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Retirement and Informal Caregiving: Behavioral Patterns among Older Workers

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AGENTA Final Conference,
Vienna

November 20-22, 2017

Motivation

- ▶ Giving care and support to people: approx. 1/3 of older workers do so.
- ▶ Extent of care and support varies a lot.
- ▶ **Do these activities impact on retirement behavior?**
- ▶ Two main aspects relevant for policy:
 - ▶ Understand the driving factors of retirement;
 - ▶ Increasing need for public and private management/financing care for older adults.

Related literature: informal care and retirement

▶ **Nature of informal care:**

- ▶ Informal and formal care are substitutes: Bolin et al. (2008), Bonsang (2009), van Houtven and Norton (2004)

▶ **Labor supply and informal care:**

- ▶ Older literature:
 - ▶ 1/3 of informal care leads to labor market exit, Gorey et al. (1992)
 - ▶ Gender differences and closeness to person cared for: Dentinger and Clarkberg (2002)
- ▶ More recent studies:
 - ▶ Effect of caregiving on hours of work and wages, but only for females: van Houtven et al. (2013)
 - ▶ Females on low hh income provide more care: Lee et al. (2015)

Working definition

- ▶ Giving care and support: taking the **broadest definition possible**.
- ▶ **To whom?**
 - ▶ Non-remunerated help given to people in ones social network (parents, parents-in-law, spouses, kids, grandchildren, neighbors, friends, colleagues, etc.)
- ▶ **Type of activity?**
 - ▶ In principle, any type: from occasional help with paperwork up to providing informal, nursing-like care every day.

Empirical model

- ▶ Estimated as a binary **logit model** with a retirement dummy as the dependent variable.
- ▶ For the explanatory variables, two specifications deployed:
 - ▶ Specification 1: **single care/support dummy**
 - ▶ Specification 2: **multivariate dimensions of care/support**
- ▶ **Potential endogeneity**: regressions also with lagged care variables and 2SLS

Data and sample construction

- ▶ Survey of Health, Aging and Retirement in Europe (**SHARE**), waves 1, 2 and 4
- ▶ Panel attrition highly present; largest refreshment in wave 4
- ▶ Age group: **55 to 70 years** old
- ▶ People included: retirement out of prior labor force participation

Sample characteristics

Table 1: Sample characteristics

Variable	Description	Males		Females	
		Mean	SD	Mean	SD
Retirement cases	Dummy, 1 if retired, 0 otherwise	0.147	0.354	0.139	0.346
Income decile	Position in income distribution	6.859	2.608	6.485	2.687
Age	Age at interview	59.553	3.237	59.256	3.162
Health	Self-perceived, 1 if excellent, ..., 5 if poor	2.637	0.991	2.636	0.987
Partnerhh	Cohabitation dummy, 1 if yes, 0 otherwise	0.871	0.335	0.752	0.432
Education	Years of education	12.303	4.305	12.122	4.074
Kids	Number of children	2.113	1.1228	2.044	1.175
N		7,052		6,333	
Persons		4,639		4,157	

Source: Author's own calculations based on SHARE, wave 1, 2, and 4

Care variables

Table 2: Care-giving variables, in percent of observations

Variable	Description	Males	Females
<i>Care</i>	Dummy, 1 if giving care or support, 0 if no	31.07	37.50
<i>Incare</i> (in household)	Dummy giving daily care	3.70	4.42
<i>Carehelp</i> (out of household)	Dummy, care or support	28.42	34.47
<i>Caretime</i> (out of household)	no help	74.56	69.62
	less often	9.34	7.53
	almost monthly	6.34	6.96
	almost weekly	7.36	11.38
	almost daily	2.40	4.50
<i>Outhelpnumber</i> (out of household)	Number of people given care to	0.368	0.428
N		7,052	6,333
Persons		4,639	4,157

