

**THE UNEVEN DISTRIBUTION OF FAMILY
RESPONSIBILITIES BETWEEN WOMEN AND MEN,
AND ITS LINK WITH LOW FERTILITY: SOME
EVIDENCE FOR EUROPEAN UNION COUNTRIES
FROM EUROBAROMETER DATA**

Fernando Gil Alonso

253

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Abstrat:

Eurobarometer is a survey done twice a year by the European Union to know the opinion of Europeans. This survey covering all the EU Member States and the candidate countries has a very significant sample at European level. Each wave includes a series of thematic questionnaires covering diverse issues of interest for the EU policy-makers. For instance, the Standard Eurobarometer number 56.2 (2001), included a series of questions on actual and ideal fertility for EU-15. These questions were repeated the following year in the Candidate Countries: therefore results for 28 countries in total are available. Several recent Eurobarometers have also included questions on the distribution of family responsibilities between men and women. This research analyses all these results to show if there is some relation between low fertility and tasks sharing, as women are increasing their participation in the labour market but continue being in charge of most of the reproductive tasks.

Keywords: low fertility, European Union, Eurobarometer, survey, domestic work.

Resum:

L'Eurobaròmetre és una enquesta realitzada per la Unió Europea dues vegades a l'any, que té com a finalitat conèixer l'opinió dels ciutadans europeus. Aquesta enquesta, que cobreix tant els estats membres de la UE com els països candidats a l'adhesió, té una mostra molt àmplia a escala europea. Cada enquesta inclou una sèrie de qüestionaris temàtics que cobreixen diversos temes d'interès pels polítics de la UE. Per exemple, l'Eurobaròmetre Estàndard 56.2 (2001) inclou un conjunt de preguntes sobre fecunditat ideal i efectiva a la UE-15. Aquestes preguntes es varen repetir al 2002 pels països candidats: com a conseqüència, es disposa de resultats per 25 països. Alguns Eurobaròmetres recents inclouen, a més a més, preguntes sobre la distribució de les responsabilitats familiars entre homes i dones. Aquesta investigació analitza aquests resultats per demostrar si existeix alguna relació entre baixa fecunditat i repartiment de tasques en un context en el que les dones estan incrementant la seva participació en el mercat de treball, però continuen encarregant-se de la majoria de les tasques reproductives.

Paraules clau: baixa fecunditat, Unió Europea, Eurobaròmetre, enquestes, divisió de tasques domèstiques.

Resumen:

El Eurobarómetro es una encuesta realizada por la Unión Europea dos veces al año que tiene como finalidad conocer la opinión de los ciudadanos europeos. Esta encuesta, que cubre tanto los Estados Miembros de la UE como los países candidatos a la adhesión, tiene una muestra muy amplia a escala europea. Cada oleada incluye una serie de cuestionarios temáticos que cubren diversos temas de interés para los políticos de la UE. Por ejemplo, el Eurobarómetro Estándar 56.2 (2001) incluyó una serie de preguntas sobre fecundidad ideal y efectiva en la UE-15. Estas preguntas se repitieron en 2002 para los países candidatos: en consecuencia, se dispone de resultados para 25 países. Algunos Eurobarómetros recientes han incluido además preguntas sobre la distribución de las responsabilidades familiares entre hombres y mujeres. Esta investigación analiza estos resultados para demostrar si existe algún tipo de relación entre baja fecundidad y reparto de tareas en un contexto en el que las mujeres están incrementando su participación en el mercado de trabajo pero continúan encargándose de la mayoría de las tareas reproductivas.

Palabras clave: baja fecundidad, Unió Europea, Eurobaròmetre, encuesta, divisió de tareas domèstiques.

INDEX

1. Introduction.....	1
2. Eurobarometer data on fertility in the E.U.....	4
2.1. Fertility ideals and desires.....	4
2.2. Actual fertility compared to the ideal one.....	5
2.3. Planned children.....	6
2.4. Total fertility levels deducted from Eurobatometer data.....	6
3. Sharing family responsibilities among women and men.....	8
3.1. Remaining traditionalism concerning gender roles across the EU.....	8
3.2. Sharing childcare tasks: high equality in theory....	8
3.3. ...but actual division of tasks is still very unequal.....	10
3.4. ...with women spending more time in housework and childcaring than men....	11
3.5. ... although most people are satisfied with current tasks sharing.....	11
4. Relationship`between low fertility and sharing family responsibilities: some preliminary results.....	12
4.1. Data and methodology.....	12
4.2. Results at EU-15 and candidate countries level.....	13
4.3. Results and national level.....	19
5. Bibliografia.....	20

