

**The future of the welfare state: paths of social policy
innovation between constraints and opportunities**
Urbino, 17-19 September 2009

**Policies and practices in care -
how configurations of care policies
shape the patterns of informal care for children and elderly**

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Very first draft – do not quote without permission by authors

Paper presented at the 7th ESPAnet conference 2009
Session nr. 20a – Family policy, Gender and Work-Family Reconciliation

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Abstract

This paper uses data from the European Household Panel (EHP) to analyze what practical consequences national configurations of care policies have in terms of individual allocation of time to care for children and elderly in Europe. By applying fine-tuned policy indicators to the analysis, we investigate what are the practical every-day consequences of national service and cash policies available. The paper is presenting the first results only and need further work, but suggests that informal care is gendered both in terms of proportion of men and women involved and in the intensity of time they devote. Informal caring is most often about caring for children and parents tend to care for children and partners for each other. There are no obvious regime characteristics in terms of the prevalence of caring across the countries, but more so in terms of division of care time, as informal caring is in the Nordic countries mainly a question about providing care for children, while in the other countries in the study there is a more equal division between child care and care for elderly/dependants. The analysis of the relationship between configurations of care policies and informal caring indicate that generous service benefits yield more involvement of informal carers, both for child care and elder care, whereas the impact of cash transfers is negative on child care but positive for taking care of the elderly. All in all our findings do not support the common crowding out idea that high formal support circumscribes informal care, instead they are complementary to each other rather than substitutes.

1. Introduction

Often studies on informal caring investigate the caring for specific population groups, such as either children or elderly and disabled. Fewer studies focus on the informal care provided for both of these groups, and thus overlook the combinations of informal care for children and other dependants, and whether men and women in various countries have multiple care responsibilities. Policy response to relieve informal carers also seem mainly focused on families with children. Although increasing and maintaining men and especially women's high labour force participation is high on the EU agenda and is of concern in all member states, formulation of policies to relieve and support informal carers have on a European level so far mainly been concerned with how parents combine working and caring for their children. In order to achieve this, EU policy focus has so far been to encourage member states to increase child care and to emphasise for member states their responsibility for formulating appropriate sustainable family policy¹. Provision of child care is promoted as a feasible way to increase female employment and enhance the balancing of work and family life. Family policy, however, does not yet include care for other dependants than children, and care for elderly and disabled is still outside the EU policy framework.

Whereas member states are encouraged to de-familise child care by financing and organizing child care outside the home, the policy development in the member states seem to go the opposite direction by re-directing transfers from the public provision of elderly care to informal care (Jenson and Jacobzone, 2000). Recent examples of this development are e.g the introduction of the Personal budget in the Netherlands, the Direct payments in the UK and the Care insurance cash scheme in

¹ The European Employment Strategy aims at reaching a 70% employment rate (60 % female employment and older workers 50 %) at the end of 2010. One of the strategies is to provide more day care. The Barcelona European Council in 2002 encouraged the provision of childcare by 2010 to at least 90 percent of children between 3 and 6 years old and at least 33 percent of children under 3 years old.

Germany. These cash benefits may be used for purchasing private care outside the family, but is often used to compensate informal carers for the time and effort they spend on caring (*). Also in the Nordic countries which are otherwise known for relying in more formalized and public welfare solutions is informal caring of great importance and is supported in care policies. Eg in Sweden the Informal carers 300 policy program was initiated in 1998 to stimulate the municipal support for informal carers in their work by eg providing information, counseling and relief services, and direct financial support to informal carers. Cash schemes supporting informal care for elderly are also part of the Norwegian care systems and presuppose the payment of the benefit to a family member.

Paying public money for informal care for the elderly and disabled can be regarded as a recognition of the amount of time which informal carers devote to caring and also functions as a compensation for the foregone wages. Cash-for care schemes may protect informal carers in terms of providing pension credits for them, as is the case with the English Home Responsibility Protection, or may give access to unemployment benefit or the right to be re-installed at work once the care relationship ends. In this way, informal carers may have secured some social rights. Many of these schemes are also introduced in order to give elderly and disabled more autonomy and choice of how they want to organize their care, but the development nevertheless underline the increasing reliance on informal caring.

In this paper we wish to examine what is the role of informal caring across a number of EU countries and whether there is a relationship between the configuration of care policies into service and cash benefits and the actual provision of informal care. We do so by studying the national care policies and time allocated to care for children and elderly in Denmark, Finland, Italy, UK and the Netherlands. Using 2001 data from the European Community Household Panel (ECHP), we first present and compare country differences in the volume of informal caring provided for children and elderly in these countries. What is the proportion of the population involved in informal caring and how much time is spent on caring, across age and gender? Do we find country specific patterns of informal care and what are the national combinations of allocation of time to care for children and elderly and other dependants? By applying multivariate methods we also explore to what extent the country differences in time spent on caring is due to participation in paid employment and various socio-economic characteristics, but also whether they are due to the configurations of national care policies.

2. Combinations of informal and formal care

Previous studies on informal caring suggest that despite the shift from informal towards formal care for children, informal carers are still the major providers of child care – and certainly also of elder care (Moss and Cameron, 2002). Eg Joesch and Spiess (2002) find when analyzing mothers' use of time with ECHP data from 1998, that European mothers spend a considerable amount of time on caring for children, but that country averages range from 37-73 hours per week, being highest in the UK and lowest in Germany. They find that socio-economic characteristics and employment is not sufficient to explain countries differences, and suggest the application of child care indicators to the analysis.

Only few studies have so far included the national care policy context in the analysis of time use, but the key to understanding the gendered division of child care work is according to Bonke and Koch-Weser (2004) how countries organize their support for child. They find that in the family-oriented male breadwinner model found in Southern-Mediterranean area, where the assumption is that the male partner is working full-time and that care is provided within the family, the woman is

more often the one caring for children and the home. In the gender equality model often associated with the Nordic countries, where child care especially for the young children is extensively provided, men and women's tasks of caring and housework is more equally divided between the partners. A general finding across countries from this study is, however, that men tend to increase their working hours once they have children in order to compensate for the extra costs of their family. Other studies find that while women spend more time on caring than men, employment does not affect much the amount of time mothers spend with their children. Employed mothers spend only a little less time on physical and interactive child care than do employed mothers. They do, however, perform less routine child associated housework in the presence of their children (Bianchi 2000).

