Abstract

The paper investigates empirically whether and to what extent financial incentives have an effect on individuals' fertility decisions. In particular, the paper investigates the effect that changes in child subsidy levels have on individual's fertility decisions.

The paper uses a non-public large, individual-level panel data set during the period 1999–2005. By merging several non-public data sets maintained by the CBS, we create an individual-level panel data set that contains 1.2 million person-year observations on fertility for married women that includes not only complete fertility histories but also education, religion, immigrant status, and income for the woman and her husband. During the periods we study, there were a number of significant and unanticipated changes in the level of the child subsidy, both increases and decreases, but no changes in eligibility.

The question of whether and to what extent fertility responds to financial incentives is not only of theoretical interest but also has significant policy implications. Facing sharp declines in birthrates in the recent decades, many developed economies have adopted either explicitly pro-natalist policies or implicit subsidies to children through childcare.

Our identification strategy is based on exploiting variation in the child subsidy over the seven-year period we study. Back-timing births to their date of conception we estimate the impact of the subsidy that a mother will receive for her next child on the probability of her becoming pregnant. We consider both the contemporaneous child subsidy (assuming the woman makes a myopic fertility decision) and the present value of the child subsidy over the eighteen-year period in which she will receive it (assuming the mother makes a forward-looking decision). We use the child subsidy for infra-marginal children and income two years before the incremental childbirth as instruments for household income.

We find that a 150 NIS reduction in the monthly subsidy for a marginal child reduces the probability of an incremental child by 0.78 percentage points. We estimate a benefit elasticity of 0.15 and a price elasticity of -0.422 for the population as a whole, and provide estimates for these elasticities for different income and religious groups. The effect on fertility of the subsidy for a marginal child is weakest among households in the upper part of the income distribution – the households for whom the subsidies are least economically meaningful.

We find that the effect of the subsidy is present across all religious groups but is strongest among the ultra-Orthodox, whose norms discourage family planning, and Arab Muslims. We also find an effect among women who are nearing the end of their lifetime fertility and are unlikely to postpone fertility, suggesting that the effect we identify is not wholly due to changes in the timing of births and at least partly from changes in total fertility. We also find that the effect of income on fertility is small and that this effect is negative at low levels of income and positive at higher income levels.