

Does Parenthood Increase Happiness?

Evidence from Panel Data

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Background

- ▶ **research on determinants of happiness**
 - ▶ a growing literature in economics, sociology and demography (Frey & Stutzer 2010; Billari & Kohler 2009; Dolan et al. 2008)
- ▶ **understanding family formation decisions**
 - ▶ so far, demographic research has focused on the costs of childbearing
 - ▶ especially the opportunity costs are easier to measure, can be proxied by educational attainment or directly measured by wages
 - ▶ not so much attention has been paid to the benefits from childbearing
 - ▶ a change in happiness after the birth of a child may indicate gains derived from parenthood

Review of previous studies

- ▶ cross-sectional studies with international comparison
 - ▶ Aassve et al. (2009): a **significantly positive** effect of having at least one child among females in Europe
 - ▶ Margolis & Myrskylä (2010): a **significantly negative** effects of children
- ▶ single-country studies controlling for unobserved heterogeneity
 - ▶ Kohler et al. (2005) for Denmark: a **significantly positive** effect of the **1st child**, but **negative effect** of **2nd and 3rd+ child**, the effects are stronger for women than men
 - ▶ Clark & Oswald (2002) for Germany: **no significant effect** of **first child** on happiness; **negative influence** of higher parity births
 - ▶ Angeles (2009) for Great Britain: **no significant effect** of children

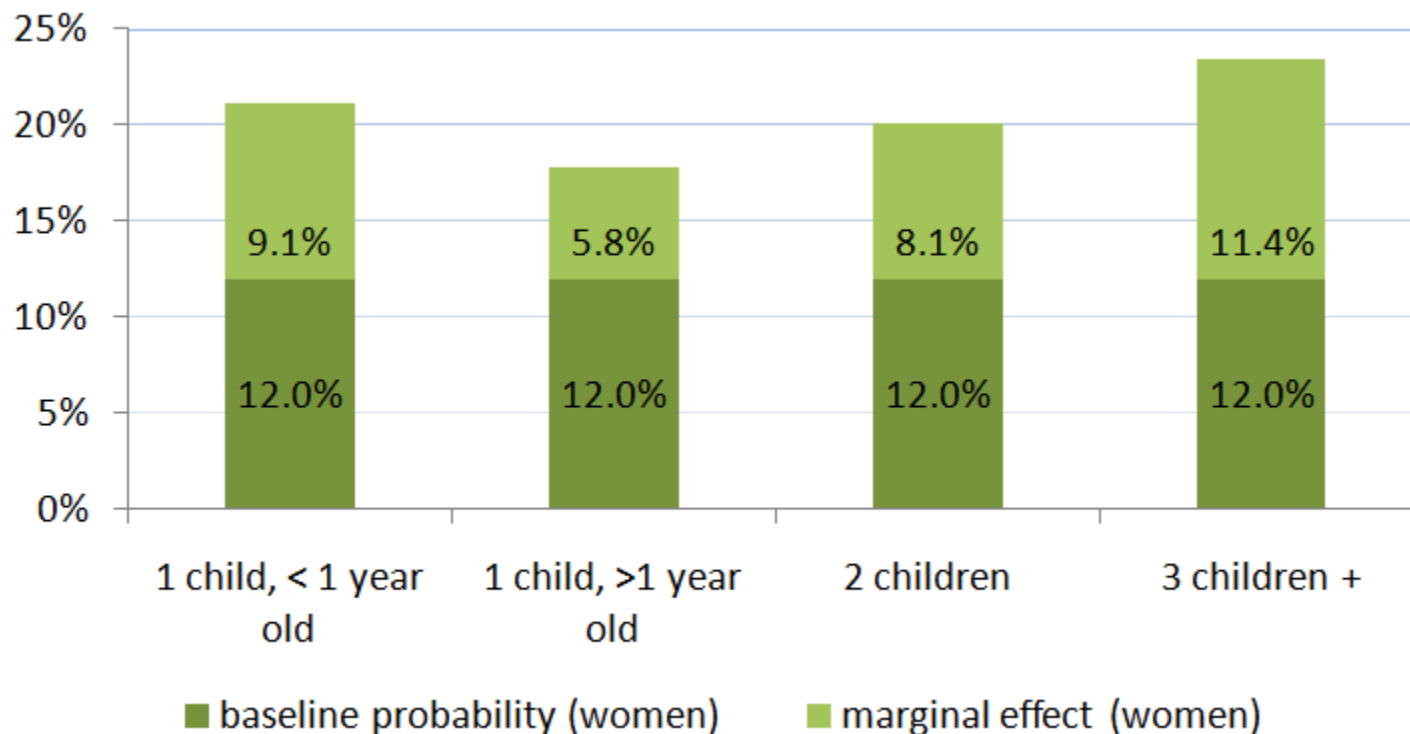
Polish context

- ▶ **Poland in European cross-country comparisons**
 - ▶ ranks very high in terms of valuing family (Fokkema & Esveldt 2008; Pongracz & Spèder 2008; Stankuniene & Maslauskaite 2008)....
 - ▶ ...but belongs to the countries with low fertility levels (TFR of 1.39 in 2009)
 - ▶ **so far the research on childbearing focused on the costs of childbearing:**
 - ▶ extremely limited financial support of the welfare state for families with children (Kotowska et al. 2008) → **high direct costs**
 - ▶ incompatibility of work and parenthood (Matysiak 2009; Muszynska 2007) → **high opportunity costs**
 - ▶ **research questions:**
 - ▶ what are the net benefits from childbearing?
 - ▶ do they differ for men and women ?
 - ▶ is the effect of having 2nd, 3rd and another child as high as the effect of the first?
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- ▶ Does parenthood increase happiness? Baranowska & Matysiak, ISID SGH

