



Reproductive decision-making
in a macro-micro perspective

Cross-National Differences in the Effect of Educational Attainment on Fertility Quantum: A Study Based on ESS Data

Eva-Maria Merz

Aart C. Liefbroer

(NIDI / VU University Amsterdam)

Background (I)

- ❖ **Much interest in the effect of educational attainment on fertility**
- ❖ **Both New Home Economics and Second Demographic Transition theory suggest higher education is related to later and lower fertility among women**
- ❖ **Expectations for men are less clear. Higher income would lead to higher fertility among the highly educated, stronger emphasis on autonomy would lead to lower fertility**
- ❖ **The effect of educational attainment is thought to be weaker – or even non-existent – in countries where the combination of employment and parenthood is facilitated by governments**

Background (II)

- ❖ **Most studies until date examine the link between educational attainment and the timing of fertility**
- ❖ **A main reason for doing so is that one has to wait until the end of the reproductive period to be able to analyze the effect of educational attainment on fertility quantum. Otherwise, one could misinterpret timing effects as being quantum effects**
- ❖ **Existing quantum studies usually focus on one or a few countries, and are not able to test whether the strength of the education-fertility link differs across countries**

Research Questions

- 1. Is there a negative educational gradient in quantum fertility?**
- 2. Is this gradient stronger for women than for men?**
- 3. Is this gradient stronger in countries with poor arrangements to combine parenthood and employment than in countries with good arrangements to do so?**

Hypotheses

- 1. The ultimate number of children that men and women have in Europe is negatively related to their level of educational attainment**
- 2. This negative relationship is stronger for women than for men**
- 3. This negative relationship is stronger in countries with poor arrangements to combine parenthood and employment than in countries with good arrangements to combine parenthood and employment**

Problem: Classifying countries

- ❖ **How should one compare countries on ‘employment-parenthood compatibility’?**
- ❖ **The focus on cohorts that have completed their fertility implies that most of their fertility career occurred in the 1980s and 1990s**
- ❖ **Few useful comparative measures that allow classifying European countries during this period are available**
- ❖ **Solution: classifying countries based on welfare regime type**
- ❖ **Combination of Esping-Andersen, Fenger, and Ferreira**

Classification of countries

- ❖ **Social-democratic**
- ❖ **Liberal**
- ❖ **Conservative-corporatist (German vs. non-German speaking)**
- ❖ **Mediterranean**
- ❖ **Former USSR**
- ❖ **Post-communist Middle and Eastern Europe**

Data ESS

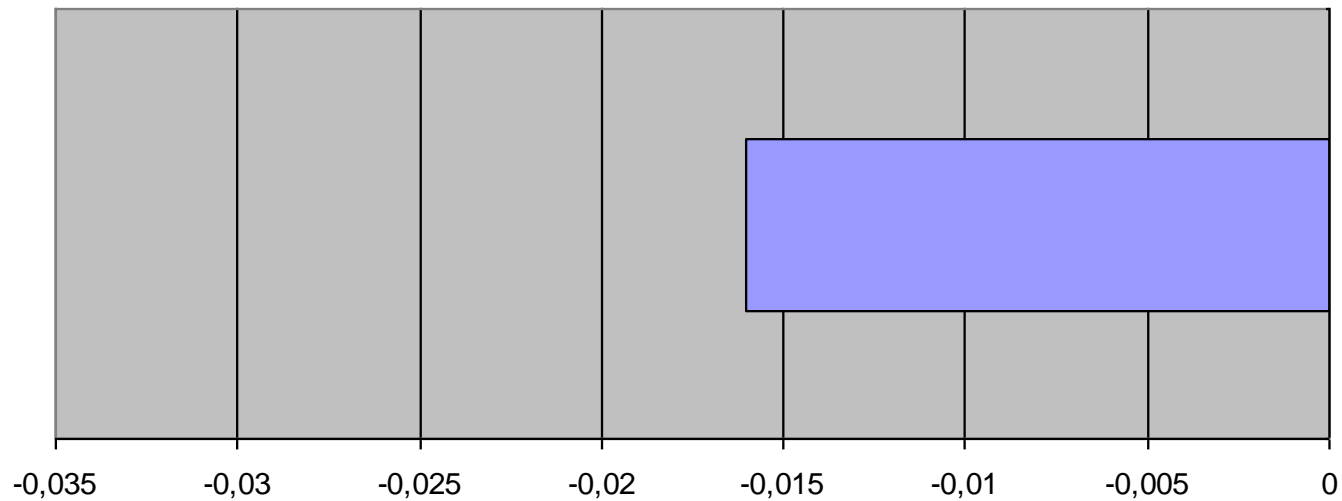
- ❖ **ESS wave 3 - 2006**
- ❖ **Men and women age 40 and over**
- ❖ **Dependent variable: number of children ever had**
- ❖ **Independent variables: age, age squared, sex, ever partnered, educational attainment (number of years spent in education)**
- ❖ **25 countries**
- ❖ **N = 29,035**
- ❖ **Multi-level negative binomial model, estimated with MLWin**

