

The educational gradient of fertility intentions: regional differences in Europe

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FOR DEMOGRAPHY AND
GLOBAL HUMAN CAPITAL

Outline



Meta-analysis of published studies considering the relationship between fertility intentions and educational attainment



Multilevel analysis on the intentions to have another child in the next three years

AIM

Conditions under which educational attainment is positively correlated with fertility intentions in a broad cross-country comparative setting using different measures of fertility intentions, and different methodological approaches

MOTIVATION

"...when it comes to women's lifetime fertility intentions education level has a positive effect both at the individual- and country-level." (Testa 2014)

"...the negative association between educational level and completed fertility seems to be a stubborn one..." (Bjrkklund 2006)

MECHANISMS OF POSITIVE LINK

- Marriage market: highly educated women are in more stable partnerships
- Gender roles: highly educated women receive more help from their partners in child-caring and childrearing tasks
- Labour market: Highly educated women find a stable/secure job more easily

CONCEPTS

Intention to have an (additional) child
[childbearing intention]



Intention to have an (additional) child in a given
temporal framework
[child-timing intention]



MEASURES

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FERTILITY INTENTIONS

Intention to have a(nother) child as in the collected papers

Short-term fertility intentions: def yes, prob yes, prob not, def not

EDUCATION

LOW EDU: ISCED 0-2

MEDIUM EDU: ISCED 3-4

HIGH EDU: ISCED 5-6

DATA

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INTENTION TO HAVE A CHILD

Meta-sample:
38 study lines (11
papers between
1990-2011)

INTENTION TO HAVE A CHILD IN THE NEXT THREE YEARS

Pooled country dataset:
63,260 women of
reproductive ages from
GGS W1 and W2 (16*
countries. 2002-2012)

* Countries: Austria, Belgium, Germany, France, the Netherlands, Italy, Norway, Sweden, the Czech Republic, Hungary, Poland, Bulgaria, Romania, Estonia, Lithuania, and Russia

(Part 1) Meta-analysis

Quantitative comparison of results across studies, with the use of adjusted measures of comparability, so-called **effect sizes**. Two-Step procedure

- 1) Suitable research papers are collected according to the criteria of comparability of outcome variable (“...to have a(nother) child in the future?”)
- 2) Coefficients of each study are recalculated to effect sizes

Effect size

The effect size refer to the difference in fertility intentions between a 'high' and a 'low' educated group.

$$ES = \text{COEFFICIENT}_{high} - \text{COEFFICIENT}_{low}$$

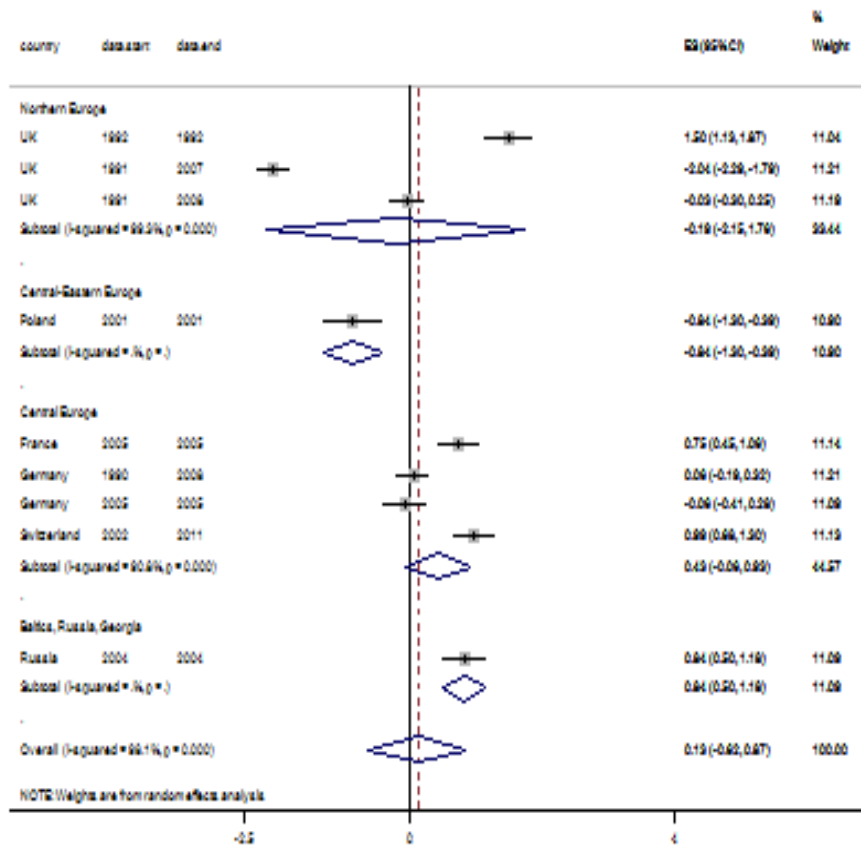
Caveat:

