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Income inequality among family members in Italy: who gains and who loses?

1. INTRODUCTION

Several researchers have analysed the evolution of income distribution to detect the levels of inequality and poverty that characterise a specific population (see for instance Atkinsons and Brandolini, 2001). These contributions generally aim at providing a picture of increases in inequality, household impoverishment or the disappearance of the middle class often discussed in public debate. The present paper builds on this strand in the literature, taking into account the considerable changes that have occurred in the labour market, in the social security system, and Italian society more generally. First, we define an indicator to capture income inequality amongst households under the assumption of equal sharing of resources; second, we analyse the flow of monetary contribution within the family (i.e. we identify who gains and who loses from this hypothesised equal sharing) and its determinants, using the 2010 Italian Statistics on Income Living Conditions (IT-Silc).

The estimates show that monetary contributions vary by gender. More educated women are more likely to be able to equalise consumption among family components, while for men education is not significant once economic activities are controlled for. As expected, more stable labour contracts enhance the probability of making a positive contribution to the other family members. Households more involved in family activities have less time to allocate to paid jobs, and therefore they contribute less than other members to reducing income inequalities. Predicted values underline that men and women behave differently based on age, and recognise males as the primary breadwinner.

The paper is organised as follows. Section 2 analyses the relationships between the determinants of income differences among family components and the empirical evidence and presents the theoretical framework. Section 3 describes the data; Section 4 presents the results; and Section 5 contains concluding remarks.

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2. BACKGROUND

Italy exhibits the most unequal distribution of wages and salaries amongst individuals, especially because of differences in demographic structure, social composition, and employment conditions. This paper aims to provide some useful insights into the factors related to income differences among family components. For instance, families where the household head is aged 40 years or less are not particularly widespread in Italy (about 14.5% of our sample). This is due to the higher propensity of Italian young adults to postpone departure from their parental home. It also reflects the role played by employment conditions and parents' and children's incomes in the latter's decision to leave the parental home and take the relative risk of being poor (see Belloc, 2009; Manacorda and Moretti, 2006; Mazzotta, 2007; Parisi, 2008; Iacovou and Parisi, 2009; Becker *et al*., 2010). The inclusion of other demographic characteristics should provide a better understanding of the income differences that emerge at the family level, including the gender of the family's components. Discerning the link between personal characteristics and the attitude to income differences at the micro level (i.e. within the household) might help policy makers to define interventions to overcome income inequalities at the macro level.

However, survey data providing reliable information that describes the sharing of resources in the household are scarce (see Jenkins, 1991). For example, the Bank of Italy (Survey on Household Income and Wealth - SHIW) collects information on income transfers exclusively between family members living in different households; the Survey of Health, Ageing and Retirement in Europe (SHARE) provides information on monetary transfers between individuals within a family, but includes only people aged 50 and over, which means the sample is composed almost entirely of retired individuals. The ECHP dataset collects individual money transfers received and assumes that transfers occur between household heads in the form of financial support from relatives, friends or others not living in the household, but provides no information on monetary contributions made among members of families living in the same household.

This paper attempts to fill in some of these gaps. It employs the OECD procedure (OECD, 2001) to calculate individual monetary contributions, based on the 2010 Italian Statistics on Income and Living Conditions (IT-Silc) survey questionnaire, which uses a comprehensive set of up-to-date measures of observed characteristics at the individual and family levels. Our indicator is defined as the difference between the personal and per-capita income divided by the equivalent family income. We make certain assumptions: first, for each family member we assume personal consumption is equal to per-capita income. This hypothesis of equal sharing of resources among all family members relies on the unitary household decision making model (Becker, 1974 and 1981; Samuelson, 1956). Although the income pooling hypothesis is controversial in the literature (see for instance: Browning *et al*., 1994; Browning and Chiappori,

