

Child-Care and Participation in the Labour Market for Married Women in Mediterranean Countries

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Abstract

In this paper we study the connection between the married women's labour force participation, family policies and time spent in take care of children in Mediterranean countries. We use the new database from the EUSILC (European Survey on Income and Living Conditions) and data from the ECHP (European Community Household Panel) The results show that while Mediterranean countries have advanced in the incorporation of women into the labour market, most of them still have to assume total responsibility for housework and the care of the children.

JEL. classification: *J16, J31, C2, C3*

Keywords: *Household, family benefits, labour market, childcare system*

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Introduction

The family structure and employment patterns have changed in Europe in the last thirty years, so the welfare states policies respect to families have also changed. The European countries have implemented new family policies with strong effect in parental employment patterns, to achieve different objectives such as to increase the participation of mothers in the labour market and the fertility rate, to create the possibility for women to access in the labour market on an same footing with men and to increase the equal division of unpaid labour between men and women.

While the participation of married women has increased in the labour market over recent years, the fertility rate continue to go down, although we observe an increase of the fertility rate in Norther European countries where the participation rate of women is greater respect to other countries in Europe.

The different work-family arrangements across the member states are based on historical and cultural differences among countries. Esping-Andersen (1990) distinguishes three standard welfare regimens: *social-democratic*, *conservative-corporatists* and *liberal*.

The relationship between the labour market, the family and the welfare state varies among the countries.

The Mediterranean countries were classified by Esping-Andersen in the second type of welfare-state regime. Women were primarily responsible for unpaid work at home and the tradition family was central in this regime. Child care and other unpaid work were unequally shared among partners, even when the mothers are employed on a full time basis in the labour market. We focus our attention on these countries and we study if there is a change in this regime as for the welfare state in family policies, unpaid work at home (take care of children) and the labour market participation of married women or if it's still to be a conservative regime. The countries analyzed in this work are: France, Italy, Spain, Portugal and Greece.

The increase of the participation rate of women in the labour market has implied one breach in the traditional household family. Their members have to decide how the housework is to be distributed and who is to take care of children, because the structure of the household where the wife does the homework and takes care of the children, and the husband works outside to earn the household income is changed, even if partially.

In table 1 we present the maternal employment rate in 2005 respect the age and number of children in Europe. We can see that most mothers are in paid work especially when they children go to school.

A large number of papers in the past years have studied the difference between mothers' and fathers' employment rates and earnings to the balance of time spent in household and caring activities, but these studies are refereed to past period. In recent years we don't know how this phenomenon

Table 1: Maternal employment rates, women age 15-64

Country	by age of youngest child				by number of children under 15		
	0-16	< 2	3-5	6-16	1 child	2 children	3 children
Belgium	59.9	63.8	63.3	56.9	58.3	58.5	39.4
Canada	70.5	58.7	68.1	71.1	70.1	73.2	66.3
Czech Republic	52.8	19.9	50.9	67.6	57.4	52.5	34.4
Denmark	76.5	71.4	77.8	77.5	..	..	..
Finland	76.0	52.1	80.7	84.2	71.2	70.9	60.1
France	59.9	53.7	63.8	61.7	62.2	57.6	38.1
Germany	54.9	36.1	54.8	62.7	58.4	51.8	36.0
Greece	50.9	49.5	53.6	50.4	48.4	44.4	37.4
Hungary	45.7	13.9	49.9	58.3	53.7	48.3	24.6
Iceland	84.8		83.6	86.5	88.5		82.3
Ireland	57.5		55.0	59.9	55.4	52.5	42.3
Italy	48.1	47.3	50.6	47.5	48.3	41.0	27.4
Japan	52.4	28.5	47.8	68.1	..	..	..
Luxembourg	55.4	58.3	58.7	52.7	56.0	49.8	33.8
Netherlands	69.2	69.4	68.3	69.4	70.1	70.6	59.9
New Zealand	64.6	45.1	60.6	75.3	64.1	64.5	56.7
Poland	46.4	..	..	..	42.7	35.6	28.5
Portugal	67.8	69.1	71.8	65.4	63.5	59.2	46.1
Slovak Republic	48.4	23.1	46.6	60.4	56.4	49.4	31.5
Spain	52.0	52.6	54.2	50.9	51.1	44.7	38.5
Sweden	82.5	71.9	81.3	76.1	80.6	84.7	75.6
Switzerland	69.7	58.3	61.7	77.0	69.5	65.4	58.0
United Kingdom	61.7	52.6	58.3	67.7	67.1	62.4	42.3
United States	66.7	54.2	62.8	73.2	..	..	..
EU-19	59.5	51.1	58.2	63.2	59.4	55.2	41.2
OECD average	61.5	51.7	61.2	66.1	60.2	56.9	43.8

Data source: Eurostat, 2005

has evolved and change across countries.

In this contest the objective of the paper are threefold. First, to study the household model in the countries, how the members of a family share the home work and the care they give to the children. Second, to study the participation equation of married women in the labor market and the effect of the hours spent to take care of children. Finally, we try to analyze the difference among countries in essay of family policies. All these analysis are carried out in point of view to estimate their evolution during the time. To do the cross-section analysis we use the wave of 2001 from the European Community Household Panel (ECHP) and the EUSILC (European Income and Living Conditions) in 2006.

The paper is organized as follows: in section I we estimate a logit model to carry out the characteristics that determine the time dedicated to caring for children. In section II we estimate the participation of married women in the labour market, and in section III we present the difference across countries, their evolution in the welfare-state policies and conclusions.