positive changes in ES may be due to smaller $COEF_{low}$ or larger $COEF_{high}$
negative changes in ES may be due to larger $COEF_{low}$ or smaller $COEF_{high}$

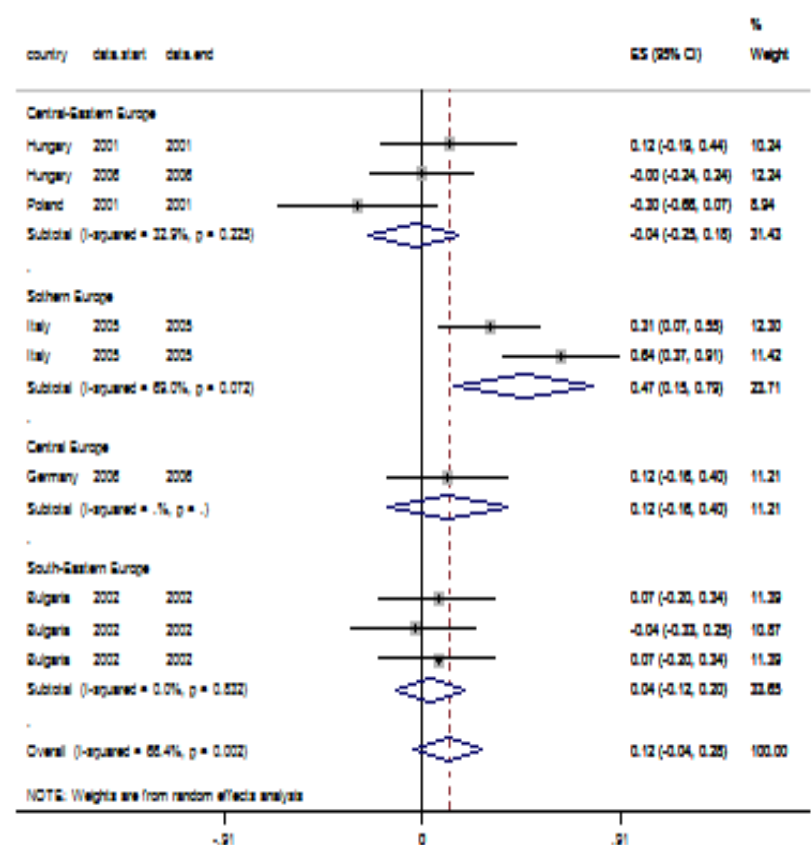
META-ANALYTIC RESULTS

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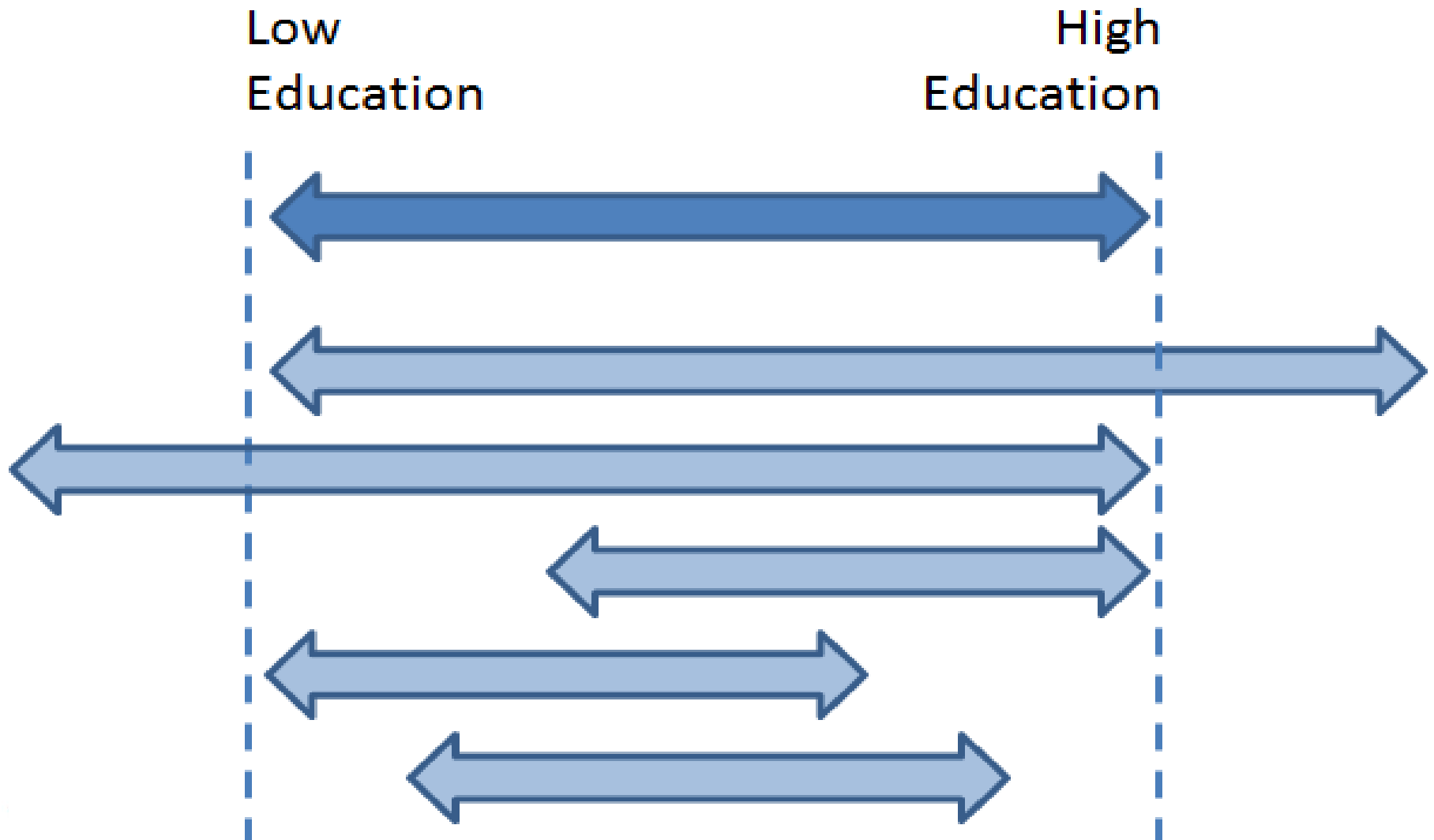
Childless women



