Measuring the link between intergenerational occupational mobility and earnings

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Measuring the link between intergenerational occupational mobility and earnings: evidence from 8 European Countries*

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Abstract

This paper takes a fresh look at the relationship between family background and earnings applying a synthetic social mobility index built on distributions of parental and offspring occupational statuses. Using the EU-SILC dataset for 8 countries, our analysis shows that country differences mainly concern residual background correlations, left after controlling for background-related intervening factors such as education and occupation. Behind certain significant residual correlations, observed in the UK and in Southern European countries, we may detect respectively penalisation of upward mobility and insurance against downward mobility. Insignificant residual effects encompass significant penalisation of both downward and upward mobility in Germany and France, a parachute for the self-employed in Ireland and no patterns in Nordic countries. In quantile regressions, residual background correlations appear to increase along the earnings distribution. Although we are unable to provide causal explanations, we suggest that the findings for relatively unequal countries would hardly concur with a standard human capital explanation.

Jel Classification: D31, J62, J24, J31

Keywords: intergenerational occupational mobility, index of social mobility, economic returns to intergenerational occupational mobility, international comparison.

1. Introduction

Recent empirical studies on intergenerational inequality focus on identification of the mechanisms generating income persistency. The aim of these studies is to decompose the estimated intergenerational earnings elasticity (IGE) and the role played by family background during the major steps determining earnings, in particular educational attainments and occupational sorting (e.g. Mulligan 1999, Bowles and Gintis 2002, Blanden et al. 2007)[1]. On the evidence offered by these studies it is possible to deliver solid policy guidelines and ethical judgements on the fairness of the process of inequality transmission. Since education

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[1] A further strand of the literature, exploiting information on genetic linkages within families (e.g. Sacerdote 2002, Bjorklund et al. 2005, Bjorklund et al. 2006), addresses the ambitious issue of identifying the causal impact of genetic factors vis-à-vis that of the social and family environment.

is the only channel to attain good jobs for disadvantaged offspring with weaker social networks, the more occupational sorting depends on family ties (i.e. ascription) the less acceptable will be a given level of intergenerational persistence[2].

On top of effects on education and occupation, a residual correlation of parental background and child earnings appears to persist after controlling for narrowly defined social origins and destinations (Bowles and Gintis 2002). In fact, within the range of income outcomes achievable in a certain, narrowly defined, social position, there may emerge an order related to family background. The purpose of this paper is to see whether this order is driven by income penalties for those who improve their social position, engendering a sort of glass ceiling, or whether it is associated with a parachute for the offspring of the well-off ending up in bottom social positions.

From a theoretical standpoint, penalties and returns to upward and downward social mobility are likely to stem from different sources. In a competitive labour market, if unobservable individual skills do not depend upon observable background variables, one would expect to observe positive (resp. negative) returns associated with upward (resp. downward) social mobility. In this case, those who improve (resp. worsen) the parental position improve upon (resp. decline from) the parental position should be more (resp. less) endowed with unobservable skills positively affecting incomes. Under a milder assumption of partial correlation between individual unobservable skills and parental background, two forces tend to offset each other. On one hand, a better average endowment of unobservable acquired skills (soft skills, access to better schools, and higher parental investment in education) for the offspring of the well-off is itself a source of background-related earning advantage. On the other hand, the tougher selection process to access top occupations from the bottom inflates the average level of unobservable abilities of the less-advantaged pupils, both in top and bottom social positions[3].

One can hence argue that unobservable acquired skills positively related to background should be paramount in top social positions. Conversely, in bottom social positions, the composition effect brought about by a tougher selection process should more than offset the disadvantage in terms of unobservable acquired skills. This argument holds under the plausible assumption that the effect of background is self-reinforcing during the process of skill formation (Cunha and Heckman 2007). Because of the inherent difficulties in offsetting

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[2] Moreover, distorting the optimal allocation of people to jobs, ascription is a source of economic inefficiency.

[3] In bottom positions, the average level of unobservable skills of the worse-off pupils is driven up by tougher selection processes as many more average-ability students from the more disadvantaged backgrounds are sorted into bottom occupations.

an initial lack of parental investment at later educational stages, heterogeneity in unobservable skills is likely to increase with the years of education attained. And, empirically, a relatively higher observed dispersion in returns to tertiary qualifications seems to support this statement (Lemieux 2006, Cholezas and Tsakloglou 2007).

On the empirical side, for the sake of precision in estimating residual returns to social mobility it is essential first to provide close specification of what we mean by social position and then to summarize intergenerational movements along the social scale by means of a synthetic index. The major original contribution represented by this paper consists in building such a synthetic index, borrowing from sociological literature the idea of considering parental occupations as the main background variable[4].

In particular, for both offspring and parents we convert the ISCO two-digit occupational classes available in the dataset used in this paper (EU-SILC 2005) into a 'quasi continuous' measure of social position with the ISEI index. This measure is then further refined by considering, in a hierarchical order, other relevant information serving to generate a finer ranking of social positions for both generations, hence obtaining two surrogate distributions of, respectively, parent and child social positions. Finally, we rely on these two surrogate distributions to construct a relative mobility variable, i.e. the Relative ISEI (henceforth Isei-rel), computed as the difference between the decile obtained by the child and the one occupied by the best parent in their respective distributions. On aggregate, the Isei-rel index can tell us which of the two main effects, i.e. composition or unobservable acquired skills, tend to prevail in each country[5]. Moreover, the underlined Isei-rel distribution can be used to compute both returns to short- and long-distance mobility and returns to mobility in different parts of the income distribution.

The remaining part of the paper is organized as follows. Having supplied further details on the Isei-rel variable (section 2), the subsequent three sections present the main results of our empirical analysis for 8 European countries representative of different welfare regimes (Germany, France, Spain, Italy, the UK, Ireland, Denmark and Finland). In section 3, preliminary analyses of occupational mobility show that parent and child occupations are closely correlated everywhere. Section 4 outlines the econometric strategy and presents

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[4] Unlike other non-income proxy of earning potential such as education, the parental occupational level attained at mature carrier stages encompasses several key aspects of background such as the individual position in the social scale, his/her prestige, relational capital and capacity to influence key economic decisions (Ganzeboom and Treiman 1996, Erikson and Goldthorpe 1992).

[5] Aware that estimations of the intergenerational link could be biased due to the unavoidable exclusion of unobservable variables (e.g. parents' and children's abilities), in the following sections we never consider as causal effects the significant links between background and outcomes.

estimates of the residual correlation between background and earnings, obtained controlling for the main background-related intervening factors. In section 5 we re-express this residual effect by means of the Isei-rel variable, which can be further decomposed to assess the link between earnings and upward and downward intergenerational mobility. Use of the Isei-rel variable evidences that behind residual effects of similar size there may be completely different patterns across countries. These results are discussed in the 6^{th}, conclusive section.

2. How to measure relative social mobility

The main aim of the paper is to measure the association between social mobility and earnings. To this end a key task is to construct, for each country, two distributions that capture the relative social position of children and their better parent, i.e. the one with the higher occupational status[6].

Unlike approaches based on discrete social classes, a continuous index can be used to build distributions of social positions allowing for precise quantification of relative changes (improvement or worsening) in the child's situation with respect to the parental one[7]. Specifically, such changes can be ascertained taking the percentile variation between the parental and the child's position. For instance, a child having the better parent in the i^{th} percentile improves its position by k if it is in the $(i+k)^{th}$ percentile.

In order to obtain surrogate distributions of social positions for both the better parent and the child, we use the International Socio-Economic Index of occupational status (ISEI) as it is empirically validated on a very large database and outperforms other indexes of social prestige in explaining background-related attainments (Gazeboom et al. 1989, Gazeboom et al. 1992). The ISEI index is based on the simple idea that "occupation is the intervening activity linking education and income" (Ducan 1961, p. 116-7). In particular, it is built so as to maximize the indirect influence of education on income (Gazeboom et al. 1992). In practice, this maximization involved the implementation of an iterative procedure on a large dataset covering 16 countries over a considerable number of years (for further details see Gazeboom et al. 1992). With the updated conversion tables provided by Gazeboom and

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[6] By limiting attention to the better parent alone it is possible to reduce the number of missing observations.

[7] In sociological literature (Gazeboom et al. 1992), the main point in favour of continuous measures of occupational status rather than discrete ones rests in their capacity to overcome the problem of heterogeneity within social classes, an issue that is looming ever larger given the widespread social fragmentation following upon the process of tertiarization of economic systems. Moreover, having a synthetic indicator is recognized as a further advantage of using in the use of continuous indexes.

Treiman (1996) it is possible to assign a quantitative ISEI value to each two-digit ISCO occupational group available in our dataset, hence re-expressing it on a continuous scale.

However, the fact that ISCO occupations are available only at the two-digit level in the EU-SILC dataset brings the two distributions of origins and destinations to be clustered in a few mass points (fig. 1). It follows that the derived percentiles, i.e. deciles, of the two marginal distributions of, respectively, the better parent and the child are not well-balanced. Since we are mainly interested in relative social positions rather than absolute ones, we use other qualitative information to smoothen the original ISEI distribution for both generations.

In particular, we rank individuals with the same ISEI using other variables that also approximate their social positions, i.e. immigrant status, educational levels, family composition and, for the parental distribution, also the occupational and educational attainments of the less achieving parent. Exploitation of this additional information follows a hierarchical order, namely each additional variable is used to modify the ranking of the individuals with the same level of all variables considered at the previous step. More precisely, those individuals with the same ISEI are first ranked according to their immigrant status, those with the same ISEI and immigrant status are further ranked following their educational attainments, and so on[8]. With this refinement we are able to obtain two smooth distributions of social origins and destinations.

The final step consists in finding the appropriate measure to quantify the movement of each individual with respect to his/her best parent. Among the possible measures, absolute differences between child and parental ISEI, depurated by changes in the distribution of ISEI across generations, presents three major disadvantages. First, this measure does not allow for exploitation of the additional information provided by the refined distributions of social positions. Second, absolute differences would be dependent on the way specific ISEI values are assigned to ISCO occupations. Third, since the distribution of occupations improves due to the on-going process of structural change, relative positions in the marginal distribution capture intra-generational social influence and prestige better than absolute ones[9].

For these reasons, we prefer to use a relative measure of social mobility, constructed as the difference between the child and the parent decile of their respective marginal distributions

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[8] Since the derived distributions are refinements of the original ISEI distribution, the results do not change if we change the hierarchical order of the other criteria considered to order origins and destinations. Moreover, we prefer to build an index that maintains a hierarchy of family circumstances rather than using a latent variable approach, i.e. principal components, as not all these circumstances are equally important in determining socio-economic success.

[9] Note that in both the child and the parent distribution several generations overlap; however, since we consider only prime-age offspring, parents should share more or less the same social circumstances.

and normalized so as to vary between 0 and 2. We can clarify this with some examples: (??) the Isei-rel measure of mobility is equal to 1 when offspring and parents achieve the same decile of the ISEI distribution; it assumes a value of 0.4 when a child having the better parent in the 8th decile ends up in the 4th decile and amounts to 1.5 when the better parent is in the 5th and the child ends up in the 10th decile. In formulae:

$$[1] \quad Isei-rel = \left\{ \frac{d_c - d_p}{10} + 1 \right.$$

In the following paragraphs the Isei-rel measure is used first to analyze cross-country differences in relative occupational mobility (section 3), and then to assess the link between mobility and earnings (section 5).

3. Dataset, Descriptive and Preliminary Analysis of Occupational Mobility

The first cross-sectional wave of the European Union Survey on Income and Living Conditions (EU-SILC 2005) includes a specific module focusing on intergenerational mobility. In all the Member States persons interviewed aged over 24 and under 65 had to reconstruct the home environment when they were around 14 years old, providing a detailed picture of their family background, i.e. family composition, number of siblings, financial distress, parents' education and occupation. Additionally to these background variables, for each individual the dataset provides information on income and several variables that are used to account for it in wage equations: employment status (contractual arrangements, months worked, usual hours worked each week), educational attainment (coded through ISCED), occupation, potential experience, citizenship, degree of urbanization of the living area and personal characteristics (gender, age, marital status).

Following suggestions in the literature on intergenerational inequality (Haider and Solon 2006), the usual caveat of considering only prime-age workers is applied here, i.e. those aged 35-49 for whom the process of intergenerational transmission has fully displayed its effects. The analysis is carried out for 8 countries – the five largest European economies (Germany, France, UK, Spain and Italy) plus Ireland, Finland and Denmark[10] – that are representative of

[10] Sweden has not been included because about 90% of the answers on parental occupation are missing. Questions on parental occupation display a very high response rate (higher than 95%) in 6 out of 8 countries; only in the UK and Ireland do missing answers on the occupation of both parents reach a remarkable 25%. However, missing data do not seem to be concentrated among the more disadvantaged individuals: the R^2 of a regression of the dummy 'missing parental occupation' on child occupation, education, citizenship and labour income is lower than 0.01.

the four welfare regimes usually identified by the literature (Esping Andersen 1990, Ferrera 1996).

Table 1 displays for each country changes in the average ISEI and in its standard deviation from parents to offspring generations. A general improvement in occupational levels occurs everywhere, but it is more pronounced in the two Southern countries where the parents' average occupational statuses were initially lower. In the parental generation, the standard deviation in ISEI is closely correlated with the mean and the convergence of the occupational structure in the child generation is also accompanied by a convergence in the ISEI standard deviation. For each country, figures 1a-1h show in more detail how the process of structural changes leads to a change in the distribution of occupational statuses in favour of top and average occupations, associated with a higher ISEI.

Going on to bivariate correlations between parent and child ISEI, Germany emerges as the 'most mobile' country, whilst Italy, France and Spain represent the least mobile (table 1, last column)[11]. With the exception of the UK, the country ranking is preserved when parent-child ISEI correlations are estimated in a multivariate regression including additional controls (table 2), i.e. age, sex, immigrant status and especially child education attainments, whose levels are, as we know, strongly affected by family background (e.g. Hertz et al. 2007). Everywhere, the association between parental and offspring occupational outcomes is highly significant, pointing to a non-negligible ascription effect, but the differences are minor. Depurated of the relative size of the variance in the two marginal ISEI distributions, the estimated parent-child correlation in occupational attainment reaches the highest level between 0.19 and 0.21 in France, Denmark, Spain and the UK, whereas it appears slightly above 0.13 in Ireland and Germany (see table 2 row 3). Similar patterns across countries also emerge using mobility tables along quintiles of the two marginal ISEI distributions of parents and offspring (see Raitano and Vona 2011 for further details).