TABLE INDEX

1. Present and planned number of children among women aged 18-39.....	7
2. Proportions of childcare tasks to be carried out by mother / father / both.....	9
3. Division of tasks between men and women, according to respective responses...	10
4. Correlation between fertility indicators and housework and childcare tasks for the Eu-15 (Eurobarometer 59.0).....	14
5. Correlation between fertility indicators and housework and childcare tasks for the 13 former candidate countries (CC Eurobarometer 2001.1).....	14
6. Means and Standard deviations of the variables used for the EU-15 (Eurobarometer 59.0).....	16
7. Means and Standard deviations of the variables used for the 13 former candidate countries (CC Eurobarometer 2001.1).....	17
8. Multiple regression estimates of standard coefficients of demographic and socio-economic factors of current fertility levels.....	18

1. INTRODUCTION¹

The aim of this paper is to analyse the available data from Eurobarometer surveys to show whether there is some relationship or not between very low fertility and uneven tasks sharing between men and women, as women are increasing their participation in the labour market but continue being in charge –even in the most advanced countries- of most of the reproductive tasks, including childcare. Limiting fertility could be a response to this situation that puts an additional burden on female’s shoulders.

The starting point of this research is the hypothesis that the very low fertility levels existing in advanced countries with a traditional division of gender roles such as southern and German-speaking European countries or some Asiatic countries like Japan, Hong Kong, Singapore or South Korea could be influenced by the fact that female incorporation to the labour market has not been accompanied by a more balanced share of reproductive tasks –including child and old people caring activities and housework (Tsuya and Mason, 1995; Tsuya and Bumpass, 2004; Caldwell and Schindlmayr, 2003). This possible explanation can be placed in the context of what P. McDonald (1997) calls the “incoherence between the levels of gender equity applying in different social institutions”. That means that the increasing gender equality in some institutional domains which deal with people as individuals, like education and the labour market, has not been accompanied by changes at the same pace in other institutions which deal with people as members of families, including the family itself and more specifically the domestic role division between men and women. Women therefore have a double burden (productive and reproductive work) that would condition some of them to reduce the number of children –or even, in more exceptional cases, to avoid having children (McDonald, 2000). In the opposite direction, greater male implication in caring activities could have a positive effect on fertility, as some evidence from Germany shows (Cooke, 2004).

¹ I would like to express my gratitude to Eva Jiménez, Joan Garcia and John MacInnes for their contribution to this paper.

Comparative analysis across countries is needed to validate this hypothesis. However, multi-national surveys which cover fertility and task sharing issues are not numerous. In this context, the European Commission's Eurobarometer Public Opinion survey can be of help in analysing this matter.

The Eurobarometer (EB) is a survey carried out twice a year by the European Commission to know the opinion of EU citizens on the Community institutions and policies as well as on the general problems that affect to them. This survey, that covers the 25 EU Member States (as well as the 13 candidate countries until 2004)², consists of around 1000 interviews by country³ and offers, therefore, a very significant sample at European level. Each wave consists of a series of permanent questions (including basic socio-economic and demographic characteristics) plus a series of thematic questionnaires covering diverse issues of interest for the EU policy-makers.

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

- The Standard Eurobarometer 50.1 (1998) included a module on family issues with question on caring and housework sharing aspects;
- The Standard EB 56.2 (2001) included questions on actual and ideal fertility aspects: desire for children, family size ideals, number of children ever born, reasons for having or not having children;
- The Candidate Countries EB 2002.1 (2002) was a very big survey which included a selection of questions on social aspects (including fertility, task sharing and

² Until 2004, two different EB existed: the Standard Eurobarometer, created in 1973, which covered the 15 old Member States; and the Candidate Countries EB (first wave launched in 2001) which included the 13 Candidate countries, i.e. the 10 new Member States plus Romania, Bulgaria and Turkey. Currently both EBs have been unified and it now covers the 25 current Member States, but not the three candidate countries.

³ With the exception of Germany (1000 interviews for Western Germany, 1000 for the old GDR), United Kingdom (1300 with includes a sub-sample of 300 interviews in Northern Ireland), Luxembourg (600 interviews), Cyprus and Malta (500 interviews each).

caring aspects) previously asked in the Standard EB for the old EU Member States, with the aim to permit comparisons.

