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ABSTRACT

Mums and Their Sons, Dads and Their Daughters: Panel Data Evidence of Interdependent Marginal Utilities across 14 EU Countries*

We study how fathers and mothers income satisfaction correlates with the income satisfaction of their sons and daughters, as well as with other economic and socio-demographic variables. We estimate these correlations using data on parents and children in households surveyed in the eight waves of the European Community Household Panel-ECHP (1994-2001) for 14 EU countries. To assess the robustness of these correlations, we use siblings in the Panel and we investigate the sensitivity of the estimates with the inclusion of other control variables. We also adopt a multi-level random effects ordered probit specification, that uses step-parents in the data, to allow us to distinguish nature effects from nurture effects. Our main results show evidence of strong altruism effects, but these estimated effects differ across countries, differ between mothers and fathers, and differ between sons and daughters.

JEL Classification: D13, D60, D64, C33

Keywords: parents and children, income satisfaction, interdependent marginal utilities, altruism, Europe

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1. Introduction

The extent to which parents are altruistic towards their children is important because government policy towards children is usually mediated by the parents. In particular, most developed countries provide significant income transfers to parents who are motivated by concern for the well-being of their children, especially those in low income households. For example, in the US, the recently introduced Child Tax Credit (CTC) costs almost $1 billion each week, that is to say, about 0.4% of GNP (Burman and Wheaton, 2005). The UK government spends about $25 each week per child in the form of a lump sum transfer called Child Benefit (CB) which, together with the UK equivalent CTC, accounts for about 1% of GDP (Bradshaw and Finch, 2002). Moreover, altruism would suggest a crowding out effect between public and private transfers, in such a way that public transfers directly to children would be offset by reductions in private transfers (Güth et al., 2002; Kang and Sawada, 2003; Lafferrère and Wolff, 2004).[1]

The aim of this paper is to analyse the extent of altruism between parents and their children. To address this, we use responses to questions about satisfaction with income as measures of marginal utility.[2] An optimising altruistic parent should equate the ratio of his/her marginal utility of consumption to that of the child, and to the weight of the child's utility in the parent's welfare function. In other words, an altruistic parent should transfer resources to the child if the parental marginal utility of consumption is higher than the weight that the parent places on the child's welfare, times the child's marginal utility of consumption. Thus, a correlation coefficient between parental and child marginal utilities is an estimate of the weight of the child's utility in the parental preferences.

Altruism is often deduced in the literature from often-problematic data on both bequest and inter-vivo transfers, and it would clearly be useful to attempt to substantiate these findings using more reliable methods.[3] Thus, our approach represents an important advance on the previous literature by providing estimates over 14 countries using a rich

[1] Interactions between elderly parents and their adult children do not necessarily depend on altruism, but can involve elements of the exchange motive (Cox 1987; Cox et al., 1998; Arrondel and Masson, 2001).
[2] Notable studies of individual well-being include Blanchflower and Oswald (2004), Frey and Stutzer (2002a, 2002b), Layard (2005), Oswald (1997), and Clark and Oswald (2002). Interdependencies between levels of well-being of spouses can be found in Winkelmann and Winkelmann (1995) who found a negative effect on the well-being of wives having an unemployed husband.
[3] See Altonji et al. (1992, 1996 and 1997) for evidence of intergenerational altruistic links between parents and adult children.

and internationally comparable dataset, the eight waves of the European Community Household Panel-ECHP (1994-2001). This Panel allows us to consider fixed-effect estimations and contains information on all individuals within the household. Hence, we can consider sibling differences to eliminate family fixed effects.

In contrast to our work here, which relies on responses to questions about satisfaction with income, to measure the marginal utility of consumption, Winkelmann (2005) models the intra-family correlation between levels of subjective well-being using a hierarchical random effects model. Similarly, Schwarze and Winkelmann (2005) study the well-being of parents and its correlation with that of their children older than 16 who have moved out of the parental home, using panel data from Germany. While correlations between the levels of well-being will be suggestive of altruism, they will not, in general, be able to reveal the degree of altruism.

The outline of the paper is as follows. In Section 2 we briefly describe the data; Section 3 provides the methodology; Section 4 presents some estimates from a variety of methods, and Section 5 concludes.

2. Data

The data used in this work comes from the eight waves of the European Community Household Panel-ECHP (1994-2001) for 14 European Countries.[4] We select families in which either parent and the children older than 16 still living at home, declare non-missing responses to the question about their income satisfaction.[5]

The number of observations of children between 16 and 24 years old living in the household are given in Table 1, broken down by type of household: both natural parents present, only natural father present, only natural mother present, natural mother with step-father, and natural father with step-mother.[6]

[4] ECHP gives us income information about the previous year, so that we have a final panel composed of seven waves. Additionally, we omit Sweden since the Swedish ECHP data do not contain information regarding income satisfaction questions.

[5] Household members who leave the original household are not followed in ECHP. We consider the impact of this censoring in our subsequent analyses.

[6] After analysing eight age groups (16-18, 19-21, 22-24, 25-27, 28-30, 31-33 ….), with the estimation results being similar, we have decided to perform our analysis for children from 16 to 24, in order that the study is comparable across countries, and that the sample is representative of all European countries. However, in our later estimation, we control for this effect by interacting age with child income satisfaction, to determine whether parents were more or less altruistic toward children of different ages.

(Table 1)

The specific question we employ, based on individuals' own perceptions, is: "How satisfied are you with your present financial situation?", with the responses taking values from "not satisfied at all" (1) to "completely satisfied" (6).

With respect to the explanatory variables, our study includes a number of parent and child individual characteristics that have proved to be important determinants of individual subjective well-being in previous research (Argyle, 1999; Van Praag et al., 2003; Frijters et al., 2004). Thus, we incorporate economic and socio-demographic variables, including the age of the parent and the age squared of the parent (*ParentAge, ParentAge2*), and the education level of the parent and that of the child (*ParentPrimEduc, ParentSeconEduc, ParentHighEduc, ChildPrimEduc, ChildSeconEduc, ChildHighEduc*). In addition, we examine two household characteristics: the first indicating the number of children under 16 in the household (*Children<16*), and the second indicating whether the household own their flat or house (*HouseOwnership*), with this latter variable being interpreted as a family wealth proxy. Introducing logarithmic family income and logarithmic household size is an alternative to imposing an arbitrary "income equivalence scale" to account for size effects (Schwarze, 2003, 2004; Winkelmann, 2005; Schwarze and Winkelmann, 2005; Winkelmann, 2006).[7] The study also includes a variable which indicates whether the parent and the child are employed or not (*ParentEmployed, ChildEmployed*), with this being among the strongest predictors of a high level of well-being.

In our dataset it is possible to distinguish between biological and non-biological children, so we introduce the possibility of being a step-son or a step-daughter. These variables interact with satisfaction of the child and the logarithm of family income, which allows us to determine if, and in what direction, there is a significant effect on the economic satisfaction of the father or the mother.[8]

[7] Household income, net of tax and post transfers, less child net annual income. We introduced family income in logarithms since income is related to reported utility in a logarithmic form, but not to true utility (Oswald, 2005; Ferrer-i-Carbonell, 2005).

[8] In a later section we will delineate the measurement error between the child sharing the same biological parents, and that of being siblings, whether they are biological or step, but live in the same household. Literature has studied twin samples, those who are monozygotic and share all genes, and those who are dizygotic and just share half of their genes, those who are reared together and whose who grow up separately. This allows us to identify if correlations in self-reported subjective well-being are due to genetics or to sharing the same family background (Bingley et al., 2005).

Tables 2.a to 2.f show the mean and standard deviation of some relevant variables employed in the analyses for four samples (fathers with their sons, fathers with their daughters, mothers with their sons and mothers with their daughters), and a further two samples (fathers with more than one son or daughter, and mothers with more than one son or daughter). In these two latter samples, we use fixed and random effect estimations to model the existence of siblings in a household, as well as the presence of siblings sharing the same parents, which allows us to distinguish between biological or "nature" effects, as opposed to the "nurture" effects of simply growing up in the same household.

(Tables 2.a-2.f)

The variables we list in these Tables are income satisfaction declared by the parent (*Parent Inc Sat*), as well as income satisfaction of the child between 16 and 24 years living in the household (*Child Inc Sat*). We also show the satisfaction of the child between 16 and 24 recorded in the year they take the decision to leave home (*Child Sat Leaves home*), so that, in the following year, they are no longer in the sample. We consider the satisfaction recorded by the parent in the year the child takes such a decision (*Parent Sat Child Leaves home*).[9] We then consider the mean of the family income in PPP in order to make cross-country comparisons (*Log Fam Inc*) [10], the percentage of households in the sample that experience a windfall (*Windfall*)[11], the proportion of the child income compared with the rest of the household income (*Proportion*), as well as the percentage of married parents (*Parent married*), the percentage of employed parents (*Parent employed*), and the percentage of step-parents (*Step*). Additionally, we employ the percentage of children who take the decision to leave home in each sample (*% Children Leave Home*), as well as the average age of taking such a decision (*Average Age Child Leaves*). In the last column, we show the number of observations in each country for the different samples.

[9] We can compare these last satisfaction indicators with the mean of the satisfaction declared by the individuals whose children do not leave home, confirming that this is only slightly smaller. Thus, there does not seem to be any pattern of satisfaction and it does not appear that less satisfied individuals or children of non income-satisfied parents are the ones who leave home. This suggests that there is no selection by observables in our samples, and we subsequently show that our results do not appear to be overly sensitive to the age range of the children, thus suggesting that there is little selection by unobservables.

[10] Purchasing Power Parity rates are used to convert income variables into a common indicator which allows us to compare the purchasing power of families across countries.

[11] The household inherits or receives gift or lottery winnings worth 2000 € or more.

In these Tables we observe that, in Greece, Italy, Portugal and Spain, parents declare satisfaction levels of around 3 points, with higher satisfaction reported in the rest of the countries and similar results for the four parents-children samples. Children declare lower satisfaction levels in Greece and Italy than in Portugal, Spain and in the rest of the countries.

Other variables, such as the logarithm of family income, are very similar in each of the countries for the four samples, although life standards are very heterogeneous in each of the countries. We have found significant differences between countries in the ratio of the child's income to the income of the other members of the household, with higher ratios in Austria, Italy, Portugal and Spain, and lower ratios in France and the Netherlands. We observe that, for the daughter samples, both for fathers and mothers, the portion the daughter contributes to the rest of the family income is smaller than the son's portion. The proportion of individuals who benefit from windfalls is quite high in Denmark and the Netherlands, very small in Austria and Portugal, and in the rest of the countries is around 1 or 2 percent of individuals that receive such a positive income shock.

We also observe that most of the parents in our analysis are married or cohabiting. The percentage of employed fathers in the sample is very high, whereas for the mothers-sons and daughters samples the percentage of employed mothers is smaller. The proportion of step-sons and step-daughters in the father samples is similar but is, again, very heterogeneous across countries, being very high in the United Kingdom but low in Denmark and France. In the two fathers samples, there are more step-children than in the samples of mothers, as children tend to stay with biological mothers and when the mothers re-marry, the step-father lives in the existing household of the current wife.

The proportion of children who leave the household, and are not in the household the following year, is very high in Luxembourg but very low in Greece. When we observe the proportion of daughters who leave home it is similar to that of sons, being very high in Italy and lower in Denmark and the Netherlands, but we will show a gender difference in the average age they took such a decision. Daughters take the decision of leaving home earlier than sons in both the fathers and mothers samples.

3. Methodology

Theoretical Model

In order to model the altruistic links between parents and their children, we follow the basic approach of Becker (1991) subsequently developed by Schwarze (2004) and Schwarze and Winkelmann (2005). Let *W*(.) denote parental utility, where we assume that the parent is altruistic, while the child *c* is egoistic, and that this welfare function is additively separable:

$$W = W\left(q^p, q^c\right) = U\left(q^p\right) + \eta V\left(q^c\right).$$

where $U(\ )$ is the utility the parent derives from its own consumption, $V(\ )$ is the utility the parent derives from the child, in such a way that the parent considers the child utility in his utility function, q^i is the amount both parent and child consume $i = p, c$; and η is the weight the parent gives the child in his utility function. We will distinguish $p = m, f$ to indicate whether the parent is the father (adult male) or the mother (adult female), and we will distinguish $c = s, d$ to indicate if the child is a son or a daughter.

Following Chiappori (1988), cooperative behaviour within the household implies that household members pool their incomes and will, in general, satisfy the Pareto optimality conditions. Thus, we would expect optimising altruistic parents to set $\lambda_i^p = \eta\lambda_i^c$ where λ is the marginal utility of consumption, p indicates parents and c indicates child. The direct data on λ should allow this relationship to be estimated and so reveal an estimate of η and hence test the hypothesis that $\eta = 0$ (egoism) against the alternative $\eta > 0$ (altruism). This hypothesis can be tested directly without observing consumption data, on the assumption that survey responses to the question about subjective income satisfaction are direct measures of marginal utilities.

Empirical Models

Estimating this equilibrium relationship will reveal the degree of altruism and no issue of endogeneity arises, since this is simply an equilibrium relationship. However, we would expect to improve the precision of the estimates, if we include other variables, to control for heterogeneity in preferences that may be correlated between parents and children. Thus, we add $x_i\beta$ to control for socio-economic characteristics, that is to say,

household income, size and composition, as well as education level and employment status of the parent, in order to proxy the parent consumption.

We also estimate panel models with individual specific effects to address the problem of omitted variables, that is to say, unobserved variation in parental consumption that is not in $x_i\beta$, but is correlated with the child's consumption. Thus, we estimate:

$$\lambda_i^p = x_i\beta + \eta\lambda_i^c + \alpha_i + e_i$$

Since satisfaction variables are discrete, we estimate ordered probit models. Moreover, we exploit the panel nature of the data to include fixed effects. Finally, we estimate a mixed (fixed effects and random effects) model that accounts for the presence of siblings in the data.[12]

The random effects ordered probit model (see Appendix 1) is written as:

$$y_{it}^{p}* = x_{1it}^{p}\beta_1 + x_{2it}^{p}\beta_2 + x_{it}^{c}\beta_3 + \eta y_{it}^{c}* + \alpha_i + e_{it}$$

where $y_{it}^{p}*$ is the latent realisation of the marginal utility of income (subjective income satisfaction) of parent *i*. Subjective satisfaction is explained by a vector of individual characteristics, x_{1it}^{p}, which includes parental income x_{2it}^{p}, characteristics of the child, x_{it}^{c}, which include his/her income, as well as the son's/daughter's own income satisfaction.

