



Working Paper No. 235

April 2008

Europeanisation of Inequality and European Reference Groups

Christopher T. Whelan and Bertrand Maître

Abstract. In this paper we take advantage of the recent availability of EU-SILC data to contribute to the recent debate relating to the Europeanisation of reference groups. Our analysis addresses both weak and strong versions of the thesis. The former proposes that common standards of what is an acceptable level of participation in one's own society emerge as a consequence of knowledge of conditions in other societies. The latter argues that people increasingly perceive themselves as part of a larger European stratification. Our analysis leads us to reject both versions of the thesis. Material deprivation rather than having a uniform effect is highly dependent on national context. In circumstances where the Europeanisation of inequality is raising issues relating to both national and transnational forms of legitimacy, it is important to understand that there is no necessary relationship between such Europeanisation and the Europeanisation of reference groups.

Corresponding Authors: chris.whelan@esri.ie; bertrand.maitre@esri.ie

Key Words: Europeanisation of inequality, reference groups, deprivation, economic stress, legitimacy

ESRI working papers represent un-refereed work-in-progress by members who are solely responsible for the content and any views expressed therein. Any comments on these papers will be welcome and should be sent to the author(s) by email. Papers may be downloaded for personal use only.

Introduction

In recent years, in the context of the profound social changes associated with the enlargement of the EU, a debate has developed involving significant disagreement regarding the manner in which individuals evaluate objective inequalities within and across national boundaries. The case for a European wide perspective has been set out most strongly by Fahey (2007) who argues that a particular sociological approach to understanding relative deprivation has led to a narrow understanding of the role and significance of reference groups. This distorted perspective, it is argued, has led to a neglect of the importance of cross-national disparities and to an undue focus on within country differences.

This distortion is considered to be directly connected to the extent to which the discussion of poverty and social exclusion in the European Union has been dominated by the relative income approach. The conceptual foundations of that approach are found in Townsend's (1979) definition of poverty as 'exclusion from ordinary living patterns, customs and activities due to lack of resources'. As Fahey *et al* (2005:7-9) stresses, Townsend can be seen to have pursued a very different agenda to that motivating those coming from the *American Soldier* tradition.¹ He understood the term 'relative deprivation' in an objective sense and his concern was with the socially relative nature of needs and wants rather than with feelings of satisfaction and injustice.

For Delhey and Kohler (2006:126) the reference groups to which people orient themselves is the litmus test for the appropriateness of an EU-wide perspective on the distribution of material deprivation. The crucial requirement that must be fulfilled is that citizens' frames of reference extend beyond the national realm. Whelan and Maître (forthcoming) suggest that it is possible to think in terms of weak and strong versions of this argument. The former proposes that a common standard relating to an acceptable level of participation in one's own society emerges as a consequence of knowledge of conditions in other societies. Such effects could be observed while the normative framework remained resolutely national; with the obligation for creating

¹ See Merton and Kitt (1950), Merton (1957).

the conditions in which appropriate participation could take place continuing to be seen to reside with the nation state.²

The stronger version of the EU-wide framework requires, as Delhey and Kohler (2006: 126) argue, that people perceive themselves as part of larger European or stratification system. Furthermore, the perception of being advantaged or disadvantaged within this system would have to play an important role in individuals' evaluations of their own life circumstances. The stronger case, as Delhey and Kohler (2006: 125) note, is linked to the claim that the concentration on national societies has led to a distortion of our perceptions of inequalities that will be corrected as a result of Europeanisation and the emergence of European wide distribution conflicts.³ The national context is considered to provide an inadequate framework for the analysis of social inequalities and it becomes increasingly necessary to enlarge the frame of reference by taking into account transnational contexts. From this perspective, norms shift from the national to the transnational level, as does the responsibility for meeting the associated claims.⁴

The Europeanisation of reference groups is therefore seen to go hand in hand with Europeanisation of the economy. However, we should be careful about deducing the former from the latter. Heidenreich and Wunder (2008:25), in their recent analysis of patterns of regional inequality in an enlarged Europe, convincingly demonstrate that there is no necessary relationship between the geographical level at which inequalities are shaped and their consequences for within and between country inequalities. They conclude that while supranational regulation of economic, social, regional, and employment policies and the integration of the national markets means that the causes of social inequalities are increasingly shaped by the EU, such Europeanisation has contributed to a situation in which regional inequalities within states in the enlarged Europe have increased by 15 per cent over the last eight years, while between-nation inequalities in Europe have fallen by 45 per cent. Heidenreich and Wunder (2008:32-

² See Ger & Belk (1996) and Keyfitz, (1992).

³ Each of these positions can in turn be distinguished from one that sees knowledge of external circumstances having an impact on aspirations but without implications for current notions of entitlement and consequent well-being.

⁴ See Beck (2000, 2002)

33) direct attention to the possibility that increasing dissatisfaction with Europe may be the consequence of increasing regional and individual inequalities at the national level. In similar vein, Kangas and Ritakallio (2007:112) note that, since the structural funds are aimed at eradicating regional disparities, they can also have the potential to intensify internal comparisons. Similarly, as Brandolini (2007:80) notes, while an EU-wide perspective can be seen as a significant step towards viewing the EU as a social entity, it does not necessarily require a strong sense of European identity. Thus, Marlier *et al* (2007:154) suggest that the use of EU-wide social indicators could be justified not on the basis of the existence of European wide reference groups but precisely as a means of *promoting* the adoption of such standards within a social rights perspective.

An evaluation of the changing nature of European reference groups cannot be deduced from a consideration of changes in the geographical level at which inequalities are structured or measured but must be the subject of systematic empirical investigation. In what follows we seek to take advantage of the recent availability of European wide data from the European Union Statistics on Income and Living Conditions (EU-SILC) to provide such an analysis.

Fahey's (2007:41) key argument is that the failure to take into account EU-wide as well as national frames of reference people undermines our capacity to understand the processes linking material deprivation to subjective reactions. His case rests on comparisons of absolute material deprivation levels and how people feel about such deprivation. Basing his analysis on the European Quality of Life Survey (EQLS), he shows that economic clusters within the EU display a similar ranking in terms of absolute material deprivation and subjective economic stress and that the least favoured income groups in the most prosperous countries exhibit more favourable outcomes than the most favoured in the least prosperous countries. However, at no point does he seek to explicitly model the relationships between material deprivation and individuals' subjective evaluations of their economic situation. Delhey and Kohler (2006:and 2007) using, Euromodule and Eurobarometer data relating to satisfaction and ratings of individual, national and EU-wide social and economic conditions, do succeed in demonstrating that individuals can evaluate living

conditions in their own and other countries and that the latter are related to their own levels of satisfaction. However, Whelan and Maître (forthcoming) conclude that this is not sufficient to establish the stronger version of the reference group argument, which would require the adoption of a more comprehensive justice evaluation methodology involving comparisons of the actual situation with what is considered to be just or fair.⁵ Whelan and Maître (2007 and forthcoming) make use of the EQLS and the first wave of EU-SILC covering fourteen countries to argue that the predominant frame of reference remains national.

One point on which each of these authors is in agreement is that the data on which the arguments to date have been based have been far from ideal in terms of providing high quality data an appropriate range of European countries. In this paper we seek to take advantage of data from the second wave of EU-SILC covering twenty-six countries in order to provide a more comprehensive assessment of the key issues.