Data

The data set used drawn from the European Community Household Panel (ECHP) and EUSILC (European Income and Living Conditions). The ECHP data set is a multi-country annual longitudinal survey of collected data since 1994 ¹ in 15 European Union Member States under Eurostat

¹Belgium, Germany, Hollands, The U.K., Denmark, France, Greece, Ireland, Portugal, Italy and Spain started in 1994 (wave 1), Austria joined in 1995 (wave 2), Finland joined

(Statistical Office of the European Communities) coordination.

The data set covers approximately 130,000 individuals from 60,000 households in the fifteen countries which were EU members in 2000, reflecting population changes over time through a continuous evolution of the sample. The panel data cover a wide range of subjects such as demographics, labor force behavior, income, health, education and training, housing, poverty and social exclusion, etc.

The ECHP is being progressively replaced with data collection under the EU-SILC regulations (no.1177/2003 Community Statistics on collection under the EU-SILC regulations on Income and Living Conditions). Seven countries launched a preliminary version of the EU-SILC in 2003. The project is formally launched in 2004 and EU25 coverage is expected with effect from 2005 ². The regulations will be fully applicable from 2007. EU-SILC is expected to become the reference source of statistics on income and social exclusion in the European Union.

The European Union Statistics on Income and Living Conditions (EU-SILC) is an instrument aiming at collecting timely and comparable cross-sectional and longitudinal multidimensional microdata on income, poverty, social exclusion and living conditions.

The EU-SILC aims to provide two types of data:

- Cross-sectional data pertaining to a given time or a certain time period with variables on income, poverty, social exclusion and other living conditions .
- Longitudinal data pertaining to individual-level changes over time, observed periodically over, typically, a four year period.

Social exclusion and housing condition information is collected at household level while labour, education and health information is obtained for people aged 16 and over. The core of the instrument, income at very detailed component level, is mainly collected at personal level but a few components are included in the household part of SILC.

The sample has constructed to matching the couple of wives and husbands in the data. We have selected all the wives that are in working age and we have excluded self worker women's. The size of the sample varies across countries and across years.

In table 2 and 3 we report for each country the husband and wife relation with the labour market in 2001 estimated with the ECHP data set and the 2006 one estimated with the EU-SILC data. The data shows that the husband household work increase a little bit in Italy and Spain while in Greece and Portugal we continue to find no husband that spent time in this job. The home work for wives decrease in 2006 respect to 2001 around

in 1996 (wave 3).

²The EU-SILC was launched in 2004 in 13 Member States :BE, DK, EE, EL, ES, FR, IE, IT, LU, AT, PT, FI and SE and in NO and IS

10% less in all countries and about 20% in Greece. In France the husband house work decreased in 2006, but we observe that the wives household work also decreased. Of course different instruments are used to take care of the children. The unemployment rate affects women more than men and it decrease in general, while the employment rate increased in 2006 and we find a disequilibria between husbands and wives, with a difference of 40% of participation in the labour market for Greece, Italy and Spain and about 20% for Portugal and France. These tables show that the social family structure has changed, but the results are more clear in tables 4 and 5 where we look at the time spent of wives and husbands to take care of children in 2001 with ECHP data and the time the children spent in Childcare systems when they are outside the household and not in school ³.

We present in table 4 the percentage how husband and wife share the care of the children and the time that they spent for this in 2001. We can first note that such care is distributed between both spouses improperly in all countries. The wife is responsible for this task around a 70% in the Mediterranean area while the husbands on average of 50%, but when the wife don't take care of children only 0.50%–1% of their partner do that. The time dedicated to child care is much grater for women, we find that 88% of women in Spain spent more than 28 hours for children while only 45% of men spent 28 hours. We don't find more differences across countries except for France where a higher percentage of husbands take care of children although the time spent with children is less for both spouses.

We show the results of EU-SILC data in table 5, where we report the weekly hours that children with age between 0 and 13 spent without their parents but in an institution, with professional people or other people that took care of them.

Italy, France and Greece have almost 1% of children of all ages (except Greece where only the children with age less than 5) that stay outside the control of their parents. The fifty percentage of children spent between 5 and 30 hours away from their parents in all countries. The distribution of age of children respect the hours spent varies across countries. When children are older than 10 years old the number of hours spent in child care are few, while the children wit age between 1 and 3 spent a lot of time in childcare system. In Italy the child care arrangements is homogenous for each age, while in Portugal we find that a great percentage of the children in the middle, 3–10 years old, are cared away from their parents.

We can conclude that the time spent without parents is not very high

³In the data set EU-SILC, we don't have the variable that indicate the number of hours that the members of the household spent to take care of children, but the number of hours that the children spent outside home such as care organised/controlled by a structure (public, private), direct arrangements between the carer and the parents, unpaid care (free or informal arrangements such as exchange of services) as grand-parents, others household members (outside parents) and centre-based services outside (pre-)school hours

especially for Italy and Spain. We can't estimate how of spouse take care of children with the EU-SILC data, but to returning to table 2 we find that the housework is very high for women and nearly zero for husbands. The childcare system is organized different across countries, in table 6 we report the average of hour spent in different type of care for children. We have *Child care at centre-based services*, that concerns only the children who are at pre-school or at school in the childcare reference period outside (pre-)school hours. *Child care at day-care centre* includes all kind of care organised/controlled by a structure (public or private), which is often the carer's employers. *Child care by a professional child-minder* there are direct arrangements between the carer and the parents: parents are often employers, pay directly the carer. *Unpaid care* is free or informal arrangements such as exchange of services (neighbor, friends, grandparents etc.) The higher percentage of children are cared for unpaid people and Greece and Italy are the countries that most use this instrument to take care of the children. In the *Child care at day-care centre* and *Child care by a professional child-minder* we find few children except for France, while *Child care at centre-based services* is another option that parents use to take care of their children, but in Italy and in Greece is not often used.

