DemoSoc Working Paper

Paper Number 2005--07

Women's Employment and the Adult Caring Burden

Sebastià Sarasa
E-mail: sebastia.sarasa@upf.edu

and

Josep Mestres
E-mail: j.mestres@ucl.ac.uk

May, 2005

Department of Political & Social Sciences
Universitat Pompeu Fabra
Ramon Trias Fargas, 25-27
08005 Barcelona
http://www.upf.edu/dcpis/

DemoSoc Working Paper

Abstract

Demographic ageing is increasing pensions, health and social services spending and threatening the future balance of public budgets. Providing home care can help to curb health expenditure and it may improve elderly welfare also, but EU states have chosen different policies in providing home care. Main differences are related with source of financing and eligibility criteria but also with the kind of benefits (benefits in cash or in kind). How these different options affect welfare and carers' employment opportunities is the core of this research. Home care growth is going to be more efficient as far as it promotes employment and, public revenues consequently. Using microdata from the European Community Household Panel, British and Spanish means tested programs are compared with German and Austrian 'in cash' benefits, and with Danish 'in kind' benefits also. The results show that Danish policies are the most efficient and equitable while the British and Spanish ones are the worst.

Keywords

Women's employment, adult care, family life, Western Europe

Acknowledgements

The ECHP is used with the permission of Eurostat, who bear no responsibility for the analysis or interpretations presented here. We have benefited from the financial support that the Spanish Ministry of Science and Technology has granted to the research project Riesgos y oportunidades a lo largo del curso de vida en las sociedades post-industriales (SEC2003-02699). We would like also to thank Gosta Esping-Andersen who gave us very interesting and crucial comments on previous drafts. The views expressed in this paper are, however, exclusively attributable to the authors.

Introduction

Population aging is one of the great challenges for policy making throughout Europe. Its consequences for pension guarantees and financial sustainability of welfare states have received most attention, while the simultaneous rise in demand for care has been far less intensely scrutinized. Population forecasting informs us that, on average, the share of the ultra-aged (75+) near doubles every twenty years, and since this population group is characterized by extraordinarily high probabilities of needing care services, clearly the needs and risk structure that accompanies aging will shift heavily towards service provision.

Considering that demand for care will rise exponentially over the coming decades, Europe's welfare states will be pressed to respond, not least because the traditional source of care that comes from family members is likely to dry up as women's life-long employment becomes the norm. A first glance tells us that, with a few exceptions, public policy has been slow to develop across much of Europe. Moreover, the kinds of policies that have been adopted vary substantially. . One can identify one distinct Nordic approach that stands out for its emphasis on direct public provision of care services. Germany and Austria exemplify a second distinct approach based, in this case, on cash transfers to households with caring burdens. Perhaps the most prevalent policy, so far, is to consider care a private matter, either by assuming that the market for care will function adequately for the majority (as in the U.K.) or by delegating responsibilities to the family itself – which is the prevailing view in Southern European policy. Southern Europe stands out for its lack of any systematic development of elderly care services. This cannot bee ascribed to lack of need. Recent research on Spain has identified a huge unsatisfied need for home help services, nursing homes, and for housing adapted to the needs of the frail elderly. The prevalent informal care is, moreover, characterized by great inequities, both in terms of its distribution across gender and across the social classes (Sarasa, 2003).

In a sense, the Southern European countries find themselves in a 'tabula rasa' situation as far as caring policy is concerned. From a public policy perspective, this implies the potential for policy learning through an evaluation of the experience gained from reforms in other European countries. Simply put, the choice seems to be between three basic formulae. One, exemplified by Britain, combines a pervasive reliance on market purchased care with publicly provided services targeted quite narrowly to the truly needy. Considering the status quo in Southern Europe, this option would not entail a dramatic departure from existing policy except for extending coverage of public aid to a somewhat larger clientele. The second, exemplified by the insurance-based cash transfer policy adopted in Austria, Germany, and Luxembourg during the 1990s, would imply the establishment of a comprehensive additional social insurance scheme. And the third, exemplified by Scandinavia, would probably imply the most radical reform, considering that it would necessitate construction of a major infrastructure of public service provision.

Any informed debate on policy reform and innovation must include an assessment of efficiency and equity. The former has to do with the comparative effectiveness of a policy to accomplish welfare goals in consideration of overall costs. The latter is a question of the direct and indirect distributional consequences of any given policy. The principal aim of this paper is to explore which policy combination may potentially yield the most 'Paretian' outcome in terms of possible trade-offs between equality and efficiency. Before we turn to such analyses we will first lay out the principal dilemmas involved and then briefly describe the workings of the different policy models.
To improve the provision of services for the frail elderly compels Southern European states to choose among the different strategies already implemented by other European Union members. We can summarize those strategies in three main options. First, the British one, where public services are available mainly for the very frail and poor people, the rest of dependent people having to buy the services in the market. That would means for Southern European societies more of the same but, as the British case shows to us, with greater coverage and greater public resources expended in. Second, the cash transfer option implemented during the 90s in Germany, Austria and

Luxembourg among others and; third, the provision of public services with universal eligibility criteria as the Scandinavian states do.

Do all institutional designs produce similar outcomes in terms of equity and efficiency? That is the issue we are going to explore but, before to do it, we have to pay attention to two basic details; what the main dilemmas are and, what the main patterns characterize each institutional design.

Some challenges of demographic ageing

Lower fertility rates and higher life expectancy are increasing the share of elderly people in all advanced societies. The ratio of employed to retired people is falling and threatens the future equilibrium of Social Security budgets. Over the past decades, European governments have implemented reforms to address the issue of increasing pension and health expenditure, many of which consist in weakening entitlements for future pensioners. Some experts suggest that the need for major spending reductions is unfounded because the added social costs of ageing can be offset by the reduced need for spending on families and children that will accompany the falling birth rates (Concialdi, 2000)

It is, however, rather unclear how much of the increase in aged spending can be offset by potential savings on family and child benefits in the Southern European welfare states. As female employment is growing rapidly, pressures on governments to provide more public services for children are mounting. And we should not forget that a substantial increase in women's (and especially mothers') employment rate is being defined as key to improving the ratio between actives and retirees, as well as to broaden the contribution base for Social Security and general taxes. This is nowhere more true than in Southern Europe where female activity rates *and* fertility levels are extremely low (Castles, 2003). Realistically, future immigration flows alone will not ensure the sustainability of social security systems (Storesletter, 2000). Leaving aside

possible increases in productivity which undoubtedly will improve the available resources, greater involvement of women in labour market seems absolutely necessary in Southern Europe.

While it is possible that the greater financial burdens from ageing can be partially compensated for by raising female activity rates, we should keep in mind that also health care expenditures are powerfully affected by aging. As Jenson and Jacobzone argue, all OECD countries face the question of how best to provide care for elderly persons who may be more frail than sick, more in need of help with everyday living than of medical care, more in need of help in living autonomously than requiring care in institutions' (Jenson & Jacobzone, 2000:18). This is essentially the issue often defined as 'ageing in place'. But very different policies are hidden under this generic label. Major differences are evident with regard to financing ageing in place programs, to the kind of benefits to be delivered, and to eligibility criteria. Any given choice will, in turn, affect the opportunities both to generate higher employment levels, especially for women, and to obtain a broader tax and social security contributions base, too.

Ageing in place policies can result in relative lower costs for health services, greater employment and more public revenues but, this depends on whether the development of care is designed to alleviate family from caring burdens and to encourage women to seek formal employment. Where ageing in place programmes do not offer women enough incentives to obtain a formal job, the results in employment ratios and public revenues will be modest. That can be the case if ageing in place delegates the bulk of caring work to the family, and possibly accompanied by cash transfers. In such scenario, the consequences for health expenditure are more ambiguous. Delegating caring activities to the family can curb public health expenditure in the short term, but since it is well known how the health of informal carers deteriorates when caring last for a long time, the long-run effect may be rising spending[i].

