

# Looking for low fertility determinants in the European Union: gender distribution of family tasks

## Cercant els determinants de la baixa fecunditat a la Unió Europea: la distribució per gènere de les responsabilitats familiars

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### Abstract

The European Union Eurobarometer is a survey covering all the Member States carried out twice a year to obtain a broader acquaintance of the opinions of Europeans on specific issues of interest for EU policymakers. For instance, in Standard Eurobarometer 56.2 (2001) the former EU-15 Member State respondents were asked about current and ideal fertility. These questions were asked again the following year in the 13 former candidate countries (including Turkey); therefore, results are presently available for 28 countries. Several other more recent Eurobarometers also included questions on how family responsibilities were distributed among men and women. This article analyses all of these results with the intention of assessing whether or not low fertility and task-sharing are interrelated in any way because, although women are still responsible for most reproductive tasks, they are also increasingly incorporated into the labour market. The findings obtained run counter to initial expectations: present-day fertility is poorly and negatively correlated to a more egalitarian division of domestic work.

**Keywords:** fertility, gender relations, gender-based task share, European Union.

### Resum

L'Eurobaròmetre és una enquesta de la Comissió Europea llançada dues vegades a l'any en tots els estats membres de la Unió Europea (UE) per a obtenir un millor coneixement de l'opinió dels seus ciutadans sobre un seguit de temes d'interès per als polítics de la UE. Per exemple, l'Eurobaròmetre estàndard 56.2 (2001) incloïa preguntes sobre el nombre de fills ideal que tenien a la ment els enquestats i sobre el nombre de fills que realment havien

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tingut. Aquestes preguntes es van repetir l'any següent als tretze antics països candidats (més Turquia) i, com a resultat, disposem d'informació de vint-i-vuit països en total. Després, altres eurobaròmetres han inclòs preguntes sobre com estan distribuïdes les responsabilitats familiars entre homes i dones. Aquest treball analitza conjuntament aquests resultats amb l'objectiu d'estudiar si hi ha una correlació entre la baixa fecunditat i el repartiment de les tasques domèstiques, en un context en què les dones estan creixentment involucrades al mercat de treball, però s'encarreguen encara de la major part de les tasques reproductives. Els resultats obtinguts són contraris als esperats: la fecunditat està dèbilment i negativament correlacionada amb una divisió més igualitària del treball domèstic.

**Paraules clau:** fecunditat, relacions de gènere, repartiment de tasques, Unió Europea.

## 1. Introduction<sup>2</sup>

### 1.1. PAPER OBJECTIVE

Using Eurobarometer data, the aim of this paper is to study whether very low fertility and uneven task sharing between men and women are interrelated in EU countries. Though women continue to hold responsibility for most reproductive tasks including childcare – even in the most advanced societies – they are also becoming increasingly involved in the labour market, and limiting fertility may constitute a response to their new circumstances that are placing an additional burden on their shoulders. Contrariwise, a more balanced distribution of domestic tasks between men and women may be a factor making it possible to strike a better balance between work and family life, thereby increasing the potential for fertility ideals – two children per woman in most European countries (Testa, 2002; Sleebos, 2003) – to be met. Evidence from some countries seems to point in that direction, but it is far from being firmly established for all EU countries.

### 1.2. FERTILITY AND DOMESTIC TASK SHARING: ANALYTICAL FRAMEWORK AND ARTICLE HYPOTHESIS

The demographic transition theory establishes that the decline in fertility is a consequence of society becoming ever more modern, one major aspect thereof being increasing gender equality, higher female education and greater female employment integration. Consequently, growing opportunity costs of motherhood (Becker, 1991) should cause a negative association between fertility and the rate of female employment cross-nationally (Brodmann *et al.*, 2007). Nevertheless, in recent decades the correlation between fertility and female employment has become positive (Ahn and Mira, 2001; Sleebos, 2003), particularly in the most developed countries like those of northern Europe. There, at present, fertility is even positively correlated to women's education and earnings (Andersson, 2000; Vikat, 2004; Brodmann *et al.*, 2007). Myrskylä *et al.* (2009) have shown, through the use of the Human Development Index (HDI),<sup>3</sup> that the current fertility rise in the most advan-

2. This article stems from the CSO2008-06217/SOCI R&D project directed by Dr Fernando Gil and funded by the Spanish Ministry of Science and Innovation through the 2008-2011 National R&D&I Plan. A previous version of this text was presented as a paper at the XXV IUSSP International Population Conference, held at Tours, France (18-23 July 2005), in session 68 'The causes of low fertility', chaired by Dr John C. Caldwell. That session's comments, especially those by Dr Caldwell and Dr Peter McDonald, helped to improve the original text. I would also like to express my gratitude to Eva Jiménez-Julià, Joan Garcia and John MacInnes for their contributions to this paper.

3. Indeed, when HDI>0.9, the relationship between this indicator and total fertility rate, which had formerly been positive, becomes positive. The HDI is the primary index used by the United Nations Development Programme (UNDP)

ced countries is positively related to the increased levels of human development they experience. This index would be also indirectly related – through innovation in family behaviour or female labour market participation – to improvements in gender equality (McDonald, 2000; Billari and Kohler, 2004).

This positive correlation with fertility in countries with the highest human development could be explained by several factors. Authors such as Gauthier and Hatzius (1997), Billari *et al.* (2002), Esping-Andersen *et al.* (2002), Gornick and Meyers (2003) or Del Boca *et al.* (2003), claim that their highly developed welfare state, and specifically the implementation of mother-friendly policies, reduces the opportunity costs of motherhood. Other authors like Adserà (2004) believe that labour market characteristics, arrangements and institutions would, for instance, be key issues in explaining the high fertility levels in Nordic countries – and in the US – and the low levels in southern European ones.

