UCD GEARY INSTITUTE
DISCUSSION PAPER SERIES

Analysing Intergenerational Influences on Income Poverty and Economic Vulnerability with EU-SILC

Christopher T. Whelan
School of Sociology
Geary Institute
University College Dublin

Bertrand Maître
Economic and Social Research Institute
Dublin

Brian Nolan
School of Applied Social Science
University College Dublin

UCD GEARY INSTITUTE
DISCUSSION PAPER SERIES

Analysing Intergenerational Influences on Income Poverty and Economic Vulnerability with EU-SILC

Christopher T. Whelan
School of Sociology
Geary Institute
University College Dublin

Bertrand Maître
Economic and Social Research Institute
University College Dublin

Brian Nolan
School of Applied Social Science
University College Dublin

Analysing Intergenerational Influences on Income Poverty and Economic Vulnerability with EU-SILC

Christopher T. Whelan*, Bertrand Maître** and Brian Nolan***
*School of Sociology & Geary Institute, University College Dublin, **Economic and Social Research Institute Dublin, *** School of Applied Social Science, University College Dublin

Abstract

The EU-SILC 2005 wave includes a special module on inter-generational transmission of poverty. In addition to the standard data relating to income and material deprivation, the information relating to parental background and childhood circumstances was collected for all household members or selected respondents aged over 24 and less than 66 at the end of the income reference period. In principle, the module provides an unprecedented opportunity to examine on a comparative European basis the relationship between current poverty and social exclusion outcomes and parental characteristics and childhood economic circumstances. In this paper we seek to exploit such potential. In pursuing this objective, it is necessary to address some of the limitations of the data. We do by restricting our attention to a set of countries where data issues seem less extreme. In addition we employ 'dominance procedures in relation to parents' education and social class to reduce the scale of the missing values problem. Finally, we compare findings from one dimensional and multidimensional approaches in order to provide an assessment of the extent to which our analysis provides a coherent account of the intergenerational transmission of disadvantage.

Keywords: Poverty; Intergenerational; EU-SILC.

Introduction

The primary goal of inter-generational mobility research has always been to explain how and why social origins influence peoples' life chances. This has naturally placed family attributes at centre stage. The key role of such influences relative to, for example, neighbourhood influences research has been confirmed by recent research. Thus, Solon, Page and Duncan (2000) used the cluster sampling design of the Panel Study of Income Dynamics to estimate both sibling and neighbourhood correlations of years of schooling, and found correlations for the former of around 0.5 whereas their estimates for the latter were as low as 0.1; Raaum, Salvanes and Sorensen (2003) used Norwegian census data and also concluded that neighbourhood correlations are small compared to sibling correlations, for both education and long-run earnings. Without reviewing the wide range of studies involved (on which see, for example, Esping-Andersen, 2004a, b, D'Addio, 2007), for present purposes the key point is that they suggest that causal mechanisms related to the family are critical in relation to intergenerational mobility.

Against this background the European Union Statistics of Income and Living Conditions (EU-SILC) 2005 wave appears to offer an outstanding opportunity to explore such issues since it includes a special module on inter-generational transmission of poverty. In addition to the standard data relating to income and material deprivation, information relating to parental background and childhood circumstances was collected for all household members or selected respondents aged over 24 and less then 66 at the end of the income reference period.[i] In principle, the

module provides an unprecedented opportunity to examine on a comparative European basis the relationship between current poverty and social exclusion outcomes and parental characteristics and childhood economic circumstances.

In this paper we seek to exploit the potential of this data by examining the relationship of parental characteristics to measures of income poverty and an indicator of economic vulnerability understood in multidimensional terms. However, in so doing it is necessary to alert readers to significant limitations relating to the data that make up the EU-SILC intergenerational module.

EU-SILC Data

Since 2004, the EU-SILC survey is the reference source for statistics on income and living conditions, and common indicators for social inclusion in the EU. In 2004 it included 13 Member States (Belgium, Denmark, Spain, Greece, Spain, France, Ireland, Italy, Luxembourg, Austria, Portugal, Finland and Sweden) as well as Norway and Iceland. In 2005 the survey was extended to include 25 Member States plus Norway and Iceland. The EU SILC survey collects information on the income and living conditions of households as well a large range of socio demographic information about the household members ranging from personal characteristics to personal income, living conditions, labour market position, education, health etc…

For the purpose of this analysis we use the User Database (UDB) of the EU-SILC 2005 wave and our analysis is conducted at the individual level. The data set covers 26 countries with Malta not being included. The sample sizes range from 6,744 cases

in Iceland to 47,311 cases in Italy constituting a total sample size of 419,043 individuals.

Data Limitations of the Intergenerational Module

As our discussion below documents, we have found it necessary to exclude a range of countries from our analysis because of either or both intractable problems in relation to missing values or lack of comparability in relation to the measurement of key variable such as parental educational.

The information for the module was collected for all household members or selected respondents aged over 24 and less than 66 at the end of the reference period of the income. The reference period in relation to the module is when the interviewee was a young teenager, between the ages of 12 and 16.

The module includes 11 variables and Table 1 shows the percentage of missing values across countries for these items. Table 1 presents the "true" missing values that is missing values corrected for where there were no father/mother in the household or where in case of the occupation variable, for example, where the father/mother did not have any activity (mainly involving home duties for the mothers) that provided an occupational code.

From this table we see than the main problems relate to the high percentages of missing values for the education variable of the father (PM050) for the UK (39%) as well as for the education of the mother in Austria (33%) and in the UK (34%).

Table 1: Percentage of missing values on the multigenerational variables across countries

