

# Who Cares? Fathers and the Time They Spend Looking After Children

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## Abstract

Changes in employment patterns and family structures may redefine what it means to be a father. Research in many countries confirms that fathers spend less time with their children than mothers. A systematic comparison between countries, however, based on a common data source has until now not been possible. I analyse the time spent looking after children by fathers across the European Union, between the years 1994 - 2001, based on the European Community Household Panel Survey. Paternal time and gender inequalities in parental time vary substantially by country. The trend is for fathers to spend increasing amounts of paternal time. Certain socioeconomic characteristics such as level of education, having a working spouse, the number of children and being employed, are positively associated with paternal time. Employment conditions also affect paternal time. Working part-time is positively associated with paternal time. Working conditions such as number of hours worked, working in the private sector and working in small and medium sized business environments are negatively associated with paternal time. Event history analysis of the transition into spending substantial paternal time confirms these effects.

## 1 Introduction

Changes in employment patterns and family structures may redefine what it means to be a father. The dual-earner/dual-carer family model envisions, as both positive description and normative aspiration, a social and economic arrangement in which men and women engage symmetrically in both paid work in the labour market and in unpaid work in the home. This family model is unusual as women have, in general, become earners to a greater extent than men have become carers. Change has been asymmetric. There has been much research into the causes and consequences of women becoming more attached to the labour market. Strikingly little complementary research has been undertaken to explore the correlates of paternal care and the transition into spending substantial paternal time.

A body of previous research shows that mothers are responsible for the majority of child care, although fathers are caring more than ever before. While the bulk of this literature examines parental time<sup>1</sup> in the USA (Bianchi 2000; Sandberg and Hofferth 2001), research echoing similar results has emerged in the UK (Fisher, McCulloch and Gershuny 1999; O'Brien and Shemilt 2003), the Netherlands (Knijn and Selten 2002) and Sweden (Halberg and Klevmarken 2001). The consensus in the literature is that paternal time is on the increase. There is little conclusive research into the correlates of increased paternal time. However, there is evidence which suggests that all parents, but especially fathers, with a higher level of education spend more time with their children than those with less education (Dex and Scheibl 2000; Fisher, McCulloch and Gershuny 1999; Gauthier, Smeeding and Furstenberg 2001; Gershuny 2000).

Even where paternal time has been the subject of study, each research project has been carried out independently, and it is therefore difficult to make direct comparisons between countries. This current paper is based on a structured comparison of the association between paternal time and socio-economic factors among member states of the European Union, derived from the analysis of a single data set, the European Community Household Panel (ECHP). For the first time, cross-national comparisons of paternal time and analyses of its correlates are possible because of this substantial harmonised survey conducted across the European Union.

## 2 Theoretical Considerations

Paternal time, defined as the time fathers spend looking after their children, is taken as a measure of active fathering. As Hobson (2002) considers, fatherhood is on the political agenda in the European Union. It is sometimes cast in terms of crisis. One side of the policy debate focuses on absent or non-resident fathers. But this is only part of the story. The other side of the policy debate revolves around enabling men to become active and engaged fathers. There are institutional initiatives within the European Union seeking to affirm men's rights to father and their responsibilities to fatherhood. This is reflected by the resolution of the Council of the European Union and the Ministers for Employment and Social Policy (2000/C 218/02) on the balanced participation of women and men in family and working life. I focus only on men who have children within a two-parent (heterosexual) family. This is not representative of all men, or of all fathers, but it is particularly within this household context that changes in employment patterns may redefine what it means to be an active father.

Despite much policy intervention in the 1980s and 1990s, persistent in-

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<sup>1</sup>Parental time is defined as the time that parents report spending looking after children. Paternal time is specific to fathers and maternal time to mothers.

equalities between men and women in the labour market and in the division of domestic work across industrialised societies remain (see e.g. Blau 1999; Blossfeld 1987; Huber and Spitze 1983; Ramos 2003; Reskin and Roos 1990; Rubery and Fagan 1993). This is all the more surprising given the virtual disappearance of differentials in educational attainment levels of male and female school leavers in nearly all modern societies (Erikson and Jonsson 1996; Shavit and Blossfeld 1993). This said, there is less inequality between young men and young women than between younger and older women (Walby 1997) until these young women have children. A better understanding of the household dynamics of parental time and in particular paternal time may shed light on the mechanisms maintaining gender inequalities.

There are many theories of the gender division of labour which could be drawn upon to inform decisions on variable selection for analysis. Relative resource and bargaining theories (Lundberg and Pollack 1996) and time availability theories (England and Farkas 1986; Presser 1994) lend themselves particularly well to the data available here. The relative resources perspective predicts that when the mother devotes more time to paid labour, she gains more power to negotiate a more equitable division of domestic tasks. Similarly, when the father is employed fewer hours, he has less power to avoid tasks and so participates more with childcare. The effect of a father having a working spouse, as well as the hours he works are considered in the analysis. Time availability theories refer to explanations that characterise parental time as the result of parents' other time commitments. Institutional factors at the workplace can influence the amount of time parents have available to spend with their children and are taken into consideration in the analyses.

Because I use a multi-country comparison, it is necessary to frame the hypotheses around a theoretical approach that will help to explain the potential differences between countries in paternal time and its associated factors. Discussed here are three, sometimes overlapping, theoretical approaches to household employment models by country types. It is expected that these patterns in household employment will help explain country differences in (i) the amount of paternal time spent and (ii) the person, household and workplace characteristics and their association with paternal time.

Household employment and the way in which welfare production is allocated between state, market and household are linked. Esping-Andersen (1990, 1999) refers to *Three Worlds of Welfare Capitalism*. His central axis of welfare state variation is "decommodification", which is the extent individuals are freed from dependence on the labour market. The first category is the "liberal" model, characterised by the market playing a central role and the individualisation of risks. Combining work and family life is likely to remain a private responsibility and child care provision is not likely to be organised, paid for (or even regulated) by the state. Countries clustered in this category are typically the Anglophone nations. The second is the "so-

cial democratic" model, where the role of the state is central and dedicated to universalism, comprehensive risk coverage, (generous) benefit levels and egalitarianism. Women are expected to be part of the labour market; child care is viewed as a social responsibility and there is a strong commitment to gender equality. This regime is virtually synonymous with Denmark, Finland, Norway and Sweden. The third is the "conservative" model. Features of a conservative regime are status segmentation and familialism. The emphasis is on the family's (mother's) centrality as care provider, the standard male breadwinner model being assumed, which makes it harder for men to spend time looking after children. Continental European countries such as Germany and France are situated within this category. There have been persuasive arguments in favour of a "Mediterranean" category (Ferrera 1996; Leibfried 1992), based on the extremely residual nature of southern European social assistance, the use of social benefits for the purposes of political clientelism, and on strong "familialism"<sup>2</sup>.