The average of weekly hours spent of by children without their parents is very low in Italy and very high in Portugal. In the last section of this paper we consider the different implementations that every government has done in the field of family policies, childcare arrangements and we discuss more these results.

Time dedicated to taking care of children: Logit Model

We estimate taking care of children probabilities for husband an wife with logit functions on the data set from ECHP in the year 2001 and estimate the probability that the husband and wife use child care arrangements for their children with EU-SILC data, because we don't have information about the taking care of children by spouse in this data set.

In the Logit Model we calculate P_{it} which denotes the probability that an individual i takes care of children in the period t . The odds of participating in the labor force are given by the ratio of the probability of take care to the probability of not take care:

$$\frac{P_{it}}{1 - P_{it}} \tag{1}$$

Assuming that the natural log of the odds ratio is given by

$$\ln \frac{P_{it}}{1 - P_{it}} = \beta X_{it} \tag{2}$$

where X_t is a vector of individual characteristics at age t , and β is a row vector of coefficients. Solving (2) for P_{it} and $1 - P_{it}$ yields the probabilities of taking and not taking care of children. We have:

$$P_{it} = \frac{1}{1 + e^{-\beta_{it}}} \quad (3)$$

$$1 - P_{it} = \frac{1}{1 + e^{\beta_{it}}} \quad (4)$$

where this last equation is the cumulative value of the logistic distribution. We utilize a simple specification of the labor supply function focusing on demographic characteristics. The logit model is estimated for husbands and wives when we use the ECHP data. The vector of individual characteristics X_{ti} at time t contains the following variables: age in three different age cohorts; dummy variables for three different level of education: primary school, secondary school and tertiary school; the status of employment (inactive, at work, unemployed and house work) and variables for the spouse: take care of children, level off education, employment status. Finally we used variables at level of household such as the logarithm of the household income and the house size.

In table 7 we report the marginal effects of logit estimation for the ECHP survey in 2001 for the selected countries.

We can note that the husband and wives's decision is influenced by age in all countries except for husbands in Portugal. We can see that if the spouse are older the probability to take care of children decreases. This probability increases when the education level of women decreases except for France, and when the spouse education increase. If both spouses are in the state of unemployed, house work o inactive, the probability to take care of children increases respectively. The household size has a significant and positive effect on the probability to take care of children except for the husbands in all countries, while the household income has a negative effect. The probability is positive and significant when the other partner takes care of children. In conclusion So we noted that wives to dedicate a lower number of hour in the labour market are be able to dedicate more time to taking care of children. These results are in accord with other papers dedicate to this topic, for example in Spain with Garcia - Molina (1998) and in Italy with Del Boca (2002).

We have calculated the logit model with EU-SILC data in the year 2006. This date set doesn't report the time that both spouses spent to take care of their children, but we know the time that children spent in the centre of care or with other people that aren't the parents and in the school, in the age of pre-school or compulsory.

The results are showed in the table 8, where the dependent variable is a categorial variable equal 1 if the children spent time without the parents

and zero otherwise. We use the characteristics of the father and mother such as: education age and if they are active, inactive, unemployed or at home; in addition, we use the income of the family and members inside the household. When the fathers are in the age of active for work (35) the probability is positive and significant in all countries except in Spain where the probability is positive but not significant, while in the age higher than 35 the probability decreases and is negative. If we look at the age of the mother, the effect is positive until the age of 45 except for Greece. When the age is higher than 45 the probability is decreases and the effect is very significant. The education of the father and the mother has also an effect to let the children with other people, and the probability that this occurs increases with the level of education. We don't find difference in this aspect between the countries while as for the status of the employment of couple there are differences between country and inside the couple. In Italy when the mother is unemployed the effect is negative on to care arrangements of the children while in France Spain and Greece the effect is positive. In Portugal has a negative effect but respect to the dummy variable take as reference the probability increases. If women work at home, the probability that the children are on the parents vigilance increase in France, Italy and Portugal, while in Spain and Greece, the probability decrease but the sign is positive. When women participate in the labor market the effect is positive and significant in the choice to let the children in all countries except Portugal.

The same occurs when the husbands are active , while if they are unemployed the probability decreases but the sign is positive except in Spain where it is negative although not significant respect to the reference dummy, so this means that men in Spain when are in unemployed status don't take care of the children while if they work at home the probability still to have a positive sign, Italy follow the same scheme. The income and house size have a positive and significant effect on the dependent variable, except for Portugal where the sign of coefficient of income is negative, and in France where the house size has a negative effect. So we can conclude that the age, education, income and employment status have an effect on the care of the children and the time the spouse can spent for them. The situation seems not to change a lot respect to 2001for Italy and Portugal when if the wives are unemployed or work at home are not able to let the children in other institution, while husbands even if are unemployed or work at the home, prefer to spend less time with the children except in Spain, where we find a negative effect if the husband is unemployed.

Participation equation and child care

In this part of the paper we estimate the effects of the children care on the probability to participate in the labor market and the opportunity cost of the time dedicate by the household to take care of children. First, we calculated with a probit model the participation of wives in the labour market. The participation equation was written before as:

$$q_{it}^* = a_i + \beta X_{it} + \tau_i + v_{it} \quad (5)$$

where q_{it} , is a dummy variable which takes 1 if the woman participates in labor market (working or seeking work) and 0 if she doesn't. We excluded self-employed married women. The equation participation, q_{it}^* , is positive only if the dummy variable equals 1. The decision to participate depends on a vector of explanatory variables X_{it} such as age, education level, household income without earn's,house size, education of husbands and if they and their husband take care of children.