The parametric ordered probit model with multiple random effects (see Appendix 2) is given by:

$$y_{ijht}^{p}* = x_{1ijht}^{p}\beta_1 + x_{2ijht}^{p}\beta_2 + x_{ijht}^{c}\beta_3 + \eta y_{ijht}^{c}* + a_h + b_{jh} + c_{ijh} + e_{ijht}$$

When there is more than one child in the household over 16, the sibling's satisfaction is interrelated, for genetic or family background reasons. We break down the long-term correlation into a part that is shared between members of the same household (siblings), and a part that is specific to the child (the individual effect). The household effect measures the correlation in long-term well-being between siblings of the same household. These correlations can be identified in the panel, and repeated measurements are available for different siblings of the same family. Other evidence

[12] We use the GLAMM (Generalised Linear Latent and Mixed Models) add-on to STATA 9.

shows that the long-term correlation is indeed related to biological factors and not simply to living together; hence, we introduce the effect of sharing the same biological parents between siblings.

4. Results

In Tables 3.a and 3.b we present the estimates of how the income satisfaction of the child is correlated with that of the fathers/mothers. We estimate Random Effects Ordered Probit Models, as employed in Schwarze (2004).[13] Each column of these tables represents specifications with an increasing number of control variables and, in general, the coefficients are stable, so results are robust for different specifications. In the first specification, child satisfaction and the interactions with the variables step, age and parent's education are included. In the second specification, we include income variables and household characteristics. In the third specification, we add parents socio-demographic characteristics to the second specification, and in the fourth, we add to the second specification the child's socio-demographic variables. Finally, in the fifth specification we add the total set of controls, parents and children, as well as year dummies.

(Tables 3.a-3.b)

The results show that the coefficients are highly significant, positive and stable for both sexes. We can conclude that the child's income satisfaction coefficient indicates that the degree of altruism from parents to children is positive and statistically highly significant in most of the countries, and stable throughout all specifications. This altruism coefficient is very high in Greece, Italy, Luxembourg and Portugal. Fathers care more for their sons than for their daughters in France, Ireland, The Netherlands and Spain. However, fathers care more for their daughters than for their sons in Austria, Belgium, Denmark, Italy and The United Kingdom. Mothers care more for their sons than their daughters in Ireland, while they care more for their daughters than for their sons in Austria, Belgium, Finland and Italy.

Table 3.c shows the results of the Ordered Probit Model with four error components, or multiple random effects, as employed in Lucas et al. (2003a and

[13] The model is estimated using STATA 9.1 and the module "REOPROB" by Guillaume R, Frechette (see www.econ.Ohio-state.edu/frechette/html/econ.htm).

2004).[14] We find slightly smaller coefficients that are still positive and significant in all countries, for both the altruism coefficient and the family income coefficient. When comparing the coefficient of altruism for fathers and mothers, we find that mothers care more than fathers for their children in Belgium, Greece, Italy, The Netherlands, Portugal, Spain and The United Kingdom, while the opposite is true in Austria and Ireland.

(Table 3.c)

In Figures 1.a and 1.b, we present the estimation results from both the simple and multiple random effects ordered probit. In every country, the multiple random effects coefficients are very close to the simple random effects coefficients, but somewhat smaller. This means that the latter, since they do not allow us to break down the measurement error between nurture and nature effects, would be an upwardly biased estimator.

(Figures 1.a-1.b)

In Tables 4.a, 4.b and 4.c we observe the coefficient of the log family income variable (annual family income less total income of the child). We find a positive and highly significant effect across all specifications in the six samples. Fathers income coefficient is higher regarding daughters than sons in Austria, Denmark, Finland, France, Germany, The Netherlands, Portugal and the United Kingdom. Mothers income coefficient is higher regarding sons than daughters in Denmark, Finland and Greece, but higher regarding daughters than sons in Austria, Germany, Ireland, The Netherlands, Portugal and the United Kingdom. Fathers take income into account more than do mothers in Austria, Germany, Greece, Ireland, Italy, Spain and the United Kingdom, while this effect is higher for mothers than for fathers in Belgium and Finland. The fact that fathers give more weight to income than mothers in their utility function, in most of the countries, would indicate a different preference structure. This leads us to compare, below, the weights they give both to income and to the children in their respective utility functions.

(Tables 4.a-4.c)

[14] The model is estimated using STATA 9.1 and the module "GLLAMM" by S. Rabe-Hesketh, A. Pickles and A. Skrondal (see www.gllamm.org).

When we compare the altruism coefficient with the income coefficient in all samples and specifications of every country, both fathers and mothers care more about money than they do for their children, except for Portugal where the altruism coefficient is higher than the income coefficient.

We also present the estimation results for the other controls used.[15] The dummy variable of being a step-child indicates an ambiguous effect, as in some countries the effect is positive whereas in others it is negative.

When we interact the variable of being a step-child with child's income satisfaction, we discover that it is not often significant for fathers. Fathers are less altruistic toward their step-children in Belgium, whether they are sons or daughters, toward step-sons in Germany and the United Kingdom, and toward step-daughters in Portugal. Austrian mothers are less altruistic toward their step-children when they are sons, as is also found for Danish, Finnish, Greek and British mothers. Mothers are less altruistic toward their step-children, whether they are sons or daughters, in France and Spain, but they are more altruistic toward their step-daughters in Belgium and Portugal.

We also interact this child income satisfaction variable with the age of the individual, in order to identify if fathers and mothers are more or less altruistic toward their children when they are 16 to 18, or 19 to 21, rather than 22 to 24 years old.

This child income satisfaction variable is also interacted with secondary and higher education levels of the parent, in order to take into account whether the parent is more altruistic when he or she is higher or secondary educated, than when he or she is not. The effect is positive and significant for higher and secondary education levels of parents in most countries. Higher educated parents not only provide more income, because of having better jobs, but they care more regarding their children and provide a better education. In the first four samples, fathers and mothers are more altruistic when they are secondary and higher educated in Austria, Greece, Ireland, the Netherlands, Portugal, Spain and the United Kingdom. In the samples with two or more children over 16 in the household, highly educated fathers and mothers appear to be more altruistic toward their children in Austria, Finland, Portugal, Spain and the United Kingdom. When they are secondary educated, both are also more altruistic in Italy, Spain and the United Kingdom, and less altruistic in France.

[15] These results are not presented here, for space reasons, but are available for readers upon request.

We introduce the variable which indicates parent to child age difference in order to take into account whether parents do care more regarding their first children, or their youngest children, as the parents grow older. The effect differs across countries, in such a way that it has a negative effect in Portugal and Spain, where there is a preference for those who were first born, and a positive effect in Ireland and the United Kingdom.

Regarding household characteristics, we also include the log of family size, house ownership dummy and number of children under 16 living in the household. In most countries, the family size effect is negative in every sample, that is to say, the more people living in the household, the less satisfied are fathers and mothers, as found in Schwarze, (2004), and Ferrer-i-Carbonell and Van Praag (2003). Being an owner, rather than a tenant, influences both fathers and mothers in a positive way in the four samples in France, Ireland, Italy, The Netherlands, Portugal, Spain and the United Kingdom (Schwarze, 2004; Stanovnik, 1992; Headey and Wooden, 2004). France, the Netherlands and Germany show a lower proportion of households owning their own house or flat as compared to the large proportion of home owners in Greece, Ireland, Italy and Spain. In the last two samples, previously defined, where at least two children older than 16 are in the household, both fathers' and mothers' income satisfaction decreases in Austria, Finland, Germany, Ireland, Italy, Portugal and Spain, as it does for mothers in the UK.

The higher the number of children under 16, the more income satisfied are fathers in the fathers-daughters samples of Austria, mothers in the mothers-daughters samples of France and Italy, and mothers in the mothers-sons sample of Germany. The effect is negative for fathers in the fathers-sons samples of Belgium, Denmark, Italy and Portugal, in mothers in the mothers-sons samples of Denmark, Greece, Ireland and Spain, and in mothers in the mothers-daughters sample in Spain. In the last two samples, we found a positive effect in fathers' and mothers' income satisfaction in Germany, but a negative effect in Portugal, and a negative effect in Italian fathers and Danish mothers.

When the family income variable is interacted with the variable of being a step-child, we found a negative effect in Irish fathers, and Belgian and Danish mothers, as well as in the fathers-sons sample in Italy, in the fathers-daughters samples of Ireland and the United Kingdom, and in the mothers-sons samples of Germany and the United

Kingdom. We found a positive effect in the mothers-sons samples in Portugal and The Netherlands.

The higher the child income regarding family income, that is, the annual family income less total income of the individual, the more income satisfied are fathers and mothers generally, in all samples, in Austria, Belgium, Italy, Portugal, Spain and the United Kingdom, and also in the first four samples in France and Greece. The parent is happier the more income the child has, given altruism and positive sentiments regarding the child, because the child is less dependent on the parents' money. This could be seen as evidence of the bargaining power of the child in the household.

The exogenous and unexpected income shock, that is, a windfall (the household inherits, receives a gift or lottery winnings worth 2000 € or more) has a positive effect on fathers-sons income satisfaction in Denmark, France, Greece and The Netherlands, and also in the fathers-daughters sample in Ireland. We found this effect in the mothers-sons sample in France, Greece, The Netherlands, Spain and the United Kingdom, and in the mothers-daughters sample in Belgium, Spain and the United Kingdom. In the last two samples of at least two children over 16 at home, we found this effect on fathers income satisfaction in France and Spain, with the same effect appearing in mothers income satisfaction in Denmark, Greece, The Netherlands and Spain.

We observe the effect of the set of parental variables introduced, in order to proxy parents consumption. We find a U-Shaped effect in Austrian and Danish fathers, as well as in the fathers-sons sample in Portugal, the mothers-sons sample in France, and the mothers-daughters samples of Ireland and The Netherlands (Clark et al., 1996). In the last two samples, we find this effect in Austrian fathers. Additionally, an inverted U-Shape is found for mothers in the UK.

The effect of higher education on fathers income satisfaction is positive, that is to say, those who are higher educated are more income satisfied (Clark and Oswald, 1994, 1996). In the last two samples, with at least two children over 16 at home, a secondary educated father is more income satisfied in Austria, but is less income satisfied in Greece. By contrast, a higher educated father is more income satisfied in Belgium and the Netherlands. A secondary educated mother is more income satisfied in France and less income satisfied in the Netherlands, whereas a highly educated mother is more income satisfied in Denmark, Portugal, Spain and the United Kingdom, and less

income satisfied in Finland. When the father reaches secondary or higher education, he is more income satisfied in Ireland, and when both mothers and fathers reach secondary or higher education levels, they are more income satisfied in Italy.

The father being employed increases his income satisfaction in most of the countries, while the mother being employed increases her income satisfaction in France, Italy, The Netherlands and Spain, as it does in the mothers-sons samples of Denmark, Germany and Portugal, and in the mothers-daughters samples of Belgium, Finland and Ireland.

When analysing the samples with more than two children, we found a positive effect in both fathers and mothers income satisfaction in Finland, Ireland, Italy and Portugal. Also, fathers are more satisfied in Austria, France, Spain and the United Kingdom, as are mothers in Germany.

When both sons and daughters are higher or secondary educated, fathers are more income satisfied in Spain. Fathers are more income satisfied when both sons and daughters are only secondary educated in Austria and Greece, and only higher educated in Belgium. When the son is secondary educated, fathers income satisfaction decreases in Luxembourg. When the son is higher educated, fathers income satisfaction decreases in Italy and the Netherlands, but increases in Greece. Mothers are more income satisfied when their sons are secondary educated in Belgium, Italy and Portugal, and when their daughters are secondary educated in Austria, Greece and Spain. When the son is higher educated, the mothers income satisfaction increases in Belgium, Ireland and Spain, and when the daughter is highly educated, the mothers income satisfaction increases in The Netherlands and Spain.

Whether the child is employed affects parents income satisfaction in a negative way. This is apparent for fathers in Greece and Portugal, fathers-daughters samples in Austria and Spain, mothers in Greece, Italy and Portugal, and mothers in the daughters samples of Austria and Spain. The employed children live at home and earn wages, but nevertheless continue to spend household resources. The effect is positive in mothers-daughters samples in Germany and the United Kingdom, where they can be considered more independent and live on the wages they earn. When analysing the samples with more than two children in the household, we find a negative effect in both fathers and

mothers income satisfaction, when their child is employed, in Austria and Portugal. This negative effect also applies to fathers in Finland and mothers in Italy.

Having a female adult partner in the household decreases fathers income satisfaction in Belgium, and in one specification in France. Having a male adult partner in the household increases mothers income satisfaction in all countries, except for Denmark and Luxembourg.

In the Generalised Linear Latent and Mixed Models (GLLAMM) we use the variable child gender in order to identify whether they are son or daughter, and to determine if fathers and mothers are more satisfied when the child is male, as in Belgium and Portugal, or if they are more satisfied when the child is female, as in Denmark, Luxembourg and the United Kingdom. When we interact the child gender variable with child income satisfaction, we find that fathers and mothers are more altruistic toward daughters in Belgium, fathers are more altruistic toward daughters in Germany, and mothers are more altruistic toward daughters than toward sons in Denmark, Finland, Italy, Luxembourg, The Netherlands and Portugal.

Schwarze and Winkelmann (2005) estimate models in differences to eliminate potential endogeneity. Here, we estimate an equilibrium condition, so the question of endogeneity does not arise. However, we can confirm that parental changes are significantly affected by changes in satisfaction of their children.[16]

Finally, in Tables 5.a-5.c and Figures 2.a-2.c, we present money metrics estimations of child welfare by taking the estimated altruism parameter and dividing it by the income parameter. We then scale the result by the standard deviation of child satisfaction, to get an estimate of the willingness of parents to pay for a one standard deviation change in child satisfaction.[17] These estimates can be interpreted as the proportion of income that parents are willing to give up for a standard deviation increase in child satisfaction. Fathers are willing to pay more to increase daughters satisfaction, rather than sons, in Austria, Denmark, Finland, Greece, Italy, Luxembourg, and the United Kingdom. Mothers will pay more to increase sons satisfaction, rather than

[16] As there is an increase in the measurement error when we estimate in differences, since we are treating the variable satisfaction as continuous, the parameters of all coefficients would be lower than the ones estimated from the levels data. Therefore, this estimator should be considered a lower boundary.

[17] For similar calculations in a different context see Clark and Oswald (2002), Blanchflower and Oswald (2004), Oswald and Powdthavee (2005), Winkelmann and Winkelmann (1995, 1998), Oswald (1997) and Van Praag and Ferrer-i-Carbonell (2004).

daughters, in Denmark, Germany, Ireland, Luxembourg, The Netherlands, Portugal and the United Kingdom, while they will pay more to increase daughters satisfaction, rather than sons, in Austria, Belgium, Finland, France, Greece, Italy and Spain.

(Tables 5.a-5.c and Figures 2.a-2.c)

When we compare fathers and mothers willingness to pay to increase their child income satisfaction by one standard deviation in the last two samples, with at least two children in the household, we find that mothers do care more than fathers in Austria, France, Greece, Ireland, Italy, Portugal, Spain and the United Kingdom.

