Does Economic Vulnerability Affect Social Cohesion? Evidence from a Comparative Analysis[1]

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Abstract. This article explores the relationship between social cohesion and social inequalities in Europe. The analysis is built around two main research questions: Does economic vulnerability exert an impact on the level of social cohesion? Does social class mediate between economic vulnerability and social cohesion? The comparative analysis is based on the welfare regimes perspective. In my opinion, welfare state is relevant because it influences not only the relationship between social class and economic vulnerability, but also the link between social cohesion and economic vulnerability. The empirical analysis, based on data from the "European Quality of Life Survey" collected by the European Foundation for the Improvement of Living and Working Conditions in 2003, shows that economic vulnerability does influence social cohesion and that social class and welfare regime are partially able to attenuate this effect.
Keywords: social cohesion; economic vulnerability; social class; welfare regime; latent class analysis; Europe.

Résumé. Cet article examine la relation entre la cohésion sociale et les inégalités sociales en Europe. L'analyse est centrée autour de deux grandes questions, à savoir si la vulnérabilité économique a un effet sur la cohésion sociale et si la classe sociale sert d'intermédiaire entre la vulnérabilité économique et la cohésion sociale. L'analyse comparative est basée sur le point de vue des régimes d'aide sociale. À mon avis, l'État providence est pertinent parce qu'il influence non seulement la relation entre classe sociale et vulnérabilité économique, mais aussi parce qu'il relie cohésion sociale et vulnérabilité économique. L'analyse empirique, basée sur les données de l'enquête *European Quality of Life Survey* de la Fondation européenne pour l'amélioration des conditions de vie et de travail de 2003 indique que la vulnérabilité économique a effectivement un effet sur la cohésion sociale et que la classe sociale et le régime d'aide sociale peuvent en partie en atténuer l'effet.
Mots clés: Cohésion sociale, vulnérabilité sociale, classe sociale, régime d'aide sociale, analyse de structure latente, Europe.

1. I would like to thank two anonymous reviewers for their helpful comments.

Preliminary Remarks

The analysis of the relationship between social cohesion and poverty involves a set of problems in measurement. In fact, these concepts are characterized by a plurality of approaches that complicate a unique examination. While the scientific debate is in a more mature stage for the concept of poverty, the same is not true for social cohesion. Indeed, the concept of social cohesion, despite having its roots in sociological tradition (Pahl 1991), has received growing attention only recently, thanks to the interest shown by government organizations (Canadian Heritage 1995).

Multidimensional aspects of social cohesion and poverty

Social Cohesion

The social cohesion theme poses a couple of problems. The first is the definition of social cohesion; there is a wide heterogeneity in the literature on this topic. In social psychology (Moreno and Jennings 1937; Festinger 1950), social cohesion is seen as a field of forces that holds the individuals within the groupings in which they are. Government organizations define cohesion as a process that creates, among individuals, a sense of belonging to the same community and the feeling that they are recognized as members of that community (Canadian Heritage 1995; Commissariat General du Plan 1997). Other scholars consider social cohesion as a property of the network of social relationships (Moody and White 2003; Friedkin 2004). In this way social cohesion considers both participation in public life and the primary network at community level (Lockwood 1992). Moreover, within the network perspective, social cohesion has been defined as solidarity (Kawachi and Berkman 2000) as well as the willingness to cooperate (Jeannotte et al. 2002).

Some scholars recognize the multidimensional nature of social cohesion, but this agreement disappears when attention is focused on the different dimensions considered by various scholars. The main point of concern is the role of social inequalities. While some authors consider social inequalities a dimension of social cohesion (Jenson 1998; Berger-Schmitt 2000; Chiesi 2004), others argue that the inequalities' sphere is a factor that could influence social cohesion (Whelan and Maître 2005b; Chan et al. 2006).

There is a distinction between the objective and the perceived level of social cohesion. Following Bollen and Hoyle (1990), using small groups theory, the objective level concerns relationships inside social groups; the perceived level includes the sense of belonging and feel-

ings connected with the membership of a social group. Widening these considerations to the whole society, it is possible to refer to the objective level considering behaviours and social relationships. In the case of perceived or subjective level, the focus is on individuals' attitudes about the different domains of human associate life.