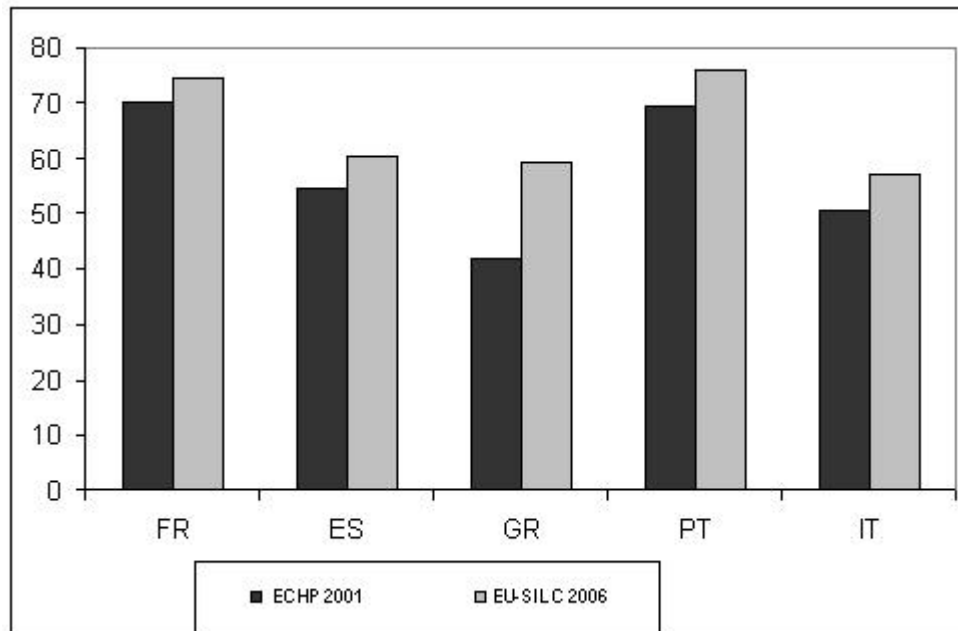
In graph 1 we report the participation rate in the year 2001 with the ECHP data and in the year 2006 wit the EU-SILC data. The size of the samples are different across years and countries, but we can see how the employment rate increased in all countries around 5%, except in Greece where the increment is 15%.

The results corresponding to wives' participation in labour market in 2006 are shown in table 9, where we calculate a probit estimation on the dependent variable as a dummy that takes 1 if they participate in the labour market and 0 otherwise. All the variables used in the estimation are more o less significant in all countries. The probability of participation increase in the middle age between 30 and 45 years. The education has a significant and positive effect on the participation and increase with the level of studies, as well as the education of the husband except in France where the probability decreases with a husband's high level of education. To have a tertiary education increase the probability to participate around 20% in most countries. These results also indicate that if wives have children they aren't be able to work, especially when children are in age less than 6 years, while to have children and the possibility to let them in the center or have grandparents or professional that takes care of children increases the probability. Unpaid care and professional childminder are the instruments that more than other increase the participation in the Mediterranean countries and the effect is very high in all countries. The income has a negative effect and reduce the probability to enter the job market such as the number of members in a home.

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Figure 1: **Participation rate: ECHP and EU-SILC**



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Table 2: Percentage distribution of households by labor market: EU-SILC 2006

Italy		Husbands			Spain			Husbands			
Wives	Working	Inactive	Housework	Unemployed	Total	Wives	Working	Inactive	Housework	Unemployed	Total
Working	45.99	3.47	0.24	1.48	51.18	Working	47.02	2.41	0.08	2.27	51.78
Inactive	3.71	0.78	0.06	0.12	4.68	Inactive	5.69	0.65	0	0.24	6.59
Housework	32.8	3.67	0.29	1.5	38.26	Housework	28.67	2.76	0	1.77	33.2
Unemployed	4.77	0.3	0.01	0.8	5.88	Unemployed	6.95	0.64	0	0.84	8.43
Total	87.28	8.22	0.6	3.9	100	Total	88.32	6.48	0.08	5.12	100

Greece		Husbands			France			Husbands			
Wives	Working	Inactive	Housework	Unemployed	Total	Wives	Working	Inactive	Housework	Unemployed	Total
Working	48.69	3.11	0.99	52.79	52.79	Working	63.77	3.28	2.5	69.55	69.55
Inactive	2.11	0.51	0.18	2.8	2.8	Inactive	8.06	1.04	0.49	9.59	9.59
Housework	32.76	3.92	1.15	37.82	37.82	Housework	12.03	1.57	1.57	15.17	15.17
Unemployed	5.75	0.43	0.41	6.59	6.59	Unemployed	4.74	0.35	0.6	5.69	5.69
Total	89.31	7.97	2.72	100	100	Total	88.61	6.24	5.16	100	100

Portugal		Husbands			
Wives	Working	Inactive	Housework	Unemployed	Total
Working	62.78	2.93	3.82	69.52	69.52
Inactive	2.82	0.68	0.18	3.68	3.68
Housework	17.45	1.64	1.36	20.45	20.45
Unemployed	5.42	0.43	0.5	6.35	6.35
Total	88.47	5.67	5.85	100	100