Lastly, other authors such as Del Boca (2002) in Italy, Cooke (2004) in Germany, and Duvander and Andersson (2003) in Sweden, have found evidence showing that higher involvement from fathers in domestic work has a positive effect on fertility. Similarly, in the latter country, Olah (1998) found that women are more likely to have a second child if the male partner took parental leave following the birth of the first child.

On the basis of all this evidence, the following hypothesis has been taken as our starting point. Very low fertility levels in advanced countries with a traditional division of gender roles, such as southern and German-speaking European countries or certain Asian countries and regions like Japan, Hong Kong, Singapore or South Korea, may be influenced by the way women are integrating into the labour market. That is to say, by the fact that their growing participation has not been accompanied by a change in the way reproductive tasks – including child and elderly person caring activities and housework – are being distributed between men and women (Tsuya and Mason, 1995; Tsuya and Bumpass, 2004; Caldwell and Schindlmayr, 2003). This possible explanation can be placed within the context of what McDonald (1997) calls the “incoherence between the levels of gender equity applying in different social institutions”. This means that increasing gender equality in some institutional domains that deal with people as individuals – such as education and the labour market – has not been accompanied by changes in other institutions that deal with people as family members, including the family itself and, more specifically, domestic work. The division of family tasks between men and women has not taken place at the same pace for both sexes and women, therefore, have a double burden (productive and reproductive work) that could lead some of them to have a lower number of children – or even, in more exceptional cases, to avoid having children (McDonald, 2000).

### 1.3. A COMPARABLE EUROPEAN UNION DATASET: THE EUROBAROMETER

A comparative analysis across countries is needed to validate the hypothesis that when housework and childcare is more evenly distributed between sexes, fertility is also higher. However, multinational surveys covering fertility and reproductive task sharing are not numerous. The European Commission's Eurobarometer public opinion survey may, in that respect, be of some help.

The Eurobarometer (EB) is a survey carried out twice a year by the European Commission to obtain information on what EU citizens think about the Community's institutions and policies, and to gauge their opinions on the general problems affecting them. This survey, covering the 25

to monitor and evaluate broadly defined human development, combining indicators of a country's health conditions, living standards and human capital with equal weight (Myrskylä *et al.*, 2009).

4. Spain is a clear example of a country where reproductive tasks are unevenly distributed by sex (Durán, 2000; Garrido, 2000; Larrañaga *et al.*, 2004), even in two-earner couples, where the contribution of husbands to childcare is scarcely affected by the labour force status of wives (Álvarez and Miles, 2003).

EU Member States (plus Turkey), contains around 1,000 interviews by country,<sup>5</sup> thereby offering a very significant sample on a Europe-wide scale. Each wave consists of a series of permanent questions (including basic socioeconomic and demographic characteristics) plus a series of thematic questionnaires covering diverse issues which EU policy-makers consider of interest.

Until 2004, two different EBs existed: the Standard Eurobarometer, created in 1973, which covered the 15 old Member States; and the Candidate Country EB (with the first wave launched in 2001) which included the 13 former candidate countries, i.e., the 12 new Member States (10 of them joined the EU in 2004, with Romania and Bulgaria in 2007) plus Turkey. Now, both EBs have been merged and the survey presently covers the 25 current Member States along with Turkey, Croatia, Montenegro, Macedonia and Iceland.

During the five years (1999-2004) for which I was responsible for EB matters within the Social and Demographic Analysis Unit (Directorate-General for Employment and Social Affairs of the European Commission), no less than six questionnaires – including questions of interest for this paper – were launched:

- Standard Eurobarometer 50.1 (1998) included a module on family issues with questions on caring and housework sharing;
- Standard EB 56.2 (2001) included questions on actual and ideal fertility issues: desire for children, ideal family size, number of children born, reasons for having or not having children;
- (former) Candidate Country EB 2002.1 (2002) was a broad survey which included a selection on social aspects (including fertility, task sharing and care). These questions were previously asked in a separate manner in the old EU Member States in the Standard EB 50.1 and 56.2.
- Standard EB 59.0 (2003) had a module with questions on fertility and children, as well as questions on housework and childcare task sharing between men and women.
- Standard EB 60.3 (2003) included a questionnaire on time use: both men and women were asked about time devoted to family and household tasks;
- The same questions were repeated in 2003 for the former candidate countries in CC Eurobarometer 2003.5.

Data on family and fertility matters, as well as on the distribution of family responsibilities (childcare and housework) between men and women, are therefore available for a total of 28 countries. However, as data stem from six different surveys and refer to two diverse groups of countries (15 old Member States and 13 former candidate countries before the 2004 enlargement, including Turkey), the depth of the analysis is somewhat limited. Moreover, not all EU Member State and (former) candidate country questionnaires include the exact same questions (or have the same wording). Nevertheless, available data should be able to offer some evidence on how fertility and family responsibilities are linked. This is the purpose of the following pages.

#### 1.4. PAPER STRUCTURE

In order to achieve this objective, this paper has been divided in three different parts.

- Section 2 presents the EB 56.2 results on actual and ideal fertility in the former European Union of 15 countries. It is the foremost wave devoted to this issue. Equivalent data for the 13 former candidate countries come from CCEB 2002.1.

5. With the exception of Germany (1,000 interviews for West Germany, 1,000 for the former GDR), United Kingdom (1,300, which includes a sub-sample of 300 interviews in Northern Ireland), Luxembourg (600 interviews), Cyprus and Malta (500 interviews each).