As a final exercise to test cross-country differences in occupational mobility, we plot for each country the Kernel density function of the 'refined' Isei-rel variable (figures 2a-2h). In every country, the Isei-rel distribution looks very similar: the mode is close to 1 (where

[11] The sociological literature on social mobility usually follows two methods for comparing occupations across generations: i) measuring mobility through odd-ratios of the movements across classes, made up of broad unordered occupational groupings (the most used group classification is the one proposed by Erikson and Goldthorpe 1992, followed also in the international comparisons in Breen 2004); ii) computing intergenerational correlations of index of socio-economic status (ISEI). For cross country comparisons of these correlations, see Ganzeboom and Treiman (1996, 2003), which, contrary to the evidence provided by EU-SILC, include Germany among the 'immobile' countries. However, the ISEI correlations currently available seem to have problems in terms of robustness (Blanden 2008).

parents and offspring achieve the same relative social positions) and the density is substantially higher than that corresponding to the normal distribution.

In sum, the influence of family background on children's occupational attainments appears considerable in all the countries. However, as is well known, the degree of income intergenerational mobility substantially differs across countries. Looking for possible explanations of these differences, it seems of paramount importance to study if a 'residual' association between parental occupations and children earnings still emerges when, keeping constant individual education and occupation, determinants of labour incomes are analyzed in a fully-fledged wage equation model.

4. Empirical Strategy and Residual Returns to Background

4.1 The empirical strategy

As an initial step in the econometric analysis carried out in this section, we attempt to quantify the association between parental ISEI and child earnings. In particular, we wish to assess whether a residual effect of parental occupations on gross labour incomes persists once other intervening factors – offspring education and occupation – are included among the covariates. This step is crucial in order to ground further analyses of the returns to upward and downward mobility on solid bases as it enables us to establish the connection between the linear residual impact of parental background and that of the relative mobility, as computed through the Isei-rel variable.

Our empirical strategy is relatively simple as we mainly follow an incremental approach to decompose the link between parental background and earnings[12]. As a benchmark, for each country we estimate a basic earning equation with standard controls[13] and parental ISEI (i.e. the highest ISEI level attained by father or mother) as our variable of interest. Subsequently, we compute the fraction of the parental effect captured by intervening factors adding first child education and then her/his ISEI. Finally, in the analyses carried out in section 5 we replace the parental ISEI with the Isei-rel index and also use quintiles of the Isei-rel distribution to assess the impact on earnings of short- and long-distance upward and downward mobility.

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[12] Similar incremental strategies are followed by studies attempting to decompose the impact of background on earnings, see Bowles and Gintis (2002), Bowles et al. (2005), Blanden et al. (2007), Lefranc and Trannoy (2005), Osterbacka (2001).

[13] Namely : age, age squared, potential experience, sex, immigrant status, marital status, typology of area of residence, working part time and – when studying the effect on total labour income – working as self-employed.

In order to account for the inadequacy of continuous measure of occupational status to deal with immobility (Gazeboom et al. 1992) and to capture the informal transfer of specific skills that might represent another source of earning advantage (see Galor and Tsiddon 1997), we also include a dummy equal to 1 if both the child and her/his better parent get the same ISCO two-digit job.

Furthermore, all the analyses are carried out for both logs of gross hourly wages and logs of total yearly gross labour incomes[14] (from employment and self-employment), using the sample weights provided in the intergenerational section of EU-SILC 2005. This robust verification is required in order to ensure that the results are not driven by measurement errors of two kinds. In the case of hourly wages, these are due to intrinsic problems of the EU-SILC dataset[15], while for incomes, measurement errors can stem from badly reported self-employment earnings. The joint analysis of hourly wages and incomes is also useful for economic reasons, the former being a proxy of the worker's human capital endowment while the latter is considered the most comprehensive measure of permanent well-being, capturing other aspects likely to be related to family background, such as the contract typology and the number of hours and months worked (Bowles and Gintis 2002, Solon 2002, Jenkins and Siedler 2007). Finally, to reduce the influence of outliers, we exclude from the wage regressions those earning an hourly wage below 1 euro and working less than 15 hours per week.

4.2 The residual link between background and earnings

The estimated coefficient of parental ISEI in Model A (table 3 and 4, respectively for yearly incomes and hourly wages as dependent variables) displays the overall association between family relative position and offspring earnings. Not surprisingly, for both labour incomes and hourly wages, this impact is positive and highly significant at 1% confidence level in all the countries. As emerges clearly on comparing the estimated coefficients of all the models in tables 3 and 4, parental ISEI has a greater effect on incomes than on wages insofar as parental background also affects intermediate variables related to annual incomes (type of contract, time of work).

[14] In Italy and Spain wages and incomes are considered net of taxes. Hence, compared to the other six countries, the size of estimated background effects for these two countries constitutes a sort of a lower bound, as tax progressivity turns out to have the effect of mitigating income differences.

[15] EU-SILC dataset does not provide very accurate identification of hourly wages for all countries, because for most of them only information on incomes in the previous year is recorded, while the information on the features of the job activity (included the usual number of hours worked) refers to the current employment status.

In line with the usual country rankings in terms of intergenerational inequality (Bjorklund and Jantti 2009), the association between parental ISEI and children earnings is relatively lower in the Nordic countries and in Germany[16], stands at an average level in France and Ireland, and is relatively higher in Italy, Spain and the UK. Quantifying cross-country differences, the estimated coefficient of parental ISEI for the more equal countries is less than half the size of the coefficient for the less equal ones[17].

As expected, when we add child education among the explanatory variables (Model B, tables 3 and 4), we observe a generalized decline in the effect of parental ISEI. With regard to incomes, the significance of parental ISEI disappears for the Nordic countries and substantially declines in Ireland. The parental ISEI coefficient almost halves everywhere but in Italy and in the UK, where formal educational attainments capture respectively 1/3 and 1/4 of the parental effect on earnings, and in Denmark, displaying a larger 60% drop. By contrast, the effect of background on hourly wages remains significant in every country but Germany.

The next step is to include child occupational characteristics among the regressors, namely the child ISEI and the dummy ascertaining whether the children stay in the same ISCO two-digit occupation as their parents. On yearly labour income, the residual parental effect disappears for every country but those with higher levels of intergenerational inequality, i.e. Italy, Spain and the UK (Model C, tab. 3)[18]. Combined, child occupation and education account for less than 2/3 of the original parental ISEI coefficient in Italy, whereas in the UK and in Spain the explained fraction slightly increases up to 0.70 and 0.76 respectively. For hourly wages (Model C, tab. 4), the coefficient of parental ISEI remains slightly significant at 85% also in Ireland and changes sign in a statistically significant way in Germany, becoming negative. With respect to the overall correlation between wages and background estimated in model A, the fractions left unexplained are 41% in the UK, 33% in Italy and 24% in Spain (tab. 4).

Having established these important results, the next step is to achieve a better understanding of the sources of this residual earning advantage linked to family background.

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[16] In Nordic countries a smaller impact of parental occupation could be due to the more compressed labour income distribution (Kenworthy 2008).

[17] Note that Germany represents the only deviation with respect to the usual ranking of countries, as it is often perceived as a country characterized by an average level of intergenerational mobility (d'Addio 2007, Corak 2006). This discrepancy can be explained by the modest representativeness of the German population in the EU-SILC dataset underlined by some authors (Causa et al. 2009).

[18] Since our ISEI levels are based on two-digit ISCO recorded by EU-SILC, the positive association between parental background and earnings can be due to sorting in better finer occupations of those with a better background.

5. Earnings and relative occupational mobility

5.1 The association between earnings and mobility

The analyses presented in the previous section corroborate the fact that background-related earning advantages respect the usual country ranking in terms of intergenerational inequality. However, linear specification of the residual background effect (i.e. the mere inclusion of parental occupations) does not suffice to disentangle whether the association between family background and children's earnings acts as a parachute for the few well-off offspring who end up in bottom occupations, or if it emerges in top occupations conjuring up a glass-ceiling effect in favour of children remaining in the same high social positions as their parents.

Re-expressing the residual background correlation in terms of our Isei-rel variable represents an attempt in this direction. In principle, both coefficients of the parental ISEI and of the Isei-rel variable should capture a residual link between background and earnings. However, the sign of the Isei-rel coefficient has a slightly different interpretation, being the aggregate resultant of the rewards associated with upward and downward mobility, respectively. More precisely, the Isei-rel coefficient expresses earning rewards and penalties associated with a one-decile change in the joint distribution of origins and destinations.

With inclusion of the Isei-rel in the analysis we find the previous results confirmed both in terms of fitness of the regressions and with respect to the country ranking (Models D1 in tables 5 and 6). The only difference emerges for France, where on average climbing the relative occupational ladder is linked to a significant wage penalty at the 90% level (table 6).

Irrespective of the dependent variable chosen, the UK, Italy and Spain remain the countries with the highest and most significant background effect. For hourly wages (table 6), the UK displays the greatest impact, being a one-decile increase in the social outcome associated with a 2.0% earnings cut. With regard to annual labour incomes (table 5), Italy takes the lead with a 1.8% penalty for people increasing their relative occupational position. Among the remaining countries, Germany and Denmark show a positive impact of mobility on incomes, which in Germany proves significant for hourly wages. In Ireland, the sign tends to be negative but insignificant, while in Finland the signs of the Isei-rel coefficient change when moving from yearly incomes to hourly wages, but the association is never statistically significant.

The next step is to split the synthetic Isei-rel variable into its quintiles and replace it with quintile dummies in order to analyze upward and downward mobility.

5.2 Earnings and upward/downward mobility

The Isei-rel index condenses the impact of upward and downward relative occupational mobility, but it does not provide any insight as to which of the two impacts is paramount. In contrast, the quintiles of the Isei-rel distribution proved revealing in this respect. With regard to the third quintile where the 'stayers' are (i.e. people whose occupational decile is very close to their parents'), the first and the fifth quintiles capture, respectively, long-distance downward and upward social mobility. In turn, the two even quintiles account for short-distance movements. Note that, since the distribution of Isei-rel is very similar across countries (see section 3), the quintiles roughly coincide.

Taking income as dependent variable (Model D2, table 5), the high Isei-rel coefficient for the UK stems from a heavy penalty associated with upward mobility rather than a parachute for downward mobility. This penalty amounts to 6.5% for short-distance upgrades and to a remarkable 13.4% for the long distance. On the contrary, the negative aggregate Isei-rel coefficient appears associated with a generous insurance for those who worsen their position in the two Southern European countries. Both in Italy and in Spain, the parachute effect appears similar in size, ranging between 5.1-6.8% for short-distance downward mobility to 6.7-8.8% for the long distance. Unlike Spain, Italy displays a significant penalty for long-distance upward mobility. Also in Ireland, a sizeable and significant parachute effect emerges for short-distance downgrading. In turn, Germany, France and Denmark display an inversion in the effect of parental origin on income, both upward and downward mobility generally being penalized. The penalty for long-distance downward mobility is especially large in Germany and in Demark, where it is significant at cut-off 80% level. France is the only country where penalties on upward and downward mobility are large and both significant.

In the case of hourly wages (Model D2, table 6), Ireland joins the two Nordic countries, showing no significant background effects, while Italy and the UK present an almost identical structure of rewards and penalties as that observed for incomes. However, compared to model D2 of table 5, the effects are weaker in Italy and stronger in the UK, where short-distance downward mobility is also rewarded at 85% significance level. The significance of the parachute effect disappears in Spain, but the significance (85%) of the penalty for long-distance upward mobility increases. The more equalizing pattern followed by Germany for hourly wage is driven by the disappearance of penalties for upward mobility, whose associated coefficients become positive. Both for wages and for incomes, the results remain robust if we consider two synthetic dummies ‘upward’ and ‘downward’, merging the respective dummies for long- and short-distance mobility (Model D3, tables 5 and 6).

5.3 Quantile regressions

Another way to decompose the aggregate impact of mobility on earnings consists in looking at its effect at different points of the income distribution using quantile regression techniques (Koenker 2005). In tables 7-10 we report for both dependent variables and for each decile of the earnings distribution the estimated coefficients for parental ISEI, Isei-rel and upward and downward Isei-rel mobility dummies.

For both labour incomes and hourly wages, tables 7 and 9 show that the background variable coefficients tend to increase along the income distribution in almost every country but Spain, suggesting a stronger residual role of background in well-paid positions. This increasing pattern is robust to the way of calculating the residual correlation (linear parental Isei, model C, or Isei-rel, model D1), and is more evident in Germany, Finland, France than in the UK, Denmark, Italy and Ireland. In Denmark, the pattern becomes flat for hourly wages; however, as in the case of Finland, the residual correlations never prove significant for both measures of earnings.

The two Anglo-Saxon countries display a decreasing background effect in the top deciles of the distribution. This decrease at the top is particularly pronounced in Ireland, where the background coefficients become almost insignificant in the last deciles. In line with previous results, both the parental Isei and Isei-rel coefficients point to a significant background correlation along the whole wage and income distribution in the UK.

In France and Germany, residual background correlations tend to change sign moving upward in the earning distribution. In particular, both coefficients indicate that a better background is penalized in bottom deciles, especially in Germany where this penalty is significant, whilst it is rewarded in top deciles, especially in France with the background effect turning significantly positive above the 4th decile.

Finally, the two Southern countries display a strongly significant residual background correlation, almost flat along the whole distribution. In the case of Italy alone, acceleration in the size of the background advantage is observed in the very top deciles of the distribution. For hourly wages, also the UK exhibits a flatter pattern of Isei coefficients.

Tables 8 and 10 display the distribution of the effects of short- and long-distance Isei-rel mobility on earnings. A large and significant earning parachute for those who fall in the social scale is observed in the less equal countries: both for incomes and wages in Italy, only for incomes in Spain and Ireland, and only for wages in the UK. In the case of incomes, the significance of the parachute effect diffuses up to the central deciles in the two Southern countries, while in Ireland it appears persistent also in the upper part of the distribution and is mainly associated with short-distance downgrading. For hourly wages, generous insurances against downward mobility are observed up to the 7th decile in Italy and in the UK. In the remaining countries, downward mobility tends to be penalized in the bottom deciles, especially in Germany.

With regard to the link between upward mobility and incomes, the penalties tend to be significantly above the median everywhere and are mainly linked to long-distance occupational improvements. For hourly wages, on the other hand, the penalties for upward mobility turn out to be insignificant everywhere but in Spain, France and the UK. This diverging result for our two dependent variables conveys the fact that the top incomes for self-employment can easily be inherited. Also important is the fact that the penalties for upward mobility are very heavy and diffused also below the median in countries where access to higher education and elite schools greatly depends on family background[19], i.e. the UK and France.

6. Conclusions

This paper proposes a synthetic measure of social mobility that can be used to decompose the residual correlation between parental background and child earnings left after controlling for major background-related intervening factors, namely educational and occupational achievements. Preliminarily, our analysis shows that the differences among the 8 countries selected apply mainly to these residual background correlations rather than patterns of occupational mobility. Subsequently, we use our Isei-rel measure of occupational and social mobility to bring to light significant country differences in the ways in which intergenerational mobility is rewarded or penalized.