1998, Findlay and Wright, 1996; Jianakoplos and Bernasek, 2008), in the exercise in this paper, we are not interested in modelling individual bargaining power. The baseline objective is to identify the determinants explaining income differences amongst family components and how they might increase the need of individual family members to share a part of their personal income with others, in order to offset the emerging inequality. Second, we assume that a family component should give (receive) to (from) the others the amount of his personal income that exceeds (is less than) the per-capita amount. This results directly from implementation of the OECD procedure and relies on the motivations embedded in Becker's 'altruistic model' (1974), Berneheim *et al*.'s (1985) and Cox's (1987) 'exchange models', and complies with family rules (i.e. family constitution) (Cigno, 1993). In particular, the altruistic model suggests that individuals' transfers of money to others stems from a desire to increase the other's well-being. In other words, the giver of money derives direct utility from the increased utility of the receiver. According to the exchange model, transfers to other individuals are made in return for services received; for instance, a parent might promise a bequest in exchange for an offspring's companionship. Another explanation for voluntary money transfers might be the existence of a self-enforcing 'family constitution' (Cigno, 1993), which is a set of unwritten rules prescribing the amount of money that a family component is required to donate to the components in need. Regardless of the prevailing framework and relative implications in the form of different outcomes from public policies to redistribute income, these other motives that undoubtedly drive transfer behaviour and predict and support similar qualitative results regarding removing income inequality since we assume that family members act as an income-equalising institution.

Thus, we include personal and family characteristics in the analysis in order to capture their effects on reducing income inequality amongst family components. Our indicator depends on whether the individual has a job and also on the amount of the salary received, compared to other members of the household. Consequently, the specifications take account of labour supply theory (Becker, 1965 and 1981; Gilbert and Becker, 1975) as well as the motives of intra-household transfer discussed above (i.e. Becker, 1974; Cox, 1987). Gender, age and education level are used as proxies for the different labour market participation of individuals (for gender and education see Becker, 1965, 1981; for an age and life cycle hypothesis see Gilbert and Becker, 1975; Heckman and Macurdy, 1980; Macurdy, 1981).

According to the literature, all these variables influence the decision to work. Overall females, all other things being equal, are less likely to have a job than their male counterparts because of potential exposure to interruptions, especially due to pregnancy at the beginning of their work careers (Del Boca 1997 and 2002; Del Boca and Locatelli, 2006; Chiuri, 2000). The more limited female participation in the job market is also a consequence of the bargaining

power in the family, in which women are charged with child/elderly care and males are considered the breadwinners. Thus, these social and cultural norms do not help women reconcile their household responsibilities with work activities (Gauthier and Hatzius, 1997; Engelhardt and Prskawetx, 2004; Del Boca and Sauer, 2009), as observed in their employment patterns. The propensity to work is also positively correlated with the level of education achieved (Del Boca, 1993 and 2002; Colombino and Di Tommaso, 1996; Addabbo, 1999; Bratti and Staffolani, 2012). In fact, education can be seen as a proxy variable for "a positive taste" or "pure preference" for market work (Bowen and Finegan, 1969). Type of contract and economic status are used to control for the different opportunities available to family components to give (receive) monetary contributions to (from) the others (i.e. people with stable job conditions earn more than other categories of workers) (Mussida and Picchio, 2011). Degree of kinship provides evidence of gender attitudes towards reducing income inequality based on the role in the household (i.e. head of household, spouse/partner, children). Details of family composition, such as number of females, number of unemployed, etc., highlight how differences in the characteristics of households may emphasise income inequalities among members. The geographic area of residence provides information about labour market conditions and social capital (i.e. acceptability of women working). Finally, controlling for the number of hours spent on childcare and care for the elderly serves as a proxy for the time spent on unpaid work, which contributes to explaining a lower 'wage' or share of income, compared to other components that are relieved of this burden. Clearly, those more involved in family activities have less time to allocate to a paid job, which explains the risk of facing income inequality within the family and responds to the exchange framework (Berneheim *et al*., 1985; Cox, 1987).

3. DATA

Applying the OECD (2001) procedure, for each family component we define the monetary contribution given (received) to (from) the other members to reduce income inequality within the household, and provide evidence of the determinants of these differences using the 2010 IT-Silc. The selected sample consists of individuals over 17 years of age, living in a household composed of at least two members (required to calculate the amount shared with any other component). Self-employed people are excluded since this category of worker has some specific characteristics that could bias our estimates (e.g. income declared) and outliers with respect to income, according to Hadi (1992 and 1994).[1] The resulting sample size is 21,729 individuals, of which 51.2% are female (see Table1). According to family status, in the sam-

[1]All these observations – apart from single households – were accounted for in the definition of the variables related to the family, and only subsequently excluded.

ple, around 32% are male household heads, 8% are female household heads, 31% are wives, 3% are husbands, 10% are daughters, and 12% are sons.