	Family composition when young (PM010)	Year of birth father (PM020)	Year of birth mother (PM030)	Siblings (PM035)	Education father (PM040)	Education mother (PM050)	Activity father (PM060)	Occupation father (PM070)	Activity mother (PM080)	Occupation mother (PM090)	Economic circumstances (PM100)
AT	1	15	9	2	8	33	5	2	3	1	3
BE	2	10	7	2	7	6	4	19	4	4	2
CY	0	5	1	0	0	0	0	0	0	0	0
CZ	1	11	3	0	1	1	1	1	2	1	2
DE	2	9	4	3	14	14	4	11	3	4	100
DK	0	0	0	0	12	23	1	8	1	38	1
EE	0	27	9	0	1	1	0	1	0	1	1
ES	2	18	14	4	5	4	3	6	3	1	4
FI	3	18	8	3	5	5	5	4	4	16	6
FR	0	12	8	2	11	7	8	9	4	1	7
GR	0	5	2	0	0	0	0	0	0	1	100
HU	1	14	5	3	2	1	2	6	1	2	2
IE	2	10	6	0	7	4	6	10	2	0	2
IS	1	17	7	1	3	4	1	3	1	3	2
IT	0	13	31	1	0	0	0	0	0	0	1
LT	1	16	3	1	2	2	1	1	1	0	2
LU	0	7	5	0	6	6	1	2	1	2	2
LV	1	27	5	1	3	3	1	1	1	1	3
NL	2	16	9	3	15	12	1	4	1	1	8
NO	0	10	5	0	12	6	10	12	9	39	4
PL	0	16	12	0	7	5	6	9	4	4	3
PT	1	17	10	1	2	2	2	1	1	0	100
SE	3	6	6	100	5	4	5	74	3	51	6
SI	0	16	6	1	1	2	1	3	2	5	2
SK	0	6	3	2	3	3	4	8	2	2	1
UK	9	24	17	9	39	34	20	58	14	19	20

Regarding the occupation of the father (PM070), we observe a very high percentage of missing values in Sweden (74%) and in the UK (58%). Considering the same variable for the mother's occupation (PM090) we find three countries characterised by high levels of missing values, namely Denmark (38%), Norway (39%) and Sweden (51%).

Finally the "economic circumstances" variable (PM100) is completely missing for three countries, Germany, Portugal and Greece and despite the fact that the information was collected in the first two countries.

A second issue relating to the data set is the distribution of the education variable of the father (PM040) and of the mother (PM050) as shown in Table 2 and Table 3.

The main concern on the education variable of the father is the large number of countries having no or almost no cases of father having primary or less than primary education level as can be seen in Table 2. Austria, the Czech Republic, Denmark, Germany and Norway have almost nobody less than lower secondary education level while in the UK 54% of father have less than primary education level. At the other end of the spectrum, Germany and Norway have a significant high percentage of fathers with a high level of education (ISCED 5 & 6) at 32 % and 21 % respectively.

In Table 3 we look at the corresponding figures for the mother for the same countries and observe similar patterns to those found for the education of the father. These countries are Austria, the Czech Republic, Germany, Denmark and Norway with less than 4% having less than secondary education level. In the UK almost 68% of mothers have less than primary education level and 0% have a primary education

level. For the father's education variable, Norway records the highest percentage having the highest education level (ISCED 5 & 6) at 25%.

The final issue concerns the occupational variables for the father (PM070) and the mother (PM090) which allows us to construct a social class position. In the SILC module the occupational variable is a 2 digits ISCO-88 and we can derive a "rough" four category social class variable with the following classification:

ISCO-88	Social class position
11 to 34	Highly skilled non-manual
41 to 52	Lower skilled non-manual
61 to 83	Skilled manual
91 to 93	Elementary occupation

Table 4 presents the distribution of the social class of the father where we can see that four countries are quite distinctive in having a high percentage of fathers in the highly skilled non-manual class position, these comprise the Netherlands (47%), Ireland (40%) and Norway and Iceland both at 37%. For the UK we see also that 43% of fathers have a lower skilled non-manual class position while for the other countries it ranges only from 2 % to 16%, and 13% of the UK fathers are found into the skilled manual category versus an average of just above 50% for the other countries. The corresponding table for the mothers produces similar results and patterns.

Overall it is clear that the scale of missing values for Sweden and the UK means that serious questions are raised regarding the inclusion of these countries in any analysis focused on occupation/class. Denmark, The Netherlands and the UK have particularly

high missing values for mother's occupation. The Czech Republic, Greece and Portugal have 100% missing values.

Educational distributions vary across countries in ways that are very difficult to accept at face value. The discussion by Schneider and Müeller (2009) that explores issues relating to education in considerable detail confirms the view that results employing this variable must be interpreted with a great deal of caution.

The "class schema" employed here is of a very aggregated and crude nature. Although the variables available for the parents' generation involve a level of detail that is well below the level for successful implementation of ESeC or EGP procedures, in principle, a somewhat improved schema could be developed. However, given that class distributions vary across countries in a manner that is difficult to explain the question arises as to whether the investment of effort involved in following this route can be justified.

Overall our assessment would be that cross-national analysis involving the EU intergenerational module must be interpreted with great care. This does not preclude the possibility of productive analysis involving particular countries and specific variables. However, even here one would ideally wish to be able to compare the results deriving from the EU-SILC combined data sets with those deriving from national data sets. Schneider and Müeller (2009) and Vallet (2009) in their discussions provide an illustration of what could be achieved.

Conducting Intergenerational Analysis with EU-SILC

In what follows we have sought to limit the difficulties documented in the foregoing discussion by adopting dominance procedures in relation to both social class and education (Erikson, 1984) and by using the information relating to the available partner where it is missing for the other partner. Thus where information is available for both partners we opt for the individual with the superior occupation or educational qualifications but where information is recorded for only one person that determines the parents' status or defines childhood economic circumstances.

While this produces a significant improvement in the situation relating to the missing values problem, it comes nowhere producing an entirely satisfactory outcome. For, example, in relation to childhood economic circumstances all cases are found to be missing for Germany, Greece and Portugal. In consequence we have restricted our analysis to a set of ten countries where the missing value levels seem tolerable. The exception involves the UK which has been included because of its intrinsic interest despite an unduly high level of missing values in relation to parents' occupation.

Over and above the difficulties associated with the scale of missing values, a further problem arises relating to the apparent lack of comparability of the educational variables. It seems clear that the striking differences in parental educational distributions are in many cases not plausibly interpreted as reflecting genuine substantive differences. The scale of these differences is such that we do not think it is possible to have confidence in the observed patterns of association between parental education and current situation relating to poverty and social exclusion. Instead we will focus on the impact of parental social class and current economic circumstances.

We do so for the following set of countries, Denmark, Finland, Austria, France, United Kingdom, Ireland, Italy, Spain, Estonia and Slovakia.

The countries provided observation for a range of welfare regimes.

- Denmark and Finland constitute examples of the *social democratic regime* which assigns the welfare state a substantial redistributive role. A high level of employment flexibility is combined with high security in the form of generous social welfare and unemployment benefits to guarantee adequate economic resources independently of market or familial reliance.

- Austria and France provide examples of the *corporatist regime* which involves less emphasis on redistribution and views welfare primarily as a mediator of group-based mutual aid and risk pooling, with rights to benefits depending on being already inserted in the labour market. Relatively strict employment protection legislation (EP) policies are aimed at protecting established inside workers.