A central criticism of Esping-Andersen's typology is that, as long as women are not fully commodified (i.e. engaged in market work), decommodification is not a concept relevant to them. Lewis (1992) has proposed an alternative typology of gendered policy logics, centred around the concept of breadwinning. This typology places countries into one of three categories: strong breadwinner regimes (UK, Germany, Netherlands and Ireland); modified breadwinner regimes (France) and weak breadwinner regimes (Sweden). At its extreme, the male breadwinner model involves the exclusion of women from the labour market. Women would be expected to do all unpaid caring work and they would be dependent on men for access to all income.

A third alternative is offered by Crompton (1999:205), who illustrates a continuum of household employment models from traditional male breadwinner/female care arrangements to partial modification to a dual earner/dual-carer model.<sup>3</sup> Five ideal types of households are identified. Here, they are used to give the framework for explaining the differing proportions and combinations of the different household employment patterns which predominate in particular national contexts. According to Crompton, type 1 is the male breadwinner/female carer model found particularly in Southern Europe, Austria, Germany and the Netherlands. Type 2 is the dual earner/female part-time carer model which has emerged strongly in Northern Europe, particularly in Britain and the Netherlands. Type 3 is the dual earner/state carer model that might be used to describe Denmark, Finland and Sweden. Type 4 is the dual earner/marketised carer model would be used to describe certain household employment patterns in the UK (and the

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<sup>2</sup>A familialistic welfare regime is one that assigns a maximum of welfare obligations to the household (Esping-Andersen 1999:45).

<sup>3</sup>As noted by Gornick and Meyers (2001:11), different variations of this model have been described by Ellingsaeter (1999); Lister (1997); Pfau-Effinger (1999); Sainsbury (1994) and Fraser (1994).

USA). Type 5 is the dual earner/dual carer model which has been encouraged in the Scandinavian countries.

I consider that all three theoretical approaches may have validity and first examine results by country, then discussing the viability of the household employment models within the context of the findings on paternal time. A particular advantage of Crompton's composition model is that it allows for the study of change over time within countries. This follows from it allowing for countries to be categorised not according to a single type as in the approaches offered by Esping-Andersen and Lewis, but rather according to a particular combination of various types.

### 3 Data and Methods

Data for the years 1994-2001 are from the European Community Household Panel (ECHP). The ECHP is a large-scale survey organised and funded by the European Union in order to gather micro-data that are comparable across member countries. The same questions are asked in each country so it is possible to make comparisons. The initial sample interviewed was of approximately 128,000 individuals, in some 60,000 households. Most national samples used a two-stage sample design. Each of the adults in the sample were re-interviewed in each subsequent year, thus making it a panel survey from which it is possible to study the changes affecting individuals and their families, from year to year.

The first wave of data was collected in 1994 in twelve EU countries (Belgium, Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, Spain, Portugal, the United Kingdom). The final wave was collected in 2001 for fifteen countries. In some countries, data from existing household panel surveys were transcribed into the common ECHP format so that they could be analysed in parallel with the new surveys. Austria and Finland started their fieldwork in 1995 and 1996. Sweden provides cross-sectional data from 1997 onwards derived from its National Survey on Living Conditions. The ECHP collects data on household income, labour force situation, household structure and education level. Whilst it does not allow detailed estimates by type of child care activity, its major advantage is the richness of the household and personal contextual information as well as its comparability across countries.

This paper makes use of all available ECHP data for every year available for every country except Sweden.<sup>4</sup> In total, the data consists of 405,537 households in 14 countries. See Table 1. The sample is reduced to those households comprising a couple (not necessarily married) with children under the age of sixteen, excluding those households with grandparents and

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<sup>4</sup>Only the original ECHP survey (available 1994-1996) is used for Germany, Luxembourg and the UK, (i.e. not the later surveys based on the national surveys).

	Households	Household Analysis Weight	2-parent households*
Austria (from 1994)	20777	0.96	11324
Belgium	23627	1.28	11854
Denmark	21868	0.80	9901
Finland (from 1995)	22206	0.56	10390
France	49008	3.55	26016
Germany (1994-1996)	14249	7.97	7096
Greece	36285	0.78	20843
Ireland	22568	0.37	15777
Italy	52687	2.99	30353
Netherlands	40370	1.27	19596
Portugal	38094	0.68	22133
Spain	46790	1.95	27670
UK (1994-1996)	14102	6.23	6736
Total	405537	-	221573
*After dropping missing observations for parental time			

Table 1: ECHP sample characteristics for pooled cross sections, 1994-2001.

older siblings (or any other adults). Because sample sizes varied between countries, country weights were created so that each country was represented in due proportion to its population.<sup>5</sup>

### 3.1 Measuring the Dependent Variable: Paternal Time

The ECHP collects self-reported data on how much time adults spend looking after children unpaid on a weekly basis. I make the assumption that this time, spent by couples with children under the age of sixteen present in the household, is parental time (regardless of whether the child is the biological or non-biological child of the parent).