Table 1 – *Sample size by gender and family status (number of observations)*

	Number. of observations	%
Women	11,119	51.17
Men	10,61	48.83
All	21,729	100.00
Family Status:		
Household Head		
Men	7,017	32.29
Women	1,649	7.59
Spouse		
Husband	611	2.81
Wife	6,717	30.91
Children		
Men	2,622	12.07
Women	2,284	10.51
Others		
Men	360	1.66
Women	469	2.16
All	21,729	100.00

Sources: Own elaboration of IT-Silc data (2010).

3.1 *Dependent variable*

The dependent variable is the amount of the monetary contribution each component should give (receive) to (from) other family members to remove potential income inequality. Since we do not have direct information on intra-household transfers (IT-Silc data contain details only on monetary transfers between households) we calculate this by applying the following strategy which is in line with the OECD (2001) procedure.

Assuming that each family member's consumption is equal to the per-capita income, we define and calculate several types of incomes.

Let Y_1 be the total equivalent net household income defined as the sum of personal income from labour and pensions of all family members plus other sources of income at the household level,[2] divided by the OECD equivalence scale, which takes account of economies of scale based on family composition.

[2]To define the total household income we consider the following sources: imputed rent, income from rentals, interest, dividends and other capital income, family/children allowances, other social benefits, housing allowances, and regular inter-household cash transfers received.

Let Y_2 be the equivalent income calculated as the sum of only personal income from labour and pensions of all household members, divided by the OECD equivalence scale. Let Y_3 be the per-capita income defined as the sum of personal income from labour and pensions of the individuals living in the household, divided by the number of components. Finally, Y_4 is the personal income from labour and pensions.

According to the OECD procedure (OECD 2001), three types of variables are defined: T_1 is unidentified resources, resulting from the difference between Y_1 and Y_2 (i.e. Y_1–Y_2); T_2 refers to the economies of scale and is defined as the difference between Y_2 and Y_3; (i.e. Y_2–Y_3); and T_3 is inaccurately termed intra-household transfers, and is the difference between Y_4 and Y_3 (i.e. $Y_4 – Y_3$). Next, we divide each of these monetary components by the total equivalent household income (Y_1) to provide the share of each component.

T_3 is the core variable in our empirical exercise and may be negative or positive. We are aware that this variable does not properly show effective intra-household transfers among family components, but rather measures the amount an individual should give (receive) to (from) other family components in order to nullify the income inequality amongst them (i.e. assuring that each member has disposal of the per-capita income in the context of equal sharing of resources).

Tables 2 and 3 report income decomposition using the OECD procedure (i.e. the three variables 'T' described above and the personal income), by gender and status respectively. In the male sub-sample (Table 2), about 99% of the household's disposable equivalent income derives from each individual's own financial sources (pension or wage), thus, they must contribute on average 37% of this amount to remove family income disparities. In the female subsample, only 47% of their income derives from their personal income, and they need to receive monetary contributions from the other components (about 16%) to overcome their income inequality. Descriptive statistics show that there are economies of scale, meaning that families composed of at least two individuals can live more cheaply than single households (the benefit provided by the economies of scale is around 33%) . Men are the main breadwinners as they are more likely than women to promote equal consumption among all family components.

With regard to family status (Table 2), we notice a significant difference for the category of household head, namely that men contribute with 58% of the per-capita income from labour and pensions to ensure income equality in the family. Wives benefit from economies of scale related to the partnership (32.6%) and from the contributions received (18.6%) from the other family members. These results confirm the existence of gender differences, and suggest that men, on average, provide more support in the form of income than women. Also, women are generally recipients but female household heads positively contribute (about 14%). Overall, the personal incomes of children are below per-capita income, but gender differences still emerge. In particular, daughters require a smaller

contribution (about 18%) than sons (29%), from the other family members to achieve per-capita income levels.

