Grandparents' Help and Fertility Decisions

Arnie Aassve, Elena Meroni, Chiara Pronzato (Dondena, Bocconi University)

Using data from the first two waves of SHARE we investigate the effect of grandparents' help with childcare on the fertility behavior of their children.

While it is theoretically demonstrated that availability of childcare affects positively the probability of having a child, by lowering the cost of children, there is lack of empirical evidence. The first aim of this paper is to assess whether there is a causal effect of childcare on fertility decisions focusing just on one type of childcare, the one provided by grandparents. Moreover, the paper aims at understanding how the changes in the population dynamics (larger age-gap between generations, longevity, better health, more divorce, more only children, later age at retirement) may have an indirect effect on fertility through the care given by older generations.

By using SHARE, we have data about several European countries and we may have information up to 4 generations. We draw information about (potential) grandparents directly from 50+ people interviewed. The characteristics of other generations are then derived by their answers to questions about their parents, children, and grandchildren. We mainly use variables related to the grandparents' help in childcare, children's work and education, and the arrival of new grandchildren.

Given the potential endogeneity of grandparent's help on fertility, we use an instrumental variable approach. We select a number of variables which affect the probability that a grandparent helps in childcare but should not directly influence the probability of having a new grandchild between wave 1 and 2. Grandparents' help with childcare is measured at two levels: almost daily care and at least weekly care. Fertility is measure at the grandparents' level, in terms of birth of a grandchild by any of the children.

Results below reports both endogenous and instrumented effect of daily and weekly care on the probability of having a new grandchild

Endogenous daily care ¹	Instrumented daily care			
-0.034 ** (0.015)	0.126 (0.193)			
Endogenous weekly care	Instrumented weekly care			
0.002 (0.011)	0.078 (0.076)			

Table 1: Endogenous and instrumented effect of giving care on the probability ofhaving a new grandchild

Notes: control variables for fertility are: number of children, average age of the children, proportion of female children, proportion of children leaving outside the parental house and average number of grandchildren. Instrumental variables for childcare provided by grandparents are: being in a couple, age, being a homemaker, being in poor health, having a great grandparent in poor health, being disable. All the analysis are performed including countries' dummies.

These first results were not as we expected, indeed it seems that grandparents helping with childcare are not more likely to have a new grandchild, compare to the ones who are not taking care of their grandchildren. However these results could be negatively bias by two reasons:

- 1. Grandparents who are taking care of their grandchildren are already "busy" and they could not take care of another child.
- 2. We focused just on grandparents who already had at least one grandchild, excluding the unobservable sample of " potential" grandparents.

Therefore we estimate different model for grandparents who are already looking or not after their grandchildren including in the analysis also those "potential grandparents" who did not have a grandchild in wave 1. Based on the characteristics of the actual grandparents (the same used as instrument before) we predict the probability of taking care of grandchildren both daily and weekly, also for those respondents who were not grandparents at the time of the first interview so it is possible to estimate the effect of the predicted probability of being help in childcare also for grandparents with no grandchildren in wave one.

¹ Standard errors in parenthesis; *** p<0.001, ** p<0.05, *p<0.1

	Daily care		Weekly care	
All grandparents	0.126	(0.192)	0.078	(0.305)
Grandparents who are already helping	-0.952*	(0.577)	0.048	(0.153)
Grandparents who are not helping	0.303	(0.204)	0.096	(0.089)
"Potential" grandparents	0.903***	(0.228)	0.305***	(0.092)

Table 2: Effect of predicted care on the probability of having a new grandchild

Notes: prediction is made using previous instruments. Fertility equation has same controls as before.

Results for the original sample (*all grandparents*) are the same as before (coefficients for daily and weekly care are the same as in the instrumented model), therefore we can rely on these prediction also for the sample of potential grandparents.

We find that the predicted probability of taking care of a grandchild, both weekly and daily, increases the probability of having a new grandchild just for the "potential" grandparents. This could support the hypothesis that women are more prone to have a child if they know that they can rely on their parents' help once the child is born. Women, whose parents are in better health, are younger, do not work and are not busy with other grandchildren, know that they could rely on the grandparents' care and therefore are more likely to give birth to a child.

We expected the same results also for grandparents who already have a grandchild but are not currently helping, nevertheless the effect of this sub group is positive but not significant. This can be due to two contrasting effects: a positive one driven by the potential availability of the grandparents given that they are not taking care of any grandchild, but also a negative one driven by the knowledge that the grandparents are not willing to help, even if they could.