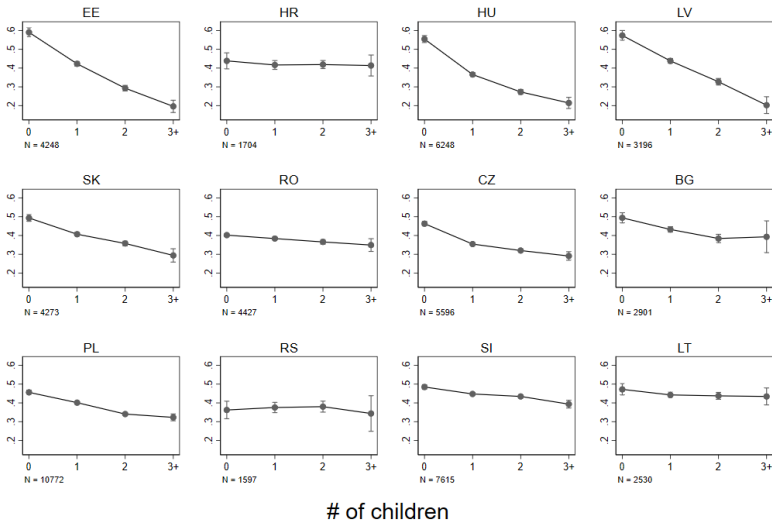
## Nordic



# of children

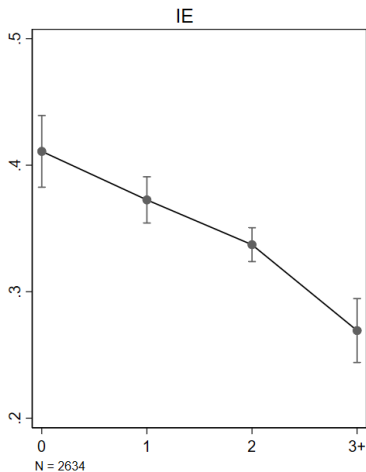
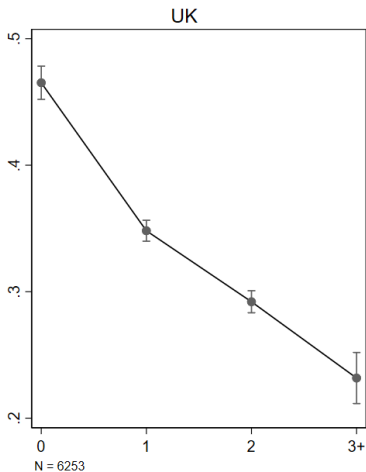
# Women's % at couples' total working hours

## Eastern-Central-Europe



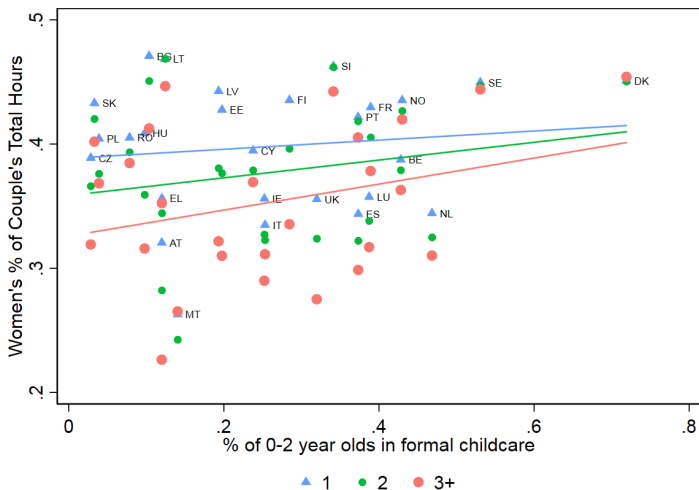
# Women's % at couples' total working hours

