Do regional contexts shape the burden of informal caregivers aged 50+ across Europe?

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Overview

I. What causes caregivers´ burden?

II. Research questions

III. Data, variables and sample composition

IV. Results

V. Summary and discussion

I. Empirical findings: What causes caregivers´ burden?

1. The caregiving task itself is burdensome: lifting, staying awake at night, no recreational time (George & Gwyther 1986)
2. The „loss“ of the person in need of care is burdensome: partner care (Kaschowitz & Brandt 2015 (forthcoming))
3. Selection into caregiving: disadvantaged become caregivers (Czaplicki 2012; Mentzakis 2009)
4. Caregiving as a fate: there are no alternatives than doing the care oneself (Verbakel 2014)

II. Research questions

1. Confirm previous findings that caregivers are more burdened than non-caregivers

2. Check if caregivers´ burden is higher in regions with few formal care services than in regions with many formal care services
   - Shared responsibility between informal and formal caregivers
   - Informal care is given voluntarily

III. Data

Individual data

- SHARE wave 5 data, release 1
- 67410 respondents from 15 countries (gross)

Regional data

- Eurostat data on NUTS 2 level: provinces or regions
- Taken from ESS website

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eurostat

III. Variables used for the analysis

- Regional GDP

Moderator variable

- No. of long-term care beds per 1000 people

Independent variable

- Caregiving

- Gender
- Age
- Partnership
- Education
- Working
- Household size
- Household income

Outcome variables

- Quality of life (scale)
- Loneliness (scale)
- Self-rated health (1 question)

III. Sample composition

Gross sample: 67410 Wave 5 respondents

- Excluded for conceptual reasons: 15605 single households
- Excluded because of missing data in SHARE: 3822
- Excluded because of missing regional data:
  - 22947: No. of long-term care beds per 1000 people (Countries: DE, SE, NL, DK, ES, SI, IL)
  - 2286: GDP (Country: CH)

→ **Final sample:**

- 89 NUTS 2 regions from AT, FR, IT, BE, CZ, LU, EE
- 22750 individuals

IV. RESULTS: Caregivers are more burdened than non-caregivers

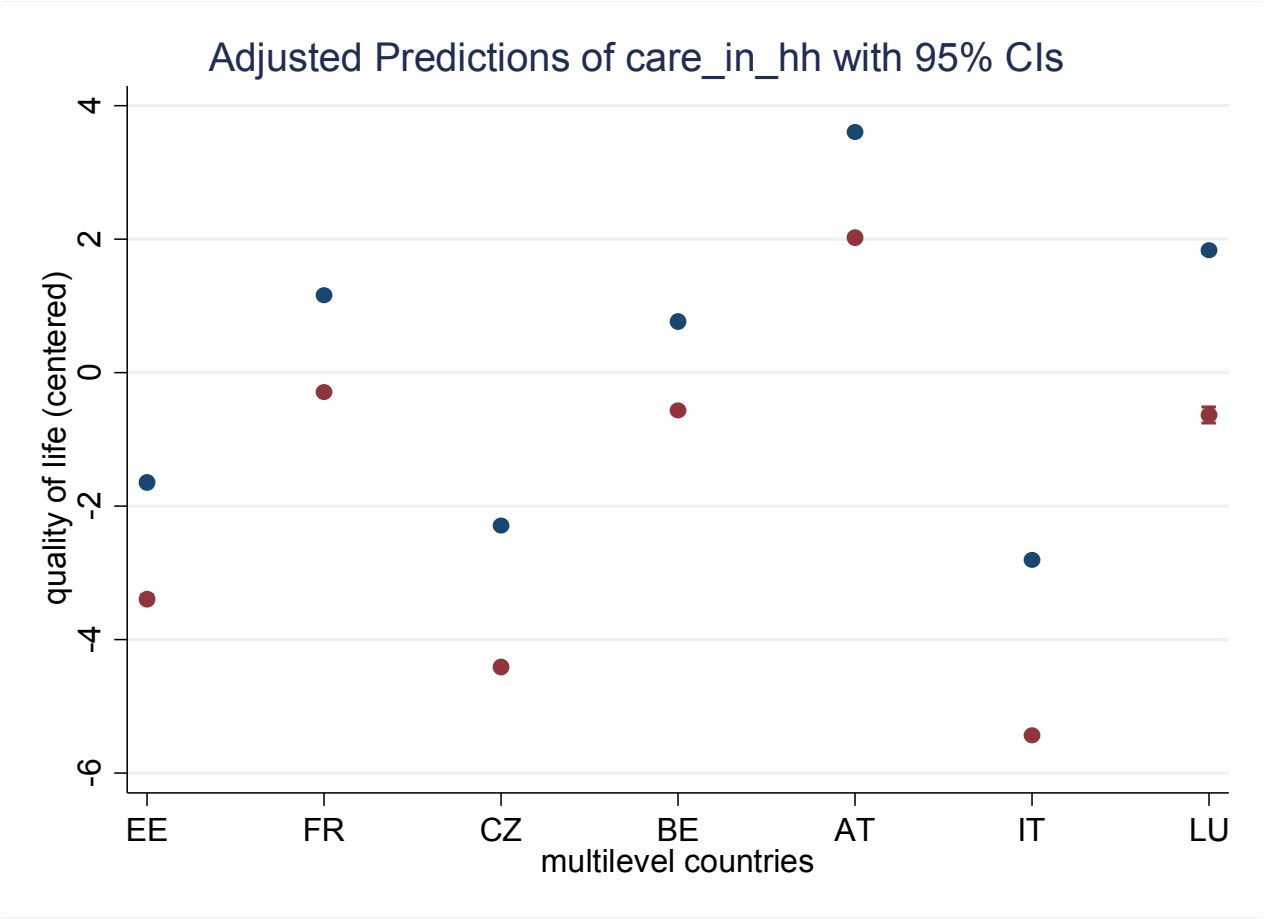
Analytical strategy: Random-intercept model with respondent level control variables

