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# Gender Differences in Money Transfers within the Family. Evidence from Italy

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## Abstract

This paper examines the changes of women's contribution within the family in Italy over time. It uses two sources of data, namely ECHP and IT-Silc. The final goal is to detect whether women become more supportive in the household or not because of a number of factors occurred in the sample period. The contribution of each members within the family is defined as the difference between the personal and the per-capita income. We firstly perform separate estimates by gender and by sub-groups, namely *receivers* (if their contribution is negative) and *givers* (if their contribution is positive). Finally, we run a three-fold Oaxaca decomposition. The results confirm that the differences between men and women are persistent and mainly due to unexplained factors.

*Keywords:* Oaxaca decomposition, monetary transfers, gender differences.

*JEL classification:* J16, C33, D31.

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## 1 Introduction

Over the last few decades an undeniable fact is that the role of women both in the labour market, in the family and in the society is dramatically changed. Several dimensions have contributed to such change, for instance the increase in the levels of female education, the availability of child care and of flexible working arrangements, the delay in marriage and childbearing, and the cultural attitudes as well. Many empirical research on the determinants of working participation by females has focused on factors such as labour market conditions, marital status, schooling levels, wages rates, fertility rate, family friendly policies, and time allocation (see for instance Del Boca and Locatelli, 2006).

In contrast, in this paper we show whether the determinants mentioned above have influenced the entity of women's contribution within the family. To provide evidence on this topic, which has received little attention in the literature, we use the Italian component of two sources of data, namely the European Community Household Panel (ECHP) and the Statistics on Income and Living Conditions (IT-Silc). The final goal of this piece of work is to detect how the differences in the level of females' contribution versus all the other family members are due to the evolution of the aforementioned aspects occurred over the sample period. The variation in the amount transferred to the household is defined as a difference between the personal income and the per-capita income. The latter is determined dividing the sum of all the family incomes for the number of components. Basically, this procedure assumes an equal sharing of resources between all the family members, to be more precise once we consider the hypothesis of global pooling of resources within components we refer to the unitary model of household decision making (Samuelson, 1956; Becker, 1981;1991). As a consequence, the intra-household allocation of consumption is supposed to be equally shared between individuals. We are aware that this assumption is controversial in the literature (see for instance: Browning et al. 1994; Browning and Chiappori, 1998), but in this exercise we are not interested to look at neither the way resources are distributed between members nor to the individual bargaining power as our investigation aim at analyzing if women have substantially modified their role in the family, and this aspect is captured by considering the change in their levels of contribution.

There has been much debate about the extent to which better labour market conditions, higher levels of education as well as new social and cultural norms affect both labour participation and the role in the family and in the society of women. With regard to the Italian context, it has been firmly established the relationship between fertility and female labour supply. In contrast with what observed for the Northern European countries, there is a positive observable connection between the two events - relatively low levels of fertility and of female labour force participation- especially in the northern and central regions (Kohler et al., 2002; Del Boca et al., 2005; Del Boca and Locatelli, 2006). An explanation of this tendency is clearly related to the specific Italian labour market characteristics, namely insecurity, rigidities, less developed tertiary sector, high women and youth unemployment rates and the lack of parental leave. As expected, women's employment status is greatly affected by all the factors listed before. The availability of more family friendly schemes, such as generous maternity and parental leave, greater child care services and more flexible working conditions, enhance the likelihood of entry into the labour market by females and of giving a birth as they feel more protected.

For instance, more job opportunities with flexible hours along with accessibility to some benefits, like maternity and parental leave not only to permanent employees, help women to reconcile household responsibilities with work activities (Gauthier and Hatzius, 1997; Engelhardt and Prskawetz, 2004; Del Boca and Sauer, 2009). An additional determinant of the greater females participation is associated with the levels of education. Not surprisingly, more educated women increase their share in the labour force as the higher investments in human capital strengthen the attachment of females in the labour market, mainly because of the improved earnings prospects and working career (Becker, 1991; Cigno, 1991; Ermisch, 2003). It is then more likely that women decide to work if they are not married. The participation is not negatively affected by the marital status if grandparents support their adults children providing time for child care, which compensate for the rigidity of the service system, especially for Italy (Del Boca, 2002). Regional unemployment rates exerts a negative effect on females' working decision. Finally, the environmental factor is relevant too. Institutions and culture impact on the female labour market participation through a systematic variation in beliefs and preferences across time, space or social groups (Fernandez, 2007; Fernandez and Fogli, 2009).

