Informal elderly care across Europe:
The role of public policy

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The United Nations states that “…ageing is increasingly becoming one of the most salient social, economic and demographic phenomena of our times”

Eurostat estimates that by 2050 the number of people over 60 in Europe will have doubled.

The oldest old population (80+ year olds) is forecast to triple.

Although people live in better health in old age, the elderly do have special needs and requirements and often require assistance.
Traditionally elderly care has been provided by the extended family.

Since the 1960s, women have become more educated and opted to work outside the home. Also, urbanisation, greater life expectancy of the elderly, and decreasing family sizes have resulted in elderly care being increasingly provided by state or charities in the developed world.

Most countries in Europe have a mechanism to fund formal care, for example, nursing homes.

Several northern and continental European countries also provide at least partial funding for informal care as well, for example Norway’s municipalities has paid informal carers since 1988 and Finland and Denmark have followed since with similar schemes.
A recent trend in the EU countries has been to re-direct transfers from public provision of elderly care, for example nursing homes, to informal care.

The expectation of increasing provision of informal care is in conflict with the European Employment Strategy and specifically the Lisbon Agenda which has set an ambitious target for raising female employment rates to 60% across the EU.
The majority of informal care providers are women

Informal elderly care Incidence rates across the following countries: Austria, Belgium, Denmark, France, Finland, Greece, Ireland, Italy, Netherlands, Portugal, Spain, United Kingdom.
Many EU countries have female labour force participation rates well below the 60% target rate.

<table>
<thead>
<tr>
<th>Country</th>
<th>LFP</th>
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<tbody>
<tr>
<td>Spain</td>
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<td>Ireland</td>
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<td>UK</td>
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<td>Finland</td>
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<td>Denmark</td>
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The expectation of increasing provision of informal care is in conflict with the 60% employment target since informal care and labour force participation may be substitutes.

Note: Incidence rates across the following countries: Austria, Belgium, Germany, Denmark, France, Finland, Greece, Ireland, Italy, Netherlands, Portugal, Spain, United Kingdom. Line stands for labour force participation and the bars for informal elderly care.
Labour force participation and informal elderly care across Europe
Fundamental adjustment is required to [enhance the] compatibility between domestic and employment responsibilities both on a daily basis and across the lifecycle...

The issue – (1) increasing lifespan of the elderly

It is estimated that by 2050 the number of people over 60 in Europe will have doubled to 40% of the total population or 60% of the working age population.

The oldest old population that’s defined as 80+ years old is forecast by Eurostat to increase dramatically: from about 4% across EU to 12% of total population.

More resources need to be targeted at the elderly to help them, for example, to deal with everyday Activities of Daily Living (such as eating, bathing and dressing) or Instrumental Activities of Daily Living restrictions (such as shopping, meal preparation, using the telephone and medication management).
The issue – (2) old age dependency ratio

For the EU the old age dependency ratio is expected to rise from 25% in 2008 to 38% in 2030 and 53% by 2050.

This means that where, in 2008, 100 persons of working age supported 25 persons aged 65 or over, in 2050 they are projected to support 53 persons.

Research questions

Does informal care giving have an effect on health or general life satisfaction?

Does formal (public) elderly care substitute for informal care?

Does public provision affect intergenerational household formation?

Can formal care provision be used to influence individual labour market behaviour?
Data

European Community Household Panel 1994-2001

ECHP is the best available option for international comparisons in Europe as the same survey was conducted in all EU-15 countries.

Sample: all individuals aged 18-59, not in early retirement or education

N=474,660 (244,165 females)

Choice of the countries is guided by the availability of data for each country:

Sweden and Luxembourg are not used in the analysis because information on care-giving is missing.
The main explanatory variables of interest come from the OECD social expenditure database:

Old age benefits in kind for residential care / home-help services in Euros per capita of population over 65 years of age (2001 prices)

At minimum this variable proxies the number of beds in care homes.

Services for the elderly and disabled includes the following sub-categories: residential care, home help, day care and rehabilitation services, and other benefits in kind. Old age cash benefits includes the following sub-categories: old age pension, old age civil servant pension, veteran’s old age pension, other old age cash benefits, and early retirement pension.
Characteristics of caregivers across Europe

• **Labour force participation:**
  Carers are less likely to be employed in NL, FR, IT, SP, FI, UK

• **Age:**
  Carers are older in FR, PO and younger in IR

• **Level of education:**
  Carers are less likely to have tertiary level education in PO, UK

• **Household size:**
  Carers have larger households in NL, IT, GR, SP, PO, AU

• **Health:**
  Carers are more likely to be in bad/very bad health in NL

• **Presence of children:**
  Carers are less likely to have children in NL, FR, GR, SP, PO
Impact of elderly care on work satisfaction regarding…§