While parents might provide the bulk of care for children, grandparents play a role too. Albertine, Kohil and Vogel (2007) found that while there is no regime difference between Continental, Southern and Nordic European countries in terms of how likely grandparents are to provide care and support for their grandchildren, there are significant regime differences in intensity of the help and support. Grandparents in the Southern European countries (but also Germany) were on average providing the highest amounts of hours, followed by the Continental countries, and Nordic countries, including France and the Netherlands, the lowest. Also here do we find a gendered division of work, as grandmothers in terms of volume provide more care to their grandchildren than grandfathers, who again are considered important for stimulating the children (Attias-Donfut and Wolff 2000).

In contrast to what is often assumed in the literature, the transfer of help and support from elderly to their children and grandchildren even exceeds the help and support the elderly get in return and even elderly over 70 years of age remain net givers (Albertine, Kohil and Vogel, 2007). Despite this, provision of informal care for the elderly is extensive. It also displays the same variation across countries, but with a seemingly different relationship with the provision of public elder care, than is displayed for child care.

Data from the Eurobarometer survey in 2003 gives evidence of the also extensive informal care for elderly in Europe, where on average 17 % of the population of the EU 25 countries report that they are providing regular care or help for an elderly person (60+), but with considerable country variation, ranging from 11 % in Spain to 30 % in Finland (Alber and Kohler, 2004). That informal care provision for the elderly is not a phenomena which only takes place in Southern European countries with less developed formal care provision is thus evident.

This is despite of the existence of different family cultures and norms about who should provide care for the elderly, which resemble the country diversity in assumptions about child care. Again we have a model of care with familialistic traits which is typically associated with Southern European countries, where the lack of formal institutional setting is combined with the general norm that caring for the elderly is a household matter, provided mainly by women, and in some countries legally obliging the family to finance elder care, such as is the case in Italy. Norms about kinship obligations is supposedly prevalent and more prescriptive in familialistic than individualistic countries of the North, where inter-generational exchanges are in practice more open to negotiation and obligations towards family members are less pre-fixed (Lowenstein, Katz and Daatland, 2004). In between, we find countries that combine reliance on market and the family (UK), and combination of family and state (Germany) (Anttonen/Sipilä 2005; Daly/Lewis 2001; Rostgaard 2005; Surdej/Slezak 2009; Theobald 2005). Also in terms of informal care for the elderly do we

find a gendered division of care work, but there is mounting realization that many elderly male partners provide considerable amounts of care (*)

In contrast to the findings for the institutional arrangements of child care, the combinations of informal and formal care elder does apparently not support a simple relationship where relatively high formal support decreases informal, instead they seem to complement rather than substitute each other, at least in the Nordic countries. There seems to be some support for the theorem that increased public services leads to increased informal care (Motel-Klingenberg, 2003; ter Meulen, Arts & Muffels, 2001, Künemund and Rein, 1999; Sundström, 1999) with evidence for a total of more help in social policy systems with high quality and generous care benefits. Nevertheless, across care regimes and across age groups, there seems general agreement that ideally family members should provide care for elderly parents (Alber and Kohler, 2004).

We have so far assumed the differences across countries in terms of public support for children and elderly, but how does a simple overview of take-up rates in the countries included in this study correspond to the presentation of informal/formal care regimes that we have so far referred to? We find that there is still great variation across countries in the provision of care services both for the elderly and the children, but countries have perhaps as a consequence of the EU child care agenda expanded the provision of public child care. Today, most EU countries provide subsidized and often publically provided day care for a considerable proportion of the children aged 3-6 (See Table 2.1). On average 77.6% of this age group is in the EU-27 enrolled in daycare or pre-primary activities, and a country such as Italy (100 %) has met the EU target goal of 90 % provision, while Denmark is very close. There has also been an increase in the proportion of children in the 0-2 age group using daycare services, but this group still lags behind the EU Lisbon target of 33% provision. Overall enrolment for children aged 0-2 is 19.6% in the EU-27 and several countries have reached the Lisbon target, including in this study Denmark (61.7%).²

Table 2.1. Children in day care 0-2 and 3-school age, % of age group, full-time and part-time, 2005 or latest years.

	DK	FIN	NL	I	EU-27 average
0-2 years	61,70	22,40	29,50	6,30	19,60
3-school age	89,70	46,13	70,20	100,30	77,60

Note: Italian figures for the 3-school age children sums to more than 100 % due to double counting. Source: Care Data, originally from Lohmann, Peter, Rostgaard and Spiess, 2009.

In regards to public care provided for elderly 65+, we find also here variation in how frail elderly are supported, at least what concerns take-up rates (See Table 2.2).³ Elderly in Denmark are much more likely to receive care in their homes than in other countries in the study, but here there are no possibilities to receive cash-for-care benefits, neither provided for the care recipient, nor to the informal carer. Receipts of home care is least likely in Italy, where on the other hand a high proportion of the elderly receive a cash-for-care benefit, *Indennità di accompagnamento*, aimed at highly dependant elderly 65+ who are in risk of becoming institutionalized. On the other hand, Italy provide institutional care for only a small proportion of the elderly (1,5 %). In contrast, the

² As there are no reliable comparable data on take-up of maternity, paternity and parental leave, we only report take-up of day care services.

³ Unlike child care, there are few reliable comparative studies, so we do not provide European average figures.

Netherlands has had a long tradition for providing elder care in institutions, and especially in residential care homes, and 7 % of elderly 65+ are today receiving care and support in an elder care institution.

Table 2.2. Elderly 65+ with home care services, living in institutional care or being recipients of cash-for-care benefits, % of age group, 2005 or latest year.

	DK	FIN	NL	ENG	I
Home care	20,86	6,60	13,3	5,7	3,0
Institutional care	5,40	4,20	7	4,2	1,5
Cash-for-care	0	1,15	0,80	0,08	9,00

Source: Care Data, based on national statistics. Note: Institutional care consists of nursing home care and residential home care; figures for cash-for-care refers to the schemes most widely used.