5. Conclusions

Our aim has been to analyse the existence and degree of altruism from parents toward their children, using responses to questions about income satisfaction as measures of marginal utility of consumption. The altruism coefficient is the correlation between parental and child marginal utilities, that is, an estimate of the weight of the child's utility in the parental preferences. We observe strong altruism effects, but these effects differ across countries, differ between mothers and fathers and between sons and daughters. We have confirmed the presence of significant altruism between parents and children. In general, we find that mothers seem more altruistic toward their sons than toward their daughters, for instance in Ireland, and fathers seem more altruistic toward their daughters than toward their sons in Austria, Belgium, Denmark, Italy and the UK. In Greece, Italy, Luxembourg and Portugal parents are very altruistic. Although in Spain individuals report higher satisfaction levels, they break the Southern European pattern regarding altruism.

Our aim has been to model altruism using the framework of an ordered probit model with multiple random effects (unobserved child-individual effect, sharing the same parents effect, and the effect of being siblings or belonging to the same household). These three levels allow us, not only to address the problem of unobserved individual heterogeneity, but also to distinguish between those family shocks that siblings experience, and which are correlated for either genetic reasons, or due to the fact of being reared together. After taking into account such effects, we have found that mothers care more than fathers regarding their children in Belgium, Greece, Italy, the

Netherlands, Portugal, Spain and the United Kingdom, while the opposite is true in Austria and Ireland.

References

Altonji, J., F. Hayashi, and L. Kotlikoff. (1997). "Parental Altruism and Inter Vivos Transfers: Theory and Evidence." *Journal of Political Economy*, 105, 6, 1121-1166.

Altonji, J., F. Hayashi, and L. Kotlikoff. (1996). "The Effects of Income and Wealth on Time and Money Transfers between Parents and Children." NBER Working Paper 5522.

Altonji, J.G., F. Hayashi, and L.J. Kotlijoff. (1992). "Is the Extended Family Altruistically Linked? Direct Tests Using Micro Data." *American Economic Review*, 82, 5, 1177-1198.

Becker, G.S. *A Treatise on the Family*. Cambridge, MA: Harvard University Press, 1991.

Bingley, P., Christensen, K. and I. Walker. (2005). "Twin-based Estimates of the Returns to Education: Evidence from the Population of Danish Twins". Working Paper.

Bingley, P., Myrup Jensen, V., and I. Walker. (2005). "The effects of school resources on participation in post-compulsory education: Danish quasi-experimental evidence, and evidence that controls for family, school and neighbourhood effects". Working Paper.

Blanchflower, D. G., and A. J. Oswald. (2004). "Well-being over Time in Britain and the USA." *Journal of Public Economics*, 88, 1359-1386.

Boes, S., and R. Winkelmann. "Income and Happiness: New Results from Generalized Threshold and Sequential Models." IZA: Working Paper 1175, 2004.

Bonke, J., and M. Browning. "The Distribution of Well-being and Income within the Household." Center for Applied Microeconometrics, University of Copenhagen: Working Paper, 2003.

Burkhauser, R.V., J.R. Frick, and J. Schwarze. "A Comparison of Alternative Measures of Economic Well-being for Germany and the United States." *Review of Income and Wealth*, 43, 1997, 153-171.

Bradshaw, J. and N. Finch (2002), "A Comparison of Child Benefit Packages in 22 Countries" Department of Work and Pensions Research Report 174, www.dwp.gov.uk/asd/asd5/rrep174.asp.

Burman, L.E. and L. Weaton (2005), "Who gets the child tax credit?", Urban Institute http://www.urban.org/url.cfm?ID=411232.

Clark, A.E., Etilé, F., Postel-Vinay, F., Senik, C. and K. Van der Straeten. "Heterogeneity in Reported Well-being: Evidence from Twelve European Countries." *Economic Journal*, 115, C118-C132.

Clark, A.E., and A.J. Oswald. "Satisfaction and Comparison Income." *Journal of Public Economics*, 61, 3, 1996, 359-381.

Clark, A.E., and A.J. Oswald. "A Simple Statistical Method for Measuring how Life Events affect Happiness." *International Journal of Epidemiology*, 31, 2002, 1139-1144.

Easterlin, R.A. "Will Raising the Incomes of All Increase the Happiness of All?" *Journal of Economic Behaviour and Organization*, 27, 1995, 35-48.

Easterlin, R.A. "Income and Happiness: Towards a Unified Theory." *Economic Journal*, 111, 2001, 465-484.

Ferrer-i-Carbonell, A. and P. Frijters. "How Important is Methodology for the Estimates of the determinant of Happiness?" *Economic Journal*, 114, 2004, 641-659.

Ferrer-i-Carbonell, A., P. Frijters., and B. Van Praag. (2003). "The Anatomy of subjective well-being." *Journal of Economic Behavior and Organization*, 51, 29-49.

Ferrer-i-Carbonell, A. and B. Van Praag. (2003). "Income Satisfaction Inequality and its Causes." *Journal of Economic Inequality*, 1, 107-127.

Ferrer-i-Carbonell, A. and B. Van Praag. (2004). Happiness Quantified: A Satisfaction Calculus Approach. Oxford University Press, Oxford: UK.

Frey, B. S., and A. Stutzer. (2002). "What can Economists Learn from Happiness Research?" *Journal of Economic Literature*, 40, 402-435.

Frey, B.S., and A. Stutzer. (2002). *Happiness and Economics: How the Economy and Institutions Affect Human Well-being*. Princeton, NJ: Princeton University Press.

Frey, B. S., and A. Stutzer. (2006). "Does marriage make people happy, or do happy people get married?" *The Journal of Socio-Economics*, 35, 326-247.

Frijters, P., Haisken-DeNew, J. and M. Shields. (2004). "Money Does Matter! Evidence from Increasing Real Income and Life Satisfaction in East Germany Following Reunification." *American Economic Review*, 94, 3, 730-740.

García, I., Molina, J. A., and Navarro, M. "Income satisfaction within European families: determinants and interrelations." Mimeo, 2005.

Headey, B., and Wooden, M. (2004). "The Effects of Wealth and Income on Subjective Well-Being and Ill-Being, *Economic Record*, 80, S24-S33.

Hedeker D., and Gibbons R.D. (1994). "A random-effects ordinal regression model for multilevel analysis." *Biometrics*, 50, 933-944.

Hedeker D., and Gibbons R.D. (1997). "Random-effects probit and logistic regression models for three-level data." *Biometrics*, 53, 1527-1537.

Kang, S. J., and Sawada, Y. "Are private transfers altruistically motivated? the case of the republic of Korea before and during the financial crisis." *The Developing Economies*, XLI, 4, 2003, 484-501.

Lafferrère, A., and Wolff, F. (2004). "Microeconomic models of family transfers." In Gerard-Varett, L.-A., S-C.Kolm, and J. Mercier Ythier (eds.): Handbook on the Economics of Giving, Reciprocity and Altruism, North-Holland: Elsevier.

Layard, R. (2005). Happiness. Lessons From a New Science.

Mc Elroy, M. B. (1985). The Joint Determination of Household Membership and Market Work: The Case of Young Men. *Journal of Labour Economics*, 3, 3, 293-316.

Oswald, A., and A. Clark. (1994). "Unhappiness and Unemployment" *Economic Journal*, 104, 648-659.

Oswald, A., Clark, A., and P. Warr. (1996). "Is Job Satisfaction U-shaped in Age?" *Journal of Occupational and Organizational Psychology, 69, 57-81.*

Oswald, A. (2005). "On the Common Claim that Happiness Equations Demonstrate Diminishing Marginal Utility of Income" IZA WP 1781.

Oswald, A., and Powdthavee, N. (2005). Does Happiness Adapt? A Longitudinal Study of Disability with Implications for Economists and Judges. IZA Discussion Paper Nº 2208.

Peracchi, F. (2002). "The European Community Household Panel: A review." *Empirical Economics*, 27, 63-90.

Rabe-Hesketh, S., Pickles, A., and A. Skrondal. (2001). GLLAMM Manual Technical Report 2001/01. Department of Biostatistics and Computing. Institute of Psychiatry, King's College, University of London.

Schwarze, J. "Using Panel Data on Income Satisfaction to Estimate Equivalence Scale Elasticity." *Review of Income and Wealth*, 49, 2003, 359-372.

Schwarze, J. "Living Conditions of Children and Parental Well-being: Evidence from German Data on Life Satisfaction." IZA: Discussion Paper 1200, 2004.

Schwarze, J. and R. Winkelmann. (2005). "What Can Happiness Research Tell Us About Altruism? Evidence from the German Socio-Economic Panel." IZA: Discussion Paper 1487.

Stanovnik, T. (1992). Perception of poverty and income satisfaction. An empirical analysis of Slovene households, *Journal of Economic Psychology*, 13, 57-69.

Stark, O. (1995). Altruism and Beyond. An Economic Analysis of transfers and exchanges within families and groups. Cambridge: Cambridge University Press.

Walker, I. and Zhu, Y. (2005). Do fathers really matter? Or is it just their money that matters? Evidence from the British Household Panel Survey. Working Paper.

Walker, I., and Zhu, Y. (2005). Child Support and Partnership Dissolution, *Economic Journal*, 116 (510), C93-C109.

Winkelmann, R. (2006). Parental separation and well-being of youths: Evidence from Germany, *The Journal of Socio-Economics*, 35, 197-208.

Winkelmann, L. and Winkelmann, R. (1995). “Happiness and Unemployment: A Panel Data Analysis for Germany.” *Konjunkturpolitik*, 41, 4, 293-307.

Winkelmann, L and Winkelmann, R. (1998). Why Are the Unemployed So Unhappy? Evidence from Panel Data. *Economica*, 65, 1-15.

Winkelmann, R. (2005). Subjective Well-Being and the Family: Results from an Ordered Probit Model with Multiple Random Effects, *Empirical Economics*, 30, 749-761.

Wooldridge, J. M. *Econometric Analysis of Cross-Section and Panel Data*. Cambridge, MA: MIT Press, 2002.

Table 1. Sample sizes

	Number of observations	Both natural	Only father	Only mother	Step father	Step mother
Austria	5908	82.08%	1.74%	12.15%	2.74%	1.29%
Belgium	4468	72.36%	3.25%	18.04%	4.34%	2.01%
Denmark	2296	73.48%	4.05%	14.59%	5.53%	2.35%
Finland	4067	77.13%	4.33%	13.70%	3.52%	1.33%
France	9857	75.99%	3.11%	14.08%	5.17%	1.64%
Germany	11372	83.97%	3.27%	10.96%	1.51%	0.29%
Greece	10229	88.76%	1.15%	9.84%	0.22%	0.02%
Ireland	9601	85.25%	3.31%	10.97%	0.45%	0.02%
Italy	17917	89.48%	1.45%	8.51%	0.42%	0.15%
Luxembourg	4605	75.68%	2.28%	14.88%	4.19%	2.98%
The Netherlands	5667	84.12%	2.84%	12.56%	0.07%	0.41%
Portugal	12520	81.26%	1.77%	14.67%	1.54%	0.76%
Spain	17798	84.57%	2.08%	12.26%	0.83%	0.26%
United Kingdom	7327	63.74%	4.93%	21.61%	7.92%	1.82%

Table 2.a. Fathers-Sons

	Parent Inc Sat	Child Inc Sat	Log Fam Inc	Proportion	Shock	Parent Married	Parent Employed	Step	% Children Leave Home	Age Average Child Leaves	Parent Sat Child Leaves	Child Sat Leaves Home	Nº Observations
Austria	4.13907	3.876744	10.33714	0.3323241	0.0093023	0.9762791	0.8130233	0.027907	0.1164506	24.06142	3.982332	3.827957	1881
	(1.350494)	(1.479555)	(0.5358871)	(2.962071)	(0.0960213)	(0.1522137)	(0.3899836)	(0.1647447)	(0.3208003)	(5.381956)	(1.491003)	(1.5475)	
Belgium	4.084756	3.885976	10.38504	0.1147767	0.0567073	0.954878	0.8695122	0.0554878	0.0588	24.19728	3.865854	3.725	848
	(1.277108)	(1.41673)	(0.5525894)	(0.5697142)	(0.2313531)	(0.2076349)	(0.3369421)	(0.2289997)	(0.2352971)	(4.816694)	(1.244863)	(1.458064)	
Denmark	4.488757	4.036686	10.30354	0.1423637	0.104142	0.8804734	0.9266272	0.0710059	0.1619128	21.16062	4.590643	4.079755	560
	(1.14533)	(1.444003)	(0.4424387)	(0.3965172)	(0.3056256)	(0.3245993)	(0.2609018)	(0.2569868)	(0.3685254)	(3.055068)	(1.249341)	(1.418492)	
Finland	3.912243	3.748646	10.18869	0.1754817	0.0888407	0.9252438	0.872156	0.0303359	0.1306002	22.19094	3.893023	3.6	615
	(1.300714)	(1.373631)	(0.4830839)	(2.219436)	(0.284668)	(0.2631402)	(0.334097)	(0.1716027)	(0.3370338)	(4.688247)	(1.157139)	(1.305641)	
France	3.41267	3.263914	10.16142	0.085938	0.0218005	0.929982	0.829187	0.0620672	0.0700201	23.53938	3.362934	3.059524	2229
	(1.288841)	(1.407798)	(0.5901613)	(1.325741)	(0.1460502)	(0.25521)	(0.3763938)	(0.2413085)	(0.2552021)	(4.138771)	(1.290821)	(1.461467)	
Germany	3.85	3.406944	10.19973	0.1876636	0.0263889	0.9736111	0.8986111	0.0208333	0.1112092	23.22109	3.751592	3.293578	592
	(1.212934)	(1.405218)	(0.5176951)	(0.238228)	(0.1604003)	(0.1604003)	(0.3020528)	(0.1429254)	(0.3144108)	(4.581447)	(1.264857)	(1.380007)	
Greece	3.078334	2.765785	9.590383	0.2512114	0.0136233	0.9887346	0.8108462	0.0112654	0.0248716	25.6422	3.445545	3.025316	1483
	(1.172222)	(1.160429)	(0.8161564)	(1.067799)	(0.1159362)	(0.1055528)	(0.391682)	(0.1055528)	(0.1557428)	(5.445199)	(1.203954)	(1.13199)	
Ireland	3.557342	3.154465	10.22351	0.2446223	0.0135421	0.955565	0.7697842	0.0080406	0.1518828	23.53112	3.582329	3.088305	1781
	(1.453918)	(1.466334)	(0.636472)	(0.7445038)	(0.1156044)	(0.2061032)	(0.42106)	(0.0893272)	(0.3589355)	(4.527069)	(1.473525)	(1.420739)	
Italy	3.246234	2.747853	9.865724	0.3411786	0.0164719	0.9864846	0.744615	0.003942	0.1018107	26.14937	3.325123	2.869852	2815
	(1.245003)	(1.335424)	(0.8016453)	(3.376673)	(0.1272905)	(0.1154757)	(0.4361081)	(0.0626659)	(0.3024089)	(4.989333)	(1.279665)	(1.437773)	
Luxembourg	3.978022	3.664835	10.61818	0.1616205	0.0384615	0.9395604	0.8186813	0.0274725	0.1852672	25.53064	4.17284	3.675	116
	(1.394369)	(1.524306)	(0.5156586)	(0.2456785)	(0.1928382)	(0.2389568)	(0.3863448)	(0.1639067)	(0.388568)	(4.982998)	(1.348982)	(1.438837)	
The Netherlands	4.507163	3.980352	10.20418	0.1079873	0.1031519	0.9619321	0.8964388	0.0008187	0.0436482	22.62687	4.663158	4.106383	1476
	(1.050842)	(1.323426)	(0.5034347)	(0.2610242)	(0.3042194)	(0.1913995)	(0.3047528)	(0.0286065)	(0.2043444)	(3.643248)	(0.9295449)	(1.273958)	
Portugal	3.10744	3.033917	9.464327	0.4194238	0.0054705	0.9553611	0.8245077	0.0175055	0.1021672	24.578	2.981481	3.025263	2737
	(1.041306)	(1.080249)	(0.769627)	(1.984595)	(0.073768)	(0.2065324)	(0.3804293)	(0.1311594)	(0.3028854)	(4.806051)	(1.061834)	(1.10015)	
Spain	3.185331	3.040903	9.801431	0.5226019	0.0156559	0.9719323	0.754725	0.0087447	0.0558368	24.94505	3.069832	2.974212	3481
	(1.371602)	(1.456093)	(0.7957047)	(13.2742)	(0.1241488)	(0.1651779)	(0.4302805)	(0.09311)	(0.2296151)	(5.367614)	(1.387473)	(1.518817)	
United Kingdom	3.770192	3.650156	10.22766	0.2643506	0.0102633	0.9348505	0.8121374	0.1039714	0.168023	23.12678	3.700873	3.581176	1936
	(1.136381)	(1.163761)	(0.574156)	(0.3990114)	(0.1008091)	0.2468445)	(0.3906896)	(0.3052916)	(0.3739314)	(4.543296)	(1.138177)	(1.140433)	