The highly significant residual correlation between background and earnings observed in the UK and in Southern European countries, especially Italy, reflects respectively penalties for upward mobility and generous insurance against downward mobility, also observed in Ireland. Insignificant residual background associations encompass penalties for both downward and upward mobility in Germany and France, and no evident patterns in Nordic

[19] See among the others Blanden and Machin (2004), Chevalier and Conlon (2003), Albouy and Wanecq (2003), Gurgand and Maurin (2007).

countries. Furthermore, quantile regressions show that everywhere but in Spain the residual background correlations tend to be larger significantly above the median. Also, the more equal societies display steeper increases in the background effect along the distribution than the less equal ones. Finally, parachutes are stronger below the median while penalties for upward mobility prevail above.

Whereas our analysis allows to isolate a residual effect of background on earnings, the origins of this effect remain difficult to identify with our dataset. However, at least two findings hardly tally with a standard human capital explanation of residual background associations. First, the flat pattern along the earning distribution observed especially in Southern countries implies that parental background residually affects earnings independently of child abilities. Provided that child ability and parental background are complementary inputs in the 'production' of unobservable skills for which we cannot control (soft and non-cognitive skills[20], behavioural traits, genetic inheritance, etc.), the background effects should uniformly increase along the joint income-ability distribution. Secondly, for similar reasons parachute effects and positive returns to downward mobility hardly fit with a fairly intuitive implication of human capital theory: the fact that those who downgrade should have worse unobservable characteristics than those who stay or improve up to a certain social position.

Informal labour market networks might help account for the background-related earning gaps, suggesting a source of discrimination in labour market opportunities and hiring probabilities for individuals with different connections (Montgomery 1991, Ioannides et al. 2004, Granovetter 2005). In relation with our analysis, it is worth noting that family ties represent a natural network in themselves that will prove all the more extensive and strong proportionately with the height of the family's social position and its capacity to 'leverage social relations for economic purposes' (Granovetter 2005, p. 39). Such an explanation can be particularly useful to account for the parachute effect prevalent in the bottom deciles of the income distribution insofar as jobs found through personal contacts tend to be concentrated in the low-quality occupations (Pellizzari 2004)[21].

[20] Recent studies (Bowles and Gintis 2002, Osborne-Groves 2005, Goldthorpe and Jackson 2008) emphasize the impact of family role models on the development of children's non-cognitive traits closely related to labour market success– the so called soft skills, i.e. elements shaping social and relational competences such as risk aversion, extroversion, willingness to work in a team, the sense of discipline or leadership, or also factors, at least partially genetically inheritable, such as height, weight and beauty. In particular, Goldthorpe and Jackson (2008) point out that in post-industrial societies employers (mostly in the services sector) when recruiting employees and deciding on promotions attach less importance to cognitive and technical abilities (certified by degrees, the so-called hard skills) and more to soft skills, largely dependent on the family background.

[21] For Italy, Raitano (2011) observes that the sign of the association between earnings and having gained the current job through informal networks differs according to the parental occupational background: the estimated association is positive (mostly for the self-employed) for people from good backgrounds, whereas finding the job

Unlike family connections in the labour market, penalties for upgrading may simply reflect the fact that the offspring of the well-off either inherit soft skills and behavioural traits positively correlated with earnings or have access to better quality schools. Background-related inequalities in educational achievements are documented in an extensive sociological and economic literature (e.g. Shavit *et al.*, 2007, Hertz et al. 2007, OECD thematic review on tertiary education 2008) highlighting the way that gaps tend to shift from a quantitative to a qualitative dimension as a country develops. Educational policies establish the size of this gap, more or less explicitly determining the criteria to access high quality schools. If access to a good school is closely linked to parental background, then similar educational attainments can cover up different effective levels of human capital[22].

Going back, now, to our cross-country analysis, positive returns to downward mobility emerge in countries where labour market ties and non-educational mechanisms of social reproduction are commonly thought to distort the allocation of workers to jobs. In turn, penalties on upward mobility characterize the more developed countries showing greater heterogeneity in the upper levels of the educational systems. In this respect, a growing strand of research for France and the UK documents how differences in the access to high quality schools determine different patterns of skill formation and hence earning prospects for the individual depending on parental background[23]. In particular for Britain, the empirical evidence points to a substantial heterogeneity in the schooling system which can fairly well account for the earning polarization observed in the middle and top part of the distribution. In France, access to an elite university, e.g. the 'Grande Ecole', is so very dependent on family background that president Sarkozy recently proposed reserving a quota of places for pupils from disadvantaged backgrounds, falling back on a second-best policy that fails to address the roots of this disadvantage.

Two final caveats are in order. First, the two-digit classification of ISCO occupations available in our dataset provides a still crude and aggregate measure of occupational quality. With finer examination of occupational classes part of the correlation between background and earnings is likely to appear, rather, as an effect on occupational sorting. Second, even considering prime-age workers only, there is a non-negative probability that these workers are temporarily unemployed or in bad matches. If background alters the worker's external option

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through informal channels is correlated with an earning penalty for the offspring of parents working in bottom occupations.

[22] In schooling systems where access is conditioned by the neighbourhood of residence, for example, pupils end up in schools with fairly homogeneous peers, hence replicating the home environment at school.

[23] See, among others, Chevalier and Conlon (2003), Blanden and Machin (2004), Machin and Pischke (2006), Brook (2008), Albouy and Wanecq (2003), Gurgand and Maurin (2007).

and influences the probability of being in one of these two states, a fraction of the residual background correlation that we have estimated is ultimately driven by differences in labour market policies. For Italy, by merging the EU-SILC dataset with the panel of working histories provided by administrative sources we will be able to investigate this issue in future studies and assess the role of parental background in shaping working careers.

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Tab. 1: Parental and offspring ISEI and intergenerational correlation in ISEI levels. Individuals aged 35-49.

	Mean ISEI			ISEI S.D.			
	Parents	Offspring	*% Change*	Parents	Offspring	*% Change*	*Pearson correlation between parental and offspring ISEI*
Germany	44.5	48.4	8.9	15.3	14.3	-6.5	0.266
France	39.8	43.4	9.1	14.7	14.6	-0.6	0.383
Spain	34.7	40.7	17.3	14.1	15.2	7.5	0.415
Italy	36.7	42.5	16	13.9	14	1.4	0.363
UK	44.2	47.4	7.1	15.7	15.6	-0.6	0.309
Ireland	42.1	47	11.8	15.5	16.3	5.2	0.308
Denmark	43.2	45.4	5.1	16.7	15.3	-8.7	0.317
Finland	40.4	46.8	15.7	16.1	15.6	-3.4	0.336

Source: elaborations on EU-SILC 2005 data

Tab. 2: OLS estimated coefficients of parental highest ISEI level on offspring ISEI[1]. Individuals aged 35-49.

	DE	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Coefficient	0.1283	0.2073	0.2044	0.1820	0.1974	0.1401	0.1780	0.1573
Depurated coeff.	*0.1373*	*0.2086*	*0.1901*	*0.1795*	*0.1985*	*0.1332*	*0.1950*	*0.1628*
Robust S.E.	0.0124	0.0153	0.0146	0.0142	0.0152	0.0256	0.0237	0.0187
P value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Obs.	7,201	4,656	7,096	9,597	3,906	2,066	1,688	2,579
R^2	0.255	0.360	0.450	0.337	0.249	0.350	0.255	0.418
F	159.0	197.0	315.0	205.0	131.0	72.2	50.4	146.0

[1] Control variables are age, age squared, potential experience, gender, immigrant status, marital status, a dummy if living in an urban area and two offspring educational attainment dummies (upper secondary or tertiary graduated). Source: elaborations on EU-SILC 2005 data

Tab. 3: Estimated coefficients of parental highest ISEI level.

OLS on logs of yearly gross labour income (net for Italy and Spain)[1]. Individuals aged 35-49.

	Model A- only parental ISEI							
	DE	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Coefficient	0.0037	0.0063	0.0093	0.0078	0.0094	0.0065	0.0033	0.0040
Robust S.E.	0.0008	0.0009	0.0008	0.0007	0.0008	0.0018	0.0013	0.0010
P value	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.000
Obs.	6,011	4,071	5,609	8,523	3,267	1,573	1,589	2,404
R^2	0.248	0.208	0.285	0.198	0.300	0.338	0.112	0.165
F	165.0	78.9	144.0	103.0	107.0	49.0	14.3	29.2
	Model B-parental ISEI & child education							
	DE	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Coefficient	0.0021	0.0034	0.0053	0.0054	0.0065	0.0031	0.0014	0.0015
Robust S.E.	0.0009	0.0009	0.0008	0.0007	0.0008	0.0018	0.0014	0.0011
P value	0.015	0.000	0.000	0.000	0.000	0.083	0.303	0.157
Obs.	6,011	4,071	5,609	8,523	3,267	1,573	1,589	2,404
R^2	0.272	0.253	0.346	0.228	0.337	0.387	0.157	0.218
F	165.0	86.4	155.0	103.0	111.0	52.2	16.0	39.0
	Model C- parental ISEI, child education & child ISEI							
	DE	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Coefficient	-0.0005	-0.0007	0.0022	0.0029	0.0029	0.0012	-0.0010	-0.0010
Robust S.E.	0.0008	0.0009	0.0008	0.0007	0.0008	0.0017	0.0014	0.0010
P value	0.563	0.413	0.004	0.000	0.000	0.506	0.476	0.329
Obs.	6,011	4,071	5,609	8,523	3,267	1,573	1,589	2,404
R^2	0.334	0.338	0.404	0.286	0.413	0.427	0.216	0.270
F	180.0	114.0	169.0	119.0	136.0	55.5	23.3	45.5

[1] Control variables of model "A" are age, age squared, potential experience, gender, immigrant status, marital status, a dummy if living in an urban area, if working part-time and a dummy if income from self-employment is larger than income from employment. In model "B" two dummies on offspring educational attainment are added (upper secondary or tertiary graduated). In model "C" the offspring ISEI level and a dummy if parental and offspring occupations are the same are added.

Source: elaborations on EU-SILC 2005 data

Tab. 4: Estimated coefficients of parental highest ISEI level.
OLS on logs of hourly gross wage (net for Italy and Spain)[1]. Individuals aged 35-49.

	DE	FR	ES	IT	UK	IE	DK	FI
Model - only parental ISEI								
Coefficient	0.0013	0.0054	0.0068	0.0058	0.0087	0.0058	0.0026	0.0037
Robust S.E.	0.0007	0.0006	0.0007	0.0006	0.0007	0.0013	0.0007	0.0008
P value	0.050	0.000	0.000	0.000	0.000	0.000	0.001	0.000
Obs.	4,432	3,360	4,217	5,368	2,635	1,106	1,302	1,600
R^2	0.104	0.140	0.198	0.190	0.105	0.242	0.120	0.126
F	43.3	44.6	60.2	44.9	32.4	19.5	14.0	19.6
Model B- parental ISEI & child education								
	DE	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Coefficient	0.0001	0.0030	0.0038	0.0033	0.0062	0.0031	0.0014	0.0015
Robust S.E.	0.0006	0.0007	0.0006	0.0006	0.0007	0.0012	0.0007	0.0008
P value	0.926	0.000	0.000	0.000	0.000	0.014	0.059	0.041
Obs.	4,432	3,360	4,217	5,368	2,635	1,106	1,302	1,600
R^2	0.149	0.216	0.294	0.261	0.170	0.336	0.167	0.220
F	57.8	65.8	94.7	60.0	43.8	27.6	16.7	33.1
Model C- parental ISEI, child education & child ISEI								
	DE	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Coefficient	-0.0012	0.0007	0.0016	0.0019	0.0036	0.0015	-0.0001	0.0002
Robust S.E.	0.0006	0.0007	0.0006	0.0006	0.0007	0.0011	0.0007	0.0007
P value	0.044	0.280	0.011	0.001	0.000	0.155	0.934	0.831
Obs.	4,432	3,360	4,217	5,368	2,635	1,106	1,302	1,600
R^2	0.241	0.297	0.363	0.310	0.256	0.407	0.253	0.286
F	89.5	79.2	126.0	61.1	64.3	35.2	21.2	38.6

[1] Control variables of model “A” are age, age squared, potential experience, gender, immigrant status, marital status, two dummies equal 1 if living in an urban area and if working part-time. In model “B” two dummies on offspring educational attainment are added (upper secondary or tertiary graduated). In model “C” the offspring ISEI level and a dummy equals 1 if parental and offspring occupations are the same are added. People receiving incomes also from self-employment, working fewer than 15 hours at week or earning less than 1 euro per hour are excluded from the sample. Standard errors are robust for heteroskedasticity.

Source: elaborations on EU-SILC 2005 data

Tab. 5: Estimated coefficients of Relative ISEI[1].

OLS on logs of yearly gross labour income (net for Italy and Spain). Individuals aged 35-49.

		Model D1 - Relative ISEI							
Independent variable		**DE**	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Isei-rel	Coeff.	0.0440	0.0158	-0.1184	-0.1756	-0.1630	-0.0743	0.0746	0.0294
	Rob. S.E.	0.0415	0.0439	0.0367	0.0337	0.0442	0.0920	0.0796	0.0597
	P value	*0.289*	*0.719*	*0.001*	*0.000*	*0.000*	*0.419*	*0.349*	*0.622*
	Obs.	6,011	4,071	5,609	8,523	3,267	1,573	1,589	2,404
	R^2	0.334	0.338	0.404	0.288	0.414	0.427	0.217	0.270
	F	180.0	114.0	167.0	120.0	137.0	55.4	23.4	45.5
		Model D2 - Quintiles of Relative ISEI							
Independent variable		**DE**	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Q1 of Isei-rel	Coeff.	-0.0741	-0.0254	0.0876	0.0674	-0.0088	0.1075	-0.1033	-0.0242
	Rob. S.E.	0.0371	0.0385	0.0320	0.0356	0.0366	0.0883	0.0768	0.0507
	P value	*0.046*	*0.509*	*0.006*	*0.058*	*0.809*	*0.224*	*0.179*	*0.634*
Q2 of Isei-rel	Coeff.	0.0149	-0.0577	0.0508	0.0680	0.0029	0.1651	-0.0491	0.0290
	Rob. S.E.	0.0353	0.0347	0.0362	0.0355	0.0339	0.0815	0.0755	0.0445
	P value	*0.673*	*0.096*	*0.161*	*0.055*	*0.932*	*0.043*	*0.516*	*0.515*
Q4 of Isei-rel	Coeff.	-0.0611	-0.0633	0.0237	0.0330	-0.0645	0.0700	-0.0264	0.0409
	Rob. S.E.	0.0388	0.0332	0.0311	0.0290	0.0370	0.0800	0.0628	0.0500
	P value	*0.115*	*0.057*	*0.446*	*0.256*	*0.081*	*0.382*	*0.674*	*0.413*
Q5 of Isei-rel	Coeff.	-0.0351	-0.0393	-0.0279	-0.1099	-0.1337	0.0613	-0.0496	-0.0397
	Rob. S.E.	0.0341	0.0345	0.0305	0.0339	0.0392	0.0777	0.0596	0.0441
	P value	*0.303*	*0.255*	*0.361*	*0.001*	*0.001*	*0.430*	*0.406*	*0.367*
	Obs.	6,011	4,071	5,609	8,523	3,267	1,573	1,589	2,404
	R^2	0.335	0.339	0.405	0.289	0.413	0.430	0.217	0.271
	F	153.0	94.9	142.0	102.0	114.0	47.6	19.7	38.7
		Model D3 - Grouped quintiles of Relative ISEI							
Independent variable		**DE**	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Q1-Q2 of Isei-rel	Coeff.	-0.0245	-0.0448	0.0731	0.0615	-0.0049	0.1440	-0.0705	0.0036
	Rob. S.E.	0.0308	0.0310	0.0299	0.0331	0.0296	0.0766	0.0685	0.0408
	P value	*0.426*	*0.149*	*0.015*	*0.064*	*0.869*	*0.060*	*0.304*	*0.929*
Q4-Q5 of Isei-rel	Coeff.	-0.0466	-0.0542	-0.0023	-0.0117	-0.0961	0.0715	-0.0350	-0.0133
	Rob. S.E.	0.0309	0.0300	0.0275	0.0283	0.0317	0.0731	0.0563	0.0384
	P value	*0.132*	*0.071*	*0.932*	*0.678*	*0.003*	*0.328*	*0.535*	*0.729*
	Obs.	6,011	4,071	5,609	8,523	3,267	1,573	1,589	2,404
	R^2	0.334	0.339	0.404	0.285	0.413	0.429	0.217	0.270
	F	171.0	106.0	157.0	112.0	127.0	52.9	22.0	43.0

[1] Control variables as in model C. In model D1 the variable of interest is the continue "Relative ISEI"; in model D2 the quintiles of the "Relative ISEI" distribution (the third quintile of Relative ISEI is the omitted variable); in model D3 quintiles 1 and 2 and, respectively, quintiles 4 and 5 are grouped together in single dummy. Standard errors are robust for heteroskedasticity.