- The UK and Ireland are treated as members of the *liberal regime* which acknowledges the primacy of the market and confines the state to a residual welfare role, social benefits typically being subject to a means test and targeted on those failing in the market. These countries exhibit levels of flexibility coupled with limited measures to actively sustain employment.[ii]

- Italy and Spain are members of the *southern European regime* which is distinguished by the crucial role of family support systems. Labour market policies are poorly developed and selective. The benefit system is uneven and minimalist in nature and lacks a guaranteed minimum income provision.

- Alber *et al* (2007) and Juhász (2006) note the difficulties involved in categorising the welfare regimes of post-socialist countries, although low levels of spending on social protection and weakness of social rights are common. Bukodi and Róbert (2007) observe that there has been a general increase in employment flexibility with most transition countries displaying a level of labour market flexibility significantly less than the UK but significantly greater than in southern European countries. They distinguish two clusters. The corporatist post-socialist regime comprises the central European countries, with mostly transfer oriented labour market measures and a moderate degree of employment protection. Slovakia is located in this cluster.

- The *post-socialist liberal cluster* comprises the Baltic countries which are characterised by a more flexible labour market, with employers unwilling to abide by legal regulation of the market, and an absence of policies aimed at sustaining employment. Estonia is included in this group.

Income Poverty Patterns by Parental Social Class and Childhood Economic Circumstances

In Table 5 we show the relationship between being income poor, where the threshold is set at 60% of equivalized income, and parental social class. Four class categories are distinguished in relation to parents in the EU-SILC intergenerational module. These comprise the "higher non-manual", the "lower non-manual", the "skilled manual" and "elementary occupations". From Table 5 we can see that the impact of parents' class is relatively weak in Social Democratic countries. In Denmark no

systematic pattern emerges while in Finland a gradual increase from 6 to 12 per cent is observed as one moves from the higher non-manual class to elementary occupations. In relation to the corporatist countries, France displays a rather similar profile to Finland while for Austria the contrast is between the elementary occupations with a poverty rate of 15.4% and the remaining categories where the figure ranges between 8 to 10%. For the liberal countries fairly clear patterns of class differentiation emerge. For the UK we observe almost a doubling of the rate across class categories from 8.1 to 15 per cent. For Ireland the absolute levels are higher but the differential is somewhat less sharp with the corresponding figures being 12.4 and 19.8 per cent. Class differentials are more accentuated for the Southern European countries, although very little differentiation is observed within the non-manual stratum. For Italy we see the poverty rate increase from 9.2 to 25.1 per cent as one descends the class hierarchy. The corresponding figures for Spain are 11.3 and 20.6 per cent. The pattern for Slovakia is not dissimilar to that found for the earlier corporatist examples with the poverty rate ranging from a low of 9.6 per cent to a high of 14.8 per cent. For Estonia, which constitutes an example of the post-socialist liberal cluster, a rather sharper pattern of class differentiation is observed with the poverty rate rising steadily from 9.9 per cent for the higher non-manual class to 22.6 per cent for the elementary occupations group.

In Table 6 we show the impact of childhood economic circumstances for income poverty. In every case poverty is higher for those who had difficult childhood circumstances. However, in most cases the effects are modest. In Denmark and Finland the number poor rises from 8 to 10 per cent and in Austria and France from 8/9 per cent to 13 per cent. The UK is similar to the foregoing countries but with

higher levels observed for both groups as reflected in poverty rates of 13.5 and 16.4 per cent. For Ireland, on the other hand, the impact of childhood economic circumstances is more dramatic with the poverty rate more than doubling from 12.9 to 26.8 percent. Among the Southern European countries, Italy resembles Ireland with rates of 12.2 and 20.4 per cent while Spain occupies an intermediate position. Among the post-socialist countries Estonia resembles Spain while by far the weakest impact is observed for the Czech Republic.

Overall we can see that intergenerational factors tend to have their weakest influence on income poverty in social democratic countries and their greatest consequences for members of liberal and Southern European welfare regimes.

Economic Vulnerability

A number of related debates have focused attention on the limitations of relative poverty measures based solely on a national income The first relates to the relative merits of unidimensional approaches focusing on income poverty versus approaches that attempt to capture the multidimensional nature of social exclusion (Nolan and Whelan, 2007). The second relates to increasing concern that the enlargement of the European Union has exacerbated the limitations of focusing on income poverty measures, defined in purely national terms. This approach is seen to produce results that are counterintuitive and at odds with our knowledge of variation across the EU in terms of objective living conditions and subjective feelings of deprivation (Fahey, 2007). The final issue relates to whether social class differentials in poverty and social exclusion continue to play an important role and the extent to which the answers to

this question are influenced by the choice of dependent on the choice of dependent variable (Beck, 2007, Goldthorpe, 2007a, Whelan and Maître, 2008b).

Such considerations have led authors such as Fahey (2007), to argue for the development of an EU-wide poverty line alongside national measures. However, recent efforts in this direction suggest that, while the latter may fail to capture cross-national or welfare regimes differences, conversely the former have difficulty in appropriately capturing socio-economic differences.[iii] If we are to seek alternatives or complements to conventional income poverty measures, it would seem desirable to develop indicators that can capture adequately both between country/welfare regime variation in social exclusion and within country/regime socio-economic variation. Making use of latent class analysis procedures we develop a multidimensional approach to the measurement of social exclusion. In particular, we focus on identifying individuals that we characterise as 'economically vulnerable'. [iv]

In applying latent class analysis, each of our indicators is taken as an imperfect measure of economic vulnerability. Our income poverty variable has four categories distinguishing between those below 50 per cent median income, between 50-60 per cent and 60- 70 per cent and above 70 per cent. Our results will be reported in terms of the conditional probabilities of being below each of the three median income lines. Our deprivation outcome reports the conditional probability of experiencing an enforced lack of 3+ items on a seven item consumption deprivation index. [v] Finally the economic stress variable involves a dichotomy between those in households that are experiencing difficulty or great difficulty in making ends meet and all others.

Our objective is to identify groups who are vulnerable to economic exclusion in being distinctive in their risk of falling below a critical resource levels, being exposed to consumption deprivation and experiencing subjective economic stress. Following Chambers (1989), we can define vulnerability as not necessarily involving current deprivation but rather insecurity and exposure to risk and shock. It can be seen as implicitly involving a multidimensional and dynamic perspective that is consistent with the notion of social exclusion as a process rather than simply an outcome.