Women with one child



Methodology - judging effect sizes



(Part 2) Regression-analysis

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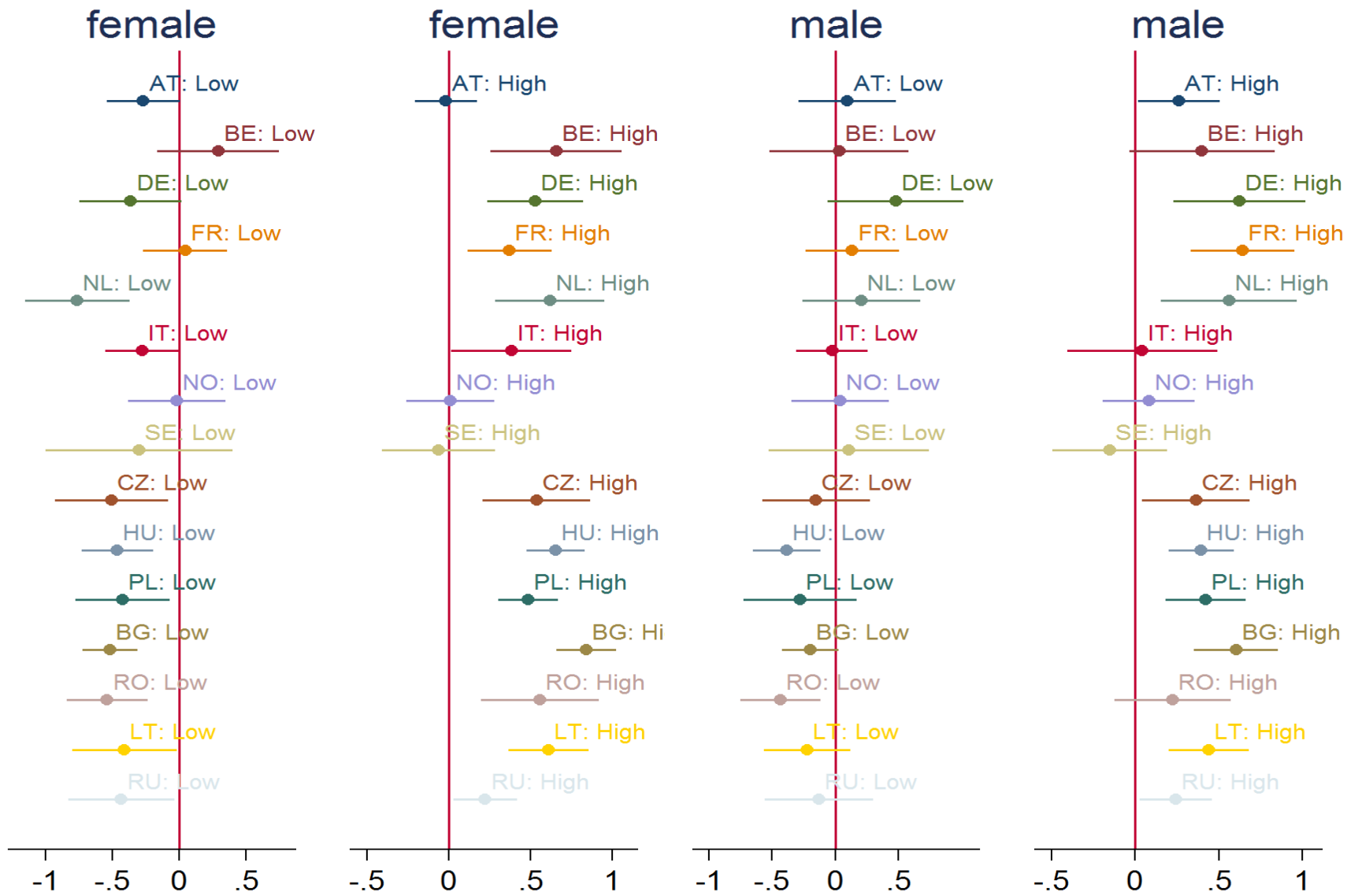
Ordinal logistic regression models with fixed country effects.

$$P(\text{Intention}_i = t_i | x) = f_{\text{country}} + \beta_{\text{country}} \cdot \text{Macro}_{\text{country}} + \gamma_i \cdot \text{Individuals}_i + \epsilon_{\text{country}} + \epsilon_{\text{individual}}$$

Individual-level controls: age, enrollment in education, employment, partner's employment, age of the youngest child