Taken together, there seems to be different mechanisms associated with the provision of informal care for children and elderly in relation to formal support, but the question is how much effect care policies have on informal care giving? While previous studies have assumed the importance of the national configurations of care policies or applied relatively simple indicators of take-up of care services, our focus in the paper is to qualify the understanding of the interaction of the policies and practices of informal care. We do so by applying more fine-tuned policy indicators to the analysis, which not only takes into account simple take-up, but also aspects of universalism, cost and standards in regards to service benefits and universalism and generosity of time and money in terms of cash for care-schemes, and investigate the relationship with time spent on informal care giving.

3. The data

3.1. ECHP data

The data on time use used in this study is from the 8th wave of the European Community Household Panel (ECHP) study. It is a large-scale comparative study across 15 EU member states based on a standardized questionnaire. It includes questions on whether daily activities include care giving for children and dependants needing care due to illness, old age or disability and how much time is devoted to care weekly. Respondents are adults (aged 16 and over). Compared to other surveys, including the more recently developed EU-SILC, the ECHP data offer considerable advantage in treating care for children and care for other dependants as two different items. The analysis uses a sub-sample consisting of respondents aged 16-45 years of age with children so that the results are not biased by country differences in fertility rate and the 45+ with and without children in order to ensure that the care activities of this group for both grandchildren and partners/spouses are taken into account. This leaves us with a sample size of 2 909 respondents for Denmark, 6 770 for the NL, 9 694 for Italy, 4 097 for Finland, and for the UK we have 6 323 observations which yields a database of in all 44 898 cases. Unfortunately the ECHP data do not contain hours spent on child in the U.K. Therefore, in the comparison of child care, we exclude the UK⁴. Table 3.1. presents the variables used in the multivariate analysis.

⁴ ECHP data is from the UK, where as the data on care policies and take-up is based on England, as there is growing divergence between England, Wales, Northern Ireland and Scotland in the funding, organisation and delivery of care for the elderly.

Table 3.1.1 Description of ECHP variables used in analyses.

Variable	Definition	ECHP variable
<i>Dependant variable</i>		
Respondents time spent on caring for 1. children, 2. elderly and other dependants, 3. children and other dependants	Continuous variable	PR007a and PR008a
<i>Covariates</i>		
Age	Categorical variable, divided in age brackets of 17-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55+	PD003
Gender	Dichotomous variable, (Men = 0; women = 1)	PD004
Employment status	Continuous variable, hours worked in a week.	PE005
Marital status	Dichotomous variable (0=couple; 1 = single)	PD008
Adult family members in household	Number of adult family members	HD002
Educational attainment	Three digit classification, (1 = first level or less than that; 2 = second level and 3 = third level education)	PT022
Children in household	Dichotomous (0 = no children; 1 = child/children)	HL001
Income	Imputed and 0-1 –coded income for total sample and actual income in national currencies for individual country analyses. Household income.	HI100X and HI100
Policy index children/policy index elderly	Total indicators for child / elderly care and cash for children / elderly	Own computations (as specified later on)

As we are investigating how care policy configurations influence normative gender arrangements, gender is an obvious variable to include and as previously noted other studies have found a clear but diminishing gendered division of care work for children and elderly.

In order to test to what extent, if any, time spent on paid work affects the time devoted to informal caring activities we include a variable on weekly hours worked. Although there is some evidence that employment may be more indicative for the performance of tasks, rather than the time spent, (Bianchi 2000), we assume that not only the employment status but also the work hours will influence the possibilities to be involved in not both caring for children, and caring for elderly and other dependants.⁵

Other studies have concluded that while married and cohabiting partners seem to devote the same time for childcare, single parents spend more time on child care and less time on paid employment compared to other parents (Kalonkoski, Ribar and Stratton, 2005). The marital status of the respondent is included in the analysis in order to investigate this, but also in order to test whether there is a positive relationship between having a spousal/partner and the provision of care for elderly and other dependants.

Likewise, we assume that the number of adults in the household will influence how much time an individual will need to devote to informal care. On the other hand, having several adult members in

⁵ The spouse/partner's labour market involvement is also expected to influence the amount of time which is possible to devote to caring, but we have at the moment no data on this.

the household could also indicate co-residence across generations and a need for informal care for an elderly or otherwise dependant person.⁶

The number of children in the household indicates possible joint production and economies of scale which reduces the incentives to pay for formal day care, and also increases the cost of using public day care for the family.

Income is included in the analysis from the assumption that the cost of care will negatively influence the ability to use care for lower income groups. Also the trade-off between working and caring will be lower for an informal carer if services are costly. Since fees for services are in most cases based on household income, not on individual income, we use household gross income as an indicator for economic prosperity.

The educational level of the respondent is also investigated. Other studies find that lowly skilled parents tends to spend less time on child care (Kalonkoski, Ribar and Stratton, 2005; Anxo, Floo and Kocuglu, 2002) while highly-skilled parents tend to spend more time with their children. We are interested in testing this, and also to see whether this effect is found for care for other dependants than children. An interesting question is how various forms of care and cash policies provided by the state affect choices done in different educational groups. There are indications (Kangas & Rostgaard 2007) that low-income women are sensitive to these policies, i.e. generous leave options and cash for care (e.g. in the Finnish case) encourage women with low educational attainment, and consequently low status in work hierarchy and pay, to opt out from employment which would indicate that they use more time to child and elderly care.

3.2. Care data

While other time use studies have mainly investigated the relationship between socio-economic characteristics and labour market participation and provision of informal care, our contribution is first and foremost to understand how different configurations of care policies might also contribute to country variations in informal care giving for children as well as elderly. We are also interested in seeing what is the contribution to the analysis of the application of more fine-tuned care policy than simple take-up rates.