## Liberal

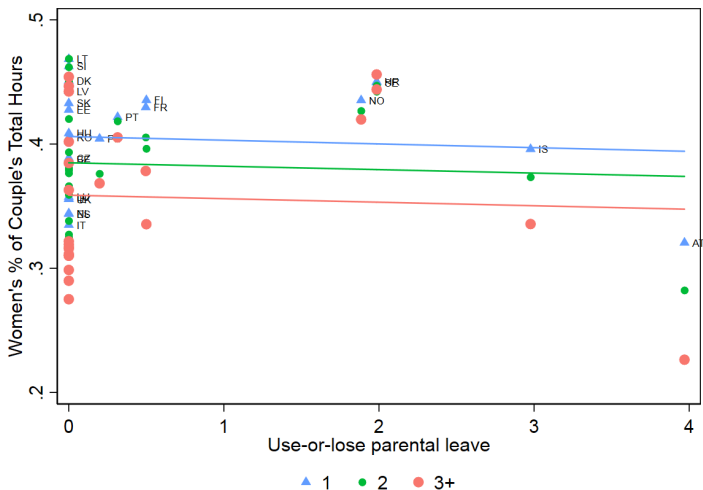


# of children

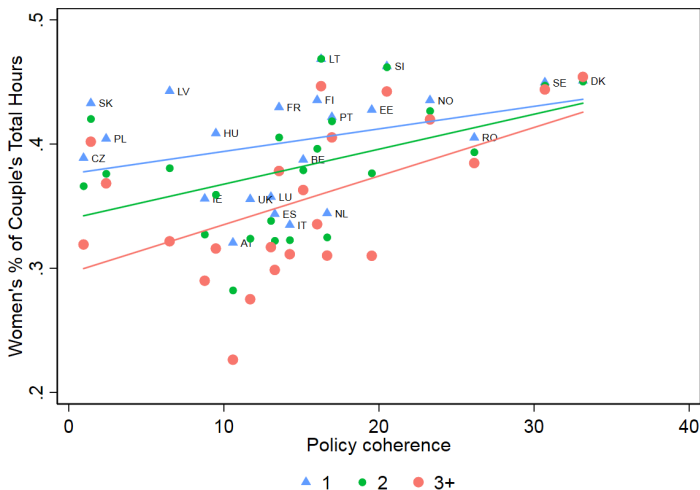
# Predicted % of woman's contribution to couple's working hours by childcare coverage & # of kids



# Predicted % of woman's contribution to couple's working hours by use-lose-months & # of kids



# Predicted % of woman's contribution to couple's working hours by **policy coherence** & **# of kids**



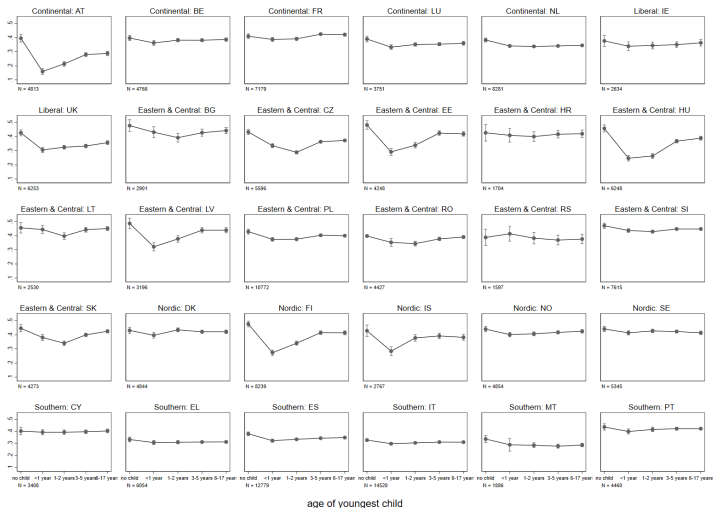
## Results of Multilevel Models)

- Specifications with random slopes and individual FEs do not yield significant relationships b/n policies and female partner's contribution at couple's total working hours
- ICC based on empty model: small (0.04)
- Result of work interruptions following childbirth (and timing of additional child/short panel duration)?



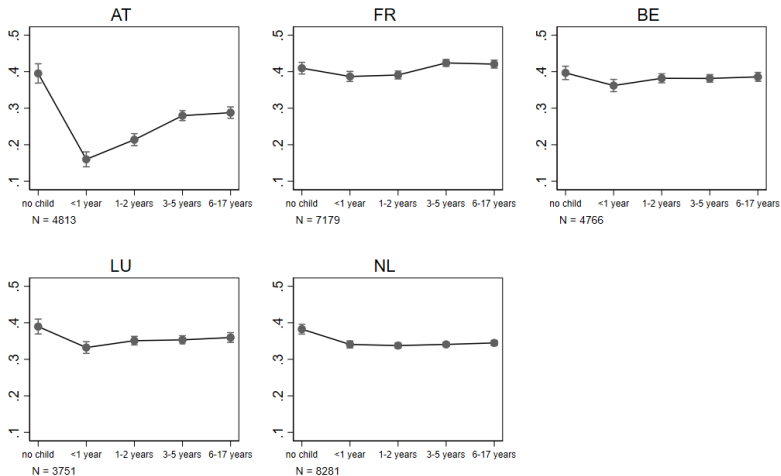
# Women's % at couples' total working hours