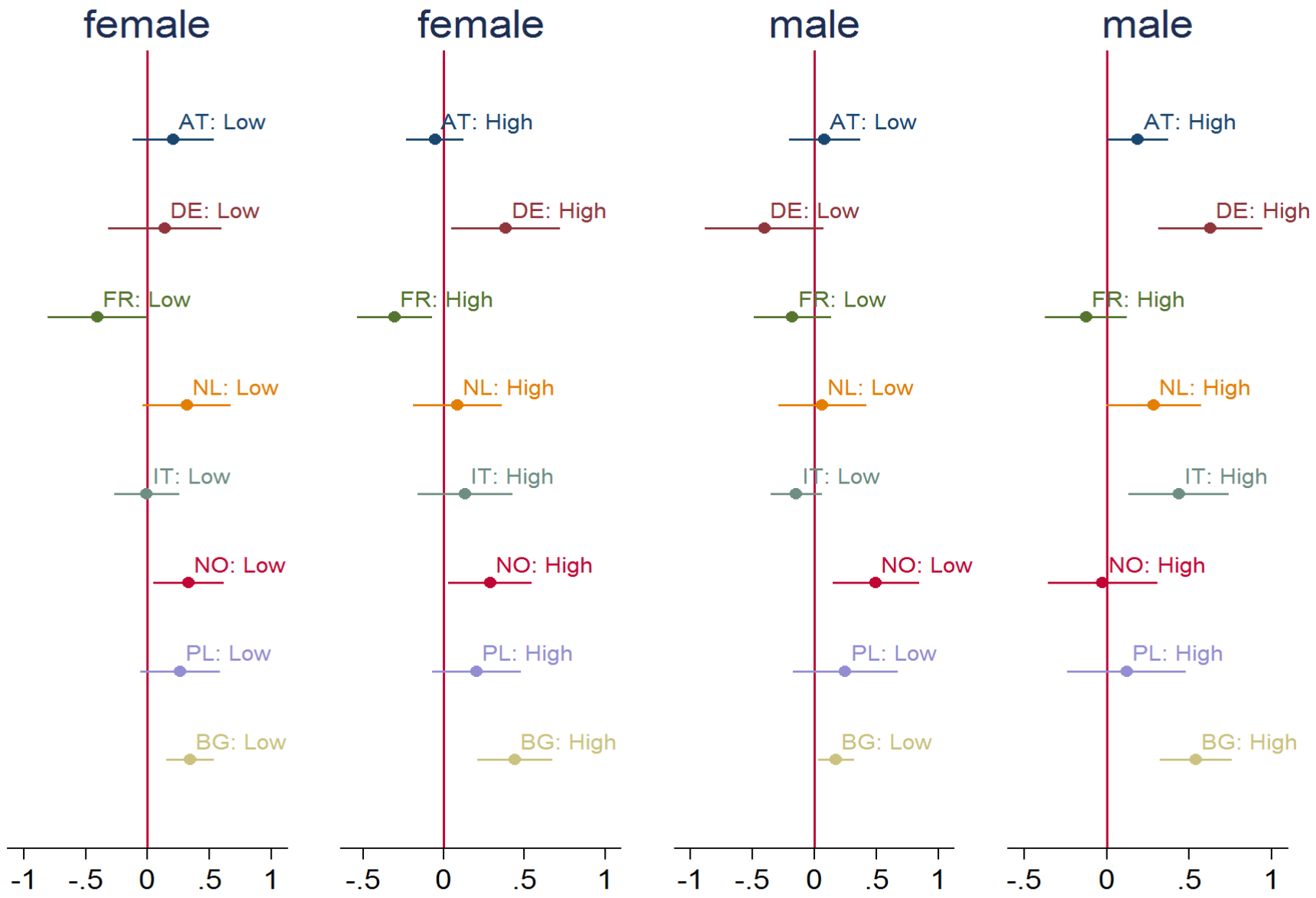
Country-level covariates: the ratio of female to male labour force participation rate, the percentage of females with tertiary education, the percentage of women in vulnerable employment, and the percentage of women in part-time employment.

EFFECTS OF EDUCATION ON CHILD-TIMING INTENTIONS.