As it has been shown, several dimensions influence women's participation in the labour market. However, in this paper we do not exploit the relationships between those aspects and females's working, but we consider these links as starting points to analyse whether the role of women in the family has been changed in terms of transferring money to the other household members. To avoid a misleading interpretation of the temporal evolution of these contributions, it is necessary to emphasize a few distinctive changes that the Italian labour market experienced over the last two decades, mainly after the 1990s occupational crisis. The first considerable intervention occurred in 1997 through the so-called *Pacchetto Treu* (L.196/1997) and has allowed the opportunities of hiring new staff through more flexible contractual conditions, such as fixed term contracts. This path was then carried on with the *Biagi Law* (L.30/2003) which essentially introduced additional types of temporary contracts. The reforms have basically encouraged the labour force participation of women and youths, enhancing the chances of transferring money within the family for these categories.

As a result, we investigate in this paper whether the increase in the number of opportunities of entering into the labour market, the institutional changes, the individuals' characteristics and the cultural factors have played a diverse role in terms of family's contribution for women and men. Our research indicates that individuals behave differently according to gender. In particular females are more supportive in the family when they are more educated. Family characteristics do matter as they influence the entity of the contribution each member has to provide to the households. The aforementioned gender difference in the contribution is confirmed also when we applied the *Oaxaca decomposition* approach. This technique highlights that men and women contribute in a different manner within the family mainly for unexplained factors, for instance cultural norms and beliefs.

The paper is organised as follows. The next section offers a description of the data. Section III discusses the econometric approaches. Section IV provides the corresponding results. Finally, conclusions are reported in section V.

Table 1: Sample size by gender over the two periods: *givers*

	<b>Women</b>	<b>Men</b>	<b>Total</b>
<b>ECHP</b>			
1994	2,099	4,262	6,361
1995	2,197	4,319	6,516
1996	2,076	4,033	6,109
1997	2,008	3,812	5,820
1998	1,959	3,872	5,831
1999	1,900	3,705	5,605
2000	1,775	3,418	5,193
Total	14,014	27,421	41,435
<b>IT-Silc</b>			
2005	1,761	3,407	5,168
2006	3,440	6,273	9,713
2007	4,776	8,679	13,455
2008	4,529	7,999	12,528
Total	14,506	26,358	40,864

## 2 Data

We use two surveys, namely the Italian questionnaire of the European Community Household Panel (ECHP) and of the Statistics on Income and Living Conditions (IT-Silc) to investigate whether women's monetary contribution in the family has underwent any substantial variation over the sample period. These data are based on a standardized questionnaire filled by individuals and households in several European countries and on diverse issues. The former is composed of 8 waves (1994-2001) while the latter of 4 waves (2005-2008). The aim of taking into account two sources of data is to have at our disposal a larger span of years in order to capture the many changes occurred, such as personal characteristics, environmental and institutional factors. The empirical work that follows is based upon the sample resulted from some restrictions, namely we exclude both households composed by only one member as for them we are not in the position of calculating the entity of the transfers to any other component, self-employed since this category of workers differs from those who are employees, for instance in terms of income declared and finally outliers with respect to income using the method of Hadi (1992, 1994).

Tables 1 and 2 report the distribution of individuals by gender within the two datasets. Moreover we distinguish between *givers* and *receivers* according to whether they transfer money within the household or the receive economic support from any other family members. The final ECHP sample is composed by 84,595 observations, whereof 45,335 women and 39,260 men. The IT-Silc sample contains 79,530 individuals, whereof 42,804 females and 36,726 males, respectively.

Table 2: Sample size by gender over the two periods: *receivers*

	<b>Women</b>	<b>Men</b>	<b>Total</b>
<b>ECHP</b>			
1994	4,830	1,812	6,642
1995	4,941	1,898	6,839
1996	4,687	1,819	6,506
1997	4,385	1,647	6,032
1998	4,419	1,671	6,090
1999	4,208	1,579	5,787
2000	3,851	1,413	5,264
Total	31,321	11,839	43,160
<b>IT-Silc</b>			
2005	3,695	1,307	5,002
2006	6,727	2,453	9,180
2007	9,460	3,485	12,945
2008	8,416	3,123	11,539
Total	28,298	10,368	38,666