- Section 3 focuses on the distribution of housework and childcare between men and women. Although the values regarding these issues can also be analysed using EB 50.1 (EU-15) and CCEB 2002.1, three more recent Eurobarometers launched in 2003 are used here instead: EBs 59.0 and 60.3 (EU-15) and EB 2003.5 for the former candidate countries.
- Section 4 analyses the possible relationship between fertility and the gender distribution of reproductive tasks by using the two EBs that include questions on both issues in the same questionnaire: Eurobarometer 59.0 for the 15 old Member States, and CCEB 2002.1 for the former candidate countries.

Lastly, the main conclusions are compiled in section 5.

## 2. Eurobarometer data on fertility in the European Union

The EB 56.2 and CCEB 2002.1 results have been analysed by different authors and published in several Eurobarometer reports (Testa, 2002; Gallup Hungary, 2002), as well as in a report published by the European Foundation for the Improvement of Living and Working Conditions (Fahey and Spéder, 2004). These datasets give a large amount of information on Europeans' ideal and actual fertility.

### 2.1. FERTILITY IDEALS AND DESIRES

Eurobarometer data confirm that a large majority of Europeans would ideally have two children. More precisely, 2.3 children would be the average ideal family size, and 2.2 children the average number they would personally and ideally have. After “two children”, the second most frequently mentioned answer for both general and personal ideal family size is “three children”. This two-child pattern even prevails for 20-year-old Europeans. But preferences tend to be slightly higher among women than among men.

When looking at the differences between the European Union Member States, several groups of countries, rather homogeneous for their fertility preferences (in terms of childbearing ideals, desires and plans), are evidenced: Austria and Germany are the countries with the lowest ideal, desired and wanted fertility (at young ages): the mean family sizes are always below those of the EU average. Conversely, Scandinavian countries (with the exception of Swedish women), as well as France, tend to have higher childbearing ideals and desires than those prevailing at EU level. The same can be said for Greece, Cyprus and Ireland.

### 2.2. ACTUAL FERTILITY COMPARED TO IDEAL FERTILITY

Eurobarometer data confirm that the actual fertility of Europeans is lower than their ideal fertility. The mean effective family size at EU level is around 1.5 children; therefore, the difference between the actual and the ideal number of children Europeans have is around 0.7 children per person. This difference is lower for the oldest cohorts, and higher for younger ones, who are not yet in completed fertility.

The actual average number of children is higher in Scandinavian countries, France, United Kingdom, Ireland and Portugal (ranging from 1.6 to 1.9 children), and lower in the Mediterranean countries (Spain, Greece and Italy) and Germany (at 1.3 children in each of the latter three and 1.4 in Spain).

When comparing fertility desires and the actual number of children among women with completed fertility (aged 40-64), most Europeans (56%) said they had achieved the fertility targets they had envisaged for themselves when they were around 20 years old, and almost a third stated



they had not had all the children they originally wanted when they were at the age of about 20. Only 13% reported actual births being higher than the desired target at 20. Turkey is the only country surveyed where the latter group includes the majority of the population (51%).

Spain, Greece and Italy (together with Denmark and Luxembourg) are the countries with the lowest proportion of women aged 40-64 who answered stating they had had all the children they wanted when they were about 20 (roughly 45% in each country, and 39% in Greece), and the highest percentage of respondents who have not reached their fertility targets (43% in Greece).

The Eurobarometer also gathers data on the relationship between fertility fulfilment and educational category: women with low education are more likely to have “too many” children, and this proportion increases as data move from the EU-15 (16%) to the 10 new Member States (22%) and the 3 former candidate countries (Bulgaria, Romania and Turkey: 38%). However, the proportion of highly educated women throughout the EU declaring that they had “too few” children is similar: around 41%.

Since childbearing intentions are experienced throughout an individual’s life cycle, the proportion of respondents replying different options considerably varies across birth cohorts. One third of young respondents (between 25 and 39) consider themselves satisfied with the amount of children they currently have, one third has not yet met its fertility desires. On the other hand, one fifth of respondents still plan to have babies. In the older age groups (40-54) people with future fertility intentions become a marginal category and those who have achieved their childbearing desires, or who have more children than they wanted, account for around 45% and 14% of respondents, respectively.

### 2.3. PLANNED CHILDREN

At the time of the interview, more than 37% of all Europeans planned to have children. The respective mean planned family size for women aged between 18 and 39 was just under 1 child (0.93 for EU-15 and 0.94 for the 10 new Member States). As expected, fertility intentions vary considerably across cohorts. However, the average number of future children depends greatly on current family size. While for people with no children figures are as high as 1.6 children, for individuals who currently have 3 or more children, figures only reach 0.2.

Austrian and German men and women are the only ones whose planned family size is always – at all ages – below the EU average. Moreover, these two countries also have the highest proportion of people who do not have children and do not plan to have them in the future (around 40%). Greece, with only 6%, and Spain, France, Italy and Portugal, with 15% are at the opposite end of the spectrum.

### 2.4. TOTAL FERTILITY LEVELS DEDUCED FROM EUROBAROMETER DATA

The questions on the present number of children (“Have you had any children? If yes, how many?”) and planned fertility (“How many children do you still plan to have?”) make it possible to calculate a proxy on the total fertility rate by adding the average number of children declared by women aged 18-39 in both questions. The resulting figures can be seen in [Table 1](#) (third column).

France, United Kingdom, Turkey, Ireland, Denmark and Finland have the highest number of present + planned children, with averages between 2.1 and 2.3 children per woman aged 18-39. At the lower end of the scale we have Bulgaria, Romania, Malta, Italy, Lithuania, Germany and Austria with 1.6 children per woman.

In the last section of this paper, the possible relationship between fertility and family responsibilities will be verified. These three indicators (present number of children, planned number of children and total number of children), calculated from the answers given by women aged 18-39, will be crossed with those given to the question on housework and childcare sharing.