Data and Measures

Data

EU-SILC is now the reference source for statistics on income and living conditions, and common indicators for social inclusion in the EU. It was launched in 2004 in 13 Member States (Belgium, Denmark, Spain, Greece, Spain, France, Ireland, Italy, Luxembourg, Austria, Portugal, Finland and Sweden) and in Norway and Iceland. It was only in 2005 that the EU-SILC reached its full scale with 25 Member States plus Norway and Iceland.

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 household level. The data set covers 26 countries with Malta not being included. The sample sizes range from 3,622 cases in Luxembourg to 22,032 cases in Italy constituting a total sample size of 196,686 households. We have retained Norway and Iceland in our analysis. However, as Brandolini (2007:62) notes, the fact that EU member states are engaged in a process

⁵ For examples of such analyses see Jasso (1999, 2000)

of economic and political unification means that EU wide indices have a significance that goes beyond intellectual curiosity. Consequently, in developing indices we restrict our attention to the twenty-four Member States with appropriate weighting.

Material Deprivation

In order to address the full range of issues outlined earlier, we require an index of material deprivation that is reliable across the range of countries that we include in our analysis. The items we have employed are set out in Table 1. These comprise a set of five items relating to enforced absence of items such as a car, a PC, a holiday, keeping ones home adequately warm and being able to afford a meal with meat, chicken every second day. It also includes two items relating to arrears and inability to cope with unanticipated expenses. In comparison with the earlier 10-item employed by Whelan and Maître (forthcoming) in their analysis of EU-SILC 2004 it excludes the enforced absence of a telephone, a colour TV, and a washing machine. Our analysis of EU-SILC 2005 suggests that these items are better thought of as forming part of a dimension relating to household facilities that also contains item relating to household facilities. The inclusion of these items would not contribute to increasing the reliability of the scale and would significantly reduce the strength of its association with our indicator of subjective economic stress. Given the composition of the index, it seems most reasonably described as a measure of ‘consumption deprivation’.

The simple 7-item additive scale gives a Cronbach alpha of 0.74 for both the sample as a whole and the combined 24 EU countries with appropriate population weighting. For the EU countries the coefficient ranges from 0.62 in Denmark and Sweden to 0.74 in Belgium. The only country where the value falls below 0.60 is Iceland. In 23 of the 26 cases the coefficient reaches 0.65 or above.

Table 1: Items Used to Measure Consumption Deprivation

Cannot afford meal with meat, chicken, fish (or vegetarian) every second day Inability to keep home adequately warm Cannot afford to have a car Cannot afford a PC Cannot afford a weeks holiday away from home Cannot afford to pay unexpected required expenses Experiencing arrears on rent, mortgage, utility bills or hire purchase payments

We use a version of this measure in which each individual item is weighted by the proportion of households possessing that item across the twenty-four EU countries. Enforced lack of a widely available item is considered of greater consequence than comparable deprivation in the case of an item whose possession is more strongly concentrated. Since we have taken EU levels of possession as the reference point, deprivation of an item such as a PC will be counted equally across all countries included in our analysis. This approach contrasts with that which takes national reference points.⁶ Since our concern is to evaluate the importance of within and between country differences, we wish to avoid an approach that necessarily restricts deprivation differences across countries. The consumption deprivation measure is constructed simply as the sum of the weighted deficits on all 7 items divided by the total proportion of items possessed in the EU. Such standardisation produces scores ranging from 0 (if an individual lacks no items) to 1 (all items are lacked).

Economic Stress

The measure of subjective economic stress we employ is based on the following question asked to the household reference person:

“Thinking now of your household’s total income, from all sources and from all household members, would you say that your household is able to make ends meet?”

⁶ See Muffels and Fouarge (2004)

Respondents were offered six response categories ranging from “with great difficulty” to “very easily”. The economic stress variable is constructed as being those reporting either “great difficulty” or “difficulty”. In the analysis that follows we treat this variable as a continuous one with scores ranging from ‘1’ corresponding to “very easily” to ‘6’ corresponding to great difficulty. Alternative using an ordered logit shows the categories to be fairly equally spaced and produces conclusions that do not differ from those arising from OLS regression.

The European Distribution of Material Deprivation and Economic Stress

In Table 2 we show the breakdown of consumption deprivation and subjective economic stress. We anticipate that levels of consumption deprivation will vary across countries not only in relation to the level of resources available in the society but also in relation to degrees of inequality in their distribution. For this reason and to facilitate interpretation of the detailed patterns of cross-national findings we have also reported the weighted descriptive results relating to variation across, five clusters of country. These results have, where appropriate, been weighted to take into account variation in population size within the clusters. The five clusters correspond to the conventional distinction between welfare regimes and are as follows:

- The Social Democratic regime which assigns the welfare state a substantial redistributive role, seeking to guarantee adequate economic resources independently of market or familial reliance. We have included – Sweden, Denmark, Iceland, Finland, Norway and Netherlands to this cluster.⁷
- The liberal regime 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. The UK and Ireland constitute this group.
- 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

⁷ The proper allocation of the Netherlands is matter for debate. We follow Aiginger and Guger (2006) and Muffels and Fouarge (2004) in locating it in the social democratic cluster.

labour market. This cluster includes Germany, Austria, Belgium, France and Luxembourg.

- The Southern European regime with family support systems playing a crucial role and the benefit system being uneven and minimalist in nature. This group comprises Cyprus, Greece, Italy, Portugal, and Spain.
- The Post Communist group. Juhász (2006) note the difficulties in developing an assessment of the types of welfare regimes characterising post-communist countries and an evaluation of their adjustment to the European Social Model. However, in evaluating the available evidence he directs attention to low levels of spending on social protection and to the weakness of social rights.⁸ The Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovenia and Slovakia are included in this cluster.

The pattern of results is largely as we would have expected on the basis of the assumption that individuals have reasonably accurate perceptions of their own and others economic circumstances, with levels of deprivation and economic stress being greatest in the least affluent countries. The correlation between GDP adjusted for purchasing power and mean level of deprivation is 0.84 and with mean level of stress it is -0.79 . Cross-national variation accounts for close to 20 per cent of the variance of consumption deprivation. The level of deprivation is lowest in the Social Democratic cluster at 0.092 before rising to 0.108 for the liberal regime and to 0.135 for the corporatist cluster and to 0.153 for the Southern European group and then more than doubling to 0.333 for the post Communist group.

Within the Social Democratic group deprivation ranges from a low of 0.072 in Sweden to 0.128 in Finland. Within the Liberal group the Irish and UK are almost identical at 0.108 and 0.112. Within the Corporatist group Luxembourg constitutes an outlier recording the lowest value of all twenty-six countries of 0.057. The remaining countries are located on a continuum running from 0.098 for Austria to 0.140 for Germany with Belgium and France being closer to the upper rather than the lower end. For the Southern European countries a somewhat wider range of variation is

⁸ For further discussion of pre-accession similarities and differences in the countries included in this cluster see Manning (2004)

observed with Spain and Italy being close to the upper end while for Portugal and Cyprus and Greece the observed values go from 0.22 to 0.24.