## 2.1 Dependent variable

Both ECHP and IT-Silc surveys collect information on monetary transfer between families based on the assumption that this happen amongst heads of household, but information about intra-money contribution to and from individuals within the households are not directly provided.<sup>1</sup>

However, before analysing these information, we looked at other sources of data accessible for Italy and we draw the following conclusions: 1) Bank of Italy data (SHIW - Survey on Household Income and Wealth) are not helpful for our purpose as information on income's transfers between individuals are available exclusively for members living in different households instead of in the same family. Furthermore, building a panel over the period considered reduce dramatically the number of observations as in each wave only 25% of households are re-interviewed in the subsequent survey. Finally, we also disregard this data as the disaggregation in categories of the type of employment is not provided for the year 1995; 2) Share (Survey of Health, Ageing and Retirement in Europe) collects monetary transfers between individual within a family, but includes only individuals aged 50 and over and interviewed only twice, namely in 2004 and in 2006. As mentioned above, although the datasets we used do not collect directly information on money transfers within the family, they provide a comprehensive set of measures of observed characteristics for individuals and their families, so we are able to exploit and use these variables as fully as possible to study variation of the individual's monetary contribution within the family. In addition, as already mentioned, the large period covered gives us the opportunity to grasp the main determinants of the variation in the entity of this household's monetary transfers.

Monetary contributions within the family depend on different factors, for instance the level of education, the participation in the labour market, individuals' preferences, cultural and institutional aspects and the role played within the family. As a consequence, two different samples are exploited and regressions according to gender and whether a person transfers money to other family members - *receiver* or he/she is supported by any other households - *giver* are run separately.

We apply the following strategy to define the monetary transfer within the family: first, we assume that consumption of each member of the family is equal to the per-capita income<sup>2</sup>. Second, we compare individual personal income to per-capita income in order to show whether the individual is a net provider or not. In fact, if the individual's personal income is higher than the per-capita one he/she gains more than he/she consumes within the family, hence he/she is a net provider, the opposite is true for a net receiver. Finally, for each individual the logarithm of the absolute value of the previous difference is calculated<sup>3</sup>

Tables 3 and 4 report the distribution of income by gender over the two periods under consideration. Individuals are also separated according to their status,

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<sup>1</sup>ECHP collects individual money transfers received i.e. financial support from relatives, friends or other persons outside the household, while IT-Silc collects inter-household cash transfers received and paid.

<sup>2</sup>Per-capita income from labour and pension is calculated as the sum of personal income from labour and pension of all the members of the household divided by the number of the household components. All the earnings are defined in real value, and 2000 is the reference year.

<sup>3</sup>In case the entity of the transfer is equal to zero, this value is changed with one as we use the logarithm.



namely - *givers* and - *receivers*.

Since 1994, the first year considered in our sample, both equivalised, personal and per-capita income have increased. It is remarkable to note that especially women earn more over time, compared to what observed in the starting year considered, although men are still the breadwinner in the family as their personal income is twice the one gained by their counterpart.

Table 3: Distribution of incomes over the two periods: *givers*

ECHP	Women			Men		
	Equivalised	Personal	Per capita	Equivalised	Personal	Per capita
1994	10,738	10,313	6,364	9,997	12,595	6,107
1995	11,112	10,507	6,606	10,507	13,072	6,443
1996	10,753	10,583	6,528	10,330	13,047	6,448
1997	11,010	10,608	6,679	10,604	13,172	6,620
1998	11,272	10,780	6,801	10,869	13,284	6,771
1999	11,636	10,979	7,066	11,047	13,507	6,922
2000	11,733	11,037	7,136	11,053	13,374	6,926
<b>IT-Sile</b>						
2005	14,883	13,665	9,092	14,408	16,647	9,119
2006	14,731	13,612	8,985	14,130	16,427	8,949
2007	15,279	14,091	9,231	14,570	16,800	9,133
2008	14,977	13,635	8,928	14,508	16,473	8,997

Note: Incomes are reported in real value: base-year 2000.

The personal contribution (by gender and status), calculated as the ratio of each individual's contribution and his/her equivalised household income, is shown in table 5. Overall women contribute less than men, but the entity is narrower as time passes. With regard to the group of females' givers, we note that in the first year considered the contribution is equal to 45% and 36% in 2008. On the contrary women belong to the category of receivers become gradually less a burden compared to the other family members, probably because of all the changes occurred in the environmental, institutional and cultural dimensions over the sample period. Finally, men, once they are givers, appear to be the group that transfers more to the other households, even though the entity is year by year less consistent.