As Moisio (2004) notes, implicit in the notion of multi-dimensional measurement of exclusion is the assumption that there is no one 'true' indicator of the underlying concept. Instead we have a sample of indicators that tap different aspects of a complex phenomenon. We need a measurement model that enables us to understand the manner in which our indicators are related to the underlying concept. In this paper we make use of latent class modeling to achieve this objective. The basic idea is long established and very simple (Lazarsfeld and Henry 1968).[vi] The associations between a set of categorical variables, regarded as indicators of an unobserved typology, are presumed to be accounted for by membership of a small number of latent classes. Latent class analysis assumes that each individual is a member of only one of N latent classes and that, conditional on latent class membership, the manifest variables are mutually independent of each others. Conditional independence is a version of the familiar idea that the correlation between two variables may be a result of their common dependence on a third variable. The logic is identical but explanatory variable is unobserved and must be identified statistically.

In Table 7 we display the results for model fit, size of the vulnerable class and conditional probabilities. Given large sample sizes, any particularly parsimonious model is unlikely to fit the data. Nevertheless, the latent class model does remarkably well across all six welfare regimes in accounting for the patterns of association between the income, deprivation and economic stress indicators. The size of the G^2 for the independence model provides one benchmark against which to assess the fit of the latent class model. The value ranges from 6.20 in Finland to 179.9 in Italy. One useful indicator of goodness of fit is the reduction in the G^2 for the independence model. This ranges from 98.1% in Estonia to 99.7% in Austria. The index of dissimilarity or the proportion of cases misclassified goes from a high of 0.033 in Estonia to a low of 0.005 in Austria with the figure for seven of the ten countries being below 0.020.

A systematic pattern of variation in the size of the vulnerable class is observed across welfare regimes. The lowest level of 11.1 per cent is observed in Demark while the figure for the other member of this regime Finland reaches 15.1 per cent. For the corporatist regimes the figures are respectively 11.2 and 18.3 per cent for Austria and France respectively. For the liberal regime the figure goes from 18.5 per cent in UK to 23.9 per cent in Ireland. A similar pattern is observed for the Southern European countries where the figure goes from 23.8 per cent in Spain to 24.8 per cent in Italy. The figure rises to 28.2 for Slovakia. A lower figure of 24.9 is found for Estonia which earlier work has shown to occupy a particularly favourable position within the post-socialist liberal cluster. On average we find that the Social Democratic countries occupy the most favourable situation while the post-socialist countries are at the other extreme.

Focusing on the multidimensional patterns differentiating the vulnerable and non-vulnerable we find that the discriminatory power of income poverty is relatively similar across countries. The conditional probability of income poverty at the 50% line, given that one is the non-vulnerable class, ranges from 0.028 in Finland to 0.084 in Spain and in 7 of the 14 cases it is at or below 0.05. Among the vulnerable class the poverty rate goes from 0.153 in Finland to 0.343 in Italy. While income poverty systematically distinguishes between the vulnerable and non-vulnerable classes with the differential ranging from three to seven to one, as will become apparent, it is the least potent of the elements making up the vulnerability profile.

For the non-vulnerable class, variation across countries in levels of economic stress is modest with the figure running from 0.012 in Estonia to 0.173 in Italy. For the vulnerable class stress levels run from 0.456 in Finland to 0.870 in Italy.

While substantial patterns of differentiation are observed in relation to economic stress, the most powerful discriminating factor in relation to economic vulnerability is consumption deprivation. Among the non-vulnerable class, with the exception of the post-socialist countries, deprivation levels are close to zero with the highest conditional probability of 0.020 being reported for the UK. Among the vulnerable the lowest conditional of probability of 0.562 is observed for Spain it rises to 0.871 and 0.908 for Estonia and Slovakia respectively.

.

Intergenerational Influences on Economic Vulnerability

In Table 8 we set out the relationship between parental social class and economic vulnerability. As with income poverty, for Denmark we find no systematic relationship with vulnerability being equally distributed across parental class categories. In contrast for Finland where vulnerability rates for the non-manual classes are approximately 8 per cent they then rise for the manual classes and peak at 14.1 per cent for the elementary occupations group. A comparable pattern is found for Austria. Similarly for France the vulnerability rate rises steadily from 12.6 per cent for the higher non-manual class to 21.5% for the routine occupations class. Turning to the liberal countries, we find a similar pattern for the UK with respective levels of 10.5 and 16.1 per cent. However, once again the class gradient is rather sharper for Ireland with the level of vulnerability rising from 10.2 per cent to 21.9 per cent as one descends the class hierarchy. Similar, if somewhat sharper, class profiles are observed for the southern European countries. For Italy the level of vulnerability rises gradually from 12.2 to 32.8 per cent while the corresponding figures for Spain are 9.1 and 25.4 per cent. The post-socialist countries patterns are similar to those for the southern European countries with the Estonian figure rising from a low of 10.7 to 26.5 per cent and the corresponding figures for Slovakia being 13.9 and 30 per cent.

In Table 9 we look at the impact of childhood economic circumstances on economic vulnerability. In every case vulnerability levels are higher for those whose families experienced severe financial problems in their childhood "often to most of the time" compared to those who responded "never to occasionally". This is true even in Denmark where effects up this point have been muted with the respective figures

being 6.6 and 15.4 per cent. For Finland the corresponding figures are 9.9 and 16.3 per cent. For Austria the gap is slightly wider with the relevant figures being 8.0 and 14.3 per cent. For France a sharper pattern of differentiation is observed with the level of vulnerability rising from 13.5 to 23.5 per cent. For the Liberal countries the contrast is sharpest for the UK with respective figures of 12.5 and 18.7. The impact of childhood economic circumstances is greater in Ireland with the vulnerability level rising from 11.3 to 37.7. Differentials are slightly less sharp for Italy and Spain with the corresponding figures being approximately 14 and 31 per cent. A further moderation of difference is found for Estonia with vulnerability levels of 15.7 and 24.6 per cent and Slovakia with rates of 18.7 and 26.9 per cent.

Multivariate Analysis of Intergenerational Influences on Income Poverty and economic Vulnerability[vii]

In Table 10 we report the odds ratios from a set of logistic regressions at the combined impact of parental social class and childhood economic circumstances on income poverty. For social class we find that net effects are relatively weak in the social democratic and corporatist countries where the odds ratios for routine occupations ranges from 0.479 in Denmark to 1.644 in Slovakia. They are strongest in the Liberal and Southern European countries (excluding Ireland) where it goes from 2.0 in Spain to 2.9 in Italy. The impact in Ireland is somewhat weaker than we might have anticipated which is related to the fact that the net odds ratio for economic circumstances in childhood in Ireland at 2.1 is higher than for any other country.