- The Standard EB 59.0 (2003) had a module with questions on fertility and children, as well as questions on housework and childcare tasks sharing between men and women.
- The Standard EB 60.3 (2003) included a questionnaire on time use aspects: the time devoted to family and house tasks were asked to both men and women;
- The same questions on time allocation were repeated in 2003 for the Candidate Countries in the 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 . The fact that data come from six different surveys and refer to two diverse groups of countries (15 old Member States and 13 Candidate Countries before the 2004 enlargement), together with the fact that not all the questions have been included (or have the same wording) in the questionnaires of both EU Member States and Candidate Countries, limits the depth of the analysis. However, data available should give some evidence about the link between fertility and the sharing of family responsibilities. This is the purpose of the following pages.

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

- Section 2 presents the more relevant data on actual and ideal fertility in the former European Union of 15 countries from EB 56.2, which is the most important wave devoted to this issue. The equivalent data for the 13 candidate countries come from the CCEB 2002.1.
- Section 3 focuses on the distribution of housework and childcaring activities between men and women: although the values regarding these issues can be analysed through the EB 50.1 (EU-15) and the CCEB 2002.1 (candidate countries), here I will study the actual sharing through the EB 59.0 and 60.3 (EU-15) and Candidate Countries EB 2003.5.

- Finally, section 4 analyses the possible relationship between fertility and the gendered distribution of reproductive tasks using the two EBs that include questions on both issues: the Eurobarometer 59.0 for the 15 old Member States, and the CCEB for the 10 new Member States and 3 candidate countries.

2. EUROBAROMETER DATA ON FERTILITY IN THE E.U.

The Eurobarometer 56.2 report, written by Maria Rita Testa (2002), analysing the result of the CCEB 2002.1 (Gallup Hungary, 2002) and the report published by the European Foundation for the Improvement of Living and Working Conditions (Fahey, T., Spéder, Z, 2004) on the basis of both surveys, give a big amount of information on the Europeans' aspirations regarding fertility and their realisations. The main finding will be summarised in the following paragraphs.

2.1 Fertility ideals and desires

From Eurobarometer data it can be seen that the two-child norm is strongly predominant among Europeans' ideals on fertility: on average, 2.3 children is reported as the ideal for a family, while they would personally like to have 2.2 children. After "two children", the second most frequently mentioned option as an ideal family size is "three children", both generally and personally speaking. This two-child pattern still prevails in the childbearing desires of Europeans when they are asked about their fertility desires around the age of 20. Such fertility preferences tend to be higher in the older age classes, and are slightly higher among women as compared to men.

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

2.2 Actual fertility compared to the ideal one

The Eurobarometer data show that actual fertility declared by Europeans is lower than the ideal. The mean effective family size is around 1.5 children at the EU level, therefore the difference between the number of children Europeans actually have and the number they would like to have is around 0.7 children per person. This difference is lower for the individuals in the oldest cohorts, and higher for the younger ones that have not completed their fertility yet.

The actual average number of children, is higher in the 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 in Germany (1.3 children in each of them, 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 have achieved the fertility targets they had when they were around 20 years old, and almost a third stated they have not had all the children wanted at the age of around 20. Only 13% reported actual births being higher than the desired target at 20. Turkey (one of the three candidate countries) is the only surveyed country where the latter group includes the majority of the population (51%).

In the other end of the scale, Spain, Greece and Italy (together with Denmark and Luxembourg) are the countries with the lowest proportion of women aged 40-64 who answered they have all the children they wanted to have at around 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).

Eurobarometer data also shows the existing relationship between fertility fulfilment and educational category: women with low education are more likely to have “too many” children, and this proportion increases as we move from the EU-15 (16%) to the 10 new Member States (22%) and the 3 candidate countries (38%). Among

women with high education, the share of those declaring that they have had “too few” children is however similar: around 41%.

Since the childbearing intentions are carried out over the individual’s life cycle, the proportions of respondents with different options vary considerably across the birth cohorts. In the young age class, 25-39 years, one third considers themselves satisfied with their current fertility outcomes, one third has not met their fertility desires, while one fifth still plans to have babies. In the older age groups, people with future fertility intentions become a marginal percentage and those who have achieved their childbearing desires, or who have more children than they wanted, are, respectively, around 45% and 14% in the 40-54 age group.