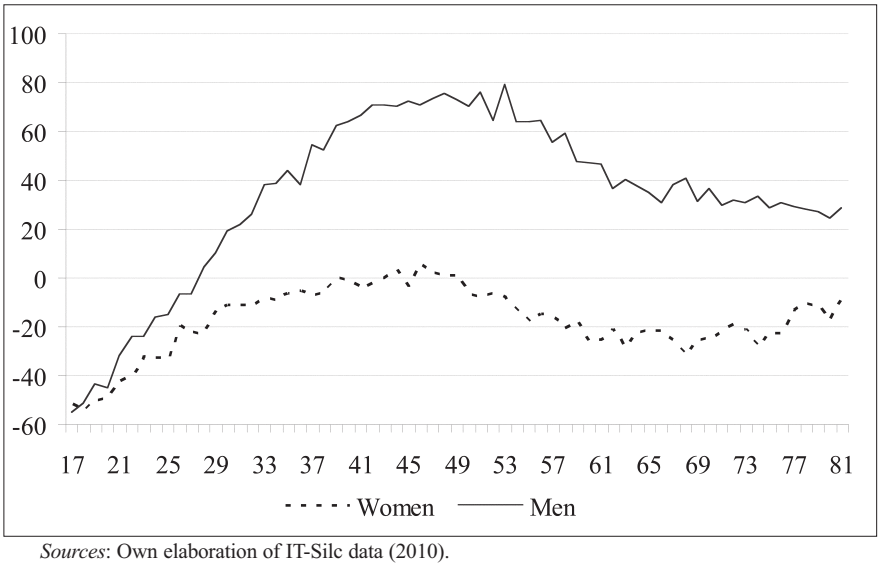
Table 2 – *Income decomposition by gender and family status (%)*

	All		Household Head		Spouse/Partner		Children		
	Men	Women	Men	Women	Men	Women	Men	Women	All
T_1	4.37	4.75	4.61	4.72	4.1	4.7	5	3.86	4.57
T_2	32.9	32.62	32.38	30.09	33.53	32.59	34.38	34.02	32.76
T_3	36.54	-15.66	57.72	13.95	43.68	-18.57	-29.13	-17.74	-9.83
Personal Income	99.27	46.97	120.73	79.03	106.06	44.14	31.49	44.38	72.51

Note: T1 (unidentified resources) results from the difference between total net equivalent and equivalent net income from labour and pensions, T2 (economies of scale) results from the difference between net equivalent and net per-capita income from labour and pensions; T3 (intra-households transfer) results from the difference between net personal and net per-capita income from labour and pensions. All the variables in the table are divided by the total net household equivalent income to obtain the share of it.
Source: Own elaboration of IT-Silc data (2010).

Figure 1 shows the distribution of monetary contributions by age and gender. The age distribution is characterised by an inverted U shape and gender differences are more pronounced if individuals are more likely to have a job.

Figure 1 – *Intra-household contribution by gender and age*



Sources: Own elaboration of IT-Silc data (2010).

Relying on how T_3 is defined has two important implications for our estimates. First, family members with no personal income (e.g. inactive or unemployed people), by construction, must benefit from the monetary contributions of the other members to make consumption equal to the per-capita income. However, to avoid sample bias and misleading interpretations of the estimates, we did not exclude them from our sample. Second, T_3 may vary according to: 1) individual personal income; 2) personal incomes of every other family component as they affect household income; and 3) number of family members in the household, which affects both per-capita and equivalent income. The distribution of the three types of income by gender and family status are presented in Table 3.

According to the distribution of incomes, what emerges is that women generally have lower personal incomes than per-capita incomes (except for female household heads) and males have higher personal incomes than per-capita incomes, especially once they are household heads. Table 3 shows that the difference between per-capita and personal income is smallest for female household heads and largest for sons.

Table 3 – *Income distribution by gender and family status (euros)*

	All		Household Head		Spouse		Children	
	Men	Women	Men	Women	Men	Women	Men	Women
Total Equivalent Incomes	18,813	18,548	18,771	18,993	20,262	18,722	17,806	18,738
Equivalent Income from labour and pensions	18,083	17,763	17,998	18,128	19,518	17,936	17,032	18,100
Personal	17,922	9,287	21,348	14,185	20,707	9,139	6,149	8,834
Per-capita	11,965	11,792	11,994	12,513	12,886	11,909	10,965	11,769

Sources: Own elaboration of IT-Silc data (2010).

3.2 *Explanatory variables*

To test the effects of the determinants on the dependent variable, namely the individual monetary contribution, we apply several controls: education level, participation in the labour market, individuals' preferences, cultural and institutional aspects, and the role within the family.

