

*The effects of emergency contraception on
women's socioeconomic status: empirical
evidence from European data*

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Emergency Contraception

- focus was so far on outcomes as birth and abortion rates, teenage pregnancies and sexual behavior

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Hypothesis:

- **Reduction** of the **costs of postponing childbearing**.
 - time & behavioral costs
- By **avoiding an unintended pregnancy**, women have the opportunity to **delay childbearing** to a point later in life and free up their resources to **invest** in their **education** and their **career**.

Literature Review

The Pill and its impact on

- careers in professional occupations of unmarried women (Goldin & Katz, 2002, Journal of Political Economy)
- educational and occupational outcomes of married women (Edlund & Machado, 2011, IZA Discussion Paper)
- lifecycle labor supply at the extensive and intensive margin of unmarried women (Bailey, 2006, QJE)
- years of education and formal sector employment of women in Columbia (Miller, 2009, the Economic Journal)

Literature Review

Emergency Contraception (Plan B) - Over the counter access

- birth rates for disadvantaged subgroups in the U.S. (Koohi, 2013, manuscript)
- effects on birth and abortion rates as well as sales (Gross et al., 2014, Journal of Policy Analysis and Management)
- teenage pregnancies in England (Girma and Paton, 2006, Health Economics)

Institutional Background

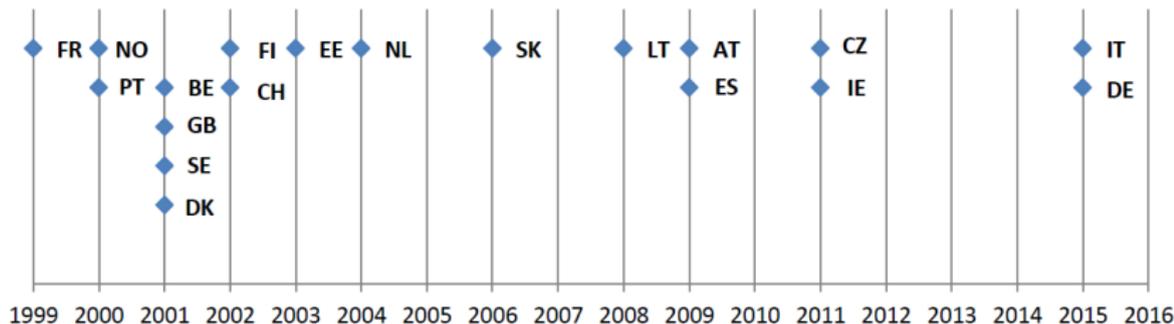
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- LNG available since 1999 and prescription-free since:



Source: European Consortium for Emergency Contraception, own depiction

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Restriction of dataset

- women aged 15-45 years at the time of the survey
- only 21 countries can be used for the analysis
- after the restriction: 68,717 observations for 21 countries for total time frame

Estimation Approach

Difference-In-Differences approach that exploits country- and year variation of prescription-free LNG-EC

Baseline specification:

$$Y_{ict} = \alpha + \beta PFEC_{ct} + \lambda_t + \mu_c + \gamma age_{ict} + \epsilon_{ict} \quad (1)$$

Outcomes Y_{ict} :

- EducYears: years of full-time education completed
- EducLevel: highest level of education either post-secondary education (ISCED-4) or tertiary education (ISCED-5/6)
- pdwrk: doing last 7 days - paid work

$PFEC_{ct}$ is the indicator of interest which equals 1 if country c had LNG-EC prescription-free in survey year t and 0 otherwise.

Estimation Approach

Baseline specification with individual controls:

- migration background of respondent, parental migration background, religion, education of parents

$$Y_{ict} = \alpha + \beta PFEC_{ct} + \lambda_t + \mu_c + \gamma Z_{ict} + \epsilon_{ict} \quad (2)$$

Specification with country-specific linear time trends:

$$Y_{ict} = \alpha + \beta PFEC_{ct} + \lambda_t + \mu_c + \gamma Z_{ict} + \mu_c \times \text{timetrend} + \epsilon_{ict} \quad (3)$$

Results

Effect of prescription-free emergency contraception for women age 15-45

Dependent Variables	EducYears			EducLevel			pdwrk		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
<i>PFEC_{ct}</i>	0.319** (0.132)	0.241* (0.130)	0.277* (0.162)	0.023 (0.015)	0.013 (0.015)	0.012 (0.016)	-0.001 (0.010)	-0.003 (0.010)	0.010 (0.018)
Country Fixed-Effects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed-Effects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual Background Characteristics?	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Country-by-Year Controls?	No	No	No	No	No	No	No	No	No
Country-Specific Time-Trend?	No	No	Yes	No	No	Yes	No	No	Yes
Observations	67,621	67,621	67,621	68,607	68,607	68,607	68,607	68,607	68,607

Standard errors, clustered at country and year, in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level.

Results

Heterogeneity

- by age
- by socioeconomic background
- differentiation between countries with higher abortion rates and countries with lower abortion rates

Mechanism

- delay of first birth
- birth rate
- marriage / cohabitation

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