Table 2: Mean Levels of Consumption Deprivation and Economic Stress by Country		
	Consumption Deprivation (Standardised score with range 0-1)	Economic Stress (range 1-6)
<i>Social Democratic</i>	0.092	2.859
Sweden	0.072	2.904
Norway	0.087	2.807
Netherlands	0.091	2.944
Denmark	0.096	2.502
Iceland	0.114	3.229
Finland	0.128	2.955
<i>Liberal</i>	0.108	3.218
United Kingdom	0.108	3.194
Ireland	0.112	3.670
<i>Corporatist</i>	0.135	3.462
Luxembourg	0.057	2.577
Austria	0.098	3.181
Belgium	0.128	3.327
Germany	0.140	3.415
France	0.135	3.603
<i>Southern European</i>	0.153	4.061
Spain	0.134	3.802
Italy	0.139	4.139
Cyprus	0.228	4.186
Portugal	0.219	4.225
Greece	0.238	4.403
<i>Post Communist</i>	0.333	4.317
Slovenia	0.153	3.953
Czech Republic	0.206	3.948
Ëstonia	0.254	3.484
Hungary	0.304	4.231
Slovakia	0.328	4.198
Lithuania	0.377	4.129
Poland	0.382	4.520
Latvia	0.431	4.659
EU24	0.160	3.645
Country Eta ²	0.195	0.204
N	193,586	176.831

As expected, the Post-Communist group display both the highest levels of deprivation and also the greatest level of variability. At the lower end of the continuum are Slovenia and the Czech Republic with values of 0.153 and 0.206 respectively. The remaining six countries exhibit values higher than all other countries with the range of values going from 0.254 to 0.431. Estonia, Hungary and Slovakia are at the lower end of this spectrum and Lithuania, Poland and Latvia at the higher end. The consumption deprivation index thus discriminates between countries and within and between welfare regimes in a highly satisfactory manner.

Cross-national variation accounts for 20 per cent of the variance of economic stress. The pattern of variation largely mirrors that for consumption deprivation. The level is lowest for the Social Democratic cluster at 2.859 before rising to 3.218 and 3.462 respectively for the Liberal and Corporatist clusters. It then rises significantly to 4.061 for the Southern European group before peaking at 4.317 for the Post-Communist cluster.

Within the Social Democratic group Denmark exhibits the lowest level of stress of 2.502 followed by Sweden and Norway, Finland and the Netherlands with values ranging between 2.807 and 2.955 while Iceland reports the highest levels of stress of 3.229. Among the liberal countries stress levels are somewhat higher in Ireland than in the UK with the respective values being 3.670 and 3.194. Within the corporatist group, Luxembourg is once again the exception with a stress value of 2.577. For the remaining countries the values range between 3.181 and 3.603 with Germany and France being at the upper end of this continuum. All of the Southern European Countries report higher levels of stress than the countries considered so far with the range running from 3.802 for Spain to 4.403 for Greece. The divide with the post-Communist group is identical to that for consumption deprivation. However, the contrast with the Southern European group is less sharp than in the latter case.

The pattern of results suggests that the consumption deprivation measure not only constitutes a highly reliable index but is also a powerful instrument in differentiating between countries and clusters of countries in terms of subjective economic stress. The results confirm Fahey's (2007) finding of a close correspondence at this level of

analysis between objective levels of deprivation and their subjective counterparts. This is given further confirmation by the fact that a between country regression based on mean levels of deprivation and stress shows that almost sixty per cent of the cross-country variation in economic stress can be accounted for by corresponding variation in consumption deprivation.

Fahey's case for the importance of supra national reference groups was based not just on the strength of the association that we have confirmed above but also on the fact that, viewed in absolute terms, those at the lower end of the income continuum in richer countries experience lower levels of deprivation and stress than those in richer countries. In order to address this issue, in Figures 1A and 1B we set out descriptive findings for the five welfare regimes that we have identified relating to the breakdown of deprivation and stress by national income quintile. The results confirm Fahey's earlier findings.

The mean deprivation level for the bottom quintile in the Social Democratic countries is 0.19. This is only marginally higher than that prevailing in top quintile in the Post-Communist cluster and is lower than that in the fourth quintile of the latter. While the contrast between clusters are not as sharp as in Fahey's analysis, which included Bulgaria, Romania and Turkey, the conclusion still holds that the position of the most favoured in the least affluent cluster is not significantly different from that of the least favoured in the most affluent cluster.

The mean level of economic stress for the bottom quintile in the Social Democratic countries is 3.50 this is equal to the observed level for the top quintile in the Post Communist countries and is only marginally higher than the level for the top quintile in the Southern European countries. Similarly, those in the bottom quintile in the Liberal countries exhibit lower levels of stress than those in the fourth quintile in the Southern European and Post-Communist countries. Those in the bottom quintile of the corporatist cluster look similar to those in the third quintile of the two least favoured clusters.

Figure 1A: Mean Consumption Deprivation By Quintile by Welfare Regime

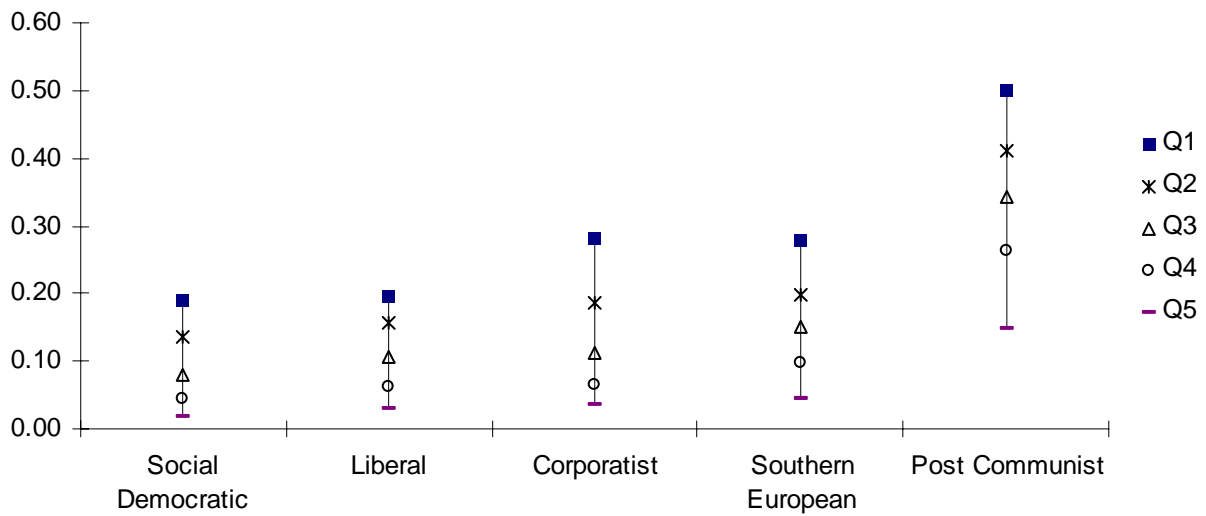
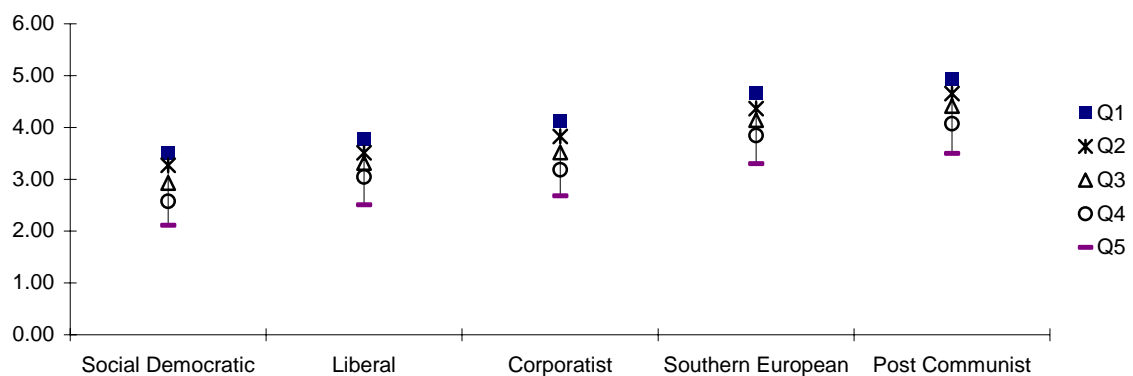