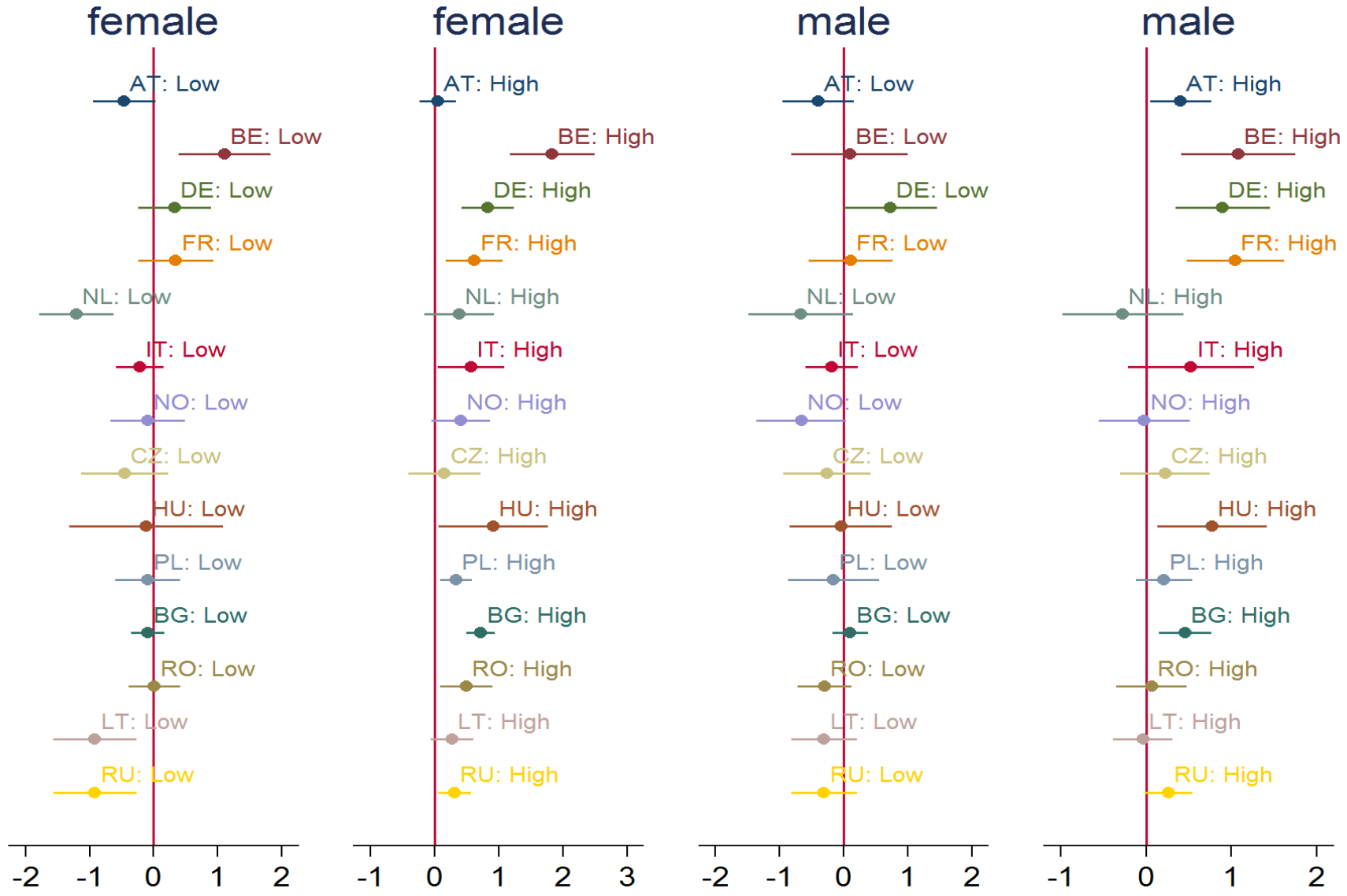
Education Coefficients for Women (Left) and Men (Right) (all parities)
 Controls: Age, education, work status, partner's work status, partner's education, parity, age of youngest child
 Source: GGS1, GGS2, and own calculations