2.3 Planned children

More than 37% of all Europeans planed to have children at the time of the interview. The corresponding mean planned family size for women aged 18-39 is almost of 1 child (0.93 for EU-15 and 0.94 for the 10 new Member States). Fertility intentions vary considerably across cohorts, as is expected. The average number of planned children is also very much dependent on the current family size, ranging between 1.6 children, for people with no child, and 0.2, for individuals currently having 3 or more children.

Austria and Germany are the only two countries where the planned fertility size is definitely lower than that of the EU in each age group, for both males and females. These two countries are also the ones with the highest proportion of people who do not have children and do not plan to have them in the future (around 40%). An opposite trend emerges in Greece, with only 6% , and Spain, France, Italy and Portugal, with 15%.

2.4 Total fertility levels deducted 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?") allows to calculate a proxy of the total fertility rate through the addition of the average number of children declared in both questions by women aged 18-39. The resulting figures at national level can be seen in Table 1 (third column).

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

	Average number of children		
	Present	Planned	Present + Planned
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
Candidate Countries	1.23	0.82	2.05

Source: Eurobarometer 54.2 and CC Eurobarometer 2002.1

France, United Kingdom, Turkey, Ireland, Denmark and Finland are the countries where the present + planned number of children is the higher, with averages between 2.1 and 2.3 children per women aged 18-39. At the lower end of the scale, Bulgaria, Romania, Malta, Italy, Lithuania, Germany and Austria show an average number of children per woman of 1.6.

These three indicators (present number of children, planned number of children and total number of children) calculated from the answer of women aged 18-39 will be crossed with the answers to the question on housework and childcare sharing to verify, in the last section of the paper, if any relationship exist between fertility and family responsibilities.

3. SHARING FAMILY RESPONSABILITIES AMONG WOMEN AND MEN

The Standard Eurobarometers 59.0 and 60.3, launched in 2003, as well as the Candidate Countries EB 2003.5 launched the same year, included a series of questions on division of housework and childcare among men and women, and the time devoted by each of them to these activities. The following are the main findings highlighted in the corresponding EB reports (Cuyvers, Schulze, Künzler, Hooghiemstra, 2003; Breedvel, 2004; Gallup Hungary, 2004).

3.1 Remaining traditionalism concerning gender roles across the EU

Over 70 % of all respondents agree with statements that tasks in childcare and the household should be equally divided, and that women should have a paid job. These percentages drop substantially for a number of countries when the statement is that men and women should work an equal number of hours. Only one out of three respondents in the Netherlands would agree to this, for instance. Similarly, the statement that ‘it is more natural for mothers to raise children than for fathers’ was agreed by the majority of the respondents in all countries except Sweden – it was the only country in which less than half (49%) of the respondents agreed with the statement. The results of both questions indicate that gender ideology remains traditional in most EU-15 countries.

3.2 Sharing childcare tasks: high equality in theory...

For most Europeans childcare is a task that should be done by both partners. But some countries ‘think more equal’ than other countries. In general, the overall level of belief in childcare sharing in the 10 new Member States and the three candidate countries is at the lower end of the scale.

Within the EU-15, there is a distinct group of countries with high equality standard (Sweden, Denmark and Finland) and a group with lower acceptance of the idea of sharing: Austria, Luxembourg, Belgium, and Germany. The Mediterranean countries take the middle positions (Table 2).

Table 2: Proportions of childcare tasks to be carried out by mother / father / both.

	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
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
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
Sd	0,07	0,06	0,01	0,07	0,06	0,01

Source: *Eurobarometer 59 Report*.

Table 2 shows that within almost each country, men and women are almost equally in favour of a well-balanced division of childcare tasks. Their scores range from 70% of the tasks should be shared in the more conservative countries to 95% of the tasks in the more “modern” countries, but the scores for men and women do not differ more than 5% within any country. Ireland, Portugal and Germany show the highest disagreement between men and women; Denmark and Sweden the least.

There also is an overall difference when it comes to the kind of childcare task to be performed. Punishing children for instance has a 90% equality score, changing diapers just 65% –of the remaining 35% most respondents think this should be done by mothers.

3.3 ... but actual division of tasks is still very unequal...