Information on parental time comes in two forms in the ECHP. First, for all countries from wave one (1994) onwards, the number of hours that parents spend caring per week is recorded as a grouped variable with the following categories: cares more than twenty-eight hours per week; cares between fourteen to twenty-eight hours per week; cares between zero to fourteen hours per week; not applicable; and missing. Second, for most countries from wave two onwards (1995), the number of hours that parents spend caring for children per week is recorded as a continuous variable (up to ninety-six hours in most cases). Joesch and Spiess (2002) discuss the

<sup>5</sup>The weights were originally calculated to gross up to national populations; they were then scaled down to be relative weights, with an average of 1. The weights are constructed using population data and sample sizes in 1996.

problems of these child care time variables. Some countries yield implausibly high results at the lower end of the reported child care time. This suggests a certain margin of measurement error which may lead to inconsistency in the harmonised survey. Given this, coupled with the interest of this paper in fathers who are spending more rather than less paternal time, the analysis rests on those parents recording the highest category in the grouped variable of twenty-eight hours or more per week. This amount is referred to as "substantial parental time".<sup>6</sup> Whether a father spends substantial paternal time or not is measured by a dummy variable coded "1", if a father responds that he spends more than twenty-eight hours per week looking after children.

### 3.2 Explanatory Variables

*Household structure.* The sample is already selected in such a way that it only consists of two parent households with dependent children. There are additional data providing information on marital status; the age of the children; whether there are step, foster or adopted children in the family; and whether or not the spouse is working. Marital status is measured by a dummy variable coded "1" if a respondent is married, "0" if the respondent is cohabiting. No further distinctions (e.g. whether the respondent is single or divorced or widowed, etc.) are made. The age of the children is used in two ways. The first is the count of how many children of school age (between six and sixteen years) are present in the household. The second is the count of the number of infants (under six years) present in the household. The presence of a step, foster or adopted child in the household is captured by a dummy variable coded "1" ("0" indicates that there are only biological children of the parents in the household).

*Educational level.* Highest educational attainment is measured by a harmonised education variable corresponding to the International Standard of Education (ISCED) classification. The harmonised data set has four collapsed categories of highest attained level of education: the first corresponding to the education a child usually has up to sixteen years, the second corresponding to secondary education, and the third corresponding to post-secondary education. The fourth category is for those still in education. Different dummy variables were created for each category, the "low educational level" being used as the reference category.

*Labour force situation.* A respondent is considered to be working if they were in paid employment or paid training/apprenticeship for at least 15 hours per week. A spouse was considered to be working according to the above criteria. The variable this was derived from was originally created using the International Labour Organisation (ILO) definitions of main ac-

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<sup>6</sup>Models run with the continuous variable yield similar results.

tivity. Working 15 hours or more per week in many countries, is the "cut off line" from claiming unemployment and other such benefits, thus conceptualised as being the minimum number of hours necessary in order to support one's self. The ECHP also provides additional data on occupation; whether a job is part-time or full-time; the number employees at the respondent's workplace; and whether work is in the public or private sector. Occupation is measured by a harmonised variable collapsed into five categories, professional; white collar; service worker; skilled manual; and manual. The first category "professional" is used as the reference category. Whether or not a respondent works part-time is measured by a dummy variable coded "1" (full-time coded "0"). Due to the method of sample selection (unemployed fathers are dropped from the model looking at labour force situation), only part-time workers employed for more than 15 hours per week are included. The number of employees at the respondent's workplace is measured in reference to five categories, works alone; less than 20; between 20-99; between 100-499; more than 500. The last category, "more than 500", is taken as the reference category. Sector of employment is measured as a dummy variable coded "1" if private, "0" if public.

Other relevant variables available within the ECHP are country; gender; age; and household income. The income of the whole household is considered rather than individual income, on the grounds that resources are often shared between household members rather than retained for the sole use of the person who earned them. The annual household income variables were relativised to make the coefficient more readable (e.g. for the UK expressed in thousands of pounds rather than in pounds).

### 3.3 Method

The analysis of paternal time is split into two sections: the amount of paternal time, the association between paternal time and various socioeconomic indicators and work place characteristics. The first section is concerned with the following. (1) Differences in parental time between countries. (2) Differences between maternal and paternal time in member states. (3) Trends across time in parental time. The second section considers (1) socioeconomic characteristics and paternal time, (2) work place characteristics and paternal time and (3) the transitions into and out of substantial paternal time.

Differences in parental time between countries are considered by looking at the different percentages of the national samples spending substantial parental time. Differences between maternal and paternal time in the various member states are presented in terms of the proportion of those spending substantial parental time that are male. In order to look at whether or not there are any trends in paternal time, all years of data available are pooled and logistic regression equations with panel corrected standard errors (Beck,



Katz and Tucker 1998) are used. Even though the ECHP is a panel and not a cross sectional survey, by only looking at couples with infants (children under six) in the household for each wave there will be new couples being introduced each year to the sub sample used in the analysis). Where individuals have been in the survey the previous year, the panel corrected standard errors control for correlation between observation  $x_{it}$  and  $x_{i(t-1)}$ . In order that a positive coefficient for the correlation of time (year) and paternal time can be interpreted as a trend, the coefficient in the univariate model (model 1) containing year as the only explanatory variable should be similar in magnitude to that in model 2 which contains other explanatory variables (which are fully presented in the next section). Otherwise, it might be that the composition of the sample in terms of the explanatory variables is driving the coefficient.

The next step is to explore how education level, household structure and labour market situation are related to the higher levels of paternal time. Whether the effect of certain characteristics is consistent across many countries or country specific is considered. Given that the dependent variable is dichotomous, logit regression equations with standard errors adjusted for clustering of individuals (or panel-corrected standard errors Beck, Katz and Tucker 1998) are used for this. OLS regression models using the continuous variable (also with standard errors adjusted for clustering on individuals) yield similar results. Models were run on a country by country basis apart from the "All-Europe" model where country dummies were used. Two sets of logistic regression equations using different samples were used. The first contains all the households in the selected sample and is used to estimate the association between paternal time and education level, household structure, number of working hours, age and household income. The second uses the sample of employed fathers only and is used to estimate the association between paternal time and occupation; being a part-time as opposed to full-time worker; number of employees at the workplace; and working in the private versus the public sector.

Event history analysis is used to analyse correlates with the transition into and out of substantial paternal time. The data are treated as discrete and the logit model is used.