Figure 1B: Mean Level of Economic Stress By Quintile by Welfare Regime



Using the substantially superior database provided by EU-SILC, we have confirmed the two key findings on which Fahey based his conclusion relating to the Europeanisation of reference groups. The remainder of this paper is concerned with explaining why, despite the agreement of our analysis with Fahey's on these points, we remain unconvinced by his substantive conclusions.

Analysing the Relationship between Consumption Deprivation and Economic Stress

In pursuing a systematic analysis of the relationship between material deprivation and economic stress across a wide range of countries, we are confronted with the challenge of interpreting both within and between country effects and deciding whether or not they are tapping the same underlying processes. However, as Snijders and Bosker (1999:26) note, within group relationships can, in principle, derive from completely different principles to those underlying between group associations. Taken at face value the strong association between consumption deprivation and economic stress at national level is striking. However, the difficulties associated with the interpretation of such between country relationships are complicated by problems associated with both multicollinearity and the small number of observations. The countries in our analysis differ in many other respects than current levels of consumption deprivation leading to the danger of spurious correlation at across national level between these outcomes. A range of within country processes with the potential to affect both economic performance and the manner in which it is evaluated could account for the association between deprivation and stress at the national level.⁹

	(i)		(ii)		(iii)	
	B	SE	B	SE	B	SE
Constant (NL)	3.034		2.639		2.425	.011
LU			-.253	.019	-.155	.021
NO			-.124	.016	-.044	.019
SE			.023	.016	.134	.018
IS			.206	.020	.261	.025
DK			-.462	.016	-.366	.018
FI			-.113	.013	.049	.016
AT			.208	.017	.359	.019
BE			.256	.016	.383	.019
DE			.302	.012	.500	.015
FR			.510	.014	.725	.016
UK			.191	.016	.345	.016

⁹ For a discussion of similar difficulties relating to associations involving GDP see Frey and Stutzer (2002) and Inglehart and Klingeman (2000).

IE			.654	.013	.834	.018
ES			.711	.012	.813	.016
IT			1.031	.012	1.244	.014
CY			.779	.018	1.019	.025
PT			.846	.017	1.088	.023
GR			.962	.016	1.235	.021
SI			.797	.014	1.006	.018
CZ			.614	.017	.879	.022
EE			-.011	.018	.405	.025
HU			.568	.015	1.004	.021
PL			.596	.013	1.017	.017
LT			.219	.018	.753	.027
LV			.566	.019	1.108	.030
SK			.453	.017	1.045	.025
CD	3.599	0.010	3.370	.011	5.723	0.065
LU*CD					-.320	.142
NO*CD					-.807	.105
SE*CD					-.933	.112
IS*CD					-.961	.132
DK*CD					-1.125	0.082
FI*CD					-1.952	0.102
AT*CD					-1.705	.106
BE*CD					-1.678	.092
DE*CD					-2.242	.077
FR*CD					-2.361	.082
UK*CD					-1.810	.085
IE*CD					-2.058	.091
ES*CD					-1.525	.081
IT*CD					-2.347	.072
CY*CD					-2.468	.097
PT*CD					-2.481	.093
GR*CD					-2.606	.084
SI*CD					-2.325	.086
CZ*CD					-2.604	.089
EE*CD					-3.150	.091
HU*CD					-3.087	.079
PL*CD					-2.898	.070
LT*CD					-3.203	.085
LV*CD					-3.116	.085
SK*CD					-3.504	.085
R ²	0.385		0.475		0.489	
N	193,374		193.374			193,374

Determining whether between country level associations support the argument for national references groups is made extremely difficult because of the possibility of

such spurious correlation arising from such in observed heterogeneity. We have opted not to employ a random effects model because we are interested in specific country effects and do not wish to consider our twenty-six observations as random selected from a wider population.¹⁰ It is not possible to validate the strong version of the Europeanisation of reference groups, on this basis of between country correlations. The weaker version which implies simply that notions of appropriate national thresholds, and of what constitutes an acceptable level of participation in one's own society, come to be influenced by knowledge of conditions in other societies suggests that the within country impact of consumption deprivation on subjective economic stress should be relatively uniform across countries. It is difficult to see that the strong version of the European reference group hypothesis can be validated in the absence of support for the weaker version. Without evidence that notions of what constitutes an unacceptable level of consumption deprivation have become relatively uniform across countries, it becomes hard to see that the strong version which requires a shift in norms and aspirations from national to a transnational level and the increasing salience of European wide distribution conflicts can be sustained.

The weak versions can be tested by a focus on variation across countries in the impact of consumption deprivation on economic stress. In Table 3 we set out the analysis appropriate to addressing this issue. In equation (i) we estimate the simple ordinary least squares equation relating to the impact of consumption deprivation on economic stress. This estimate combines information on both within and between country variation but makes no adjustment for the multi-level structure of the data in which individuals are clustered within countries. This provides an estimate of 3.599 for the deprivation coefficient and accounts for 0.385 of the variance. In equation (ii) we enter the country dummies and obtain a fixed effects estimate of the impact of consumption deprivation on economic stress that is based solely on within country variation. The estimate of the deprivation effect falls to 3.370 while the R^2 increases to 0.475. The assumption underlying equation (ii) is that implicit in the weaker version

¹⁰In any event. as Snijders and Bosker (1999:44) note, with a small number of second level units and large sample sizes within clusters the difference between analysis of covariance and random intercept models will be negligible. For a general discussion of the conditions under which random effects models are appropriate and the need to compare fixed effect and random effect outcomes see Halaby (2004).

of the European reference groups hypothesis, that the effect of an increase involving an identical absolute increase in deprivation within nations is uniform across countries. In equation (iii) we provide an explicit test of this hypothesis by considering the manner in which consumption deprivation interacts with country. This produces a significant increase in the R^2 to 0.489. A clear pattern of interaction emerges across countries and welfare regime broadly consistent with the interpretation that the impact of consumption deprivation increases as one moves from the least to the most affluent countries/regimes.

The magnitude of the deprivation coefficient ranges from a high of 5.723 for The Netherlands to a low of 2.219 in Slovakia. To facilitate our description of country variation in Table 4 we show the regression analysis corresponding to (iii) above for welfare regimes. On this occasion we have not weighted to take population size into account. Instead we operate with the simplifying assumption that the underlying process relating deprivation to stress is uniform within welfare regimes in which case sample size will have no impact on the outcome. In the case of the corporatist regime we have excluded Luxembourg from the analysis because it constitutes such an outlier that its inclusion would obscure an important substantive finding.