Table 3: Percentage distribution of households by labor market: ECHP 2001

Italy		Husbands			Spain			Husbands		
	Wives	Working	Inactive	Unemployed	Total	Wives	Working	Inactive	Unemployed	Total
Working	38.55	4.27	1.17	43.99	Working	41.34	2.11	1.8	45.25	
Inactive	2.08	1.55	0.11	3.74	Inactive	0.81	0.37	0.12	1.3	
Housework	36.63	7.21	2.19	46.02	Housework	39.35	3.66	2.55	45.56	
Unemployed	4.43	0.27	1.55	6.25	Unemployed	5.65	0.62	1.61	7.88	
Total	81.69	13.29	5.02	100	Total	87.15	6.77	6.08	100	

Greece		Husbands			Portugal			Husbands		
	Wives	Working	Inactive	Unemployed	Total	Wives	Working	Inactive	Unemployed	Total
Working	37.53	2.77	0.69	40.99	Working	63.73	3.02	2.09	68.83	
Inactive	1.96	0.92	0	2.89	Inactive	2.86	0.93	0.08	3.87	
Housework	40.18	10.39	1.15	51.73	Housework	17.25	3.09	0.46	20.8	
Unemployed	3.46	0.58	0.35	4.39	Unemployed	6.03	0.31	0.15	6.5	
Total	83.14	14.67	2.19	100	Total	89.87	7.35	2.78	100	

France		Husbands			Husbands				
	Wives	Working	Inactive	Unemployed	Total	Working	Inactive	Unemployed	Total
Working	61.87	2.37	0.92	67.78	Working	2.62	0	0.97	3.62
Inactive	0.68	0.24	0.05	1.07	Inactive	1.07	1.41	0.98	3.46
Housework	17.73	1.89	0.68	20.3	Housework	1.41	9.88	1.41	12.7
Unemployed	7.85	0.44	0.19	8.48	Unemployed	5.09	100	5.09	100
Total	88.13	4.94	1.84	100	Total	100	100	100	100

Table 4: Distribution between couple of the numbers of hours and is they take care of the children: ECHP 2001

Greece					Husbands				Wives			
Wives	< 14	14-28	> 28	Total	Husbands	Yes	No	Total				
< 14	2.02	0.51	0	2.53	Yes	41.11	0.58	41.7				
14-28	11.62	6.57	0	18.18	No	35.89	22.42	58.3				
> 28	17.68	45.96	15.66	79.29	Total	77	23	100				
Total	31.31	53.03	15.66	100								

Spain					Husbands				Wives			
Wives	< 14	14-28	> 28	Total	Husbands	Yes	No	Total				
< 14	2.71	1.08	0.27	4.07	Yes	50.34	0.75	51.09				
14-28	2.98	2.98	1.36	7.32	No	25.7	23.21	48.91				
> 28	11.65	33.88	43.09	88.62	Total	76.04	23.96	100				
Total	17.34	37.94	44.72	100								

Italy					Husbands				Wives			
Wives	< 14	14-28	> 28	Total	Husbands	Yes	No	Total				
< 14	3.75	0.34	0.17	4.26	Yes	37.16	1.98	39.14				
14-28	12.1	7.67	0.51	20.27	No	32.3	28.56	60.86				
> 28	19.25	35.95	20.27	75.47	Total	69.46	30.54	100				
Total	35.09	43.95	20.95	100								

France					Husbands				Wives			
Wives	< 14	14-28	> 28	Total	Husbands	Yes	No	Total				
< 14	6.59	0.6	0.6	7.78	Yes	63.96	1.16	65.12				
14-28	13.77	11.98	0	25.75	No	14.4	20.48	34.88				
> 28	16.17	26.95	23.35	66.47	Total	78.36	21.64	100				
Total	36.53	39.52	23.95	100								

Portugal					Husbands				Wives			
Wives	< 14	14-28	> 28	Total	Husbands	Yes	No	Total				
< 14	6.59	0.6	0.6	7.78	Yes	59.15	0.54	59.69				
14-28	13.77	11.98	0	25.75	No	27.1	13.2	40.31				
> 28	16.17	26.95	23.35	66.47	Total	86.25	13.75	100				
Total	36.53	39.52	23.95	100								

Table 5: Distribution of the numbers of hours spent without the vigilance of the parents: EU-SILC 2006

Spain						France					
Age	0-5	5-30	30-60	> 60	Total	Age	0-5	5-30	30-60	> 60	Total
0	0	1.15	0.38	0	1.53	0	0	0.69	0.46	0	1.16
1	1.78	5.99	3.95	0	11.72	1	0.46	3.93	5.2	0.23	9.83
2	1.15	6.5	1.91	0.13	9.68	2	0.58	4.86	6.36	0.35	12.14
3	2.04	7.52	2.68	0	12.23	3	0.69	4.62	6.36	0.12	11.79
4	2.42	4.08	0.51	0	7.01	4	1.97	5.66	0.69	0	8.32
5	2.42	3.18	0.89	0	6.5	5	2.54	6.13	0.12	0	8.79
6	3.82	3.69	0.38	0	7.9	6	2.54	6.01	0.46	0.12	9.13
7	4.08	3.18	0.13	0	7.39	7	3.01	4.39	0	0	7.4
8	3.95	3.44	0.25	0	7.64	8	2.43	4.39	0	0	6.82
9	3.69	3.31	0	0	7.01	9	3.01	4.62	0.12	0.12	7.86
10	3.18	3.18	0	0	6.37	10	2.08	3.47	0	0	5.55
11	3.82	3.31	0.25	0	7.39	11	1.85	0.92	0.12	0	2.89
12	2.04	2.55	0.25	0	4.84	12	3.12	1.04	0.12	0.12	4.39
13	2.04	0.76	0	0	2.8	13	2.89	0.92	0	0.12	3.93
Total	36.43	51.85	11.59	0.13	100	Total	27.17	51.68	20	1.16	100