TABLE 1. Present and planned number of children among women aged 18-39

	<i>Average number of children</i>		
	<i>Present</i>	<i>Planned</i>	<i>Present + planned</i>
France	1.01	1.24	2.25
United Kingdom	1.61	0.62	2.23
Turkey	1.34	0.87	2.21
Ireland	1.01	1.12	2.13
Cyprus	1.15	0.98	2.13
Denmark	1.00	1.14	2.14
Finland	1.14	0.92	2.06
Hungary	1.01	1.00	2.01
Belgium	1.08	0.91	1.99
Sweden	1.03	0.93	1.96
Greece	0.76	1.18	1.94
Poland	0.92	0.96	1.88
Luxembourg	1.09	0.79	1.88
Portugal	0.89	0.99	1.88
Slovakia	0.84	0.97	1.81
Latvia	0.97	0.83	1.80
Netherlands	0.93	0.86	1.79
Estonia	0.62	1.15	1.77
Czech Republic	0.93	0.83	1.76
Slovenia	0.72	0.97	1.69
Spain	0.56	1.12	1.68
Malta	0.59	1.01	1.60
Bulgaria	1.01	0.56	1.57
Romania	0.83	0.69	1.52
Germany	0.85	0.67	1.52
Italy	0.46	1.05	1.51
Lithuania	0.98	0.50	1.48
Austria	0.89	0.54	1.47
EU-15	0.91	0.93	1.84
New Member States	0.90	0.94	1.84
Former candidate countries	1.23	0.82	2.05

SOURCE: Standard Eurobarometer 56.2 and CC Eurobarometer 2002.1.

### 3. Sharing of family responsibilities between women and men

In 2003, Standard Eurobarometers 59.0 and 60.3, and the former candidate country EB 2003.5 were launched. They included a series of questions on how housework and childcare were divided between men and women, and on the time devoted by both sexes to these activities. The main findings, highlighted in the EB reports (Cuyvers *et al.*, 2003; Breedvel, 2004; Gallup Hungary, 2004), are summarised in the following paragraphs.

#### 3.1. REMAINING TRADITIONALISM CONCERNING GENDER ROLES ACROSS THE EU

Over 70% of respondents agree that childcare and household tasks should be shared on equal terms, and that women should have a paid job. However, percentages drop substantially for a number of countries when the issue is whether men and women should work the same number of hours. For instance, only one in three respondents in the Netherlands would agree to this. Similarly, in all countries most respondents think that “it is more natural for mothers than fathers to raise children”. Results for both questions indicate that in most EU-15 countries, gender ideology has not changed a great deal.

#### 3.2. SHARING CHILDCARE: IN THEORY, HIGH EQUALITY ...

Most Europeans believe childcare should be provided by both partners. But some countries think “it should be more shared” than others. In general, the new Member States must, in this respect, be viewed as being placed at the lower end of the scale.

Within the EU-15, Sweden, Denmark and Finland have the highest equality standard whereas Austria, Luxembourg, Belgium and Germany have the lowest acceptance of the idea of sharing. Mediterranean countries occupy the middle positions ([Table 2](#)).

TABLE 2. Proportions of childcare tasks to be carried out by mother / father / both (%)

	<i>Proportion of tasks to be done by both parents, by mother or by father</i>					
	<i>According to men's view (n = 7496)</i>			<i>According to women's view (n = 8662)</i>		
	<i>Both</i>	<i>Mother</i>	<i>Father</i>	<i>Both</i>	<i>Mother</i>	<i>Father</i>
Austria	0.67	0.27	0.06	0.71	0.25	0.04
Belgium	0.72	0.22	0.06	0.72	0.23	0.05
Denmark	0.91	0.07	0.02	0.93	0.06	0.01
Spain	0.82	0.14	0.04	0.84	0.12	0.04
France	0.76	0.19	0.05	0.80	0.17	0.03
Germany	0.69	0.25	0.06	0.73	0.23	0.04
Greece	0.76	0.20	0.04	0.83	0.14	0.03
Italy	0.73	0.20	0.07	0.78	0.18	0.04
Ireland	0.77	0.20	0.04	0.83	0.15	0.03
Luxembourg	0.78	0.18	0.04	0.79	0.18	0.03
Netherlands	0.85	0.13	0.03	0.85	0.13	0.02



*Proportion of tasks to be done by both parents, by mother or by father*

	According to men's view (n = 7496)			According to women's view (n = 8662)		
	Both	Mother	Father	Both	Mother	Father
Portugal	0.75	0.19	0.06	0.81	0.14	0.05
Sweden	0.93	0.05	0.02	0.95	0.04	0.01
Finland	0.87	0.09	0.04	0.90	0.08	0.03
United Kingdom	0.83	0.13	0.04	0.83	0.15	0.02
EU-15	0.76	0.19	0.05	0.80	0.17	0.04

SOURCE: Standard Eurobarometer 59.0.

As [Table 2](#) shows, both men and women of almost all countries are nearly equally in favour of a well-balanced division of childcare. Scores range from 70% in the more conservative countries to 95% in the more “modern” ones. Interestingly, within each country, the scores for men and women do not differ more than 5%. Ireland, Portugal and Germany are the counties where men and women disagree most, while Denmark and Sweden are the countries where they agree most.

Differences by type of childcare task performed can also be observed. For instance, 90% consider that disciplining children can be equally done by mothers and fathers, but only 65% think that changing nappies should be done by both parents. The remaining 35% think that this should be done by mothers.