Table 4: Distribution of incomes over the two periods: *receivers*

<b>ECHP</b>	<b>Women</b>			<b>Men</b>		
	<b>Equivalised</b>	<b>Personal</b>	<b>Per capita</b>	<b>Equivalised</b>	<b>Personal</b>	<b>Per capita</b>
1994	9,221	1,499	5,638	9,086	1,514	5,506
1995	9,632	1,658	5,888	9,217	1,709	5,552
1996	9,323	1,686	5,831	9,116	1,764	5,608
1997	9,716	1,827	6,088	9,447	1,849	5,821
1998	9,896	1,889	6,186	9,522	1,837	5,815
1999	10,100	1,946	6,374	10,082	2,056	6,300
2000	10,301	1,996	6,474	10,255	2,232	6,409
<b>IT-Silc</b>						
2005	14,261	3,671	9,176	15,317	4,832	9,792
2006	13,945	3,466	8,991	15,126	4,642	9,684
2007	14,469	3,656	9,198	15,521	4,646	9,767
2008	14,553	3,689	9,195	15,563	4,745	9,765

Note: Incomes are reported in real value: base-year 2000.

Table 5: Distribution of the contribution over the two periods

	<b>Givers</b>		<b>Receivers</b>	
	<b>Women</b>	<b>Men</b>	<b>Women</b>	<b>Men</b>
<b>ECHP</b>				
1994	45.57	78.94	-48.95	-48.54
1995	43.68	76.20	-48.19	-47.10
1996	47.35	76.73	-48.62	-47.63
1997	45.01	74.69	-48.14	-47.52
1998	43.81	72.66	-48.11	-47.35
1999	41.19	72.41	-48.00	-46.81
2000	40.93	70.91	-47.86	-46.26
<b>IT-Silc</b>				
2005	35.29	60.75	-42.70	-36.42
2006	36.78	61.35	-43.84	-37.42
2007	35.90	60.59	-42.07	-36.50
2008	36.39	58.64	-41.15	-36.52

## 2.2 Explanatory variables

Both ECHP and IT-Silc contain information on household and individuals: demographic characteristics, personal income, housing conditions, employment. Clearly due to the existing differences between the two data sources, all the variables used have been made homogeneous <sup>4</sup>.

To disentangle the differences in contribution by gender within the family, three groups of covariates have been considered: the first set of explanatory variables describes individual characteristics including age, age squared, education, marital status, the role in the family - whether the person is a parent or not -, macro-area of residence, namely north, center and south.

The second set of covariates describes family composition and includes number of women, of unemployed, of elderly persons, of members in good health conditions, of individuals aged less than seven years and between seven and fifteen within the family. It is remarkable to stress that each aforementioned variable is defined without counting the respondent.

Finally, the third set of covariates includes macro variable such as labour force occupied in the tertiary sector, marriage and fertility rates. The fraction of individuals working in the tertiary sector is helpful to identify the regional labour market opportunities, as a large value of this indicator underlines better job opportunities, especially for the groups that are generally more discriminated in the labour market, such as women and youths. The inclusion of marriage and fertility rates may be interpreted as a proxy of both the economic and institutional conditions and the regional's preferences and beliefs regarding women's roles. In addition, it may capture the constraints that women may face while they have children, for instance because of the lack of availability of child care services.

## 3 Methods

As already stated, the Italian questionnaire of two datasets (ECHP and IT-Silc) have been used in this analysis. They are both longitudinal, so panel data technique is used to estimate which factors affect the money contribution within the family.

In particular four different equations for both men and women and *givers* and *receivers* are estimated. Moreover we distinguish between the two data sources namely ECHP and IT-Silc. Let  $y_{git}$  be the money contribution for any man (woman) net givers <sup>5</sup>  $i$  ( $\forall i = 1, \dots, N$ ). The model can be written:

$$y_{git} = \alpha_0 + x_{it}\beta_1 + u_i + \epsilon_{it} \quad (1)$$

where

$$E(u_i | x_i) = 0$$

and

$$E(u_i^2 | x_i) = \sigma_u^2$$

The composite error can be written as:

$$v_{it} = u_i + \epsilon_{it} \quad (2)$$

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<sup>4</sup>Details about the procedures adopted to reconcile and make comparable the variables between the two samples, especially information about income, are not reported for the sake of brevity but they are available upon request.

