

# Preventing Child Maltreatment: Beneficial Side Effects of Public Childcare Provision

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## Motivation

- This paper investigate the impact of public childcare provision on the incidence of child maltreatment using large temporal and spatial variation in childcare coverage at the county level in Germany.
- Child maltreatment is highly prevalent (e.g. 683,000 cases in the U.S. in 2015) causing high short- and long-term costs (Conti et al. 2017; Wang and Holton, 2007; Fang et al., 2012).
- However, no research whether universal interventions, such as provision of public childcare, affect child maltreatment.
- This is the case although childcare influences several aspects in family lives and although many countries expand provision.

## Why May Universal Childcare Influence Child Maltreatment?

### Improved parental resources

- Childcare may relax parental mental resource constrains.
- Employment may reduce financial constrains.
- Childcare gives possibility to interact with nursery and to connect with other support services.

### Less exposure to potential perpetrator

- Public childcare may provide lower risk of maltreatment than parental or informal childcare.
- Lindo et al. (2018) show that increase in male care givers increase child maltreatment.
- Changes in maternal employment might alter the distribution of power between perpetrators and mothers within a household.

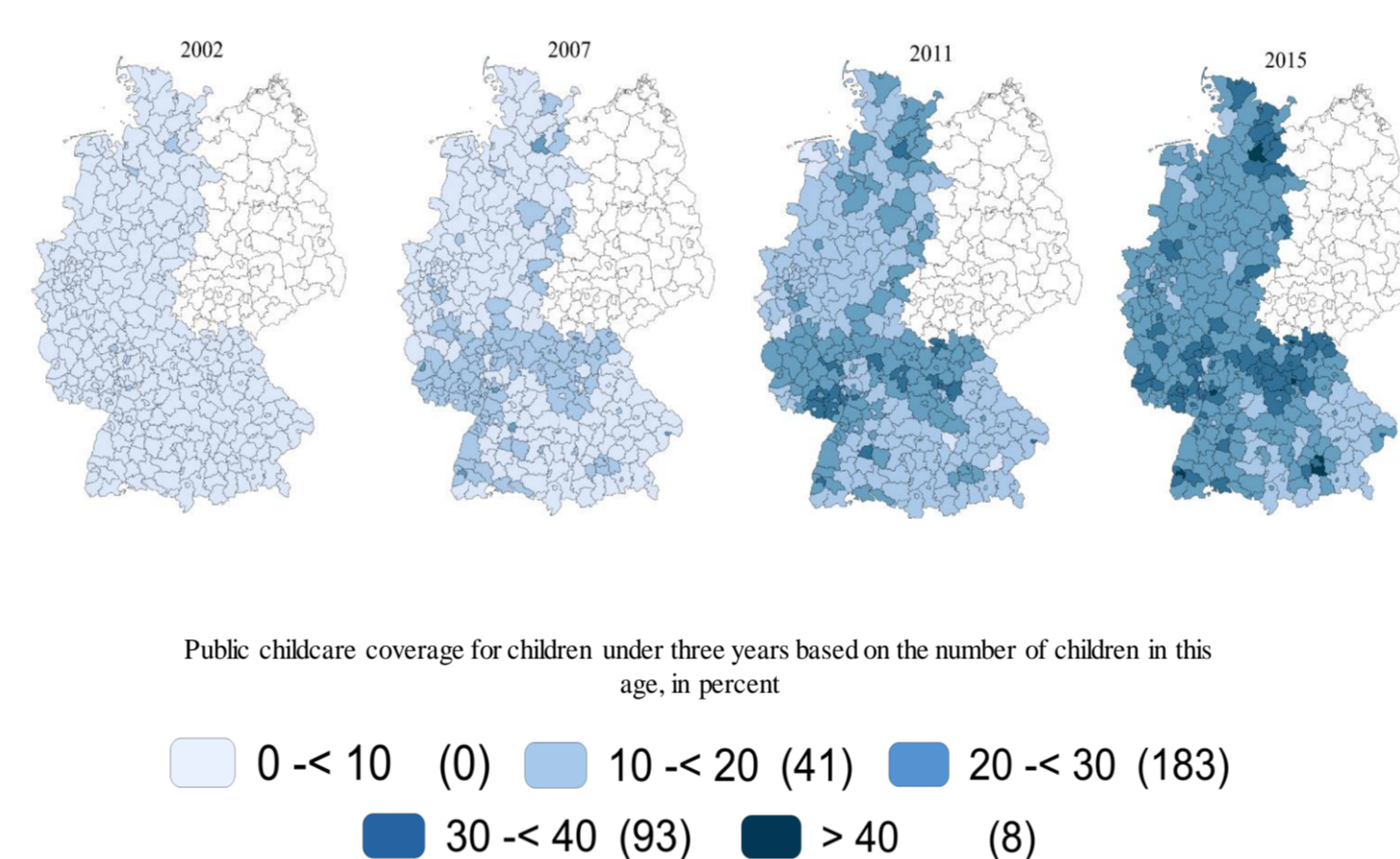
## The German Early Childcare Expansion Reform