Source: elaborations on EU-SILC 2005 data

Tab. 6: Estimated coefficients of Relative ISEI.
OLS on logs of hourly gross wage (net for Italy and Spain)[1]. Individuals aged 35-49.

		Model D1 - Relative ISEI							
Independent variable		**DE**	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Relative ISEI	Coeff.	0.0765	-0.0512	-0.0860	-0.1107	-0.1996	-0.0517	0.0057	-0.0293
	Rob. S.E.	0.0294	0.0304	0.0281	0.0271	0.0377	0.0619	0.0414	0.0406
	P value	*0.009*	*0.093*	*0.002*	*0.000*	*0.000*	*0.404*	*0.891*	*0.472*
	Obs.	4,432	3,360	4,217	5,368	2,635	1,106	1,302	1,600
	R^2	0.242	0.298	0.364	0.312	0.256	0.406	0.253	0.286
	F	90.0	77.7	125.0	61.7	65.1	36.0	21.3	38.6
		Model D2 - Quintiles of Relative ISEI							
Independent variable		**DE**	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Q1 of Isei-rel	Coeff.	-0.0441	-0.0330	0.0216	0.0624	0.0374	0.0588	-0.0140	0.0197
	Rob. S.E.	0.0272	0.0273	0.0246	0.0271	0.0313	0.0722	0.0443	0.0371
	P value	*0.105*	*0.227*	*0.381*	*0.021*	*0.232*	*0.416*	*0.751*	*0.595*
Q2 of Isei-rel	Coeff.	-0.0074	-0.0524	-0.0138	0.0584	0.0489	0.0830	0.0294	0.0102
	Rob. S.E.	0.0216	0.0249	0.0293	0.0272	0.0307	0.0790	0.0374	0.0328
	P value	*0.732*	*0.035*	*0.637*	*0.032*	*0.111*	*0.294*	*0.431*	*0.756*
Q4 of Isei-rel	Coeff.	0.0114	-0.0601	0.0033	0.0303	-0.0463	0.0565	0.0221	0.0133
	Rob. S.E.	0.0220	0.0242	0.0259	0.0243	0.0332	0.0621	0.0357	0.0364
	P value	*0.604*	*0.013*	*0.898*	*0.212*	*0.164*	*0.364*	*0.536*	*0.716*
Q5 of Isei-rel	Coeff.	0.0270	-0.0751	-0.0388	-0.0364	-0.1280	0.0216	0.0035	-0.0276
	Rob. S.E.	0.0213	0.0278	0.0259	0.0268	0.0342	0.0576	0.0383	0.0298
	P value	*0.205*	*0.007*	*0.134*	*0.173*	*0.000*	*0.707*	*0.926*	*0.354*
	Obs.	4,432	3,360	4,217	5,368	2,635	1,106	1,302	1,600
	R^2	0.242	0.299	0.363	0.312	0.256	0.408	0.254	0.287
	F	74.7	67.1	105.0	50.8	53.4	30.1	18.1	33.5
Independent variable		***Model D3 - Grouped quintiles of Relative ISEI***							
		DE	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
Q1-Q2 of Isei-rel	Coeff.	-0.0238	-0.0454	0.0077	0.0576	0.0405	0.0710	0.0125	0.0129
	Rob. S.E.	0.0203	0.0227	0.0233	0.0251	0.0263	0.0705	0.0368	0.0305
	P value	*0.241*	*0.046*	*0.739*	*0.022*	*0.124*	*0.314*	*0.735*	*0.672*
Q4-Q5 of Isei-rel	Coeff.	0.0200	-0.0682	-0.0186	0.0112	-0.0841	0.0448	0.0151	-0.0141
	Rob. S.E.	0.0191	0.0225	0.0229	0.0230	0.0283	0.0569	0.0338	0.0269
	P value	*0.297*	*0.003*	*0.416*	*0.624*	*0.003*	*0.431*	*0.656*	*0.601*
	Obs.	4,432	3,360	4,217	5,368	2,635	1,106	1,302	1,600
	R^2	0.241	0.299	0.362	0.310	0.254	0.407	0.253	0.286
	F	84.1	71.3	117.0	56.7	59.8	34.0	20.3	36.1

[1] Control variables as in model C. In model D1 the variable of interest is the continue "Relative ISEI"; in model D2 the quintiles of the "Relative ISEI" distribution (the third quintile of Relative ISEI is the omitted variable); in model D3 quintiles 1 and 2 and, respectively, quintiles 4 and 5 are grouped together in single dummy. Standard errors are robust for heteroskedasticity. People receiving incomes also from self-employment, working fewer than 15 hours a week or earning less than 1 euro per hour are excluded from the sample.
Source: EU-SILC 2005 data

Tab. 7: Estimated coefficients of Parental and Relative ISEI[1]. Quantile regressions on logs of yearly gross labour income (net for Italy and Spain). Individuals aged 35-49.

	Model C – Estimated Coefficient of Parental ISEI							
	DE	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
10	-0.0018	-0.0031*	0.0036**	0.0010	0.0005	-0.0057*	-0.0014	-0.0020
20	-0.0013	-0.0010	0.0031***	0.0017**	0.0033***	-0.0003	-0.0008	-0.0020
30	-0.0013	0.0002	0.0024***	0.0022***	0.0028***	0.0025	0.0001	-0.0015
40	-0.0005	0.0007	0.0019**	0.0028***	0.0033***	0.0032**	0.0003	-0.0001
50	-0.0001	0.0010*	0.0021***	0.0029***	0.0035***	0.0033***	0.0002	0.0002
60	-0.0002	0.0014***	0.0028***	0.0026***	0.0040***	0.0031***	0.0001	-0.0001
70	0.0001	0.0013**	0.0017***	0.0026***	0.0045***	0.0031***	0.0007	0.0000
80	0.0005	0.0019***	0.0021***	0.0032***	0.0038***	0.0032***	0.0013	0.0003
90	0.0013**	0.0017**	0.0024***	0.0043***	0.0035***	0.0017	0.0013	0.0010
	Model D1 – Estimated Coefficient of Relative ISEI							
	DE	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
10	0.1446*	0.1353	-0.2191***	-0.1441**	-0.0455	0.1707	0.1392	0.0880
20	0.1293**	0.0234	-0.1421***	-0.1369***	-0.1611***	-0.0174	0.0833	0.1522**
30	0.1138**	-0.0382	-0.1394***	-0.1450***	-0.1639***	-0.1363	0.0129	0.0969*
40	0.0633**	-0.0558**	-0.0885**	-0.1555***	-0.1717***	-0.1296*	0.0161	0.0223
50	0.0322	-0.0638**	-0.1020***	-0.1543***	-0.1551***	-0.1956***	-0.0061	-0.0196
60	0.0171	-0.0705**	-0.1180***	-0.1452***	-0.2010***	-0.1719***	0.0040	0.0043
70	-0.0013	-0.0655**	-0.1077***	-0.1253***	-0.2199***	-0.1794***	-0.0160	0.0058
80	-0.0260	-0.0964***	-0.0931***	-0.1597***	-0.2023***	-0.1832**	-0.0366	-0.0384
90	-0.0533*	-0.0877*	-0.1327***	-0.2159***	-0.1872***	-0.0760	-0.0669	-0.0839

[1] Control variables as in model C. In model D1 the variable of interest is the continue "Relative ISEI"; in model D2 the quintiles of the "Relative ISEI" distribution (the third quintile of Relative ISEI is the omitted variable); in model D3 quintiles 1 and 2 and, respectively, quintiles 4 and 5 are grouped together in single dummy. Standard errors are robust for heteroskedasticity. Significance level: * p<0.10; ** p<0.05; *** p<0.01.

Source: elaborations on EU-SILC 2005 data

Tab. 8A: Estimated coefficients of Quintiles of Relative ISEI[1] (Model D2 and D3).
Quantile regressions on logs of yearly gross labour income (net for Italy and Spain). Individuals aged 35-49.

	Germany			France			Spain			Italy		
	Downward mobility			*Downward mobility*			*Downward mobility*			*Downward mobility*		
	Q1	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**
10	-0.1022	-0.0201	-0.0451	-0.0857	-0.0328	-0.0338	0.1963***	0.1566**	0.1900***	0.1208*	0.2180***	0.1909***
20	-0.1023**	0.0379	-0.0045	-0.0002	-0.0467	-0.0238	0.1027***	0.0217	0.0680*	0.0664**	0.1309***	0.0899***
30	-0.1152***	0.0132	-0.0342	0.0163	-0.039	-0.0275	0.1107***	0.0645*	0.0955***	0.0628**	0.0786***	0.0689***
40	-0.0707**	0.015	-0.0205	0.0138	-0.0289	-0.0081	0.0655**	0.017	0.0472*	0.0713***	0.0704***	0.0632***
50	-0.0462**	0.0137	-0.0053	0.033	-0.0103	0.0092	0.035	0.0024	0.0267	0.0655***	0.0388**	0.0349**
60	-0.0255	-0.0073	-0.0129	0.0155	0.0095	0.0162	0.0306	0.0021	0.0099	0.0398**	0.0169	0.018
70	-0.0106	0.0042	-0.0027	-0.0046	-0.0242	-0.0162	0.0176	0.0071	0.0123	0.0273	0.0135	0.0182
80	0.0135	0.0354	0.0238	-0.0033	-0.0037	-0.0042	-0.0199	-0.0347	-0.0243	-0.0002	-0.0169	-0.011
90	-0.0158	0.0423	0.0105	0.0238	-0.0028	0.0149	0.0437	-0.0036	0.0264	0.0014	-0.0739***	-0.0198
	Upward mobility			*Upward mobility*			*Upward mobility*			*Upward mobility*		
	Q4	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**
10	-0.0651	-0.0495	-0.0472	0.0272	0.0287	0.0355	0.1020*	-0.0159	0.0468	0.1561***	0.019	0.1044**
20	-0.0364	0.0173	0.0058	-0.0301	-0.0285	-0.0263	0.0353	-0.0386	-0.0045	0.0767***	-0.0526*	0.0374
30	-0.0241	-0.0017	-0.0104	-0.0311	-0.0452	-0.0506**	0.0550*	0.002	0.0279	0.0505**	-0.0615**	0.007
40	-0.0222	-0.0072	-0.008	-0.0425	-0.0654**	-0.0465**	0.0181	-0.0132	-0.0033	0.0455**	-0.0749***	0.0073
50	-0.0454**	-0.0096	-0.0336*	-0.0291	-0.0448*	-0.0420**	-0.0241	-0.0626**	-0.0332	0.0262	-0.0862***	-0.0185
60	-0.0486**	-0.0015	-0.0204	-0.0395*	-0.0529**	-0.0424**	-0.0279	-0.0666***	-0.0452**	0.0042	-0.1057***	-0.029
70	-0.0317*	-0.0171	-0.0269*	-0.0681***	-0.0524**	-0.0603**	-0.0287	-0.0762***	-0.0588***	-0.0234	-0.1026***	-0.0385**
80	-0.0027	-0.0063	-0.0055	-0.0821***	-0.0560**	-0.0726***	-0.0572**	-0.0953***	-0.0739***	-0.0672***	-0.1321***	-0.0835***
90	-0.0218	-0.0695**	-0.0319	-0.0893**	-0.0023	-0.0494	-0.0073	-0.0808**	-0.0517	-0.1073***	-0.1752***	-0.1113***

[1] Control variables as in model C. In model D1 the variable of interest is the continue "Relative ISEI"; in model D2 the quintiles of the "Relative ISEI" distribution (the third quintile of Relative ISEI is the omitted variable); in model D3 quintiles 1 and 2 and, respectively, quintiles 4 and 5 are grouped together in single dummy. Standard errors are robust for heteroskedasticity. Significance level: * p<0.10; ** p<0.05; *** p<0.01.

Source: elaborations on EU-SILC 2005 data

Tab. 8B: Estimated coefficients of Quintiles of Relative ISEI[1] (Model D2 and D3).
Quantile regressions on logs of yearly gross labour income. Individuals aged 35-49.