### 3.3. ... HOWEVER, ACTUAL DIVISION OF TASKS IS STILL VERY UNEQUAL ...

Women are responsible for most household tasks and virtually all childcare. In fact, men attribute themselves with a larger share of household and childcare tasks than women say their male partners do (see [Table 3](#)). On average, the percentage of housework which men claim to do is twice that which women rated them as actually performing. As for childcare, on average 10% of men claim to be responsible for it, while women only give them credit in 5% of cases. For household tasks these percentages range from less than 5% for ironing and cleaning (men claiming 9%) to an average of 15% for dishwashing and shopping (men claiming 25%).

Men also give women less credit than women give themselves. With regard to “playing with the children” – the only childcare task for which men score over 10 percent in women’s eyes – men attribute the main responsibility to their partner in 49% of cases, whereas women state that they are mainly responsible for it in 67% of cases. In the case of ironing, the figures are 70% and 90%, respectively.

### 3.4. ... WITH WOMEN SPENDING MORE TIME ON HOUSEWORK AND CHILDCARE THAN MEN ...

According to Eurobarometer data on time use, working Europeans spend around 59 hours per week on paid work, unpaid work and education. The amount of time that working citizens devote to unpaid work is about the same in the EU-15 countries and in the 10 new Member States. Gender differences are important, however: while men spend more time on paid work, women spend more time on household tasks and care. On average, EU-15 working men spend 13.3 hours per week on these tasks, while women spend 22.6 hours.

As comparative data for Greece (26.8 hours), Italy (25.3), Spain (23.8) and the figures for Sweden (18.3), Finland (18.9) or Denmark (22.4) confirm, geographical differences are also im-

portant. As these data show, women in southern European Member States spend more time than women in Nordic countries on these activities. Relevant differences can also be observed among new Member States.

TABLE 3. Division of tasks (%) between men and women, according to respective responses

	WOMEN		MEN	
	<i>Me</i>	<i>Partner</i>	<i>Me</i>	<i>Partner</i>
<i>Household tasks</i>				
Doing the ironing	90	4	6	70
Cleaning the house	90	4	9	81
Preparing dinner	87	9	16	77
Preparing breakfast	80	14	28	62
Doing the dishes	76	13	20	65
Doing the shopping	75	19	28	62
Paying bills/paperwork	46	48	62	30
Gardening, painting	22	65	74	13
<i>Childcare tasks</i>				
Buying clothes for children	88	4	6	82
Dressing children	87	3	6	78
Feeding children	86	4	7	78
Changing nappies	85	3	6	79
Bathing children	83	6	10	75
Putting children to bed	81	7	12	73
To and from school/childcare	80	7	17	67
Playing with children	67	18	31	49

SOURCE: Standard Eurobarometer 59.0.

NOTE: Results do not add to 100 because the answers 'both' or 'other people' have not been included.

At family level, working men spend more time than women on paid work (for EU-15 an average difference of 13.3 hours per week) and working women spend more time on unpaid work (+13 hours). This is true for most countries, the differences being larger in southern European countries (and in West Germany) than in Nordic ones (as well as France and Portugal for paid work). Differences in time spent on housework and care are larger in households with children (-17.0 hours in those with children and -9.3 hours in the remainder).

### 3.5. ... ALTHOUGH MOST PEOPLE ARE SATISFIED WITH CURRENT TASK SHARING ...

Just over one third of women and half of men are so satisfied with the division of household and childcare tasks that they cannot mention one task they are dissatisfied with. In Denmark, Greece

and the Netherlands these percentages even rose to over 60%. Men and women are more dissatisfied with the division of housework than with the division of childcare. The level of dissatisfaction is particularly high for cleaning the house (one in three women and one in six men). All other household tasks show lower scores, below 20% for women and below 12% for men. Dissatisfaction with childcare tasks is on average 5% lower.

#### 4. Relationship between low fertility and family task sharing: some preliminary results

##### 4.1. DATA AND METHODOLOGY

In this final section of the paper, the initial hypothesis (uneven domestic task-sharing is correlated with lower fertility, or contrariwise, a more balanced share of housework and childcare tasks between men and women should be linked to higher fertility) will be tested through correlation and multiple regression analysis. The data used come from the only two Eurobarometers addressing both issues: EB 59.0 for the EU-15 Member States and EB 2002.1 for the 13 former candidate countries. The surveys were conducted in two successive years (2002 and 2003), so the results are almost simultaneous. Moreover, outcomes are fully comparable as the questions used have practically the same wording. The only important difference between both sets of data is that EB 59.0 includes three additional questions on actual task sharing and related values, which CCEB 2002.1 – conducted prior thereto – does not.

A host of fertility and domestic task sharing variables have been built from these questions. In order to find any significant link between pairs of variables, these sets of variables have been crossed using a correlation analysis. As the relationship between the burden of housework and the desire for additional fertility is not relevant for older women whose reproductive period has ended, only data corresponding to women aged 18-39 have been used.

As explained earlier, three variables have been formed on this issue (“Have you had any children? If yes, how many?” linked to current fertility; “How many children do you still plan to have?” on planned fertility, and an addition of present + planned fertility) to analyse total fertility.

As for domestic task sharing, old candidate country questionnaires only include one question which does not exactly refer to actual task sharing but instead to what the respondent considers the ideal situation should be. Of a list of 11 tasks, the respondent marks the number of childcare tasks he or she thinks should be carried out by both parents. Responses indicating “mainly by the father” or “mainly by the mother” are considered proxies of an uneven distribution of tasks.

EB 59.0 also includes an additional question on the value of paid and unpaid work. It consists of a series of four statements on how each of the latter should be distributed between men and women. The most “egalitarian” responses have been used to build an indicator on positive values of gender roles.