Source: Author's own calculations based on SHARE, wave 1, 2, and 4

Caregiving across gender and countries

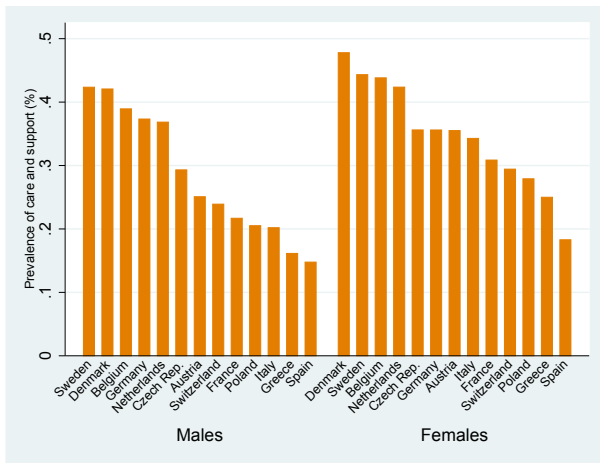


Figure 1: Prevalence of caregiving

Results: impact of care on retirement

Table 3: Logit regression - current and lagged period care variables

Dep. var.		Males OR		Females OR	
Retired		current	lagged	current	lagged
<i>Spec. 1</i>					
<i>Care</i>		1.26 (2.50)*	1.572 (5.16)***	0.995 (-0.05)	0.960 (-0.45)
<i>Spec. 2</i>					
<i>Incare</i>		0.876 (-0.59)	0.959 (-0.18)	0.648 (-1.88)	0.882 (-0.57)
<i>Carehelp</i>		0.79 (-0.72)	1.778 (3.09)**	1.796 (2.20)*	1.231 (1.29)
<i>Caretime</i>	no help	0.41 (2.04)*	1.413 (0.98)	1.519 (-1.08)	2.125 (2.16)*
	less often	0.465 (2.79)**	1.333 (0.96)	0.793 (-0.85)	1.693 (1.82)
	almost monthly	0.67 (-1.42)	1.158 (0.47)	0.859 (-0.58)	1.135 (0.42)
	almost weekly	0.822 (-0.71)	1.597 (-0.71)	0.744 (-1.22)	1.404
	almost daily	omitted	omitted	omitted	omitted
<i>Outhelpnumber</i>		1.061 (-0.5)	0.972 (-0.27)	1.013 (-0.1)	1.117 (0.84)
<i>N</i>		7,052		6,333	

Notes: Regressions include controls for socio-demographics, years and countries.

Robust z-statistics in parentheses. (*), (**), (***) indicate $p < 0.05$, $p < 0.01$, $p < 0.001$.

Results: impact of care on retirement

Table 4: IV - 2SLS, current/lagged period care

Dep. var.		Males Coef.		Females Coef.	
Retired		current	lagged	current	lagged
<i>Care</i>		0.041 (3.798)***	0.041 (3.806)***	-0.001 (-0.068)	-0.009 (-0.794)
<i>Exogeneity tests</i>					
Durbin	chi2(1)	7.423	0.017	0.214	0.556
	p	0.006	0.898	0.883	0.456
Wu-Hausmann	F(1,7014)	7.423	0.016	0.214	0.552
	p	0.007	0.898	0.884	0.457
<i>Instr. weakness</i>					
	Partial R2	0.562	0.514	0.554	0.493
	1st stage F	9,009.18	7,406.87	7,819.29	6,121.25
	p	0.000	0.000	0.000	0.000
<i>N</i>		7,052		6,333	

Notes: Regressions include controls for socio-demographics, years and countries.

Instrument: *Outhelpnumber(Lag)*; first-stage regression output omitted.

Robust t-statistics in parentheses. (*), (**), (***) indicate $p < 0.05$, $p < 0.01$, $p < 0.001$.

Predicted retirement probabilities

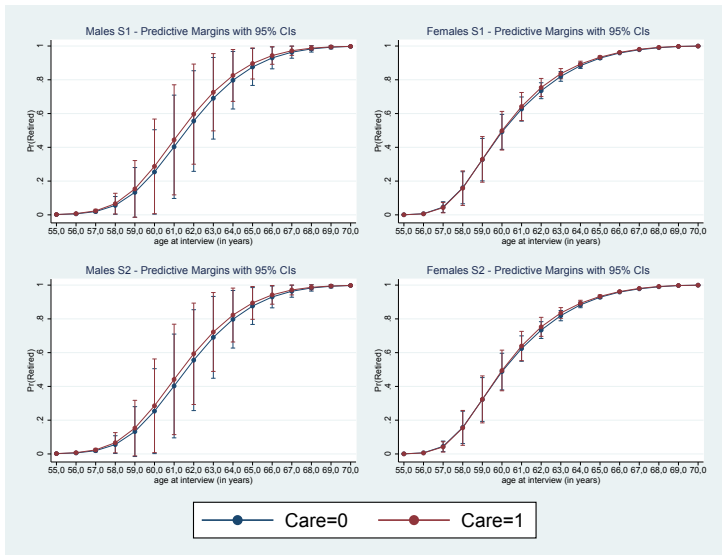


Figure 2: Predicted retirement probabilities - current care variables

Predicted retirement probabilities

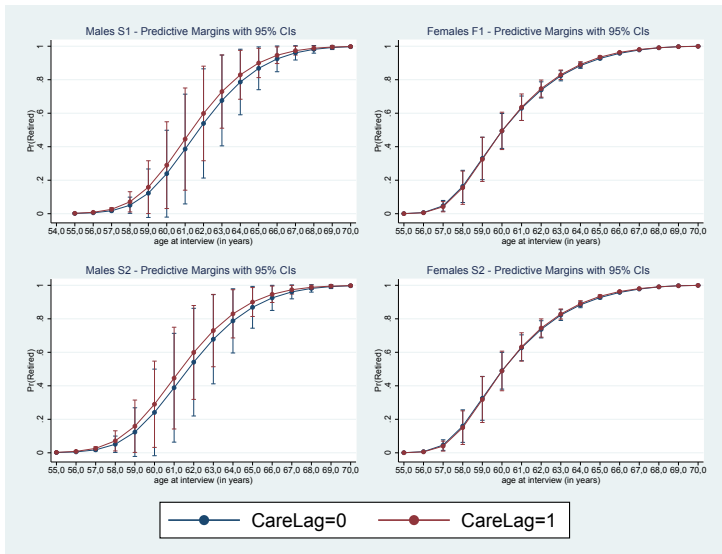


Figure 3: Predicted retirement probabilities - lagged care variables

Discussion

- ▶ Informal care and support: **positive impact on retirement under certain conditions.**
- ▶ Gender differences are considerable
 - ▶ Males: intensity of care and support matters.
 - ▶ Females: no general impact, only when giving out-of-hh care and support.
- ▶ Discussion:
 - ▶ **Conservative family roles** persistent: are women better able to absorb care and support?
 - ▶ Follow-up: would greater supply of formal care facilities have a (small) impact on males' average retirement ages?