Italy						Portugal					
Age	0-5	5-30	30-60	> 60	Total	Age	0-5	5-30	30-60	> 60	Total
0	0.56	1.38	0.34	0.09	2.37	0	0	0.19	0.38	0	0.57
1	0.73	3.62	1.51	0.3	6.16	1	0.19	1.15	4.21	0	5.56
2	1.59	3.92	1.42	0.17	7.11	2	0	1.34	7.85	0.19	9.39
3	1.64	4.87	0.47	0.17	7.16	3	0	1.72	9	0	10.73
4	1.81	4.87	0.17	0.26	7.11	4	0.19	2.11	3.26	0	5.56
5	1.59	4.35	0.22	0.09	6.25	5	1.34	2.87	0.38	0	4.6
6	2.63	5.47	0.56	0.09	8.75	6	0.57	5.56	0.38	0	6.51
7	3.1	5.17	0.17	0.09	8.53	7	0.19	6.9	0.19	0	7.28
8	3.32	4.44	0.43	0.17	8.36	8	2.11	9.39	0.57	0	12.07
9	3.97	4.66	0.22	0	8.84	9	0.77	8.24	0.19	0	9.2
10	3.88	4.09	0.13	0.09	8.19	10	1.92	8.62	0.19	0	10.73
11	3.75	3.53	0.26	0	7.54	11	0.57	5.75	0.19	0	6.51
12	4.18	3.02	0.17	0.13	7.5	12	2.68	3.26	0	0	5.94
13	2.89	2.97	0.22	0.04	6.12	13	2.11	3.26	0	0	5.36
Total	35.65	56.38	6.29	1.68	100	Total	12.64	60.34	26.82	0.19	100

Greece						
Age	0-5	5-30	30-60	> 60	Total	
1	0.6	6.04	3.78	0.45	10.88	
2	0.76	5.14	3.63	0.15	9.67	
3	0.3	5.44	4.83	0.3	10.88	
4	0.76	6.19	3.47	0.15	10.57	
5	0.3	5.89	1.51	0	7.7	
6	0.45	3.93	1.21	0	5.59	
7	0.76	7.1	1.21	0	9.06	
8	0.91	7.1	0.45	0	8.46	
9	1.06	5.74	0.45	0	7.25	
10	0.76	3.78	0.76	0	5.29	
11	1.06	3.78	0.3	0	5.14	
12	0.45	2.72	0.45	0	3.63	
13	0.3	2.11	0.15	0	2.57	
Total	8.46	66.16	24.32	1.06	100	

Table 6: **Distribution of the institutions and people that take care of the children without parents:EU-SILC2006**

Country	Centre-based services	Day centre care	Professionals child-minder	Unpaid care
Spain	5.21 <i>30.24</i>	14.89 <i>9.41</i>	18.26 <i>15.12</i>	16.21 <i>45.24</i>
France	5.68 <i>27.75</i>	21.44 <i>24.49</i>	18.43 <i>17.18</i>	12.18 <i>30.57</i>
Greece	11.39 <i>17.74</i>	12.33 <i>0.43</i>	25.21 <i>8.58</i>	24.49 <i>73.25</i>
Italy	5.81 <i>21.56</i>	4.28 <i>16.86</i>	10.02 <i>6.65</i>	14.43 <i>54.91</i>
Portugal	12.01 <i>41.52</i>	36.5 <i>14.84</i>	24.44 <i>7.95</i>	21.14 <i>35.69</i>

Table 7: Logit Estimation: ECHP 2001

	Italy		Greece		Spain		Portugal		France	
	Wives	Husbands	Wives	Husbands	Wives	Husbands	Wives	Husbands	Wives	Husbands
Age < 30	0.294	0.251	0.283	0.631	0.527**	-0.196	0.370*	-0.118	0.170	0.097
Age 30-35	0.205	0.388	-0.305	0.156	-0.087	-0.248	-0.711***	-0.318	-0.136	0.090
Age 35-45	-0.420*	0.142	-1.273***	0.330	-1.110***	-0.638**	-2.199***	-0.271	-0.990***	-0.696**
Age > 45	-0.833***	-0.710**	-1.703***	-0.529	-2.754***	-1.673***	-2.987***	-1.590***	-1.679***	-0.911***
Secondary School	-0.524**	-0.090	-0.324	-0.082	0.169	-0.173	0.279	-0.346	-0.134	-0.425
Tertiary School	-0.686***	-0.273	-0.099	-0.366	-0.104	-0.720***	0.011	-0.871**	-0.031	-0.031
Active	0.344	-0.513**	-0.099	-0.030	3.266***	-0.136	0.189	-1.069	-2.019***	-0.790**
Unemployed	0.800**	-0.416	-0.009	1.611*	4.076***	0.348	0.617	-2.548**	-1.449**	0.375
House work	0.749**	0.063	0.125	0.142	4.202***	0.102	1.159**	0.051	-0.572	-0.941
House size	0.950***	-0.001	0.953***	-0.010	1.121***	0.102	0.886***	0.051	0.542***	0.118
logincome	-0.027	-0.001	-0.053	-0.010	-0.133	-0.108	0.131	-0.097	0.357**	-0.252
<i>Spouse Charact.</i>										
Tertiary School	-0.291	-0.113	0.065	-0.629*	0.047	-0.444**	0.418	-0.591*	-0.058	-0.261
Secondary School	-0.331	0.251	-0.057	-0.356	0.036	-0.308	0.140	-0.288	0.286	0.161
Active	0.400**	0.145	0.072	0.140	0.464	-2.204**	1.092**	1.182	0.086	1.107
House work		-0.571		-0.417		-2.960***		-0.584	-0.350	-0.221
Unemployed	-0.491	-0.852*	-1.820**	-0.055	-0.131	-3.014***	0.326	0.806	-0.483	0.323
Take care	2.614***	2.798***	3.420***	3.518***	3.948***	4.294***	3.726***	3.920***	4.312***	4.528***
cons	-3.070***	-2.187**	-1.385	-3.789**	-5.990***	0.797	-6.543***	-1.823	-5.557***	-1.060