In Table 11 we look at the corresponding results relating to economic vulnerability. The strongest impact of parental social class is found in the Southern European and

post-socialist countries with odds ratio for the contrast between elementary occupations and higher non-manual ranging from 2.4 in Slovakia to 2.8 in Spain. The lowest values are observed for the Social Democratic countries with the respective values for Denmark and Finland being 0.5 and 1.3. For the reaming countries the values lies between 1.46 and 1.62

The net impact of childhood economic circumstances is generally higher than in the case of income poverty. The impact is particularly high in Ireland with an odds ratio of 3.9 the next highest values are observed in the Southern European countries and Denmark with values between 2.5 and 2.9. By far the weakest effect is observed in Finland.

In Table 12 we look at the cumulative impact on income poverty and economic vulnerability of routine occupation level of parental social class and the family having experienced severe financial problems most of the time or often in childhood relative to those with professional and managerial origins and who families experienced financial stress rarely or never. Focusing first on income poverty, we find that the largest cumulative impact is observed for Italy where the odds ratio reaches 4.6. For Austria, Ireland, the UK, Spain and Estonia the value ranges between 2.5 and 3.5. Denmark is the only case where the value does not exceed one. Controlling for current social class produces only modest reductions in these ratios.

Turning our attention to economic vulnerability, we can see that the cumulative impact of parental social class and childhood is generally sharper than in the case of income poverty. By far the highest odds ratios are observed for Ireland and the

Southern European countries where the value ranges from 6.3 in Ireland to 7.0 in Spain. The weakest effects are found in the Social Democratic countries and Slovakia where the odds go from 1.5 to 1.7. The UK and France follow with values of 2.3 and 2.9. For Austria and Estonia the figure rises to just below 4.0

Conclusions

As we have shown, the EU-SILC Intergenerational Module appears to offer an unprecedented opportunity to conduct a comparative analysis of the relationship between current poverty and social exclusion. However, as our analysis reveals, serious problems relating to the scale of missing values and major reservations about the comparability of key variables means that the results of any such analysis must be treated with considerable caution. In particular, it is clear that cross-national differences in the distribution of educational qualifications cannot plausibly be interpreted in substantive terms and rather seems to reflect the influence of differences in classification procedures or forms of aggregation.

We have endeavoured to overcome such difficulties by maximising the use of information for both parents and generally restricting our analysis to countries where such problems are least severe. Even so the situation remains highly unsatisfactory and our finding must continue to be treated with a considerable degree of circumspection.

The analysis we have conducted includes a range of countries spanning a variety of welfare regimes. Employing a four category social class schema we found that intergenerational factors tended to have their weakest influence on income poverty in

social democratic countries and their greatest consequences in liberal and southern European welfare regimes.

Our analysis was extended to incorporate a multidimensional perspective by focusing on economic vulnerability. A systematic pattern of variation in the size of the economically vulnerable class was observed by welfare regime with on average the socials democratic countries occupying the most favourable position with the post-socialist regimes at the other extreme and intermediate variation being modest. Income poverty is the least discriminatory dimension in relation to economic vulnerability while the sharpest variation is associated with consumption deprivation.

The pattern of variation for vulnerability in relation to both parents' social class and childhood economic circumstances is generally sharper than in the case of income poverty. The weakest differentiation is again found in the social democratic regime. Patterns of differentiation are sharper for the corporatist, liberal and southern European welfare regimes. For the post-socialist regimes clear absolute differences are observed across social classes and, unlike the situation in relation to income poverty, vulnerability levels for all social classes are higher than for the remaining welfare regimes. Economic vulnerability levels are also significantly higher in every welfare regime for those who experienced difficult economic circumstances in childhood

Our analysis was extended in order to consider the joint impact of parents' class and childhood economic circumstances on income poverty and economic vulnerability. Focusing on net odds ratios we found that the impact of parental social class on

income poverty was weak in the social democratic and corporatist countries and strongest for the liberal and southern European countries.

For economic vulnerability the net impact of social class is generally higher. This is also true in relation to economic circumstances.

Focusing on the cumulative impact of social class and economic circumstances in childhood we find that in relation to income poverty we observe odds ranging between 4.5 and 2.5 for a number of countries with Denmark being the only case where the value does not exceed one. For economic vulnerability the cumulative impact is much sharper. The lowest values are again observed in the social democratic countries with Ireland and some of the southern European countries being at the other end of the spectrum.

Overall, by attempting to minimise the missing values problems and focusing on a restricted set of variables and countries, we have been able to reveal fairly systematic variation across welfare regimes in the strength of intergenerational influences. This is particularly so in relation to economic vulnerability. However, this should not conceal the real for a substantial improvement in the equality of data available to with regard to the comparative impact of intergenerational influences on poverty and social exclusion across European countries.

Table 1: Percentage of missing values on the multigenerational variables across countries

	Family composition when young (PM010)	Year of birth father (PM020)	Year of birth mother (PM030)	Siblings (PM035)	Education father (PM040)	Education mother (PM050)	Activity father (PM060)	Occupation father (PM070)	Activity mother (PM080)	Occupation mother (PM090)	Economic circumstances (PM100)
AT	1	15	9	2	8	33	5	2	3	1	3
BE	2	10	7	2	7	6	4	19	4	4	2
CY	0	5	1	0	0	0	0	0	0	0	0
CZ	1	11	3	0	1	1	1	1	2	1	2
DE	2	9	4	3	14	14	4	11	3	4	100
DK	0	0	0	0	12	23	1	8	1	38	1
EE	0	27	9	0	1	1	0	1	0	1	1
ES	2	18	14	4	5	4	3	6	3	1	4
FI	3	18	8	3	5	5	5	4	4	16	6
FR	0	12	8	2	11	7	8	9	4	1	7
GR	0	5	2	0	0	0	0	0	0	1	100
HU	1	14	5	3	2	1	2	6	1	2	2
IE	2	10	6	0	7	4	6	10	2	0	2
IS	1	17	7	1	3	4	1	3	1	3	2
IT	0	13	31	1	0	0	0	0	0	0	1
LT	1	16	3	1	2	2	1	1	1	0	2
LU	0	7	5	0	6	6	1	2	1	2	2
LV	1	27	5	1	3	3	1	1	1	1	3
NL	2	16	9	3	15	12	1	4	1	1	8
NO	0	10	5	0	12	6	10	12	9	39	4
PL	0	16	12	0	7	5	6	9	4	4	3
PT	1	17	10	1	2	2	2	1	1	0	100
SE	3	6	6	100	5	4	5	74	3	51	6
SI	0	16	6	1	1	2	1	3	2	5	2
SK	0	6	3	2	3	3	4	8	2	2	1
UK	9	24	17	9	39	34	20	58	14	19	20