	Outcome: Quality of life	Outcome: Loneliness	Outcome: Self-rated sickness
	Estimate (SE)	Estimate (SE)	Estimate (SE)
Caregiving	-1.72*** (0.13)	0.18*** (0.03)	0.21*** (0.02)
Respondent level control variables	X	X	X
ICC	0.16 (0.02)	0.05 (0.01)	0.05 (0.01)
AIC	142360	75073	61344

Observations: 22750 Respondents, 89 regions

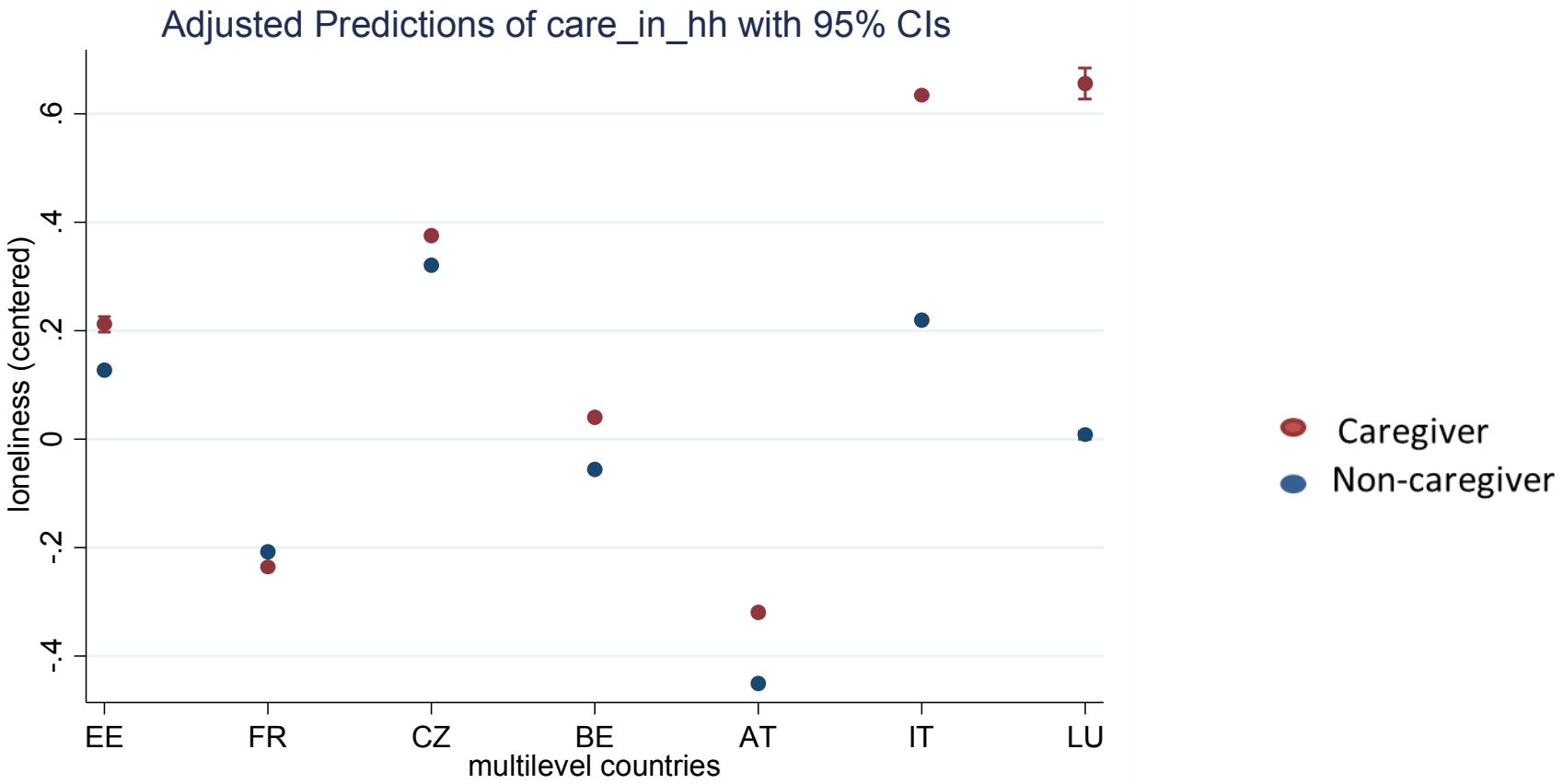
ICC= Intraclass Correlation, AIC=Aikaike Information Criteria, * p < 0.1, ** p < 0.05, *** p < 0.01