Adult care and employment

The relationship between care and employment can be studied focusing on several dimensions. One dimension has to do with the new jobs directly created by the introduction of formal services to cover the needs for care. Recent research has shown that employment growth in the caring sector depends on the modes of financing and provision (Bosch et al., 2001; Christopherson, 1997).

Another field of research, focusing on labour supply, home production and care giving, examines the equilibrium between caring and working time, and tries to identify the conditions under which care givers can combine caring and employment. That is our main concern in this work. The time allocation model suggests that caregiving and employment compete for the caregiver's time resources (Becker, 1965). The trade-off depends on the relative marginal utility of paid work and care giving which, in turn, depends on relative wages. The higher the actual wage rate or a caregiver's earnings potential, the higher the opportunity cost of caregiving.

Earnings potential and actual wages depend on individual attributes such as age, educational credentials, sex and the skills acquired through work experience. Furthermore, "in the long run, reducing work hours for caregiving or quitting work altogether will reduce the caregiver's earning potential and thus reduce the marginal utility of employment" (Spiess and Schneider, 2001:2).

On the caregiving side, the marginal value depends on the accessibility to care services provided by third parties (market, state or relatives) and on the intensity of caring needed by the care-recipient. At the same time, studies of caregivers' stress point out a decrease in their marginal utility of care at high levels of assistance provision. Notwithstanding, empirical evidence on the relationship between caring and formal work is unclear. Although most bivariate comparisons of hours of work and caring time show a negative association, results from multivariate analysis are less consistent, depending in a great way on how the samples are constructed and on the estimating techniques (Johnson & Lo Sasso, 2000, Spiess & Schneider, 2001).

Furthermore, the trade-off between care and work seems to operate within a framework shaped by cultural values. Whether to care or not depends also on how deep moral values about family duties are rooted. In most advanced societies, in spite of the 'individualization' thesis, the rising employment rates among women have not produced any significant reduction in women's motivation to care for their frail relatives. Using ECHP data, Spiess and Schneider (2001) do not find any "care giving crunch" when employment time rises. [ii] Similar results have been found in the USA where paid employment by female caregivers reduces the caring time, but only when other formal or informal caregivers are available (Johnson and Lo Sasso, 2000).

Do these results mean that no trade-off exists between caring and employment? The empirical research done by Doty et al. (1998) indicates that this trade-off is especially acute in USA, when women work full time and the care receiver's dependency is severe. In such a situation women confront a choice between cutting back their hours of work or accessing larger amounts of supplemental help even from her husband. So the main relevance of this trade-off is not so much for the dependents' well being as for the carers'[iii]. The main issue then is how caring interferes in carers' employment opportunities. Undoubtedly, the nature of a country's welfare state support will have a major effect on how women reconcile care and employment and this paper will therefore also centres on the effects of welfare institutions.

The importance of welfare regimes is highlighted when one considers that the amount and composition of 'supplemental help' is strong related to governmental policies. Johnson & Lo Sasso, (2000) have found in the USA that the likelihood of caring for parents among children of age between 53 and 65 is greater when their parents lacked alternative sources of social support. Similar results have been found for EU (Spiess & Schneider, 2001) where either starting or increasing caregiving decrease the weekly work hours of midlife women. Spiess and Schneider (2001) also find significant differences between 'Northern' and 'Southern' European countries. Their results, however, cannot be used to make inferences about institutional effects on caregivers' employment since the 'Northern' group aggregates such different welfare regimes as

Denmark (the only Scandinavian country considered), the Netherlands, Germany, France and Belgium. Since we aim to identify the influence of welfare institutions on the labour supply of caregivers, we need to know first how welfare policies are designed at the national level.

INSTITUTIONAL DESIGNS OF DEPENDENT CARE

Using coverage ratios one can identify three main groups of nations in the EU (see Table 1). The Scandinavian countries have developed the largest network of nursing homes and home help services. Here, around one third of elderly people receive one or the other kind of care, with home help services being the most important. At the opposite end we find the Southern European countries where service coverage is the lowest and where care is most familialized. In the other in-between countries, coverage lies close to 10% of the elderly population; the bulk of services are nursing homes, although home help is rising.

Trying to curb the demand for hospitals and nursing home admissions, most Continental European governments have implemented new policies during the nineties. In 1993, Austria established a universal grant for dependent people. Germany, in 1995, set up a new Social Security program for covering dependence risk (one that Luxembourg imitated in 1998), and France implemented a new benefit in 2002 following a series of earlier unsuccessful reforms.

These recent Continental European policies differ in important respects from the more longstanding and institutionalized Scandinavian experience, both with respect to the instruments and results. Key dimensions of policies that directly influence results are: the type of benefit, eligibility criteria, costs and sources of financing, and the organizational model. There are, in each case, important trade-offs and policy makers are therefore forced to make hard choices.

Cash or in kind benefits?

Two main public strategies can be chosen to address 'ageing in place'. Public authorities can prompt free, or heavily subsidised, in kind services or they can chose to transfer cash benefits to households with any dependent member. The consequences of either strategy can be radically different.

It can, first of all, affect the dependents' well being. Benefits in cash imply an increase in the disposable income for dependents but there is no guarantee that such will translate into better care or into preventive actions against further deterioration of dependents' health. Benefits in kind can be a better tool for monitoring the evolution in health and autonomy of dependents offering, at the same time, a greater certainty that public resources are actually invested in the dependents' care.

Secondly, the type of benefit has also different effects on informal caregivers, in particular because it affects the trade-off between employment and caring. Still, at least in theory, what is really important is not so much the kind of benefit as the 'intensity' of it.

Cash benefits can be interpreted differently, all depending on the relative amount of money being transferred. Cash transfers reduce the caregivers' opportunity cost linked to potential earnings lost in the labour market. As a result; they may reinforce the traditional role of women by lowering the opportunity cost of informal caring. Alternatively, one may interpret cash transfers as means by which women can purchase substitutive services or supplementary help that, in turn, allows them to remain (or begin to) employed. In fact these two possible effects of cash transfers have been considered in the implementation of the recent Austrian and German policies. However, the employment effects of cash benefits will depend very much on their generosity. Low benefit levels that do not match the cost of market services will, most likely, not permit women to purchase help as a substitute for their own informal care. Only when the amount of money is close to the cost of market services will women have a realistic possibility of seeking employment without incurring additional costs.

The double effect of cash benefits works also for benefits in kind. In this case, the main issue has to do with the intensity of service provision. Very restrictive or poor service delivery implies that the dependents' needs will not be adequately covered and, hence, this will affect negatively women's labour supply. Conversely, women will be more prone to be active in the labour market when the gap between the needs of dependent adults at home and the needs covered by external providers decreases[iv].

One extreme formulation of the employment-caring trade-off is represented by the *invalid care allowance* in the United Kingdom. Beneficiaries of this allowance are forbidden to work although most of them are poor women in working age. The allowance operates as a sort of wage but, with two serious disadvantages, it is neither sufficiently generous to permit the independence of the beneficiary, and nor is caring recognised as formal work by the Social Security administration (Baldwin et al., 1991).

Benefits in cash are the corner stone in German, Austrian, French and Luxembourg's reforms. Although the main motivation is to alleviate the rising demand for nursing homes and hospital beds, they also try, indirectly, to encourage the supply of formal services. Conversely, the cornerstone of the Scandinavian approach is the public provision of services and cash benefits are of minor importance.

Sources of financing and eligibility criteria

There are three main sources of financing care, namely general taxation, social insurance contributions, and private savings. In practice, all of them can be mixed.

Personal savings and insurance can be a source of private financing, but insurance companies have proven ineffective in raising the supply of formal services. Even in the USA, where private insurance has been strongly promoted via tax deductions and grants, the results have been insignificant. Here, private insurance finances only 7 per

cent of total spending on nursing homes (Olsen, 2002). The high costs of premiums deter most potential consumers (Wiener, 1994).

