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Public childcare reform, attitudes and first births in Germany

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As part of the European Employment Strategy, non-family childcare has appeared on the political agenda of the European Union (EU). In the Barcelona targets from 2002, it was explicitly stated that, by 2010, 90 percent of children between age three and the age of school entry, and one-third of children under age three, should be provided with childcare (European Council 2002). External childcare is supposed to reduce incompatibilities between employment and family life and thus support working mothers. It was expected that due to this reconciling effect childcare provision might stimulate fertility. However, studies investigating the relationship between childcare and childbearing behavior have found inconsistent effects. On the macro-level, some studies have indicated that countries with a higher childcare provision also show higher fertility levels (Castles 2003; Esping-Andersen 2000). On the one hand, a number of micro-level studies confirmed this positive effect (Baizán 2009; Del Boca 2002; Rindfuss, Guilkey, Morgan, Kravdal, and Guzzo 2007). On the other hand, several studies did not find a statistically significant relationship between public childcare and childbearing (Andersson, Duvander, and Hank 2004; Brodmann, Esping-Andersen, and Güell 2007; Hank and Kreyenfeld 2003; Klevmarken and Tasiran 1996). Yet other results indicate mixed effects that varied over parities, control variables in the model, model specification and countries (Kravdal 1996; Lappegård 2010; Rønsen 2004). One methodological problem of the existing studies might be related to measurement issues of childcare access (Baizán 2009; Gauthier 2007). Most studies use childcare enrollment rates that are rather a measure of demand and usage than of childcare supply.

This study contributes to the literature by analyzing the effect of a childcare reform on fertility in Germany. The reform was an initiative imposed by the federal government. Thus, we assume that the childcare expansion on the municipal level was driven by an exogenous policy goal rather than by the local demand of parents. This allows us to investigate the causal effect of childcare provision on fertility behavior.

The childcare reform in Germany increased the childcare availability in many districts considerably. In 2008, the German government enacted a reform to increase the level of childcare for children under age three to a level of 35% of children in this age group by 2013. Especially in western Germany, the childcare enrollment rates in the districts were much lower than this threshold before the political initiative. In 2008, the 314 western districts reached an average rate of 12.1 percent (DESTATIS 2009) for children under age three. Since then, the municipalities had invested substantially and in 2012, the average enrollment rate was 22.3 percent (DESTATIS 2012).

This setting allows us to analyze whether the increase in district level childcare enrollment had an effect on the transition to first birth for women living in the respective region. In our empirical analyses, we investigate the relationship between childcare availability and the transition to first births in western Germany. We combine district level enrolment rates provided by the German statistical office with individual level panel data. Enrolment rates refer to the percentage of children using public childcare in all children of a specific age group. To account for the childcare reform, we include both the level and the yearly increase in enrollment rates in percent. The individual level data is taken from the new German Family Panel pairfam that is collected annually for the years 2008 to 2011. The data is organized in discrete-time event-history format with personyears as the unit of observation. The sample is reduced to women who are childless in the first wave in the age group 20 to 39 years. The variable of interest is based on the self-reported occurrence of a first birth (or pregnancy) since last interview. Within the sample, we found 301 entries into motherhood (or first pregnancies, respectively). For the multivariate analyses, we run discrete time hazard models including a random effects component in order to account for the multi-level structure of the data. We expect that women living in districts where the increase in childcare provision is large have a higher first birth risk than women living in a region with lower-scale childcare expansion.

Further, the data allows us to take into consideration individual level attitudes. Existing studies assume that an important pre-requisite for the childcare effect is the acceptance of non-family childcare (Hank and Kreyenfeld 2003; Rindfuss et al. 2007). Women believing that a child in public childcare suffers might also think that it is a mother's duty to exit the labor market when her children are young. Such women are unlikely to perceive public childcare provision for infants and toddlers as incentive for childbearing.

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