



Going formal or informal, who cares?

The role of differences in public coverage of long-term care in LTC decisions

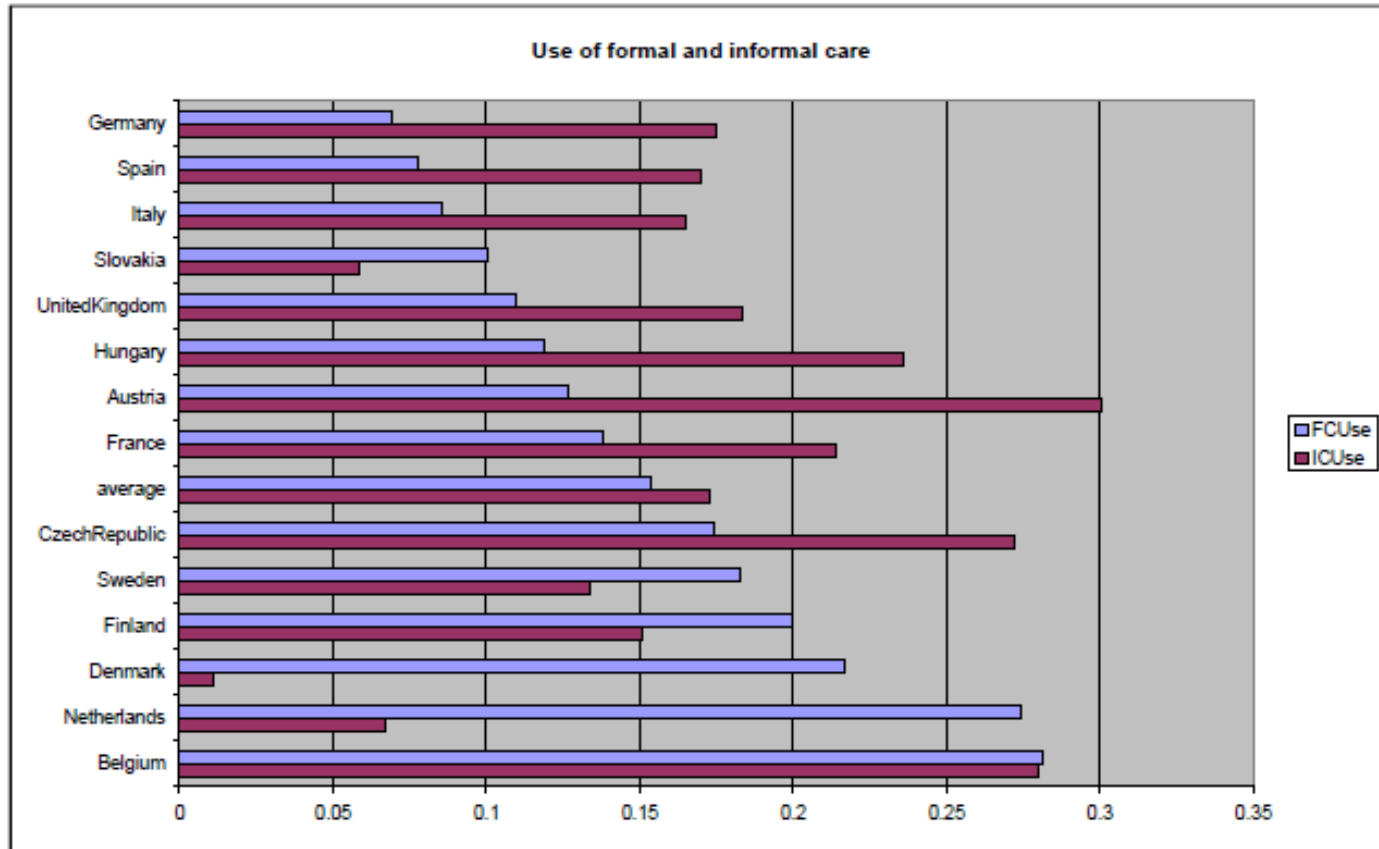
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Introduction