There seems from the previous investigation of the relationship between care policies and time use to be some indication that care regimes may influence time devoted to informal care. We are testing this by applying index values of national care policies to the analysis. The care variables are based on data from Caredata, a database on institutional design of care for children and older people in Europe, covering the period from 1982 to 2005. The data included in this analysis is mainly from 2005.⁷

In order to understand the incentives created by the national care policies, we have divided the care indicators into cash and services, assuming that national care policies which provide good

⁶ Parental time spent with the child also tends to decrease by the age of the child, indicating the change in care needs and the increasing independence of the child (Anxo, Floo and Kocuglu, 2002; Hallberg and Klevmarken, 2003). We have at the moment no data on this but hope to include this at a later stage.

⁷ At this explorative phase, care policy data from 2005 will be used. At a later stage we will apply data from 2001, matching the year of the collection of the ECHP data.

incentives for using the cash schemes will be more supportive of informal caring, while those countries providing good incentives for using services will be less supportive of informal caring.

The care variables are split into elder care and child care, as countries may operate different policy principles for elderly and children, so that generous child care policies might not be combined with generous elder care policies and visa versa (Sipilä and Anttonen, 2006; Rostgaard, 2004). The child care variable is split into an index on day care services and an index on leave schemes. The day care index consists of different indicators for day care services for children aged 0-2 years and 3-school age as the institutional differences in day care are considerable between these two age groups. School age is the cut-off point and children are excluded once they have access to, and are obliged to enter universal and free schooling (see also Rostgaard, 2000).⁸ (See appendix for composition of leave and child care index*)

Different characteristics of the care systems are assumed to be of importance, such as the universal traits of the policies. This is understood in the sense of whether services and benefits are designed for all citizens, whether they in practice are used by a large majority of citizens, and whether they are uniform rather than tailored to specific groups (Anttonen, 2002:71). This both indicates that care is generally available, not stigmatised and to be seen as a right for citizens to make use of – although they may still be awarded on the basis of need. Universalism in day care is measured as a combined indicator of availability, right to day care and public investment. This consists of the public investment in day care as a % of GDP and per capita for this age group, whether there is a day care guarantee in place, the share of the age group in day care, and the proportion of children in full-time care. The components of the universalism indicator are then weighted, awarding day care take-up a higher weight than other indicators, in accordance with our assumptions of importance to familial opportunities and constraints (See Table * in appendix for weights).

We also consider the cost of the use of the care services to be of importance for the take-up of the services. The cost for care represents a trade-off between forgone wages if parents or informal carers provide care instead of purchasing social care and the wage income they can obtain from the market, but also the financial burden which the elderly as a user has to bear. Cost for care is for children measured as the monthly cost to parents in Euro and as a proportion of an Average Production Worker (APW) net income, and the public share of the cost which is measured as the proportion of total expenditure born by the public purse and whether there are any tax credits available for parents for the use of day care.

Finally, the standard of child care is measured according to weekly opening hours and average opening hours, assuming that full-time care makes it easier for parents to combine work and family life, and also whether child care is offered full-year round or only during school term. The number of children per staff member is included as is also the number of children in the group, assuming that children are better cared for the higher the number of adults and the fewer number of children in the group. The quality of the care that is provided is captured by the indicator of the proportion of staff with training or tertiary education which should capture the quality of the interactions with and responsiveness towards the children.

The variable on leave policies is reported according to the universalism of the schemes and generosity in regards to time and money and finally according to gender equality incentives.

⁸ This results in different age grouping across the countries, but is considered the best option for reaching a reasonable level of comparability.

Universalism is composed by the social investment in leave policies measured as % of GDP to leave, while generosity of time is measured by the available weeks of maternity and parental leave available to parents, and generosity of money is measured by how much the leave benefits makes up as a proportion of an APW net income. A combined indicator on timeXleave, the so-called effective leave, takes into account that in some countries parts of the leave is without payment, and the possibility to divide leave equally between genders and any gender equality policy incentives makes up the last indicator, the gender equality index.

All variable values have subsequently been standardised so that they run from 0-1, by dividing by the maximum value, and have finally been reversed according to our assumptions regarding opportunities and constraints for taking up employment, in order not to cancel each other out, e.g. by converting a value of 0.3 for the cost of day care (a negative incentive) to 0.7.

The use of cash and service indices in this paper is a step forward from merely using country dummies as indicators of national provisions for families with children. However, our approach also suffers from the same “black box” problem as studies that apply dummies. In addition, our measure is an aggregate level variable that does not vary within a country. It should be remembered that in some countries there is a considerable regional variation in service delivery, notably so in Germany (Cooke 2006). Therefore, our results on the importance of the care and leave arrangements are indicative. Therefore, the index values are more or less accurate proxies and would require regional analysis for fully understanding the opportunities and constraints for parents and informal carers.

In Tables 3.2.1. and 3.2.2., country values for the cash and service index for children are presented. As is apparent from the tables, Denmark and Finland do well on universalism in both cash and services, and in both service and cash overall score higher than other countries in the study. Italy scores high on child care which is due to the total coverage of free day care provision for the 3-school year age group. Finland scores high on leave, in the universalist traits and gender equality incentives which are built into the scheme, while the Netherlands has low value for leave as the parental leave is unpaid and of short duration.

Table 3.2.1. Indicator values cash scheme (leave) for care of children

	DK	FIN	NL	I
Universalism	0,77	0,80	0,00	0,28
Generosity in time and money	0,66	0,49	0,30	0,40
Gender equality policy index	0,26	0,83	0,39	0,44
Total indicator leave	1,69	2,12	0,69	1,13

Source: Caredata

Table 3.2.2. Indicator values for day care for children, 0-2 years and 3-school age

	DK	FIN	NL	ENG	I
Universalism	1,93	1,44	0,84	0,91	1,17
Cost	0,88	0,84	0,74	0,86	1,00
Standards	1,13	1,18	1,24	1,00	0,92
Total indicator day care	3,94	3,47	2,81	2,77	3,08

Source: Caredata

The care variable for the elderly is also divided into cash and services. For services, we differentiate between institutional care (nursing homes and residential homes) and home care (personal care and

practical assistance in the home, in some countries also nursing care), but have similar themes for the indicators. Universalism takes into account indicators which express how much a country invest in social care, the availability and the right to care. It is composed by the per capita 65+ public expenditure and % of GDP spent on home care and institutional care, the unit cost which gives an average of cost per user, the proportion of elderly using home care or institutional care, and the social right to care which is an index composed on coverage, age and qualifying period conditions.

