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Assessing Needs of Care in European Nations

AVAILABILITY AND CHOICE OF CARE

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1. Introduction

The ageing of the population in the EU member states in combination with the cuts in national budgets have led to the emergence of important challenges for both citizens and governments. The number of caregivers who need to balance paid employment with caring responsibilities can substantially increase as a result of other institutional and cultural changes that are taking place simultaneously in Europe, most of them related to an increase in female labour force participation.

From the point of view of caregivers, providing care often diminishes their results in the labour market in terms of wages. And, as is well documented in the literature, it can also have an adverse effect on their personal well-being, in terms of the quality of life, happiness, personal fulfilment and achievement of personal and family goals.

The provision of informal care is an important source of long-term care (LTC) for older people in Europe. According to the SHARE database,[1] between 21% and 43% of the population living in Europe aged 65 and older are receiving informal care. Given fiscal constraints on public budgets in most of the EU countries and the ageing of the population, it is likely that in the very near future informal care providers will represent the most important source of care for disabled and older people in Europe. In this context, we need to analyse the determinants of the provision of care to understand the determinants of receiving this type of care and to design adequate policies to support caregivers in a sustainable and efficient way.

Following this aim, it is necessary to understand 1) how the share of informal and formal care varies between the EU countries and 2) the underlying reasons for the observed differences between European countries, both in the propensity to provide formal and informal care and in the probability of receiving both formal and informal care. To this extent, among the factors considered in the analysis to explain the observed cross-country differences in the EU are: dissimilarities in the structure and characteristics of the formal care provision and the number of institutionalised dependents in the country; differences in the characteristics of the citizens within each country that determine their propensity to provide informal care, e.g. the level of education and income, the role of women in the family and household chores, family structure, etc.; We also seek to understand 3) the interdependence between formal and informal care, since the demand for formal care will evolve depending to a great extent on whether they are complementary or substitutes and, finally 4) the potential dependent's unmet needs and the burden suffered by the informal caregivers.

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[1] SHARE is the acronym used to refer to the Survey of Health, Aging and Retirement in Europe, which collects information on the health, lifestyle and financial situation of individuals aged 50 and older in a majority of European countries.

2. Evidence and analysis

Different institutional environments within EU countries but similar determinants of formal and informal care provision and use

The structure of LTC systems differs considerably from one country to another, as a result of the different nations' structure, history and culture as well as their economic performance (see Riedel & Kraus, 2011a). The analysis reveals that both a centralised and shared decision-making structure can be found in Europe with a roughly similar frequency: in about half of the LTC systems the main responsibilities for regulating LTC reside at the national level, while in the other half this responsibility is shared between national, provincial and municipality levels. This proportion holds true for both institutional and home-based care. In contrast to our expectations, not all Eastern European LTC systems are organised in a centralised way. In the Bulgarian, Estonian, Latvian and Slovakian LTC systems, decision-making is the responsibility of both the central and local levels.

As shown by SHARE data, there is a wide variation in the potential availability of informal carers[2] between countries (see Riedel & Kraus, 2011b). Among the old member states, Sweden ranks on the low side with 34 potential caregivers per 100 persons aged 65 or older, while the theoretical availability of informal care is twice as high in Belgium and the Netherlands. Differences between new member states are even larger, but the potential carer/dependent ratio in the remaining new member states is higher than in any old member state. Regarding the characteristics of the informal caregivers, there is also some variability across countries. On average, around 6% of the population above 50 years of age provides informal care in the countries considered. With the exception of Poland (and Switzerland), more than 50% of informal caregivers are women in the EU and 68.9% of caregivers provide care inside the household. In a majority of cases, the care is provided by the partner (57%-83%, depending on the range of ages considered) or the child (12-41%; depending on the range of ages considered) of the dependent person.

Concerning the regulation of informal care, important differences exist across countries. For example, important differences are found regarding the use of the benefits received (in some cases the recipient is free to decide how to use the benefit) as well as in the level of generosity of the benefits provided. At the same time, all countries with the exception of Lithuania offer some kind of monetary benefit that can be used to finance long-term care provided by informal caregivers.