Table 2.b. Fathers-Daughters

	Parent Inc Sat	Child Inc Sat	Log Fam Inc	Proportion	Shock	Parent Married	Parent Employed	Step	% Children Leave Home	Age Average Child Leaves	Parent Sat Child Leaves	Child Sat Leaves Home	Nº Observations
Austria	3.982215	3.825588	10.3658	0.2467143	0.0131956	0.9546758	0.8605852	0.0246701	0.1492876	22.58568	3.977707	3.865815	1398
	(1.449583)	(1.509058)	(0.5237057)	(2.25971)	(0.1141446)	(0.2080738)	(0.3464783)	(0.1551622)	(0.3564294)	(4.681106)	(1.448635)	(1.42591)	
Belgium	4.142084	3.90866	10.45844	0.07004	0.0514208	0.9276049	0.8782138	0.0548038	0.057561	22.24576	3.788235	3.744186	664
	(1.259806)	(1.413416)	(0.5565406)	(0.3363259)	(0.2209293)	(0.2592287)	(0.3271494)	(0.2276739)	(0.2329682)	(3.89814)	(1.328211)	(1.321194)	
Denmark	4.575365	3.996759	10.35919	0.0813237	0.0988655	0.904376	0.9659643	0.089141	0.1784512	20.45912	4.493151	3.930556	351
	(1.084682)	(1.464955)	(0.3699051)	(0.2792685)	(0.2987235)	(0.2943135)	(0.1814679)	(0.2851784)	(0.3831071)	(3.509016)	(1.255315)	(1.624346)	
Finland	4.02019	3.81829	10.22157	0.1023938	0.0771971	0.932304	0.888361	0.0391924	0.1385176	20.08333	4.010811	3.512658	534
	(1.236896)	(1.416397)	(0.4352032)	(1.002874)	(0.2670626)	(0.2513728)	(0.3151089)	(0.1941678)	(0.3455474)	(2.74417)	(1.206816)	(1.324619)	
France	3.456669	3.306392	10.1425	0.0921219	0.0199754	0.9287031	0.8451137	0.047941	0.0835873	22.22396	3.482517	3.288809	1847
	(1.263767)	(1.40062)	(0.5610936)	(0.3440535)	(0.1399372)	(0.2573596)	(0.3618519)	(0.2136743)	(0.276798)	(3.687088)	(1.28611)	(1.460712)	
Germany	3.867117	3.376126	10.22637	0.1605163	0.027027	0.9797297	0.8851351	0.018018	0.1105096	21.58277	3.819945	3.433803	366
	(1.182223)	(1.464545)	(0.4297018)	(0.235716)	(0.1623451)	(0.1410823)	(0.3192185)	(0.1331665)	(0.3135532)	(4.006328)	(1.230736)	(1.360453)	
Greece	3.104923	2.758945	9.67324	0.1641294	0.0126446	0.9865483	0.8092548	0.0045736	0.0292407	23.99432	3.020619	2.895349	1329
	(1.179421)	(1.193589)	(0.7255861)	(0.7386304)	(0.1117501)	(0.1152143)	(0.3929415)	(0.0674825)	(0.1684946)	(5.005708)	(1.198779)	(1.301845)	
Ireland	3.452979	2.996553	10.21507	0.1912629	0.0152634	0.9739045	0.7641556	0.0073855	0.162653	22.66262	3.516393	3.150442	1503
	(1.472784)	(1.484398)	(0.5633542)	(0.3462941)	(0.1226289)	(0.1594587)	(0.42463)	(0.0856422)	(0.3690852)	(4.219985)	(1.508272)	(1.482918)	
Italy	3.229299	2.743359	9.943296	0.1495441	0.016778	0.9853969	0.7778468	0.0066801	0.1080083	25.06686	3.104938	2.759317	2069
	(1.240849)	(1.341712)	(0.7163353)	(1.354309)	(0.1284487)	(0.1199669)	(0.4157259)	(0.0814649)	(0.3104034)	(4.765738)	(1.272017)	(1.369346)	
Luxembourg	4.230769	3.852071	10.64612	0.2113956	0.0295858	0.9289941	0.816568	0.0414201	0.2008597	23.75875	4.27027	3.864865	111
	(1.367131)	(1.506537)	(0.4194625)	(0.2957142)	(0.1699452)	(0.257598)	(0.3881704)	(0.199852)	(0.4007216)	(4.372982)	(1.15031)	(1.348)	
The Netherlands	4.463298	3.965682	10.20292	0.0828712	0.0753098	0.9680648	0.8884652	0.0028599	0.045584	20.24107	4.563107	4.126214	1181
	(1.058533)	(1.34571)	(0.4650739)	(0.1790002)	(0.2639535)	(0.1758695)	(0.3148683)	(0.0534139)	(0.2086237)	(3.213837)	(0.893)	(1.226182)	
Portugal	3.148343	3.006049	9.551833	0.1827437	0.0076276	0.9673856	0.8250921	0.013151	0.1069542	24.02136	2.953947	2.871397	1749
	(1.049966)	(1.07553)	(0.7095491)	(0.8275681)	(0.0870137)	(0.1776486)	(0.3799383)	(0.1139361)	(0.309077)	(4.935907)	(1.144536)	(1.098019)	
Spain	3.142625	2.961058	9.79638	0.403661	0.0160636	0.9725783	0.7532046	0.0097355	0.0573384	24.19839	3.082857	2.792023	2864
	(1.34852)	(1.469734)	(0.8123025)	(14.84869)	(0.1257304)	(0.163322)	(0.4311816)	(0.0981952)	(0.2324988)	(5.141079)	(1.386175)	(1.438072)	
United Kingdom	3.756867	3.665108	10.30439	0.1956181	0.0111046	0.936879	0.85564	0.0900058	0.189781	21.72203	3.721198	3.704492	1464
	(1.091931)	(1.146341)	(0.5067745)	(0.4561869)	(0.1048224)	(0.2432515)	(0.3515572)	(0.2862738)	(0.3921928)	(4.060144)	(1.124229)	(1.075427)	

Table 2.c. Mothers-Sons

	Parent Inc Sat	Child Inc Sat	Log Fam Inc	Proportion	Shock	Parent Married	Parent Employed	Step	% Children Leave Home	Age Average Child Leaves	Parent Sat Child Leaves	Child Sat Leaves Home	Nº Observations
Austria	4.073559	3.88394	10.27685	0.3494272	0.0102166	0.8720883	0.5835717	0.0130772	0.1107498	24.17271	4.041401	3.729904	2149
	(1.412877)	(1.489544)	(0.5758849)	(2.752028)	(0.1005801)	(0.3340598)	(0.4930671)	(0.1136288)	(0.3138521)	(5.420506)	(1.44158)	(1.542214)	
Belgium	3.98944	3.821542	10.31106	0.1173889	0.0549102	0.8400211	0.5675818	0.0216473	0.0678426	24.505	3.777778	3.915094	987
	(1.381676)	(1.445557)	(0.5701528)	(0.5476632)	(0.2278651)	(0.3666833)	(0.4955425)	(0.1455675)	(0.2515183)	(4.456374)	(1.32787)	(1.428405)	
Denmark	4.427455	3.997768	10.2376	0.1559428	0.1026786	0.8158482	0.8225446	0.03125	0.1906585	21.18072	4.618182	4.056604	587
	(1.274277)	(1.466191)	(0.4599346)	(0.3968687)	(0.3037081)	(0.3878244)	(0.382267)	(0.1740898)	(0.3929708)	(3.61943)	(1.317129)	(1.409717)	
Finland	3.823009	3.728614	10.15088	0.0960931	0.0825959	0.8761062	0.8151426	0.0088496	0.1291811	22.5119	3.885246	3.431507	675
	(1.265122)	(1.372931)	(0.4913818)	(0.9878151)	(0.2754058)	(0.3296225)	(0.3883728)	(0.093701)	(0.3354647)	(4.804212)	(1.287462)	(1.413763)	
France	3.366251	3.235561	10.09389	0.0952314	0.019932	0.8314836	0.582786	0.0156285	0.0745115	24.05088	3.25	3.096774	2585
	(1.311029)	(1.412211)	(0.6236338)	(1.247802)	(0.1397826)	(0.3743666)	(0.4931547)	(0.1240475)	(0.2626207)	(4.545775)	(1.395562)	(1.427362)	
Germany	3.767949	3.369231	10.0919	0.2578155	0.025641	0.9038462	0.5230769	0.0089744	0.1117485	23.69815	3.728745	3.253247	652
	(1.297276)	(1.415874)	(0.6589319)	(0.6263267)	(0.1581633)	(0.2949913)	(0.4997877)	(0.0943676)	(0.3150749)	(4.853375)	(1.281521)	(1.399853)	
Greece	2.953177	2.745581	9.563391	0.256641	0.013139	0.907549	0.4476828	0.0052556	0.0294029	26.58362	2.947368	2.774194	1649
	(1.165496)	(1.16439)	(0.7805114)	(1.543419)	(0.1138837)	(0.2896962)	(0.4973148)	(0.0723135)	(0.1689415)	(5.456303)	(1.246887)	(1.260857)	
Ireland	3.582615	3.127514	10.16584	0.2767347	0.0179598	0.8990661	0.2873563	0.0007184	0.15254	23.7573	3.531108	3.04034	2133
	(1.475759)	(1.458213)	(0.6752172)	(0.8065982)	(0.132829)	(0.3012953)	(0.4526105)	(0.026798)	(0.3595686)	(4.78348)	(1.575898)	(1.423386)	
Italy	3.107414	2.729631	9.824925	0.3250457	0.0159811	0.9236311	0.3661252	0.0014409	0.0963002	26.4994	3.256803	2.894378	3080
	(1.258427)	(1.337756)	(0.8073022)	(2.787931)	(0.1254105)	(0.2656048)	(0.4817758)	(0.0379346)	(0.295011)	(5.043235)	(1.276323)	(1.409046)	
Luxembourg	4.062827	3.575916	10.60689	0.1512355	0.0471204	0.8795812	0.4659686	0.0052356	0.178117	25.66104	4.125	3.643678	119
	(1.390278)	(1.557071)	(0.4939429)	(0.2294744)	(0.2124533)	(0.326306)	(0.5001515)	(0.0723575)	(0.3826555)	(5.021738)	(1.354537)	(1.470461)	
The Netherlands	4.484998	3.939613	10.15388	0.1197604	0.1052032	0.8997341	0.4417015	0.0049373	0.041987	22.11972	4.327434	3.946903	1587
	(1.134171)	(1.337358)	(0.5193251)	(0.3988721)	(0.3068733)	(0.3004112)	(0.496684)	(0.0701058)	(0.2005891)	(3.958082)	(1.263799)	(1.294499)	
Portugal	2.924813	3.014739	9.399031	0.4569175	0.0059701	0.8367537	0.5169776	0.011194	0.0920292	24.79094	2.797642	2.955466	3329
	(1.081378)	(1.086125)	(0.7907711)	(1.896951)	(0.0770429)	(0.3696247)	(0.4997583)	(0.1052178)	(0.2890809)	(4.867583)	(1.023501)	(1.076223)	
Spain	3.170548	3.015985	9.7453	0.592767	0.0151038	0.8860919	0.3011957	0.0036501	0.0533556	25.52941	2.940678	2.855422	3978
	(1.358921)	(1.451766)	(0.8338646)	(15.232)	(0.1219737)	(0.3177196)	(0.4588064)	(0.0603094)	(0.2247491)	(5.537869)	(1.375375)	(1.455337)	
United Kingdom	3.746385	3.626251	10.14875	0.3522174	0.0103819	0.836485	0.6611049	0.0148313	0.1642663	23.33412	3.717668	3.513566	2303
	(1.125396)	(1.160563)	(0.6288457)	(3.761989)	(0.1013801)	(0.3699035)	(0.4734219)	(0.1208997)	(0.3705531)	(4.873218)	(1.206157)	(1.196195)	