Another disadvantage of private insurance is its incapacity to cover current and short-term needs, mainly because premiums are designed to cover future risks among the insured. Accordingly, people currently in need of care would be left out unless the public sector provides care. In other words, to ensure coverage it is difficult to avoid that public authorities assume at least some share in financing. The size of its share and the eligibility criteria for benefits differ, however, among welfare regimes. Eligibility can vary according to age and level of dependency and furthermore, access to benefits can be conditional on previous contributions, on means tests, or it can be open to all nationals or residents.

In the UK, public services are financed by general taxes and eligibility is restricted by dependency level, co-payment capacity, and by the absence of informal carers. The Scandinavian countries provide a large supply of tax-financed public services covering all citizens no matter their income or age. Since the 1970s onwards they have pioneered the strategy of prioritising home help services and community care over nursing homes. Finally, in Continental Europe, tax financed services have generally been limited to the very poor until the nineties. Since then, the state has extended coverage to the majority of citizens though not providing services directly but by cash-transfers, partially or totally financed by Social Security contributions. The largest gap exists in the Southern European countries, where public authorities still remain very inactive, insisting that care is a family responsibility. However, population ageing and changes in the role of women are fuelling a debate on what strategy the state should adopt to improve (and finance) elderly care.

In Spain, for example, the government faces the choice between general taxation and Social Security contributions as the main source of funding. Both have advantages and disadvantages that need to be weighed against each other. Social insurance based coverage would appear to offer a stronger individual entitlement to beneficiaries than would general revenue financed services. In social insurance systems, eligibility

criteria and benefit entitlements are usually defined in a very objective and explicit way, and changes of statutory defined rights will demand a national political consensus that is not always easy to obtain. In tax financed systems the authorities will, in principle, enjoy greater discretionary power to change benefits, and such systems may suffer from substantial territorial inequalities in polities with substantial local and regional autonomy.

However, including a new risk in the Social Security system will automatically incur yet higher contribution rates and this implies added fixed labour costs that, in turn, may adversely affect employment and job creation. Furthermore, a social insurance model will likely produce coverage gaps considering the high proportion of employees working in the black economy – in particular in Southern Europe. Last, but not least, a social insurance scheme is likely to favour cash transfers over in-kind benefits, as has happened in Germany. As we shall see below, such an approach may easily generate inefficiencies.

One additional alternative is to include patient co-payments. Co-payment is currently used in Scandinavian countries, in the UK, and also in the new programs implemented in Continental Europe, although governed by different rules. Co-payment is a useful tool in containing demand and public expenditures but it can, potentially, give rise to a perverse incentives structure. If, for example, the user fee is proportionally lower for nursing homes than for home help, then consumers would tend to demand admission in residential homes and reject the home help alternative even if their dependency level were low enough to permit them to remain at home with some additional help. Such perverse effects are de facto out-ruled if, like in Denmark, home help is free and co-payment is limited to nursing homes. Conversely, the Japanese experience suggests what to avoid. The new Japanese elderly care policy entails an ex-post and flat-rate co-payment. Users pay 10 per cent of the total cost, independently of what services they consume and, furthermore, they must first pay the full cost in advance and only later will they receive reimbursement for the 90%. Campbell and Ikegami (2003) estimate that Japanese elderly use only a 50% of the services they could ask for, because demand is concentrated in services with the relative lowest costs.

Caring cost: how much and who pay for it?

Dependency forecasts are important for the evaluation of future costs. It is currently thought that aging involves greater dependency, but available data seem to contradict that assumption. In many nations the increase in life expectancy has come together with increases in 'disability-free' life expectancy. The net result is that the average number of years in a situation of dependency has remained unchanged. The greater coverage and efficacy of health systems have contributed to lower mortality rates but also to prevent illness that has a high probability of causing disability. The contribution of preventive community health services is here crucial. Furthermore, severe handicaps are strongly associated with the last years of the life cycle. This means that increasing life expectancy is not necessarily associated with more years of disability but rather with a delay in the age at which disabilities become likely.

The future cost of caring does not depend so much on the absolute number of elderly people as on the demographic dependency rate, that is, on the ratio between dependents and potential care givers. Caring has traditionally been concentrated among mid-life women, but their role is declining. The ratio of women aged 45 to 69 over people older than 70 has declined since the middle of twentieth century and will keep falling in the future (European Commission, 1993a). The increase in demographic dependency has meant a greater probability for households to be involved in caring for frail elderly in spite of the growing welfare state (Sundstrom, 1994). And that implies rising social costs in terms of health, disposable income and employment opportunities for carers. Here the question is how much the nation is ready to pool risks and help households with dependent members.

Leaving equity and efficiency issues aside for the moment, the cost of caring can vary hugely depending on the criteria used to estimate it. Estimations about the non-monetary costs suffered by households with dependent members are not available at

comparative level and we have to limit our estimates to public expenditure, although even estimates of international public expenditure for elderly care are not accurate.

Available figures are not homogenous; sometimes they include health expenditure and sometimes only social services expenditure. Furthermore, the distinction between expenditure for elderly care and for other adult dependents is not very clear. Jacobzone et al. (1998) estimate that public expenditure for elderly care in the most advanced OECD countries varied between 0.6% and 3% of GDP in the mid-1990s, the highest expenditure being in the Scandinavian countries and the lowest in Southern Europe. Jensen and Hansen (2002) estimate that Danish public expenditure for all categories of dependent people, including those younger than 65, lies around 2.7% of GDP[v]. For the UK, the cost amounts to 1.3% of GDP (OECD, 1998) and for Germany only the dependency insurance implemented in 1993 absorbs close to 1% of GDP, although means tested expenditures undertaken by local governments should be added to this figure[vi].

These figures may lack accuracy, but it is clear that the distribution of caring costs in society greatly vary among EU states. At one end, the Southern European states consider caring as a private issue to be internalised within each family. At the opposite end, the Scandinavian states have assumed the societal responsibility of caring for their dependent citizens. These figures parallel the coverage ratios discussed above, but some additional remarks are needed in order to understand differences in efficiency.

In Table 2, the structure of expenditure is shown for a number of countries. Spain, Germany, Austria and the UK, although with different expenditures on community services, share a similar bias in favour of cash transfers towards the elderly and handicapped. Pensions and other transfers are the main bulk of expenditure. Theoretically, beneficiaries can buy the services they need in the market but this possibility is realistically limited to a minority and thus reinforces inequalities. Most interestingly, the total level of Danish expenditure is quite low (only a bit higher than Spanish), but with a marked bias towards benefits in kind. This, of course, helps promote employment and, in turn, a broader tax base and this means that the net public

cost of caring is lower than what emerges from the official (gross) expenditure figures. How much lower is difficult to evaluate, but Adema (1999: 30, Table 7) suggests the difference is appreciable. According to his estimates, net social expenditure in the Scandinavian countries is 8 percentage points lower than the official gross spending figures. For Denmark, net expenditures are 36 per cent lower than gross public expenditure of Denmark, while the reduction is far smaller elsewhere (only 13 per cent for the UK, and 11.5 per cent for Germany)[vii]. Assuming a homogeneous relationship between net and gross public expenditure for all welfare sectors, we could apply these coefficients to adult care benefits, including both in kind services and cash benefits. Doing so, we obtain a very low net public expenditure in Denmark, equivalent to 7.5 per cent of GDP, compared with 10.9 in Germany and 11.8 in UK.

In sum, the Danish combination of cash and in kind benefits seems competitive on efficiency grounds when we consider the superior results not only in home help coverage but also in poverty reduction. At the beginning of the nineties, the elderly poverty rate was 1.3 per cent for Denmark, while for Spain, UK and Germany was around 4 per cent, and 7 per cent for Austria[viii].