<sup>5</sup>The same model applies for a net receiver  $y_{rit}$

### 3.1 Implications of the estimation's procedure

Panel data method gives the opportunity to look at time-invariant individual effect. On the one hand the fixed effect model allows the individual effect to be correlated with the regressors, removing the bias that would result. It uses the within variation but it needs sufficient variation over time and can only estimate coefficients on time-varying covariates. On the other hand, the between regression uses only the between-group variation amplifying the individual effect and estimating with the potential bias due to the correlation between the individual effect with the regressors. A more general panel data technique is the random effect model where the use of the generalised least squares method weight the between and the within variation providing the efficient combination of the two. Of course, the choice of random effect model in the context of panel data technique is based on whether the assumption of individual effect uncorrelated with the regressors holds (Wooldridge, 2002). A random effect model is chosen to estimate time-invariant covariates. In fact, there are only two years for each panel and some of the variables included in the estimates, namely area of residence and education, do not vary between them.

## 4 Estimates

The bunch of covariates considered in our regressions plays a different role on the dependent variable (namely entity of contribution) according to gender and whether an individual transfers money to the other family members or receives a contribution from any other household components. As a result we split our sample into two groups, such as givers and receivers and we run separately the maximum likelihood random effect regressions for men and women.

Table 6 reports the results of those who support the consumption<sup>6</sup> of the other family members through a transfer of money, both for males and females. With regard to the age and its squared term it is noticeable that, independently of the gender, the group of givers behaves in an inverted U-shaped. This means that the entity of their contribution is larger in the beginning of their working life, but once they reach the peak they start to decrease the amount they transfer to the other family members. This maximum changes according to gender and the period under consideration, for instance for men it is equal to 44 and 56 years old, respectively for the period between 1994-2000 and 2005-2008; while for women it is equal to 33 and 57 years old, respectively for the period between 1994-2000 and 2005-2008.

Looking at the geographical area of residence, we note that a man living in the north up to the 2000 is less likely to transfer money within the family compared to a male living in the centre of Italy. For the males sub-sample drawn from the IT-Silc survey the situation definitely changes as they become more supportive within the family as their contribution is now positive and about 23%. In contrast, men who are living in the South before 2000 are transferring about 20% more than the reference category.

Not surprisingly, the level of education has a positive correlation with the entity of the contribution. Being graduate increases the probability of transferring money to the family members by about 27% for men in the ECHP sample and by about 17% for those included in the IT-Silc. On the contrary females with tertiary education

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<sup>6</sup>We remind that we are supposing that the consumption of each component is equal to the per-capita income

passes from a 72% to a 39%. This negative trend highlights, on the one hand, that women are less supportive within the household, but on the other hand it may be due to either the diffusion of a larger number of flexible job opportunities during the last decades that may have enhanced the chances of entry into the labour market, especially for the weak categories or the less favorable labour market conditions face by women, as overall they are more discriminated. The coefficients of education are positive for all the sub-groups considered although smaller in magnitude, suggesting that more educated people, at least with a level of education beyond the compulsory schooling, are more able to contribute within the family.

Looking at the marital status we note that such condition has a different effect on women and men. In particular, men are more likely to transfer money (about 23%) than females. However, married women over the sample period reduce the entity of the money absorbed from the other family members, probably because of the introduction of more flexible working conditions that may help them to reconcile time allocation between paid and unpaid work. In addition, as expected, parents are more generous as they are the category that contributes more compared with all the other individuals living in the household.

Family characteristics provide interesting insights, as well. Both men and women contribute more if in the household there is one more female. The same situation happens when the family has one more unemployed component. In contrast, living in a family with older people reduces the level of the monetary transfers, probably because elderly people may provide time for childcare which compensates for the rigidity of the service system and providing financial transfers (Del Boca, 2003). Individuals under 16 years are overall a burden for both males and females living in a family, especially for children aged less than seven the contribution is larger, mainly for men (24% till 2000 and 32% after 2005). Finally, with regard to the macro-variables we may focus our attention to the coefficient associated with the portion of individuals occupied in the tertiary sector. This indicator is positive and significant only for men in IT-Silc which suggests that a one point percentage increase in this sector greatly enhances the opportunity of transferring money to the other members for the category mentioned. The logarithm of the equivalised income is then positively correlated to the contribution. Overall a point increase in this level of the aforementioned variable enlarges the opportunity of making a transfer, probably because of the change in magnitude of their personal income as they are belong to the group of givers.