- International differences in LTC use
 - Importance of informal care versus formal care
 - Home care versus institutional care
- Financing and organization of LTC affects LTC use patterns
- But studies using cross-national database of micro data only include country dummies
- This paper: closer look at association between institutional differences and decisions on LTC use

Cross-country variation in LTC use



Source: Kraus et al. 2010

Objective

- Examine how differences in public LTC coverage relate to variation in choice for informal and formal LTC between Germany (G) and the Netherlands (NL)

LTC use	NL	G
No Care	85,0%	84,8%
Informal LTC	4,9%	11,6%
Formal LTC	10,2%	3,6%

Source: SHARE data (authors' compilation)

There are similarities...

- Separate public LTC insurance system
 - (Near-)universal coverage
 - Legal entitlement to LTC
 - No role for voluntary LTC insurance
- Prices negotiated by providers and insurance companies
 - Insurance companies not at risk for LTC expenditures
- Standardized eligibility assessment
 - Legally binding

... but also differences

- Coverage in G is less comprehensive than in NL
 - G: cost-sharing is high, co-payments not income-related
 - Private expenditures as % of total LTC expenditures:
NL: 8%; G: 31%
- Eligibility is assessed differently
 - G: eligibility based on need;
 - NL: eligibility based on need + informal care availability

Cross-country variation LTC use

Sources variation LTC use:

1. Differences in distribution of determinants
 - E.g. differences need patterns, informal care availability
2. Differences in how determinants impact LTC use due to structural variation (e.g. public LTC insurance system):
 - Difference comprehensiveness
 - H1: Income and wealth affect decision LTC use in G, not in NL
 - Difference eligibility regarding treatment of informal care
 - H2: Impact of spouse ability on formal LTC use is larger in NL than in G

Decomposition method

Non-linear decomposition method (Yun, 2008)

Decomposition achieved by:

1. Obtaining functional relationship LTC use for G and NL:
 - Multinomial probit with alternatives: no LTC, informal only, formal (+ informal)
2. Simulating marginal and counterfactual predicted probabilities (PP): combining estimates in (1) with different samples of determinants

Decomposition method

- a. Simulating marginal PP: combining determinant distribution of country with functional relationship LTC of same country
- b. Simulating counterfactual PP: applying functional relationship LTC in NL to determinant distribution G

$$\overline{F(X_{NL}\beta_{NL})} - \overline{F(X_G\beta_G)} = \left[\overline{F(X_{NL}\beta_{NL})} - \overline{F(X_G\beta_{NL})} \right] + \left[\overline{F(X_G\beta_{NL})} - \overline{F(X_G\beta_G)} \right]$$

(total variation) = (variation determinants) + (variation coefficients)

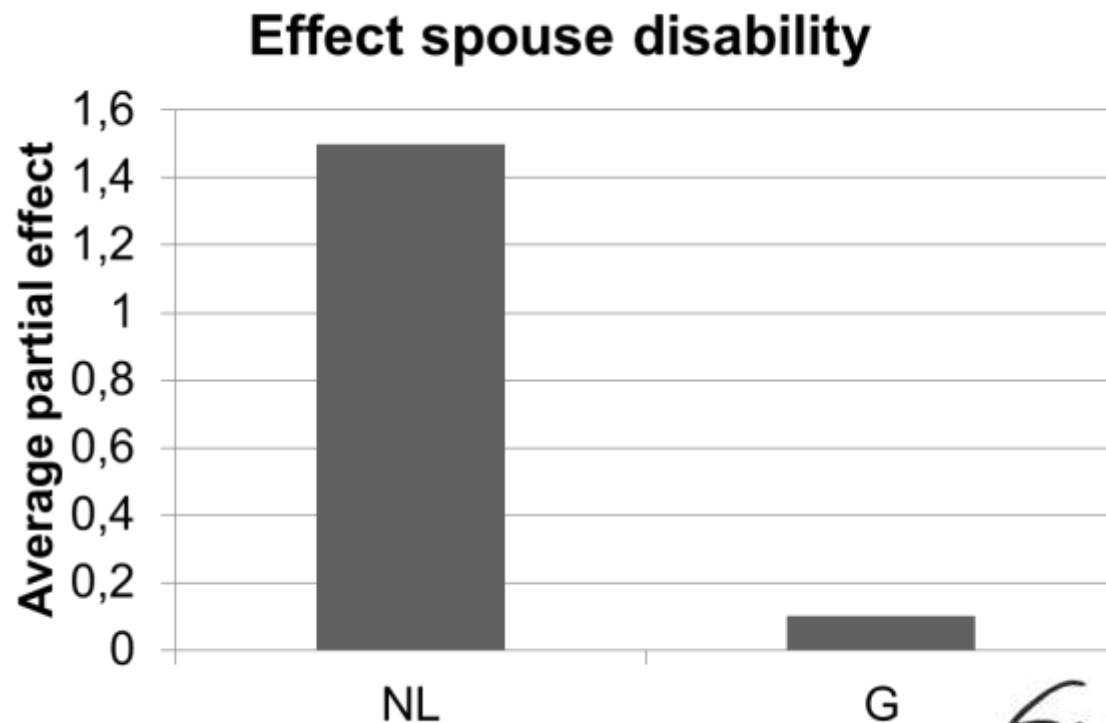
In addition, detailed decomposition: contribution of each variable to variation LTC use