This Eurobarometer also has two questions on the actual distribution of housework and childcare tasks: “Let me ask you two questions on how tasks are divided in your household. Could you indicate for a number of activities who is mainly responsible for (6 housework tasks) (8 childcare tasks)?” The two variables have been formed by adding women’s responses: “my partner”, the other two possible answers being “me” or “someone else”. Only answers given by women who have at least one child have been taken into account.

##### 4.2. RESULTS FOR EU-15 AND FORMER CANDIDATE COUNTRIES

Correlation analysis results ([Table 4](#) for EU-15 and [Table 5](#) for former candidate countries) show that:

- a) Both the EU-15 and the former candidate countries show a significant correlation between fertility levels and the ideal distribution of childcare tasks (negative correlation with present fertility, positive with planned fertility);
- b) In the EU-15, there is a significant correlation between fertility and the actual distribution of housework tasks (again, negative with present fertility, positive with planned fertility);
- c) In the EU-15, there is no correlation between fertility and the actual share of childcare tasks;

TABLE 4. Correlation between fertility indicators, and housework/childcare tasks for the EU-15

		<i>Present children</i>	<i>Future children</i>	<i>Total children</i>	<i>Childcare sharing – ideal</i>	<i>Values</i>	<i>Housework sharing – actual</i>	<i>Childcare sharing – actual</i>
Present children	r (Pearson)	1	-0.517**	0.596**	-0.142**	-0.130**	-0.160**	0.018
	N	3722	2711	2711	3722	3348	1983	1868
Planned children	r (Pearson)	-0.517**	1	0.379**	0.149**	0.036	0.118**	0.035
	N	2711	2712	2711	2712	2457	1698	1627
Total children	r (Pearson)	0.596**	0.379**	1	-0.013	-0.075**	-0.053*	0.031
	N	2711	2711	2711	2711	2456	1698	1627
Childcare sharing – ideal	r (Pearson)	-0.142**	0.149**	-0.013	1	0.232**	0.147**	0.098**
	N	3722	2712	2711	3726	3349	1983	1868
Values	r (Pearson)	-0.130**	0.036	-0.075**	0.232**	1	0.171**	0.112**
	N	3348	2457	2456	3349	3349	1778	1658
Housework sharing – actual	r (Pearson)	-0.160**	0.118**	-0.053*	0.147**	0.171**	1	0.408**
	N	1983	1698	1698	1983	1778	1983	1492
Childcare sharing – actual	r (Pearson)	0.018	0.035	0.031	0.098**	0.112**	0.408**	1
	N	1868	1627	1627	1868	1658	1492	1868

\* Significant correlation at the level 0.05 (bilateral).

\*\* Significant correlation at the level 0.01 (bilateral).

SOURCE: Standard Eurobarometer 59.0.

The results show that planned fertility and the distribution of housework tasks are directly correlated: the higher the number of future children wanted, the more balanced the distribution of this type of task. Therefore, the starting hypothesis would be corroborated. However, the current number of children and ideal task sharing are inversely correlated: the higher the number of presently declared children the less balanced the distribution of tasks is. The formerly observed patterns – task sharing and current and future fertility being inversely correlated – are due to the strong negative correlation between the present and planned number of children. Birth timings, together with the age of the women surveyed, account for this negative correlation. And timing is probably influenced by the mother's educational or socioeconomic level: the higher the income or education level, the greater the delay before births and the more balanced the distribution of tasks. This new hypothesis can be tested in the EB for former candidate countries

by means of a question asking the mother's age on the birth of the first child: in effect, the analysis gives a positive significant correlation (0.140\*\*) between age at first birth and childcare task distribution.

TABLE 5. Correlation between fertility indicators, and housework/childcare tasks for the 13 former candidate countries

		<i>Present children</i>	<i>Future children</i>	<i>Total children</i>	<i>Age at first child</i>	<i>Childcare sharing – ideal</i>
Present children	r (Pearson)	1	-0.601**	0.577**	-0.235**	-0.162**
	N	3326	2892	2892	1890	3326
Planned children	r (Pearson)	-0.601**	1	0.306**	0.064**	0.069**
	N	2892	2909	2892	1761	2909
Total children	r (Pearson)	0.577**	0.306**	1	-0.195**	-0.146**
	N	2892	2892	2892	1760	2892
Age at first child	r (Pearson)	-0.235**	0.064**	-0.195**	1	0.140**
	N	1890	1761	1760	1891	1891
Childcare sharing – ideal	r (Pearson)	-0.162**	0.069**	-0.146**	0.140**	1
	N	3326	2909	2892	1891	3350

\* Significant correlation at the level 0.05 (bilateral).

\*\* Significant correlation at the level 0.01 (bilateral).

SOURCE: Candidate Country Eurobarometer 2002.1.

The correlation analysis results for the 15 old Member States and the other 13 countries are very similar. The only relevant difference between both groups of countries is the correlation between ideal childcare task division and total fertility. Table 4 shows that for EU-15 there is no significant, consistent correlation between the total number of children (present + planned) and the ideal distribution of tasks. However, for former candidate countries this correlation does exist and is negative (-0.146\*\*) (Table 5).

The negative correlation found for the former candidate countries runs counter to the original hypothesis. In this case, a more egalitarian division of tasks is linked to lower total fertility levels. However, an in-depth analysis of the relationship between the different variables helps to explain the differences between the EU-15 and the former candidate countries, and highlights the importance of socioeconomic factors such as women's educational level or income when it comes to understand the relationship between fertility and task sharing.