The covariates can be grouped into two categories. The first set of explanatory variables refers to individual characteristics. It includes age, age squared,

education dummies, area of residence, family status, type of contract, number of hours spent on caring. The second identifies the set of information related to family composition. It includes number of females, number of components with permanent and fixed term contracts, number of unemployed, and households not in the labour force. Each of these variables is defined excluding the respondent. In order to account for unpaid work, we include hours spent on caring[3] (for children, elderly, and the household) by each family component.

Table 4 presents a statistical summary of the explanatory variables by gender. The average age of males and females is 48. Three dummies - North, Centre, and South - capture the geographical area of residence: the majority of our sample lives in the North.

Education dummies are defined according to the International Standard Classification of Education (ISCED). We distinguish particularly between lower secondary or compulsory education, upper secondary and tertiary education. For education, we find no gender differences: more than half of each sub-sample achieved only compulsory education (about 51%). However, gender differences emerge if we account for family status (around 66% of men and 15% of women are household heads). The number of sons is slightly higher than the number of daughters (25% vs 21%). With regard to type of contract, the percentage of men with a full-time permanent contract is almost twice that of women (43% vs 22%). Women are mainly inactive because this category includes housewives (about 43% vs 13% of men). Finally, for the variables on family composition, the descriptive statistics generally do not show gender differences except for number of women, which is related to the construction of the variable which excludes the respondent.

Regardless of any specific characteristics, men are more active than women in equalizing family income (see Table 5).

Table 4 – *Descriptive statistics by gender*

	Men	Women	All
North	34.11	-13.67	9.93
South	41.36	-19.84	9.85
Centre	34.11	-13.21	9.62
Tertiary ed.	41.49	1.24	19.26
Upper secondary ed.	35.25	-9.65	12.77
Lower secondary ed.	36.62	-23.66	5.76
Household Head	57.72	13.85	49.38
Spouse\Partner	43.68	-18.57	-13.38
Children	-17.74	-29.13	-23.04

...Cont'd...

[3]The variable describes the time spent on household work, child care and care for other dependents, and is available only in the IT-Silc 2010 module on intra-household sharing resources.

Table 4 – *Cont'd*

	Men	Women	All
Other members	-5.64	-16.15	-5.05
Permanent full time	64.33	25.08	50.75
Permanent part time	29.90	5.75	8.95
Not permanent FT	41.61	9.41	28.06
Not permanent PT	22.26	-2.53	4.26
Other workers	30.97	-7.86	7.40
Retired	35.07	-9.59	19.18
Unemployed	-7.95	-32.88	-20.31
Other inactive	-25.94	-41.57	-38.01

Sources: Own elaboration of IT-Silc data (2010).

Table 5 – *Mean of T_3 by explanatory variables*

	Men	Women	All
North	34.11	-13.67	9.93
South	41.36	-19.84	9.85
Centre	34.11	-13.21	9.62
Tertiary ed.	41.49	1.24	19.26
Upper secondary ed.	35.25	-9.65	12.77
Lower secondary ed.	36.62	-23.66	5.76
Household Head	57.72	13.85	49.38
Spouse\Partner	43.68	-18.57	-13.38
Children	-17.74	-29.13	-23.04
Other members	-5.64	-16.15	-5.05
Permanent full time	64.33	25.08	50.75
Permanent part time	29.90	5.75	8.95
Not permanent FT	41.61	9.41	28.06
Not permanent PT	22.26	-2.53	4.26
Other workers	30.97	-7.86	7.40
Retired	35.07	-9.59	19.18
Unemployed	-7.95	-32.88	-20.31
Other inactive	-25.94	-41.57	-38.01

Sources: Own elaboration of IT-Silc data (2010).

4. FINDINGS

4.1 *Estimates*

The OLS regressions run on the entire sample and on the samples split by gender are presented in Table 6. The dependent variable indicates the share of

personal monetary contribution of each family component (i.e. the difference between personal and per-capita income divided by the total equivalent household income), and can be positive or negative. Interpretation of the coefficients of each covariate relies on the following statement: a positive sign of an explanatory variable means that this characteristic either increases the monetary contribution or reduces the amount received. The reverse applies in the case of a negative sign.