IV. RESULTS: Caregivers experience less quality of life than non-caregivers



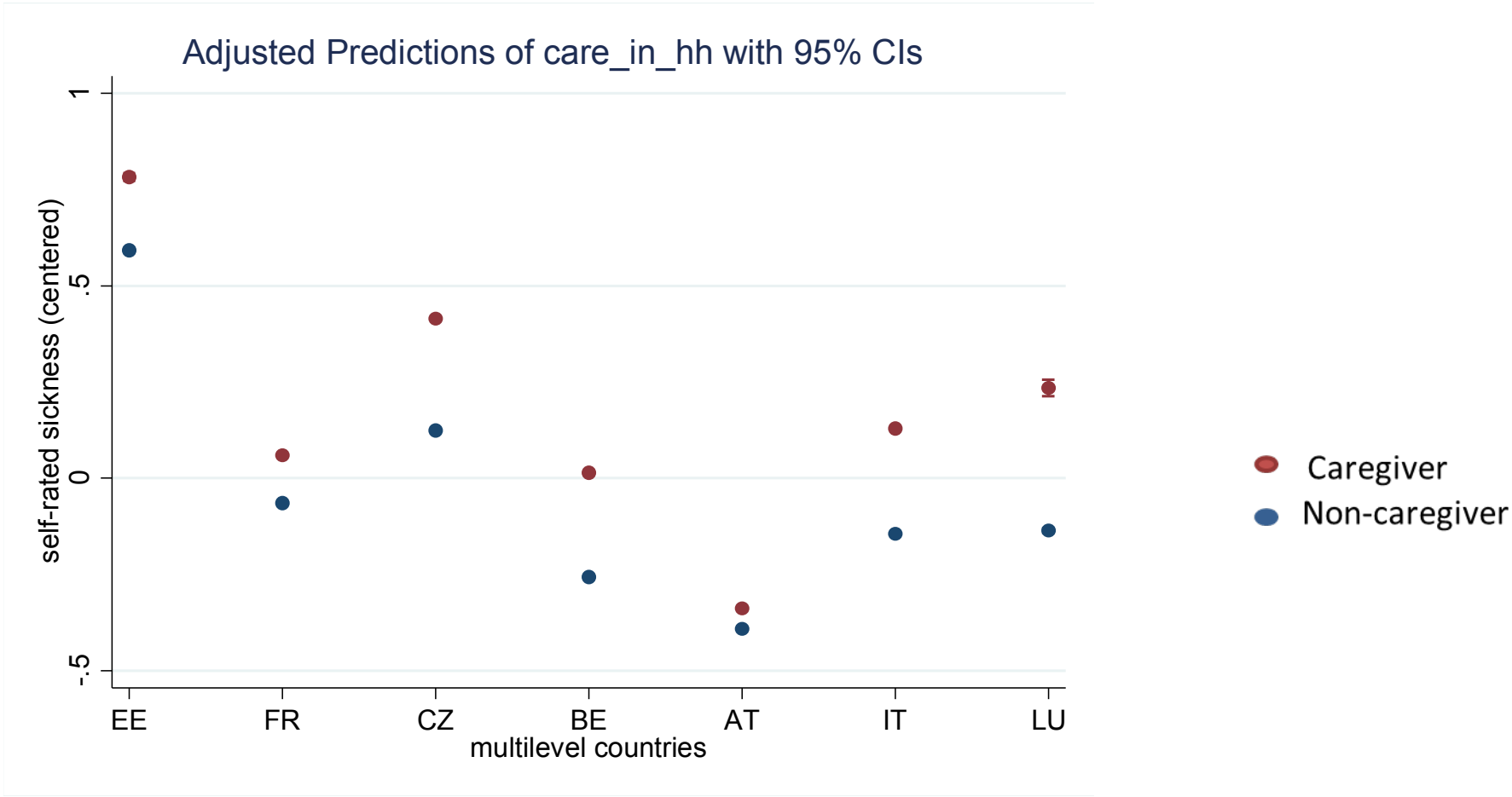
SHARE wave 5, weighted data

IV. RESULTS: Caregivers feel more lonely than non-caregivers



SHARE wave 5, weighted data

IV. RESULTS: Caregivers feel sicker than non-caregivers



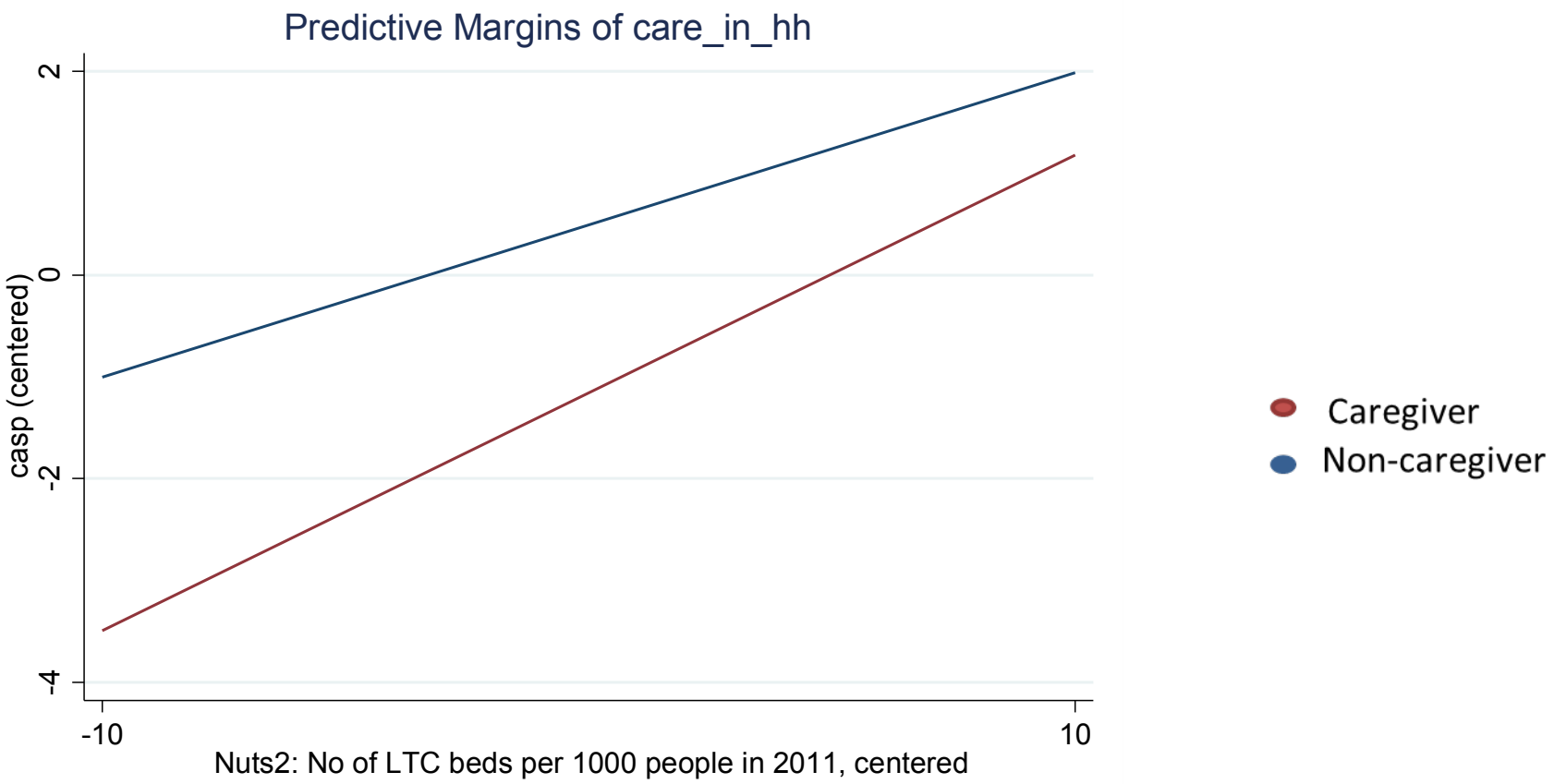
SHARE wave 5, weighted data

IV. RESULTS: (Only) caregivers´ quality of life is higher in regions with many formal care services than in regions with few formal care services

Analytical strategy: Random-intercept model with cross-level interaction of caregiving and formal care services

	Outcome: Quality of life	**Outcome: Loneliness**	**Outcome: Self-rated sickness**
	Estimate (SE)	Estimate (SE)	Estimate (SE)
Caregiving	-1.69*** (0.13)	0.18*** (0.03)	0.21*** (0.01)
Respondent level control variables	X	X	X
No. of LTC beds per 1000 people	0.35*** (0.04)	-0.03*** (0.01)	-0.01 (0.01)
Interaction of caregiving and LTC beds	0.07* (0.04)	-0.01 (0.01)	-0.003 (0.01)
Regional GDP / 1000	X	X	X
ICC	0.12 (0.02)	0.04 (0.01)	0.02 (0.004)
AIC	142270	75025	61124
Observations: 22750 Respondents, 89 regions			
ICC= Intraclass Correlation, AIC=Aikaike Information Criteria, * p < 0.1, ** p < 0.05, *** p < 0.01			

IV. Quality of life differences between caregivers and non-caregivers



V. Summary

- Caregivers aged 50+ feel lonelier, experience less quality of life and have worse self-rated health than non-caregivers even when controlling for socio-economic factors

- The regional context shapes the **quality of life** of informal caregivers due to differences in formal long-term care services but it does not shape the **loneliness** or **self-rated health**

THANK YOU!