Unfortunately, the difficulties in the conceptual field match the problems in the measurement area. This is due to the gap between theory and the actual operationalization of social cohesion. Almost all empirical research is obliged to come to terms with the available data. As a consequence, this procedure entails the risk of "operational opportunism," where hypothesis construction, or conceptual definition, is driven by available measures instead of theoretical arguments (Edwards and Foley 2001). Social cohesion has been measured following two distinct traditions. For the first case, social cohesion is seen as a property of the social system and consequently measurement takes place at the macro level by means of aggregated data. The most used indicators are: criminality and unemployment rate, educational level, proportion of individuals showing racist attitudes, inequalities index, newspaper readership, and number of voluntary associations (Wilkinson 1996; Berger-Schmitt 2000; Rajulton et al. 2007). In the second case, the overall level of social cohesion is linked to the individuals' attitudes toward the different spheres of social life (Whelan and Maître 2005b, Chan et al. 2006) and the behaviours and relationships occurring at the micro level (Sampson 1991; Lee 2000; Villarreal and Silva 2006).

In the heterogeneous field of social cohesion definitions, a multidimensional approach deals with the double nature — objective and perceived — of social cohesion and the different areas of social life in which it can be analyzed. Following Chan et al. (2006), I define social cohesion as a state of affairs concerning the interactions among members of society characterized by a set of attitudes and norms and taking place inside the different domains of human associate life. Following Whelan and Maître (2005b), these domains are identified by three dimensions: micro (relationships within primary groups), meso (the strength and nature of relationship within secondary groups), and macro (related to the common sense of belonging to society and institutional trust). Due to data limitations, in this article the focus will be only on the macro level.

Poverty

The debate concerning the concept of poverty is characterized by several approaches.[2] In the measurement process, as noticed by Lucchini and

2. See Atkinson (1998) for a deeper review.

Sarti (2005), the researcher has to choose the following: the relevant variables, the unit of analysis, the equivalence scale, and the temporal unit of observation. Poverty is measured by means of thresholds that can be identified in two different ways. The first, known as the absolute approach, refers to a set of goods and services considered fundamental in order to satisfy the main needs (Rowntree 1901). Following this argument, an individual is considered poor if he/she is unable to acquire this set of goods. The relative approach, on the other hand, defines the poverty line with reference to the average standard of living of the whole community (Townsend 1979). The different thresholds are built either by means of direct measures of poverty by considering consumption, or indirect measures by considering income. Empirical research demonstrates that the two approaches give incoherent images of poverty and integrative approaches have been developed to control for its multidimensional nature (Nolan and Whelan 1987). Consumption and income are objective indicators, but poverty can be also measured in subjective terms (Hagenaars and de Vos 1987). Here poverty is measured using the individuals' perception of their own situation.

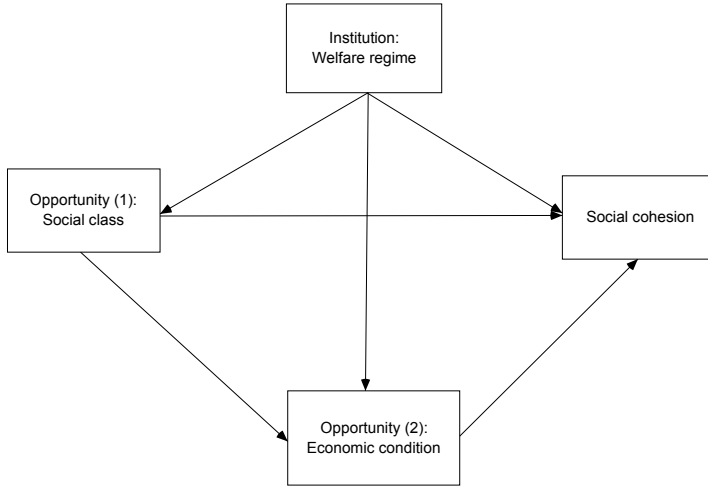
In this paper, I address the issue of poverty by following recent contributions by Whelan et al. (2001), Whelan and Maître (2005) and Fahey et al. (2005) applying latent class models to identify vulnerable groups.[3] These groups are vulnerable to economic exclusion because of a distinctive risk of falling below a critical resource level, being exposed to lifestyle deprivation, and experiencing subjective economic strain (Whelan and Maître 2005:425).

Research Questions

The aim of this paper is to analyze the relationships between social cohesion and inequalities in Europe. The argument is based on the structural position thesis, according to which people differ in their views due to their social positions. Here, I will test a self interest oriented explanation, which asserts that attitudes are influenced by economic condition and by social position. The theoretical model (Fig. 1) is built according to DBO (desires, beliefs, and opportunities) theory, sketched by Elster (1989) and Hedström (2005). Desires and beliefs roughly correspond to individuals' expectations and preferences that form the attitudes toward social cohesion. Following the sour grapes mechanism (Elster 1983), people desire what they believe can be possible. But the beliefs about what is possible are shaped by the opportunities structure — i.e., social position and economic condition. In other words, economic interest

3. See also Breen and Moisio (2004) and Moisio (2004).

Figure 1. Graphical representation of the theoretical model.



is one of the primary forces able to influence social cohesion. Another force in action is the institutional arrangement which can weaken the role played by individual interest and at the same time influence the perception of social reality (Mau 2004).

