

Forward looking and fertility in Germany. A dyadic approach.

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Short abstract

Fertility decisions, as all life actions, imply a balancing of anticipated costs and benefits whose expectations are formed under uncertainty. Fertility research has addressed the socio-economic, psychological, biological factors influencing fertility decisions. Yet, the role of time preferences in influencing fertility decisions has been overlooked. How an individual discounts time has been found to influence different types of choices, from financial investments to schooling decisions. Indeed, forward looking individuals are more likely to place emphasis on the utility of a certain choice in the more distant future. In contrast, those with short-time orientation greatly weight the utility in the present and in near future. Given that consequences of childbearing are immediate but also develop over time, what is the relationship between time preferences and fertility? This is the first study that implements a couple approach. We use longitudinal data from the German Socio-Economic Panel (GSOEP). In particular, we make use of a question included in the 2008, 2013 and 2018 waves to examine how assortative mating patterns based on time preferences can lead to a higher/lower likelihood of first and second parity transitions.

Keywords: fertility, time preferences, Germany, SOEP, dyadic approach

Motivation.

In the last decades, the literature on fertility have extensively analysed several micro-, meso- and macro-level determinants influencing the decision-making process underlying the fertility timing and quantum choices (see Balbo et al. 2013 for a review). Values and preferences, socio-economic conditions, demographic characteristics, health, social networks are among the micro-level factors that have been found to impact fertility behaviours. Although to a more limited extent, personality traits have also been analysed as determinants of fertility behaviours (Jokela 2009; Le Moglie et al. 2015). In this paper we consider the specific trait represented by time preferences. They are strictly related to the trade-off between costs and benefits occurring in different time periods.

Sociological and demographic studies of fertility have largely overlooked the role of time preferences. The only study that has analysed the relationship between individual time preferences and fertility shows that there is an inverted U-shape association between impatience and parity progression (Bellani et al., forthcoming). Our study goes further. Given that childbearing is a joint outcome that requires a joint decision between partners, we analyse the relationship between time preferences and fertility outcomes from a dyadic perspective.

One could expect that impatient partners prefer to avoid or limit the immediate (material and immaterial) costs of having a child thus reducing their fertility. Since they emphasize short-term outcomes, they weight more immediate costs of fertility than future gains. And this, in turn, may reduce their parity transitions. Patient partners value childbearing consequences over their life course. Forward-looking partners could limit their family size because they foresee the monetary support and time/emotional investment that adult children could need over the life course (Hyp 1b).

In case of partners' heterogamy, one could expect that, given the divergence in time preferences, that, in turn, could influence marital quality, they are less likely to have children (Hyp 2).

Data and measures

We use data from the German Socio-Economic Panel (GSOEP) carried out annually since 1984. It represents the largest follow up survey in Germany: about 30.000 individuals are interviewed every year. GSOEP provides very detailed information on the demographic and socio-economic characteristics of individuals that belong to the same household unit. Moreover, the questionnaire of the survey includes questions that allow us to capture time discounting preferences of both partners of the household. Indeed, GSOEP is one of the very few surveys (together with NLSY and PSID) that provides this information for both partners. The question on patience provided by GSOEP has been previously used, for example, to study political regimes (Friehe and Pannenberg 2020) and self-employment entry (Caliendo et al 2013). It has been included in the 2008, 2013 and 2018 questionnaires, inquiring into the partners' level of patience. More precisely, individuals are asked the following question:

Q. Would you describe yourself as an impatient or a patient person in general? Answers are coded on an 11-point scale, with 0 denoting "very impatient" and 10 "very patient." This question is significantly correlated with time preference information from incentivized experiments.

Interestingly, a question on present bias (impulsiveness) is asked. "Do you generally think things over for a long time before acting—in other words, are you not impulsive at all? Or do you generally act without thinking things over for a long time—in other words, are you very impulsive?" Answers are

again coded on an 11-point scale, with 0 denoting “not at all impulsive” and 10 “very impulsive.” GSOEP contains questions on Big Five, too. This helps to disentangle the role of patience, given that we are able to control for other personality characteristics.

We are planning to use Cox proportional hazard models. By the time of the conferences, we will finalize the empirical analyses

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