EFFECTS OF EDUCATION ON CHILD-TIMING. PARITY ZERO



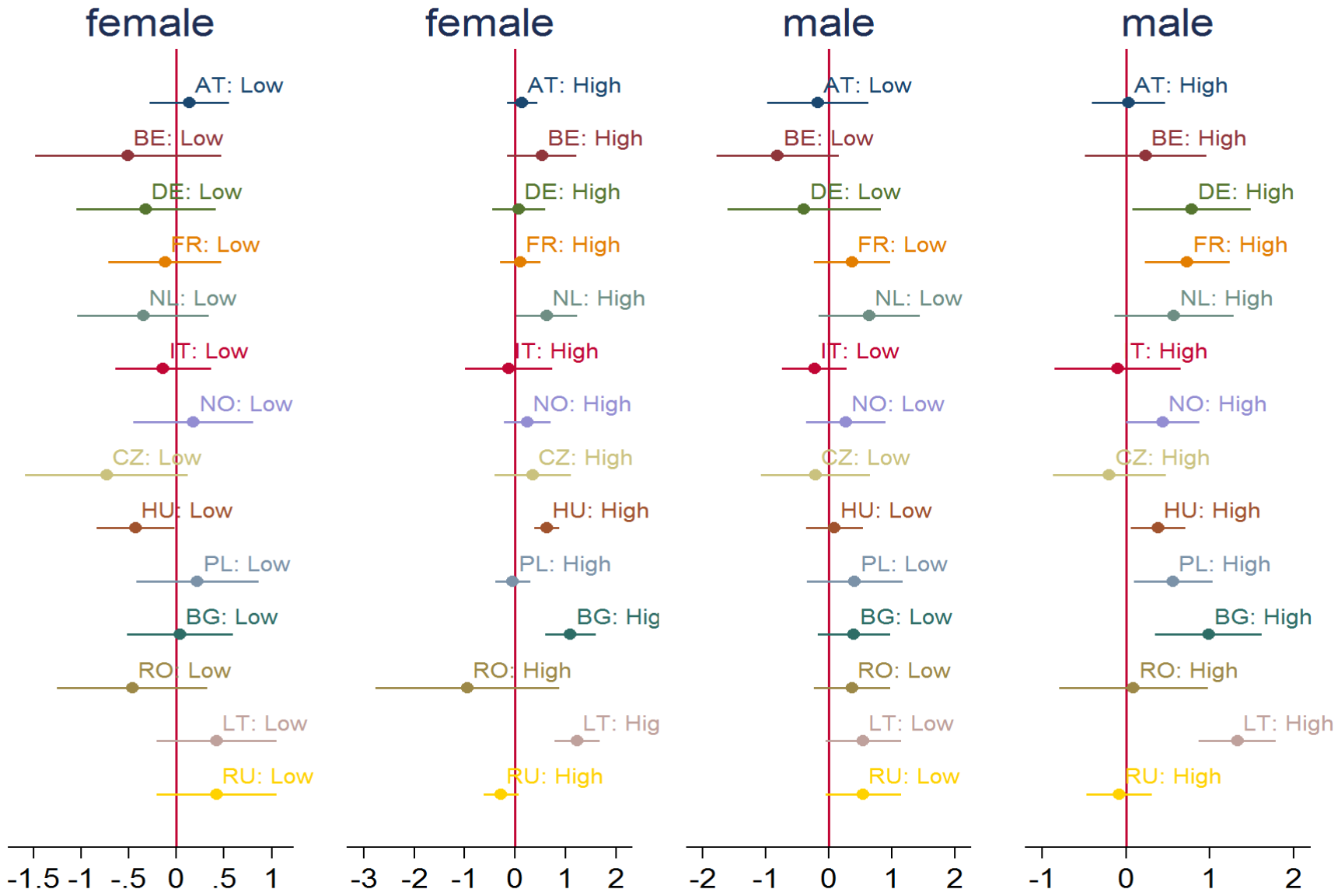
Education Coefficients for Women (Left) and Men (Right) (Parity 0)
 Controls: Age, education, work status, partner's work status, partner's education, parity, age of youngest child
 Source: GGS1, GGS2, and own calculations

EFFECTS OF EDUCATION ON CHILD-TIMING INTENTIONS. PARITY ONE



Education Coefficients for Women (Left) and Men (Right) (Parity 1)
 Controls: Age, education, work status, partner's work status, partner's education, parity, age of youngest child
 Source: GGS1, GGS2, and own calculations

EFFECTS OF EDUCATION ON CHILD-TIMING INTENTIONS. PARITY TWO



Education Coefficients for Women (Left) and Men (Right) (Parity 2)
 Controls: Age, education, work status, partner's work status, partner's education, parity, age of youngest child
 Source: GGS1, GGS2, and own calculations



Concluding remarks (1)

Highly educated women have their fertility intentions more **strongly clustered around two children** and this pattern is behind the positive educational gradient of fertility intentions observed in Europe