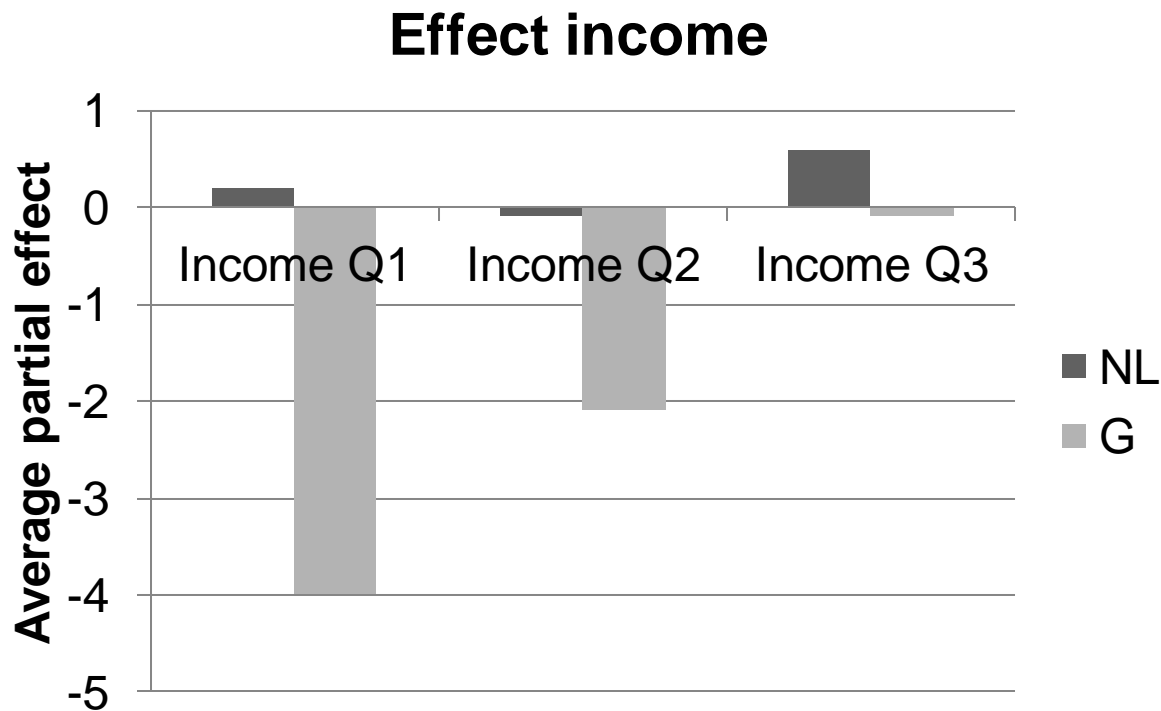
Data

- Survey of Health, Ageing, and Retirement in Europe (SHARE)
- Household members ≥ 50 years and their spouses are interviewed
- Includes individual and household characteristics
- Two waves: 2004 and 2006
- 8735 observations with full information (NL: 4347; DE: 4388)
- Determinants: spouse ability characteristics, income, need-related , demographics and enabling variables