## 4 Results

### 4.1 The Amount of Paternal Time

The percentages of respondents spending substantial parental time are reported by country and sex. Both the figures for the most recent cross section (for 2001) and the figures for the pooled panel are presented. Tables 2 and 3 show the percentage of mothers and fathers in two parent households (without grandparents or older siblings) with dependent children under sixteen

	% Sample			
	Fathers		Mothers	
	2001	Pool	2001	Pool
Denmark	41	34	69	65
Finland	21	18	40	41
UK*	23	22	84	81
Belgium	11	14	46	52
Germany*	16	14	73	72
Ireland	15	14	78	80
The Netherlands	14	10	65	72
Spain	16	13	70	70
Austria	8	8	58	58
France	10	8	48	44
Italy	10	10	66	65
Greece	4	5	63	62
Portugal	5	4	37	36
Group mean	15	13	61	61
Note: The Pearson $\chi^2$ was always large.				
$\chi$ always has (4 degrees of freedom, $\rho = < 0.000$ )				
* Figures for 1996				

Table 2: Percentage of parents of children under sixteen spending substantial parental time: 2001, and pooled average.

and six years old respectively, spending substantial parental time. The Pearson chi-squared statistic is always large (4 degrees of freedom,  $\rho = < 0.000$ ) so the observed differences can be said to be significant. Table 2 shows that in 2001, 41% of all Danish fathers (and 69% of all Danish mothers) with dependent children under sixteen years of age are spending substantial parental time. The percentage of parents spending substantial parental time on a weekly basis is higher among the parents of the younger aged children. The average percentage of parents spending substantial parental time is 13% of fathers and 61% of mothers of children under sixteen and 18% of fathers and 67% of mothers of children under six. There are differences in the percentages across countries for both mothers and fathers. At the most extreme, concentrating only on those fathers of children under six years of age, this is demonstrated by the figure of 57% in Denmark in 2001, contrasting with only 6% in Portugal.

It is illustrative to group the countries into three categories of above

Country	% sample			
	Fathers		Mothers	
	2001	Pool	2001	Pool
Denmark	57	47	91	85
Finland	31	29	51	60
UK*	24	24	90	85
Germany*	20	17	87	86
Ireland	21	19	85	85
The Netherlands	20	15	76	82
Spain	24	19	83	86
Austria	12	11	59	64
Belgium	13	17	50	60
France	16	12	66	61
Italy	11	13	73	72
Greece	5	7	75	77
Portugal	6	5	49	49
Group mean	20	18	71	67
Note: The Pearson $\chi^2$ was always large.				
$\chi$ always has (4 degrees of freedom, $\rho = < 0.000$ )				
* Figures for 1996				

Table 3: Percentage of parents off infants under six spending substantial parental tme: 2001, and pooled average.

20%, between 10%-20%, and below 10%. There are three countries in the first category, Denmark, Finland and the UK. Denmark lies 10 percentage points higher than Finland and the UK. Belgium, Germany, Ireland, the Netherlands and Spain constitute the second group. The third and lowest category comprises of Austria, France, Italy, Greece and Portugal. Greece and Portugal have particularly low paternal time at 5% or less. For the sample of fathers with younger children, it is more illustrative to group countries into four categories of above 30%, 20-30%, between 10-20% and below 10%. Denmark and Finland make up the first category, although Denmark is some twenty percentage points higher than Finland. Ireland, Germany, the Netherlands, Spain and the UK constitute the second group, with the UK being the group leader. Austria, Belgium, France, Italy and Greece form the third group. Finally, Greece and Portugal again have very low levels of paternal time.

There is a North/South divide in paternal time. For both children of school age and infants, paternal time would seem to increase the further North one goes (with the notable exception of Spain). The Scandinavian countries and the UK report the highest levels and the Southern countries, Portugal and Greece, report the lowest levels. The more Northern continental countries (along with Ireland) report higher levels than the more Southern continental countries. There is not an obvious correlation between levels of maternal and paternal time, in that higher levels of paternal time signal neither consistently higher nor lower levels of maternal time. The lowest levels of maternal time are found in Finland which has high levels of paternal time and in Portugal which in contrast has low levels of paternal time. The North/South divide only applies to paternal time.

Next, the differences in the gender inequalities in parental time between member states are examined. Gender differences in parental time are presented by considering the percentage of those spending substantial parental time that are male (Table 4). Both the figures for the most recent cross section (for 2001) and the figures for the pooled panel are presented. 36% of all those parents of children under sixteen and 37% of all parents of children under six spending substantial parental time in Denmark in 2001 were male. The proportion of child carers that are male and spend substantial time with children under six varies across countries in 2001 from 38% in Finland to just 7% in Greece.

In summary, there is a lot of variation in the gender differences in parental time in Europe. In terms of regional patterns, the same patterns as for the differences in paternal time can be observed. There is a trend for parental time to be shared more equally the further North the country, with the notable exception of Spain. In the Scandinavian countries (Denmark and Finland), fathers are responsible for about a third of all parental time. In the Northern European countries of Belgium, Germany, Ireland, the Netherlands and the UK, and Spain, fathers perform around a fifth of

	Male percentage			
	Children < 16		Children < 6	
	2001	Pool	2001	Pool
Denmark	36	33	37	34
Finland	34	31	38	33
Belgium	18	20	20	22
Germany*	16	15	18	16
Ireland	15	14	19	18
The Netherlands	16	12	20	15
Spain	18	15	22	18
UK*	21	21	21	22
Austria	12	12	15	14
France	10	8	19	16
Italy	13	13	13	15
Greece	6	5	7	9
Portugal	11	9	10	9
Group mean	17	16	24	18
Note: The Pearson chi-squared statistic was always large				
$\chi^2$ had (4 degrees of freedom, $\rho = < 0.000$ )				
* Figures for 1996				

Table 4: Percentage of those spending substantial parental time that are male.

all parental time. In the Southern European countries of Austria, France, Italy fathers do around one sixth and in Greece and Portugal around one tenth of substantial parental care.

For nine out of the fourteen countries considered, there is a significant ( $\rho = < 0.05$  two tailed) correlation of time and paternal time. See Table 5. These trends are more or less independent of sample composition changes in terms of the explanatory variables, as the univariate and multivariate model coefficients are similar in magnitude in each country. There are no significant wave effects for Austria, Belgium, Greece, Italy and the UK. However, for all other countries the trend shows paternal time to be increasing over time.<sup>7</sup> The correlation between time and paternal time is largest in Germany and Denmark.

<sup>7</sup>There are no such Europe wide trends in maternal time.