Cost for the use of care is measured as the proportion of total expenditure born by users.

To capture the quality of the care provided, we have collected indicators on the average number of persons per room and the proportion of residents living in single room for institutional care. In home care we account for the average weekly home help hours per user, and for both sectors we give the staff/user ratio.

Also the variables for the elderly have been standardised and reversed according to our assumptions regarding opportunities and constraints for taking up employment.

In Tables 3.2.3. and 3.2.4. country values for the cash and service index for elderly are presented. This time England is included as we have English data on time use on elderly only. Denmark has zero value for cash for care, as there is no scheme available. In regards to services for the elderly, Denmark performs much better than other countries, while England has the lowest value in the country sample, due to high user payment and little availability of services. Otherwise, Italy performs well in the cash-for-care scheme, due to the larger proportion of elderly who receive the benefit and due to a relatively high compensation rate.

Table 3.2.3. Indicator values cash scheme for care of elderly

	DK	FIN	NL	ENG	I
Universalism	0,00	0,31	0,27	0,23	0,73
Generosity of compensation	0,00	1,04	1,50	1,23	1,49
Total indicator	0,00	1,35	1,78	1,47	2,22

Source: Caredata

Table 3.2.4. Indicator values for services for elderly (Home care and institutional care)

	DK	FIN	NL	ENG	I
Universalism	1,53	1,02	1,24	1,11	0,67
Cost	1,86	0,88	1,38	0,03	0,59
Standards	1,15	1,04	0,92	1,13	0,63
Total indicator	4,55	2,93	3,55	2,27	1,90

Source: Caredata

4. Prevalence of informal care

Before we apply the care policy indicators, we wish to investigate whether there are country and gender differences in the provision of informal care by looking at simple proportions of the sample population who do or do not provide informal care, according to gender. A Chi2test of differences between countries finds that countries are significantly different at a 0.05 level on all care provisions, ie there are no dominant regime types.

Across the countries, a considerable part of the populations are involved in some kind of informal caring. For women, the highest proportions are found in the Netherlands (55 %) and Italy (53 %) and lowest in Denmark (41 %), while for the men also here are the Dutch men the most involved but we see a different pattern for the other countries, as only few Italian (26 %) and British (24 %) men are providing informal care while a considerable proportion of men in Denmark (38 %) and Finland (36 %) do provide care.

A much higher proportions of respondents are providing care for children than care for elderly or other dependant. This is expected as we have chosen a sub-sample of respondents aged 17-45 of age with children only. Informal care for children seems to be most prevalent in the Netherlands and among women in Italy, and it is also in these two countries we find the highest proportion of persons who provide care for both children and an elderly /dependant person. For all countries, we find that a significantly higher proportion of women (sig. < 0.05) are providing care for children, elderly/dependant or for both. But care work between men and women seems to be more equally divided between men and women in countries such as Denmark and the Netherlands.

Table 4.1 Proportion of respondents providing informal care, % of age group, 17-45 of age with children and 45+ with and without children.

	Denmark		The Netherlands		Italy		Finland		UK	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
Caring for children	34	35	42	46	22	44	29	35	11	23
Caring for elderly/dependant	3	4	4	5	2	4	5	7	16	16
Caring for child and an elderly/dependant	1	2	2	5	2	5	1	2	1	4
Not caring for a person	62	59	52	45	74	47	64	56	72	56

Gender and country difference= $p < 0.05$.

The variation in age across the four groups of informal caring (Table in Appendix) shows that the average age of informal carers providing care for children is especially high in Italy (45 years), indicating that grandparents play a greater role here, which is in accordance with findings of previous studies. Otherwise, the average age of informal carers for children ranges from 36-45 years. The average age of informal carers looking after an elderly is for all countries higher than for children and with little range (from 58-62 years). The average age of persons caring for both a child and an elderly has a much large range, from 37-50 years, being lowest in the UK which indicates that many respondents here are caring for both smaller children as well as another dependant.

Finally, we look at the average weekly hours spent on informal caring across countries. Table 4.2. shows that the means of care provision for children across the 4 countries where data is available range from 30-42 hours per week, and thus displays some country variation, albeit not as much as expected. Taking into account division of care work between men and women, time spent on caring for children range for women from 38-50 hours per week, being highest in Denmark and lowest in Italy, and for men from 18-33 weekly hours, again highest in Denmark and lowest in the Netherlands and Italy, somewhat in contradiction to assumptions about association between

generous care policies in the North and low rates of informal caring. On the other hand, as presented in Table 2.1, Italy provides (free) day care for the entire age group 3-school age, and this may well explain the low level of informal care in this country for both men and women, relatively to other countries. Age differentiated information on children in the household will be applied at a later stage in the analysis and this may further explain the country differences. There is a significant gender division in provision of informal care for children ($p < 0.05$) with women spending more time on child care than men.

Table 4.2. Average time spent on care for children, weekly hours, country averages and averages for men and women, 17-45 of age with children, 45+ with and without children.

	Denmark			Netherlands			Italy			Finland		
	Mean	Male	Female	Mean	Male	Female	Mean	Male	Female	Mean	Male	Female
Hours per week spent looking after children	42,43			30,38			31,08			30		
	33,60	49,89		18,15	40,72		18,71	36,49		21,22	38,09	

N: DK=1.009, NL: 2.997, IT: 3.271, FI: 1.312. Gender difference for all countries, $p < 0.05$.

In Table 4.3. the average weekly hours of care for elderly is displayed, this time including the UK, where data on time use is now available. Overall, the average intensity of time devoted to informal caring for elderly and dependants is considerably lower in the UK (3 hours) than in the other countries, and highest in Italy (24 hours). Across gender, we again find that women on average provide more informal care, except for the Netherlands and hardly any difference in Finland, but this time the gendered differences are only very small and only significant for Italy.

Table 4.3. Average time spent on care for elderly, weekly hours, country averages and averages for men and women, 17-45 of age with children, 45+ with and without children.