	UK			Ireland			Denmark			Finland		
	Downward mobility			*Downward mobility*			*Downward mobility*			*Downward mobility*		
	Q1	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**
10	-0.0744	-0.0444	-0.0511	-0.0728	0.2751*	0.3079**	-0.3847***	-0.1529	-0.2041*	-0.0701	0.1422	0.0596
20	0.0118	-0.0169	-0.0103	0.0567	0.1614**	0.1343**	-0.1175	-0.0568	-0.0742	-0.1197**	-0.0363	-0.0479
30	0.0407	0.0475	0.036	0.2201**	0.1641**	0.1796**	-0.0157	0.0234	0.0037	-0.0547	0.0195	-0.0341
40	0.0336	0.0523	0.0388	0.1701**	0.1306**	0.1486**	-0.0156	0.0129	0.0105	-0.0351	0.0146	-0.0204
50	0.0482	0.0371	0.0421*	0.1083	0.1034*	0.1167**	0.0065	0.0248	0.0154	-0.0023	-0.0002	-0.0042
60	0.0417	0.0347	0.0403	0.1155**	0.1001**	0.1099***	-0.014	0.0176	0.0071	-0.0023	0.0056	0.0032
70	0.0199	0.0403	0.025	0.0518	0.0745**	0.0542*	-0.0006	0.0365	0.0237	0.0011	0.029	0.0097
80	0.0017	0.0493	0.0313	0.0556	0.0589	0.0491	0.0092	0.0372	0.0369	0.0481	0.0388	0.0353
90	-0.0525	-0.0303	-0.0432	0.0441	0.0778	0.0412	-0.0797	-0.0721	-0.0744	0.058	-0.0119	0.0314
	Upward mobility			*Upward mobility*			*Upward mobility*			*Upward mobility*		
	Q4	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**
10	-0.0938	-0.0832	-0.0834	0.042	0.2698*	0.2366	0.0075	-0.0394	-0.0331	0.0705	0.0641	0.0364
20	-0.0294	-0.1201***	-0.0946**	0.105	0.0846	0.1052	-0.0467	-0.0409	-0.0419	0.0573	0.0155	0.04
30	-0.031	-0.1128***	-0.0629**	0.0937	0.0641	0.0835	-0.029	-0.0011	-0.0216	0.0575	-0.004	0.0167
40	-0.0189	-0.1118***	-0.0661**	0.0623	0.0274	0.0494	0.0028	0.0002	-0.0039	-0.0013	-0.0315	-0.0226
50	-0.0475	-0.0984***	-0.0721***	0.0006	-0.0552	-0.013	0.0106	0.0005	0.0077	0.0089	-0.0342	-0.0224
60	-0.0813**	-0.1287***	-0.0907***	0.0345	-0.0398	-0.0039	0.0026	-0.0144	0.0044	0.0476	-0.0203	0.002
70	-0.0580*	-0.1280***	-0.0916***	-0.0188	-0.1184***	-0.0448	0.032	-0.0122	0.0222	0.0599	-0.0137	0.0015
80	-0.0197	-0.1310***	-0.0888**	-0.0076	-0.1154**	-0.0524	0.0125	-0.035	0.0049	0.0449	-0.0193	0.0049
90	-0.1033*	-0.2309***	-0.1499***	0.0763	0.0057	0.0403	-0.0526	-0.1521***	-0.1180**	-0.0223	-0.0849**	-0.0428

[1] Control variables as in model C. In model D1 the variable of interest is the continue "Relative ISEI"; in model D2 the quintiles of the "Relative ISEI" distribution (the third quintile of Relative ISEI is the omitted variable); in model D3 quintiles 1 and 2 and, respectively, quintiles 4 and 5 are grouped together in single dummy. Standard errors are robust for heteroskedasticity. Significance level: * p<0.10; ** p<0.05; *** p<0.01.

Source: elaborations on EU-SILC 2005 data

Tab. 9: Estimated coefficients of Parental and Relative ISEI[1].
Quantile regressions on logs of hourly gross wage (net for Italy and Spain).
Individuals aged 35-49.

	Model C – Estimated Coefficient of Parental ISEI							
	DE	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
10	-0.0044***	-0.0002	0.0017*	0.0022***	0.0027***	-0.0005	0.0005	-0.0007
20	-0.0021***	0.0006	0.0019**	0.0015***	0.0030***	0.0004	0.0001	-0.0006
30	-0.0013***	0.0009*	0.0017**	0.0017***	0.0030***	0.0020	0.0000	0.0003
40	-0.0005	0.0014***	0.002***	0.0019***	0.0036***	0.0017	-0.0001	0.0009
50	-0.0002	0.0014***	0.0021***	0.0018***	0.0039***	0.0026***	-0.0001	0.0005
60	0.0002	0.0011**	0.0015**	0.0023***	0.0037***	0.0031***	0.0001	0.0002
70	0.0004	0.0012**	0.0011*	0.0023***	0.0042***	0.0036***	0.0005	0.0003
80	0.0009**	0.0015***	0.0016**	0.0026***	0.0042***	0.0026***	0.0007	0.0006
90	0.0011*	0.0021**	0.0016***	0.0033***	0.0040***	0.0011	0.0001	0.0014
	Model D1 – Estimated Coefficient of Relative ISEI							
	DE	**FR**	**ES**	**IT**	**UK**	**IE**	**DK**	**FI**
10	0.2518***	-0.0059	-0.1100**	-0.1100***	-0.1980***	0.0404	0.0146	0.0966
20	0.1183***	-0.0299	-0.0910***	-0.0786***	-0.1746***	-0.0111	0.0070	0.0478
30	0.0958***	-0.0533**	-0.0663**	-0.0872***	-0.1780***	-0.0697	0.0107	-0.0178
40	0.0429*	-0.0709***	-0.0994***	-0.0975***	-0.1897***	-0.0622	0.0197	-0.0531
50	0.0393**	-0.0840***	-0.0917***	-0.0946***	-0.1945***	-0.0878	0.0157	-0.0312
60	0.0077	-0.0618**	-0.0603**	-0.1115***	-0.1873***	-0.0976**	-0.0029	-0.0326
70	-0.0104	-0.0665***	-0.0718***	-0.1125***	-0.1900***	-0.1327	-0.0136	-0.0118
80	-0.0306	-0.0698**	-0.0531*	-0.1283***	-0.2273***	-0.0722	-0.0351	-0.0542
90	-0.0552*	-0.0986**	-0.0435	-0.1587***	-0.2126***	0.0297	-0.0076	-0.1098*

[1] Control variables as in model C. In model D1 the variable of interest is the continue "Relative ISEI"; in model D2 the quintiles of the "Relative ISEI" distribution (the third quintile of Relative ISEI is the omitted variable); in model D3 quintiles 1 and 2 and, respectively, quintiles 4 and 5 are grouped together in single dummy. Standard errors are robust for heteroskedasticity. People receiving incomes from also self-employment, working fewer than 15 hours a week or earning less than 1 euro per hour are excluded from the sample. Significance level: * p<0.10; ** p<0.05; *** p<0.01.

Source: elaborations on EU-SILC 2005 data

Tab. 10A: Estimated coefficients of Quintiles of Relative ISEI[1] (Models D2 and D3). Quantile regressions on logs of hourly gross wages (net for Italy and Spain). Individuals aged 35-49.

	Germany			**France**			**Spain**			**Italy**		
	Downward mobility			*Downward mobility*			*Downward mobility*			*Downward mobility*		
	Q1	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**
10	-0.0780*	0.0013	-0.0293	-0.0792*	-0.0731*	-0.0781**	0.042	-0.0296	0.0068	0.1085***	0.1162***	0.1029***
20	-0.0820**	0.0063	-0.0269	-0.0438	-0.0537*	-0.0558**	0.0389	-0.0073	0.0248	0.0857***	0.0833***	0.0863***
30	-0.0766***	-0.0223	-0.0370*	-0.0056	-0.036	-0.0257	0.0108	-0.0104	0.0065	0.0613***	0.0512**	0.0540***
40	-0.0411**	-0.014	-0.0215	0.0033	-0.0236	-0.0087	0.035	0.0015	0.0242	0.0648***	0.0475**	0.0560***
50	-0.0254	-0.0197	-0.02	-0.0075	-0.0248	-0.0163	-0.0079	-0.0286	-0.0108	0.0690***	0.0519***	0.0573***
60	0.0105	-0.0032	0.0057	-0.0062	-0.0108	-0.0117	0.0005	-0.0161	-0.0114	0.0682***	0.0389**	0.0463***
70	0.0128	0.0011	0.0091	0.0136	0.0011	0.0056	-0.0027	-0.0041	-0.0038	0.0509**	0.0293	0.0408**
80	0.0137	-0.0196	-0.0064	-0.004	-0.0303	-0.0224	-0.0014	0.0052	-0.002	0.0469**	0.0381*	0.0334*
90	0.0272	0.0417	0.0329	-0.0019	-0.0424	-0.0253	-0.0149	-0.0409	-0.0193	0.0634**	0.0145	0.0233
	Upward mobility			*Upward mobility*			*Upward mobility*			*Upward mobility*		
	Q4	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**
10	0.1397***	0.1732***	0.1456**	-0.0102	-0.1156***	-0.0731*	0.0387	-0.0316	0.0134	0.0588**	0.0046	0.0405
20	0.0526	0.0582*	0.0541*	-0.0266	-0.0747**	-0.0455*	0.0394	-0.0174	0.0138	0.0530***	0.0092	0.0420**
30	-0.0042	0.0242	0.0106	-0.0245	-0.0467*	-0.0403*	0.0022	-0.0475*	-0.0202	0.0262	-0.0192	0.0102
40	-0.0115	0.0018	-0.0027	-0.0276	-0.0610**	-0.0389*	0.0106	-0.0356	-0.0114	0.0306	-0.0287	0.0152
50	-0.0214	0.011	-0.0038	-0.038	-0.0715***	-0.0520**	-0.0254	-0.0773***	-0.0433*	0.0275	-0.0153	0.0157
60	-0.0057	0.0196	0.0067	-0.0379*	-0.0524**	-0.0479***	-0.0202	-0.0702***	-0.0411*	0.0038	-0.0446**	-0.0071
70	-0.0197	-0.0118	-0.0159	-0.0176	-0.0346	-0.0255	-0.0181	-0.0439*	-0.032	-0.0048	-0.0497**	-0.0174
80	-0.0016	-0.0324*	-0.0254	-0.0308	-0.0497*	-0.0451*	-0.0073	-0.0471	-0.0218	0.002	-0.0557**	-0.0136
90	0.0143	-0.0329	0.003	-0.0549	-0.0594	-0.0612*	-0.0312	-0.0512	-0.0455	0.0001	-0.0920***	-0.0309

[1] Control variables as in model C. In model D1 the variable of interest is the continue “Relative ISEI”; in model D2 the quintiles of the “Relative ISEI” distribution (the third quintile of Relative ISEI is the omitted variable); in model D3 quintiles 1 and 2 and, respectively, quintiles 4 and 5 are grouped together in single dummy. Standard errors are robust for heteroskedasticity. People receiving also incomes from self-employment, working fewer than 15 hours a week or earning less than 1 euro per hour are excluded from the sample. Significance level: * p<0.10; ** p<0.05; *** p<0.01.

Source: elaborations on EU-SILC 2005 data

Tab. 10B: Estimated coefficients of Quintiles of Relative ISEI[1] (Models D2 and D3).
Quantile regressions on logs of hourly gross wages. Individuals aged 35-49.

	UK			**Ireland**			**Denmark**			**Finland**		
	Downward mobility			*Downward mobility*			*Downward mobility*			*Downward mobility*		
	Q1	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**	**Q1**	**Q2**	**Q1-Q2**
10	0.0901*	0.0362	0.0667***	-0.0646*	-0.1397***	-0.0814*	-0.0912	0.0329	-0.0033	-0.0403	-0.0301	-0.0299
20	0.0625*	-0.0053	0.021	-0.0075	-0.0693	-0.0419	-0.0286	0.0401	0.015	-0.0344	-0.0021	-0.0066
30	0.0555	0.039	0.0408*	0.0858	0.0036	0.0364	-0.0134	0.0235	0.0186	-0.0261	-0.0139	-0.0164
40	0.0448*	0.0454*	0.0447**	0.0882*	0.0352	0.0639	-0.0008	0.0193	0.0175	0.0127	0.018	0.0127
50	0.0372	0.0672**	0.0457*	0.0724	0.0879**	0.0772**	0.017	0.0262	0.0233	0.0283	-0.0027	0.0059
60	0.0476*	0.0756***	0.0620**	0.0239	0.0414	0.0285	0.043	0.0431	0.0438	0.0379	0.0186	0.0291
70	0.0541	0.0890***	0.0633**	0.0256	0.06	0.0261	0.0294	0.0176	0.0253	0.0332	0.0289	0.0244
80	0.0166	0.0727*	0.0458	-0.0442	-0.0029	-0.0079	0.037	0.0247	0.0221	0.064	0.0369	0.0387
90	-0.0089	0.0119	0.0036	-0.0094	0.0386	0.006	0.0668	0.0445	0.0451	0.0707	-0.0148	0.0101
	Upward mobility			*Upward mobility*			*Upward mobility*			*Upward mobility*		
	Q4	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**	**Q4**	**Q5**	**Q4-Q5**
10	-0.0148	-0.0661	-0.0222	-0.0085	-0.0257	0.0053	-0.0252	-0.0191	-0.012	-0.013	0.0038	0.0009
20	-0.0004	-0.0981***	-0.0725**	-0.0007	-0.0173	-0.0139	-0.0032	0.0086	-0.0001	0.0392	-0.0035	0.0162
30	-0.0333	-0.1117***	-0.0606**	0.0288	0.0097	0.0164	-0.0114	0.0162	0.0045	0.0047	-0.0304	-0.0184
40	-0.0539**	-0.1298***	-0.0818***	0.0263	0.0157	0.0135	-0.0021	0.0281	0.0158	-0.0099	-0.0317	-0.0264
50	-0.0710**	-0.1426***	-0.0898***	0.0113	0.0193	0.0024	0.002	0.0273	0.0133	0.035	-0.0151	-0.0124
60	-0.0544**	-0.1317***	-0.0838***	-0.0402	-0.0541**	-0.0446	0.0416	0.031	0.0366	0.056	-0.0213	-0.0067
70	-0.046	-0.1116***	-0.0762**	-0.0437	-0.0742*	-0.0647	0.0228	0.0081	0.0235	0.0364	-0.0149	0.0136
80	-0.0607	-0.1236***	-0.1090***	-0.0358	-0.0895	-0.0563	0.0273	0.0074	0.0114	0.0394	-0.0201	0.0044
90	-0.056	-0.2057***	-0.1266***	0.1397**	-0.0069	0.0325	0.1249***	0.0418	0.0664*	-0.014	-0.0479	-0.0413

[1] Control variables as in model C. In model D1 the variable of interest is the continue “Relative ISEI”; in model D2 the quintiles of the “Relative ISEI” distribution (the third quintile of Relative ISEI is the omitted variable); in model D3 quintiles 1 and 2 and, respectively, quintiles 4 and 5 are grouped together in single dummy. Standard errors are robust for heteroskedasticity. People receiving also incomes from self-employment, working fewer than 15 hours a week or earning less than 1 euro per hour are excluded from the sample. Significance level: * p<0.10; ** p<0.05; *** p<0.01.