Classification of countries

- ❖ **Social-democratic – Denmark, Finland, Norway, Sweden**
- ❖ **Liberal – Great Britain, Ireland**
- ❖ **Conservative-corporatist (non-German speaking) – Belgium, France, The Netherlands**
- ❖ **Conservative-corporatist (German speaking) – Austria, Germany, Switzerland**
- ❖ **Mediterranean – Cyprus, Spain, Portugal**
- ❖ **Former USSR – Estonia, Latvia, Russia, Ukraine**
- ❖ **Post-communist Middle and Eastern Europe – Bulgaria, Hungary, Poland, Romania, Slovenia, Slovakia**

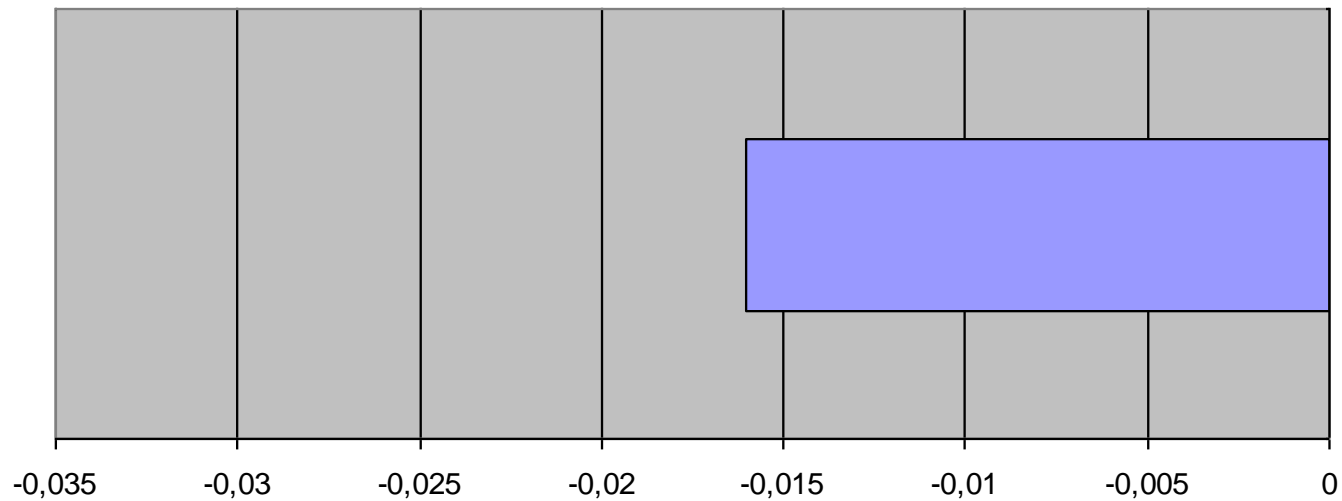
Main effect

Effect of educational attainment on completed fertility



Main effect

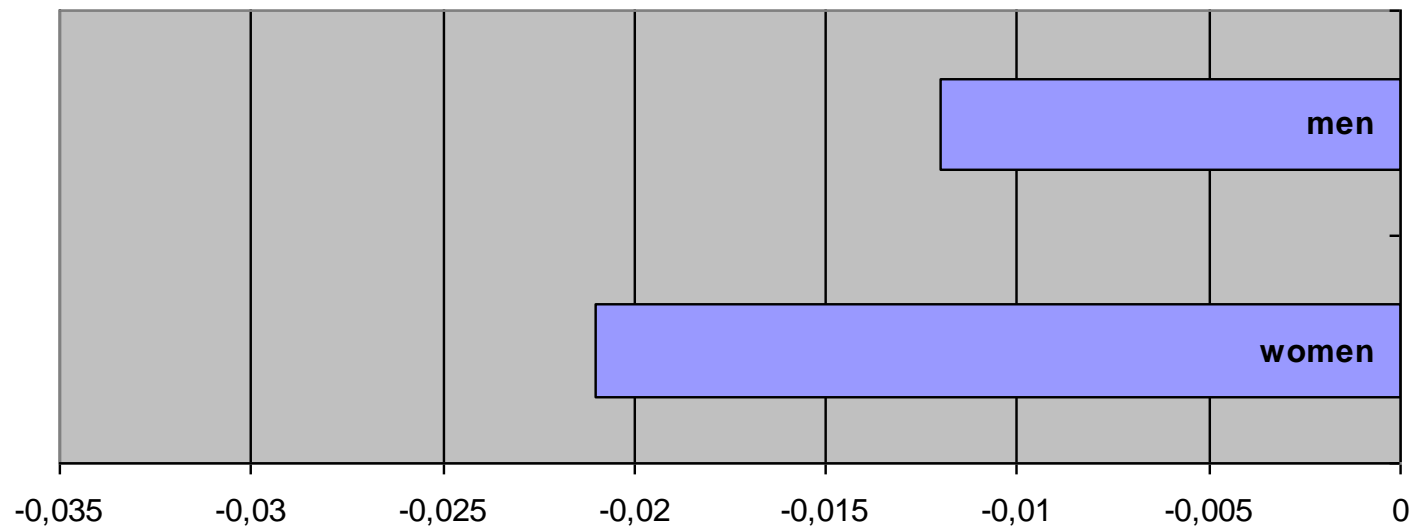
Effect of educational attainment on completed fertility