Education has been taken as an example. All Eurobarometers include a question on this issue: "How old were you when you finished your full-time education?" The four alternative answers – up to 15 years, 16-19 years, 20+ years and still studying – would afford a proxy on individual educational levels. Average values of diverse variables according to women's educational level for the 15 old Member States and the 13 former candidate countries can be observed in Tables 6 and 7. Regardless of the country, the higher the level of female education, the more egalitarian the values

on the division of childcare tasks are. However, it should also be noted that in the former candidate countries (see [Table 7](#), final column) differences due to education seem to be more pronounced than in the EU-15 countries.

TABLE 6. Mean values and standard deviations for the variables used in the EU-15

<i>Age finishing full-time education</i>		<i>Present children</i>	<i>Planned children</i>	<i>Total children</i>	<i>Childcare sharing – ideal</i>	<i>Values</i>	<i>Housework sharing – actual</i>	<i>Childcare sharing – actual</i>
Up to 15 years	Mean	1.480	0.426	2.056	8.414	3.056	0.419	0.763
	S.D.	1.21	0.76	1.12	3.24	0.74	0.81	1.48
	N	350	284	284	350	320	248	262
16-19 years	Mean	1.243	0.582	2.012	8.818	3.108	0.600	0.728
	S.D.	1.25	0.87	1.11	3.06	0.82	0.95	1.37
	N	1643	1269	1268	1644	1476	990	1039
20+ years	Mean	1.031	0.829	2.023	9.690	3.263	0.882	1.054
	S.D.	1.13	1.05	1.17	2.41	0.80	1.05	1.54
	N	935	712	712	936	843	626	519
Still studying	Mean	0.103	1.783	1.949	9.778	3.369	1.092	0.708
	S.D.	0.46	1.15	1.11	2.19	0.65	1.21	1.15
	N	794	447	447	796	710	119	48
Total	Mean	0.969	0.829	2.009	9.204	3.197	0.696	0.822
	S.D.	1.19	1.06	1.13	2.80	0.78	1.00	1.44
	N	3722	2712	2711	3726	3349	1983	1868

SOURCE: Standard Eurobarometer 59.0.

The actual division of housework between men and women in EU-15 countries also follows a similar trend ([Table 6](#), penultimate column), because the division of tasks gradually becomes more balanced as years in education increase (although the majority of tasks are performed by women in all cases). Results concerning the actual division of childcare tasks ([Table 6](#), final column) are somewhat different: regardless of education level, participation of men in these activities is very low. The contribution of men only seems to be slightly higher in couples with the most educated women. For the other three education categories, male participation in childcare is very low (men are responsible for only 0.7 of 8 activities).

[Table 6](#) also shows that the current number of children and female level of education are inversely related, whereas the planned number of future children and education are directly related due to delayed birth timing. Therefore, the resulting total number of children across female education groups is similar (around 2.0 children).

As shown in [Table 7](#), results for the 13 former candidate countries are somewhat different, particularly concerning the current number of children. Here, differences across educational groups are very pronounced. Moreover, even though women with a lower education level have more children than those in the EU-15 countries, in the other three groups, fertility is lower. These large differences in the current number of children by education level also determine total fertility rate variations: almost 2.5 children for poorly educated women compared to 1.8 children for highly educated woman. This would also explain why total fertility and the division of childcare tasks are negatively correlated.



TABLE 7. Mean values and standard deviations for the variables used in the 13 former candidate countries

<i>Age finishing full-time education</i>		<i>Present children</i>	<i>Planned children</i>	<i>Total children</i>	<i>Childcare sharing – ideal</i>
Up to 15 years	Mean	1.60	0.74	2.44	6.83
	S.D.	1.33	1.10	1.35	3.11
	N	1183	1100	1098	1185
16-19 years	Mean	1.17	0.83	2.05	8.49
	S.D.	1.09	1.02	0.95	2.63
	N	1099	1014	1010	1106
20+ years	Mean	0.77	0.99	1.78	9.21
	S.D.	0.93	0.97	0.88	2.39
	N	475	426	425	476
Still studying	Mean	0.03	1.74	1.80	8.78
	S.D.	0.20	0.88	0.86	2.63
	N	681	548	532	705
Total	Mean	1.03	0.98	2.11	8.08
	S.D.	1.20	1.08	1.12	2.92
	N	3438	3088	3065	3471

SOURCE: Candidate Countries Eurobarometer 2002.1.

Therefore, in order to analyse the possible relationship between fertility and the way domestic work is divided, the effect of independent socioeconomic variables like education or income level, or demographic variables like women's age, needs to be isolated. Four multiple regression models have been implemented, one for the former candidate countries and the other three for the EU-15 Member States. Three different models of task sharing between men and women have been defined: ideal childcare task division (Model 1), actual childcare task division (Model 2) and actual housework division (Model 3). In these multiple regression models, the current number of children is the dependent variable, and the independent explanatory factors are: task sharing, mothers' age, planned fertility, education level and income level. The main results are shown in [Table 8](#):

- 1) For both the EU-15 and the former candidate countries, the relationship between current fertility levels and the ideal distribution of childcare tasks is significant, but negative.
- 2) Even though this relationship is very weak throughout Europe, in the former candidate countries ( $-0.114$ ) it is stronger than in the EU-15 (Model 1:  $-0.046$ );
- 3) Independent variables other than ideal childcare task division have a stronger effect on fertility. This is the case with mothers' age (the only factor which is obviously positively related to current fertility) or planned fertility and education. Income level, however, is not significant.
- 4) In the EU-15, when the ideal childcare task division (Model 1) is replaced by the actual one (Model 2), the influence of this variable on fertility is no longer significant and education is also no longer an explanatory factor. In Model 3, the impact of actual division of housework on present fertility is significant, albeit low and, again, negative.

