

**Radioactivity in the cradle: the effect of Chernobyl fallout on fertility.  
Evidence from the Swiss census**

Fancesca Marino (University of Padova)  
Luca Nunziata (University of Padova and IZA)  
Lorenzo Rocco (University of Padova)\*

**Abstract.**

In this study we inquire whether fertility in Switzerland was affected by the radioactivity fallout following the Chernobyl accident of April 1986.

The fallout was stronger in certain areas than others, depending on elevation and winds circulation. Conditional to a number of observable characteristics the variation in the level of radiation is exogenously given.

We exploit the wealth of data offered by the complete Swiss census to compare across municipalities reached and non reached by the fallout the trends between 1970 and 2000 in the number of children per woman who were in fertile age in 1986.

Preliminary results indicate that in those municipalities where the level of caesium 137 was larger than 20 Kbk/m<sup>2</sup>, the number of children per woman declined by 0.04.

Results are robust to a number of sensitivities, where we alter the control group.

Several mechanisms could explain the effect we find, such as women decision to postpone conception for precautionary reasons or a selective emigration of those women who were planning to have child at the time of the fallout. The latter mechanism is difficult to investigate with our data, but some indirect evidences does not square well with this explanation.

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\* Corresponding author: e-mail: [lorenzo.rocco@unipd.it](mailto:lorenzo.rocco@unipd.it); tel. 049-827-4260