Considering age and age squared, the corresponding coefficients show that the monetary contribution - required to level personal income with per-capita income - exhibits an inverted U-shape with age; men reach a maximum at age 45 and women at age 52. This result suggests that men support the consumption of family components financially from the start of their work careers and reduces the amount of their monetary contribution only as they get older. Several empirical contributions (see for instance, Del Boca, 2002; Di Tella and Mac Culloch, 2002; Jaumotte, 2003) show that women start to contribute later in life when the risk of interruptions to work (for instance due to pregnancy and childbirth) is smaller: women's participation in the labour market is more related to their life cycle. Also, females may face lower employment rates before the age of 30 because they are still in education; this increases the likelihood of a negative amount of contribution. However, for women, once type of contract is controlled for, age stops influencing the monetary contribution.

For geographical area of residence, the estimates reflect the diverse economic conditions and inefficiencies that characterise Italy. Regardless of gender, it is noticeable that, because of the poor labour market conditions, people living in the South have a lower propensity to provide monetary contributions to other family components. However, if we control for type of contract, people living in the South positively contribute to levelling income inequalities within the family (while the opposite is true for people living in the North), especially for women. This suggests that if we disentangle from the variable South the effect of the poor labour market conditions, there is a difference in social and culture attitudes in this geographical area, resulting from a higher propensity to level income differences within the family. Not surprisingly, level of education achieved (for both men and women) positively affects the monetary contribution: overall, people with an education level beyond the compulsory schooling are more likely to share a part of their income with the other components. It is noticeable that if we account for type of contract, the level of education for males no longer affects the size of the contribution. This result can be interpreted within the human capital framework, which suggests that the labour market opportunities are better for higher educated individuals, and therefore the type of contract can be seen as a measure of the level of education achieved as well as of the economic condi-

tions. By contrast, women with higher levels of education are shown to contribute more than their male counterparts if we include information on economic status. This result is in line with national statistics that show that labour market participation is higher for better educated women (i.e. 58.5% and 72% for upper secondary school and tertiary education, respectively) (ISTAT, 2009), and with the empirical evidence provided by Bratti and Staffolani (2012), which suggests that women with university education tend to have a full-time job.

Each household member has a specific role in the family: household heads (regardless of gender) are more generous, since they contribute more than any other household member. Sons show a lower propensity to positively contribute to reduce income inequality compared to other household members. Also husbands (not classified as household heads) contribute more to levelling income inequalities, while the opposite is true for wives.

As expected, the results for type of contract show that individuals with permanent jobs are significantly more likely to share a part of their personal income within the family. Clearly, intrinsic characteristics associated with this type of contract - job tenure, higher wage, and better welfare provision - explain why this variable is a good predictor of the propensity to reduce income inequality within the family. Apart from those with atypical contract forms, part-time workers experience less favourable financial conditions. Those who are not part of the labour market contribute negatively to levelling income differences, regardless of gender.

Considering the explanatory variables related to the household composition of respondents, excluding the focal respondent, the patterns by gender are quite similar, but the size of the coefficients differs. A unit change in the number of women living in a specific household increases the amount an individual gives to a family component or reduces the amount received, mainly in the case of males. Regardless of gender, the dynamics are similar for inactive and unemployed members. Overall, independent of the type of contract, the higher the number of employed (unemployed) individuals in the family, the smaller (greater) is the amount given to (received by) each component, especially in the case of men.

Finally, family members who are more involved in family activities have less time to allocate to paid jobs; hence, they can be expected to contribute less than other members to reducing income inequalities, and the unpaid work is exchanged for monetary contributions from the other family components.