Note: p .01 - ***; .05 - **; .1 - *;

Table 8: Logit estimation of the time that children spent outside household: EU-SILC 2006

Country	Italy	France	Portugal	Greece	Spain
<i>Father</i>					
Age < 30	0.309*	0.457*	0.532*	1.246***	0.125
	<i>0.178</i>	<i>0.249</i>	<i>0.273</i>	<i>0.373</i>	<i>0.280</i>
Age 30-35	0.463**	0.208	0.012	1.702***	0.082
	<i>0.187</i>	<i>0.266</i>	<i>0.315</i>	<i>0.384</i>	<i>0.294</i>
Age 35-45	-0.278***	-0.474***	-0.622***	-0.794***	-0.418***
	<i>0.072</i>	<i>0.124</i>	<i>0.169</i>	<i>0.136</i>	<i>0.112</i>
Age > 45	-0.862***	-1.220***	-1.186***	-1.450***	-0.848***
	<i>0.091</i>	<i>0.176</i>	<i>0.227</i>	<i>0.182</i>	<i>0.161</i>
Secondary School	0.254**	-0.366***	0.117	0.370**	0.310**
	<i>0.111</i>	<i>0.141</i>	<i>0.145</i>	<i>0.154</i>	<i>0.139</i>
Tertiary School	0.519***	-0.130	0.301	0.215	0.362**
	<i>0.124</i>	<i>0.164</i>	<i>0.247</i>	<i>0.187</i>	<i>0.152</i>
Active	0.425***	1.273**	-0.127	-0.186	0.096
	<i>0.151</i>	<i>0.522</i>	<i>0.425</i>	<i>0.359</i>	<i>0.254</i>
Unemployed	0.132	0.447	0.185	-0.017	-0.439
	<i>0.207</i>	<i>0.578</i>	<i>0.486</i>	<i>0.492</i>	<i>0.350</i>
House work	0.697**	-	-	-	1.056
	<i>0.337</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>1.126</i>
<i>Mother</i>					
Age < 30	0.302**	0.137	0.182	-0.277	0.576***
	<i>0.123</i>	<i>0.191</i>	<i>0.239</i>	<i>0.186</i>	<i>0.210</i>
Age 30-35	0.352***	-0.324	0.073	-0.731***	0.553**
	<i>0.136</i>	<i>0.210</i>	<i>0.283</i>	<i>0.213</i>	<i>0.229</i>
Age 35-45	0.235	-0.818***	-0.466	0.535	0.039
	<i>0.180</i>	<i>0.258</i>	<i>0.290</i>	<i>0.389</i>	<i>0.291</i>
Age > 45	-0.982***	-1.706***	-1.670***	-1.102**	-1.222***
	<i>0.198</i>	<i>0.301</i>	<i>0.364</i>	<i>0.461</i>	<i>0.337</i>
Secondary School	0.192	0.561***	0.379***	0.585***	0.391**
	<i>0.119</i>	<i>0.170</i>	<i>0.142</i>	<i>0.183</i>	<i>0.154</i>
Tertiary School	0.434***	0.947***	0.801***	1.012***	0.835***
	<i>0.130</i>	<i>0.188</i>	<i>0.220</i>	<i>0.209</i>	<i>0.165</i>
Active	0.479***	1.580***	-0.030	1.886**	0.933***
	<i>0.123</i>	<i>0.212</i>	<i>0.367</i>	<i>0.742</i>	<i>0.222</i>
Unemployed	-0.490***	0.462	-1.070**	0.260	0.192
	<i>0.162</i>	<i>0.289</i>	<i>0.450</i>	<i>0.774</i>	<i>0.268</i>
House work	-0.610***	-0.496*	-1.865***	0.142	0.236
	<i>0.129</i>	<i>0.278</i>	<i>0.425</i>	<i>0.751</i>	<i>0.233</i>
<i>Family char.</i>					
Logincome	0.053	0.547***	-0.084	0.089	0.272***
	<i>0.047</i>	<i>0.126</i>	<i>0.117</i>	<i>0.091</i>	<i>0.077</i>
House size	0.234***	-0.041	0.162***	0.159***	0.144***
	<i>0.024</i>	<i>0.046</i>	<i>0.046</i>	<i>0.041</i>	<i>0.038</i>
cons	-3.716***	-9.257***	-0.420	-5.165***	-6.792***
	<i>0.530</i>	<i>1.333</i>	<i>1.150</i>	<i>1.251</i>	<i>0.845</i>

Note: p .01 - ***; .05 - **; .1 - *;