V. Points for discussion

1. How would you interpret the finding that caregivers have better quality of life in regions with many formal LTC services?
2. Better use a health index instead of the self-rated health question?
3. Should we built our own measure for formal care services aggregating SHARE variables on the use of long-term care services?
4. …

BACKUP

Burden No. 1: Quality of life

- → Quality of life may reduce due to intensive care tasks.
- 12 item scale: CASP: **C**ontrol, **A**utonomy, **S**elf-realisation, **P**leasure (12-48)

How often do you…

… feel that your life has meaning?
… feel that what happens to you is out of your control?
… feel left out of things
… think that you can do the things that you want to do?
… and so forth…

1. Often
2. Sometimes
3. Rarely
4. Never

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Burden No. 2: Loneliness

- Loneliness is the distress that results from discrepancies between ideal and perceived social relationships (definition).
  → Social relationships may reduce due to intensive care tasks.

- UCLA loneliness scale (Russell, 1980), 3-item version

How much of the time do you feel... you lack companionship?

... left out?

... isolated from others?
1. Often
2. Some of the time
3. Hardly ever or never

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Burden No. 3: Self-rated health

- Self-rated health is the most comprehensive measure of health (physical and mental health)
- → Health may reduce due to intensive care tasks.

Would you say your health is...
1. Excellent
2. Very good
3. Good
4. Fair
5. Poor

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What is meant by informal caregiving?

- Caregiving is “a chronic stressor that places caregivers at risk for physical and emotional problems”
- Caregiving is related with many different negative outcomes:
  - reduced well-being (George, 1986),
  - reduced life satisfaction (Guerra, S., Vicente, H., Figueiredo, D., & Sousa, L., 2008)
  - bad health incl. depression (Pinquart and Sörensen, 2007)
  - loneliness

(...) Is there someone living in this household whom you have helped regularly during the last twelve months with personal care, such as washing, getting out of bed, or dressing?

IWER: By regularly we mean daily or almost daily during at least three months. (...)

RESULTS: (Only) caregivers´ quality of life is higher in regions with few formal care services than in regions with many formal care services

Analytical strategy: Random-intercept model with cross-level interaction of caregiving and formal care services

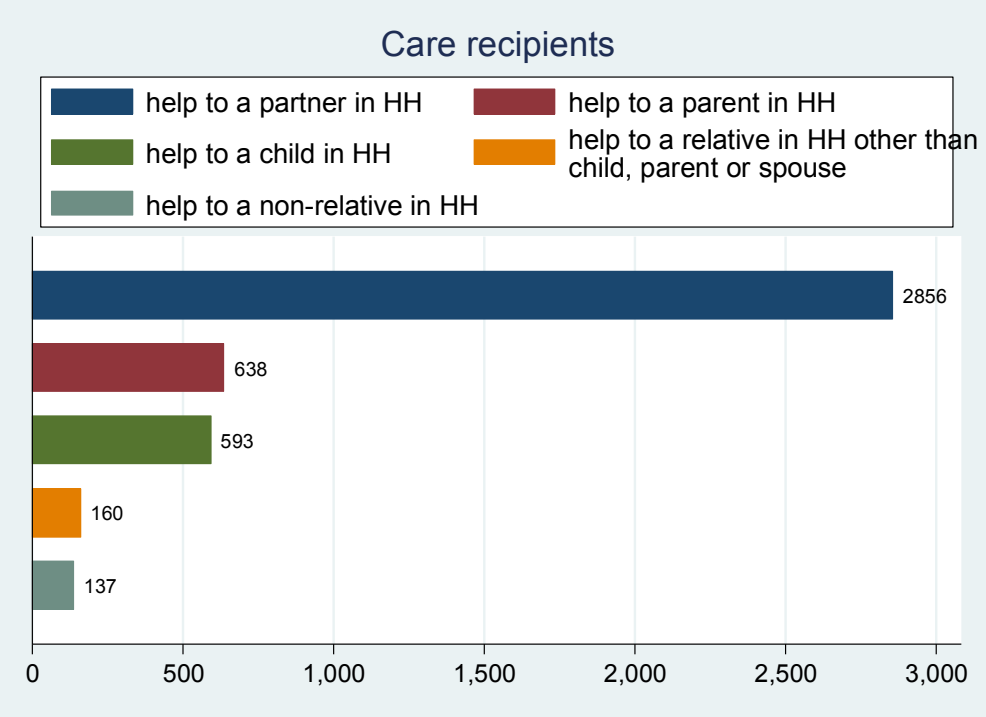
	Random-intercept model: Outcome: Quality of life	**Random-intercept model: Outcome: Loneliness**	**Random-intercept model: Outcome: Self-rated sickness**
	Est (SE)	Est (SE)	Est (SE)
caregiving	-1.69*** (0.13)	0.17*** (0.03)	.21*** (0.01)
Respondent level control variables	[yes]	[yes]	[yes]
No. of LTC beds per 1000 people	0.35*** (0.04)	-0.04*** (0.03)	-0.01** (0.01)
Interaction of caregiving and LTC beds	0.07* (0.04)	-0.01 (0.01)	-0.001 (0.01)
ICC	0.14 (0.02)	0.04 (0.01)	0.05 (0.01)
AIC	142270	75037	61343