Table 6 – *Estimates of monetary contribution using OLS model*

	Men	Women	All	Men	Women	All
Men			25.641***			12.273***
Age	3.847***	1.985***	2.898***	2.040***	-0.194	0.727***
Age squared	-0.040***	-0.019***	-0.030***	-0.020***	0.004***	-0.006***
North	2.356**	0.412	11.470	0.967	-2.059***	-0.723
South	0.502	-7.312***	-3.704***	3.597***	1.672**	2.474***
Tertiary ed.	4.939***	26.739***	16.816***	0.214	6.825***	4.031***
Upper secondary ed.	3.697***	15.781***	9.489***	0.137	4.448***	2.082***
Household Head	46.321***	25.819***	37.165***	41.256***	23.400***	33.939***
Spouse\Partner	33.943***	-9.095***	-18.352	29.315***	-3.509**	3.471**
Children	-19.214***	-18.124***	-22.071***	-12.601***	-13.316***	-15.009***
Number women	2.398***	4.138***	6.081***	2.448***	3.973***	5.219***
Number with permanent contracts	-3.593***	-13.737	-4.405***	-3.660***	11.169	-2.558***
Number with not permanent contracts	-11.796***	-6.378***	-11.178***	-11.377***	-4.649***	-9.187***
Number unemployed	15.551***	6.919***	9.388***	17.924***	8.838***	12.006***
Number out of labour force	22.707***	8.044***	14.789***	22.040***	9.836***	15.624***
Permanent part time				-17.130***	-18.748***	-18.846***
Not permanent full time				-6.462***	-12.272***	-9.827***
Not permanent part time				-27.234***	-25.455***	-25.013***
Other workers				-23.663***	-38.349***	-31.692***
Retired				-24.137***	-37.463***	-32.244***
Unemployed				-50.549***	-56.304***	-53.507***
Other inactive				-44.965***	-65.468***	-60.183***
Hours of care				-0.136***	-0.074***	-0.177***
Constant	-103.797***	-72.658***	-97.293***	-47.99***	10.409***	-17.427***
N. of observations	10,610	11,119	21,729	10,610	11,119	21,729
Log likelihood	-5.41e+04	-5.66e+04	-1.12e+05	-5.33e+04	-5.41e+04	-1.08e+05

Note: * p<.1; **'p<.05; *** p<.01 Reference categories: Centre; Compulsory education; Other members; Permanent full-time.
Sources: Own elaboration of IT-Silc data (2010).

4.2 *Further investigations*

To ease interpretation of the flows of monetary contributions and the amounts potentially received from or given to other family components, we calculated predicted values for some individuals. The plots are reported in Figure 2. We separate individuals into seven categories according to their economic status in the labour market. Workers are categorised according to type of con-

tract (permanent vs temporary), and the work hours (part-time vs full-time); non-workers are categorised as unemployed or inactive. Each value is computed assuming that the monetary contribution will vary with gender, age and role in the household, for example, household head or child. Household heads and children living in the North with upper secondary school diplomas, and the remaining covariates (number of women, of unemployed, of components with permanent and temporary contracts, and hours spent caring) are held constant; each value is equal to the sample mean. We can provide this graphical information because economic status is treated as an ordinal variable, that is, we assume that a temporary contract is less good than a permanent contract thus full-time work is preferable to part-time work. The predicted values are provided by gender for each category; hence, we can only compare between sons and male household heads and between daughters and female household heads, taking all the remaining family components as the reference category for each sub-sample.

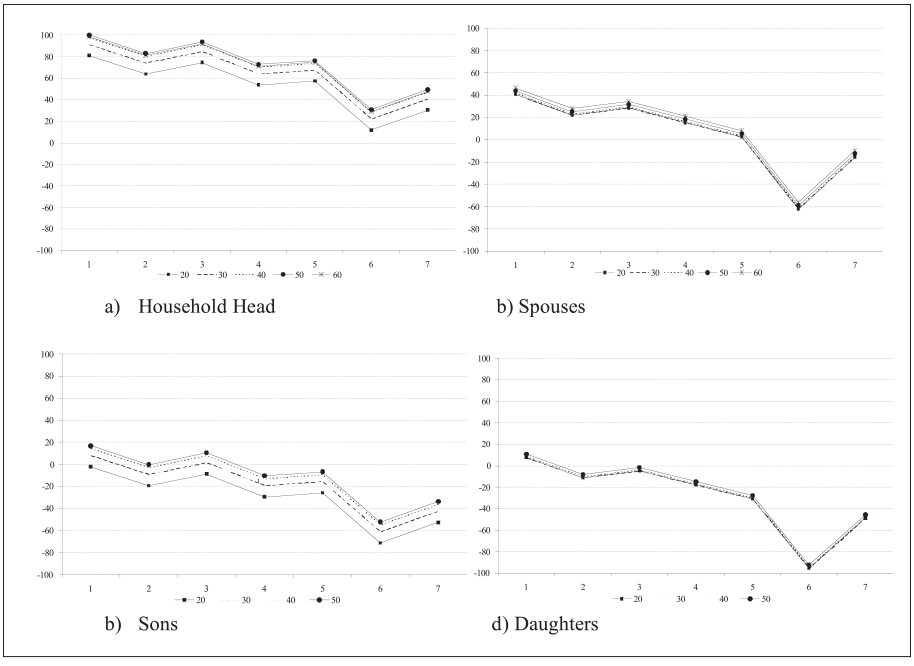
In general, independent of gender, the predictions highlight that individuals with more stable work contracts are more likely to support the consumption of other family components since they will provide a positive monetary contribution. As expected, sons contribute less than other male family members and daughters less than other female family members. Figure 2 shows that the size of the contribution increases with age. For instance, in the category of full-time permanent workers, the contribution of a 50-year-old male household head is bigger than the contribution of a younger household head. A 30-year old household head with a part-time permanent contract contributes up to 74.2% towards equalising household income differences, rising to about 83.7% at age 60. The female sub-sample shows several differences. The monetary contribution of a woman of the same economic status does not significantly change with age. This might be due to the fact that women are more likely to be hired in sectors where career prospects are limited and wage profiles flatten.