Lastly, when the actual number of children born is replaced by planned fertility as the dependent variable, only the ideal division of childcare is significant and positive at 0.05, and this is merely so for EU-15 countries. None of the other domestic work sharing variables are significant for either the EU-15 or the former candidate countries.

TABLE 8. Multiple regression estimates (standard coefficients) of demographic and socioeconomic factors conditioning current fertility levels

	<i>CC-13</i>	<i>EU-15 (Model 1)</i>	<i>EU-15 (Model 2)</i>	<i>EU-15 (Model 3)</i>
Childcare sharing – ideal	-0.114**	-0.046**		
Childcare sharing – actual			-0.006	
Housework sharing – actual				-0.022**
Age	0.497**	0.305**	0.148**	0.235**
Planned children	-0.241**	-0.313**	-0.237**	-0.401**
Education (ref. up to 15 y.)				
Still studying	-0.142**	-0.157**	-0.012	-0.102**
16-19 years	-0.206**	-0.133*	-0.120	-0.079
20+ years	-0.246**	-0.203**	-0.154	-0.128
Income (ref. low income)				
Very low income		-0.112**	-0.083	-0.040
Intermed. income	-0.014	-0.037	-0.035	-0.069
High income	-0.044	-0.020	0.001	-0.051

\* Significant correlation at the level 0.05 (bilateral).

\*\* Significant correlation at the level 0.01 (bilateral).

SOURCE: Standard Eurobarometer 59.0 and CC Eurobarometer 2002.1.

#### 4.3. RESULTS AT NATIONAL LEVEL

The foregoing analysis, when carried out on an individual country scale, shows that there is some kind of relationship between the division of tasks, and ideal and actual fertility, but this link is different depending on the country. In Turkey, Cyprus and Ireland, where tasks are traditionally divided, both desired and actual fertility are relatively high. In other Mediterranean countries like Spain, Greece or Italy, family task sharing is less traditional (compared to the above group) and, although they have a relatively high desired level of fertility, the actual level is low. In Germany and Austria task sharing patterns are relatively traditional. Ideal and actual fertility are shown to be at the lowest levels in these countries. Lastly, Scandinavian countries, France and United Kingdom have the most egalitarian division of tasks and, similarly, ideal fertility levels and actual levels are relatively high.

In general, the correlation between task distribution, and present and planned fertility is weaker for each particular country than for the two overall groups of countries (EU-15 and former candidate countries). In some cases the correlation does not even exist. This is mainly due to the size of some national samples. Therefore, some of the more complex analytical tools, such as the multiple regression analysis, are difficult to implement. But when the correlation does appear, it is generally in the same direction as that which has been observed for the two groups of countries. In conclusion, on this issue, the surveys can only offer a general description of groups of countries with similar characteristics.

## 5. Conclusions

The results obtained from the Eurobarometer are contrary to those initially expected. Across the EU, achieved fertility is negatively correlated to a more egalitarian division of domestic work – more specifically, to ideal childcare and actual housework sharing, but not to actual childcare sharing. Though future planned fertility is positively correlated to a more egalitarian ideal childcare task sharing, the relationship is weak. Interestingly, it is less significant than the link between fertility and other demographical and socioeconomic factors such as women's education level, which bears a strong negative correlation to actual fertility. The evidence found therefore indicates that the influence of a more balanced division of domestic tasks on fertility rates is extremely low. Nonetheless, this result does not contradict the fact that European countries have reached a certain degree of gender equality and this is somewhat related – in a more complex way than previously stated in the initial hypothesis – to the different fertility levels. Again, education seems to be a key factor in explaining this complex relationship. Evidence for Germany (Kreyenfeld, 2002) and Spain (González and Jurado-Guerrero, 2006) show that more educated women are far more likely to remain childless. As the female education level is positively related to a more balanced ideal and actual domestic task sharing, this may indirectly explain why, at EU level, our initial hypothesis has been rejected.

Even so, as explained in the introduction, evidence from other more advanced mother-friendly policy countries, such as Scandinavian ones, shows a positive correlation (Brodmann *et al.*, 2007) which compared to the Danish and Spanish cases gives a plausible explanation for these differences: “Danish women are more likely to have a second child because welfare state support makes reconciliation of motherhood and careers easier. [...] Danish career women are additionally able to reduce the opportunity costs of motherhood via enhanced fatherly childcare due to bargaining between spouses” (Brodmann *et al.*, 2007: 599). At the other end of the scale, in Spain, where traditional gender norms still prevail, there is less scope for pressing for a more egalitarian gender distribution of domestic tasks. Therefore, “Spanish women face far more severe trade-offs. [...] Women with strong career ambitions are more likely to renounce motherhood altogether, but those that do become mothers appear to adhere more closely to conventional norms” (Brodmann *et al.*, 2007: 608). Nevertheless, this may also be due to the fact that Spanish women who become mothers have no other option than to increase their domestic workload and to adapt their childcare sharing ideals to the harsh reality. In any event, this could also be applied to other southern European countries, some central European ones – such as Germany or Austria – and practically all new Member States (where, as observed, the negative correlation is stronger than in the former EU-15 countries). The fact that most EU countries and Turkey show this uneven gender task distribution may explain the results obtained for the European Union as a whole using Eurobarometer data.

Unfortunately, in our research, differences at national level do not appear to be relevant. The correlation between task distribution and fertility is weaker for each individual country than for the two overall groups of countries analysed and, in some countries, the relationship does not even exist. Yet, this could be mainly due to the small size of the national samples used in Eurobarometers. Accordingly, it is not possible to analyse the specific causes behind these links at national level and reach deeper conclusions using this dataset. In order to do that, a more complete data source, specifically designed to provide larger samples at national level – with longitudinal / panel data, if possible – would be required.

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