Table 2.d. Mothers-Daughters

	Parent Inc Sat	Child Inc Sat	Log Fam Inc	Proportion	Shock	Parent Married	Parent Employed	Step	% Children Leave Home	Age Average Child Leaves	Parent Sat Child Leaves	Child Sat Leaves Home	Nº Observations
Austria	3.937989	3.819177	10.30746	0.2770008	0.0140698	0.880667	0.5992705	0.009901	0.1469839	22.73796	3.985795	3.811966	1545
	(1.515925)	(1.499436)	(0.5737963)	(2.251484)	(0.1178096)	(0.3242644)	(0.490174)	(0.0990357)	(0.35414)	(4.902202)	(1.464615)	(1.42186)	
Belgium	3.961121	3.8502	10.33588	0.0851398	0.049171	0.8176101	0.6077759	0.030303	0.0577386	23.15278	3.776596	3.585106	813
	(1.373448)	(1.402179)	(0.6146701)	(0.3038706)	(0.2162867)	(0.386276)	(0.4883858)	(0.1714689)	(0.2332952)	(4.276001)	(1.400109)	(1.306803)	
Denmark	4.532951	4.057307	10.27562	0.103229	0.1017192	0.8008596	0.8581662	0.0157593	0.1986234	20.25248	4.417989	4.016043	415
	(1.151222)	(1.425182)	(0.43239)	(0.292496)	(0.3024954)	(0.3996402)	(0.3491298)	(0.1246323)	(0.3991601)	(3.285823)	(1.279916)	(1.550151)	
Finland	4.010132	3.716312	10.15915	0.0690026	0.0881459	0.8682877	0.810537	0.0091185	0.1440129	20	3.79661	3.457143	628
	(1.235832)	(1.415134)	(0.4329948)	(0.3497154)	(0.2836507)	(0.3383491)	(0.3920746)	(0.0951029)	(0.3511976)	(3.209478)	(1.349921)	(1.388435)	
France	3.385687	3.27752	10.08521	0.1182025	0.0188473	0.8331057	0.5697897	0.018301	0.0853404	22.32667	3.386167	3.253731	2064
	(1.273459)	(1.410542)	(0.5840969)	(1.072717)	(0.1360042)	(0.3729324)	(0.4951731)	(0.1340559)	(0.2794141)	(3.656455)	(1.387656)	(1.463562)	
Germany	3.739044	3.360558	10.13244	0.1887955	0.0239044	0.8864542	0.5916335	0.0099602	0.1116169	21.60876	3.671533	3.3675	415
	(1.297022)	(1.447511)	(0.521538)	(0.301127)	(0.1529037)	(0.3175753)	(0.4920219)	(0.0994014)	(0.3149211)	(4.040204)	(1.29413)	(1.386452)	
Greece	2.993122	2.746745	9.580179	0.2874985	0.0132646	0.9066568	0.4296242	0.0007369	0.0312184	24.93981	3.138889	2.8125	1510
	(1.138969)	(1.197653)	(0.786178)	(4.157915)	(0.1144195)	(0.2909485)	(0.4950833)	(0.0271396)	(0.17392)	(5.196697)	(1.342743)	(1.378882)	
Ireland	3.512377	3.040864	10.16159	0.2488985	0.0180747	0.9056974	0.2777996	0.0027505	0.1648506	22.89126	3.531401	3.172962	1918
	(1.522352)	(1.498394)	(0.6092119)	(1.466881)	(0.1332477)	(0.2923066)	(0.4480021)	(0.0523832)	(0.3710783)	(4.489155)	(1.522221)	(1.48964)	
Italy	3.086957	2.720907	9.893413	0.1633642	0.0166451	0.921653	0.3788205	0.0020089	0.105532	25.32993	2.998534	2.75	2309
	(1.279828)	(1.345687)	(0.7296018)	(1.4072)	(0.127947)	(0.2687361)	(0.4851281)	(0.0447789)	(0.3072487)	(4.845661)	(1.283007)	(1.369915)	
Luxembourg	4.093407	3.774725	10.5813	0.2080181	0.032967	0.8736264	0.532967	0.032967	0.1890482	24.16897	4.053333	3.773333	121
	(1.46301)	(1.540904)	(0.461322)	(0.2895009)	(0.1790428)	(0.3331866)	(0.5002883)	(0.1790428)	(0.3916108)	(4.601464)	(1.334504)	(1.361372)	
The Netherlands	4.448574	3.949438	10.1315	0.1232497	0.0769231	0.8993086	0.4511668	0.0116681	0.0407501	20.85841	4.291667	3.938144	1302
	(1.140456)	(1.36301)	(0.548171)	(1.366056)	(0.266527)	(0.3009848)	(0.4977172)	(0.1074102)	(0.1977464)	(3.256497)	(1.213231)	(1.375488)	
Portugal	2.998863	2.994998	9.483522	0.2231937	0.0081855	0.8556162	0.5682128	0.005457	0.0978299	24.14748	2.814371	2.862069	2092
	(1.07073)	(1.091232)	(0.7669961)	(1.069188)	(0.0901132)	(0.3515185)	(0.4953815)	(0.0736782)	(0.297102)	(5.089695)	(1.100669)	(1.086335)	
Spain	3.093931	2.9246	9.71275	0.2568837	0.0162682	0.8736738	0.3131985	0.0031122	0.0540777	24.55965	2.917127	2.796562	3348
	(1.362529)	(1.465256)	(0.8444446)	(3.604903)	(0.1265141)	(0.3322401)	(0.4638271)	(0.055704)	(0.22618)	(5.255891)	(1.392017)	(1.408672)	
United Kingdom	3.728689	3.624198	10.18131	0.2264056	0.0119157	0.8203483	0.6516957	0.0197067	0.1909561	22.17727	3.746296	3.62279	1867
	(1.133336)	(1.163372)	(0.5875813)	(0.4495369)	(0.1085315)	(0.3839851)	(0.4765422)	(0.1390223)	(0.3931053)	(4.531997)	(1.139803)	(1.122055)	

Table 2.e. Fathers

	Parent Inc Sat	Child Inc Sat	Log Fam Inc	Proportion	Shock	Parent Married	Parent Employed	Step	% Children Leave Home	Age Average Child Leaves	Parent Sat Child Leaves	Child Sat Leaves Home	Nº Observations
Austria	4.036332	3.857555	10.38245	0.3015408	0.011534	0.9714533	0.849481	0.0282584	0.1236576	23.03722	3.934236	3.869396	2915
	(1.405972)	(1.499315)	(0.5182756)	(2.706105)	(0.1067908)	(0.1665527)	(0.357631)	(0.165734)	(0.3292157)	(4.985056)	(1.480993)	(1.493639)	
Belgium	4.018416	3.701657	10.50906	0.0668045	0.06814	0.9152855	0.8563536	0.0589319	0.080415	21.69355	3.5	3.647059	273
	(1.259514)	(1.423102)	(0.516088)	(0.1901901)	(0.2522183)	(0.2787132)	(0.3510542)	(0.2357143)	(0.2721112)	(3.59229)	(1.370167)	(1.411716)	
Denmark	4.151786	4.005952	10.3459	0.165202	0.1160714	0.8333333	0.9107143	0.0625	0.21881	20.65789	4.144231	3.732673	239
	(1.28279)	(1.482221)	(0.4769354)	(0.5597663)	(0.3207883)	(0.3732338)	(0.285581)	(0.2424225)	(0.4138368)	(3.591605)	(1.210137)	(1.522439)	
Finland	3.835165	3.659341	10.21653	0.0810397	0.0641026	0.952381	0.8626374	0.014652	0.1143641	20.4	3.739583	3.475	414
	(1.298669)	(1.391084)	(0.3718522)	(0.129739)	(0.2451602)	(0.2131541)	(0.3445454)	(0.1202656)	(0.3183987)	(3.376866)	(1.2247)	(1.292383)	
France	3.291181	3.144759	10.30169	0.0776471	0.0116473	0.8976705	0.7670549	0.1006656	0.1307401	21.99174	3.119565	3.050279	778
	(1.333013)	(1.394294)	(0.567817)	(0.2281966)	(0.1073368)	(0.3032072)	(0.4228835)	(0.3010106)	(0.337207)	(3.385338)	(1.337499)	(1.522394)	
Germany	3.844988	3.395105	10.2686	0.1589562	0.0244755	0.983683	0.9055944	0.0221445	0.2150272	21.85517	3.771475	3.339012	706
	(1.209831)	(1.449685)	(0.4507844)	(0.2035583)	(0.1546103)	(0.1267655)	(0.2925627)	(0.1472393)	(0.410892)	(4.014323)	(1.265667)	(1.388358)	
Greece	3.085083	2.865193	9.763775	0.1678075	0.0176796	0.9966851	0.7690608	0.0121547	0.0614589	25.43925	3.22	2.847826	390
	(1.168563)	(1.157676)	(0.6650756)	(0.5200698)	(0.1318567)	(0.0575116)	(0.4216667)	(0.1096369)	(0.2402392)	(5.406456)	(1.217056)	(1.094783)	
Ireland	3.489096	3.093341	10.29703	0.2047367	0.015993	0.9630707	0.7749346	0.0087235	0.1666667	22.70621	3.523923	3.150721	2669
	(1.453501)	(1.461055)	(0.5854944)	(0.6308517)	(0.1254664)	(0.1886158)	(0.4176861)	(0.0930047)	(0.3726994)	(4.15145)	(1.473324)	(1.453418)	
Italy	3.219345	2.716788	9.929058	0.2386631	0.0173498	0.9856676	0.7698433	0.0051965	0.1004033	25.4113	3.174721	2.770093	4193
	(1.244501)	(1.32833)	(0.7559472)	(2.69473)	(0.1305763)	(0.118862)	(0.4209507)	(0.0719025)	(0.3005433)	(4.871591)	(1.290809)	(1.392699)	
Luxembourg	4.059937	3.700315	10.66951	0.1779433	0.0347003	0.9337539	0.8201893	0.0378549	0.188113	24.40876	4.19403	3.789474	207
	(1.416294)	(1.532899)	(0.4477182)	(0.2573658)	(0.183309)	(0.2491049)	(0.3846369)	(0.1911469)	(0.3908407)	(4.725643)	(1.259416)	(1.409129)	
The Netherlands	4.559896	3.960938	10.23217	0.1288097	0.1354167	0.9895833	0.8802083	0.0104167	0.0717391	21.45455	4.814815	4	272
	(1.089497)	(1.46001)	(0.6301453)	(0.2705505)	(0.3426145)	(0.1016616)	(0.3251414)	(0.1016616)	(0.2583364)	(3.2891)	(0.7862783)	(1.270978)	
Portugal	3.125294	3.003872	9.553989	0.2771395	0.0058083	0.9643203	0.8339096	0.0156272	0.1035321	24.01981	2.975369	2.953634	3861
	(1.052067)	(1.086182)	(0.7115631)	(1.472904)	(0.075996)	(0.1855032)	(0.3721875)	(0.1240366)	(0.3046642)	(4.737799)	(1.107929)	(1.106207)	
Spain	3.02585	2.941156	9.805068	0.4863908	0.0173469	0.9544218	0.6867347	0.0115646	0.0897392	24.27725	3.014815	2.834559	1566
	(1.389705)	(1.490222)	(0.8517584)	(12.79972)	(0.1305826)	(0.2086041)	(0.4639002)	(0.1069335)	(0.2858323)	(5.211026)	(1.450472)	(1.538623)	
United Kingdom	3.816685	3.811822	10.29416	0.2419476		0.936401	0.8316498	0.0976431	0.1718476	22.1465	3.788591	3.760611	2467
	(1.000033)	(0.9591871)	(0.5205118)	(0.3346447)		(0.2440828)	(0.374247)	(0.296887)	(0.3772893)	(4.016254)	(1.023557)	(0.9647232)	

Table 2.f. Mothers

	Parent Inc Sat	Child Inc Sat	Log Fam Inc	Proportion	Shock	Parent Married	Parent Employed	Step	% Children Leave Home	Age Average Child Leaves	Parent Sat Child Leaves	Child Sat Leaves Home	Nº Observations
Austria	3.980869	3.865047	10.32498	0.3290041	0.012151	0.8839193	0.60212	0.0108583	0.1203977	23.09152	3.993092	3.807292	3275
	(1.463157)	(1.499207)	(0.5613616)	(2.625047)	(0.1095739)	(0.320363)	(0.4895237)	(0.1036494)	(0.3254479)	(5.113734)	(1.465858)	(1.475368)	
Belgium	3.729614	3.655222	10.36078	0.0827098	0.0629471	0.7753934	0.4949928	0.0672389	0.0825688	23.20988	3.339623	3.26	360
	(1.465895)	(1.413154)	(0.554625)	(0.2892097)	(0.2430416)	(0.4176218)	(0.5003329)	(0.2506146)	(0.2753697)	(4.094863)	(1.616542)	(1.509291)	
Denmark	4.295699	4.043011	10.24689	0.1824298	0.1021505	0.7419355	0.7849462	0.0645161	0.2685338	20.32515	4.289474	3.813333	265
	(1.314929)	(1.505884)	(0.5337684)	(0.5520983)	(0.303254)	(0.438159)	(0.411413)	(0.246001)	(0.4435623)	(3.24871)	(1.315378)	(1.498933)	
Finland	3.792722	3.575949	10.18371	0.0945449	0.0727848	0.8844937	0.7753165	0.0094937	0.1232539	20.90667	3.698413	3.388235	474
	(1.27256)	(1.403163)	(0.3961231)	(0.1605448)	(0.2599887)	(0.3198852)	(0.4177043)	(0.0970487)	(0.3288636)	(4.166576)	(1.328276)	(1.328211)	
France	3.16029	3.100264	10.20328	0.0974524	0.0105541	0.7440633	0.5402375	0.0204485	0.1186147	22.57664	3.090909	3.036458	978
	(1.3345)	(1.400321)	(0.6234701)	(0.2201434)	(0.1022233)	(0.4365304)	(0.4985428)	(0.1415755)	(0.3234046)	(3.580007)	(1.501883)	(1.484201)	
Germany	3.754595	3.365405	10.18587	0.2025726	0.0205405	0.9221622	0.532973	0.0118919	0.2137821	22	3.728507	3.302839	768
	(1.283129)	(1.44693)	(0.5819364)	(0.5268297)	(0.1419169)	(0.2680612)	(0.4991815)	(0.1084582)	(0.4100214)	(4.132007)	(1.290876)	(1.396144)	
Greece	2.904427	2.814889	9.71436	0.1617059	0.0160966	0.8983903	0.4215292		0.0637768	25.375	2.984848	2.806452	406
	(1.15292)	(1.177987)	(0.6560596)	(0.4597437)	(0.1259104)	(0.3022864)	(0.4940525)		(0.2444158)	(5.617745)	(1.208845)	(1.225932)	
Ireland	3.547418	3.096479	10.24174	0.2284774	0.0204225	0.8971831	0.27277	0.0016432	0.1675626	22.99758	3.498179	3.123223	3348
	(1.49833)	(1.465046)	(0.6130435)	(0.7483061)	(0.1414572)	(0.3037552)	(0.4454358)	(0.0405077)	(0.3734964)	(4.463052)	(1.545569)	(1.458474)	
Italy	3.070904	2.693011	9.885679	0.2298167	0.0168856	0.9276892	0.3650719	0.0014071	0.0962207	25.68785	3.094708	2.765201	4610
	(1.273261)	(1.332333)	(0.7653731)	(2.212973)	(0.1288477)	(0.259012)	(0.4814691)	(0.0374868)	(0.2948993)	(4.941479)	(1.289917)	(1.369842)	
Luxembourg	4.062874	3.610778	10.64766	0.1640237	0.0389222	0.8802395	0.5179641	0.0209581	0.1778767	24.65524	4.092199	3.75	214
	(1.447458)	(1.555192)	(0.4447257)	(0.2431578)	(0.1936997)	(0.3251684)	(0.5004269)	(0.1434589)	(0.3824404)	(4.815882)	(1.325038)	(1.424983)	
The Netherlands	4.313397	3.899522	10.21104	0.1239533	0.1411483	0.9090909	0.3971292	0.0095694	0.0475248	20.45833	4.5	4.181818	306
	(1.282557)	(1.496423)	(0.5318794)	(0.2223876)	(0.3485917)	(0.2878243)	(0.4898895)	(0.0974707)	(0.2129694)	(2.992442)	(0.9636241)	(1.220319)	
Portugal	2.948113	2.989269	9.486501	0.3103764	0.0064858	0.8444575	0.5396226	0.0079009	0.0939873	24.26291	2.788262	2.899764	4708
	(1.084863)	(1.094542)	(0.7413409)	(1.446132)	(0.0802779)	(0.3624424)	(0.498457)	(0.0885406)	(0.2918201)	(4.871348)	(1.060954)	(1.075914)	
Spain	3.001463	2.904009	9.753414	0.4900462	0.0187299	0.8448932	0.2718759	0.0046825	0.0891518	24.71197	2.826498	2.755776	1849
	(1.371015)	(1.479021)	(0.8556166)	(11.92564)	(0.1355893)	(0.3620595)	(0.4449914)	(0.0682782)	(0.2849832)	(5.549064)	(1.420306)	(1.484944)	
United Kingdom	3.725559	3.76649	10.19123	0.269586		0.8156655	0.671967	0.0138398	0.1713417	22.43491	3.741935	3.703146	3107
	(1.024907)	(0.98976)	(0.5863066)	(0.3640469)		(0.3878139)	(0.469566)	(0.116843)	(0.3768391)	(4.366389)	(1.081131)	(1.030084)	