Source: elaborations on EU-SILC 2005 data

Fig. 1a: Distribution of offspring and parental ISEI in Germany.
Source: elaborations on EU SILC 2005 data

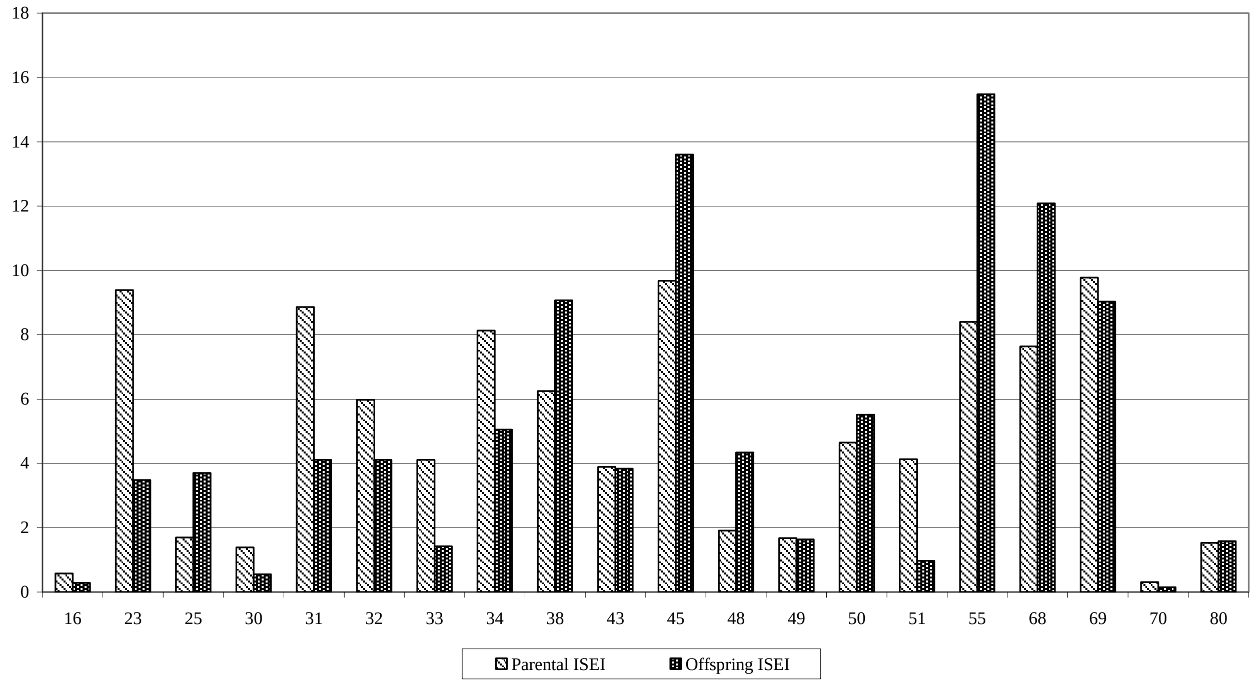


Fig. 1b: Distribution of offspring and parental ISEI in France.
Source: elaborations on EU SILC 2005 data

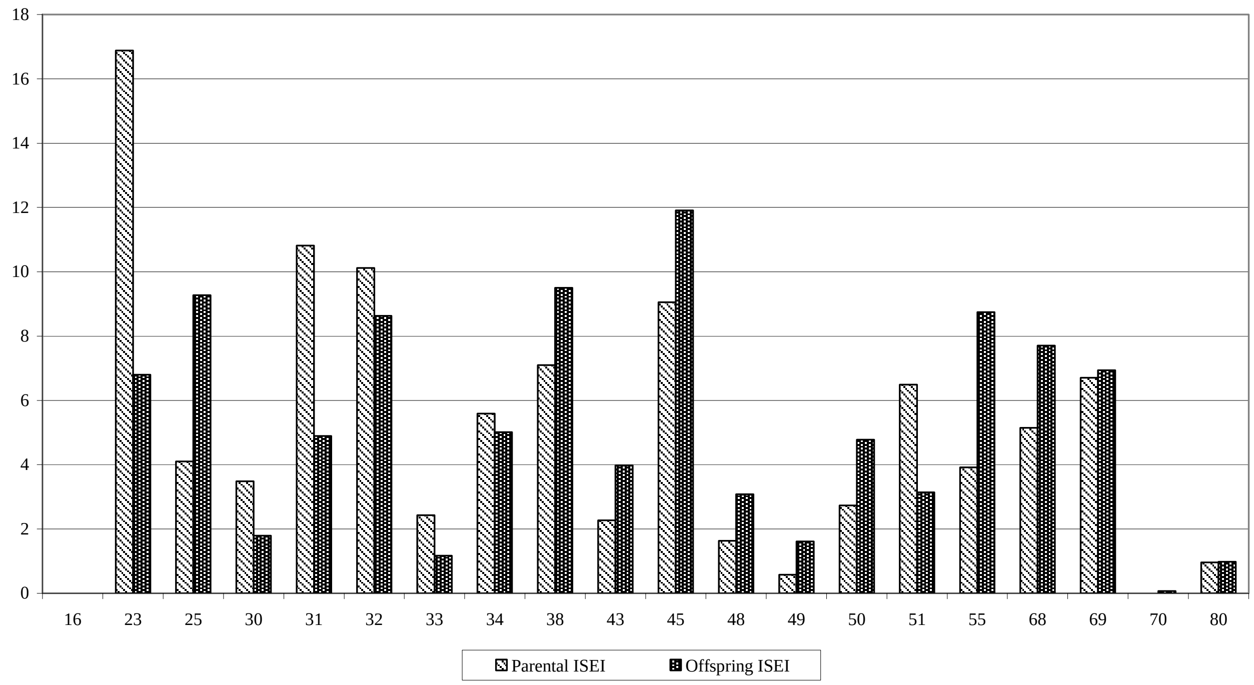


Fig. 1c: Distribution of offspring and parental ISEI in Spain.
Source: elaborations on EU SILC 2005 data

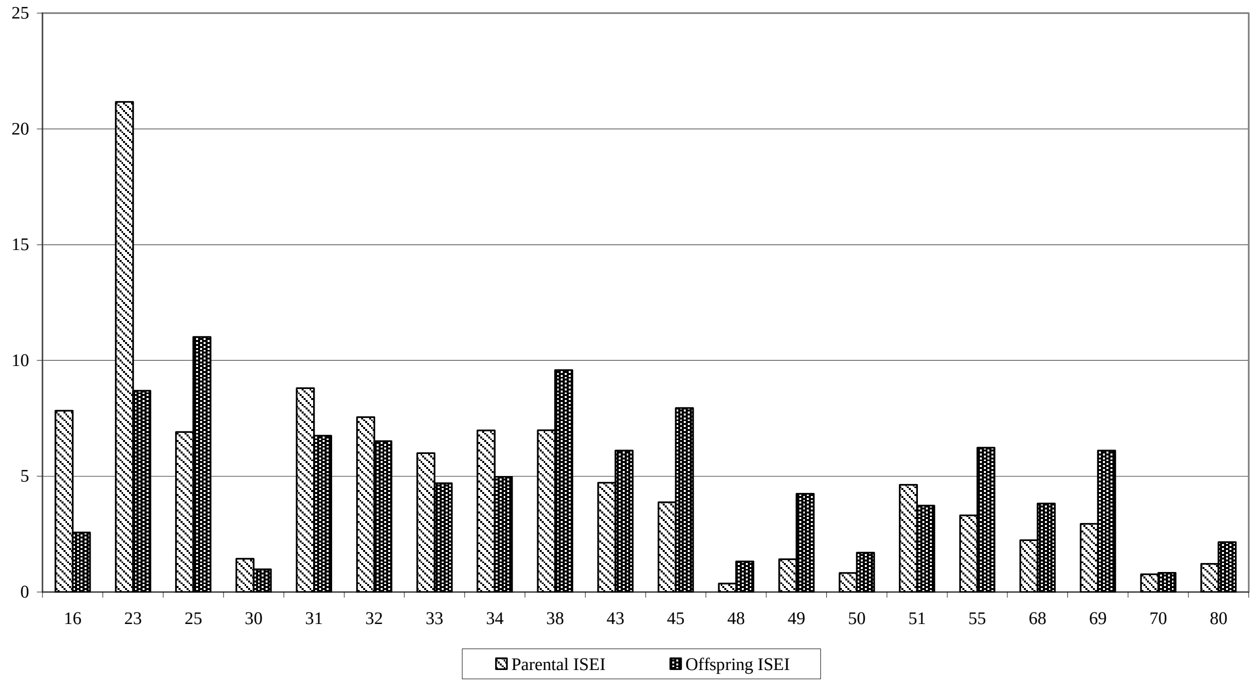


Fig. 1d: Distribution of offspring and parental ISEI in Italy.
Source: elaborations on EU SILC 2005 data

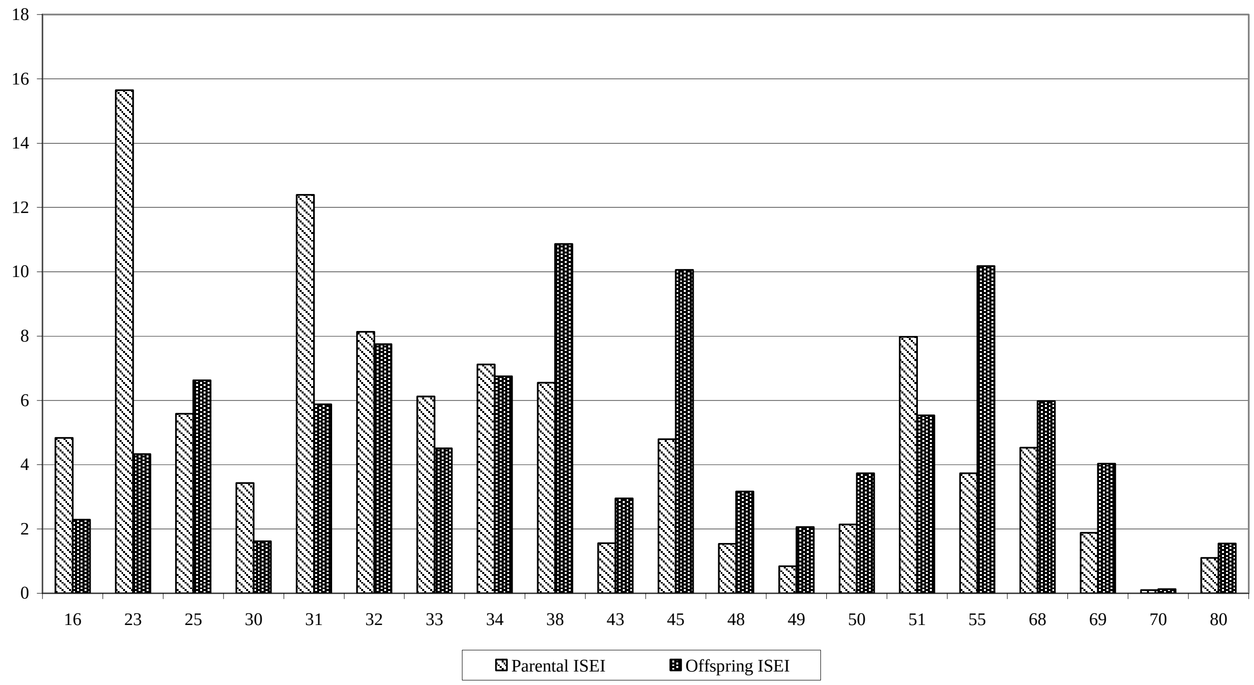


Fig. 1e: Distribution of offspring and parental ISEI in UK.
Source: elaborations on EU SILC 2005 data

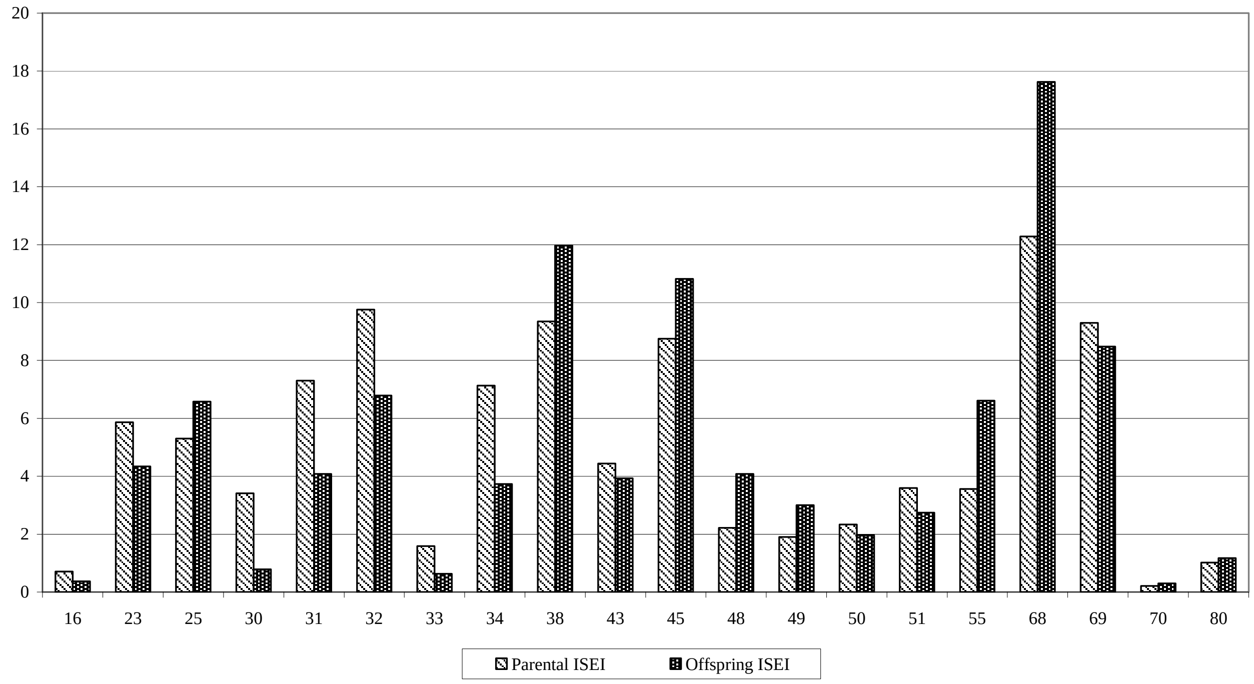


Fig. 1f: Distribution of offspring and parental ISEI in Ireland.
Source: elaborations on EU SILC 2005 data