Table 2: Education of the Father across Countries

	Less than primary	Primary	Lower secondary	Upper secondary	Post secondary (non-tertiary)	First stage of tertiary education (ISCED 5 & 6)
AT	0.0	0.2	59.7	35.4	0.3	4.5
BE	17.1	32.7	15.7	17.5	2.1	14.9
CY	30.6	42.3	6.4	13.5	0.8	6.4
CZ	0.0	0.7	20.4	70.1	1.0	7.7
DE	0.0	2.0	12.9	51.1	1.6	32.3
DK	0.0	0.0	41.8	39.1	4.4	14.7
EE	1.9	22.3	27.4	29.9	5.4	13.0
ES	26.1	54.3	5.6	5.5	0.4	8.1
FI	7.6	24.6	40.0	13.7	0.8	13.3
FR	6.7	56.2	21.7	6.4	0.3	8.7
GR	31.9	46.0	9.0	5.3	2.3	5.6
HU	1.5	26.1	23.4	37.7	3.3	8.0
IE	3.1	68.9	11.1	7.0	2.6	7.3
IS	3.3	20.5	16.5	35.0	13.0	11.8
IT	18.8	51.2	16.2	10.8	0.0	3.1
LT	11.5	40.0	18.1	11.7	10.3	8.4
LU	6.2	47.9	4.4	24.0	5.6	11.9
LV	3.9	18.7	36.3	25.7	5.1	10.3
NL	0.0	33.0	31.9	18.0	0.0	17.0
NO	0.0	0.0	35.8	29.0	14.6	20.6
PL	17.3	41.2	0.7	35.7	0.5	4.6
PT	43.1	48.2	3.3	2.5	0.1	2.8
SE	1.1	50.9	22.5	9.2	2.7	13.6
SI	6.1	39.4	11.0	35.6	3.6	4.3
SK	0.0	11.1	29.4	51.1	0.0	8.4
UK	54.4	0.0	10.4	3.5	17.4	14.3

Table 3: Education of the Mother across Countries

	Less than primary	Primary	Lower secondary	Upper secondary	Post secondary (non-tertiary)	First stage of tertiary education (ISCED 5 & 6)
AT	0.0	3.4	72.9	19.4	2.0	2.3
BE	18.5	37.8	17.0	15.2	2.0	9.4
CY	43.4	35.7	5.7	11.3	0.5	3.4
CZ	0.0	1.5	42.3	52.5	0.7	3.0
DE	0.0	3.6	37.4	46.8	2.1	10.2
DK	0.0	0.1	68.8	20.0	0.0	11.0
EE	2.6	23.7	28.0	27.1	5.8	12.8
ES	30.4	56.8	5.4	3.8	0.2	3.4
FI	6.5	26.7	40.9	16.0	0.5	9.3
FR	7.5	62.4	18.0	6.7	0.3	5.2
GR	38.6	45.1	6.7	4.7	2.0	2.9
HU	1.9	30.5	33.9	25.5	3.9	4.2
IE	2.4	66.4	13.0	9.8	2.7	5.7
IS	3.7	28.7	38.2	21.5	1.7	6.2
IT	23.5	54.0	13.3	8.0	0.0	1.3
LT	14.8	41.4	14.6	10.6	11.0	7.6
LU	8.5	61.4	7.1	15.1	0.7	7.2
LV	6.4	20.0	33.2	26.7	5.2	8.4
NL	0.0	39.3	41.8	12.1	0.0	6.8
NO	0.0	0.0	42.8	32.2	0.0	25.0
PL	19.3	46.5	0.7	29.3	1.1	3.0
PT	53.6	40.7	2.1	1.3	0.1	2.2
SE	1.9	53.5	23.0	8.6	3.3	9.7
SI	8.2	58.2	5.2	24.0	2.6	1.8
SK	0.0	13.2	42.6	40.2	0.0	4.0
UK	67.6	0.0	13.8	3.6	4.3	10.7

Table 4: Social Class of the Father across Countries

	Highly skilled non-manual	Lower skilled non-manual	Skilled manual	Elementary occupation	Not at work
AT	20	15	47	16	3
BE	28	16	43	13	0
CY	10	16	54	20	0
CZ	23	8	60	8	1
DE	33	11	50	6	1
DK	32	10	44	13	0
EE	22	2	59	15	1
ES	14	12	51	21	1
FI	26	5	63	3	2
FR	25	8	57	8	2
GR	16	9	66	9	1
HU	16	7	63	12	2
IE	40	11	29	20	0
IS	37	8	50	5	0
IT	17	8	51	12	10
LT	16	4	52	27	1
LU	30	8	56	4	1
LV	20	4	56	20	1
NL	47	11	37	5	0
NO	37	9	53	1	0
PL	12	5	73	9	0
PT	12	10	63	15	1
SE	25	11	59	2	2
SI	17	9	65	6	3
SK	22	7	51	19	0
UK	21	43	13	22	2

Table 5: *Income Poverty at 60% of Equivalent Income by Parental Social Class by Country*

	DK	FI	AT	FR	UK	IE	IT	ES	EE	SK
	%	%	%	%	%	%	%	%	%	%
Social Class										
Higher Non-Manual	9.1	6.2	9.2	8.0	8.1	12.4	9.2	11.3	9.9	9.6
Lower Non-Manual	3.8	7.1	8.2	7.1	10.8	14.7	8.2	11.5	12.3	9.6
Skilled Manual	7.2	8.9	9.9	10.5	14.4	15.5	15.5	16.5	17.1	12.0
Elementary Occupations	6.6	12.4	15.4	11.4	15.8	19.8	25.1	20.6	22.6	14.8
Total	7.4	8.2	10.4	9.7	11.8	15.0	15.3	16.0	16.0	11.8
N	3,610	10,845	5,597	10.729	5,580	4,666	22,241	17,863	4,227	

Table 6: *Income Poverty at 60% of Equivalent Income by Childhood Economic Circumstances by Country*