Observations: 22750 Respondents, 89 regions

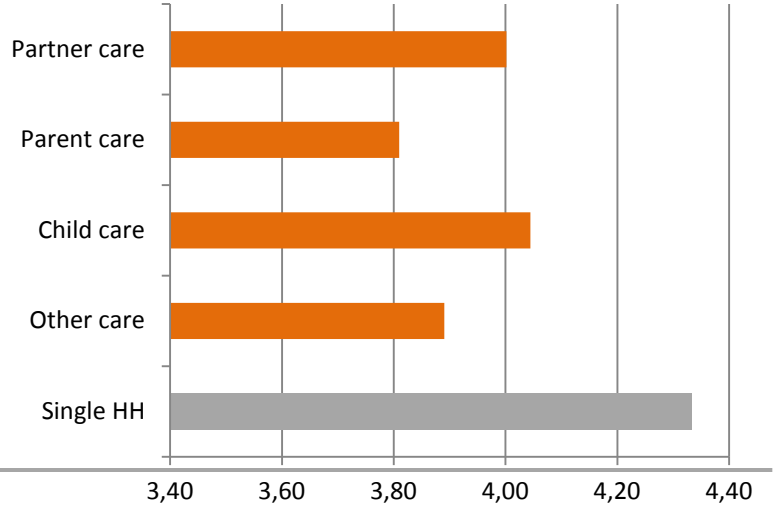
ICC= Intraclass Correlation, AIC=Aikaike Information Criteria, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The „loss“ of the person in need of care is burdensome

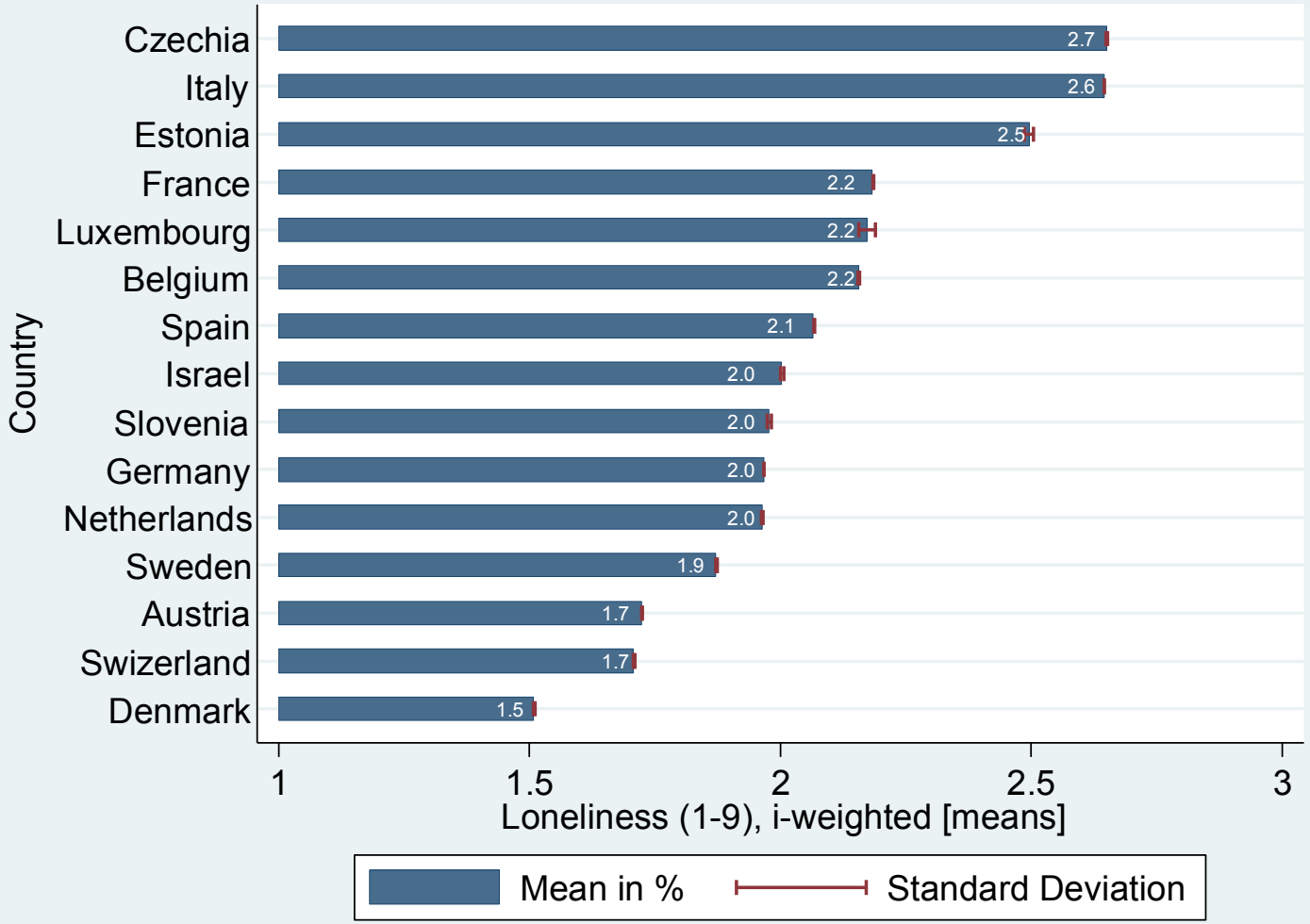
Loneliness, lower quality of life and subjective health might be driven by the "loss" of the partner for social events, not by the care task itself