In this instance, as we can see from equation (i), deprivation on its own accounts for 0.383 of the variance. Adding the cluster effects as in the fixed effects model in equation (ii) increases the level of explanation to 0.427. Entering the interactions between deprivation and welfare regime increases the level of variance explanation to 0.462. The pattern of interaction reveals the declining impact of deprivation as one moves from the Social Democratic regime to the Post-Communist cluster with the relevant interaction coefficient declining gradually from -0.761 to -0.961 to -1.130 to -1.831 . The implication of the findings set out in equation (iii) is that differences between welfare regimes in their levels of economic stress are conditional on specifying level of consumption deprivation. From equation (iii) we can see that in a model that incorporates such interactions significant differences in stress levels are observed between welfare regimes at zero levels of deprivation.

Table 4: Regression of Economic Stress by Consumption Deprivation and Welfare Regime*						
	(i)		(ii)		(iii)	
	B	SE	B	SE	B	SE
Constant (Social Democratic)	3.053		2.545		2.419	
Liberal			.465	.009	.537	.011
Corporatist			.441	.007	.529	.009
Southern European			1.003	.007	1.108	.008
Post Communist			.637	.007	.941	.009
Consumption Deprivation (CD)	3.558		3.326		4.583	.030
Liberal*CD					-.761	.052
Corporatist*CD					-.961	.041
Southern European*CD					-1.130	.037
Post Communist*CD					-1.831	.034
R ²	0.383		0.427		0.462	
N	189,816		189,816		189,816	
*Excluding Luxembourg						

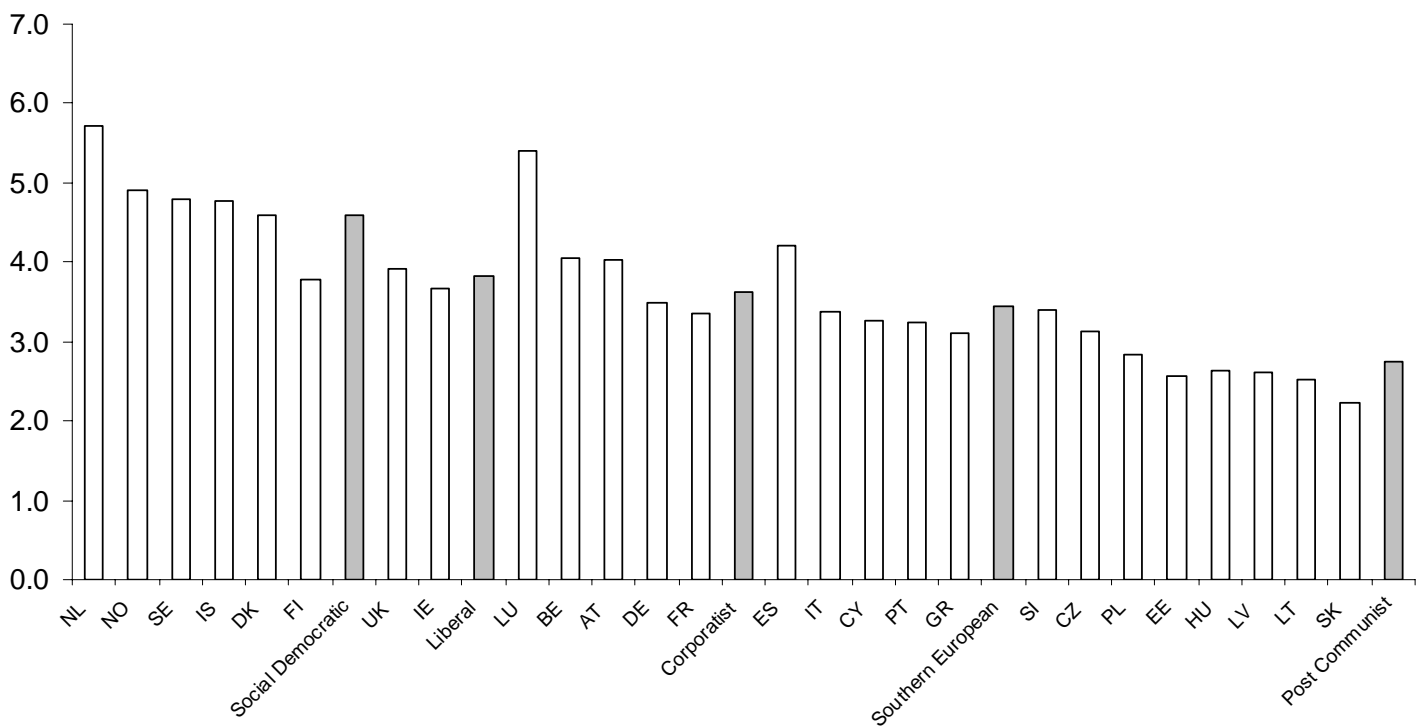
In order to illustrate the degree of systematic variation in the impact of consumption deprivation across country and welfare regime, in Figure 2 we set out the value of the deprivation effect for all 26 countries and 5 welfare regimes.¹¹ At the level of welfare regime the largest deprivation coefficient of 4.583 is associated with the Social Democratic cluster. Within this group the coefficient ranges from 5.723 for the Netherlands to 3.798 for Finland which constitutes something of an outlier. Sweden, Norway, Iceland and Denmark are located in the narrow range running from 4.916 to 4.588. For the Liberal regime the average value falls to 3.822 with the impact being slightly higher in the UK than in Ireland. A further drop to 3.622 is observed for the Corporatist group. The observations in this group are located in the range running from 4.018 to 3.362 with Austria and Belgium being at the higher end of the continuum and Germany and France at the lower end. The value of the deprivation

¹¹ In the latter case Luxembourg is once again excluded.

coefficient for the Southern European countries declines to 3.453. The highest value by some distance is of 4.198 is observed for Spain. It is followed by Italy with a value of 3.378. However, these are the only cases in which there is an overlap with the earlier clusters. For the remaining countries the range runs from 3.255 for Cyprus to 3.119 for Greece. Finally, the lowest average value of 2.753 is observed for the Post Communist cluster. The highest values ranging of 3.398 to 3.119 are observed for Slovenia and the Czech Republic. The remaining observations range between 2.824 to 2.219 with Poland, Estonia and Hungary at the upper end of the continuum and Latvia, Lithuania and Slovakia at the lower end.

Since our data is cross-sectional rather than longitudinal we cannot rule out the possibility that, despite the striking cross-national differences that we have observed, some convergence has occurred over time. However, if it was the case then it was necessarily from a starting point involving very substantial heterogeneity and has some considerable distance to go before one could speak of relative uniformity of reference groups.