Women do most of the household tasks and virtually all of the childcare tasks. However, men attribute a larger share of household and childcare tasks to themselves than women attribute to their male partners (see Table 3). As an average, men claim double the percentage women give them. For childcare tasks men claim as an average to be responsible in 10% of the families, women give them credit in 5% of the 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: 25%).

Table 3. Division of tasks between men and women, according to respective responses.

	WOMEN		MEN	
	me	partner	me	partner
<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 the children to bed	81	7	12	73
To and from school/childcare	80	7	17	67
Playing with children	67	18	31	49

Source: Eurobarometer 59 Report

Inversely, men give women less credit than women give themselves. For the issue of ‘playing with the children’ for instance –the only childcare task men score over 10 percent in women’s eyes– men attribute the main responsibility in 49% of the cases to their partner, whereas women score 67% of the responsibility for themselves. In the case of ironing this is respectively 70% and 90%).

3.4 ... with women spending more time in housework and childcaring than men...

Eurobarometer data on time use show that 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 and in the 10 new Member States. Gender differences are however important: men spend more time on paid work, while women spend more time on household and caring tasks. On average for the EU-15, working men spend 13.3 hours per week in this kind of tasks, compared with 22.6 hours spent by women.

Geographical differences are also important: women in southern European Member States spend more time in these activities than women in the Nordic countries, as data for Greece (26.8 hours), Italy (25.3) and Spain (23.8) demonstrate compared with the figures corresponding to Sweden (18.3), Finland (18.9) or Denmark (22.4). Relevant differences also appear among the new Member States.

Among couples, working men spend more time on paid work (a difference of 13.3 hours per week on average for EU-15) and working women on unpaid work (-13 hours). This is true for most countries, being the differences larger in the Southern European countries (and in West Germany) than in the Nordic countries (as well as in France and Portugal for paid work). Differences in time spent on household and caring tasks are larger in households with children, than in households without children (respectively, -17.0 hours and -9.3 hours).

3.5 ... although most people are satisfied with current tasks sharing

Just over one third of women and half of the men is 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 were even over 60%. The dissatisfaction of men and women with the division of tasks is larger for household tasks than for childcare tasks. The cleaning of the house ranks the highest for dissatisfaction (one out of three women, one out of six men). All other household tasks

score lower, below 20% for woman and below 12% for men. Dissatisfaction with childcare tasks is on average for all countries below 5 % .

4. RELATIONSHIP BETWEEN LOW FERTILITY AND SHARING FAMILY RESPONSABILITIES: SOME PRELIMINARY RESULTS

4.1 Data and methodology

In this final section of the paper the initial hypothesis (uneven share of domestic tasks is correlated with lower fertility, or the other way round, a more balanced share of housework tasks and childcare activities between men and women should be linked with higher fertility) will be test through a correlation and multiple regression analysis. Data used come from the two only Eurobarometers that include both kind of issues in their questionnaires: the EB 59.0 for the EU-15 Member States and the Candidate Countries EB 2002.1 for the other 13 countries, so 28 countries in total. Both surveys were launched in two successive years (2002 and 2003), so the results are very recent and almost simultaneous. Moreover, the outcomes are fully comparable, as the question used are the same, with practically the same wording. The only important difference between both sets of data is that the EB 59.0 includes three additional questions on the actual sharing of tasks and values related with this matter, which are not included in the CCEB 2002.1

A series of variables on fertility and domestic task sharing have been built from these questions. Then these sets of variables have been crossed through a correlation analysis in order to find any significant link between pairs of variables. Only data corresponding to women aged 18-39 has been used, as the relation between housework burden and the desire of additional fertility is not relevant for older women that have finished their reproductive period.

As I have explained before, there are three available variables regarding fertility: present fertility (“Have you had any children? (If yes) How many?”), planned fertility (“How many children do you still plan to have?”), and total fertility (present + planned).

Concerning domestic task sharing, only one variable is available for the candidate countries, and it does not refer to actual task sharing, but to what the respondent considers that the ideal situation should be: the number of childcare tasks (out of a list of 11) that should be carried out by both parents –the responses “mainly by the father” or “mainly by the mother” are considered as proxies of an uneven distribution of tasks.

In the EB 59.0 there is also an additional question concerning values: there is a series of four statements on how the unpaid and paid work should be distributed between men and women. The more “egalitarian” responses have been used to build an indicator of positive values concerning gender roles.