THE EFFECT OF LABOUR MARKET

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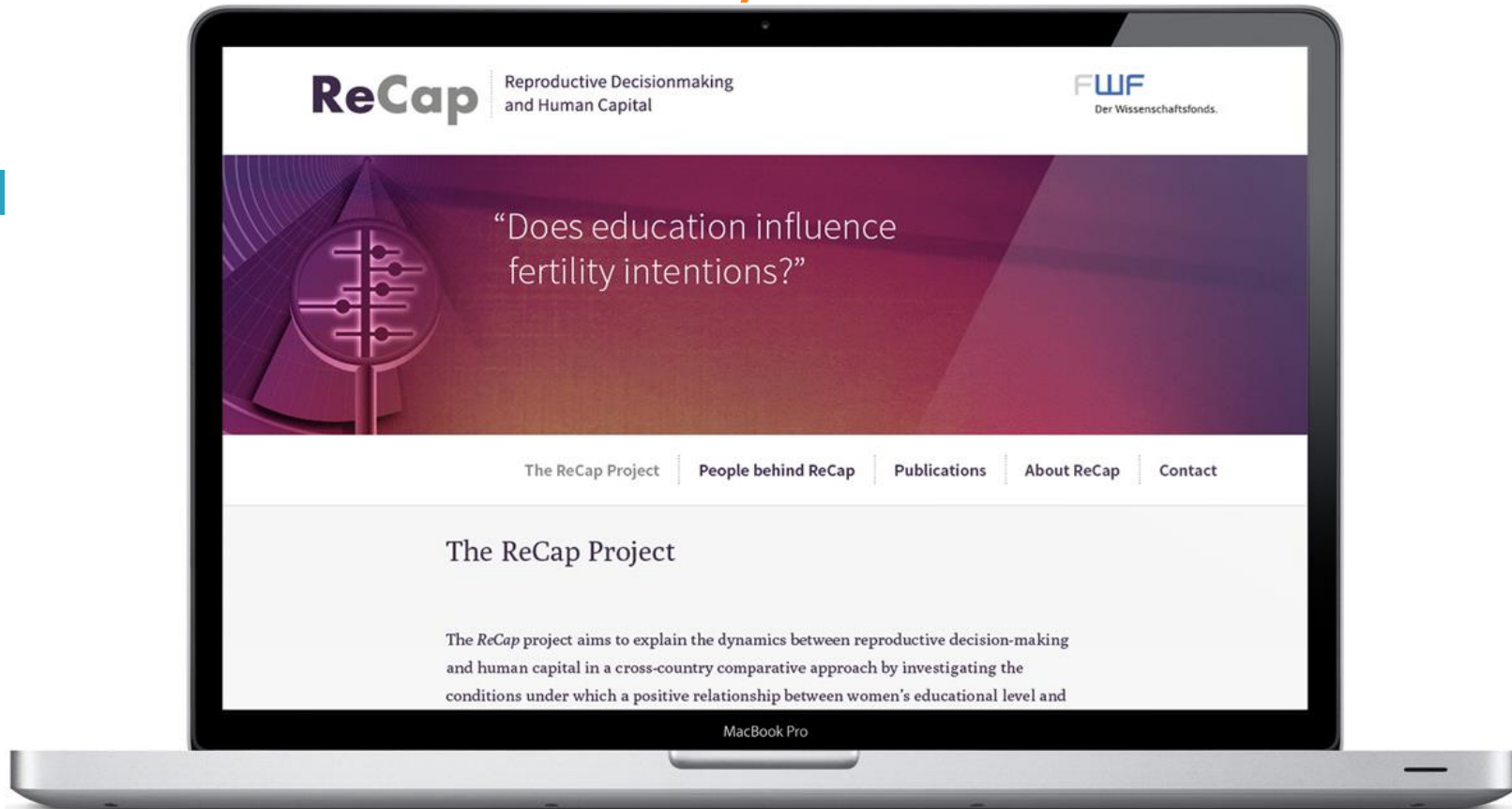
Unemployment	-0.0247*** (0.00620)	-0.0285*** (0.00639)	-0.0263*** (0.00626)	-0.0219*** (0.00622)	-0.00269 (0.00646)	-0.00774 (0.00705)
Ratio female to male		-0.00847*** (0.00317)				-0.00412 (0.00387)
Tertiary education			0.00253* (0.00133)			0.00849*** (0.00168)
Vulnerable employment				-0.0109*** (0.00239)		0.0132*** (0.00333)
Part-time employment					0.0217*** (0.00179)	0.0276*** (0.00235)



Concluding remarks (2)

Fertility intentions are particularly high in those countries in which highly educated women are allowed to have both a career in the family and in the labour market but also in those countries characterized by traditional gender roles





Elise Richter Project. FWF Austrian Science Fund

thank you!