

Work and well-being of informal caregivers in Europe

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Discussion by

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Summary

- Aim: assessing the consequences of caregiving on caregivers (daughters) outcomes: Labour market participation, health and cognitive functioning.
- Data: SHARE (wave 1, 2 and 4)
- Empirical strategy: FE and IV-FE. Instrument: parents' health
- Distinction between formal care countries and family care countries.

Summary

- Results:
 - Labour force participation: No effect for formal care countries but big negative effects for family care countries.
 - Hours of work: No effect
 - Health: Negative effect on mental health. Mixed effect for physical health
 - Cognitive functioning: Mixed effects

Strengths of this study

- Policy relevant and timely topic
- Panel data analysis
- Make use of institutional differences in long-term care across SHARE participating countries
- First paper to look at the consequences of caregiving on cognitive functioning of the caregiver

Comments on the theoretical model

- The model does not shed light on the mechanisms explaining the effect of caregiving on health, it is just an assumption of the model.

$$S = S_0 + \gamma CG,$$

- OC never plays a role in the model
- Generous LTC countries only reduce the cost of providing informal care but do not provide formal care (OC?).

Comments on the theoretical model

- The equation equalizing the marginal benefit and the marginal cost of caregiving does not allow to make prediction about the change of a exogenous variable on caregiving. You need to do a static comparative analysis.

$$w(S)U_C^D \leq U_L^D, \quad H \geq 0,$$

$$CG \geq \frac{1}{eU_C^D} \left[U_{UP}^D U_{CG}^P + U_C^D \frac{\partial w(S)}{\partial S} H \gamma - U_L^D \right], \quad CG \geq 0,$$

Comments on the theoretical model

- The equation equalizing the marginal benefit and the marginal cost of caregiving does not allow to make prediction about the change of a exogenous variable on caregiving. You need to do a static comparative analysis.
- Lack of connection between the theoretical model and the empirical model:
 - Health of the parent is absent in the model.
 - No link between the FOCs and the empirical equation.

Comments on the empirical analysis

- Validity of the instrument (parents' health):
 - If children are altruistic (as assumed in the model), the exclusion restriction is violated, especially for mental health and cognitive functioning.
 - Not convinced that justification bias is not an issue as well.
- Inclusion of bad controls in the model (Chronic conditions, ADL, IADL for labour force participation models and labour force participation in health and cognition models)
- Data issue (the definition of caregiving; Numeracy only asked to new participants in wave 4)
- Presentation of the model specification and results are unclear.

Comments on the empirical analysis

- Presentation of the model specification and results are unclear.

Frequency of care:	FE			FE-IV		
	Any	Weekly	Daily	Any	Weekly	Daily
	Employed					
Caregiver (family care country)	-0.028 (0.025)	-0.013 (0.027)	-0.016 (0.030)	-0.344** (0.144)	-0.370** (0.168)	-0.600** (0.272)
Caregiver (formal care country)	0.042** (0.020)	0.042* (0.024)	-0.021 (0.037)	0.018 (0.149)	0.023 (0.194)	0.038 (0.257)
Equality of effects (p-value)	0.030	0.133	0.931	0.082	0.125	0.090
Exogeneity (p-value)				0.041	0.037	0.040
AP F-Stat (family)				34.60	30.07	18.92
AP F-Stat (formal)				20.52	18.46	21.75

Comments on the empirical analysis

- Hard to interpret first stage results.

Dependent variable:	Hours	family	formal
Parent in poor health (family care country)		0.102 (0.071)	0.013** (0.006)
Parent in poor health (formal care country)		0.001 (0.007)	0.149*** (0.044)
Observations	2,916	2,916	2,916
Within R-squared	0.066	0.115	0.041
Unique individuals	1,313	1,313	1,313

Comments on the empirical analysis

- Robustness checks not complete with the single parent

Dependent variable:	All countries		Formal care countries	
	EURO-D	caregiver	EURO-D	caregiver
Caregiver	0.950 (0.993)		1.702* (0.887)	
Parent in poor health	0.203 (0.217)	0.183*** (0.026)	0.109 (0.209)	0.150*** (0.035)
Parental loss	0.233** (0.117)	-0.076*** (0.025)	0.122 (0.174)	-0.134*** (0.036)
Single parent		0.213*** (0.052)		0.316*** (0.072)
Observations	6,845	6,845	4,100	4,100

Comments on the empirical analysis

- Robustness checks for justification bias

Table 7: Parental health and distance to the parent

Distance to the parent

Parental health	Distance to the parent					
	≤ 5 km	> 5 km	≤ 25 km	> 25 km		
poor	0.29	0.31	(0.290)	0.29	0.31	(0.286)
fair	0.34	0.37	(0.395)	0.35	0.37	(0.474)
good	0.29	0.25	(0.132)	0.29	0.25	(0.135)
very good	0.07	0.07	(0.485)	0.07	0.07	(0.648)

Weighted values for individuals with at least one living parent based on individuals' first observation. Two sided p-values of adjusted Wald test of equality of means in parentheses. N=3,172

Suggestions/ comments

- Motivate the inclusion of controls in light of the IV approach (reinforce the exclusion restriction hypothesis and/or improve efficiency).
- Improve the connection between the theoretical model and the empirical analysis.
- In-depth description of the specification of the empirical model.
- Separate analysis for the two groups of countries.
- Extend the analysis to men.