Hypothesis 1 confirmed

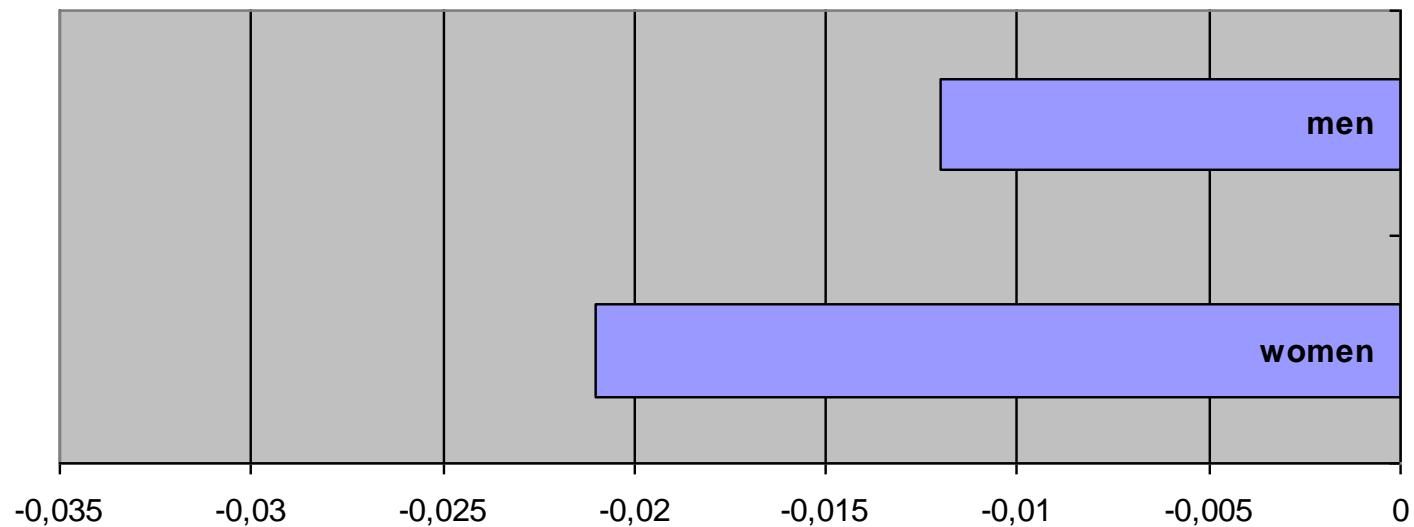
Differences between men and women

Effect of educational attainment on completed fertility