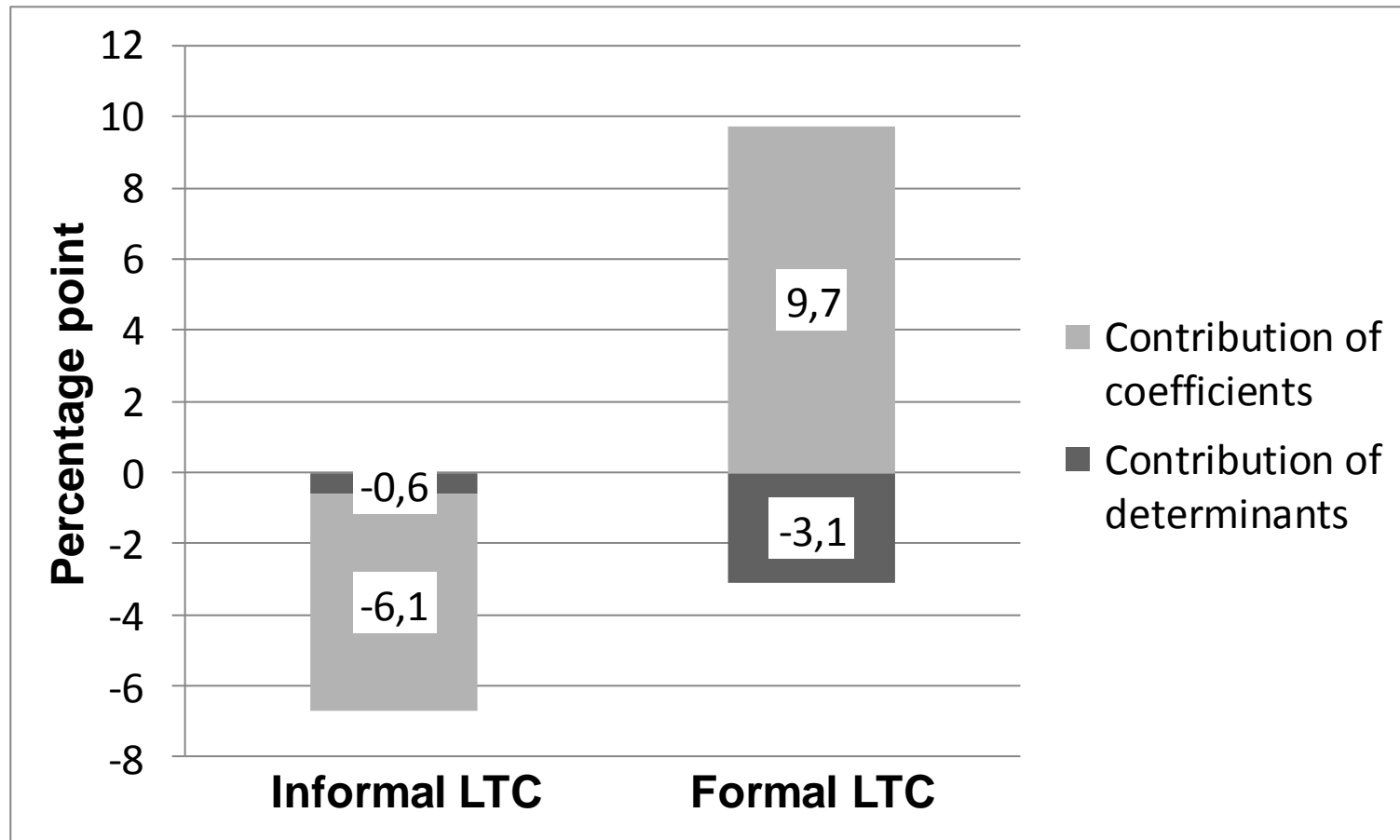
Is effect spouse disability on formal LTC use more important in NL?