There are three explanations for the structural position thesis in the literature (Hadler 2005:133)[4]:

1. Self interest-oriented explanations, which assert that attitudes are influenced by social position.[5]
2. Theories that consider cognitive processes such as the perception of inequalities.
3. Theories that combine both aspects and examine the link between the position of a person within a society and her or his judgments.

From the theoretical model it is possible to derive the following research questions: Does economic inequality exert a direct and negative impact on social cohesion? Is the individual position in the stratification system able to attenuate the strength of the relationships between social cohesion and economic inequality? Are institutional arrangements — i.e., the welfare state — able to play a role in the connection between social cohesion and economic inequality?

4. Given data limitations, I can consider only the first explanation; in fact, there is no information about the perception of inequality in the EQLS database.
5. The theoretical model sketched in Figure 1 refers to this explanation.

The first question regards the connection between poverty and social cohesion. It can be analyzed following two different approaches (Fahey et al. 2005). The first assumes, without deep consideration, the existence of a direct and negative connection between social cohesion and poverty. The second examines this link in a deeper way, arguing a causal chain from objective disadvantages to social cohesion, passing through the concept of relative deprivation (*sensu* Runciman 1966). Whelan et al. (2001:358–359) note that a central element in the concept of deprivation, as it is widely understood, refers to being denied the opportunity to have or do something. Therefore, deprivation is seen as an inability to obtain the goods, facilities, and opportunities to participate in a way identified as generally appropriate in the community in question. Relative poverty focuses only on objective condition; relative deprivation is concerned with subjective responses to objective inequalities and thus is closer to the aspects of subjectivity that might have a bearing on social cohesion (Fahey et al. 2005:10). Following the perspective of Fahey et al. (2005), it is necessary to consider the mediating role of the subjective dimension to grasp the underlying processes at work.

In case of the second research question, I use social class as a proxy for the individual position in the stratification system. The debate about the relevance of social class in the analysis of social phenomena is widespread and far from conclusion.[6] In this paper, following Goldthorpe (2000), I consider social class as an aggregate of individuals or families within a population that may come to form community with a greater or less degree of demographic, subcultural, and social identity. Social class plays a pivotal role as a result of its influence across life chances,[7] affecting attitudes and behaviours associated with social cohesion.

The third question regards the role played by the institutional arrangements. I follow the welfare regimes perspective, understood as a method which rejects the idea of social citizenship. According to Gallie and Paugam (2000), welfare regimes are systems of public regulation that assure protection and conservation of social cohesion through public intervention in different spheres of human life. According to the regime theory, welfare regimes comprise not only formalized social policy arrangements, but also collective patterns of institutionalized solidarity and social justice beliefs (Esping-Andersen 1990; 1999). The relevance of welfare regimes perspective is twofold. First of all, as shown by Whelan and Maître (2005a), the welfare regimes shape the relationship

6. See Wright (2005) for a review of the different approaches.

7. A class schema based on the neo-Weberian tradition is the best tool to explain the inequalities in the life chance (Breen 2005; Wright 2005), giving me the opportunity to build a theoretical bridge between life chance and social cohesion.

between social class and economic vulnerability. By influencing the connection between social cohesion and economic vulnerability, it may change the individual's perception of his own opportunity structure. Indeed, individuals who live in a system that guarantees protection against risks connected with market economy will show positive attitudes and a high level of trust toward the society's institutions.

DATA, VARIABLES AND METHODS

In this study, I use data from the *European Quality of Life Survey* (EQLS), collected by the European Foundation for the Improvement of Living and Working Conditions (Eurofound) in 2003. The survey is based on 23,939 individuals in 28 European countries. The survey collects comparable information on household and family composition, working conditions, social position, income and standard of living, time use and work-life balance, housing conditions, political participation, social support and social networks, health and subjective well-being. National response rates varied from 30% in Spain to 90% in Germany. In each country, around 1,000 persons were interviewed, except in the smaller countries of Luxembourg, Malta, Estonia, Cyprus, and Slovenia (600 respondents each).[8] The overall response rate was 58.4%. The following analysis considers only employed[9] people and excludes all cases with at least one missing on the variables of interest.[10] Differences among European regions were investigated by dividing countries according to the welfare regime theory (Table 1).[11]

Dependent Variables

As previously highlighted, I use the concept of social cohesion with reference to the work of Whelan and Maître (2005b). I consider only the macro level of social cohesion, that is identified by attitudes toward the

8. See Arendt (2003) and Nauenburg and Mertel (2004) for more detailed information about sample strategy, response rate and fieldwork.
9. I narrow the analysis only to employed people, because social class — one of the relevant factors for the analysis — is based on occupations.
10. In this way all the models presented are based on the same characteristics to facilitate the comparison.
11. There are different classifications of European countries in the literature (Esping-Andersen 1990; Ferrera 1996). In this study I follow the Ferrera (1996) perspective with the addition of the category of postsocialist countries. Following Hoekstra and Zad (2006), Kääriäinen (2006) and Keskin-Kozat (2006) Malta, Cyprus, and Turkey are included in the Mediterranean regime, and the Netherlands is treated as a social-democratic country.