Logistic regression coefficients ( $\beta$ )		
	Model 1	Model 2
Denmark	0.12*	0.15*
Finland	0.07*	0.08*
Germany	0.25*	0.30*
Ireland	0.05*	0.06*
Netherlands	0.04**	0.03
Spain	0.04*	0.03**
France	0.07*	0.08*
Portugal	0.10**	0.08
All Europe	0.05*	0.06*
* significant at $\rho = < 0.01$		
**significant at $\rho = < 0.05$		

Table 5: Correlation of time and paternal time.

## 4.2 Socioeconomic Characteristics and Paternal Time

Table 6 presents the logistic regression coefficients relating paternal time to household structure, education level income and hours worked.

Logistic regression coefficients ( $\beta$ )												
	Married	School Children	Infants	Working	Spouse works	Step Child	High Education	Medium Education	Age	Age <sup>2</sup>	Income	Hours worked
Denmark	0.16	0.22	0.79	0.82	0.43	-	0.58	0.32	-	-	-	-0.04
Finland	-	-	0.58	-	0.21	-	0.39	-	0.26	-0.41	-	-0.03
Belgium	-	0.09	0.29	0.60	0.88	-	-	-	0.07	-0.11	-	-0.04
Germany	-0.30	0.28	0.25	-	0.64	-	-	-	-0.03	-	-0.03	-0.05
Ireland	-	0.08	0.33	-	1.16	0.77	-	-	-	-	-	-0.02
Netherlands	-	0.10	0.57	1.35	1.07	0.72	-0.20	-	-	-	-	-0.09
Spain	-	-	0.43	0.41	0.98	-	0.66	0.52	-	-0.05	-	-0.04
UK	-	0.21	0.20	-	0.73	-0.26	-	-	-	-	-	-0.03
Austria	-	0.20	0.34	-	0.69	0.40	0.43	-	-	-	-	-0.04
France	-	-	0.45	0.87	0.76	-0.23	-	-	-	-0.14	-	-0.05
Italy	-	-	0.39	-	0.79	-	-	0.22	-	-	-	-0.03
Luxembourg	-0.85	-	-	0.96	1.10	0.70	-	-	0.01	-	0.01	-0.07
Greece	-	-	0.48	-	0.67	-	0.55	0.45	-	-	-	-0.04
Portugal	-	-	0.23	-	0.55	-	1.54	1.15	-0.05	-0.12	-	-0.04
All Europe	-0.12	0.13	0.36	-	0.85	-	0.26	0.19	-	-0.08	-	-0.03
All results statistically significant at $\rho = < 0.05$ two tailed. - denotes $\beta$ was not significant at $\rho = < 0.05$												
Reference categories are low level of education and cohabiting												

Table 6: Summary of logistic regression analyses by country for socioeconomic variables predicting substantial paternal time.

### 4.2.1 Household Structure

*Marital status.* Whether fathers are married (as opposed to cohabiting) does not appear particularly important to explaining paternal time in Europe. Although for Europe overall marriage has a negative impact on paternal time ( $b = -0.12$ ), couples being married only has a statistically significant impact on paternal time in three countries. In Germany ( $b = -0.30$ ) being married makes it less likely that a father spends more paternal time, but the opposite is true for Denmark ( $b = 0.16$ ).

*Number of children of school age in the household (between six and fifteen years of age inclusive).* Having more children of school age in the household is associated with more paternal time. This positive coefficient was statistically significant in seven countries. The strongest effect was in Germany ( $b = 0.28$ ), the weakest in Ireland ( $b = 0.08$ ). For Europe as a whole, the effect was ( $b = 0.13$ ).

*Number of infants in the household (under the age of six).* For every country, having more infants increases the likelihood of parents spending more paternal time. The effect is generally stronger for these infants than for the children of school age. The strongest effect was in Denmark ( $b = 0.79$ ), followed by Finland ( $b = 0.58$ ) and the Netherlands ( $b = 0.57$ ). The weakest effect was found in the UK ( $b = 0.20$ ).

*Employment.* In all countries for which this variable was significant (Denmark, Belgium, the Netherlands, Spain and France), being a working father is positively associated with increased paternal time. This effect is strongest in the Netherlands ( $b = 1.35$ ).

*Having a working spouse.* In all of the fourteen countries considered, the effect of having a working spouse on paternal time was positive. This effect is strongest in Ireland ( $b = 1.16$ ), followed by the Netherlands ( $b = 1.07$ ). It is weakest in Denmark ( $b = 0.43$ ) and Finland ( $b = 0.21$ ).

*Stepchildren/adopted children/foster children.* In Austria ( $b = 0.40$ ), Ireland ( $b = 0.77$ ) and the Netherlands ( $b = 0.72$ ), the presence of non-biological children in the household is positively associated with men spending more paternal time. In France ( $b = -0.23$ ) and the UK ( $b = -0.26$ ), the opposite is the case.

### 4.2.2 Level of Education

The reference category in the analyses is having attained only a low level of education. There were no statistically significant coefficients for the category "unfinished education". In every country except the Netherlands ( $b = -0.20$ ), where the high level of education variable is statistically significant (Denmark, Finland, Netherlands, Spain, Austria, Italy, Greece and Portugal), having a higher level of education is positively associated with increased paternal time. Having a medium level of education (as opposed to



a low level of education) is also positively associated with increased paternal time for all countries where the effect is statistically significant (Denmark, Spain, Italy, Greece, Portugal).

### 4.2.3 Age, Income and Hours Worked

*Age or age<sup>2</sup>.* Age or age<sup>2</sup> (sometimes both) yield statistically significant coefficients for seven of the fourteen countries considered in the paternal time models (Finland, Belgium, Germany, Spain, France and Portugal). Age<sup>2</sup> is considered in order to allow for a non-linear effect. In all countries for which age<sup>2</sup> was significant, this was a negative effect, the strongest effect being in Finland ( $b = -0.41$ ) and the smallest in Spain ( $b = -0.05$ ). The linear variable age coefficient was positive in Finland and Belgium, i.e. being older is positively related to spending more paternal time. The opposite is true for Germany and Portugal, though the coefficients were small.

*Household income.* In Germany, having a higher level of household income decreases the likelihood of spending more paternal time.