Differences between men and women

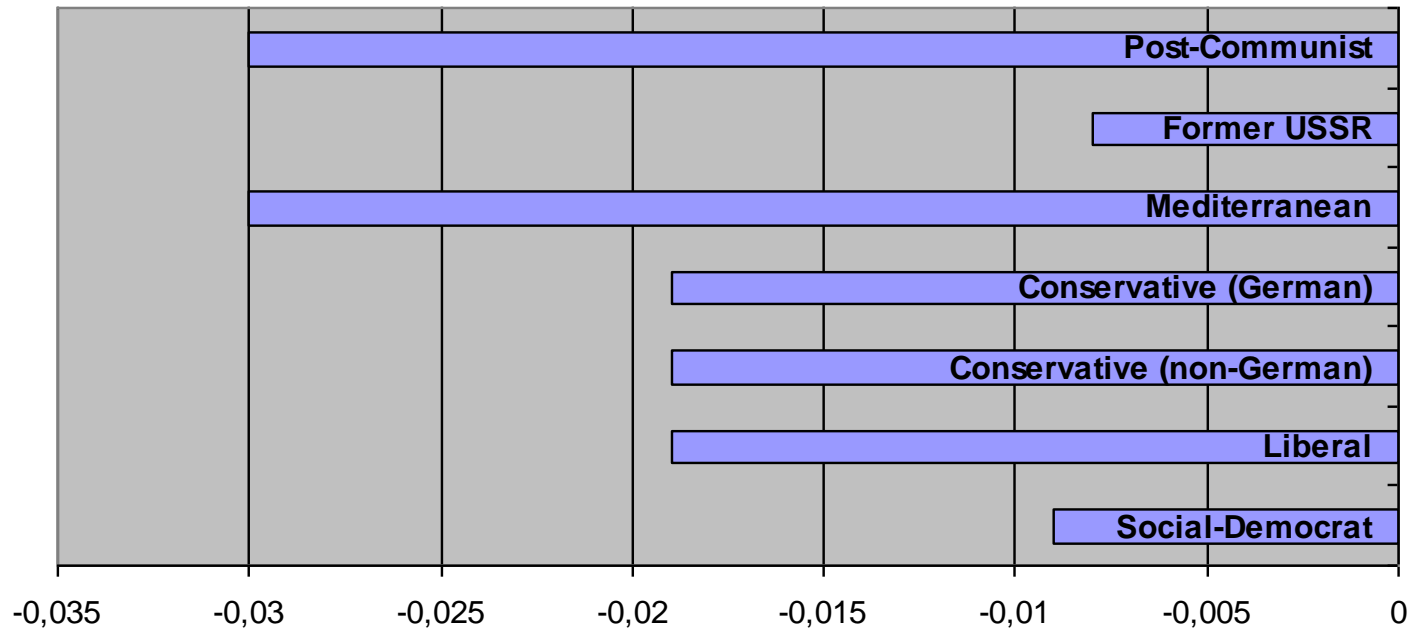
Effect of educational attainment on completed fertility