Finally, and probably not surprisingly, sons and daughters provide less support to the rest of the family even if they are employed: their monetary contribution is positive only if they have a permanent contract.

5. CONCLUSIONS

This paper set out to define and investigate intra-family income differences in Italy. We calculated an indicator using information on personal and household incomes. On this measure, family components can positively contribute to promoting equal consumption among family members through the sharing of part of their resources with member(s) with lower personal incomes. Considering that this kind of survey rarely collects data on monetary transfers within the family, the empirical evidence is narrow, and pro-

Figure 2 – *Predicted values by type of contract, gender, whether head of household or spouse or children and age profile*



Note: For each predicted value we assume that the individual is living in the North, has achieved high school diploma level, and is living in a family composed of some women, some unemployed components, some components with permanent and temporary contracts, which is equal to the sample mean. 1 = permanent full time; 2 = permanent part time; 3 = full-time, not permanent; 4 = permanent part time; 5 = other workers; 6 = retired and other inactive; 7 = unemployed.
Sources: Own elaboration of IT-Silc data (2010).

vides little information on what determines the size of the monetary contribution made to negate family income differences. In this work, in order to provide more evidence on income differences in Italy among family components we used 2010 IT-Silc data. We applied an indicator for monetary transfers within the family and then described the variables for family income differences in Italy. Our focus on the Italian case was driven by the typical household composition in Italy where it is common to find intergenerational coresidence, the tendency of young adults to postpone departure from their parental home, lower female labour force participation, and disparities amongst family components about time spent on household work, child care and care for other members. In order to highlight gender differences, we also performed the regressions separately for men and women.

Our results show that monetary contributions vary by gender. In particular, more educated women are more likely to be able to equalise consumption

among family components than less educated women. For men, education is not significant if we introduce economic activities into the regression. In relation to predicted values, we find that men and women behave differently based on age. Men provide more support as they get older, but for women there are no significant differences across ages. As expected, more stable labour contracts enhance the probability of making a positive contribution to the other family members. Regardless of gender, part-time workers have the least favourable financial conditions. In relation to the children in the family, sons and daughters are more likely to be in need of monetary contributions to achieve the per-capita income level of the other family components.

In summary, what emerges from this exercise is the persistence of gender differences in attitudes to removing family income inequalities. In the family structure analysed, the estimates confirm the persistence of a model in which men are the breadwinners. Individuals more involved in unpaid work have less time to allocate to a paid job, which enhances the risk of facing income inequality. Despite employment flexibility and equal wage laws, women's earnings still lag behind those of men. Only those women who are higher educated and/or have stable job contracts are able to share a larger part of their income with others in the family. The persistence of gender differences amongst family members suggests that policy interventions implemented to promote equal opportunities during the recent years failed once we analysed the effects at the household level. In fact, the emerging income inequality within the family is related to the behaviour of the women, which is related to the life cycle events (i.e. pregnancy, childbirth, child and family care, discontinuity in labour force participation), the bargaining power in the family, the lack of family friendly schemes, and social and cultural norms (i.e. males as the breadwinners). As a consequence, to overcome income inequalities between households, policy makers should define interventions to promote equal opportunities for family members despite their role and gender.

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