	DK	FI	AT	FR	UK	IE	IT	ES	EE	SK
	%	%	%	%	%	%	%	%	%	%
Childhood Economic Circumstances										
Never to occasionally	7.6	8.2	9.7	9.4	13.5	12.9	12.2	15.3	14.9	11.5
Often to most of the time	10.1	10.4	12.8	12.6	16.4	26.8	20.4	19.3	20.1	12.4
N	4,253	13,591	7007	11.575	10,627	5,153	31,095	19,446	5,704	8,433

Table 7: Latent Class Vulnerability Profiles by Country									
	Class Size	G^2	Df.	Delta	<70% income	<60% income	<50% income	Deprivation Threshold	Economic Stress	N
Denmark		23.3036	4	0.009						15,129
NV	0.8892				0.153	0.088	0.044	0.000	0.018	
V	0.1108				0.521	0.353	0.153	0.663	0.468	
Finland		16.74	4	0.006						28,422
NV	0.8488				0.133	0.068	0.028	0.010	0.163	
V	0.1512				0.584	0.378	0.166	0.743	0.456	
Austria		6.1961		0.005						12,865
NV	0.8829		4		0.151	0.083	0.037	0.017	0.024	
V	0.1171				0.533	0.411	0.195	0.640	0.570	
France		41.1724	4	0.012						24,063
NV	0.8174				0.138	0.075	0.033	0.019	0.042	
V	0.1826				0.576	0.368	0.202	0.759	0.700	
UK		50.3044	4	0.014						25,359
NV	0.8154				0.192	0.126	0.075	0.020	0.040	
V	0.1846				0.618	0.475	0.306	0.672	0.548	
Ireland		46.3654	4	0.021						15,283
NV	0.7612				0.167	0.108	0.049	0.006	0.086	
V	0.2388				0.645	0.480	0.313	0.564	0.768	
Italy		179.9255	4	0.027						56,105
NV	0.7518				0.150	0.089	0.048	0.0121	0.173	
V	0.2482				0.622	0.488	0.342	0.601	0.870	
Spain		29.7862	4	0.012						36,718
NV	0.7620				0.191	0.130	0.084	0.011	0.112	
V	0.2380				0.531	0.405	0.267	0.562	0.757	
Slovakia		18.2889	4	0.012						15,110
NV	0.7180				0.140	0.089	0.053	0.308	0.096	
V	0.2820				0.345	0.243	0.156	0.908	0.852	
Estonia		69.4676	4	0.033						11,887
NV	0.7514				0.133	0.083	0.048	0.124	0.012	
V	0.2486				0.651	0.486	0.309	0.871	0.457	

Table 8: Economic Vulnerability by Parental Social Class by Country										
	DK	FI	AT	FR	UK	IE	IT	ES	EE	SK
	%	%	%	%	%	%	%	%	%	%
Social Class										
Higher Non-Manual	8.7	8.6	7.7	12.6	10.5	10.2	12.2	9.1	10.7	13.9
Lower Non-Manual	7.1	7.9	6.5	14.8	11.7	13.1	16.2	14.0	9.4	21.4
Skilled Manual	6.1	10.8	9.3	16.0	14.5	18.1	20.9	18.0	17.1	24.6
Elementary Occupations	5.0	14.1	15.2	21.5	16.1	21.9	32.8	25.4	26.5	30.0
N	2,907	4,781	4,773	8,039	5,495	3,623	25,493	17,368	4,203	7,389

Table 9 Economic Vulnerability by Childhood Economic Circumstances by Country										
	DK	FI	AT	FR	UK	IE	IT	ES	EE	SK
	%	%	%	%	%	%	%	%	%	%
Childhood Economic Circumstances										
Never to occasionally	6.6	9.9	8.0	13.5	12.5	11.3	14.1	14.3	15.7	18.7
Often to most of the time	15.4	16.3	14.3	23.5	18.7	37.7	30.8	31.4	24.6	26.9
N										

Table 10: Logistic Regression Income Poverty at 60% of median equivalent income by Parental Social Class and Childhood Economic Circumstances by Country										
	DK	FI	AT	FR	UK	IE	IT	ES	EE	SK
	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios
Social Class										
Ref: Higher Non-Manual										
Lower Non-Manual	0.310	0.480	0.880	0.562	1.402*	0.854	1.213*	1.050*	1.297*	1.011
Skilled Manual	0.713*	1.064	1.026	1.354	2.084**	1.058	1.613*	1.563*	1.871*	1.283
Elementary Occupations	0.479*	1.472	1.736	1.163	2.366	1.248	2.895*	2.029	2.468	1.644
Childhood Economic Circumstances										
Often to most of the time	1.752*	1.161	1.624*	1.167	1.098	2.097**	1.607*	1.214	1.402	0.982
Nagelkerke R^2	0.018	0.005	0.020	0.009	0.020	0.021	0.042	0.016	0.027	0.006
Reduction in Log Likelihood	16.294	13.097	45.205	27.421	50.220	36.427	619.742	161.987	66.182	23.189
Df	4	4	4	4	4	4	4	4	4	4
N	3,065	4,773	4,688	7,597	4.971	3,547	25,629	17,279	4,205	7,447

Table 11: Logistic Regression Economic Vulnerability by Parental Social Class and Childhood Economic Circumstances by Country										
	DK	FI	AT	FR	UK	IE	IT	ES	EE	SK
	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios
Social Class										
Ref: Higher Non-Manual										
Lower Non-Manual	0.706	0.625	0.658	1.247*	1.161*	0.730	1.247*	1.587**	0.850	1.625**
Skilled Manual	0.511**	1.178	1.035	1.071	1.389	1.607	1.495	1.956**	1.670*	1.922**
Elementary Occupations	0.505*	1.308	1.615	1.463	1.581	1.611	2.652*	2.817**	2.752*	2.400*
Childhood Economic Circumstances										
Often to most of the time	2.900**	1.300	2.328**	1.982**	1.475	3.935***	2.561***	2.473***	1.431	1.440
Nagelkerke R^2	0.027	0.005	0.043	0.023	0.013	0.088	0.085	0.068	0.033	0.035
Reduction in Log Likelihood	22.903	10.042	92.898	91.039	33.614	158.294	1430.035	720.827	82.402	170.798
Df	4	4	4	4	4	4	4	4	4	4
N	3,073	4,734	4,621	7,561	4,955	3,479	25,629	17.151	4.205	7.378

Table 12: Cumulative Impact of Parental Routine Occupations and Occupations and Economic Circumstances in Childhood on Income Poverty & economic Vulnerability										
	DK	FI	AT	FR	UK	IE	IT	ES	EE	SK
	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios	Odds ratios
Income Poverty										
Gross	0.839	1.709	2.819	1.357	2.597	2.617	4.652	2.463	3.460	1.614
Net controlling for current Social Class	0.917	1.848	2.447	1.098	1.910	2.218	4.550	2.243	2.833	1.509
Economic Vulnerability										
Gross	1.465	1.700	3.760	2.900	2.332	6.340	6.791	6.970	3.940	1.666
Net controlling for current Social Class	1.012	1.380	2.685	2.038	1.677	4.811	6.100	5.001	2.710	0.923

References

D'Addio, A. C. (2007). "Intergenerational Transmission of Disadvantage: Mobility or Immobility across Generations? A Review of the Evidence for OECD Countries." *Social, Employment and Migration Working Papers* No. 52. Paris: OECD.