Regarding the provision of care, we analyse data from representative countries of each of the four clusters of countries chosen in WP1: 1) Germany, 2) the Netherlands, 3) Spain and 4) Poland. Due to data limitations for the latter country, its data are complemented with data from Italy (see Willemé & Mot, 2010).

Regarding the demand for formal care, we find that women, people with ADLs (Activities of Daily Living and/or IADLs (Instrumental Activities of Daily Living), people living alone, and persons with higher/university education have a higher probability of receiving formal care (Marcinkowska & Sowa, 2011). The probability of using formal LTC is higher in countries where the provision of formal LTC is more developed. Within the EU, the Netherlands is the country with the highest probability of formal care usage while Spain has the lowest probability and German and Italy are in an intermediate position.

As regards informal care, irrespective of the country considered, the demand for informal care is determined mostly by the limitations and inabilities, and the characteristics of the caregivers and dependent people. We find that men have a higher probability of obtaining informal care from inside the household and women from outside the household. In most countries, age and physical limitations are the leading factors that determine the use of informal care: care is provided to the "older among the elderly". Persons with higher/university education have the lowest probability of receiving informal care in Spain and Poland, while income is positively related with receiving informal care from people

[2] Considering that the provision of informal care is often a very time-consuming task, only non-employed members of the respective age group are considered as potential carers.

living in the household in Germany and the Netherlands. The analysis reveals, contrary to common belief, that informal care provided regularly from non-family members is more common in the Netherlands and Germany than in Eastern European and Mediterranean countries.

Moreover, according to the evidence obtained from Eurobarometer data (see Pickard, 2011), differences in socio-demographic factors as well as differences in long-term care systems between the countries determine the supply of informal care.

On the other hand, as illustrated with Finnish data (Bockerman et al., 2011), older, poorer, single and less healthy individuals are more likely to be institutionalised. According to results obtained from the Finnish data, after controlling for health status, demographics and income, we find that individuals living in old-age homes report higher levels of happiness than those living at home.

Finally, we provide an evaluation of the supply of formal care in representative countries (as identified in WP1 – see Geerts, 2011). The evaluation is based on the data contained in the EU Labour Force Survey (LFS),[3] complemented when necessary with data from national statistical institutes. Country comparisons reveal that care employment doubled in Spain and that it increased substantially in Germany and the Netherlands during the period 1993-2008. In Germany, the increase in long-term care rose faster than employment in all care-related occupations, whereas in the Netherlands, full-time LTC-related occupations decreased. Poland and Spain follow a similar trend in care employment and in total employment.

We find that employment in care is predominantly a female occupation in all countries considered. Germany and Spain exhibit higher concentrations of women in domestic care, whereas in the Netherlands the share of women is higher among personal care workers, in Poland among nursing professionals and in the Netherlands among personal care workers. A very appealing feature detected in the LFS is that the share of care workers aged 50-64 has increased in all countries considered, especially the Netherlands and Poland. Regarding educational attainment, although the LTC sector has experienced a substantial improvement in all countries (especially in Spain and Poland), it remains low compared to the total workforce. The share of immigrants in caring occupations is higher than in other occupations, but evolves in line with total labour market trends.

Using a simple stock-flow cohort projection method, care employment is projected to evolve very differently in the countries considered. High net inflows of workers into the LTC sector are projected in Spain for all age categories considered, due to changes in the family model, growing income for middle-class households and the ageing population. As a consequence, the number of LTC workers projected by 2031 is double the current level. In Germany it is projected that the total number of people working in LTC will decrease slightly, with net inflows projected only in the share of workers aged 30-44. In the Netherlands, LTC employment is projected to remain constant, with an increase only in the share of workers aged 40-49. In Poland, the share of workers in LTC is projected to halve during the same period.

The interdependence between types of care

The previous section summarised the results obtained from the analysis about the probability of supplying formal or informal care using the information available for the countries considered. The statements are based on an econometric analysis concerning the supply of care where different sources of available care are seen as if they were independent. In that setting, the amount of informal care received by an individual does not depend on the amount of formal care that s/he receives.