Hypothesis 2 confirmed

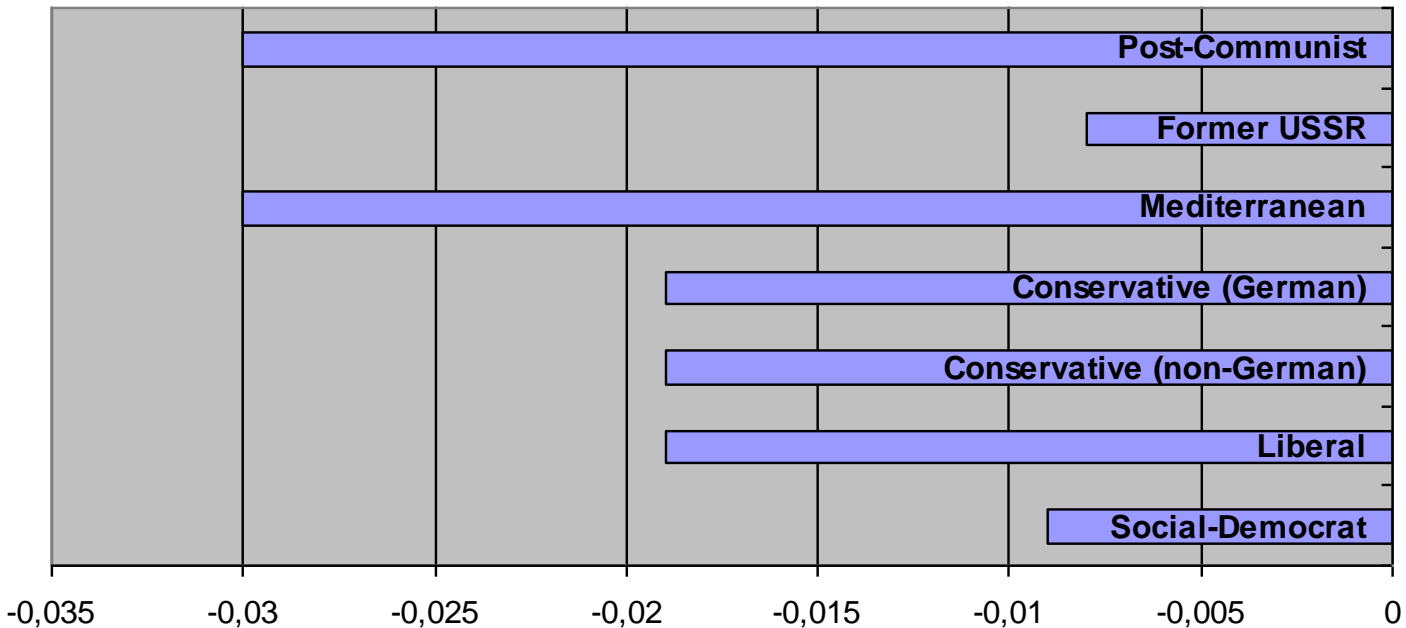
Differences between men and women

Effect of educational attainment on completed fertility (women)



Differences between men and women

Effect of educational attainment on completed fertility (women)



Hypothesis 3 partly confirmed

Conclusions (I)

- ❖ **On average, across Europe, the effect of educational attainment on completed fertility is negative for both men and women**
- ❖ **For men, this suggests that the value effect of educational attainment is stronger than the income effect**
- ❖ **The educational gradient is lowest in countries with a social-democratic welfare regime and in the former USSR**
- ❖ **In social-democratic countries, this is linked with relatively high fertility for both high and low educated**
- ❖ **In the former USSR, this is linked with relatively low fertility for both high and low educated**

Conclusions (II)

- ❖ **Social-democratic countries: Combination policies seem to work**
- ❖ **Former USSR: Both low and high educated are forced to work. If combination policies are not well-established, this leads to lower fertility among high but also among low educated**
- ❖ **Next step: fine-tuning model**