Causal effects on employment after first birth - A dynamic treatment approach

Bernd Fitzenberger*, Katrin Sommerfeld**, Susanne Steffes***

Abstract: The effects of employment breaks on labor market outcomes are of great relevance in particular for females in relation with childbirth. In this paper we estimate the effect of the timing of women’s first birth on later labor market outcomes, more precisely the effect on employment. In order to investigate the treatment effect of having the first childbirth now or waiting, we employ the dynamic treatment approach in the spirit of Sianesi (2004, 2008). We combine this approach with the inverse probability weighting (IPW) as in Busso et al. (2009) for better performance than matching with respect to bias and variance in finite samples with good overlap. Finally, we assess effect heterogeneity by estimating ex post outcome regressions as in Abadie, Imbens (2006). We implement this novel approach on a monthly basis by using the German SOEP data set from 1991 to 2008. The results show that there are very strong employment effects around childbirth which decline over time, but remain significantly negative over the whole considered period of five years after childbirth. Further, the treatment effect patterns display only some modest heterogeneity across different age groups. Finally, we find that the facilitation of part-time work as introduced in 2001 did increase maternal employment rates to a significant extent.

JEL-Classification: C14, J13, J22

Keywords: Female labor supply, Maternity leave, Dynamic treatment effect, Inverse Probability Weighting

* University of Freiburg, IFS, IZA, ZEW. E-mail: bernd.fitzenberger@wzw.uni-freiburg.de
** University of Freiburg. E-mail: katrin.sommerfeld@wzw.uni-freiburg.de
*** Centre for European Economic Research ZEW. E-mail: steffes@zew.de