Data and methods

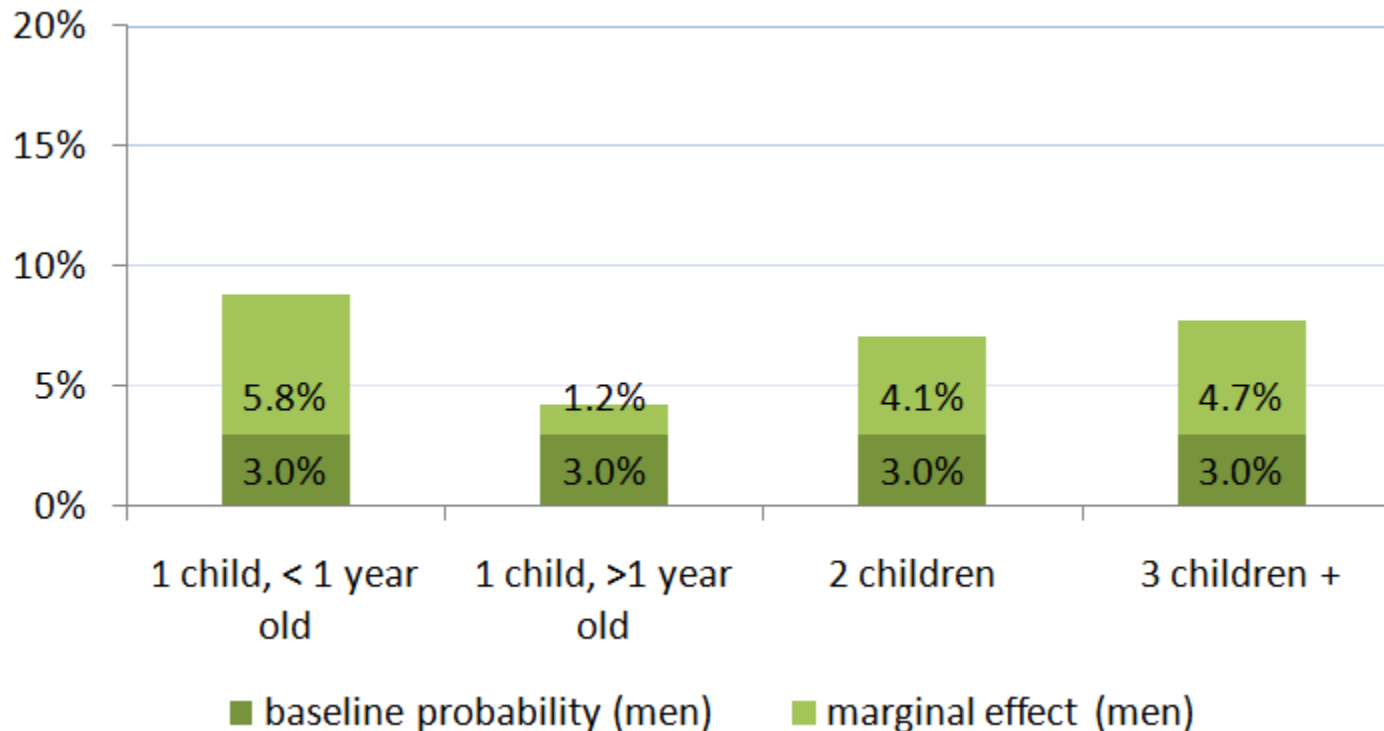
- ▶ **panel data - *Social Diagnosis 2003–2009***
 - ▶ a panel survey established to monitor the well-being of the Poles
 - ▶ 4 waves with a question on happiness: “*Taking all things together, would you say you are: 1 not at all happy, 2 somewhat happy, 3 quite happy, 4 very happy*”
 - ▶ single-item question – not sophisticated but relatively robust indicator of subjective well-being (Dolan et al. 2008; Diener 1984; Veenhoven 1993)
- ▶ **methods: correlated random effects ordered probit**
 - ▶ taking accounting of common unobserved factors affecting self-rated happiness and childbearing choices
 - ▶ key explanatory variables: number of children + age of the youngest child
 - ▶ control variables: age, education attainment and status, marital status, labour market status of respondent and his/her partner, self-rated health and standard of living
 - ▶ focus on individuals in early reproductive age (aged 18-35), separate models for men (n=5870) and women (n=6513)