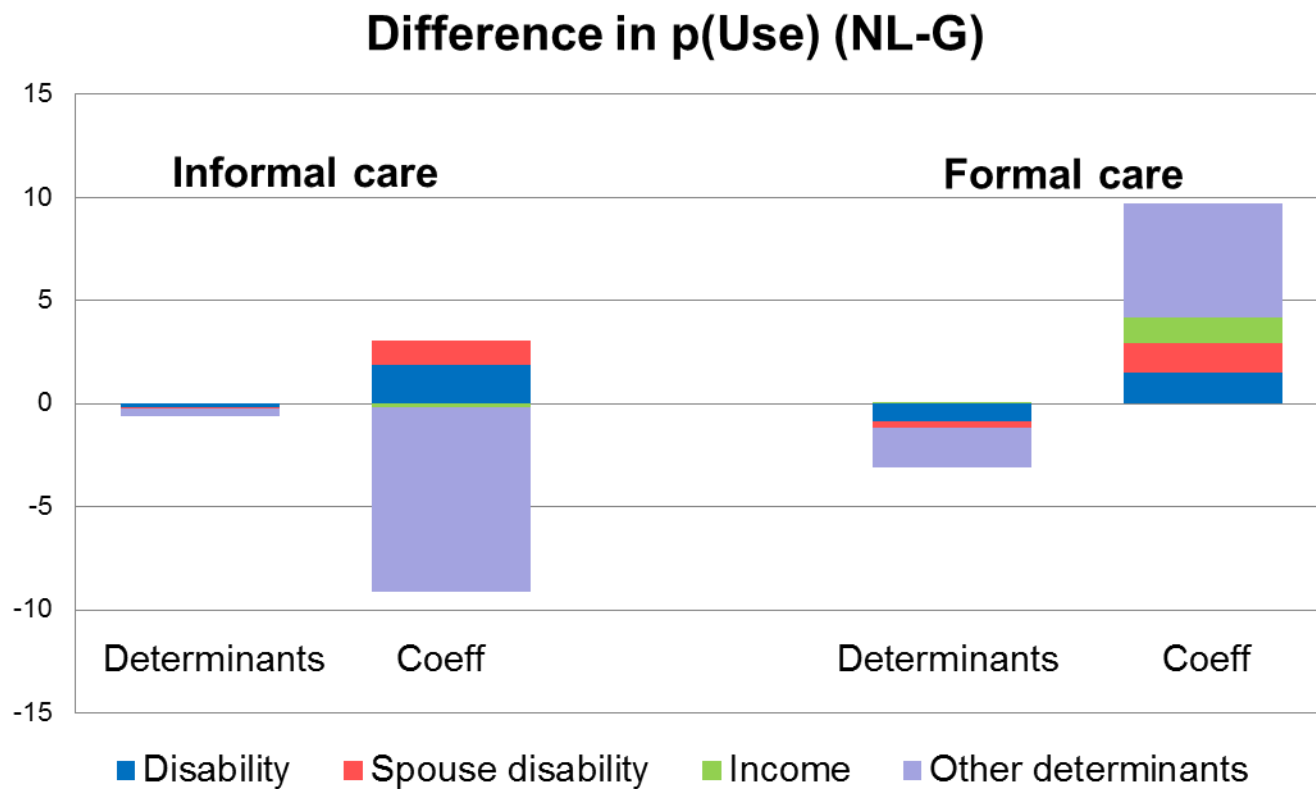
Is effect income on formal LTC use more important in Germany?



Decomposition results (NL-G)



Detailed decomposition



Conclusion

- Differences in population characteristics explain small fraction of cross-country variation in LTC use
- Choice of LTC substantially influenced by features of public LTCI system
 - Spouse ability is associated with formal LTC use in NL only
 - Having below median income hampers formal LTC use in G but not in NL

Thanks for your attention!

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