This Eurobarometer also has two questions on the actual distribution of housework and childcare tasks: “Let me ask you two question concerning 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 built by addition of the women’s response: “my partner”, the other two possible answers being “me” or “someone else”. Only the responses of women with at least one child have been taken into account.

4.2 Results at EU-15 and candidate countries level

The results of the correlation analysis (Table 4 for the EU-15 and Table 5 for the candidate countries) show that:

- a) there is a significant correlation between fertility levels and the ideal distribution of childcare tasks for both the EU-15 and the candidate countries;
- b) there is a significant correlation between fertility and the actual distribution of housework tasks in the EU-15;
- c) there is no correlation between fertility and the actual share of childcare tasks in the EU-15; and

d) when the correlation exists, the sign of the relationship is in the opposite direction when analysing current or planned fertility.

Table 4. Correlation between fertility indicators and housework and childcare tasks for the EU-15 (Eurobarometer 59.0).

		present children	future children	total children	childcare sharing - ideal	values	housework sharing - actual	childcare sharing - actual
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 0,01 (bilateral).

* Significant correlation at the level 0,05 (bilateral).

Table 5. Correlation between fertility indicators and housework and childcare tasks for the 13 former candidate countries (CC Eurobarometer 2002.1).

		present children	future children	total children	Age at first child	childcare sharing - ideal
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 0,01 (bilateral).

* Significant correlation at the level 0,05 (bilateral).

Results show that there is a direct correlation between planned fertility and the distribution of housework tasks: the higher the number of children wanted in the future,

the more balanced is the distribution of this type of tasks. This is in accordance with the starting hypothesis. However, the correlation between the current number of children and ideal task sharing is inverse: the higher the number of present children declared by women, the less balanced is the distribution of tasks. The fact that task sharing is correlated in opposite directions with the current and future fertility is linked to the existing strong negative correlation between the present and the planned number of children. The timing of births, together with the age of the surveyed women, are behind this negative correlation. And timing is probably conditioned by the mother's educational level or socio-economic level: the higher the level of education or income, the more delayed the births, and the more balanced the distribution of tasks. This new hypothesis can be tested in the EB for candidate countries, where there is a question on mother's age at the first birth: In effect, there is a positive significant correlation (0.140**) between age at first birth and childcare task distribution.

The correlation analysis shows very similar results in the 15 old Member States and in the other 13 countries. The only relevant difference between both groups of countries concerns the correlation between ideal childcare task division and total fertility. Table 4 shows that there is no significant and consistent correlation between the total number of children (present + planned) and the ideal and actual distribution of tasks in the EU-15. However, this correlation exists (-0.146**) in the candidate countries, as can be seen in Table 5.

The negative correlation found in the candidate countries goes against the original hypothesis, as it seems that a more egalitarian task division is linked to a lower total fertility. However, an in-depth analysis of the relationship between the different variables helps to explain the differences between EU-15 and CC and highlights the importance of the socio-economic factors like women's educational level or income level in the relationship between fertility and task sharing.

We shall take the case of education 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 responses –up to 15 years, 16-19 years, 20+ years,

and still studying– allow to classify individuals by a proxy to educational level. Tables 6 and 7 show the average values corresponding to the different variables analysed by women’s educational level for the 15 old Member States and the 13 old candidate countries, respectively. In both groups of countries, the higher the educational level of women, the more egalitarian values regarding division of childcare tasks, although in the candidate countries (see Table 7, last column) differences due to education seem to be more pronounced than in the EU-15 countries.

Table 6. Means and Standard deviations of the variables used for the EU-15 (Eurobarometer 59.0).

Age finishing the full-time education		present children	future children	total children	childcare sharing - ideal	values	housework sharing - actual	childcare sharing - actual
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

A similar trend appears in EU-15 regarding the actual share of housework between men and women (Table 6, last column but one), with a more balanced division of tasks gradually increasing with years of education (although the majority of tasks are in all cases done by women). Somewhat different is the result concerning the actual division of childcare tasks in the EU-15 (Table 6, last column): participation of men in these activities is very low across all educational levels, and only within the more educated women men’s contribution seems to be a bit more important. In the other three educational groups male participation in child caring activities is very low (men are responsible of only 0.7 activities out of 8).

Table 6 also shows that the current number of children decreases as female level of education grows, while the planned number of future children increases with education due to a delayed birth timing. As a consequence, the resulting total number of children is similar (around 2.0 children) across female educational groups.