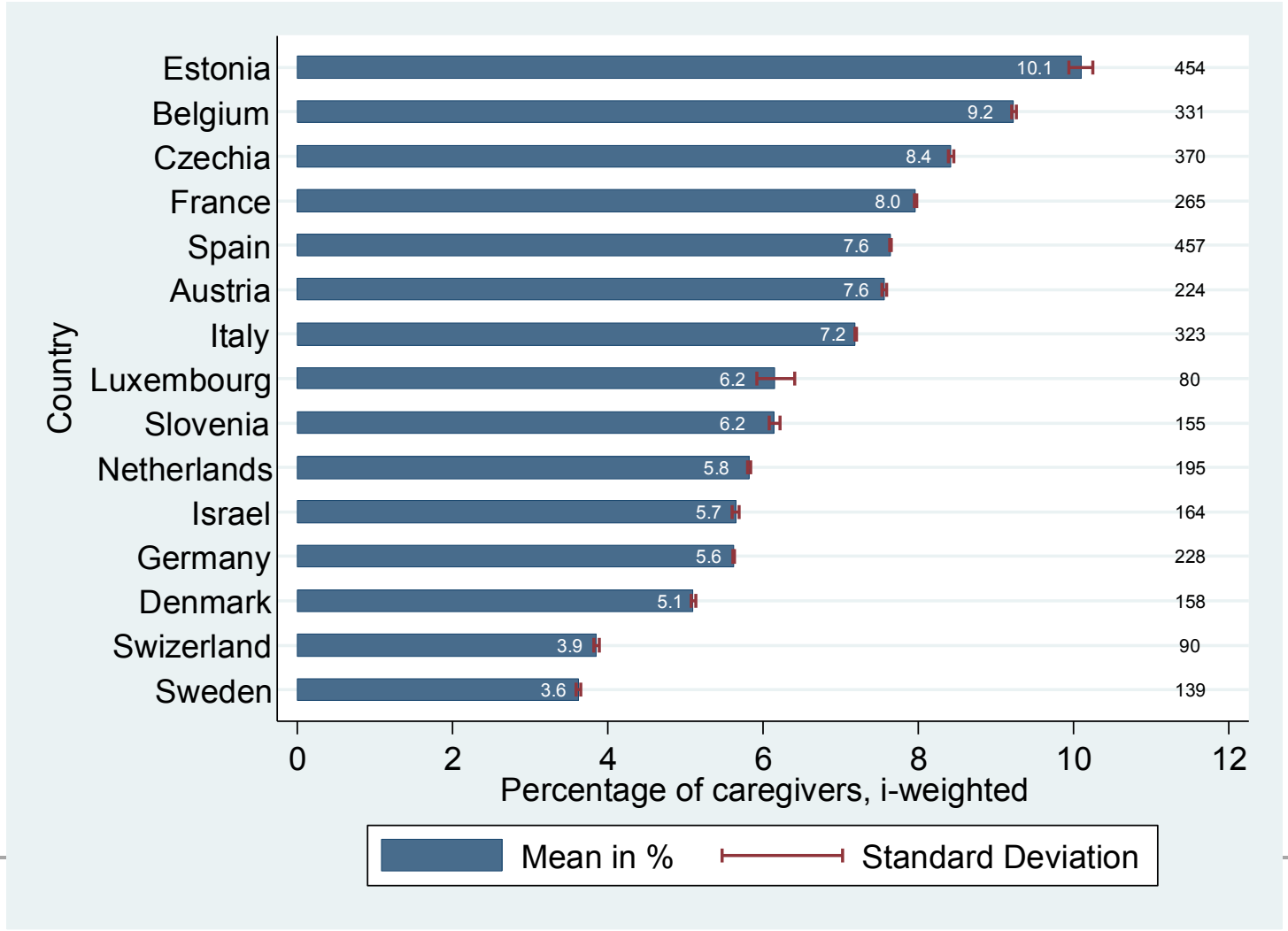
Mean loneliness scores by type of care recipient