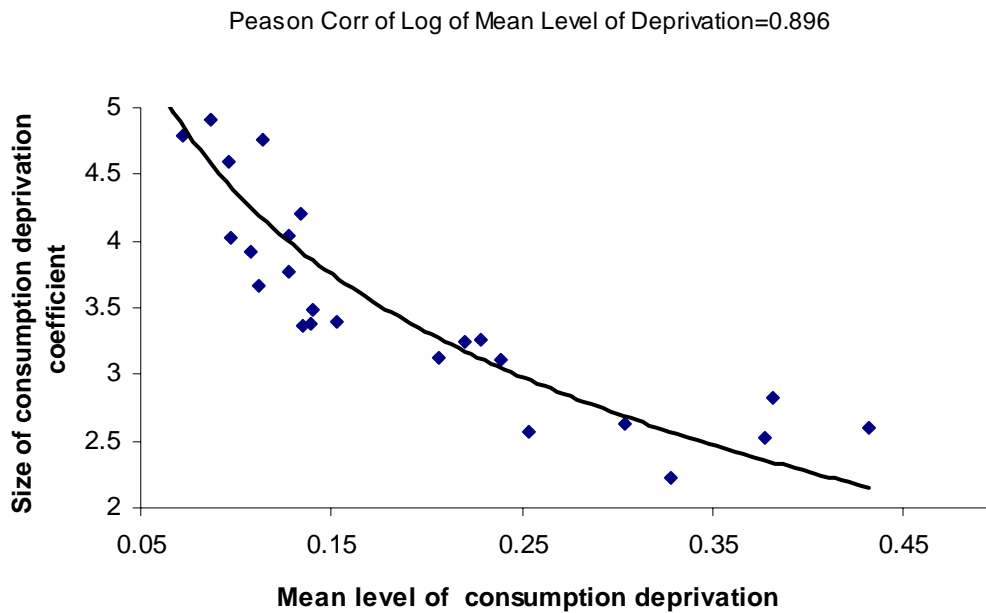
Figure 2: Deprivation Coefficient by Country and by Welfare Regime



The pattern of variation related to the impact of consumption deprivation on subjective stress suggests that it is associated with corresponding cross-national variation in objective living economic circumstances. Taking our measure of consumption deprivation as a proxy for such circumstances, in Figure 3 we plot the relationship between national deprivation levels and the magnitude of the deprivation coefficient produced. A linear specification produces a correlation of 0.822 accounting for 0.663 of the variance. However, a significant improvement is achieved by specifying a natural log form for deprivation which increases the correlation coefficient to 0.896 accounting for 0.803 of the variance. The impact of consumption deprivation declines as the average level of deprivation in the society increases. However, this decline takes a proportionate rather than an absolute form.

It remains possible that the observed association is accounted for by a third factor correlated with both consumption deprivation and economic stress. The log specification for GDP is rather marginally less successful in accounting for variation in the impact of deprivation in producing an R^2 of 0.711 while the log of mean income produces an R^2 of 0.662. One further source of information relating to the importance of mean level of deprivation versus other closely correlated dimensions such as GDP and average income levels can be derived from varying the order of entry. In both cases entering GDP or income after consumption deprivation produces a negligible increase in the reduction of the variance explained. Reversing this order of entry so that deprivation is entered second produces an increase from 0.711 to 0.804 in the case of GDP and from 0.622 to 0.803 in the case of income. Those factors associated with GDP and income that are not mediated by consumption deprivation have no impact on the strength of the relationship between consumption deprivation and economic stress. This makes it less likely that the observed relationship is spurious.

Figure 3: Magnitude of Deprivation by Mean Level of Deprivation by Country

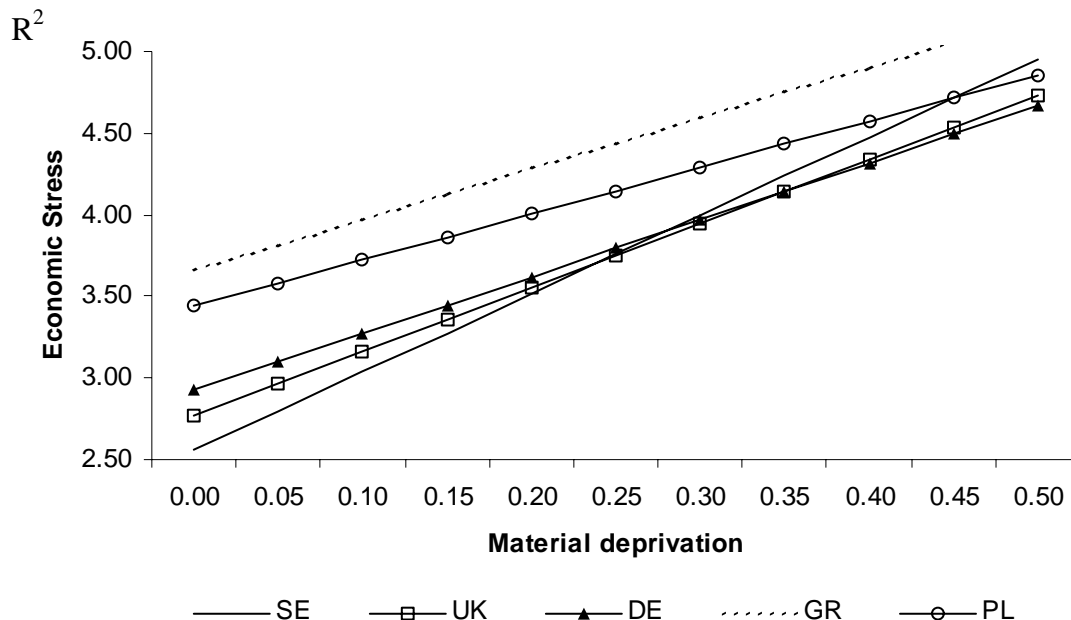


It is clear that the substantial differences in levels of economic stress that are observed between countries at low levels of deprivation narrow as mean deprivation increases. In Figure 4 we illustrate how cross-national differences vary as the level of deprivation changes. We have done this for five countries comprising one from each welfare regime namely Sweden, the UK, Germany, Greece and Poland. We have restricted our comparison to the range of deprivation running from 0 to 0.45 because beyond this point the numbers found in the more affluent countries become very small. Both the risk level associated with deprivation and the distribution of individuals across the deprivation continuum contribute to differences in mean levels of economic stress between countries. While Greece displays higher levels of economic stress than Poland at every point on the deprivation continuum, the mean stress level is higher in the latter. This arises from the fact that the Polish households are more concentrated at the upper end of the deprivation continuum.

From Figure 4 we can see that at zero level of deprivation Sweden enjoys an advantage in terms of economic stress over the four remaining countries. Factors other than current cross-national variation in levels of consumption deprivation clearly play a substantial role in producing such differences. Obvious candidates would include comparisons with earlier standards and expectations relating to future economic

prospects both personal and national. In the case of Greece the gap at zero level of deprivation amounts to 1.10. This falls to 0.88 for Poland to 0.36 for Germany and to 0.21 for the UK. When deprivation rises to 0.20 the corresponding figures are 0.13 and 0.10, 0.76 and 0.49. At a level of deprivation of 0.45, below which it must be kept in mind that 98 per cent of Swedish households are located, Swedish stress levels are actually slightly higher than those prevailing in the UK and Germany and identical to those in Poland. The process of convergence applies, with varying strength, to each of the two-way comparisons with the exception of Greece-Poland where, since the starting point for the former involves a higher level of deprivation than the latter, we observe a process of modest divergence.¹²

Figure 4: An Illustration of Converging Economic Stress Levels with Increasing Consumption Deprivation for a Selected Set of Countries



Conclusions

Taking advantage of the substantial improvement in the quality of data provided by the availability of EU-SILC, we have confirmed two findings that have been key to the claims put forward by advocates of the Europeanisation of reference groups thesis. The first concerns a close association at the national level between material deprivation and subjective economic stress. The second involves the confirmation that individuals at the bottom of the household income hierarchy in more affluent

¹² Similar differences emerge when we focus on welfare regimes.

countries experience lower levels of deprivation and economic stress than those in the upper levels of the income distribution in the least prosperous countries. However, these descriptive findings are not sufficient to establish a causal relationship between deprivation and stress at the national level.