Coordination and flexibility of health, social and housing policies

A great variety of professionals and workers are involved in caring for frail elderly and other dependent people. Many of them depend on different departments and public administrations, and others are employees working for private providers or self-employed (that may be working in the black market). The coordination of such heterogeneous poses major challenges from an efficiency point of view. Coordination is particularly difficult in welfare regimes where the finance of caring is split between health and social services, each with different rules of eligibility. Dependents are more likely to demand medical treatment in welfare regimes where social services are means tested while eligibility for medical services is either universal or conditioned by previous insurance contributions. The result is an inefficient allocation of public resources because of the over-utilization of hospitals which are far more expensive

than nursing homes or community-based services[ix]. For this reason the Commission of European Communities (1993a) recommends the containment of health expenditures through a reorganisation of nursing homes and the expansion of home help. Difficulties of coordination increase moreover when the supply of services is shared by both public and private providers. Unfortunately, we lack rigorous research and evaluation studies on this issue that would permit comparisons. In the UK, 'case managers' with their own budget coordinate multidisciplinary teams at the local level (Tester, 1996). In Scandinavia, there exists a similar kind of professional profile and, moreover, local governments have exclusive responsibility for health and social services (Casado & López, 2001) and provide incentives that discourage unnecessary case transfers to hospitals (Kirk, 1997).

Coordination is also important between social services and housing. Efficiency gains are possible if public authorities provide access to housing adapted to dependents' needs, either by adapting conventional housing, or by promoting the supply of small nursing homes and shared housing. Dependency episodes are not always irreversible and this implies that people who become seriously dependent need not be confined in nursing homes. More generally, it is possible to organize service supply flexibly so as to ensure a flow that closer matches needs. Someone may, for example, require hospitalization for a short time, followed by a stay in a rehabilitation centre, and can then later return back home, possibly contingent on adequate home help service or other amenities. Flexibility is crucial for coping with an acute crisis in a person's health, and certainly also for the needs of informal carers.

EQUITY AND EFFICIENCY OF DIFFERENT INSTITUTIONS

Policies for dependent people must be evaluated by weighing their costs against the results obtained in terms of the quality of life for carers and cared people. Here our concern is principally with the amount of time household members devote to care and how this affects their opportunities for employment.

The ECHP furnishes harmonised data for European countries with different welfare regimes. The data are, however, somewhat limited in their ability to compare institutional factors. There is no information on households' utilization of social services, nor on the help received from relatives or on purchased private caring services. Hence, we cannot measure directly the effects of theses variables on employment, but we can explore differences in labour activity between countries with very different institutional arrangements and try to see if the results are consistent or not with the institutional hypothesis. We have selected UK, Denmark, Austria, Germany and Spain as the best representatives of different welfare regimes.

In liberal regimes, like in the UK, government offers only limited public services delivered through means-tested procedures. The accent is on encouraging market arrangements through incentives like tax deductions. Co-payment is an important tool for restricting demand in public services and for promoting private services. It is assumed that women are in paid employment and that this will help defray the costs. When this fails, attendance allowances are available to substitute earnings from work if caring needs of the dependent are high enough. National surveys show how a major trade-off between care and work for women but also for men when they act as informal carers. Carmichael and Charles (1997, 1998, and 1999) find that informal carers in the UK earn less per hour than would have been expected given their human capital, and are less likely to participate in the formal labour market when they care for more than ten hours a week.

In conservative regimes reliance on kinship is greater; women's activity rate is lower than in liberal regimes and market services are not actively promoted. The role of government is generally limited to providing means-tested services. Since the 1990s, we see the implementation of new cash-transfers for dependents in order to compensate caregivers and, to a lesser extent, to encourage local networks of long-term care. Austria and Germany are pioneers while others, like Spain, have not yet passed any reforms of this kind. Here, then, we have an excellent basis for comparison.

Social-democratic regimes have built large networks of public services delivered on the universality principle. This has helped fuel female employment, both by creating jobs in the welfare sector and by freeing women from informal caring work. Public social service supply will increase the opportunity cost for female carers because they also increase the opportunities for relatively well paid jobs for less educated women[x]. In this group of welfare states, Denmark is by far the country with the largest and most generous coverage in caring services for dependent adults.

Patterns of adult care

It may come as a surprise that there is no clear association between the amount of people in need of care and the degree of caring done by households. See Table 3. Denmark, Germany and United Kingdom show high ratios of chronically sick and handicapped as well of dependent people. However, the share of households where at least one member spends some hours a week in caring for adults is, with the exception of the UK, much greater in Spain and Austria than in Germany and Denmark. Indeed, Denmark scores lowest in terms of levels of family input.

There is also no association between the amount of informal caring time and the ratios of dependency. Once more, Denmark exhibits the lowest average of household's hours per week but Germany's ranking is similar to Austria and the UK. Although Spain boasts one of the lowest ratios of dependency, there are relatively more households with carers and the average of hours per week they dedicate is more than twice the other countries considered.

Households' duties are not distributed equitably between the genders, but this varies by country. Denmark, together with UK, represents the highest ratio of informal carers and also the greatest degree of male participation. Conversely, Spain and Austria have the lowest proportion of informal carers and also the lowest share of male participation. These data suggest that the more caring for adults is considered a private and feminine activity, the more households will be involved in caring. When the need

for care intensifies, the main carer will require supplementary help that, if it can not be obtained from formal services, will be obtained from other women in the family, many of them living in other households. Conversely, where the feminization of caring activities is weaker, additional help will be more directed to the partner, thus limiting the number of households involved. The linkage between caring and gender depends on cultural values but on labour market structures also. As far as the labour market offers employment opportunities for women, as in Denmark and UK, the opportunity cost of caring rises for women and, hence, this helps force men to share caring responsibilities. This is probably especially the case where employment opportunities for older men have declined sharply, as is the case in Germany.

When dependency is acute and need of care very high, co-residence in the same household is an easier solution than living in separate homes. Everywhere the main carer of very dependent people is a relative who lives in the same household; even in Denmark where the proportion of dependents cared by non relatives is the highest[xi]. However, huge differences appear among countries when we consider the number of dependents living with the person who care for them. The data suggest that the supply structure of formal care has some influence on patterns of co-residence. In Denmark, universal access to home help allows dependent people to be autonomous in greater measure than in the other countries. Only one in three of the Danish dependents live with their carers while almost 70 per cent of the Spanish, 57% of the Britons and around 51% of the Austrians do. In Germany, where dependents can choose in kind benefits if they prefer, the volume of co-residence is a bit smaller than in Austria (see Table 4).

From Table 5 we can also see how informal care givers need to spend less caring time in Denmark than in any other country. In Spain, followed by UK, care givers dedicate much more caring time, while Austrian and German care givers occupy a middle range position. Germans, who can choose between cash or in kind benefits, dedicate somewhat less than Austrians, who only can receive cash benefits.

The impact of caring intensity on employment opportunities and health status depends both on the hours devoted to care but also the overall duration of caring obligations. A large number of hours for a long time not only distances care givers far from the labour market, but also have stress-effects that can seriously damage their health. The ECHP data do not allow us to estimate the impact of care for the chronically dependent, but we can consider as a proxy the number of successive waves the interviewed say they are caring for adults. As Table 6 shows, only a quarter of the Danish carers have cared for more than two years while the proportion reaches 40% in Spain and Austria.

In sum, the Danish policy does not substitute fully for informal care, but it clearly allows them more free time for leisure or formal work. At the opposite end, the means tested delivery of services in Spain and UK oblige informal carers to be involved for much more time while the universal, or quasi universal, cash benefits in Austria and Germany put care givers in better position than means tested programs but still a distance off the Danish model of universal in kind benefits. We turn now to the question of care givers' employment possibilities.

The perception of labour impairment among carer women

The *European Community Household Panel* (ECHP) data allow us to explore the association between caring for dependent adults activity and employment, both from an objective and subjective perspective. The interviewed were asked if "*caring for some adult or child impede* them *from getting the kind of job* they *would like*". The answers to this question represent the subjective opinion of care givers on the employment consequences of caring.