In the real world, however, the decision about the supply of informal care is taken within the family, and obviously the quantity of formal care supplied determines the amount of informal care provided to dependents and *vice versa*. Therefore, the amounts of informal and formal care provided should be considered as intertwined decisions, where the quantity provided of each one determines the amount provided of the other. That is, each type of care available to family members is not independent of alternative sources of care that can be chosen at the intensive margin, and in the limit at the extensive

[3] See http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/lfs

margin. The main methodological challenge in addressing this question is to deal with the endogeneity problems related to the labour supply decision and the allocation of time into care responsibilities. Firstly, a trade-off between the quantity of informal care and formal care provided arises for caregivers, providing the first source of endogeneity. Secondly, another source of endogeneity appears because of the correlation of caregivers' characteristics with their propensity to provide care and to participate in the labour market.

There are different hypotheses to explain the relationship between the different sources of care provision chosen by families:

- Compensatory hypothesis. Care recipients resort to formal care as a last resource once other possibilities are exhausted.
- Substitution effect hypothesis. Care recipients substitute formal care with informal care and vice versa.
- Complementary hypothesis. Both types of care complement each other.
- Task-specific hypothesis. Each type of care is specific to some determinate type of caring needs.

To shed some light on how these different sources of care interrelate, we follow the procedure proposed in Bourguignon et al. (2007), and estimate a two-equation model for the choice of the type of care and the number of hours of care used/received (one for each type of care: formal, informal as well as the combination of both), with the aim of analysing the trade-off between formal and informal care, in a set of countries considered representative of different regions within the EU (see Jiménez-Martín et al., 2011). The model allows us to test competing hypotheses regarding the complementarities/ substitutability of formal and informal care, conditional on family characteristics and socioeconomic variables from the SHARE database. The analysis was performed separately for Germany, the Netherlands, Spain, Italy and the Czech Republic, which are the countries chosen to represent each of the clusters that are defined within the EU regarding the countries' characteristics of their long-term care systems.

According to the results, there is evidence in favour of the task-specific model and complementary model in Spain and Italy. (The same results were also obtained in the Czech Republic, although there are some identification problems in this country due to the small number of observations.) On the other hand, we found no evidence in Germany or the Netherlands of any kind of interrelationship between the different sources of available care.

Finally, we have analysed the sample of countries available in SHARE, grouping them under three different criteria: geography, the generosity of their LTC system and the characteristics of their LTC systems. The evidence indicates that, if any, the 'task-specific' model, in which each task is covered by using a specific type of care, best characterises the experience of the European countries as a whole.

Labour market implications of caring for caregivers

Informal care can be a cost-effective way of providing care to disabled people, but, at the same time, reliance on informal support can have adverse consequences for the informal caregivers, such as stress, isolation and loneliness. Moreover, caring for a family member can result in the loss of economic opportunities, since caregivers often must end their labour participation or reduce the hours of paid work.

In order to determine the importance of all these factors on the burden of informal caregivers, we analyse the probability of being an informal caregiver, the probability of having labour problems due to care-giving tasks and the probability of suffering unmet needs in formal care, using data from the Eurobarometer (see Vilaplana Prieto, 2011).

According to the results obtained, it is possible to distinguish three groups of countries:

1) The first group is composed of eleven countries (Belgium, Germany, Italy, Luxembourg, Finland, Cyprus, the Czech Republic, Latvia, Lithuania, Poland and Bulgaria) for which both events are

complementary. In this situation, the caregiver cannot rely on long-term care support to alleviate his burden, and informal care acts as a substitution for formal one.

2) The second group is composed of seven countries (Denmark, France, Ireland, Portugal, Sweden, Estonia and Turkey) in which there is a lower probability of suffering labour problems in the presence of unmet needs. In this case, either because caregivers are more protected from the point of view of occupational regulation, or because the national long-term care system is more efficient, the result is that caregiver's labour situation is less sensitive/vulnerable to unmet needs.

3) The third group is composed of eleven countries (Greece, Spain, the Netherlands, the United Kingdom, Austria, Hungary, Malta, Slovakia, Slovenia, Romania and Croatia) in which there is a high fraction of dependents with unmet needs associated with caregivers suffering labour problems. Even in the absence of unmet needs, informal caregivers face difficulties in continuing her/his work.

In an alternative exercise we evaluate, using data from the European Community Household Survey (see Gabriele et al., 2011), a model of the probability of a caregiver being constrained in the amount or kind of paid work because of care duties. We use a probit model where the dependent variable is being constrained in the amount or kind of paid work because of being a caregiver. We find that women who are not working and the people who are caring for adults in the household are the ones with a higher probability of being constrained (the probability increases with age and with intensity of care responsibilities) in the labour market.