*Hours worked.* The more hours worked, the less likely fathers are to spend more parental time. This variable was statistically significant for all countries, the strongest effect being in the Netherlands ( $b = -0.09$ ), the weakest in Ireland ( $b = -0.02$ ).

### 4.2.4 Labour Market Status

Table 7 presents the results of the logistic regressions of the labour market situation indicators on paternal time. The socioeconomic indicators are included in the regressions but not presented in the table.

	Logistic regression coefficients ( $\beta$ )									
	White Collar	Service	Skilled manual	Unskilled manual	Part time	Private	Single employee	>20	20-100	100-500
Denmark	-0.34	-	-	-	-0.91	-0.91	0.44	-	-	0.17
Finland	0.36	-	-0.52	-0.44	-	-	-0.43	-	-	-
Belgium	-	-	-	-	-	-0.39	-	-	-	-
Germany	-	-1.05	-	-	-	-	-1.63	-	-	-
Ireland	0.36	0.38	-	-	-	-	-	-0.48	-0.41	-
Netherlands	0.42	-	0.29	0.67	-	-0.37	-	-0.29	-	-
Spain	0.30	-	-0.31	-0.22	0.41	-0.53	-0.39	-0.50	-	-
UK	-	0.45	-	-	-	-	-0.48	-	-	-0.35
Austria	-	-	-0.65	-0.46	0.72	-	-0.60	-0.45	-0.44	-
France	0.67	-	-	-	-	-	-	-	-	-
Italy	-	-	-0.19	-	-	-	-0.78	-0.61	-0.43	-
Greece	0.29	-	-	-	-	-	-0.79	-0.55	-	-
Portugal	-	-0.44	-	-0.49	-	-	-0.64	-1.30	-0.54	-
All Europe	0.25	-	-	-	0.46	-0.33	-0.34	-0.37	-0.17	-
All results statistically significant at $\rho = < 0.05$ two tailed.										
Reference categories are professional, size of firm $> 500$ and public.										

Table 7: Summary of logistic regression analyses by country for variables predicting substantial paternal time. Controlling for socioeconomic variables.

*Occupation.* The reference category for occupation is being a professional. In all but Denmark, where the coefficient is negative, being a white collar worker relative to being a professional increases the likelihood of a man spending more paternal time. In Germany and Portugal, working in the service sector decreases the chances of a man spending more paternal time. In Ireland and the UK, it increases the chances that a man spends more paternal time relative to a professional. In all cases for which this category is significant apart from the Netherlands, being a skilled manual worker makes a man less likely to spend more paternal time than a professional. In all cases for which this category is significant apart from the Netherlands, being an unskilled manual worker makes a man less likely to spend more paternal time than a professional. In Austria and Spain, a man working part-time is more likely to spend more paternal time. The opposite is true for Denmark.

*Part-time worker (15-30 hours per week).* In Austria and Spain, a man working part time is more likely to spend more paternal time. The opposite is true for Denmark. In general across Europe, being a part-time worker increases the likelihood of substantial paternal time.

*Private sector.* For all countries for which this variable is significant (Denmark, Belgium, the Netherlands, Spain and Europe as a whole), working in the private sector decreases the likelihood that a man spends more paternal time. This effect is strongest in Denmark ( $b = -0.91$ ).

*Number of employees in fathers' workplace.* The reference category is workplaces with more than 500 employees. In all but Denmark, for the countries for which this variable is statistically significant, being the sole worker is negatively associated with spending more paternal time. Working in a small business (with less than 20 employees) makes it less likely that a man will spend more paternal time relative to a man working in a very large firm (with more than 500 employees). Working in a small or medium-sized business with between 20 and 100 employees) makes it less likely that a man will spend more paternal time relative to a man working in a very large firm (with more than 500 employees). In Denmark, working for a medium-sized firm (between 100 to 500 employees) increases the likelihood of a man spending more paternal time. In the UK, the opposite is the case. Generally, it would appear that working for a very large firm with more than 500 employees increases the likelihood of a father spending substantial paternal time.

### **4.3 Transition into increased paternal time**

Event history analysis of the transition into spending substantial paternal time confirms many of the effects found in the previous section. An analysis of the transition out of spending substantial paternal time (not reported here) consistent results. Having infants in the household, having a working

spouse and working part time were positively associated with the transition into substantial paternal time. See Table 8 These effects are negatively associated with the transition out of substantial paternal time. Being older, working longer hours and working alone or for a small business were negatively associated with the transition into substantial paternal time and positively associated with the transition out of substantial paternal time.

## 5 Discussion

Active and involved fathering is on the agenda across the European Union. Changes in employment patterns and family structures may redefine what it means to be a father. To some degree this has been enabled by legislation aimed at enabling fathers to spend more paternal time, such as the EU directive on parental leave (96/34/EC) which came into force in June 1996 (although parental leave arrangements were already in place in some member states). Member states are only obliged to implement such legislation at the minimum level. Therefore, it is still the case that some countries have a much higher provision of measures that enable fathers to spend more paternal time.

Despite the dynamic gender relations in recent decades constructing new opportunities for fathers to spend increasing amounts of paternal time, there has, however, been no opportunity to make a systematic comparison of paternal time and associated socioeconomic and workplace characteristics between member states of the European Union. The availability of a single survey, asking the same questions across many countries, enabled the assessment and comparison of paternal time in Europe as a whole.

Paternal time is one way to operationalise the concept of active fathering. Measuring paternal time with the ECHP is potentially problematic given that it collects non-detailed information through retrospective survey questions rather than using more detailed time use diaries. Despite these potential limitations results show the ECHP measurement of paternal time to be a valid and reliable one.

The dual-earner/dual-carer family model envisions, as both a positive description and normative aspiration, a social and economic arrangement in which men and women engage symmetrically in both paid work in the labour market and in unpaid work in the home. However, it is known that this family model is unusual in reality as women have, in general, become earners to a greater extent than men have become carers. Change has been asymmetric. I present for the first time an overview of the extent to which this is the case over Europe. By looking at the gender differences in parental time between couples across Europe we see that at best fathers perform around a third of substantial childcare (e.g. in Denmark and Finland) and at worst they perform a mere 10 per cent (e.g. in Greece and Portugal).