The possibility clearly exists that the observed association may be a consequence of a joint association with other variables and that the processes underlying the between country association between consumption deprivation and economic stress are quite different to those influencing within country variation. In relation to the weaker version of the Europeanisation of reference groups hypothesis, an explicit test is possible focusing on within country variation. It suggests that a given increase in consumption deprivation, benchmarked in overall EU terms, should have a uniform impact on level of economic stress across countries or should be converging towards such an outcome. Our analysis shows that this is clearly not the case. Context matters and systematic variation is observed across countries with the impact of a particular increase in deprivation being substantially greater in countries where deprivation is less common. The impact of consumption deprivation on economic stress declines progressively as the national level of deprivation increases but in a proportionate rather than an absolute fashion. If a process of convergence is under way it is one that must have started from a point of quite striking cross-country differentials and is one that has along way to go before it could be considered to involve a substantively important form of Europeanisation of reference groups.

The consequence of such variation is that differences in economic stress between countries and regimes are greater for households at the lower rather than the higher end of the deprivation continuum.¹³ The evidence thus points decisively in the direction of a rejection of the weaker version of the Europeanisation of reference group hypothesis. It is difficult therefore to see what formulation of the underlying processes could sustain the stronger version relating to a shift in normative reference point from the national to the transnational level.

¹³ This finding is consistent with the conclusion reached by Whelan and Maître (2007) based on an analysis of the EQLS data and with Boehnke's (2008) and Whelan and Maître (2005) conclusions using the same data set that adverse conditions are more likely to give rise to marginalisation where deprivation is least common.

The evidence we have presented provides further support for the conclusion of Marlier *et al* (2007:154-155) that a EU-wide approach by failing to take into account differences in “the significance of goods in social functioning” would miss people in richer countries who are experiencing genuine exclusion from their own society while counting substantial numbers in the poorer societies who are not experiencing such exclusion.

Heidenreich and Wunder (2008) note that, while the causes of social inequality are increasingly shaped at the EU level, this arises through supranational regulation of economic, social, regional, and employment policies and the integration of the national markets rather than through European welfare state processes comparable to national arrangements or, as Diamond (2006:181) expresses it, through negative integration rather than positive social integration. In a similar fashion Ferrera (2006: 258-9) notes that European integration is based on a logic of economic opening that challenges the spatial demarcations and closure practices that sustain national solidarity.¹⁴ In this context Alber *et al* (2008:6-7) point to a range of evidence suggesting that in, contrast with European elites, ordinary European hesitate to extend notions of solidarity beyond the boundaries of the nation state.

Heidenreich and Wunder (2008) conclude that if norms of solidarity refer primarily to a national community, then the pursuit of the European integration process may not be possible without new transnational concepts of solidarity, equality, and justice.¹⁵ Ferrera (2006:274), on the other hand, suggests that it may be necessary to recast the European integration project so that it can be promoted as the best means of safeguarding modernized national social protection systems.¹⁶ The challenge is to achieve an appropriate combination of national and transnational forms of legitimacy.

¹⁴ For a detailed discussion of the influence of different spheres of EU policy on institutional and substantive social policy outcomes and their impact relative to that of international organisations such as the IMF and the World Bank see Guillén and Palier (2004)

¹⁵ In this context Alber *et al* (2007) point to arrange of evidence that, in contrast with European elites, ordinary Europeans hesitate to extend notions of solidarity beyond the boundaries of the nation state.

¹⁶ For a more general discussion of the relationship between Europeanisation, the welfare state and issues relating to national identity and self-image see Cuperus (2006)

In this context, it is necessary to accept that there is no simple relationship between the Europeanisation of inequality and the Europeanisation of reference groups.

Acknowledgments

This article forms part of activities undertaken by the authors as participants in the Economic Change, Quality of Life and Social Cohesion (EQUALSOC) network of Excellence funded by the European Commission (DG Research) as part of the Sixth framework Programme. We would like to thank Denis Conniffe, Tony Fahey, Ulrich Kohler, Traute Meyer, Brian Nolan, two anonymous referees and participants at EQUALSOC, ESRI and ISA Research Committee 28 seminars for constructive comments on an earlier version of this article.

References

- Aiginger, K., Guger, A. (2005): „The European Social Model: From Obstruction to Advantage“, *Progressive Politics* (4) 3: 40-47
- 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. (2000) ‘The Cosmopolitan Perspective: Sociology of the Second Age of Modernity’, *The British Journal of Sociology* 51 (1): 79–105.
- Beck, U. (2002), ‘The Cosmopolitan society and its Enemies’, *British Journal of Sociology*. 51,79-106.
- Boehnke, P. (2008), ‘Feeling Left Out: Patterns of Social Integration in the Enlarged EU’, in Alber, J., Fahey, T. and Saraceno, *Hand book of Quality of Life in the Enlarged European Union*, Oxon: Routledge
- Brandolini, D. (2007), ‘measurement of Income Distribution in Supranational entities: The Case of the European Union’, in J. Micklewright and S. Jenkins (eds.), *Inequality and Poverty Re-examined*, Oxford: Oxford University Press
- Cuperus, R. (2006), ‘The Vulnerability of the European Project’, in Giddens, A, Diamond, P. and Liddle, R. (eds), *Global Europe, Social Europe*, Cambridge Polity Press.
- Delhey, J. and Kohler, U. (2006). From nationally bounded to Pan-European inequalities? On the importance of foreign countries as reference groups. *European Sociological Review*, 22, 125–40.
- Delhey, J. and Kohler, U. (2007), ‘Where We Stand in Europe: Citizens Perceptions Of European Country Rankings and their Influence on Subjective Well Being, in Alber, J., Fahey, T. and Saraceno, *Hand book of Quality of Life in the Enlarged European Union*, Oxon: Routledge
- Diamond, P. (2006), ‘Social Justice Reinterpreted: New Frontiers for the European Welfare State’, Giddens, A, Diamond, P. and Liddle, R. (eds), *Global Europe, Social Europe*, Cambridge Polity Press.
- Fahey. T. (2007), ‘The Case for an EU-wide measure of Poverty’, *European Sociological Review*, 23,1, 35-47.