Table 7 shows for each country the proportion of women care givers aged between 20 and 59 years with no children that believe caring impedes them to get the kind of job they would like. Once more, Denmark stands out because very few care givers consider themselves to be limited in their job opportunities. At the opposite end, the

share in Austria is so extremely high that one may have doubts about the reliability of these data. It seems also surprising that the proportion of Spanish care givers that feel themselves impaired is only slightly higher than in the United Kingdom when we consider the scarcity of formal care and the large number of hours expended by Spanish households. This unexpected result could be explained by the low activity rate of Spanish women. Those who are not employed can not feel themselves damaged by caring if they do not wish to work, or if they consider that their inactivity is caused by factors other than caring as, for example, the lack of jobs in the labour market. In other words, women's subjective perception of the limits imposed by care-giving will depend on how far they are attached to what Hakim (2000) has defined as 'home-centred' or 'work-centred' lifestyles.

A more precise evaluation of care-giving effects on subjective perceptions of labour career impairment can be attained by modelling the effects of the main factors influencing in theory a worker's career. Career opportunities are constrained by the time available, so more time expended on caring will reduce the amount of time available for labour supply or, alternatively, it will raise its price. Wages are higher for well educated women and one can expect that women with tertiary education will be more prone to invest in careers than in care-giving so, the feelings concerning career impairment for women with similar caring time should rise as educational levels rise. But, at the same time, high earnings permit to buy substitutive care services and, well educated women can chose to remain employed redistributing the caring time in a more flexible way . In this case, the career impairment would be lower as substitutive care services are more affordable. .

Women's age will also influence her perception of employment opportunities in several ways. Younger women are at the beginning of their careers, and face therefore potentially much more severe opportunity costs than do older women. In such circumstances, having to care for someone would be perceived as more of a burden by younger women. At the same time, objective labour market opportunities can affect the subjective perception. In most of the UE countries, the youngest and the oldest have the poorest employment opportunities. People younger than 30 years are still

consolidating their career, some of them are still in education, others in transition jobs, and many in precarious jobs. At the other end, people older than 45 more easily confront employers' strategy of substitute them for younger workers. In other words, perceptions of the consequences of care-giving should be the result of a mix between subjective and objective external opportunities.

Employment and marital status are other factors that influence the way women gauge their opportunities. Being inactive can have two opposite meanings. For women with deeply rooted traditional values, being inactive can be the result of a free choice independent of any care-giving responsibility. For the more career oriented, being inactive can be the result of insurmountable difficulties in coping with labour and caring activities. The answers of both kinds of women are expected to be different when asked about their opinions about the effects of caring on their employment situation. More 'home-centred' women would not feel impaired, because they would not want to work. Conversely more 'work-centred' women would feel themselves seriously impaired if they become inactive because of their care-giving duties.

To get married reduces women's attachment to the labour market, even though they have not children. Between a quarter and a third of married women leave the labour force before having children in some European countries, and in Continental Europe many married women leave employment or change from full-time jobs to part-time when they become mothers (Stier et al, 2001). After children have been raised, most of them have serious difficulties in regaining the employment status they held prior to motherhood. Very probably many of those women will have lost their attachment to a 'work-centred' lifestyle and will be prone to undervalue the added employment effects of looking after their husband, parents or parents in law.

Table 8 shows the odds ratios from a logistic regression where the dependent variable is the answer given by interviewed women, aged between 20 and 59 years, to the question about impediments to do the kind of job they would like. As independent variables we include age, labour force status, education, marital status and, of course,

the amount of hours devoted to care giving. These hours separate away child care, using time dummies as control.

Age influences without doubt the perceptions that women have about the limitations imposed by care giving on their employment opportunities. As expected, in all countries women between 30 and 40 years express most dissatisfaction about the consequences of adult care on their employment opportunities. As the likelihood of employment and of higher wages increases, the limitations imposed by care-giving emerge even stronger.

The effects of education on career impairment confirm that penalties are unequally distributed when disposable income is the main resource for acceding to substitutive services. Where coverage is extended across all social classes as in Denmark, the perceptions of impairment rise with education. Conversely, where substitutive services are distributed through market prices, low educated women can not afford them and are compelled to reduce the working time suffering greater penalties. This is clear in Spain where the share of unsatisfied caring women gradually declines with rising education.

Job status has a clear influence in the answers of interviewed women across all the selected countries. To be active reduces the probability of feeling impaired, probably because those feelings are stronger among women that have been forced to abandon their jobs to give care. In Denmark, this rarely occurs while it is quite common in the conservative and liberal regimes, especially among married and low educated women.

Dependent adult benefits and carers' employment opportunities

At first sight, bivariate descriptive data suggest a trade-off between caring and working time. Inactivity and part time employment are more frequent among midlife care givers. Figures offered by Spiess & Schneider (2002, Tables 2 and 3) seem to confirm that some differences exist among welfare regimes. The share of midlife women (45 to

59 aged) being employed is lower among care givers in every country but, the employment gap is 1.7 times higher in the more 'liberal' UK than in Denmark and 2.5 and 3 times higher in 'conservative' Germany and Spain, respectively. The same pattern remains if we extend the sample to women aged 25 to 59. Our own estimations from the ECHP 1996 wave show that Denmark has the lowest gap in employment (around 7 per cent lower for care givers) and Spain the highest (36 per cent lower). In the middle groups there are some changes since care givers' relative employment is now lower in the United Kingdom (18 per cent less) than in Germany (13.4 per cent less) and Austria (7.1 per cent less). Considering part time work, the share of caring women working less than 15 hours per week is only slightly over average in Denmark and Germany but it is especially high in the United Kingdom and Austria where the overrepresentation of part time jobs among care givers women is 4 times higher than in Denmark.

Care givers encounter at least two limitations to their employment opportunities. For employed women, care-giving reduces the amount of time available for paid work, training and professional improvement. The longer it lasts, the greater is the effect and this will impede their careers. Furthermore, when everyday care-giving absorbs a lot of time, women can be forced to abandon their jobs. But, theories of intergenerational transfers predict that children's responsibilities for their parents will affect their work behaviour depending in part on whether the help is provided in time or money. Providing labour-intensive care for dependent adults may impede carers's employment, or persuade them to reduce their working hours (a middle-aged worker for example, may elect to advance the retirement age because of having duties). Alternatively, while market services enable a child to purchase rather than provide care, a person with financial responsibility for the care of frail parents or other adults may elect to increase their labour supply or delay retirement, in order to obtain enough income to buy substitutive services (Soldo & Hill, 1995). The extent of this seems not very large in the European Union, but Spiess and Schneider (2002:18) find that 'a relatively sizeable proportion of care giving women starts both –care giving and working, increases both –work hours and care giving hours, or reduces work effort along with care effort'. Intergenerational transfers in time and money can be

substituted for one another depending on the affordability of market substitutes for direct services and, cash transfers may operate then as a demand subsidy facilitating substitution in such a way that would promote women's work hours. Then the question to evaluate is if cash transfers in Germany and Austria, and direct provision in Denmark, are equivalent incentives to care givers employment.

Modelling variables related with labour and caring activities may help us to better understand the association between them in each country. Then, we can explore if national results are consistent with the welfare institutions hypothesis. One approach would be to measure some indicator of care needs as the exogenous variable together with the amount of care received from market and public providers. That information is not available in ECHP data, so we have chosen a dummy variable indicating if the interviewed woman is caring or not, whatever the number of hours she spends. We assume that most of women with frail parents, and married women with frail spouses, spend some hours at week in caring, no matter how many hours provided by formal providers can be[xii]. In fact, to start care giving is independent of employment status except when starting care means more than 14 hours at week[xiii]. We suppose that the amount of hours spent by women is the residual of the hours needed by the dependent adult minus the hours supplied by other relatives and market and public providers also. If our assumptions are correct, endogeneity problems, if not eliminated, are reduced because what we are estimating is the probability for women being active in labour market when some relative is dependent of care.