As regards the countries' classification, the two exercises coincide in the relative classification of several countries (for example, Belgium, Finland, Denmark and France) and differ in the relative classification of others (with the Netherland being the clearer example).

3. Policy recommendations

Given the ageing of the population in the EU and the increased participation of women in the labour force, it is unquestionable that we will experience a substantial increase in the demand for long-term care services in the very near future. Year by year, more persons with disabilities will need assistance and support to enjoy a good quality of life and be able to participate in social and economic activities.

Although informal care could be an efficient and less costly procedure to satisfy the increasing need for long-term care services, relying exclusively on this source of care cannot be considered a solution, at least in the long run. This remark has to be taken with a lot of caution, however. Further and more precise work regarding the future trends of both formal and informal care is being performed in Work Package 6 of the ANCIEN project. Firstly, even if an increasing use of this type of care will help to reduce the long-term care government expenditures, it is also required that governments ensure that informal care provision evolves accordingly with certain quality standards. This responsibility will become more expensive and unattainable the higher the size of the informal care sector. Secondly, specifically for the case of Finland, we have found evidence that dependent people who receive formal care in institutions report higher levels of satisfaction and happiness than those that are not institutionalised. Although this evidence cannot be generalised, it points to a venue for future improvement of the LTC system.

Secondly, the results obtained with Finnish data on residential care suggest that there are limits to further de-institutionalisation of long-term care (the current policy stance in many countries). The severely disabled elderly in particular might be better off in residential care than in a home care environment. Thirdly, the fact that many informal carers feel constrained in their career possibilities is an additional argument for ensuring sufficient formal care provision, both at home and residential.

Moreover, as shown by our analysis, when clustering countries, the task-specific model appears as the most appropriate paradigm to characterise the experience of the European countries. Policy should be oriented to improve the formal care provision and at the same time to provide the necessary support to informal caregivers, either by means of financial support or by the development of new regulation and support actions in the labour market that allows caregivers to balance active lives and caring responsibilities, especially in those countries (Greece, Spain, the Netherlands, the United Kingdom,

Austria, Hungary, Malta, Slovakia, Slovenia, Romania and Croatia) in which the conflict between labour market participation and caregiving is more evident.

As a final remark, policy-makers should enable caregivers to remain in paid work if they want to, as this helps them to have an independent life, to avoid burn-out and to sustain the caregiver's role. Many countries have deployed market labour policies that make it easier for informal caregivers to juggle working and caregiving responsibilities. We have appreciated that the lower probability of having labour problems in certain countries (Germany, Denmark) is associated with the implementation of measures aimed at reconciling labour and care.

4. Data and methodological aspects

This Policy Brief provides an overview of all these questions and analyses the situation in 21 member countries of the European Union (Austria, Belgium, Bulgaria, the Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Hungary, Italy, Latvia, Lithuania, the Netherlands, Poland, Romania, Slovakia, Slovenia, Spain and Sweden). To document all these features, we use data collected by ANCIEN project participants, and data from different databases such as *SHARE database*, *Euro barometer 67.3, EUROSTAT statistics and the European Household Community Panel (ECHP)*. Moreover, for some of the specific questions, Labour Force Survey data and specific national data, such as *Health 2000* database for Finland, *Encuesta sobre Discapacidad, Autonomía Personal y Situaciones de Dependencia* (EDAD) for Spain and *Administrative registers from LTC Insurance* for Germany have also been analysed.

Work Package 1 of the ANCIEN project can be considered as a cornerstone of the analysis developed afterwards in the project. The clustering of countries is defined in accordance with the captured differences in the long-term care systems of European countries, grouped within a typology. An important component is the extent to which the long-term care system relies on informal care. This typology, divides the EU member states in the ANCIEN study into four clusters according to their long-term care system (Kraus et al., 2010). The composition of the four clusters is as follows:

- Cluster 1: Belgium, the Czech Republic, Germany, Estonia and Slovakia
- Cluster 2: Denmark, the Netherlands and Sweden
- Cluster 3: Spain, France, Austria, Slovenia, Finland and the UK
- Cluster 4: Italy, Hungary and Poland

Representative countries for each cluster have been identified, these being respectively Germany, the Netherlands, Spain and Poland. Use of informal care varies across the clusters and representative countries, with informal care use being described as 'low' in Cluster 2 (represented by the Netherlands) and 'high' in the other three clusters (represented by Germany, Spain and Poland). In January 2011, two alternative representative countries are being considered for inclusion in the ANCIEN study due to data availability limitations, Czech Republic and Italy.