- Fahey, T, Whelan, C. T. and Maître (2005), *First European Quality of Life Survey: Income Inequalities and Deprivation*, Luxembourg; Office for Official Publication of the European Communities
- Ferrera, M. (2006), 'Friends, Not Foes: European Integration and National Welfare States', Giddens, A, Diamond, P. and Liddle, R. (eds), *Global Europe, Social Europe*, Cambridge Polity Press.
- Frey, B.S. and Stutzer, A. (2002), *Happiness and Economics*, Princeton, New Jersey: Princeton University Press
- Ger, G. and Belk (1996), 'Cross-Cultural Differences in Materialism', *Journal of Economic Psychology*, 17, 55-77.
- Guilén, A. M. and Palier, B. (2004), 'Introduction: Does Europe Matter? Accession to EU and Social Policy Developments in Recent and New Member States', *Journal of European Social Policy*, 14,3:203-209
- Halaby, C. N. (2004). 'Panel Models in Sociological Research: Theory into Practice'. *Annual Review of Sociology* 30:507-544.
- Heidenreich, M and Wunder, C. (2008), 'Patterns of Regional Inequality in the Enlarged Europe', *European Sociological Review*, 24,1: 19-36
- Inglehart, R., Klingemann H.D. (2000), "Genes, Culture, and Democracy." In Ed Diener and E.M. Suh (eds.) *Subjective Well-Being Across Cultures*, Cambridge MA: MIT Press, 2000.
- Jasso, G. (1999), 'How Much Injustice is There in the World: Two New Justice Indices', *American Sociological Review*, 64: 133-168
- Jasso, G. (2000), 'trends in the Experience of Injustice: Justice Indices about Earnings in six Societies, 1991-1996', *Social Justice Research*, 13,2,101-1231
- 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
- Kangas, O. and Ritakallio, V (2007), 'Relative to What? Cross National Pictures of European of Poverty Measured by Regional, National and European Standards', *European Societies*, 9,2:119-145
- Ketfitz, N. (1992), 'Development and the Elimination of Poverty', *Economic Development and Cultural Change*, 30, 649-670
- Manning, N. (2004), 'Diversity and Change in Pre-Accession Central and Eastern Europe Since 1989', *Journal of European Social Policy*, 14,3,: 211-232

- Marlier, E, Atkinson, A., Cantillon and Nolan, B. (2007), *The EU and Social Inclusion :Facing the Challenges*, Bristol: Policy press
- Merton, R. M. (1957), 'Continuities in the Theory of reference Groups and Social Structure', *Social Theory and Social Structure*, New York: Free Press
- Merton R. M. and Kitt , A. S. (1950), 'Contributions to the Theory Reference Group Behaviour' in Merton, R. K. and Lazarfeld, P. F. (eds.), *Studies in the Scope and Method of the American Soldier*, Glencoe: the Free Press pp. 40-106
- Muffels. R. and Fouarge, D. (2004), 'The Role of European Welfare States in Explaining Resources Deprivation' *Social Indicators Research*, 68,3: 299-330.
- Snijders, T. & Bosker, R. (1999). *Multilevel analysis*. London: Sage Publications
- Townsend, P. (1979). *Poverty in the United Kingdom. A survey of household Resources and Standards of Living*. Harmondsworth: Penguin Books.
- Whelan, C. T. and Maître, B. (2005), 'Economic Vulnerability, Multidimensional Deprivation and Social Cohesion in an Enlarged European Community', *International Journal of Comparative Sociology*, 46,2: 215-239.
- Whelan, C. T. and Maître, B. (2007), 'Income , deprivation and economic strain in an Enlarged European Union', *Social Indicators Research*, 83: 309-329
- Whelan, C. T. and Maître, B. (2008), 'Poverty, Deprivation and Economic Vulnerability in the Enlarged EU', in Alber, J., Fahey, T. and Saracen, *Hand book of Quality of Life in the Enlarged European Union*, Oxon: Routledge
- Whelan, C. T. and Maître, B. (forthcoming), 'The 'Europeanisation' of Reference Groups: A reconsideration Using EU-SILC', *European Societies*

Year	Number	Title/Author(s) ESRI Authors/Co-authors <i>Italicised</i>
2008	234	Managing Capital Flows: Experiences from Central and Eastern Europe Jürgen von Hagen and <i>Iulia Siedschlag</i>
	233	ICT Diffusion, Innovation Systems, Globalisation and Regional Economic Dynamics: Theory and Empirical Evidence Charlie Karlsson, Gunther Maier, Michaela Trippl, <i>Iulia Siedschlag</i> , Robert Owen and <i>Gavin Murphy</i>
	232	Welfare and Competition Effects of Electricity Interconnection between Great Britain and Ireland <i>Laura Malaguzzi Valeri</i>
	231	Is FDI into China Crowding Out the FDI into the European Union? Laura Resmini and <i>Iulia Siedschlag</i>
	230	Estimating the Economic Cost of Disability in Ireland John Cullinan, Brenda Gannon and <i>Seán Lyons</i>
	229	Controlling the Cost of Controlling the Climate: The Irish Government's Climate Change Strategy Colm McCarthy, <i>Sue Scott</i>
	228	The Impact of Climate Change on the Balanced-Growth-Equivalent: An Application of <i>FUND</i> David Anthoff, <i>Richard S.J. Tol</i>
	227	Changing Returns to Education During a Boom? The Case of Ireland <i>Seamus McGuinness, Frances McGinnity, Philip O'Connell</i>
	226	'New' and 'Old' Social Risks: Life Cycle and Social Class Perspectives on Social Exclusion in Ireland <i>Christopher T. Whelan</i> and <i>Bertrand Maitre</i>
	225	The Climate Preferences of Irish Tourists by Purpose of Travel <i>Seán Lyons, Karen Mayor</i> and <i>Richard S.J. Tol</i>
	224	A Hirsch Measure for the Quality of Research Supervision, and an Illustration with Trade Economists <i>Frances P. Ruane</i> and <i>Richard S.J. Tol</i>

- 223 Environmental Accounts for the Republic of Ireland: 1990-2005
Seán Lyons, Karen Mayor and Richard S.J. Tol
- 2007** 222 Assessing Vulnerability of Selected Sectors under Environmental Tax Reform: The issue of pricing power
J. Fitz Gerald, M. Keeney and S. Scott
- 221 Climate Policy Versus Development Aid
Richard S.J. Tol
- 220 Exports and Productivity – Comparable Evidence for 14 Countries
The International Study Group on Exports and Productivity
- 219 Energy-Using Appliances and Energy-Saving Features: Determinants of Ownership in Ireland
Joe O'Doherty, Seán Lyons and Richard S.J. Tol
- 218 The Public/Private Mix in Irish Acute Public Hospitals: Trends and Implications
Jacqueline O'Reilly and Miriam M. Wiley
- 217 Regret About the Timing of First Sexual Intercourse: The Role of Age and Context
Richard Layte, Hannah McGee
- 216 Determinants of Water Connection Type and Ownership of Water-Using Appliances in Ireland
Joe O'Doherty, Seán Lyons and Richard S.J. Tol
- 215 Unemployment – Stage or Stigma?
Being Unemployed During an Economic Boom
Emer Smyth
- 214 The Value of Lost Load
Richard S.J. Tol
- 213 Adolescents' Educational Attainment and School Experiences in Contemporary Ireland
Merike Darmody, Selina McCoy, Emer Smyth
- 212 Acting Up or Opting Out? Truancy in Irish Secondary Schools
Merike Darmody, Emer Smyth and Selina McCoy

- 211 Where do MNEs Expand Production: Location Choices of the Pharmaceutical Industry in Europe after 1992
Frances P. Ruane, Xiaoheng Zhang
- 210 Holiday Destinations: Understanding the Travel Choices of Irish Tourists
Seán Lyons, Karen Mayor and Richard S.J. Tol
- 209 The Effectiveness of Competition Policy and the Price-Cost Margin: Evidence from Panel Data
Patrick McCloughan, *Seán Lyons* and William Batt
- 208 Tax Structure and Female Labour Market Participation: Evidence from Ireland
Tim Callan, A. Van Soest, J.R. Walsh
- 207 Distributional Effects of Public Education Transfers in Seven European Countries
Tim Callan, Tim Smeeding and Panos Tsakloglou