	Denmark			Netherlands			Italy			Finland			United Kingdom		
	Mean	Male	Female	Mean	Male	Female	Mean	Male	Female	Mean	Male	Female	Mean	Male	Female
Hours per week spent looking after person other than child	14,62			17,35			23,67			14,66			3,00		
	11,89	16,13		18,53	16,57		19,49	26,00		14,64	14,68		3,00	2,99	

N: DK=104, NL=283, IT=298, FI=259, UK=1.024. Gender difference for I, $p < 0.05$

Lastly, Table 4.4. displays the division of hours spent for those who have multiple care responsibilities, ie they are caring for both a child(ren) and elderly or other dependants. Only few respondents in Denmark and Finland are providing care for both elderly and children, so we are cautious about making conclusions for these two countries. Multiple caring seems to be especially time intensive in Italy with a weekly average of 48 hours and least time consuming in Finland, at an average of 35 weekly hours (UK is excluded as there are no data on time use for care for children). There are considerable gender differences across all countries in the amount of time which is devoted, where women provide significantly more hours of care for children in Denmark, the Netherlands and Italy, while women spend more time on care for an elderly and/or a dependant in Italy and Finland. Multiple carers spend most of their time caring for children, taking up on average between 61-71% of their care time.

Table 4.4. Average time spent on care for children and elderly/dependants, weekly hours, country averages and averages for men and women, 17-45 of age with children, 45+ with and without children

	Denmark		Netherlands		Italy		Finland		United Kingdom					
	Mean	Male Female	Mean	Male Female	Mean	Male Female	Mean	Male Female	Mean	Male	Female			
Hours per week spent looking after children	26,27		27,58		29,26		23,77							
Hours per week spent looking after person other than child	10,61	12,87 34,00	16,32	14,90 32,68	18,69	17,54 33,07	10,85	18,25 26,76				3,47		
<i>Total care time</i>	36,88	17,13 48,27	43,90	30,19 49,40	47,95	31,37 53,39	34,62	22,20 41,15	3,47	3,11	3,57			
Proportion of time spent on child care	71,23		62,82		61,02		68,66		NA	NA	NA			
Proportion of time spent on care for elderly/dependant	28,77	75,10 70,44	37,18	49,37 66,16	38,98	55,92 61,94	31,34	82,20 65,03	NA	NA	NA			
		24,90 29,56		50,63 33,84		44,08 38,06		17,80 34,97						

N: DK=30, NL=232, IT=355, FI=69, UK=180. Gender difference in hours per week spent on children for DK,NL and IT, $p < 0.05$. Gender difference in hours per week spent on care for elderly/dependant for I and FIN.

5. Results

The question now remains how the application of care data can explain the variation in time devoted to caring for children and elderly/depedants and whether there are factors associated with socio-economic characteristics and labour force participation.

5.1. Care for children

In the analysis we first apply the care policy data to the data on use of time for caring for children (See Table 2 in Appendix). As our dependent variable, time use, is continuous, while some of our explanatory variables are dichotomous and some are continuous, we apply regression analysis to control for the effect of the independent variables. We analyse the whole data in two different ways. First, we include care and cash indices in the analyses. Second, since index values are constant for individual countries we omit indices and replace them with country dummies to see if this makes a difference and how other explanatory variables are affected by indices vis a vis country dummies. In the analyses we drop the age category 17-24 years of age, men, married, those with the first level educational attainment and those with no minor children in the household. When it comes to country dummies we omit Denmark. These dropped categories form a bench mark and the effect of the remaining groups are contrasted to the excluded groups.

Not surprisingly, age plays a central role but there is an apparent grandparent effect across countries, which was also indicated by the simple distributions of informal care time across age groupings. In Denmark and Finland, middle-aged and older people, i.e. older than 45 years of age, tend to spend less time on child care than the youngest age bracket (17 to 24) do, whereas in Italy and the Netherlands they participate more in child care activities. In all countries, gender matters so that women spend more time on caring for children than men, and the more people take part in paid employment, the less time they spend on child-care. Being single diminishes time for children as do the number of adults in the household but, quite logically, the explanation is different. In the former case single parent has no time given her (his) employment, while in the latter case there are more possibilities to share family responsibilities. The role of education varies between countries. The

impact of income is significant only in Denmark. Interestingly enough, the child-care index yields a positive and significant impact on informal caring, whereas the impact of cash transfers is negative. The possible explanation for this negative impact perhaps is that generous child-care leaves tend to bifurcate in the labour market. Parents, i.e., mothers tend either to totally withdraw from paid employment or work on full-time basis.

5.2. Care for elderly

Analogically with the analyses of child care, we run regressions for the care of elderly and the interpretation of the results goes in the same way (Table 3 in Appendix). We include also the number of children in the household in order to see whether there is a negative "generational" effect. Now we have one more country, the United Kingdom, in the data base. A number of interesting results can be observed. First, age plays a role, but now the impact of age is the reverse as compared to child caring: the middle-aged and elderly of 45+ of age are more devoted to looking after other elderly than are younger respondents, perhaps this is not surprising but the tendency seems to be the strongest in Italy and in the U.K., in the two countries that display the lowest service figures. However, it is interesting that there does not seem to be a general trade off between the level of services and time used up for taking care of elderly relatives – at least at the aggregate level we can not find a negative relationship between the two variables. When it comes to the level of the cash for care schemes, the better the schemes in terms of universalism and generosity, the more hours are devoted to informal caring. There is a slight negative impact from the presence of children in the household to elderly care but in none of the cases is the effect significant.

All in all the models for elder care work are considerably less explanatory than the corresponding models for child-care. The variance explained is at best two percent while in the best cases in child care the variance explained was as high as 56 per cent.

We also run additional analyses for the aggregate caring variable that is a sum of time spent on child-care and elderly care. Since the time spent of care is heavily biased to child-care, child-care also strongly dominated the results and, therefore, they are more or less the same as those results depicted in the table on child-care. We do not replicate them here. It is a task for subsequent analyses to dig deeper in this issue.