Results from correlated random effects ordered probit model



- ▶ marginal effects show how the probability of indicating „very happy” increases with an arrival of a child depending on the parity
- ▶ „baseline” predicted probability is estimated for: a women aged 27, who completed upper secondary education, with well self-rated health and standard of living (6 rank on 1-7 scale), employed, with a working partner, with no children

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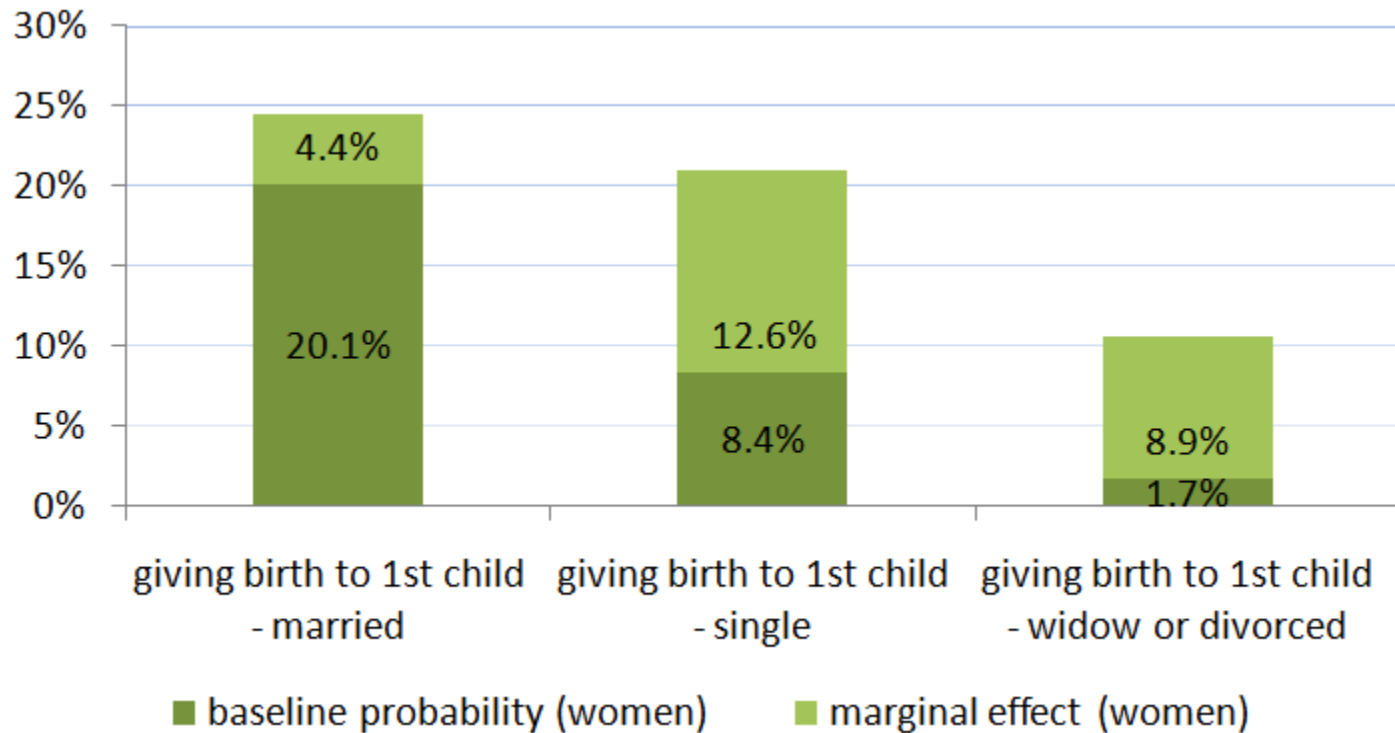
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Tentative conclusions

- ▶ having children does increase happiness both for men and women, although for women these positive effects seem stronger
- ▶ the arrival of first child increases chances of being very happy by nearly 9 percentage points for women and by almost 6 percentage points for men
- ▶ parents with two or more children are happier than childless ... but every subsequent child increases happiness to lower extent than the first child
 - ▶ higher order births do not contribute to the improvement of wellbeing of parents

THANK YOU FOR YOUR ATTENTION

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Correlated random effects ordered probit

- ▶ random effects ordered probit

- ▶ ordered probit – more suitable for ordered variables such as self-rated happiness than standard OLS
- ▶ in standard version, it takes into account the unobserved heterogeneity that is uncorrelated with explanatory variables (time-invariant individual effects)
- ▶ combined with Mundlak approach, it relaxes the assumption regarding correlation between the time-invariant individual effects and regressors

- ▶ correlated random effects ordered probit (Mundlak approach)

- ▶ u_i is modelled as a sum of two elements: related to regressors (individual means for regressors) and unrelated to regressors:

$$u_i = \bar{x}_i \delta + \eta_i \quad \text{where} \quad \eta_i | \bar{x}_i \sim N(0, \sigma_\eta)$$

$$y^*_{it} = x_{it} \alpha + \bar{x}_i \delta + \eta_i + \varepsilon_{it}$$