Table 7. Means and Standard deviations of the variables used for the 13 former candidate countries (CC Eurobarometer 2002.1).

Age finishing the full-time education		present children	future children	total children	childcare sharing - ideal
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

Table 7 demonstrates that results are somewhat different in the 13 old candidate countries, especially concerning the actual number of children, where differences are very pronounced across educational groups: present fertility of low-educated women is higher than in EU-15 countries whereas it is lower in the other three groups. These large differences in the current number of children by education also determine the variation in total fertility levels in the candidate countries: 2.5 children per low educated woman compared to 1.8 children per highly educated woman. This is the explanation to the negative correlation existing between total fertility and the division of childcare tasks in the old candidate countries.

This demonstrates that we need to isolate the effect of socio-economic independent variables like education or income level, as well as demographic variables like women's age, in order to analyse the possible relationship between fertility and domestic work division. Four multiple regression models have been implemented, one for the candidate countries and three for the EU-15 Member States, using different variables of task sharing between men and women: 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, educational level and income level. The main results are the following (see Table 8):

Table 8. Multiple regression estimates of standard coefficients of demographic and socio-economic factors of current fertility levels.

	CC-13	EU-15 (model 1)	EU-15 (model 2)	EU-15 (model 3)
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 0,01 (bilateral).

* Significant correlation at the level 0,05 (bilateral).

1) the relationship between current fertility levels and the ideal distribution of childcare tasks is significant, but negative, for both the EU-15 and the candidate countries;

2) this relationship is very low everywhere, but is more important in the candidate countries (-0.114) than in the EU-15 (model 1: -0.046);

3) the other independent variables have a more important effect on fertility than the ideal childcare task division: this is the case of mothers' age (the only factor with a positive relationship with current fertility), planned fertility and education, whereas income level is not significant;

4) when replacing in the EU-15 ideal childcare task division (model 1) by the actual one (model 2), the influence of this variable on fertility is not significant and education also loses its explanatory power. In model 3, the impact of actual housework division on present fertility is significant but low and negative again;

5) if present number of children is replaced in these models by planned fertility as a dependent variable, then only the ideal childcare task division in EU-15 countries is significant (and positive) at 0.05; the other variables related to domestic work sharing are not significant for both the EU-15 and the CC.

The results obtained from Eurobarometer data are in the opposite sense that initially expected, at least regarding present fertility, which is negatively correlated with a more egalitarian division of domestic work between men and women. Future planned fertility is positively correlated with ideal childcare task division, but this relationship is weak and in any case less important than the link existing between fertility and other socio-economic and demographic factors. Evidence found therefore minimises the importance of a more balanced domestic task division between men and women as a factor leading to higher fertility rates. However, this result does not contradict the fact that gender equality has reached various degrees of development across European countries and this is somewhat related –in a more complex way than previously stated in the starting hypothesis– with different fertility levels

4.3 Results at national level

The previous analysis in Chapters 2 and 3 showed that there is some kind of relationship between task division and levels of actual and ideal fertility, but this relation is different in some characteristic group of countries: Turkey, Cyprus and Ireland show traditional patterns of task division and relatively high levels of desired and actual fertility; other Mediterranean countries like Spain, Greece, Italy show less traditional patterns of family responsibility sharing (compared with the previous group) with relatively high level of desired fertility, but low actual fertility; Germany and Austria are characterised by relatively traditional task sharing patterns with the lowest levels of ideal fertility and low levels of actual fertility; finally, the Scandinavian countries, France and the UK show the most egalitarian pattern regarding the division of tasks combined with relatively higher levels of ideal and actual fertility.

When analysing the correlation between task distribution within each country, and present and planned fertility, the correlation found is in general weaker than that found for the two big groups of countries (EU-15 and candidate countries), and in some cases the correlation does not exist. This is due to the small size of the national samples, which makes it difficult to implement more complex analytical tools like multiple regression analysis. But when the correlation appears, it is generally in the same direction that those we have just seen for the two groups of countries and the differences

at national level do not seem relevant. In any case, from Eurobarometer data only a general description of groups of countries with similar characteristics in the relation between fertility and domestic task sharing can be obtained, but it is not possible to go deeper in the analysis of the causality process behind these links at national level. In order to do that, a more complete data source specifically designed with this aim and providing larger samples at national level is required.

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