We have measured a dummy variable indicating if women aged 20 to 59 years were caring for adult people in any ECHP wave from 1994 to 1999 and another dummy variable indicating if women were active or not. Women employed in agricultural and fishery occupations have been omitted due to the strong positive association between those occupations and caring for adults. The caring effect on activity has been controlled by age, education, child care and marital status[xiv]. Furthermore, being foreign born and to have any unemployment spell during the last five years have been included as control variables also. Unemployment spells can be an indicator of labour market attachment since unemployed women are more prone to pass in to inactivity.

And foreign born women are likely to have different employment patterns compared to natives.

Examining the regression results (Table nº 9), one goes that the fit of the model is not very strong, probably because other relevant factors have not been included. For example, care needs are determined by the functional status of the care recipient but unfortunately, such information is absent in the ECHP. In addition, the choice of type and intensity of care is only partly under the control of the reference person we are studying; other relatives are also participating in the decision and bargaining from their own labour, marital and health statuses, introducing additional complexity into the model. The reciprocal transfers between parents and children are also important, but ECHP data don't allow us to explore them. We can only identify time and money transfers between generations in one direction: the destiny but not the origin for money transfers and, the origin but not the destiny for time transfers. Furthermore, there are other institutional variables whose effects should be added to those of the kind of care benefits received by dependent people, as paid or unpaid leaves for care giving, for example, and the availability of part-time jobs that we have not included in the model. The combination of greater flexibility in organising working time with the availability of formal services permits women to remain employed although by reducing work hours[xv].

With respect to control variables, unemployment only affects labour supply negatively in Denmark whereas, the effect is positive in the other countries, especially in Spain, Austria and Germany, where female unemployment is higher and women attachment to labour market weaker. Unemployment in those countries may be more linked to women actively looking for a job. The effects of being foreign born are more inconclusive. Age influences female activity in the expected way, rising from the twenties and decreasing among older women. Education effects are also as expected: employment increases with education, but the intensity varies by country. The odds of being active are 3 to 5 times higher for women with tertiary education than for those with primary or less education in Spain, Germany, Austria and United Kingdom while, in Denmark, the education effect is far weaker. Since employment opportunities for all

Danish women are far greater, education as well as marital status and caring for children matter less. None of these variables have any effect in Denmark, whereas they reduce labour supply in all the other countries. The same happens with caring for elderly or adult people: Danish women employment are not significantly affected by care giving while that is so in all the other countries.

Bivariate analysis showed that Danish care givers manage to reconcile the caring working trade-off better than their counterparts in elsewhere because they keep on working, and working full-time, much more than any others. On the opposite end, Spanish women have few options to choose. The lack of part time jobs and of social services in Spain intensifies the caring working trade-off considerably. Social services for frail people are somewhat more extended in Austria and Germany than in Spain. Furthermore Austrian women can opt for part time work more than Germans, and this would explain the smaller differences in relative employment among Austrian care givers and no care givers. Part time work and some elderly care services are also available in the United Kingdom but, even though British care givers can opt for part time jobs, many of them do not participate in the labour market and, the relative difference in employment between care givers and no care givers is higher than in any other country except Spain.

The multivariate analysis partially confirms this. The constraints of adult care on women's employment are especially severe in United Kingdom. In tandem with the general shift towards a more liberalistic welfare model since the 1970s, Britain's 'ageing in place' policies have combined encouragement for private services with a means tested approach to public provision. The results from our analyses suggest that the British model does not improve very much women's chances of reconciling caring and work. The odds of being employed in UK are reduced by a factor of 5+ if care giving, while that factor is only 3- in Austria, Germany and Spain.

When market prices and means tests are the main eligibility criteria, different behaviours could theoretically be expected. The elderly may transfer assets to their children rather than consume them in the process of getting formal care all expecting

to be eligible by public providers. But, if this transfer is not possible by administrative controls or not wanted by the parents, children may prefer to provide care in order to protect a bequest that would be lost otherwise. In absence of subsidised services, many of the care givers would opt then to abandon employment or reduce work time. The data from UK seem to confirm the hypothesis that means tested policies do not help much to reconcile work and caring.

At the same time, whatever the importance of cash transfers in facilitating substitution, their effects on women's employment in Austria and Germany seem weaker than direct provision in Denmark. Yet, one is struck by the absence of any differences between these countries and Spain, where the provision of both cash and in kind benefits is even lower than in the United Kingdom. This may be related to the overall activity levels of women in the respective countries. Regardless of the level of service provision, if women's attachment to the labour market is weak to begin with – as in Spain – we would expect that caring for dependents will not have much of an influence on their employment status. Conversely, its effects will be stronger where most women are active, as in the United Kingdom. Herein lies the policy relevance of the Danish case. Providing universal services to elderly people facilitates 'ageing in place' goals without punishing women's ability to remain employed outside the home.

Discussion:

Our empirical results are consistent with the underlying hypothesis. Benefits in cash can be a financial compensation for households and care givers with dependent members but they do not seem to be associated with high levels of women employment. The usefulness of cash benefits should be reconsidered in so far as they fail to produce an employment dividend, and to change the structure of care as well. As Glendinning and McLaughlin's (1993) comparative study showed, there is no evidence to show that cash benefits increase informal care or that they reduce institutionalization. Nor, as Lingsom's (1994) study of Norway suggests, is there any evidence that the cash benefit approach improves upon the quantity and quality of informal care.

Comparatively speaking, the data suggest that the Danish strategy of favouring universal public provision of services is superior in terms of guaranteeing care and of nurturing employment. As a whole, considering the combined Danish outlays on pensions and services, the total cost is lower than any other alternative while delivering low poverty rates among the elderly and producing higher female employment ratios even among women over 50[xvi]. Moreover, the Danish approach ensures far greater service coverage and more equity between gender and income classes.

These results should be relevant for policy makers in Southern European countries, where few steps have yet been taken towards a comprehensive policy of care for elderly people. In Spain, for example, the debate on long-term care is focused on two main alternatives, although no decision has yet been taken. One option, represented by the Finance Ministry, is to stimulate private insurance through tax subsidies while providing means tested care assistance to poor people. The Ministry of Labour, some trade unions, and the Office of the Ombudsman advocate a second alternative, according to which the risk of care dependency would be managed by the Social

Insurance system (Rodriguez Cabrero, 2002). Our analysis suggest that strategies similar to the Scandinavian ones may present a superior policy choice since it produces greater employment, and because it may ensure a more equitable and efficient use of public resources than any of the two models being espoused by the main Spanish political actors.

Furthermore, policy making for long-term care is usually couched primarily in terms of demographic ageing, but there is a good argument for generalizing to the broader population of adult dependents. In Spain, for example, 40 per cent of handicapped people, and 1 in 3 dependents requiring more than 30 hours of care every week are younger than 65 (Sarasa, 2003). A realistic policy for long term care would, therefore, has to address the risk structure across the entire adult population and not only the frail elderly.

REFERENCES

Becker, G. (1965) "A Theory of the Allocation of Time" in *The Economic Journal* vol. 75, pages 493-517.

Bosch, G. et al. (2001) *Changes in Employment Practices in Service Activities. Findings from Five Sectors and Ten Countries*. Brussels: Institute Arbeit und Tchnik and European Trade Union Institute.

Carmichael, F. & Charles, S. (1997), 'Informal care and female labour supply; some results from the 1990 GHS'. *Aberystwyt Economic Research Papers* 97-15.

Carmichael, F. & Charles, S. (1998), 'The labour market costs of community care', Journal of Health Economics, vol. 17 nº 6, pp. 645-795.

Carmichael, F. & Charles, S. (1999), 'The Opportunity Cost of Informal Care- Does Gender Matter?' *Aberystwyt Economic Research Papers* 99-4.

Christopherson, S. (1997), 'Chilcare and Elderly Care: What Occupational Opportunities for Women?'. *Labour Market and Social Policy Occasional Papers* nº 27 Paris: OECD.

Concialdi, P. (2000); 'Demography, the Labour Market and Competitiveness' in Huges, G. & Stewart, J. *Pensions in the European Union. Adapting to Economic and Social Change.* Kluwer Academic Publishers.