Table 6: Estimates of random effect model for contribution given within the family

Contribution in log	ECHP		IT-Silc	
	Men	Women	Men	Women
Age	0.08***	0.02***	0.09***	0.08***
Age squared	-0.0009***	-0.0003***	-0.0008***	-0.0007***
North	-0.20***	0.01	0.23**	0.02
South	0.20**	0.02	0.01	-0.05
Tertiary education	0.27***	0.72***	0.17***	0.39***
Upper secondary education	0.10***	0.47***	0.12***	0.20***
Married	-0.09**	-0.68***	0.23***	-0.49***
Parent	0.65***	1.24***	0.26***	0.38***
Number women	0.13***	0.18***	0.16***	0.17***
Number unemployed	0.14***	0.10***	0.06***	0.10***
Number of elderly	-0.07***	0.07	-0.04*	-0.06*
Number of components less than 6 years	0.24***	0.06	0.32***	0.22***
Number of components between 7 and 15 years	0.17***	0.12***	0.23***	0.18***
Number of individual in good health	0.02*	0.04**	-0.02***	-0.01
Nativity rate	-0.01	0.01	0.03	0.03
Nuptiality rate	-0.23***	-0.15	0.16	0.11
Occupation in service	-0.85	0.1	1.97***	0.66
Equivalized income	0.65***	0.40***	0.71***	0.89***
Constant	1.66**	3.11**	-3.40***	-4.07**
$\sigma_u$	1.09***	1.52***	0.99***	1.29***
$\sigma_e$	0.90***	1.12***	0.63***	0.83***
Number of observations	27421	14014	26358	14506
Log likelihood	-42107.7	-25232.2	-35751.8	-23948.9

Note: \* :  $p < 0.1$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Reference categories: b Center; q Compulsory education;

Estimates of the receivers' category by gender are reported in table 7. It is interesting to highlight that the pattern of the age and of its squared value is U-shaped. This trend may confirm the younger age of the individuals belong to this category who are more likely to be receivers. As a result, in the beginning of their life they contribute less to the family's consumption, but while the minimum is reached we observe a drift, so both women and men in the sample period become less a burden to all the other households. However the turning point of the trend in age is quite high (around 70 years of age) for both men and women and in the two period considered.

With regard to the area of residence, the entity of the contribution received by those individuals reflects the labour market conditions. In fact, in the south where the job opportunities are narrower than in the center-north regions, both men and women are a burden to the other family members. By contrast, the monetary transfer received by those who live in the north is lower compared to the reference category - individuals who live in the center. The effect of the level of education is diverse according to the gender. Higher education reduces the entity of the contribution received by females (about 24% in ECHP and 29% in IT-Silc). The magnitude is lower once the level of education is equal to the upper secondary school (about 7% in ECHP and 10% in IT-Silc). With regard to men if they are better educated they absorb more money than all the other categories, this result may be driven by the delay entry into the labour market, while less educated people may easily have found a job, instead. In line with what has been found for the group of the receivers, men who are married are less a burden in the household than all the other components. Finally, with regard to the equivalised family income it is noticeable that there is a positive link between this variable and the entity of the transfers received as an improvement in the household financial conditions imply a greater propensity of receiving money from the other members.

Table 7: Estimates of random effect model for contribution received within the family

Contribution in log	ECHP		IT-Silc	
	Men	Women	Men	Women
Age	-0.07***	-0.03***	-0.07***	-0.03***
Age squared	0.0006***	0.0002***	0.0005***	0.0002***
North	-0.16**	-0.11**	-0.04	-0.17**
South	0.26**	0.20***	0.1	0.25***
Tertiary education	0.13***	-0.24***	0.15***	-0.29***
Upper secondary education	0.07***	-0.07***	0.04	-0.10***
Married	-0.26***	0.13***	-0.26***	0.24***
Parent	0.25***	0.15***	0.25***	0.10***
Number women	-0.01	0.01	0	0.01
Number unemployed	-0.02	-0.02**	-0.05**	-0.01
Number of elderly	0.03	0	0.03	-0.04**
Number of components less than 6 years	-0.06	-0.10***	-0.08	-0.19***
Number of components between 7 and 15 years	0	-0.05***	-0.04	-0.07***
Number of individual in good health	0.03***	0.02***	0.04***	0.04***
Nativity rate	-0.04*	-0.03**	-0.18***	-0.16***
Nuptiality rate	-0.09	-0.02	0.1	-0.20***
Occupation in service	-0.29	0.29	-0.25	-0.79
Equivalized income	0.67***	0.83***	0.59***	0.70***
Constant	4.24***	1.27***	5.43***	5.25***
$\sigma_u$	0.66***	0.74***	0.84***	0.84***
$\sigma_e$	0.65***	0.54***	0.63***	0.51***
Number of observations	11839	31321	10368	28298
Log likelihood	-14304.2	-32828	-13772.4	-33041.1