Table 3.a Child Income Satisfaction

Variables	Father's Economic Satisfaction (Sons)					Father's Economic Satisfaction (Daughters)				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Austria	0.0688	0.0881	0.1080	0.1036	0.1300	0.0968	0.1630	0.2282	0.1919	0.2738
	(0.0349)**	(0.0340)***	(0.0492)**	(0.0361)***	(0.0502)***	(0.0396)**	(0.0423)***	(0.0601)***	(0.0448)***	(0.0635)***
Belgium	0.0011	0.0072	-0.1045	-0.0640	-0.0361	0.0576	0.0458	-0.0051	0.0467	0.0615
	(0.0397)	(0.0500)	(0.0800)	(0.0535)	(0.0853)	(0.0348)*	(0.0537)	(0.0761)	(0.0612)	(0.0764)
Denmark	0.1315	0.1164	0.2029	0.1157	0.1935	0.1747	0.1606	0.2401	0.1714	0.3023
	(0.0518)**	(0.0602)*	(0.0902)**	(0.0669)*	(0.0933)**	(0.0853)**	(0.1103)	(0.1847)	(0.1110)	(0.2075)
Finland	0.2089	0.3288	0.2448	0.2385	0.2429	0.2788	0.3277	0.2144	0.1844	0.3492
	(0.0505)***	(0.0562)***	(0.0881)***	(0.0661)***	(0.0933)***	(0.0701)***	(0.0859)***	(0.1138)*	(0.0932)**	(0.1239)***
France	0.1632	0.2022	0.1829	0.1989	0.2120	0.1463	0.1772	0.1709	0.1801	0.1681
	(0.0217)***	(0.0274)***	(0.0348)***	(0.0286)***	(0.0368)***	(0.0247)***	(0.0320)***	(0.0389)***	(0.0317)***	(0.0396)***
Germany	0.1824	0.2045	0.2243	0.2345	0.2527	0.1331	0.0867	0.2408	0.0844	0.2425
	(0.0591)***	(0.0616)***	(0.1060)**	(0.0632)***	(0.1067)**	(0.0767)*	(0.0828)	(0.1351)*	(0.0837)	(0.1361)*
Greece	0.4638	0.3697	0.4816	0.4033	0.4680	0.4639	0.4115	0.3931	0.3767	0.4710
	(0.0231)***	(0.0360)***	(0.0456)***	(0.0389)***	(0.0463)***	(0.0252)***	(0.0408)***	(0.0492)***	(0.0419)***	(0.0513)***
Ireland	0.2269	0.2071	0.2486	0.2217	0.2596	0.1773	0.1964	0.2115	0.1569	0.2186
	(0.0246)***	(0.0272)***	(0.0348)***	(0.0296)***	(0.0360)***	(0.0260)***	(0.0294)***	(0.0396)***	(0.0333)***	(0.0411)***
Italy	0.3382	0.3127	0.3452	0.3180	0.3540	0.3620	0.3290	0.3488	0.3397	0.3612
	(0.0155)***	(0.0215)***	(0.0262)***	(0.0236)***	(0.0275)***	(0.0174)***	(0.0271)***	(0.0317)***	(0.0286)***	(0.0326)***
Luxembourg	0.4040	0.4237	0.4340	0.4985	0.5358	0.2939	0.2374	0.5987	0.3009	0.5850
	(0.1108)***	(0.1323)***	(0.1640)***	(0.1492)***	(0.1774)***	(0.1071)***	(0.1169)**	(0.2367)**	(0.1553)*	(0.2303)**
The Netherlands	0.0903	0.1145	0.0766	0.1286	0.0995	0.0804	0.0753	0.0433	0.0671	0.0259
	(0.0300)***	(0.0398)***	(0.0518)	(0.0424)***	(0.0520)*	(0.0327)**	(0.0418)*	(0.0558)	(0.0427)	(0.0557)
Portugal	0.4741	0.4976	0.4687	0.4907	0.4873	0.4776	0.4751	0.4833	0.5116	0.5169
	(0.0235)***	(0.0291)***	(0.0332)***	(0.0308)***	(0.0345)***	(0.0268)***	(0.0383)***	(0.0439)***	(0.0397)***	(0.0450)***
Spain	0.1875	0.2086	0.2019	0.1738	0.1949	0.2049	0.1749	0.1951	0.1673	0.1545
	(0.0133)***	(0.0179)***	(0.0217)***	(0.0191)***	(0.0226)***	(0.0148)***	(0.0201)***	(0.0241)***	(0.0213)***	(0.0248)***
United Kingdom	0.1158	0.1360	0.1719	0.1146	0.1776	0.1492	0.1641	0.2081	0.1756	0.2299
	(0.0388)***	(0.0412)***	(0.0551)***	(0.0418)***	(0.0553)***	(0.0453)***	(0.0480)***	(0.0702)***	(0.0505)***	(0.0699)***

Note: Standard Errors in parentheses. *: indicates individual significance at the 10% level. **: indicates individual significance at the 5% level. ***: indicates individual significance at the 1% level.

Table 3.b Child Income Satisfaction

Variables	Mother's Economic Satisfaction (Sons)					Mother's Economic Satisfaction (Daughters)				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Austria	0.1630	0.1675	0.1762	0.2028	0.2034	0.1780	0.2044	0.2313	0.2227	0.2606
	(0.0270)***	(0.0275)***	(0.0372)***	(0.0301)***	(0.0384)***	(0.0332)***	(0.0350)***	(0.0507)***	(0.0379)***	(0.0517)***
Belgium	0.1004	0.1476	0.1055	0.0862	0.0964	0.1569	0.2738	0.2496	0.2131	0.3271
	(0.0306)***	(0.0444)***	(0.0611)*	(0.0451)*	(0.0626)	(0.0319)***	(0.0477)***	(0.0629)***	(0.0504)***	(0.0629)***
Denmark	0.1836	0.2064	0.2210	0.1802	0.1455	0.0287	0.0894	0.0699		
	(0.0471)***	(0.0645)***	(0.0891)**	(0.0611)***	(0.0842)*	(0.0738)	(0.1327)	(0.1504)		
Finland	0.1926	0.2189	-0.0450	0.1596	-0.0176	0.2653	0.2909	0.2838	0.2708	0.2238
	(0.0529)***	(0.0570)***	(0.0901)	(0.0653)**	(0.0885)	(0.0673)***	(0.0733)***	(0.1049)***	(0.0730)***	(0.1036)**
France	0.1682	0.1719	0.1760	0.2097	0.1639	0.1656	0.1891	0.1831	0.1849	0.2292
	(0.0197)***	(0.0250)***	(0.0315)***	(0.0275)***	(0.0329)***	(0.0224)***	(0.0274)***	(0.0338)***	(0.0293)***	(0.0356)***
Germany	0.2432	0.2054	0.2105	0.2195	0.2290	0.2618	0.1919	0.2282	0.1568	0.1795
	(0.0469)***	(0.0458)***	(0.0731)***	(0.0499)***	(0.0745)***	(0.0791)***	(0.0827)**	(0.1103)**	(0.0849)*	(0.1125)
Greece	0.5845	0.5697	0.5729	0.5685	0.5973	0.5598	0.5887	0.5377	0.5947	0.5659
	(0.0220)***	(0.0349)***	(0.0404)***	(0.0364)***	(0.0420)***	(0.0233)***	(0.0376)***	(0.0446)***	(0.0397)***	(0.0469)***
Ireland	0.1919	0.1801	0.2120	0.1994	0.2166	0.1591	0.1421	0.0990	0.1453	0.1034
	(0.0230)***	(0.0262)***	(0.0325)***	(0.0271)***	(0.0331)***	(0.0227)***	(0.0243)***	(0.0340)***	(0.0272)***	(0.0353)***
Italy	0.3744	0.3507	0.4037	0.3805	0.4275	0.4508	0.4140	0.4325	0.4497	0.4639
	(0.0143)***	(0.0198)***	(0.0236)***	(0.0219)***	(0.0250)***	(0.0163)***	(0.0261)***	(0.0298)***	(0.0276)***	(0.0308)***
Luxembourg	0.2946	0.3284		0.3997		0.1528	0.2477	0.3521	0.2931	0.3984
	(0.0901)***	(0.1033)***		(0.1088)***		(0.0965)	(0.1326)*	(0.1496)**	(0.1316)**	(0.1590)**
The Netherlands	0.1347	0.1090	0.1423	0.2054	0.1546	0.1307	0.1533	0.1874	0.1388	0.1858
	(0.0280)***	(0.0361)***	(0.0467)***	(0.0374)***	(0.0477)***	(0.0308)***	(0.0407)***	(0.0553)***	(0.0422)***	(0.0558)***
Portugal	0.4751	0.5202	0.5211	0.5221	0.5456	0.5690	0.5188	0.5221	0.5434	0.5474
	(0.0208)***	(0.0257)***	(0.0297)***	(0.0271)***	(0.0307)***	(0.0241)***	(0.0331)***	(0.0378)***	(0.0343)***	(0.0388)***
Spain	0.2418	0.2447	0.2240	0.2578	0.2162	0.2680	0.2834	0.2697	0.2566	0.2590
	(0.0124)***	(0.0167)***	(0.0198)***	(0.0178)***	(0.0204)***	(0.0137)***	(0.0190)***	(0.0223)***	(0.0199)***	(0.0227)***
United Kingdom	0.1560	0.1849	0.2078	0.1828	0.2129	0.2265	0.1898	0.2374	0.1725	0.2175
	(0.0340)***	(0.0354)***	(0.0465)***	(0.0368)***	(0.0465)***	(0.0379)***	(0.0429)***	(0.0575)***	(0.0440)***	(0.0574)***

Note: Standard Errors in parentheses. *: indicates individual significance at the 10% level. **: indicates individual significance at the 5% level. ***: indicates individual significance at the 1% level.

Table 3.c Child Income Satisfaction

Variables	Father's Economic Satisfaction					Mother's Economic Satisfaction				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Austria	0.0772	0.0943	0.1387	0.1207	0.1657	0.0767	0.0738	0.0995	0.0817	0.1115
	(0.0354)**	(0.0373)**	(0.0456)***	(0.0395)***	(0.0466)***	(0.0290)***	(0.0328)**	(0.0398)**	(0.0332)**	(0.0410)***
Belgium	0.0552	0.0686	0.1792	0.0585	0.2321	0.1741	0.2053	0.2178	0.2368	0.2395
	(0.0695)	(0.1157)	(0.1514)	(0.1290)	(0.1419)	(0.0758)**	(0.1146)*	(0.1223)*	(0.1100)**	(0.1235)*
Denmark						0.3259	0.0622	0.8027	0.4691	0.7606
						(0.2084)	(0.3152)	(0.4042)**	(0.3738)	(0.4138)*
Finland	.2593405**	0.1989	0.0082	0.2080	0.0122	0.2141	0.3074	-0.0293	0.1677	-0.0188
	(0.1012049)	(0.1274)	(0.1539)	(0.1283)	(0.1577)	(0.1134)*	(0.1777)*	(0.1712)	(0.1306)	(0.1778)
France	0.1992	0.2002	0.1778	0.2368	0.1623	0.2074	0.1985	0.2419	0.2314	0.2474
	(0.0664)***	(0.0790)**	(0.0886)**	(0.0794)***	(0.0897)*	(0.0561)***	(0.0680)***	(0.0678)***	(0.0692)***	(0.0776)***
Germany	0.1727*	0.1188	0.3338	0.2751	0.3299	0.1776	0.2077	0.1502	0.2044	0.1448
	0.0942	(0.1005)	(0.1386)**	(0.1120)**	(0.1389)**	(0.0802)**	(0.0884)**	(0.1059)	(0.0917)**	(0.1070)
Greece	0.3666	0.2960	0.2503	0.2964	0.2644	0.5557	0.5058	0.5530	0.5350	0.5831
	(0.0764)***	(0.1164)**	(0.1462)*	(0.1190)**	(0.1469)*	(0.0781)***	(0.1268)***	(0.1457)***	(0.1289)***	(0.1449)***
Ireland	0.1278	0.1246	0.1535	0.1134	0.1433	0.0999	0.1049	0.0827	0.0927	0.0823
	(0.0275)***	(0.0311)***	(0.0366)***	(0.0324)***	(0.0376)***	(0.0268)***	(0.0288)***	(0.0326)**	(0.0303)***	(0.0335)**
Italy	0.3103	0.3182	0.3283	0.3239	0.3360	0.3746	0.3427	0.3784	0.3745	0.4032
	(0.0167)***	(0.0271)***	(0.0291)***	(0.0279)***	(0.0297)***	(0.0159)***	(0.0257)***	(0.0279)***	(0.0266)***	(0.0286)***
Luxembourg						0.1379	0.3312	0.2855	0.3322	0.2661
						(0.1363)	(0.1613)**	(0.1668)*	(0.1668)**	(0.1721)
The Netherlands	0.1208	0.1162	0.1423	0.0999	0.1251	0.2272	0.3735	0.3103	0.4193	0.3328
	(0.0914)	(0.1145)	(0.1347)	(0.1159)	(0.1390)	(0.0812)***	(0.1075)***	(0.1248)**	(0.1129)***	(0.1277)***
Portugal	0.4209	0.4605	0.4731	0.4733	0.4900	0.4573	0.4643	0.4967	0.4807	0.5136
	(0.0259)***	(0.0377)***	(0.0409)***	(0.0386)***	(0.0417)***	(0.0238)***	(0.0339)***	(0.0364)***	(0.0346)***	(0.0370)***
Spain	0.2067	0.1851	0.1689	0.1684	0.1661	0.2917	0.2730	0.2607	0.2630	0.2588
	(0.0292)***	(0.0404)***	(0.0442)***	(0.0416)***	(0.0454)***	(0.0272)***	(0.0355)***	(0.0370)***	(0.0369)***	(0.0384)***
United Kingdom	0.1641	0.1413	0.0685	0.1414	0.0619	0.1972	0.1796	0.2737	0.1823	0.2695
	(0.0568)***	(0.0588)**	(0.0731)	(0.0597)**	(0.0736)	(0.0465)***	(0.0512)***	(0.0604)***	(0.0538)***	(0.0607)***

Note: Standard Errors in parentheses. *: indicates individual significance at the 10% level. **: indicates individual significance at the 5% level. ***: indicates individual significance at the 1% level.