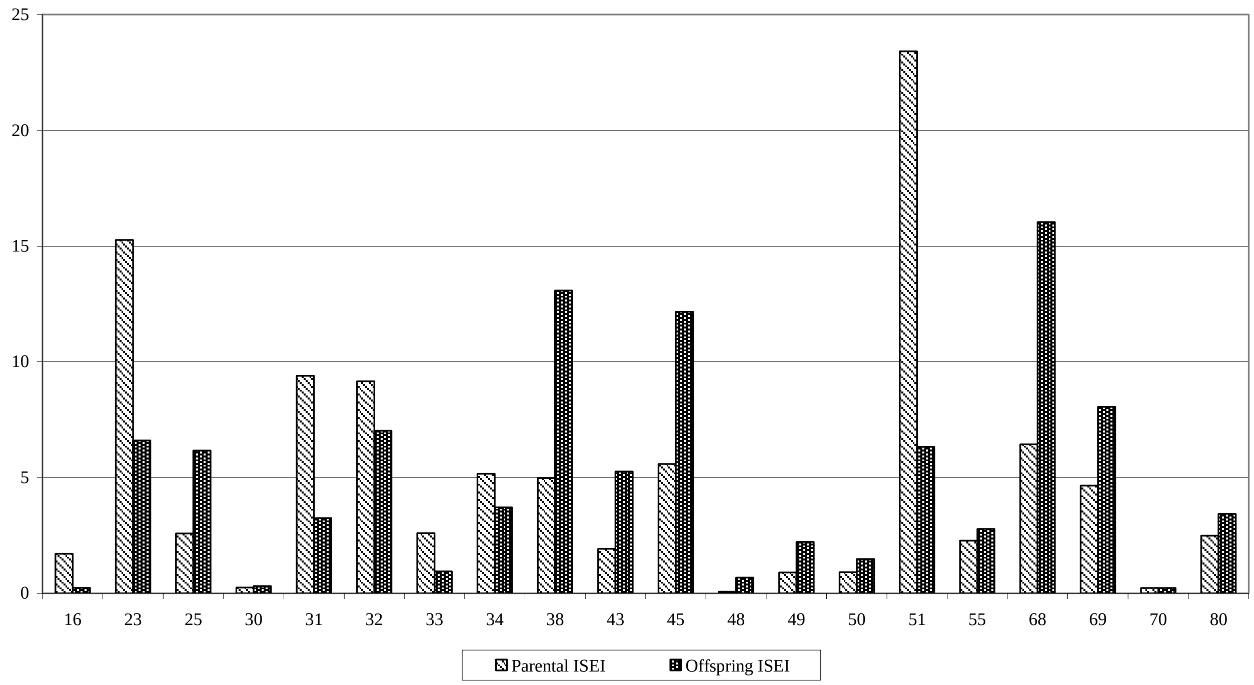


Fig. 1g: Distribution of offspring and parental ISEI in Denmark.
Source: elaborations on EU SILC 2005 data

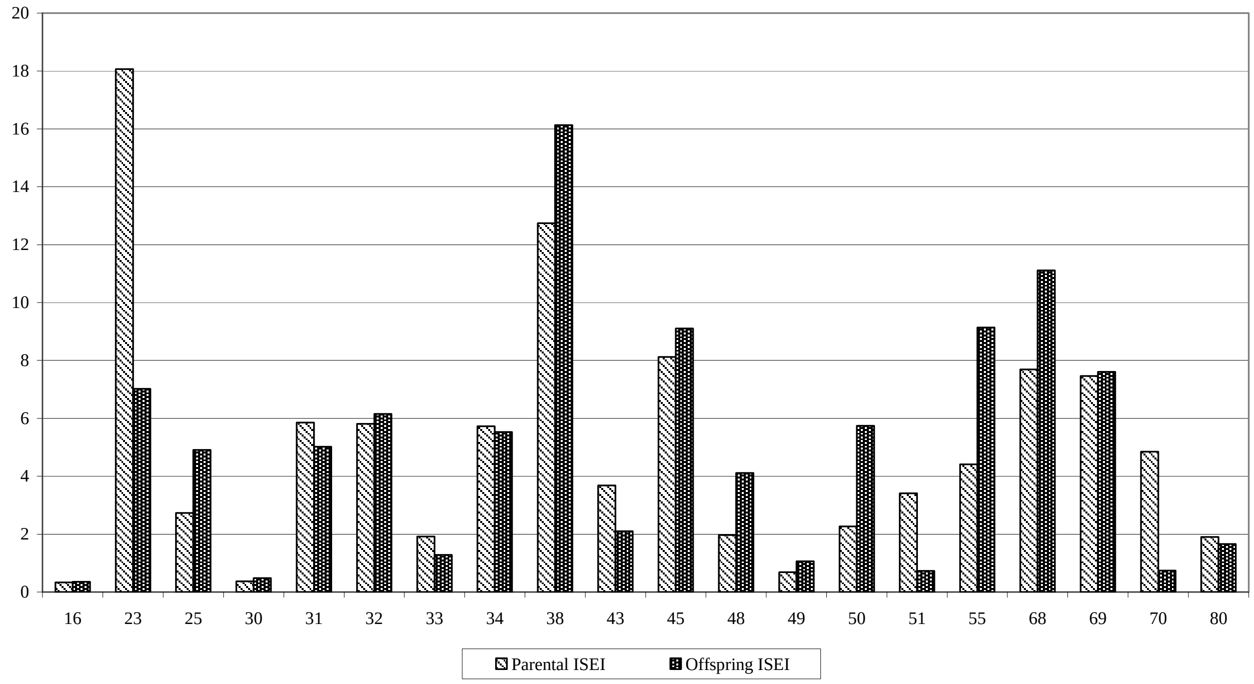
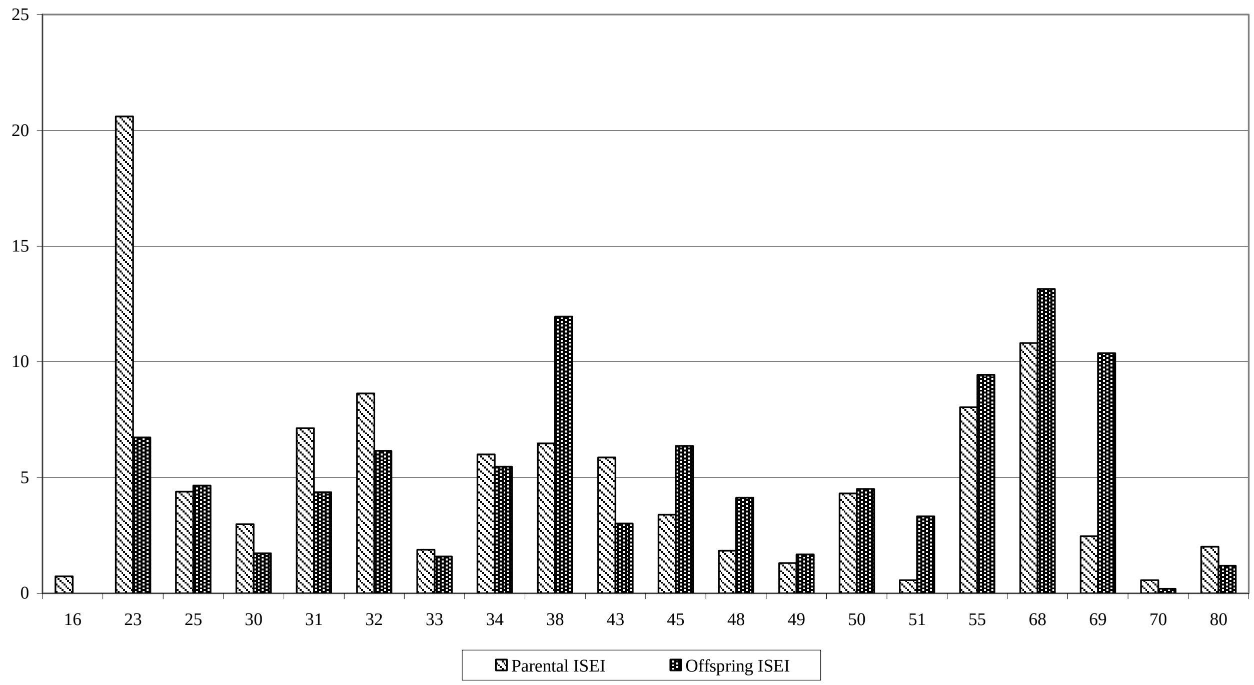


Fig. 1h: Distribution of offspring and parental ISEI in Finland.
Source: elaborations on EU SILC 2005 data



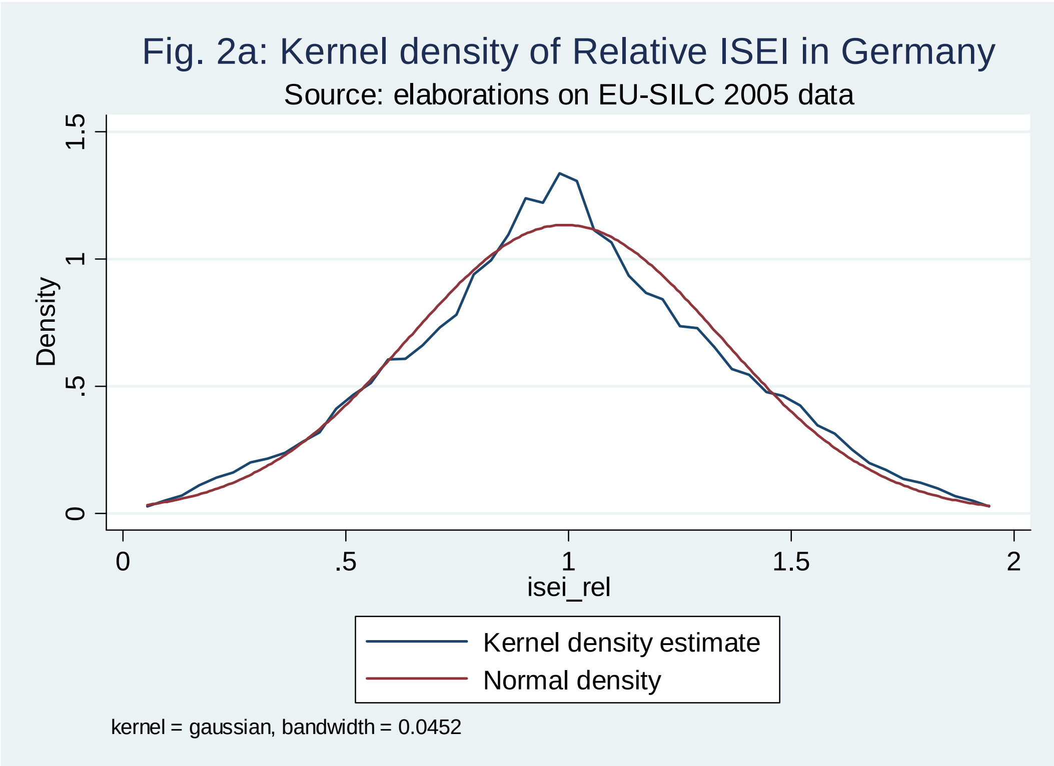


Fig. 2a: Kernel density of Relative ISEI in Germany
Source: elaborations on EU-SILC 2005 data
Density
0
.5
1
1.5
0
.5
1
1.5
2
isei_rel
Kernel density estimate
Normal density
kernel = gaussian, bandwidth = 0.0452

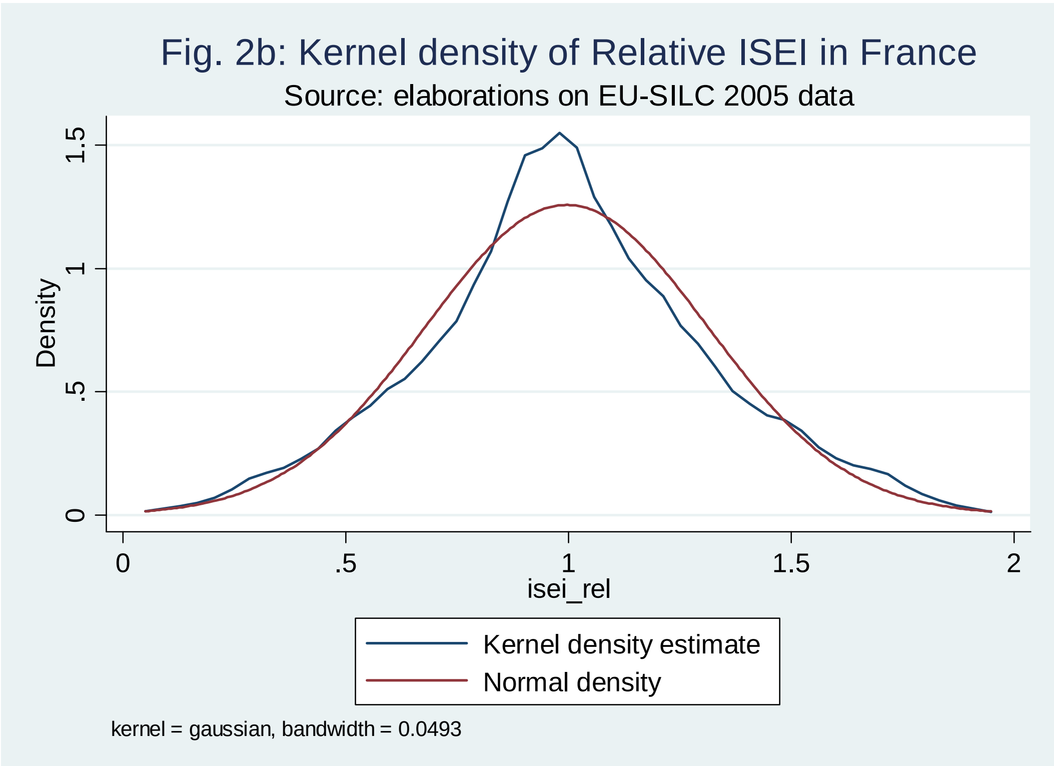


Fig. 2b: Kernel density of Relative ISEI in France
Source: elaborations on EU-SILC 2005 data
Density
0
.5
1
1.5
0
.5
1
1.5
2
isei_rel
Kernel density estimate
Normal density
kernel = gaussian, bandwidth = 0.0493