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SEVENTH FRAMEWORK PROGRAMME

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ANCIEN

Assessing Needs of Care in European Nations

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Launched in January 2009, ANCIEN is a research project financed under the 7th EU Research Framework Programme. It runs for a 44-month period and involves 20 partners from EU member states. The project principally concerns the future of long-term care (LTC) for the elderly in Europe and addresses two questions in particular:

1) How will need, demand, supply and use of LTC develop?

2) How do different systems of LTC perform?

The project proceeds in consecutive steps of collecting and analysing information and projecting future scenarios on long-term care needs, use, quality assurance and system performance. State-of-the-art demographic, epidemiological and econometric modelling is used to interpret and project needs, supply and use of long-term care over future time periods for different LTC systems.

Work Packages. The project started with collecting information and data to portray long-term care in Europe (WP 1). After establishing a framework for individual country reports, including data templates, information was collected and typologies of LTC systems were created. The collected data will form the basis of estimates of actual and future long term care needs in selected countries (WP 2). WP 3 builds on the estimates of needs to characterise the response: the provision and determinants of formal and informal care across European long-term care systems. Special emphasis is put on identifying the impact of regulation on the choice of care and the supply of caregivers. WP 6 integrates the results of WPs 1, 2 and 3 using econometric micro and macro-modelling, translating the projected needs derived from WP2 into projected use by using the behavioral models developed in WP3, taking into account the availability and regulation of formal and informal care and the potential use of technological developments.

On the back of projected needs, provisions and use in European LTC systems, WP 4 addresses developing technology as a factor in the process of change occurring in long-term care. This project will work out general principles for coping with the role of evolving technology, considering the cultural, economic, regulatory and organisational conditions. WP 5 addresses quality assurance. Together with WP 1, WP 5 reviews the policies on LTC quality assurance and the quality indicators in the EU member states, and assesses strengths, weaknesses, opportunities and threats of the various quality assurance policies. Finally WP 7 analyses systems performance, identifying best practices and studying trade-offs between quality, accessibility and affordability.

The final result of all work packages is a comprehensive overview of the long term care systems of EU nations, a description and projection of needs, provision and use for selected countries combined with a description of systems, and of quality assurance and an analysis of systems performance.

Principal and Partner Institutes

CEPS is responsible for administrative coordination and dissemination of the general results (WP 8 and 9). The Belgian Federal Planning Bureau (FPB) and the Netherlands Bureau for Economic Policy Analysis (CPB) are responsible for scientific coordination. Other partners include: German Institute for Economic Research (DIW); Netherlands Interdisciplinary Demographic Institute (NIDI); Fundación de Estudios de Economía Aplicada (FEDEA); Consiglio Nazionale delle Ricerche (CNR); Universitá Luiss Guido Carli-Luiss Business School (LUISS-LBS); Institute for Advanced Studies (IHS); London School of Economics and Political Science- Personal Social Services Research Unit (PSSRU); Istituto di Studi e Analisi Economica (ISAE); Center for Social and Economic Research (CASE); Institute for Economic Research (IER); Social Research Institute (TARKI); The Research Institute of the Finnish Economy (ETLA); Université de Paris-Dauphine-Laboratoire d`Economie et de Gestion des organisations de Santé (DAUPHINE- LEGOS); University of Stockholm, Department of Economics; Karolinska Institute-Department of Medecine, Clinical Epidemiology Unit ; Institute of Economic Research, Slovak Academy of Sciences (SAS-BIER); Center for Policy studies (PRAXIS). Most of the ANCIEN partners are members of the European Network of Economic Policy Research Institutes (ENEPRI).

For more information, please visit the ANCIEN website (www.ancien-longtermcare.eu) or the CEPS website (www.ceps.eu).