Table 9: Probit estimation of participation equation of wives

	Italy	Spain	France	Portugal	Greece
Age < 30	0.026 (0.023)	0.071** 0.029	0.043 0.027	0.057 0.042	0.050 0.036
Age 30-35	0.054** 0.023	0.035 0.029	0.151*** 0.021	0.090** 0.039	0.108*** 0.035
Age 35-45	0.081*** 0.023	0.009 0.030	0.159*** 0.022	0.081** 0.041	0.108*** 0.036
Age > 45	0.067*** 0.023	-0.032 0.030	0.123*** 0.025	0.015 0.044	0.018 0.039
Secondary School	0.122*** 0.016	0.106*** 0.016	0.177*** 0.015	0.149*** 0.020	0.030 0.022
Tertiary School	0.342*** 0.014	0.292*** 0.015	0.224*** 0.014	0.244*** 0.021	0.277*** 0.023
Secondary School Spouse	0.063*** 0.016	-0.015 0.016	0.059*** 0.016	0.048** 0.023	0.024 0.021
Tertiary School Spouse	0.104*** 0.018	0.034* 0.019	0.026 0.020	0.073* 0.044	0.082*** 0.027
Kids age 6-12	-0.035** 0.014	-0.064*** 0.016	-0.023 0.017	-0.036 0.029	-0.087*** 0.025
Kids age 3-6	-0.055*** 0.018	-0.126*** 0.022	-0.100*** 0.025	-0.081* 0.042	-0.208*** 0.033
Kidsage < 3	-0.074*** 0.020	-0.195*** 0.027	-0.262*** 0.036	-0.127** 0.061	-0.330*** 0.038
Centre-based services	0.019 0.022	-0.006 0.033	0.147*** 0.018	0.131*** 0.030	0.222*** 0.038
Day centre care	-0.015 0.025	0.176*** 0.049	0.178*** 0.014	0.195*** 0.036	
Professionals childminder	0.220*** 0.037	0.297*** 0.031	0.193*** 0.014	0.224*** 0.037	0.273*** 0.051
Unpaid care	0.271*** 0.012	0.246*** 0.021	0.179*** 0.015	0.233*** 0.021	0.353*** 0.017
Income 10000-20000 per year	-0.044** 0.022	0.016 0.018	-0.001 0.039	-0.038* 0.021	-0.037 0.036
Income 20000-40000 per year	-0.045** 0.021	0.023 0.019	-0.077** 0.036	-0.048* 0.029	-0.056 0.051
income 40000-60000 per year	-0.013 0.024	-0.026 0.027	-0.163*** 0.049	-0.152** 0.065	-0.067 0.077
Income > 60000peryear	-0.008 0.027	-0.019 0.043	-0.184*** 0.055	-0.062 0.111	-0.097 0.098
House size	-0.065*** 0.005	-0.047*** 0.005	-0.058*** 0.005	-0.036*** 0.007	-0.042*** 0.007

Note: p .01 - ***; .05 - **; .1 - *;

Table 10: **Employment patterns by full-time and part-time**

ECHP 2000	Men full-time/women full-time	Men full-time/women part-time	Men part-time/women part-time	Men part-time/women full-time
France	81.67	16.61	0.33	1.39
Italy	87.85	11.02	0.28	0.85
Spain	78.43	19.79	0.44	1.34
Greece	90.8	6.75	1.23	1.22
Portugal	93.29	5.85	0.13	0.73
EU- SILC 2006				
France	53.49	44.08	0.89	1.54
Italy	68.72	29.1	0.8	1.38
Spain	73.2	25.4	0.52	0.88
Greece	80.92	15.73	1.57	1.78
Portugal	87.78	11.03	0.34	0.85
Total	100	100	100	100

Table 11: Probit estimation of participation equation of wives

Country	Family benefits		parental leave,	Other legal family benefits	
	Age limit	variation according to income		variation with age	
Belgium	18 years (vocational training, further education: 25 years)	no	yes	no	birth grants, adoption allowance
Denmark	18 years	yes (only for the supplementary allowance)	yes	yes	birth grants, adoption allowance, child care allowance, allowance for single parent
Germany	18 years (unemployed people : 21 years; vocational training, further education: 27 years)	no	no	yes	advance payment of maintenance
Greece	18 years (further education: 22 years)	no	no	no	allowance for single parent
Spain	18 years	yes	no	yes	birth grants (for the third child and multiple births) birth grants, adoption allowance, child care allowance, allowance for single parent,
France	20 years (from the second child)	no	yes	yes	allowance at beginning of the school year, advance payment of maintenance, family supplement
Ireland	16 years (further education: 19 years)	no	no	no	birth grants, allowance for single parent, family supplement
Italy	18 years	yes	no	no	birth grants (from the third child), adoption allowance
Luxembourg	18 years (vocational training, further education: 27 years)	non	yes	yes	birth grants, allowance at beginning of the school year, advance payment of maintenance
Austria	19 years (unemployed people: 21 years; vocational training: 26 years)	no	yes	yes	birth grants, allowance for single parent, advance payment of maintenance, special unemployment assistance
The Netherlands	17 years (vocational training, further education: 24 years)	no	yes	no	
Portugal	16 years (vocational training, further education: 24 years)	yes	yes	no	funeral grant
Finland	17 years	no	no	yes	birth grants, adoption allowance, child care allowance, allowance for single parent, advance payment of maintenance
Sweden	16 years (further education: 20 years, children in secondary school)	no	no	yes	adoption allowance, advance payment of maintenance
United-Kingdom	16 years (further education: 19 years)	no	no	no	birth grants and adoption allowance, child care allowance, "working families tax credit", advance payment of maintenance
Iceland	16 years	yes	yes	no	child care allowance, allowance for single parent, educational pension, advance payment of maintenance
Norway	18 years	no	yes	yes	birth grants and adoption allowance, child care allowance, allowance for single parent, advance payment of maintenance

Note: p .01 - ***; .05 - **; .1 - *;