	$\beta$	SE $\beta$	$e^\beta$
Age	-0.13***	0.04	1.14
Age <sup>2</sup>	0.11*	0.04	1.12
Birth last year	-0.12	0.10	1.13
Infants	0.27***	0.04	1.31
School children	0.06	0.03	1.06
Hours worked	-0.02***	0.002	0.98
Working spouse	0.59***	0.05	1.80
Married	-0.17	0.10	1.19
Income	-0.0006	0.001	1.001
High education <sup>a</sup>	-0.09	0.08	0.91
Medium education <sup>a</sup>	0.07	0.06	1.07
Unfinished education <sup>a</sup>	-0.29	0.43	0.75
White collar <sup>b</sup>	0.08	0.09	1.08
Service <sup>b</sup>	0.05	0.10	1.05
Skilled manual <sup>b</sup>	-0.02	0.07	0.98
Manual <sup>b</sup>	0.05	0.08	1.05
Private	-0.11	0.07	0.90
Part time	0.54***	0.15	1.71
Size firm = 0 <sup>c</sup>	-0.42***	0.12	0.66
Size firm = 1 - 20 <sup>c</sup>	-0.25***	0.08	0.78
Size firm = 21 - 100 <sup>c</sup>	-0.09	0.08	0.91
Size firm = 101 - 500 <sup>c</sup>	-0.04	0.08	0.96
Constant	2.93		
$\chi^2$	1306.07	<i>df</i>	35
* $\rho < .05$ .*** $\rho < .001$ .			
<sup>a</sup> Reference category is low education			
<sup>b</sup> Reference category is professional			
<sup>c</sup> Refernce category is Size firm < 500			
Country contols are omitted from the table			

Table 8: Summary of logistic regression analysis for variables predicting transitions into substantial paternal time in a given year (n = 14714), controlling for country .

The analysis confirms that there are considerable and consistent differences in both the proportions of parents spending substantial parental time across Europe and the gender differences in parental time. The two Scandinavian cases available for analysis here, Denmark and Finland, are the clear leaders in terms of the number of fathers spending substantial paternal time and sharing substantial parental time with mothers. There is very much a North-South pattern in place<sup>8</sup>: the further South, the less paternal time is spent and the greater the gender gap in parental time.

The consensus in the literature is that paternal time is increasing, perhaps in relation to the improving measures enabling fathers to spend more time with their children. This trend is confirmed, results showing a sure but steady increase in the likelihood that a father will spend substantial paternal time, over time. There is little conclusive research into the correlates of increased paternal time with the exception of education level, where the evidence suggests that all parents, but especially fathers, with a higher level of education spend more time with their children than those with less education. This was confirmed in the analysis.

Over Europe as a whole, the findings can be interpreted in terms of a series of influences on paternal time. Regarding family structure, it has long been argued that working mothers are in a better bargaining position to ensure the childcare is shared more equitably. It is certainly the finding of this paper that fathers living with a working woman are doing more childcare and are more likely to make the transition into spending substantial paternal time. Overall in Europe, being married as opposed to cohabiting decreases the likelihood of substantial paternal time. Perhaps this is an indicator of more conservative couples, choosing more traditional gender roles. It is interesting that the coefficients for having non-biological children in the household tell different stories for different countries. It would be necessary to follow this up at a more detailed national case study level.

Not so much is known about paternal time and fathers' labour market situation. It is perhaps the case that men are not enabled to spend substantial paternal time if workplaces demand long and inflexible working schedules. A conclusive result from the analysis confirms that the number of hours worked are negatively associated with paternal time. This is in line with theories which argue that child care time is a function of the time parents have at their disposal.

The public sector is most likely to implement national legislation enabling a work life balance to a fuller extent beyond the statutory minimum in order to promote best practice, relative to the private sector. If true, this would contribute to the explanation for men in the public sectors being more likely to spend substantial paternal time. Similarly, larger firms are more likely to have formalised family-friendly arrangements than small

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<sup>8</sup>With the exception of Spain.

and medium sized firms. Results corroborate this hypothesis, with fathers in very small companies being conclusively less likely to spend substantial time than fathers in very large companies.

The idea when looking at the association between paternal time and occupation was to get a picture of how social class impacts on fathering behaviour. Other than the finding that white collar workers were more likely to be spending substantial paternal time than professionals, there were no clear Europe-wide patterns. It might be a more fruitful exercise to analyse occupation and paternal time in more depth, particularly with a view to how these interact with gender segregation.

The range of experiences in different countries was wide. Three ways of conceptualising different country types with regard to household employment models were suggested above as potential frameworks in which to explain differences in paternal time. Table 9 presents these theoretical frameworks, the countries ordered into four ranked groups according to the amount of paternal time and the gender differences in parental time. All three frameworks were effective in distinguishing Denmark and Finland from other countries in terms of paternal time behaviour. However, after this no immediate patterns were evident, suggesting that the idea of different country types cannot be easily applied to these results. A simpler North/South conceptualisation may assist in interpretation of results. What is not clear is why Spain exhibits such different behaviour to other Southern countries.

This is the first time that it has been possible to conduct a general overview of paternal time in Europe. The aim has been to provide a starting point for the further analysis of country patterns of paternal time. Many intuitive results have been confirmed. The stage has been set for a more detailed analysis of policies which enable men to become more active fathers.

The overall conclusions of the analysis are clear (i) paternal time varies across the EU; (ii) gender differences in parental time vary across the EU; (iii) paternal time is increasing over time; (iv) there are certain person and household specific characteristics affecting paternal time and the transition into substantial paternal time, such as education level, having a working spouse and having a step or adopted child in the household; and (v) working conditions (such as occupation, working hours, size of the firm and sector) affect paternal time. A much more detailed consideration needs to be given to conditions and policies in each country than has been possible in this short analysis. Additionally, a more in depth analysis of the impact of different occupations on paternal time might help further understanding of the persistence of gender differences in parental time.