6. Conclusion

The paper presents the first results only and need further work, but from the simple comparisons of proportions of carers in the population, we find there is some support for regime characteristics in terms of the prevalence of informal caring across the countries. Involvement in informal care seems especially widespread especially among the women in the Italy where the configuration of care policies are assuming the responsibility of the household and involvement of women. Counting the proportion of carers reveal that in terms of sheer proportion of male and female carers, informal care seems more equally divided in Denmark and the Netherlands, countries which are often associated with the Social-democratic welfare model based on gender-equality.

When we then take into account the intensity of the care provided we find that women put more hours in care for children and elderly/dependants, and that parents apparently spend considerable more time with children in the Nordic countries than in the South, somewhat in contradiction to assumptions about association between generous care policies in the North and low rates of informal caring. Informal care for elderly is on the other hand most time consuming in Italy. For those carers who have multiple care task, child care takes up most of the time, and seems to be

especially time intensive in Italy, which confirms the assumptions about the family based Mediteranian countries.

The multivariate analysis found that not surprisingly, age plays a central role in that younger persons generally spend more time on care of children while elderly take care of the other aged people. In this way, we have a partner/parent effect. However, there is an interesting division between countries. In the Nordic countries, older people spend less time (in relation to the younger) on child care than they do in Italy and the Netherlands. Interestingly enough, both child care and elderly care/service index yields a positive and significant impact on caring, whereas the impact of cash transfers is negative on child care but positive on taking care of the elderly. The possible explanation for the negative and a bit surprising impact of child care transfers perhaps is that generous child care leaves tend to bifurcate in the labour market. Parents, i.e., mothers tend either to totally withdraw from paid employment or work on full-time basis. Our results also indicate there is not a general trade off between the level of services and time used up for taking care of the elderly relatives. Universal and generous cash-for-care schemes tend to wield more r elderly care enchant more hours spend on caring activities. All in all our findings does not support the common crowding out idea that high formal support circumscribes informal care, instead they are complementary to each other rather than substitutes.

Appendix

Table 1. Weights applied in elder care

Weights home care		Weights institutional care		Weights cash for care	
Public expenditure for home care all ages, per capita 65 years, in Euro, 2004, PPP	0,00	Public expenditure for insitutional care,all ages, per capita 65 years, in Euro, 2004, PPP	0,08	a.2. Public expenditure for cash for long-term care,all ages, per capita 65 years, in Euro, 2004, PPP)	0,08
Public expenditure for home care, all ages, as proportion of GDP, 2004.	0,08	Public expenditure for institutional care, all ages, as proportion of GDP, 2004.	0,08	a.2. Public expenditure for cash for care, all ages, as proportion of GDP, 2004, 1.)	0,08
Unit cost (average cost per person receiving care), 2005	0,08	Unit cost (average cost per person receiving care), 2005	0,08	Unit cost (average cost per person receiving cash for care), Euro, 2005	0,08
% of elderly 65+ with home care, 2005	0,50	% of elderly with institutional care (nursing home and residential home), 2005	0,50	b.1. % of elderly with cash benefit, 2005 or latest year)	0,50
Social right to care (Coverage, age condition and qualifying period)	0,25	Social right to care (Coverage, age condition and qualifying period), 2005	0,25	c.1. Social right to cash for care (Coverage, dependency level, age condition, qualifying period, amount to be spend on other items than care, and can be paid to family member, including sppouse/partner), 2005)	0,25
User payment as share of total expenditure	1,00	User payment as share of total expenditure, %, 2005	1,00	d.1. Amount in % of APW for a single person, 2004	1,00
Average wekly home help hours per user, 65+	0,50	Average no of persons per room, 2005	0,25		
Staff:elderly ratio (full-time places/clients per full-time staff member, excl administrative staff),	0,50	Percentage of all residents living in single room, 2005	0,25		
		Staff:elderly ratio (full-time staff to full-time places, FTE, excl administrative staff), 2005	0,50		

Table 2. Weights applied in care for children

Weights day care 0-2 years		Weights day care 3-school age		Weights leave	
a.1. Social expenditure for child care (all ages) per capita in Euro dollar (PPP converted), 2003	0,125	a.1. Social expenditure for pre-primary education (all ages) per capita in US dollar (PPP converted), 2003	0,125	a. Social expenditure for leave schemes, in % of GDP (OECD data), 2003	0,5
a.2 Social expenditure for children for childcare (all ages) as % of GDP, 2005	0,125	a.2 Social expenditure for pre-primary education (all ages) as % of GDP, 2005	0,125	a.1. Social expenditure for leave per capita as % of GDP, 2003	0,5
b. day care guarantee for child 0-3(yes=1 and no=0)	0,25	b.1. guarantee for a place child 3-school age years (yes=1 and no=0) Weight=0.25	0,25	b. Compensation rate during paid maternity leave, calculated as per cent of 1 APW (full-time), 2007/8	0,17
c.1. % of children in day care of children in day care 0-3 years , measured as simple %	0,25	c.1. % of children in day care of children in day care 3-school age , measured as simple % (full-time + part-time) .	0,25	d. Compensation rate during parental leave, calculated as per cent of 1 APW (full-time), 2006	0,17
c.2. Full-time/part-time: % of 0-2 years old children in part-time and full-time day care (defined as 1-29 hours and 30h or +), measured as % of full-time places to all places.	0,25	c.2. Full-time/part-time: % of 3-mandatory school age children in part-time and full-time day care (defined as 1-29 hours and 30h or +), measured as % of full-time places to all places.	0,25	e. Maternity leave - weeks of leave with payment to mothers ,	0,17
d.1.. Monthly cost to parents if children age 0-2 years in main public/private care (Euro)	0,17	d.1. Monthly cost to parents if children age 3-school age years in main public/private care in Euro, max amount	0,25	h. Parental leave - weeks of leave with payment for either father or mother following maternity leave	0,17
d 2. cost to parents if children age 0-2 years in main public/private care% of 1 APW	0,17	d2. Cost to parents as % of 1 APW	0,25	Effective parental leave (FTE = Duration of paid and unpaid leave in weeks * payment (as per cent of APW earnings) received by the claimant, 2003	0,33
e.1. Public funding, as % of all funding, %	0,33	e.1. Parwental tax relief available (yes=1, no=0) (weight 0.25)	0,25	Fathers portion of all leave, including paternity leave, weeks, 2008	0,5
f.1. tax relief available for parents (yes=1, no=0)	0,33	e.2. Public funding, as proportioin of all funding, in %	0,25	Gender equality policy incentives, 2008	0,5
g.1.. Weekly opening hours, part-time= 0-29, full-time = 30+ (in main scheme (based on where the greatest take-up is). Fuull-time = 1, part-time = 0.752	0,08	f.1.. Weekly opening hours, part-time= 0-29, full-time = 30+ (in main scheme (based on where the greatest take-up is). Full-time = 1, part-time = 0.75	0,08		
g.2. Average daily opening hours	0,08	f.2. Averagre daily opening hours	0,08		
g.3. Open on a yearly basis/2. during school period (1=1, 2=0.75)	0,08	g.1. Open on a yearly basis/2. during school period (1=1, 2=0.75)	0,08		
h.1.. Staff:child ratio (full-time care staff to full-time places, excl administrative/cleaning staff),in main scheme (based on where there is greatest take-up))	0,25	i.1. Staff:child ratio (full-time places to full-time care staff, excl administrative/cleaning staff),in main scheme	0,25		
i.1.. Group size (0-2 years:max. > 12 = 1, 12-15 = 0.5, 15+ = 0.25)	0,25	i.1.. Group size (3-school age: max. < 18 = 1, 18-22=0.75, 22+=0.5	0,25		
j.1. 80 % of staff with training (1=yes, 0=no)	0,125	j.1. 80 % of staff with training	0,125		
j.2.50 % of staff with tertiary education (1=yes, 0=no)	0,125	j.2. 50 % of staff with tertiary education	0,125		