- Earnings: SP negative **
- Type of work: SP negative *, FI positive **
- Working times e.g. shift work: AU negative *
- Working conditions/environment: FR negative *
- Distance to work/commuting: IT positive **, FI positive ***

§ results based on an ordered probit for 5 states of self-reported satisfaction for a sample of workers with controls for age, education, health, household size, number of kids 0-15, wave. Note: negative=less happy; positive=happier
Impact of CARE on health§

Caregivers in relatively worse health in Ireland (**) and Portugal (***)

§ results based on an ordered probit for 5 self-reported health states for sample of workers and non-workers with controls for age, education, household size, number of kids 0-15, wave
Previous literature on informal elderly care

**Negative:**

Spiess and Schneider (2003) Ageing and Society: significant *negative* association between starting/increasing informal care-giving and change in work hours northern European women responding to start and southern to increasing care responsibilities.

Ettner (1996) JHR: large *negative* impacts on work hours of men and women, with the effects of co-residence and effects on women being larger.

Johnson and Lo Sasso (2006) Inquiry: *negative* impact on labour supply of both men and women; formal care purchased in the marketplace is not an attractive substitute for informal care.

Checkovich and Stern (2002) JHR: working children provide less care

Bolin et al. (2008) JHE: informal-care provision associated with significant lower employment probability and hours worked. No wage effects of informal-care provision.
Previous literature on informal elderly care

Zero effect:
Wolf and Seldo (1994) JHR: *no impact* for the propensity to be employed or on conditional hours of work
Stern (1995) JHR: after controlling for endogeneity, work status has *no impact* on care decision

Co-residence:
Hoerger et al. (1996) RESTAT: likelihood for intergenerational co-residence increased if parents have more housing wealth and their care burden is low
Pezzin and Schone (1999) JHR: intergenerational co-residence is an important mode of assistance to elderly persons; public care might substitute rather than complement family care at no direct cost to the government
My research demonstrates that

1) Higher government expenditure on formal residential and home-help for the elderly can increase the labour force participation rates of women across Europe by relieving their informal care burden.
**Estimation**

The country-specific variables capture the incidence of and the divergence in the market and voluntary sector provision of elderly care between the sample countries.

The net annual household income variable is expressed in Euros and is divided by the equivalised household size according to a modified OECD scale that gives a weight of 1.0 to the first adult, 0.5 to other adults and 0.3 to each child living in the household.

The raw correlation between state expenditure on formal care and informal care giving is 0.0126 highly significant, positive.

Between elderly care hours and formal expenditure it is significant negative at -0.0207.

Dependent variable: CARE, takes value 1 for interviewees who report looking after (without pay) a person who needs help because of old age, disability or illness other than a child

Controls: govt formal care expenditure, age (linear and quadratic), dummies for presence of pre-teen (age 0-12) and teenage children (age 13-15), dichotomous variables for a second or a higher level of education, and for very bad/bad health, an indicator of marital status (married, separated/divorced, widowed, never married), household size and income, and country specific trends and fixed effects.

Impact of government expenditure on formal residential care and home-help services for the elderly on the incidence of informal care (ECHP 1994-2001)

Results not significant for men at any age group.
Results

1) Informal care and labour supply

Prevalence: 3.5% of the whole sample and 8.8% of 45-59 year old women

Negative impact of CARE on LFP in FR, IR, IT, NL, PT, SP, UK

Informal elderly care decreases female LFP in many EU countries at some point during the lifecycle (most between 40-59, IT below 40 confirms Marenzi and Pagani, 2008)

Single women a risk-group for old age poverty in DE, GR, IT, NL

Esping-Andersen (1990) country groupings (South, Nordic, Liberal) – none of the groups are driving the results

State dependence: positive, highly significant for all countries
Results

2) Government expenditure and informal care

Significant result for women aged 45-59.

100 Euro increase in government formal care expenditure decreases the probability of informal care by 4-6 percent at the mean.
Results

2) Living arrangements

2.5% of whole sample care within own household only and 3.3% outside own household only, for women aged 45-59 the figures are 5.5% and 7.2% respectively

Government provided formal care does not affect intergenerational household formation but significantly lowers informal care undertaken outside of carers own household
Simulated impact of an increase in government expenditure on formal, in kind elderly care on labour force participation, women 45-59 (ECHP 1994-2001)

Notes: LFP denotes the observed labour force participation rate. SOCX+EU AVG 1 refers to the simulated labour force participation rate when the government expenditure on formal elderly care has been increased by the EU sample average without Denmark (€169.52) if the expenditure was below this figure. SOCX+EU AVG 2 refers to the simulated labour force participation rate when the government expenditure on formal elderly care has been increased by the EU sample average with Denmark (€474.66) if the expenditure was below this figure.
Discussion

Clear conflict between some EU policies

Role of:

  Immigration

  Schooling

  Increasing fertility rates through financial incentives or services