Country (Grouped in rank order of paternal time spent)	Esping-Andersen (1990)	Lewis (1992)	Crompton (1999)
Denmark	Social Dem.	Weak	Types III & V
Finland	Social Dem.	Weak	Types III & V
Belgium	Conservative	Modified	Type III
Germany	Conservative	Strong	Type I
Ireland	Liberal	Strong	Type I
The Netherlands	Conservative	Strong	Types I & II
Spain	Cons/Med	Strong	Type I
UK	Liberal	Strong	Types II & IV
Austria	Conservative	Strong	Type I
France	Conservative	Modified	Type III
Italy	Cons/Med	Strong	Type I
Greece	Cons/Med	Strong	Type I
Portugal	Cons/Med	Strong	Type I

Table 9: Theoretical frameworks and paternal time

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## References

- Beck, N., Katz, J. N. & Tucker, R. (1998), ‘Taking time seriously: Time-series-cross-section analysis with a binary dependent variable’, *American Journal of Political Science* **42**(4).
- Bianchi, M. (2000), ‘Maternal employment and time with children; dramatic change or surprising continuity’, *Demography* **37**(4), 401–414.
- Blau, F. D. (1999), ‘Women’s economic well-being, 1970-1995: Indicators and trends’, *Focus* **20**, 4–10.
- Blossfeld, H.-P. (1987), ‘Labor market entry and the sexual segregation of careers in the Federal Republic of Germany’, *American Journal of Sociology* **93**, 89–118.
- Crompton, R., ed. (1999), *Restructuring Gender Relations and Employment*, OUP, Oxford.



- Dex, S. & Scheibl, F. (2000), *Flexible and Family-Friendly Working Arrangements in SMEs: Business Cases*, Judge Institute of Management Studies, Cambridge, UK.
- Ellingsaeter, A. L. (1999), Dual breadwinners between state and market, in R. Crompton, ed., 'Restructuring Gender Relations and Employment: The Decline of the Male Breadwinner', OUP, Oxford.
- England, P. & Farkas, G. (1986), *Households, employment, and gender : a social, economic, and demographic view*, Aldine de Gruyter, New York.
- Erikson, R. & Jonsson, J. O., eds (1996), *Can Education be Equalized?*, Westview Press, Boulder, Colorado.
- Esping-Andersen, G. (1990), *The Three Worlds of Welfare Capitalism*, Polity Press, Cambridge, UK.
- Esping-Andersen, G. (1999), *Social Foundations of Post-Industrial Economies*, OUP, Oxford.
- Ferrera, M. (1996), 'The "southern" model of welfare in social Europe', *Journal of European Social Policy* **6**(1), 17–37.
- Fisher, K., McCulloch, A. & Gershuny, J. (1999), British fathers and children; a report for Channel 4 "Dispatches", Technical report, Institute for Social and Economic Research, Colchester, UK.
- Fraser, N. (1994), 'After the family wage: Gender equality and the welfare state', *Political Theory* **22**(4), 591–618.
- Gauthier, A., Smeeding, T. & Furstenberg, F. (2001), Do we invest less time in children? Trends in parental time in Canada since the 1970s, World Population Congress, Brazil.
- Gershuny, J. (2000), *Changing Times: Work and Leisure in Postindustrial Society*, OUP, Oxford.
- Gornick, Janet, C. & Meyers, M. K. (2001), Building a dual earner/dual carer society: What can governments do?, The Sixth Women's Policy Research Conference, Washington.
- Hallberg, D. & Klevmarken, A. (2001), Time for children: A study of parents' time allocation, Technical report, Uppsala University, Department of Economics.
- Hobson, B. M. (2002), *Making men into fathers : men, masculinities and the social politics of fatherhood*, Cambridge University Press, Cambridge.
- Huber, J. & Spitze, G. (1983), *Sex Stratification*, Academic Press, New York.

- Joesch, J. M. & Spiess, K. K. (2002), 'European mothers' time spent looking after children: Differences and similarities across 9 countries', *EPAG Working Paper* **2002**(31).
- Knijn, T. & Selten, P. (2002), Transformations of fatherhood: the Netherlands, in B. M. Hobson, ed., 'Making Men into Fathers: Men, Masculinities and the Social Politics of Fatherhood', Cambridge University Press, Cambridge, UK.
- Leibfried, S. (1992), Towards a European welfare state: On integrating poverty regimes in the European Community, in Z. Ferge & J. E. Kolberg, eds, 'Social Policy in a Changing Europe', Campus Verlag., Frankfurt, pp. 245–280.
- Lewis, J. (1992), 'Gender and the development of welfare regimes', *Journal of European Social Policy* **2**(3), 159–73.
- Lister, R. (1997), *Citizenship: Feminist Perspectives*, New York University Press, New York.
- Lundberg, S. & Pollak, R. (1996), 'Bargaining and distribution in marriage', *Journal of Economic Perspectives* **10**(4), 139–158.
- O'Brien, M. & Shemilt, I. (2003), *Working Fathers: Earning and Caring*, Equal Opportunities Commission, University of East Anglia.
- Pfau-Effinger, B. (1999), The modernization of family and motherhood in Western Europe, in R. Crompton, ed., 'Restructuring Gender Relations and Employment: the Decline of the Male Breadwinner', OUP, Oxford.
- Presser, H. (1994), 'Employment schedules among dual-earner spouses and the division of household labour by gender', *American Sociological Review* **59**, 348–364.
- Ramos, X. (2003), Domestic work time and gender differentials in Great Britain 1992-1998: Facts, value judgements and subjective fairness perceptions, British Household Panel Survey conference, Institute for Social and Economic Research (ISER), University of Essex.
- Reskin, B. F. & Roos, P. A. (1990), *Job Queues, Gender Queues: Explaining Women's Inroads into Male Occupations*, Temple University Press, Philadelphia.
- Rubery, J. & Fagan, C. (1993), Occupational segregation of women and men in the European Community, Technical report, OOPEC.
- Sainsbury, D. (1994), *Gendering Welfare States*, Sage Publications, London.

- Sandberg, I. & Hofferth, S. (2001), Changes in parental time with children, US 1981-1997, Technical report, Population Studies Center.
- Shavit, Y. & Blossfeld, H.-P. (1993), *Persistent Inequality: Changing Educational Attainment in Thirteen Countries*, Social inequality series, Westview, Boulder, Colo.; Oxford.
- Walby, S. (1997), *Gender Transformations*, Routledge, London.