Note: \* :  $p < 0.1$ ; \*\* :  $p < 0.05$ ; \*\*\* :  $p < 0.01$ , Reference categories: b Center; q Compulsory education;



Table 8: Three-fold Oaxaca decomposition

	ECHP		IT-Silc	
	Givers	Receivers	givers	receivers
Mean prediction men	3,659	2,660	4,546	2,943
Mean prediction women	1,641	2,840	2,293	3,571
Raw differential	2,018	-180	2,253	-628
Explained term	-89	-89	81	-318
Unexplained term	2,107	269	2,172	946

#### 4.1 Oaxaca decomposition

We apply empirical methods developed in the labour market literature<sup>7</sup> to estimate how much of the gender differences in the contribution can be due to the observable circumstances or to the unexplained components. We decompose in fact, the difference in the mean prediction of men and women as follows:

$$t_m - t_w = (\bar{X}_m' - \bar{X}_w')\hat{\beta}_m + \bar{X}_w'(\hat{\beta}_m - \hat{\beta}_w) \quad (3)$$

The first part of the equation is the explained term of such difference (i.e is the difference given by the endowments) and it's attributable to the fact that the women have worse X's than men. The second part of the equation is the unexplained term (i.e it is the difference given by the coefficient) and it's attributable to the fact that ex hypothesi they have worse Beta's than men. We can see that a negative value both in the explained and in the unexplained part contribute to reduce the gender difference.

According to the results shown in table 8 it is of paramount importance to underline that the role of women and men within the family is definitely different, as we note a diverse attitude of transferring money to the other family components. Men, as they are more likely to be the breadwinners within the family, support more individuals living in their household. This gender gap is persistent over time, as this trend is observed both in the ECHP and in the IT-Silc sample. With regard to the category of the givers, the estimates show that the gender difference in the entity of the contribution is about 2,018 euros and about 2,253 euros in ECHP and IT-Silc, respectively. By contrast, looking at the group of receivers we note that the magnitude of the money transfers received is still different as females collect from the other household members more than men, in particular about 180 euros before 2001 and about 628 euros in the more recent sample. Overall, it emerges that the great part of the gender difference in the level of contribution is unexplained by individuals' characteristics, but it is mostly due to a combination of additional factors: first the direct mechanical effect exerts by the specific features of the labour market, especially because females are economically discriminated as they earn less than men, *ceteris paribus*; secondly women may devote more time to non-paid work and they may prefer more flexible working conditions, such as part-time jobs. Finally, labour market institution, cultural norms and beliefs, such as the appropriate role of women in society may also help to explain the motivations

<sup>7</sup>see Oaxaca 1973

behind such gender difference. To sum up, it is hence necessary to be careful in the interpretation of the results, because a large part of this difference is mostly related to unexplained components.

## 5 Conclusions

During the last two decades several dimensions have experienced a gradual process of change and development, for instance in the labour market more flexible working conditions have been introduced, in the family women modify the time allocation between non-paid and paid work. Overall, all these changes, at different levels, have facilitated the females labour market participation and the evolution of their role within the family. As a consequence in this paper we attempt to analyse whether it is observable any variation in women's behaviour, especially in terms of the amount transferred to the other family members or received. To do so, we included in our estimates both personal characteristics, household composition and some macro-economics indicators. The estimates show that women are different from men both when they transfer money or they receive it from the other members. It is remarkable that the entity of the transfer increases especially for higher educated females over the sample period, probably because of the human capital investments they are more attached to the labour market, enhancing the probability of supporting other family members. In addition, the Oaxaca decomposition confirms that gender differences in the monetary transfer within the family are persistent over time. It is interesting to underline that the major motivations of these differences are due not to individual's characteristics, but mainly to institutional aspects, such as labour market conditions, working discrimination against women and cultural norms and beliefs. To conclude, the latter result suggests the need of further investigation in this direction in order to extend the knowledge of the diverse women's performance in the society, in the family and in the labour market.

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