- Implementation:
  - Increase from 2.2% in 2002 to 27.4% in 2015.
  - Large regional variation!
  - Supply is equal to utilization (but demand exceeds supply).
- Carecenters are subject to strict quality regulations.
  - Up to ten children supervised by one specialist and one (or two) assistants.
- Highly subsidized.
  - Public subsidies cover about 79% of costs.
  - 14% by parents, 7% by private organizations.

## Administrative Child Maltreatment Data

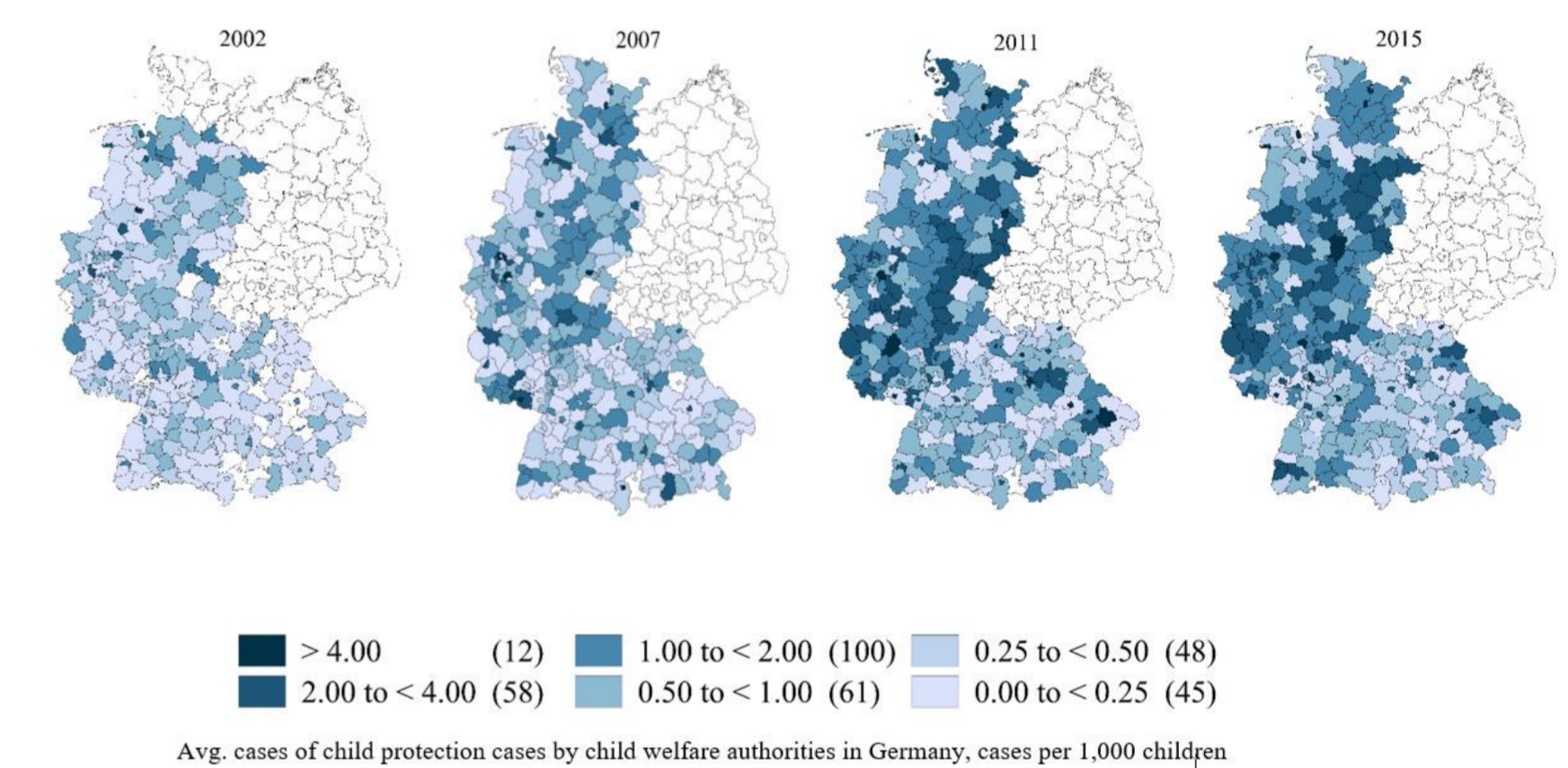
- We use child protection cases as proxy for child maltreatment.
- Child protection case is initiated if well being of the child is in danger.
- Administrative data include all individual cases per county from 2002-2015.
- Data include certain case/child characteristics, e.g.: age group, gender, reason for the case, household composition, who suggested the case.
- Overall, we can use information on 48,757 child protection cases for children below 6 years of age (over 300,000 for all age groups).

