

The Fertility Effect of Cutting Child Related Welfare Benefits

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Research Question: Do generous welfare benefits act fertility enhancing for families on welfare?

Motivation: Although a decades long political debate, if child related welfare payments encourage fertility, no clear answer from economic research so far.

Author/Year	Method	Region	Income Change	Fertility Reaction	Elasticity
Welfare Recipients					
Moffit (1998)	Literature Review	US	Varies	Varies	Varies
Kearny (2004)	DiD	US	~(-7.9%)	-	-
Wallace (2009)	DiD	US	~(-7.9%)	-	-
Brewer et al. (2012)	DiD	UK	12.0%	15.0%	1.3
General Populations					
Milligan (2005)	DiD	Quebec/Canada	4.3%	16.9%	3.9
González (2013)	pre-post analysis	Spain	8.3%	6.0%	0.7
Cohen et al. (2013)	IV	Israel	-3.3%	-9.6%	2.9

We add: Evidence from a large and sudden welfare cut (18% in the first year after birth), which we can analyse with an exceptionally large and detailed data set

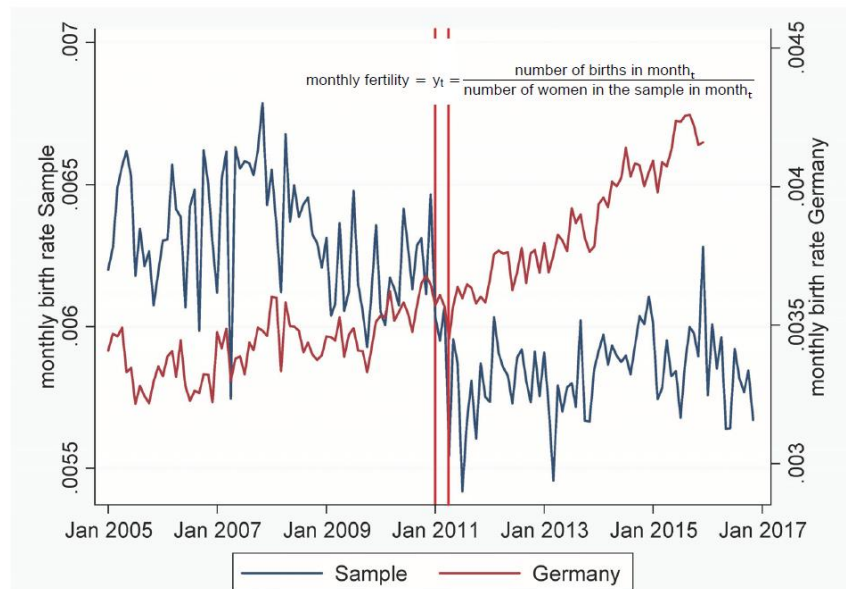
Data and Sample:

- Administrative data from the federal employment agency of Germany -> 50% of all women who ever received welfare benefits
- Women are included who have at least one previous child
- 46 million monthly observations of 463.000 women, 285.000 births

Estimation:

$$birth_{it} = \alpha + \beta \cdot post_{it} + \gamma_1 m_{it} + \gamma_2 m_{it}^2 + \gamma_3 m_{it} \cdot post_{it} + \gamma_4 m_{it}^2 \cdot post_{it} + \sum_{c=2}^{12} \mu_c \cdot month_{it} + \lambda X_{it} + \epsilon_{it}$$

Results:



	Full Sample (1)	Second Children (2)	Third and higher Parities (3)	No Sec. School Degree (4)	Lower Sec. School Degree (5)	Middle Sec. School Degree (6)	Higher Sec. School Degree (7)
Reform Dummy	-6.762*** (1.121)	-4.909*** (1.654)	-8.689*** (1.611)	-12.986*** (3.012)	-5.231*** (1.657)	-6.58*** (2.183)	-5.977* (3.461)
Observations	45,966,533	18,939,651	27,026,882	4,061,654	21,154,196	14,462,735	5,700,001
Units of Observation	463,263	314,250	293,105	38,733	211,315	147,559	60,102
Birth Rate 2010	7.60%	9.35%	6.32%	11.15%	7.63%	6.52%	6.55%
Birth Rate 2011/12	6.96%	8.76%	5.75%	9.54%	7.17%	5.97%	6.10%

Notes: Robust SE, clustered by woman, in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Source: Own calculations based on LHG and IEB data.

Robustness:

- No sudden change in sample composition
- No confounding reforms or factors that might cause a structural break
- Mothers could leave welfare receipt and give birth (without welfare receipt no information about birth is available) -> Subgroup analysis and robustness checks suggest small influence

Conclusion:

- Robust, significant effect of 6.8%
 - More robust than findings of previous literature
 - Income elasticity of 0.37 -> Smaller than for general populations (between 0.7 and 3.9)
 - The reaction is weaker than for general populations
- >The worry of encouraging fertility is a weak argument to pay low amounts of child related welfare benefits