Alber, J., Fahey, T. and Saraceno, C. (2007), 'Introduction: EU Enlargement and Quality of Life: The Context and Purpose of the Book', in Alber, J., Fahey, T. and Saraceno, Handbook of Quality of Life in the Enlarged European Union, Oxon: Routledge.

Beck, U.(2007), 'Beyond Class and Nation: Reframing Social Inequalities in a Globalizing World', *The British Journal of Sociology*, 58 (4), 679-705.

Bukodi, E. and Robert, P. (2007) Occupational Mobility in Europe, European Foundation for the Improvement of Living and Working Conditions, Luxembourg, Office for Official Publications of the European Communities.

Chambers, R. (1989) 'Vulnerability: How the Poor Cope: Editorial', *IDS Bulletin* 20: 2.

Esping-Andersen, G. (2004a). "Unequal Opportunities and the Mechanisms of Social Inheritance." In Generational Income Mobility in North America and Europe, edited by Miles Corak. Cambridge: Cambridge University Press.

Esping-Andersen, G. (2004b). "Untying the Gordian Knot of Social Inheritance." *Research in Social Stratification and Mobility* 21: 115–39.

Erikson, R. (1984). "Social Class of Men, Women and Families", *Sociology*, Vol. 18, No.4, pp. 500-514.

Fahey. T. (2007), 'The Case for an EU-wide measure of Poverty', *European Sociological Review*, 23,1, 35-47.

Goldthorpe, J. H. 2007 (a), 'Globalisation and Social Class' in H. Goldthorpe, On Sociology Second Edition, Volume One: Critique and Programme, Stanford, Stanford University Press

Juhász, G. (2006), 'Exporting or Pulling Down? The European Social Model and Eastern Enlargement of the EU', *European Journal of Social Quality*, 6,1: 82-107.

Lazarsfeld, P. F. and Henry, N. W. (1968). Latent Structure Analysis, Boston: Houghton Mifflin.

McCutcheon, A. and Mills, A. (1998), 'Categorical Data Analysis; Log-Linear and Latent Class Models, in Scarborough, E. Tannenbauum, E., Research Strategies in the Social Sciences, Oxford, Oxford University Press.

Moisio, P. 2004 Poverty Dynamics According to Direct, Indirect and Subjective Measures. Modelling Markovian Processes in a discrete time and space with error, STAKES Research Report 145.

Nolan, B. and Whelan, C.T. (2007), 'On the Multidimensionality of Poverty and Social Exclusion' in Micklewright, J. and Jenkins, S. (eds.) Poverty and Inequality: New Directions, Oxford: Oxford University.

Raaum, O. Kjell, S. and Erik S. (2003). "The Impact of a Primary School Reform on Educational Stratification: A Norwegian Study of Neighbour and School Mate Correlations." *Swedish Economic Policy Review* 10(2): 143–69.

Schneider, S. and Müller, W. (2009) Measurement of Education in EU-SILC – Preliminary Evaluation of Measurement Quality, Paper prepared for the EQUALSOC EDUC/INCDIS Meeting on the Potential of the EU-SILC Intergenerational Module.
ESRI, Dublin, 26th-27th March 2009.

Gary, S. Page, M. and Duncan,G. (2000). "Correlations between Neighboring Children in Their Subsequent Educational Attainment." *Review of Economics and Statistics* 82(3): 383–92.

Vallet, L. A. (2009) Educational and Occupational Coding in the French EU-SILC 2005 Intergenerational Module, Paper prepared for the EQUALSOC EDUC/INCDIS Meeting on the Potential of the EU-SILC Intergenerational Module.
ESRI, Dublin, 26th-27th March 2009.

Whelan, C. T. and Maître, B. 2005a, 'Economic Vulnerability, Multidimensional Deprivation and Social Cohesion in an Enlarged European Community', *International Journal of Comparative Sociology*, 46 (3): 215-239.

Whelan, C. T. and Maître, B. 2005b, 'Vulnerability and Multiple Deprivation Perspectives on Economic Exclusion in Europe: A Latent Class Analysis' in *European Societies*, 7, (3) 423–450.

Whelan, C. T. and Maître, B. (2008a) 'Social Class and Risk: A Comparative Analysis of the Dynamics of Economic Vulnerability'. *British Journal of Sociology*, 60 (4):637-659.

Whelan, C. T. and Maître, B (2008b) `New; and `Old Social Risks: Life Cycle and Social Class Perspectives on Social Exclusion in Ireland'. *Economic and Social Review*, 39 (2):139-156.

Footnotes

[i] In register countries (DK, FI, IS, NL, NO, SE, SI), a sample of persons (called selected respondent) are drawn first before selecting their corresponding household. Only the selected respondent is interviewed while household and income variables are collected either through register or through the selected respondent.

[ii] Although the latter is less true of Ireland.

[iii] See Whelan and Maître (2008a).

[iv] Earlier implementations of this approach include Whelan and Maître (2005a & b). The current approach adds these early efforts in terms of the choice of indicators and in taking advantage of the opportunities offered by EU-SLC to develop a European wide analysis based on adequate national samples.

[v] This threshold comes very close to that which would identify the same number of people as are located an EU-wide 'at risk of poverty' measure set at 60% of median income. In that sense it can be setting an EU deprivation threshold. This approach differs from some earlier attempts to measure economic vulnerability that have employed an entirely relative measure of deprivation

[vi] For a more detailed discussion of the procedure see Mc Cutcheon and Mills (1998)

[vii] Standards have been calculated to take into account the clustering of individuals within households.