Figure 1.a

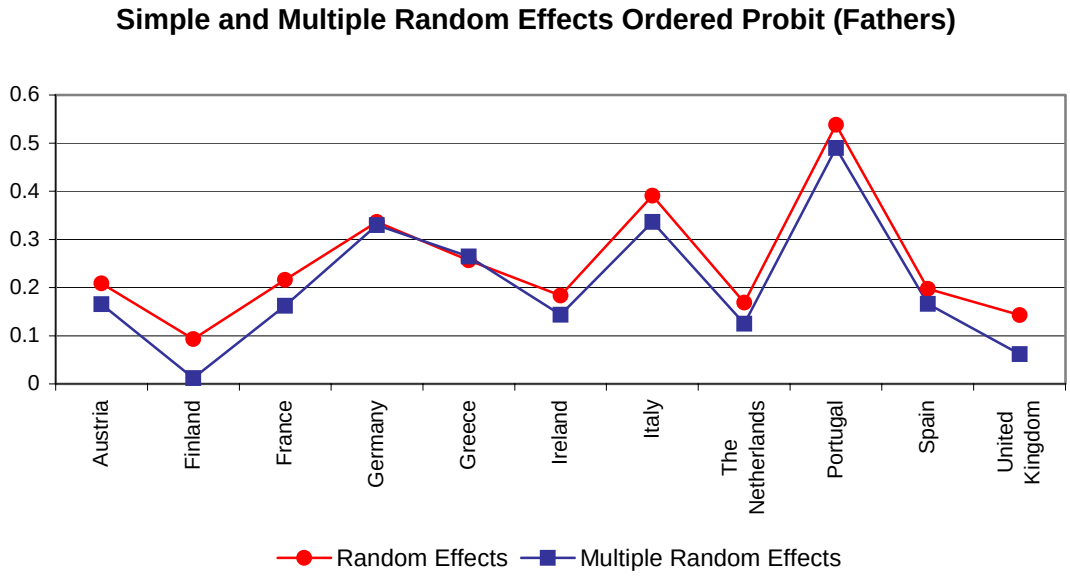


Figure 1.b

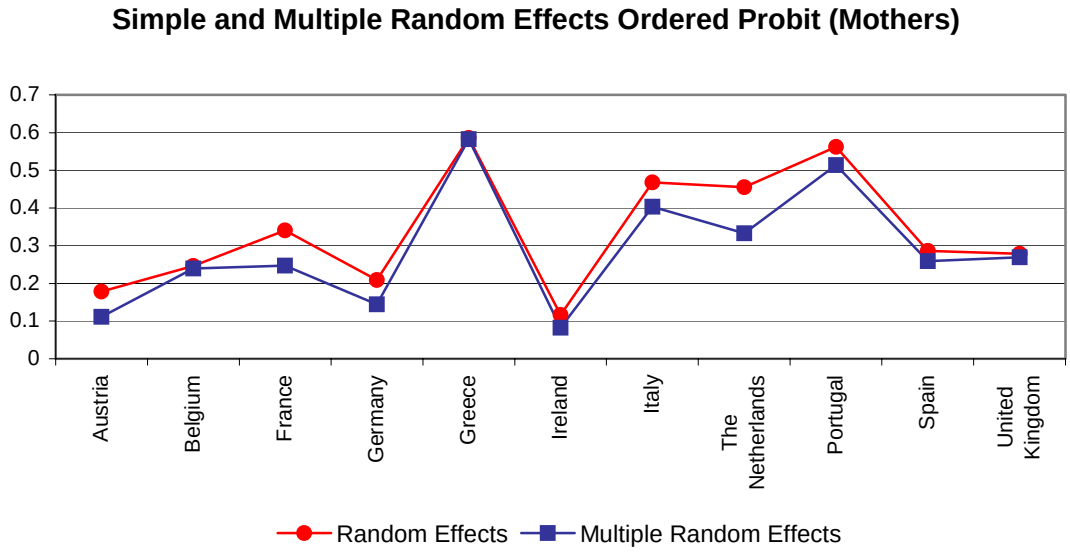


Table 4.a Family Income in Logarithms

	Father's Economic Satisfaction (Sons)				Father's Economic Satisfaction (Daughters)			
	(2)	(3)	(4)	(5)	(2)	(3)	(4)	(5)
Austria	0.5633	0.5891	0.5690	0.5733	0.8324	0.8576	0.8574	0.8234
	(0.0849)***	(0.0851)***	(0.0855)***	(0.0849)***	(0.1051)***	(0.1084)***	(0.1109)***	(0.1114)***
Belgium	0.8393	0.6333	0.5587	0.6593	0.5705	0.2754	0.4228	0.0036
	(0.1502)***	(0.1624)***	(0.1619)***	(0.1479)***	(0.1548)***	(0.1479)*	(0.1518)***	(0.1522)
Denmark	0.8349	0.7466	0.7619	0.6331	0.8588	0.7862	0.8092	0.6682
	(0.2170)***	(0.2288)***	(0.2248)***	(0.2223)***	(0.3244)***	(0.3700)**	(0.3303)**	(0.3731)*
Finland	1.1334	0.9904	1.1911	1.0732	1.7668	1.3515	1.5766	1.0918
	(0.1658)***	(0.1637)***	(0.1868)***	(0.1756)***	(0.2640)***	(0.2427)***	(0.2569)***	(0.2499)***
France	0.8953	0.8161	0.8947	0.8558	0.9120	0.9199	0.9868	0.8559
	(0.0782)***	(0.0816)***	(0.0794)***	(0.0839)***	(0.0881)***	(0.0936)***	(0.0885)***	(0.0888)***
Germany	0.6871	0.7060	0.6955	0.7186	1.3001	1.1958	1.2342	1.1796
	(0.1449)***	(0.1487)***	(0.1467)***	(0.1503)***	(0.2295)***	(0.2342)***	(0.2271)***	(0.2338)***
Greece	0.5974	0.6052	0.5441	0.6125	0.5550	0.5751	0.7090	0.5629
	(0.0634)***	(0.0623)***	(0.0578)***	(0.0695)***	(0.0677)***	(0.0688)***	(0.0747)***	(0.0691)***
Ireland	0.8227	0.6592	0.7990	0.6815	0.8237	0.6353	0.8789	0.5657
	(0.0822)***	(0.0831)***	(0.0831)***	(0.0836)***	(0.0920)***	(0.1007)***	(0.1004)***	(0.1000)***
Italy	0.5189	0.4686	0.5001	0.4660	0.5384	0.4599	0.5108	0.4676
	(0.0440)***	(0.0446)***	(0.0442)***	(0.0447)***	(0.0585)***	(0.0591)***	(0.0583)***	(0.0594)***
Luxembourg	0.6328	0.5092	0.7198	0.3839	1.1291	0.9078	0.2854	0.2821
	(0.3792)*	(0.3570)	(0.4279)*	(0.4190)	(0.4313)***	(0.5497)*	(0.6481)	(0.6465)
The Netherlands	0.4153	0.5117	0.5355	0.4933	0.7399	0.5194	0.8746	0.6063
	(0.0983)***	(0.1092)***	(0.1175)***	(0.1014)***	(0.1260)***	(0.1257)***	(0.1282)***	(0.1171)***
Portugal	0.5228	0.4604	0.4742	0.4439	0.5260	0.4847	0.5235	0.4981
	(0.0517)***	(0.0528)***	(0.0536)***	(0.0533)***	(0.0730)***	(0.0741)***	(0.0739)***	(0.0740)***
Spain	0.4140	0.3719	0.3615	0.3600	0.4041	0.4002	0.4172	0.3889
	(0.0348)***	(0.0355)***	(0.0354)***	(0.0350)***	(0.0361)***	(0.0389)***	(0.0370)***	(0.0378)***
United Kingdom	1.0854	0.8716	1.0149	0.8860	1.2446	1.1659	1.1944	1.1319
	(0.1028)***	(0.1076)***	(0.1096)***	(0.1076)***	(0.1167)***	(0.1342)***	(0.1324)***	(0.1241)***

Note: Standard Errors in parentheses. *: indicates individual significance at the 10% level. **: indicates individual significance at the 5% level. ***: indicates individual significance at the 1% level.

Table 4.b Family Income in Logarithms

	Mother's Economic Satisfaction (Sons)				Mother's Economic Satisfaction (Daughters)			
	(2)	(3)	(4)	(5)	(2)	(3)	(4)	(5)
Austria	0.4445	0.4926	0.4519	0.4804	0.6046	0.6107	0.6060	0.5921
	(0.0735)***	(0.0741)***	(0.0745)***	(0.0745)***	(0.0902)***	(0.0952)***	(0.0929)***	(0.0946)***
Belgium	0.7160	0.5402	0.5355	0.4737	0.6940	0.5608	0.4434	0.7255
	(0.1381)***	(0.1279)***	(0.1301)***	(0.1300)***	(0.1204)***	(0.1743)***	(0.1198)***	(0.1231)***
Denmark	1.8577	1.3700	1.6382	1.4080	1.0085	0.7296		
	(0.2802)***	(0.2416)***	(0.2413)***	(0.2323)***	(0.2751)***	(0.2714)***		
Finland	1.5674	1.3835	1.4501	1.3616	1.4742	0.9963	1.1245	0.7873
	(0.1880)***	(0.1841)***	(0.1940)***	(0.1875)***	(0.2160)***	(0.2185)***	(0.1964)***	(0.2055)***
France	0.9964	0.7887	0.8276	0.7528	1.0661	0.7629	1.0153	0.8385
	(0.0781)***	(0.0788)***	(0.0761)***	(0.0776)***	(0.0833)***	(0.0783)***	(0.0857)***	(0.0825)***
Germany	0.8461	0.7705	0.8609	0.7826	1.2371	1.0377	1.0904	0.9877
	(0.1155)***	(0.1222)***	(0.1208)***	(0.1242)***	(0.2076)***	(0.2122)***	(0.2085)***	(0.2127)***
Greece	0.6069	0.5728	0.5808	0.6119	0.4854	0.4313	0.4762	0.5426
	(0.0618)***	(0.0596)***	(0.0564)***	(0.0610)***	(0.0585)***	(0.0580)***	(0.0572)***	(0.0584)***
Ireland	0.6212	0.4386	0.4595	0.5074	0.6865	0.5188	0.6252	0.5669
	(0.0677)***	(0.0723)***	(0.0697)***	(0.0706)***	(0.0707)***	(0.0759)***	(0.0752)***	(0.0794)***
Italy	0.5317	0.4654	0.5125	0.4614	0.5405	0.4511	0.5336	0.4674
	(0.0401)***	(0.0408)***	(0.0406)***	(0.0410)***	(0.0554)***	(0.0559)***	(0.0555)***	(0.0561)***
Luxembourg	1.0379		1.3026		1.6561	1.8878	0.9345	1.7109
	(0.3451)***		(0.3617)***		(0.5164)***	(0.6062)***	(0.5001)*	(0.5324)***
The Netherlands	0.6042	0.6792	0.6374	0.6082	0.9783	0.7940	0.7832	0.7907
	(0.0969)***	(0.0996)***	(0.1030)***	(0.0941)***	(0.1223)***	(0.1376)***	(0.1119)***	(0.1259)***
Portugal	0.4087	0.3579	0.3655	0.3438	0.5743	0.5288	0.5515	0.5326
	(0.0445)***	(0.0461)***	(0.0460)***	(0.0464)***	(0.0589)***	(0.0607)***	(0.0597)***	(0.0606)***
Spain	0.4394	0.3418	0.3979	0.3691	0.4881	0.3446	0.4105	0.3674
	(0.0325)***	(0.0321)***	(0.0328)***	(0.0318)***	(0.0352)***	(0.0345)***	(0.0337)***	(0.0364)***
United Kingdom	0.8439	0.6868	0.7163	0.6463	1.0425	0.7900	0.9126	0.8462
	(0.0737)***	(0.0801)***	(0.0741)***	(0.0785)***	(0.0980)***	(0.0949)***	(0.1043)***	(0.1073)***

Note: Standard Errors in parentheses. *: indicates individual significance at the 10% level. **: indicates individual significance at the 5% level. ***: indicates individual significance at the 1% level.