Fig. 2c: Kernel density of Relative ISEI in Spain

Source: elaborations on EU-SILC 2005 data

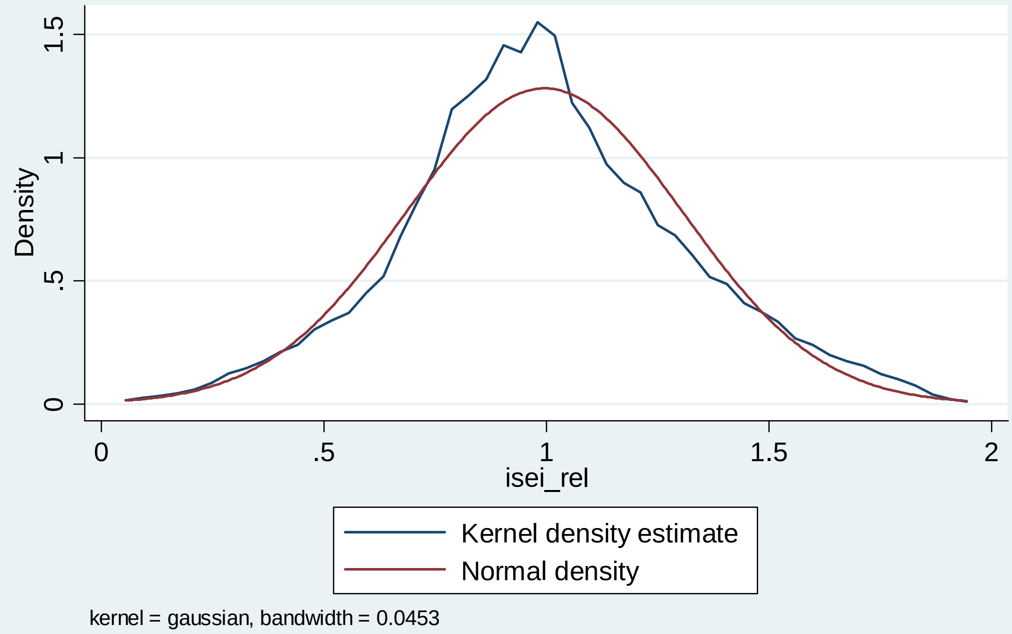
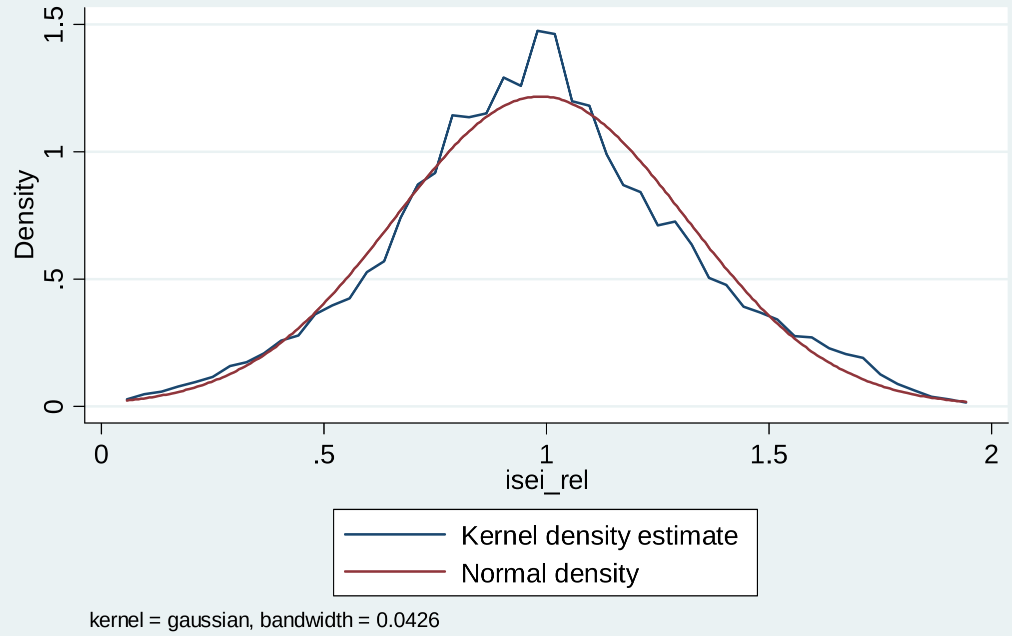


Fig. 2d: Kernel density of Relative ISEI in Italy

Source: elaborations on EU-SILC 2005 data



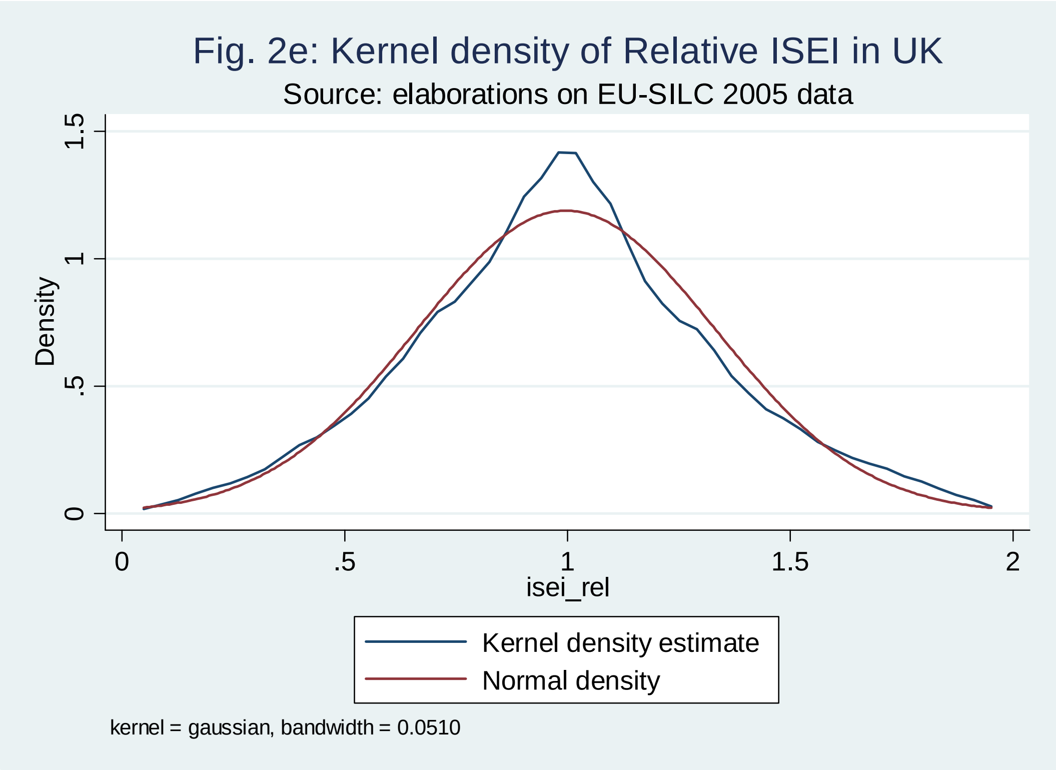


Fig. 2e: Kernel density of Relative ISEI in UK
Source: elaborations on EU-SILC 2005 data
Density
0
.5
1
1.5
0
.5
1
1.5
2
isei_rel
Kernel density estimate
Normal density
kernel = gaussian, bandwidth = 0.0510

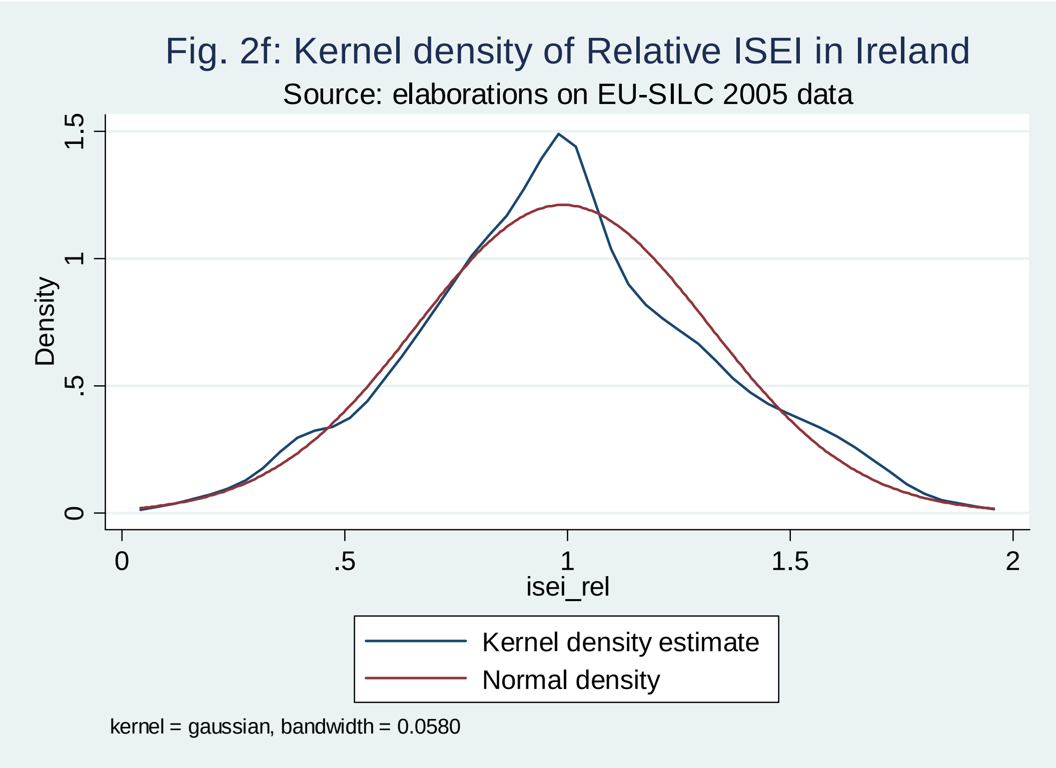


Fig. 2f: Kernel density of Relative ISEI in Ireland
Source: elaborations on EU-SILC 2005 data
Density
0
.5
1
1.5
0
.5
1
1.5
2
isei_rel
Kernel density estimate
Normal density
kernel = gaussian, bandwidth = 0.0580

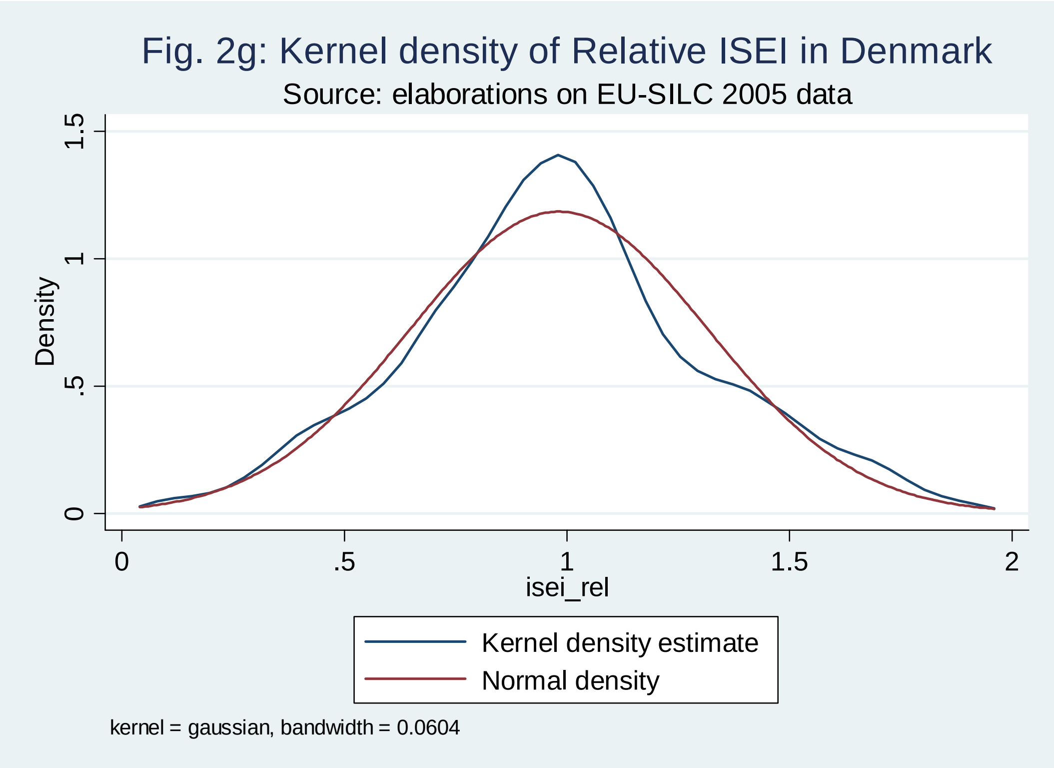


Fig. 2g: Kernel density of Relative ISEI in Denmark
Source: elaborations on EU-SILC 2005 data
Density
0
.5
1
1.5
0
.5
1
1.5
2
isei_rel
Kernel density estimate
Normal density
kernel = gaussian, bandwidth = 0.0604

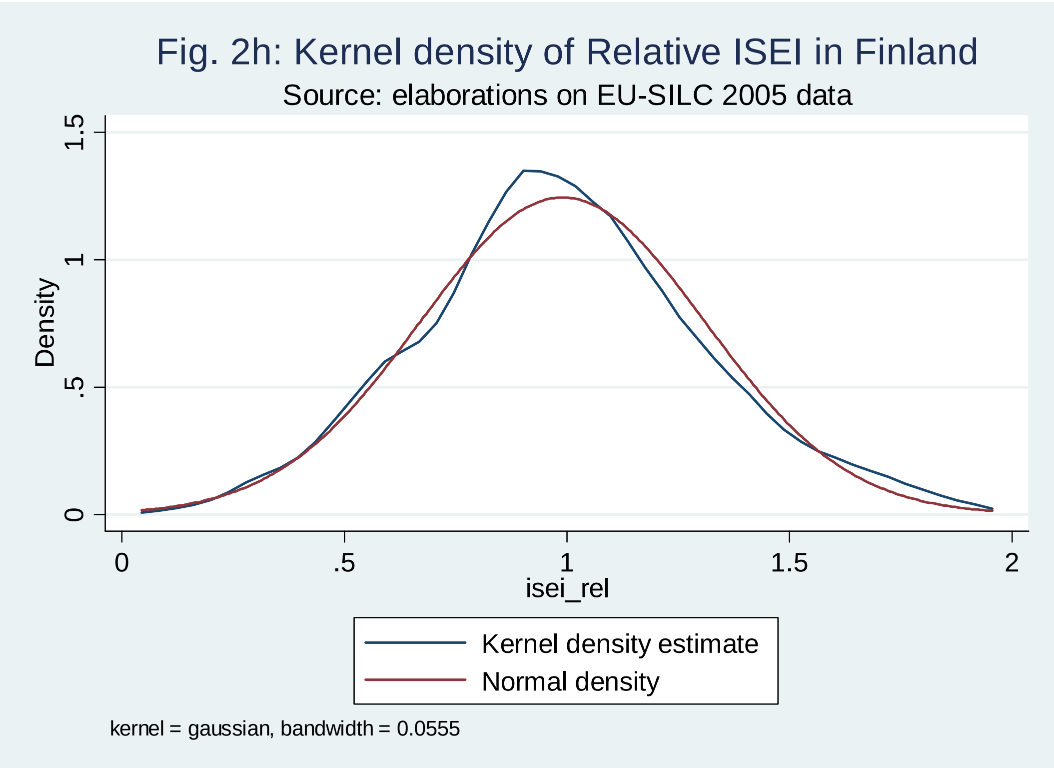


Fig. 2h: Kernel density of Relative ISEI in Finland
Source: elaborations on EU-SILC 2005 data
Density
0
.5
1
1.5
0
.5
1
1.5
2
isei_rel
Kernel density estimate
Normal density
kernel = gaussian, bandwidth = 0.0555