## Childcare expansion during 2002 and 2015



Notes: Data provided by the Statistical Offices of the German Laender on public child care coverage for children under the age of three. Numbers in brackets refer to number of counties in class in 2015. Calculations by the authors.

## Child Maltreatment Cases during 2002 and 2015



Notes: Data provided by the German Child and Youth Welfare Statistic on individual cases of child protection in a particular year on the county level of children under six years of age (per 1,000 children). Numbers in brackets refer to number of counties in each class in 2015. Calculations by the authors.

## Empirical Strategy

$$y_{ct} = \theta \text{treat}_{ct} + X'_{ct}\beta + \alpha_t + \delta_c + \varepsilon_{ct}$$

$y_{ct}$  are the natural logarithm of child protection cases per 1000 children (or cases for certain groups) in county  $c$  at year  $t$ .

$\text{treat}_{ct}$  childcare coverage rate in county  $c$  at year  $t$ .

$\alpha_t$  year-fixed effects.

$\delta_c$  county-fixed effects.

$X'_{ct}$  time-variant characteristics of the counties.

We do the estimation separately for younger (treated) and older (less treated) children.

## Main Results (dependent variable: log maltreatment cases per 1,000 children)

	Age 0 to <6 years			Age 12 to <18 years		
	Log cases per 1,000 children			Log cases per 1,000 children		
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Effects of one pp. childcare expansion</b>	<b>-0.018**</b> (0.008)	<b>-0.017**</b> (0.008)	<b>-0.017**</b> (0.008)	<b>0.002</b> (0.006)	<b>0.001</b> (0.006)	<b>0.002</b> (0.006)
Year fixed effects	yes	yes	yes	yes	yes	yes
County fixed effects	yes	yes	yes	yes	yes	yes
Regional economic factors	no	yes	yes	no	yes	yes
Regional educational factors	no	no	yes	no	no	yes
County year observations	3,496	3,469	3,447	3,496	3,469	3,447
Number of counties		324			324	

## Results for Subgroups (dependent variable: log maltreatment cases per 1,000 children)

Panel A: Who reported the Case	Youth Office	Police	Parents	Nursery
Effects of one pp. childcare expansion	<b>-0.026**</b> (0.010)	<b>-0.001</b> (0.007)	<b>-0.013</b> (0.008)	<b>-0.000</b> (0.004)
Panel B: Living Arrangement Before Case	Single	Both parents	Single with partner	
Effects of one pp. childcare expansion	<b>-0.009</b> (0.008)	<b>-0.017**</b> (0.005)	<b>-0.030***</b> (0.002)	
Panel C: Reason for the Case	Overburden	Neglect	Abuse	
Effects of one pp. childcare expansion	<b>-0.006</b> (0.010)	<b>-0.017**</b> (0.008)	<b>-0.019***</b> (0.006)	
Year fixed effects	yes	yes	yes	yes
County fixed effects	yes	yes	yes	yes

Notes: The table reports coefficients from regressions of equation (1) with log cases per 1,000 children in the specific category as dependent variable. Estimations are based on fixed-effects panel regressions for years 2002 to 2015. All observations are weighted by county population age 0 to <6. Standard errors reported in parentheses are clustered on the county level and are robust. Statistical significance indicated by stars (\* p<0.1, \*\* p<0.05, \*\*\* p<0.01).

## Conclusion

- A county expanding childcare by one percentage point reduces protection cases by 1.8 percent.
- Results are robust to several robustness checks.
- Results give evidence that universal interventions can reduce child maltreatment.
- Main channel: Childcare may substitute inadequate informal childcare by males in families at risk.
- High fiscal relevance due to enormous costs for the society by child maltreatment.
- Results give further legitimation for expansion of universal public childcare.