Loneliness among Europeans 50+



Caregivers among Europeans 50+



Robustness analysis

- 2-level model with country dummies
- OLS instead of random intercept model
- FE model with cross-level interaction instead of Random-intercept model with cross-level interaction

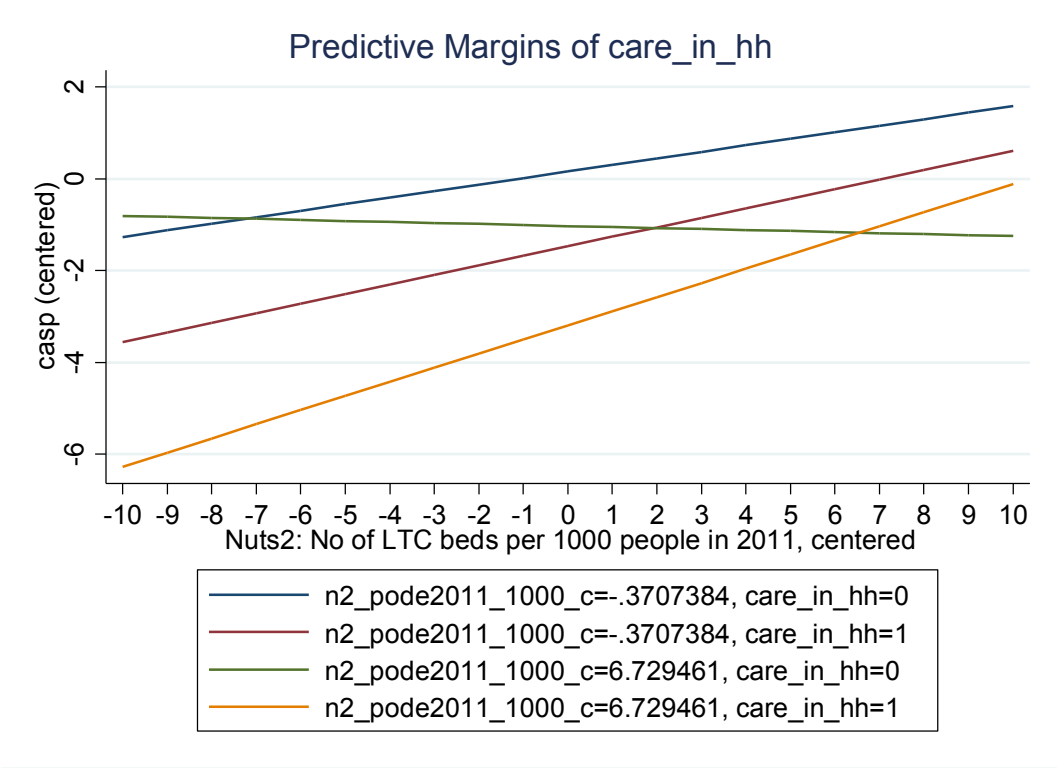
RESULTS: the role of regional GDP differences

Analytical strategy: Random-intercept model with cross-level interaction. Outcome: Quality of life

	Model 1: Regional characteristic: LTC beds only	**Model 2: Regional characteristic: GDP**	**Model 3: Regional characteristic: GDP + LTCbeds**	**Model 5: Regional characteristic: GDP + LTC beds + Interaction: care_LTCbeds**
	Est (SE)	Est (SE)	Est (SE)	Est (SE)
caregiving	-1.65** (0.13)	-1.72** (0.13)	-1.71** (0.13)	-1.68** (0.13)
control variables	[yes]	[yes]	[yes]	[yes]
GDP	[no]	0.00** (0.00)	0.00** (0.00)	0.00** (0.00)
No. of LTC beds per 1000 people	0.15** (0.05)	[no]	0.16** (0.05)	0.16* (0.05)
Interaction of caregiving and LTC beds	[no]	[no]	[no]	0.07 (0.04) (P>z=0.08) (also auf dem 10% Niveau nur noch signifikant…
ICC: Country	0.12 (0.06)	0.09 (0.05)	0.08 (0.04)	0 .08 (0.04)
ICC: Country and Region	0.17 (0.05)	0.14 (0.05)	0.13 (0.04)	0.13 (0.04)
AIC	155596	141987	141979	141978
LR Test with previous model	-77783	-70979	-70974	-70973

Durch die Kontrolle von GDP verschwindet die signifikante Interaktion. Blöd

Interaktion höherer Ordnung für den Einfluss von Population density auf die Interaktion von LTC beds



Variables used for the analysis