Dallinger, U. (2002), 'Elderly Care in the Family in Germany' *Paper contributed to COST A13 Meeting in Copenhagen* (mimeo).

Doty, P. & Jackson, M.E. (1998), 'The Impact of Female Caregivers' Employment Status on Patterns of Formal and Informal Eldercare' *The Gerontologist* vol. 38, number 3, pags. 331-341.

Johnson, R.W. & Lo Sasso, A.T. (2000), *The Trade-Off between Hours of Paid Employment and Time Assistance to Elderly Parents at Midlife*. Washington, D.C.: The Urban Institute.

PSSRU –Personal Social Services Research Unit (1998). *Evaluating Community Care for Elderly People*. Bulletin nº 2, University of Kent.

Rodriguez Cabrero, G. (2002), 'Long-term care: context, debates policies and prospects'. *Working Paper* 02-14. Madrid: Consejo Superior de Investigaciones Científicas. Unidad de Políticas Comparadas.

Rostgaard, T. (2002), *Care services for children and other dependent people*. Conference Paper. Elsinore: Danish Ministry of Social Affairs and Gender Equality.

Royal Comission on Long Term Care (1999), W*ith Respect to Old Age: Long Term Care. Rights and Responsabilities*. Londres: The Stationery Office.

Schaber, G., Schmaus, G. and Riebschläger, M. (1994), 'Loking at Intergenerational Relations in Longitudinal Panel Studies on Individual Households'. *PACO Document* nº 5.

Singleton et al. (2002), *Mental Health of Carers*. Londres: The Stationery Office.

Spiess, K & Schneider, U. (2001) *More, less or all the same? The difference midlife caregiving makes for women's adjustments of work hours*. ?????

Stier, H. & Lewin-Epstein, N. (2001), 'Welfare Regimes, Family-Supportive Policies, and Women's Employment along the Life-Course' in American Journal of Sociology vol. 106, nº 6, pp. 1731-60.

Storesletter, (2000); 'Sustaining fiscal policy through immigration' in *Journal of Political Economy*, vol. 108, 21:300-323.

Theobald, H. (2003) 'Care for the elderly: welfare system, professionalisation and the question of inequality'. *International Journal of Sociology and Social Policy*, vol. 23 nº 4-5, pp. 159-185.

Jenson & Jacobzone (2000), "Care Allowances for the Frail Elderly and their Impact on Women Care-givers" *Labour Market and Social Policy Occasional Papers* nº 41. Paris: OECD.

ANNEX

Table nº 1

Services for elderly people at the end of 1990s		
Country	**Share of coverage in percentages over people older than 64**	
	Home help	**Residencial care**
Denmark	21,7	9,0
Sweden	17,9	9,1
Netherlands	9,5	8,0
France	7,0	5,0
Germany	6,5	5,0
United Kingdom	5,0	7,0
Italy	5,4	2,2
Spain	2,0	3,0
Portugal	1,0	2,0

Source: Rostgaard, T. (2002)

Table nº 2

Percentage of Gross Domestic Product expended in benefits for handicapped adults and elder people in 1998

	Austria (a)	Germany	Denmark	Spain	UK (b)
Benefits in cash	11,9	11,5	8,6	9,5	12,8
Benefits in kind	0,9	0,7	3,0	0,3	0,8
Total	12,8	12,3	11,6	9,8	13,6

(a) Austrian data do not include expenditure in home help and care in day centers.
(b) United Kingdom data do not include expenditure in residential and day centres care. The *Royal Comission Repport* (1999) estimates total expenditure in provision of services around 1,6% of GDP

Source: OECD *Social Expenditure Database*

Tabla nº 3

Handicapped adults and informal caring (shares in percentages)

Country	**Denmark**	**Spain**	**Austria**	**Germany**	**UK**
Share of chronically ill and handicapped people	34,1	23,7	21,2	37,0	38,0
Share of people with severe dependency	5,9	6,0	6,2	8,2	na
Share of households with 1+ care givers	8,4	10,7	11,6	9,1	13,1
Households with 1+ care givers/ dependents ratio	1,4	1,8	1,9	1,1	na
Average number of care giving hours taken by huseholds	17,2	53,8	26,3	24,3	21,7
Share of care giving people	6,4	5,1	4,8	5,7	7,9
Share of care giving men	38,6	23,0	21,1	33,1	34,9

Source: own elaboration from *ECHP 1998* data.

Table nº 4

Place where care giving is done

Percentages

Country	**In the own home**	**Out of home**
Denmark	28,6	71,4
Spain	68,2	31,8
Austria	50,6	49,4
Germany	46,2	53,8
United Kingdom	56,5	43,5
average	49,0	51,0

Source: Own elaboration from *ECHP 1998* data.

Table nº 5

Average number of hours in care giving per week

Country	1 to 4	5 to 9	10 to 19	20 to 44	45 or more
Denmark	39,76	20,36	19,52	12,39	7,97
Spain	2,90	4,96	20,54	37,28	34,31
Austria	11,00	16,35	32,43	30,58	9,65
Germany	13,91	19,83	26,83	26,45	12,98
UK	16,29	16,27	19,29	20,89	27,25
average	16,77	15,55	23,72	25,52	18,43

Source: Own elaboration from ECHP 1998 data, except for UK and Germany that have been elaborated from ECHP 1996 data.

Table nº 6

Care givers distributed by nº of years of care giving between 1994 and 1997

Figures in percentages

Country	**1 year**	**2 years**	**3 years**	**4 years**
Denmark	47,5	28,0	14,8	9,8
Spain	37,0	23,0	26,1	13,9
Austria	35,0	22,6	20,7	21,7
Average	39,8	24,5	20,5	15,1

Source: Own elaboration from ECHP 1994, 1995, 1996 and 1997.
Data for Germany and UK are not available since 1996 onwards.

Table nº 7

Women care givers aged 20 to 59, without children and answering looking after prevents them from better job

Figures in percentages

Country	**Denmark**	**Spain**	**Austria**	**Germany**	**United Kingdom**
%	3.03	24.72	45.11	13.43	21.62

Source: Own elaboration from ECHP 1996 data, except for Austria which due to missing values have been estimated from ECHP 1997.

Table nº 8

Odds ratios in WOMEN's impediments to do the kind of job they would like because of looking after children or dependent adults					
	DK	***UK***	***ES***	***GE***	***AU***
Aged 20-29	1.83 ** (2.67)	5.55 ** (8.27)	2.27 ** (8.90)	1.54 * (2.26)	4.78 ** (11.99)
Aged 30-39	3.37 ** (5.61)	6.89 ** (9.67)	3.29 ** (14.19)	2.47 ** (5.36)	6.66 ** (15.45)
Aged 40-49	1.90 ** (2.84)	3.11 ** (5.54)	2.06 ** (9.00)	2.61 ** (5.95)	3.44 ** (10.05)
Category of reference women aged 50 to 59					
Secondary	1.26 (1.78)	1.02 (0.18)	.77 ** (-4.30)	.93 (-0.73)	1.07 (0.99)
Tertiary	1.94 ** (5.07)	.77 * (-2.25)	.68 ** (-5.69)	.71 * (-2.38)	.74 * (-2.42)
Category of reference women with Primary or lower education level					
Caring for adults 10 to 19 hours per week	4.67 ** (3.99)	1.59 (1.35)	6.95 ** (12.57)	5.53 ** (6.42)	2.44 ** (4.45)
Caring for adults 20 to 29 hours per week	5.49 ** (2.90)	1.27 (0.51)	9.37 ** (16.06)	7.02 ** (6.53)	2.52 ** (3.64)
Caring for adults 30 o more hours per week	5.39 ** (3.84)	3.93 ** (4.71)	18.18 ** (31.85)	5.53 ** (5.49)	6.46 ** (10.02)
Category of reference women caring less than 10 hours or not caring for adults					
Number of hours taken in looking after children	1.04 ** (24.63)	1.03 ** (24.15)	1.04 ** (47.65)	1.05 ** (29.94)	1.05 ** (40.25)
Caring for children and adults	1.01 (0.06)	.17 ** (-6.68)	.30 ** (-9.94)	.64 (-1.88)	.88 (-0.76)
Cohabitation	1.09 (0.68)	1.33 ** (2.67)	2.09 ** (9.40)	1.98 ** (4.92)	2.02 ** (8.63)
Active in labour market	.40 ** (-7.97)	.27 ** (-13.24)	.33 ** (-22.92)	.34 ** (-10.83)	.41 ** (-13.67)
Wave 3	.83 (-1.42)	.70 ** (-3.85)	.72 ** (-4.89)	1.11 (1.24)	.75 ** (-3.14)
Wave 4	.80 (-1.67)	Na	.73 ** (-4.46)	Na	1.47 ** (4.31)
Wave 5	.99 (-0.05)	Na	.75 ** (-4.04)	Na	1.27 ** (2.63)
Wave 6	.75 * (-2.02)	Na	.91 (-1.26)	Na	1.55 ** (4.75)
Pseudo R2	0.2573	0.3337	0.3556	0.4191	0.3535
Number of observations	8079	4783	23403	5938	10767

