



Long-term Care and Reciprocity: Does Helping with Grandchildren Result in the Receipt of More Help?

Agar BRUGIAVINI

Raluca Elena BUIA

Giacomo PASINI

Francesca ZANTOMIO





Premises

- In the recent years important demographic transformations in developed countries:
 - Decrease in the fertility rates
 - Increase in life expectancy
- Hence: important increase of the fraction of 65+ (to around 30%) and 80+ (to more than 10%) of the population by 2050 (OECD, 2010)
- Living longer does not necessarily mean living healthier
- Consequence: increase in the demand for LTC services



Long-term Care Services

- Main providers:
 - Publicly provided long-term care;
 - Private long term care insurance;
 - Informal care supplied by family members.
- Important increase in the future of the LTC expenditure (in a pure ageing scenario the public LTC is projected to double in the OECD countries by 2050)
- Informal LTC may act as a substitute of formal care and reduces or postpones the demand for institutional care.



Informal LTC

- Main implications:
 - On cost of long term care programmes
 - effects on the labour market participation and health status of care givers.
- Important to understand the driving forces and dynamics of informal provision in order to formulate sound reforms
- Significant part of LTC is provided by adult children (Kalwij, Pasini, Wu 2011 on SHARE data)
- Motivation:
 - Pure altruism
 - Expectation to be compensated (financially or through in-kind services)



Research issue

- Investigate whether parents who have provided help by taking care of their grandchildren, will later on time receive more informal LTC from their children living out of the household;
- We analyze both the **probability** and the **intensity** of received care
- Both grandchildren help and children LTC behaviour of crucial importance for the cost reduction of public expenditure programs and women LFP



Related literature

- Literature on LTC:
 - Implications of informal LTC: Charles and Sevak (2005), van Houtven and Norton (2004), Bonsang (2008), Bolin, Lindgren, Lundberg (2008a, 2008b)
 - Driving forces and dynamics in the provision of informal care: Bernheim et al.(1985), Cox (1987), Alessie, Angelini, Pasini (2009), Leopold and Raab (2011)
- Literature on grandchildren care:
 - Implications on labour market participation and careers: Blau and Currie (2006), Hank and Buber (2008), Arpino, Pronzato and Tavares (2010)
 - Impact on fertility: Turke (1989), Berezkei (1998), Coall and Hertwig (2011), Waynforth (2012)
 - Impact on grandparents' health: Minkler and Fuller-Thomson (1999, 2001), Hughes et al.(2007),



Terminology and data description

- Terminology:
 - Downward help: from parents to children
 - Upward care: from children towards parents
- Data from waves 1 and 2 of SHARE on individuals that participated in both waves of the survey
- SHARE:
 - multidisciplinary survey focused on 50+ population
 - Wave 1 conducted in 11 European countries (Sweden, Denmark, Austria, Germany, France, Switzerland, Belgium, Netherlands, Spain, Italy and Greece), from wave 2 other 2 countries



Data description

- Information on: health, education, socio-economic status, family composition and social relations of the target population, relevant information about respondents' children and parents.
- Keep only those individuals that have both children and grandchildren



Data description

- Information on downward support is individual while data on upward time transfer regards the entire family (both respondent and spouse together);
- SHARE provides personal data on all children but relevant information on their characteristics only for 4 children;
- Form family-child dyads for four of the respondent's children;
- Link data on downward help with grandchildren in wave 1 with data on upward care in wave 2
- Database of 18000 observations



Estimation technique

- Two-part model:
 - Estimate the probability of receiving care - outcome variable: dummy 0/1 of received help from children
 - Estimate the intensity of care received, conditional on receiving care – dependent variable: days/month of help from children
- Regressors:
 - Key variables: ***dummy variable*** 0/1 of having helped with grandchildren in wave 1 and ***frequency of help*** with grandchildren (*total* days/month)
 - Controls: log of income and logarithm of wealth, characteristics of the caregiver (age, gender, number of children, age of youngest child), features of the care recipient (mean age, ADL, variation in ADL, presence of spouse/partner), country
 - Robustness check: control for the “family type” as for the “caring attitude”



Regression results

Variable	Probit	OLS	Probit	OLS
Dummy of care with grch w1	0.175***	0.556		
Days/month of grch help w1			0.005**	0.051
ADL_max_w2	0.056	1.391*	0.056	1.406*
Delta_adl (increase in ADL dummy)	0.227*	0.945	0.225*	0.991
Log income	0.007	0.756	0.011	0.814
Log wealth	-0.027*	-0.076	-0.026*	-0.072
Partner	-0.332***	-1.864*	-0.331***	-1.892*
Age of care receiver in w2	0.011**	0.091	0.009*	0.086
Age of youngest child of child	0.007*	-0.002	0.005	0.002
Number of children of child	0.025	0.291	0.034	0.334
Gender of child (care giver)	0.004	1.066	0.007	1.011
Germany ^[4]	0.028	-0.543	0.034	-0.635
Sweden	-0.125	-4.181*	-0.122	-4.277*
Netherlands	-0.309*	-2.292*	-0.283*	-2.245*
Spain	-0.158	5.156*	-0.175	4.955*
Italy	-0.083	3.099	-0.104	2.993
France	-0.370**	-1.528	-0.363**	-1.523
Denmark	0.186	-3.179	0.195	-3.187
Greece	-0.123	1.976	-0.131	1.718
Switzerland	-0.189	-4.302**	-0.191	-4.373**
Belgium	-0.163	-0.704	-0.162	-0.812



Robustness check

Variable	Probit	OLS	Probit	OLS
Dummy of care with grch w1	0.130*	0.763		
Days/month of grch help w1			0.002	0.099
ADL_max_w2	0.085*	1.558*	0.083*	1.561*
Delta_adl (increase in ADL-dummy)	0.07	-0.14	0.072	-0.062
Log income	0.011	0.151	0.013	0.22
Log wealth	-0.031	-0.072	-0.031	-0.109
Partner	-0.301***	-1.104	-0.296***	-1.06
Age of care receiver in w2	0.013**	0.037	0.011*	0.034
Age of youngest ch of child	0.003	0.06	0.001	0.068
Number of children of child	0.037	0.266	0.045	0.302
Gender of child (care giver)	-0.019	1.178	-0.013	0.982
Caring family 1	0.019	0.452	0.019	0.45
Caring family 2	0.014	-0.16	0.01	-0.105
Caring family 3	0.028	0.137	0.028	0.065
Germany ^[7]	0.079	-0.766	0.085	-0.855
Sweden	-0.225	-2.072	-0.224	-2.025
Netherlands	-0.249	-1.728	-0.229	-1.718
Spain	-0.18	7.781*	-0.192	7.818*
Italy	-0.194	5.717*	-0.204	5.613*
France	-0.451**	1.076	-0.444**	1.222
Switzerland	-0.213	-3.185*	-0.211	-3.255*
Belgium	-0.13	-0.515	-0.125	-0.635



Conclusions

- We investigate for the presence of reciprocity in downward and upward time transfers between parents and children, taking advantage of SHARE longitudinal dimension;
- We find evidence that downward help with grandchildren increase significantly the probability of parents receiving care from their offsprings later on, when need arise;
- Intensity of upward care displays a positive but not significant dependency on previously received help.



Further steps

- Time interval between wave 1 and 2 is not large enough to allow for major variations in the health status of respondent and/or spouse;
- This drawback will be settled with the wave 4 release;
- Control for the welfare regimes;
- Control for more characteristics of offsprings (education, occupation).