## Predictions with 95 percent CIs (2004-206)



# Women's % at couples' total working hours

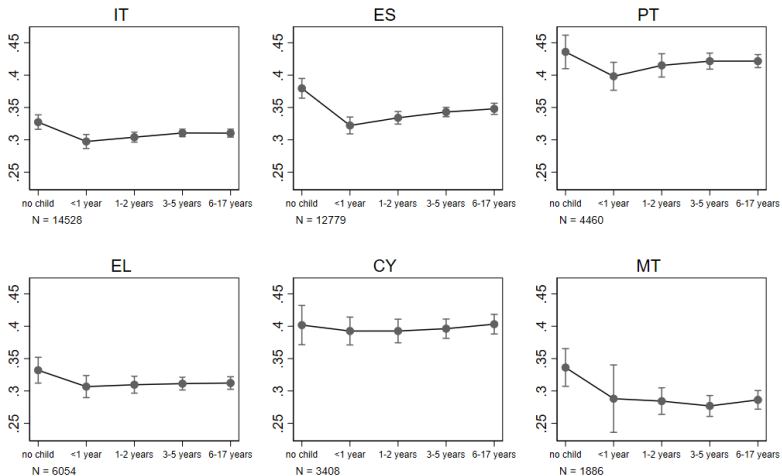
## Continental



age of youngest child

# Women's % at couples' total working hours

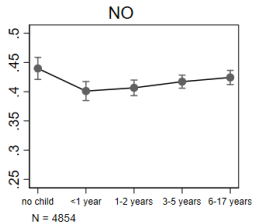
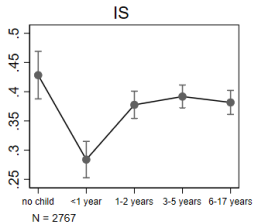
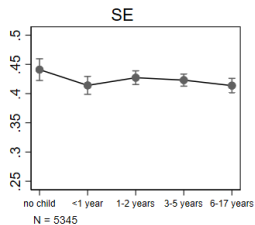
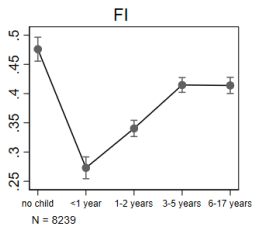
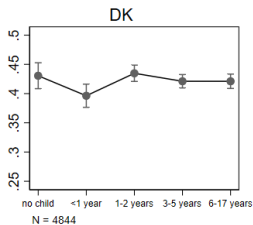
## Southern