Table 4.c Family Income in Logarithms

	Father's Economic Satisfaction				Mother's Economic Satisfaction			
	(2)	(3)	(4)	(5)	(2)	(3)	(4)	(5)
Austria	0.4970	0.5042	0.4966	0.4962	0.2575	0.2894	0.2804	0.2864
	(0.0770)***	(0.0793)***	(0.0812)***	(0.0798)***	(0.0725)***	(0.0772)***	(0.0752)***	(0.0779)***
Belgium	0.1556	0.2085	0.5249	0.3332	0.7275	0.7229	0.7769	0.7261
	(0.2606)	(0.2348)	(0.2252)**	(0.2224)	(0.1830)***	(0.2148)***	(0.1958)***	(0.2223)***
Denmark					4.1601	2.1749	5.3516	2.3379
					(1.1388)***	(0.4320)***	(1.0162)***	(0.4825)***
Finland	1.2311	0.7066	1.2331	0.7414	1.8891	1.9105	1.9982	1.8497
	(0.4884)**	(0.4147)*	(0.4385)***	(0.3776)**	(0.4108)***	(0.3934)***	(0.3805)***	(0.4766)***
France	1.1780	0.9457	1.0527	0.9361	1.0718	1.1730	0.9926	0.9114
	(0.2083)***	(0.2000)***	(0.2073)***	(0.2039)***	(0.1629)***	(0.1706)***	(0.1698)***	(0.2174)***
Germany	0.7051	0.6748	0.7590	0.7046	0.4982	0.3344	0.4171	0.3222
	(0.2054)***	(0.2613)***	(0.2580)***	(0.2762)**	(0.2242)**	(0.2350)	(0.2282)*	(0.2364)
Greece	0.7886	0.8570	0.8034	0.8183	0.5129	0.4908	0.4466	0.4328
	(0.2008)***	(0.2097)***	(0.2060)***	(0.2082)***	(0.2120)**	(0.2198)**	(0.2284)*	(0.2227)*
Ireland	0.5295	0.3921	0.4916	0.3906	0.3008	0.2092	0.2469	0.2091
	(0.0864)***	(0.0850)***	(0.0941)***	(0.0853)***	(0.0760)***	(0.0789)***	(0.0773)***	(0.0788)***
Italy	0.4769	0.4244	0.4623	0.4251	0.4577	0.4167	0.4514	0.4132
	(0.0428)***	(0.0427)***	(0.0429)***	(0.0428)***	(0.0401)***	(0.0410)***	(0.0402)***	(0.0417)***
Luxembourg					1.0395	1.1459	0.9910	1.1232
					(0.5368)*	(0.5129)**	(0.5431)*	(0.5138)**
The Netherlands	-0.0314	-0.0881	-0.0415	-0.0963	0.0852	0.0518	0.0504	0.0018
	(0.2284)	(0.2247)	(0.2215)	(0.2260)	(0.2214)	(0.2307)	(0.2158)	(0.2461)
Portugal	0.4528	0.3842	0.4154	0.3788	0.4437	0.3870	0.4081	0.3805
	(0.0518)***	(0.0531)***	(0.0531)***	(0.0532)***	(0.0446)***	(0.0461)***	(0.0457)***	(0.0462)***
Spain	0.4694	0.4127	0.4509	0.4048	0.3924	0.3719	0.3712	0.3521
	(0.0666)***	(0.0655)***	(0.0658)***	(0.0656)***	(0.0515)***	(0.0519)***	(0.0526)***	(0.0529)***
United Kingdom	1.3223	1.2039	1.2354	1.1977	0.8028	0.7421	0.7708	0.7418
	(0.1169)***	(0.1202)***	(0.1175)***	(0.1195)***	(0.0967)***	(0.0993)***	(0.1047)***	(0.0996)***

Note: Standard Errors in parentheses. *: indicates individual significance at the 10% level. **: indicates individual significance at the 5% level. ***: indicates individual significance at the 1% level.

Table 5.a Fathers money metric of child well-being

Variables	Father's Economic Satisfaction (Sons)				Father's Economic Satisfaction (Daughters)			
	(2)	(3)	(4)	(5)	(2)	(3)	(4)	(5)
Austria	11%	12%	12%	15%	13%	18%	15%	22%
Denmark	10%	19%	11%	21%	13%	21%	14%	31%
Finland	21%	18%	15%	16%	13%	11%	8%	23%
France	16%	16%	16%	18%	14%	13%	13%	14%
Germany	21%	23%	24%	25%	5%	14%	5%	14%
Greece	53%	69%	64%	66%	62%	57%	45%	70%
Ireland	17%	26%	19%	26%	16%	22%	12%	26%
Italy	45%	55%	48%	57%	46%	57%	50%	58%
Luxembourg	44%	56%	45%	92%	14%	44%	70%	138%
Netherlands	21%	11%	18%	15%	8%	6%	6%	3%
Portugal	88%	94%	96%	102%	84%	93%	91%	96%
Spain	35%	37%	33%	37%	29%	33%	27%	27%
UK	11%	17%	10%	17%	12%	16%	13%	18%

Figure 2.a

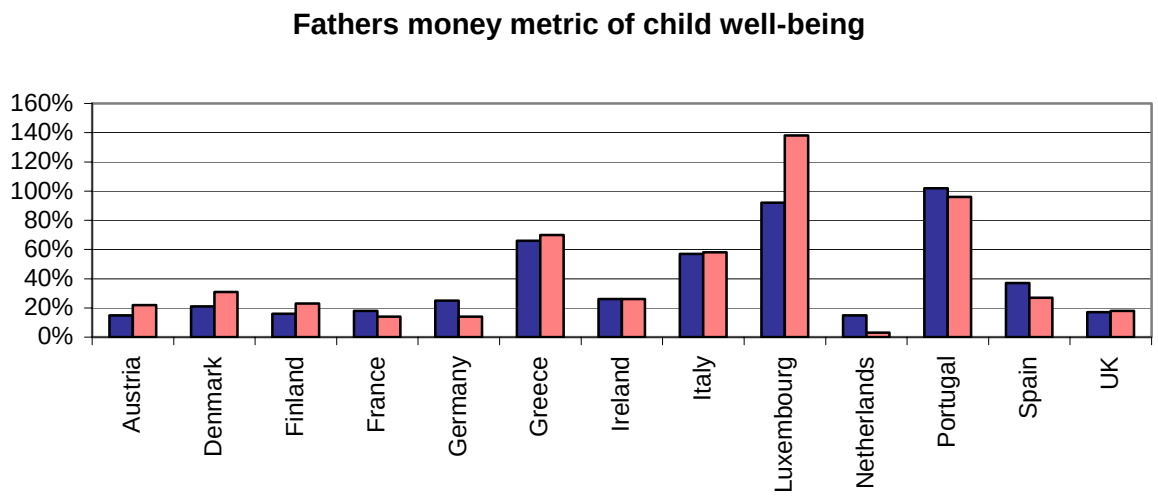


Table 5.b Mothers money metric of child well-being

Variables	Mother's Economic Satisfaction (Sons)				Mother's Economic Satisfaction (Daughters)			
	(2)	(3)	(4)	(5)	(2)	(3)	(4)	(5)
Austria	25%	24%	30%	28%	23%	25%	25%	29%
Belgium	14%	14%	11%	14%	28%	32%	34%	32%
Denmark	8%	11%	8%	7%	6%	7%		
Finland	10%		8%		14%	20%	17%	20%
France	12%	16%	18%	15%	13%	17%	13%	19%
Germany	17%	19%	18%	21%	11%	15%	10%	13%
Greece	81%	86%	84%	84%	101%	104%	104%	87%
Ireland	20%	33%	30%	29%	14%	13%	16%	12%
Italy	49%	65%	55%	69%	57%	71%	63%	74%
Luxembourg	20%		20%		10%	12%	20%	15%
Netherlands	13%	16%	24%	19%	11%	17%	13%	17%
Portugal	117%	134%	132%	146%	83%	90%	90%	94%
Spain	38%	45%	45%	40%	40%	53%	43%	48%
UK	19%	26%	22%	28%	16%	26%	16%	22%

Figure 2.b

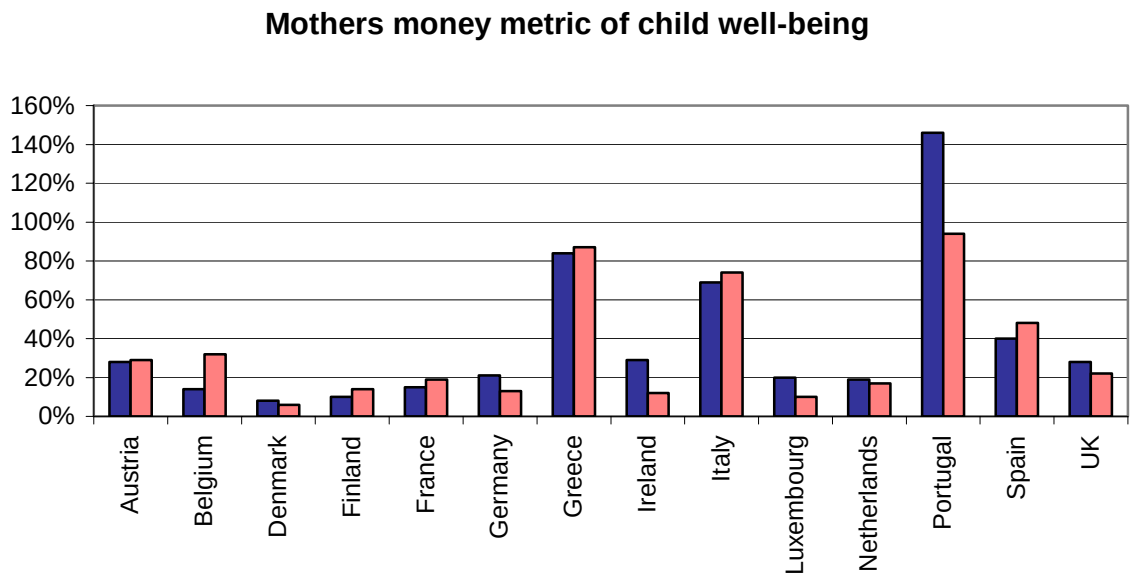
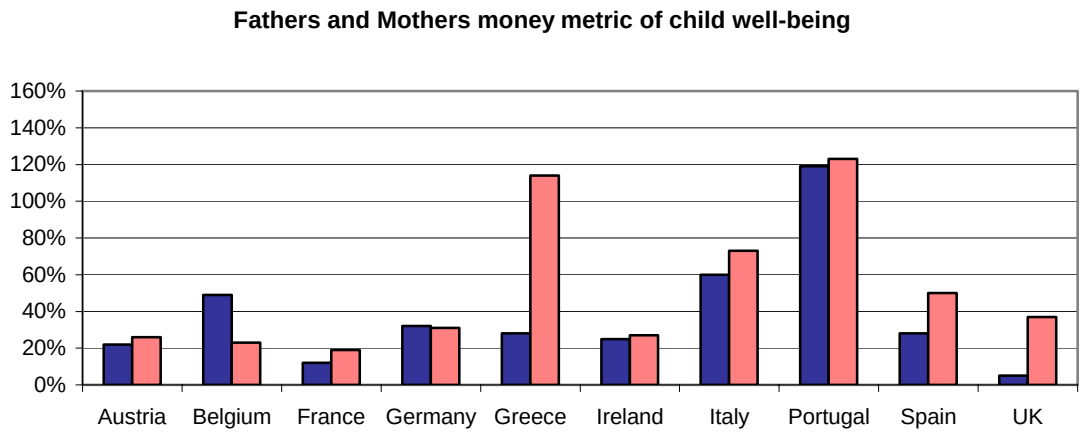


Table 5.c GLLAMM money metric of child well-being

Variables	Father's Economic Satisfaction				Mother's Economic Satisfaction			
	(2)	(3)	(4)	(5)	(2)	(3)	(4)	(5)
Austria	13%	18%	16%	22%	19%	23%	19%	26%
Belgium	31%	60%	8%	49%	20%	21%	22%	23%
France	12%	13%	16%	12%	13%	15%	17%	19%
Germany	12%	34%	25%	32%	29%	31%	34%	31%
Greece	32%	25%	32%	28%	84%	96%	102%	114%
Ireland	16%	27%	16%	25%	24%	27%	26%	27%
Italy	50%	58%	53%	60%	56%	68%	62%	73%
Portugal	94%	113%	105%	119%	96%	117%	108%	123%
Spain	26%	27%	25%	28%	47%	47%	48%	50%
UK	11%	6%	12%	5%	23%	37%	24%	37%

Figure 2.c



Appendix 1. Random Effects Ordered Probit

The Random Effects Ordered Probit is given by:

$$y_{it}^{p}* = x_{1it}^{p}\beta_1 + x_{2it}^{p}\beta_2 + x_{it}^{c}\beta_3 + y_{it}^{c}*\beta_4 + \alpha_i + e_{it}$$

where $y_{it}^{p}*$ is the latent subjective well-being of the father or the mother. e_{it} is a white noise error term and α_i the unobserved heterogeneity of the child that can be treated as a random effect, independent of the explanatory variables in the model.

$$y_{it}^{p}* = x_{it}^{'}\beta + y_{it}^{c}*\beta_4 + \varepsilon_{ijht} \quad \text{where } \varepsilon_{ijht} = \alpha_i + e_{it}$$

$$y_{it}^{p}* = \begin{cases} 1 \quad if \quad y_{it}^{p}* \le k_1 \\ 2 \quad if \quad k_1 < y_{it}^{p}* \le k_2 \\ \vdots \quad \vdots \quad \vdots \\ 6 \quad if \quad y_{it}^{p}* > k_5 \end{cases}$$

$k_1,\ldots,k_5$ are cut points estimated jointly with the β's and β_4, the conditional probabilities of the ordered responses are given by

$$f\left(y_{it}|x_{it}, y_{it}^{c}*, \alpha_i\right) = \Phi\left(k_6 - \alpha_i - x_{it}^{'}\beta - y_{it}^{c}*\right) - \Phi\left(k_5 - \alpha_i - x_{it}^{'}\beta - y_{it}^{c}*\right)$$

where Φ denotes the distribution function of the standard normal distribution.

Appendix 2. Multiple Random Effects Ordered Probit

The Multiple Random Effects Ordered Probit is given by:

$$y^{p}_{ijht} * = x^{p}_{1ijht}\beta_1 + x^{p}_{2ijht}\beta_2 + x^{c}_{ijht}\beta_3 + y^{c}_{ijht} * \beta_4 + a_h + b_{jh} + c_{ijh} + e_{ijht}$$

$$y^{p}_{ijht} * = x^{'}_{ijht}\beta + \varepsilon_{ijht}$$

$$y^{p}_{ijht} * = \begin{cases} 1 \quad if \quad y_{ijht} * \le k_1 \\ 2 \quad if \quad k_1 < y_{ijht} * \le k_2 \\ \vdots \quad \vdots \quad \vdots \\ 6 \quad if \quad y_{ijht} * > k_5 \end{cases}$$

where e_{ijht} is normally distributed with mean 0 and variance 1. Conditional on the three random effects a_h, b_{jh}, c_{ijh}, and x_{ijht}:

$$f\left(y_{ijht} \middle| x_{ijht}, a_h, b_{jh}, c_{ijh}\right) = \Phi\left(k_6 - x^{'}_{ijht}\beta - a_h - b_{jh} - c_{ijh}\right) - \Phi\left(k_5 - x^{'}_{ijht}\beta - a_h - b_{jh} - c_{ijh}\right)$$

where Φ denotes the cumulative density function of the standard normal distribution. The threshold parameters $k_1, \ldots, k_5$ are estimated together with β.

Observations are independent across households. Within siblings, observations are not independent, since a_h is common to all siblings living in the same household and time periods, b_{jh} is common to children who share the same biological parents, and c_{ijh} is common to all time periods for a given child.

$$\varepsilon_{ijht} = a_h + b_{jh} + c_{ijh} + e_{ijht}$$

where e_{ijht} is a white noise error term (short-term effect). c_{ijh} is the child specific random effect that does not vary over time. b_{jh} is the child sharing same biological parents specific random effect, that does not vary across siblings. Then a_h is the household specific random effect that does not vary across siblings within the family or over time. These last three error components are capturing long-term effects. $\sigma^2_{\varepsilon} = \sigma^2_a + \sigma^2_b + \sigma^2_c + \sigma^2_e$ assumes mutually independent and distributed with mean zero and constant variances component, where σ^2_e is normalized to 1.