Logistic regression estimated by STATA 6.0 software package.
* Significant at 95% of confidence.
** Significant at 99% of confidence.
Z values between parentheses.
Na: data not available.

Notes:

- Estimation has been done adding ECHP 1995 to 1999 waves together. First wave has been dropped because the question was not formulated then in some countries.
- Observations of all women aged 20 to 59 years, excluded retired and ill women.
- Dependent variable =1 if women feel impaired; =0 in any other case.

Table nº 9

Odds WOMEN be active when caring for adults (Agriculture and Fishery Occupations Dropped)					
Nation	***DK***	***UK***	***ES***	***GE***	***AU***
AGE	1.54 ** (17.98)	1.10 ** (4.56)	1.43 ** (32.86)	1.25 ** (11.70)	1.31 ** (15.24)
AGE2	.60 ** (-16.11)	.90 ** (-4.07)	.63 ** (-33.54)	.75 ** (12.25)	.69 ** (-16.33)
SECONDARY	1.02 (0.28)	1.47 ** (6.71)	1.24 ** (6.20)	1.41 ** (6.57)	1.82 ** (11.88)
TERTIARY	1.80 ** (5.96)	2.84 ** (13.77)	4.25 ** (37.10)	3.06 ** (12.57)	4.92 ** (14.17)
COHABITATION	1.11 (1.46)	.85 * (-2.48)	.36 ** (-27.80)	.41 ** (-12.43)	.50 ** (-11.24)
Foreign Born	.47 ** (-6.09)	.95 (-0.48)	1.08 (0.88)	Na	.74 ** (-3.93)
ELDERCARE	.99 (-0.09)	.48 ** (-9.06)	.70 ** (-7.49)	.67 ** (-5.06)	.70 ** (-4.23)
CHILDCARE	1.02 (0.24)	.33 ** (-14.82)	.54 ** (-17.67)	.31 ** (-17.22)	.49 ** (-13.47)
Unemployment 5	.82 ** (-2.98)	1.14 * (1.96)	2.37 ** (30.08)	1.94 ** (10.69)	2.19 ** (11.90)
Wave 2	.89 (-1.08)	1.81 ** (8.36)	1.48 ** (8.65)	1.93 ** (9.84))	.74 ** (-4.21)
Wave 3	.74 ** (-2.85)	2.25 ** (10.01)	1.52 ** (9.23)	2.26 ** (11.93)	.93 (-1.04)
Wave 4	.84 (-1.55)	Na	1.66 ** (10.83)	Na	.88 (-1.64)
Wave 5	.80 (-1.93)	Na	1.60 ** (9.85)	Na	.89 (-1.45)
Wave 6	.86 (-1.23)	Na	1.55 ** (9.13)	Na	Drop
Pseudo R2	0.1234	0.0628	0.1586	0.0871	0.1010
Number of observations	9973	7789	28744	9128	9790

Logistic regression estimated by STATA 6.0 software package.
* Significant at 95% of confidence.
** Significant at 99% of confidence.
Z values between parentheses.
Na: data not available.

Notes:

- Estimation has been done adding ECHP 1994 to 1999 waves together.
- Observations of all women aged 20 to 59 years, excluded retired and ill women.
- Women in agriculture and fishing occupations have been dropped due the high association between those occupations and the probability of adult care giving.

Dependent variable =1 if women are active; =0 otherwise.

[i] Prevalence of neurotic disturbances is important among caring women and it is associated to situations where being in charge of some dependent is so heavy that has negative consequences on care giver employment (Singleton et al., 2002). The survey conducted by the PSSRU (1998) among English care givers detected, not only a high prevalence of mental disturbances but also, that more than a have had been ill during the year previous to the interview; that ratio rose as far as care giving hours grew. The most common illnesses were hypertension and osteo-muscle diseases.

[ii] Vast empirical evidence seems to exist also for Germany (Dallinger, 2002).

[iii] We do not assume that both are unconnected, we know nothing about changes in the quality of care when carers chose to work, but we only stress the existence of altruistic values that place caring of very relatives in front of self-interest. These values are also supported by reciprocal relationships. In the case of intergenerational relations, mid-life parents use to transfer time and money to their children that then are returned mainly in time when parents become physically dependents (Schaber et al., 1994).

[iv] In a time allocation model the amount of unattended need determines the marginal utility of women for additional hours of care and, so influences the women's choice between caring, leisure and working times. The higher the value of additional hours of caring the higher the price asked for working time and women will prefer to care if labour market does not offer high enough wages.

[v] This figure does not include the contributions made by users through co-payment, that reduce the public spending, but neither administration costs at local level, that would increase the expenditure.

[vi] Local governments cover the care of people who have not contributed enough to Social Security or who need more care than Social Security finances. Campbell and Ikegami (2003) estimate that most of nursing homes users are financed by local governments.

[vii] Spain and Austria data are not included in Adema's repport.

[viii] Data obtained from *Luxembourg Income Study* refer to 1990 for Spain and 1995 for the other countries. Poverty measured as equivalent disposable income below 40 per cent of the median.

[ix] The cost of hospital beds in Spain is estimated five times higher than beds in nursing homes (Jimenez, 2002). Estimates for Austria, for example, indicate that in the mid-nineties there were between 14 and 19 per cent of hospital beds occupied by elderly people who could be attended at their own home or in nursing homes (Österle, 1996) and; in Japan, the so called 'social hospitalisation' has fuelled successive proposals for developing communitarian services and nursing homes (Assous & Ralle, 2000).

[x] The importance of opportunity cost of caring has been empirically validated in EU by Spiess & Schneider (2001) using ECHP data. Women who have reached a second or third level of education, experience significantly smaller reductions in weekly work hours than those with lower level of education

The expansion of public provision of child care and care for the elderly in Scandinavian countries notwithstanding has created relative higher employment possibilities for middle or low qualified women (Theobald, 2003) whose wages are no so low as in other countries where formal care is mainly provided by private sector.

[xi] The coefficient of correlation between the ratio of caring for more than 19 hours per week and the proportion of dependents living with their carers is 0.75.

[xii] Caring some hours is normal among women even when formal services provision is very large as in Denmark.

[xiii] Spiess and Schneider (2002, table 9) regress a probit model and find no significant association between labour status and the start of care giving.

[xiv] Marital status is a dummy variable equal to 1 if women are married or in cohabitation.

[xv] A negative association between starting, or intensifying, the provision of care and changes in work hours is significant in Northern Europe but not in Southern countries indicating that Southern European women have not choice in reducing work hours, the choice is mainly between work or care (Spiess & Schneider, 2002).

[xvi] Pension expenditure in Denmark is relatively low, however it does not impede to get low poverty rates among the elderly. See OECD (2001) for activity rates among older than 50.