age of youngest child

# Women's % at couples' total working hours

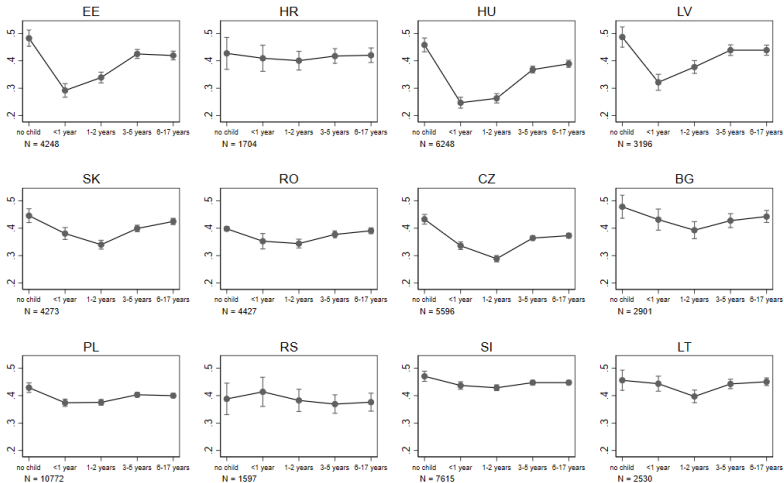
## Nordic



age of youngest child

# Women's % at couples' total working hours

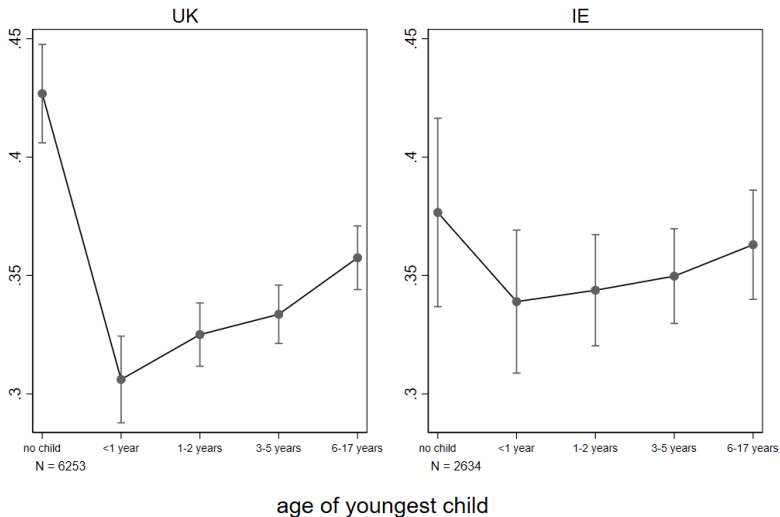
## Eastern-Central-Europe



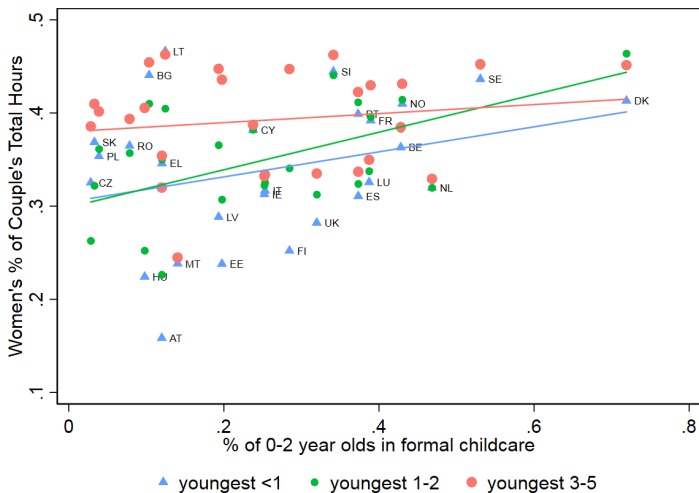
age of youngest child

# Women's % at couples' total working hours

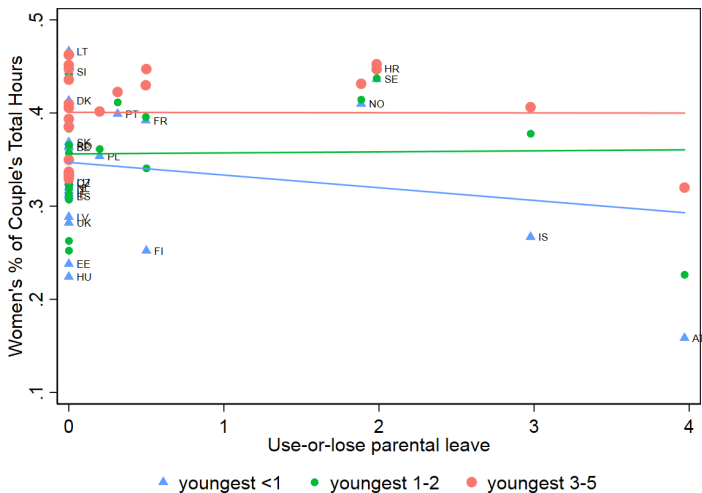
## Liberal



# Predicted % of woman's contribution to couple's working hours by **childcare coverage** & **age of youngest child**



# Predicted % of woman's contribution to couple's working hours by use-lose-months & age of youngest child











## (Potential) Contributions

- Women's working hours relative to their partners instead of working hours or lfp
- Focus on *both* first birth ("shock"-effect) and higher order birth (time intensity-effect)
- Use of comprehensive policy measure

**Thank you!**

lena.hipp@wzb.eu