Table 2. Average age of respondents, 17-45 of age with children, 45+ with and without children

	Denmark		The Netherlands		Italy		Finland		UK	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Caring for children	37,92	8,93	42,05	9,12	44,62	12,78	39,21	10,87	35,58	7,03
Caring for an elderly/dependant	59,28	11,21	61,64	12,51	58,38	11,21	58,79	11,53	57,90	13,25
Caring for a child and an elderly/dependant	46,88	11,47	48,30	10,85	49,72	10,52	47,22	10,48	37,65	7,28
Not caring for any person	58,39	14,56	58,44	16,81	56,33	17,83	55,48	14,56	54,77	17,60

Table 3. Unstandardized regression coefficients for hours spent on child care.

	Coefficient	Coefficient	Denmark	Netherlands	Italy	Finland
(Constant)	-53,913***	-4,279***	24,519***	-3,106	-,124	17,416***
Age 25-34	13,558***	12,403***	22,667***	37,228***	10,510***	15,481***
35-44	9,968***	8,214***	8,808*	27,383***	8,469***	5,085*
45-54	5,051***	2,627***	-6,053	16,927***	4,579**	-6,559**
55-64	3,544***	2,178*	-7,301	13,975***	4,414**	-7,905**
65+	2,997**	3,051*	-9,130	9,898*	4,976*	-7,007*
Gender	6,910***	7,446***	6,275***	9,594***	15,765***	6,404***
Hours worked	-,105***	-,084***	-,159***	-,363***	-,089***	-,131***
Single	-3,693***	-3,827***	-7,888***	-3,420***	-7,214***	-3,736***
Adults in household	-,801***	-1,355***	-5,388***	-,668	-1,275***	-2,962***
Education 2nd level	-4,213***	2,220***	,472	1,779	2,048***	-,656
3rd level	-3,938***	2,722***	4,478**	-5,769*	1,881**	1,325
Child	8,356***	7,247***	17,020***	13,770***	9,603**	8,709***
Income	-1,855*	-1,953***	-1,156E-5**	4,155E-6	1,296E-5	-1,636E-6
Child care index	23,687***	--	--	--	--	--
Child cash index	-13,973***	--	--	--	--	--
NL	--	15,189***	--	--	--	--
Italy	--	9,741***	--	--	--	--
Finland	--	8,315***	--	--	--	--
N	23 470	23 470	2 909	6 770	9 694	4 097
Adj. R squared	29,1%	31,7%	48,4%	56,0%	41,2%	41,0%

Table 4. Unstandardized regression coefficients for hours spent on child care.

	Coefficient	Coefficient	Denmark	Netherlands	Italy	Finland	U.K.
(Constant)	-1,381**	-,279	,249	,177	-,193	-1,497*	-,171
25-34	,434*	,392	,341	,367	,826	,773	,114
35-44	,665**	,621**	,412	,496	1,403**	,929	,288*
45-54	,807***	,767***	,245	,613	1,726***	1,111*	,367**
55-64	,918***	,873***	,298	1,158*	1,267*	1,547**	,585***
65+	1,717***	1,662***	5,802***	1,513	1,927**	,511	,556**
Gender	,378***	,385***	,562*	,371*	,718***	,258	,159**
Hours worked	-,008**	-,008**	-,014	-,010	-,016**	-,005	-,002
Single	,197	,186	,118	-,138	,908***	,346	,026
Adults in household	,128**	,115**	,185	,220*	-,010	,538***	,110***
2nd level	,215**	,173	,535	-,714	,039	-,073	,054
3rd level	,056	,055*	,486	-,320	-,190	-,228	,129**
Child	-,207	-,211	-,380	-,363	-,175	-,094	-,017
Income	,677**	,653**	-1,466E-6	-1,636E-6	-7,774E-7	-1,110E-7	-3,035E-6*
Old service index	,206**	--	--	--	--	--	--
Old cash index	,341***	--	--	--	--	--	--
NL	--	,286*	--	--	--	--	--
Italy	--	,219	--	--	--	--	--
Finland	--	,025	--	--	--	--	--
U.K.	--	-,110	--	--	--	--	--
N	29 793	29 793	2 909	6 770	9 694	4 097	6 323
adj. R squared	1,1%	1,1%	2,2%	1,0	1,8%	1,2%	2,2,%

Literature list

To follow...