Table 1. Welfare Regimes.

Conservative	*Mediterranean*	*Liberal*	*Social Democratic*	*Post Communist*
Austria	Greece	Ireland	Denmark	Bulgaria
Belgium	Italy	UK	Finland	Czech Republic
France	Portugal		Sweden	Estonia
Germany	Spain		The Netherlands	Hungary
Luxembourg	Malta			Lithuania
	Cyprus			Latvia
	Turkey			Poland
				Romania
				Slovakia
				Slovenia

functioning of the whole society and its institutions.[12] I used the following items:

1. Confidence in the social benefit system: interviewees were questioned about their confidence in the social benefit system and state pension system on a scale of 1 (low) to 4 (high).
2. Perceived intergroup tensions: respondents were asked about their perception of tension levels on a scale of 1 (low) to 3 (high) between five social groups: "poor and rich people," "management and workers," "men and women," "old and young people," and "different racial and ethnic groups."
3. Perceived quality of public services: interviewed persons rated the quality of public services on a scale of 1 (very poor) to 10 (high quality). The public services evaluated were health services, education system, public transport, social services, state pension system.
4. Alienation: respondents were asked to express the extent of their agreement with statements like "in order to get ahead nowadays you are forced to do things that are not correct" and they were asked if they "feel left out of society," if "good luck is more important than hard work for success," and if "life has become so complicated that they almost can't find their way." The scale goes from 1 (agree completely) to 4 (disagree completely).

A set of Cronbach's alpha has been calculated to assess the reliability for the constructed scales (Table 2). The test indicates a satisfactory level; all the coefficients exceed 0.60 with most approaching 0.80, with the exception of alienation in the Mediterranean regime.

12. I consider only the macro level because EQLS does not supply sufficient information for the measurement of all levels of social cohesion.

Table 2. Cronbach's alpha for the Different Social Cohesion Scales.

	Conservative	*Mediterranean*	*Liberal*	*Social Democratic*	*Post Communist*
Trust	0.761	0.778	0.837	0.680	0.776
Quality	0.793	0.870	0.821	0.814	0.855
Tension	0.720	0.790	0.700	0.722	0.673
Alienation	0.607	0.564	0.679	0.602	0.609

Four additive indexes[13] built from these items are used as dependent variables in the following analysis. The variables are coded so that high values mean a high level of social cohesion for all the variables.[14]

Independent Variables

Following Fahey et al. (2005) and Whelan and Maître (2006), I consider economic vulnerability as a latent trait whose indicators are: income, material deprivation, and economic stress. Income is measured as the household total net equivalent income using the modified OECD equivalence scale and adjusting for purchase power parity.[15] This scale, first proposed by Haagenars et al. (1994), assigns a value of 1 to the household head, 0.5 to each additional adult member, and 0.3 to each child.[16]

Economic stress is a subjective measure of the perceived economic condition. It is based on the following question: "Is your household's disposable income enough for you to get through the month?" In this way I can differentiate those households that have "difficulty" or "great difficulty" in getting through the month, from all the others. The measure of material deprivation captures *exclusion from participation* in "ordinary living" in the relevant community, using three types of items. For the first set of items the absence and affordability elements are incorporated in one question as: "There are some things many people cannot afford even if they would like to. Can I just check whether your household can afford these if you want them?" The six items were:

1. Keeping your home adequately warm.
2. Paying for a week's annual holiday away from home.
3. Replacing any worn-out furniture.
4. Buying new, rather than second-hand clothes.

13. I have normalized the indexes to obtain a range of 0–1 for all the new variables.

14. High scores on the "Alienation" index means a high level of social cohesion and a low level of alienation.

15. As noted by Whelan and Maitre (2005b), it is not reasonable to expect that EQLS can approach the precision of, for example, the European Community Household Panel (ECHP) in measuring household income. Therefore, I do not calculate income poverty lines and income analysis is conducted at the level of income quartiles.

16. An individual over 14 is considered an adult.

5. Eating meat, chicken ,or fish every second day, if you wanted to.
6. Having friends or family for a drink or meal at least once a month.

For the second set of items respondents were asked if the household possessed the following items and if not, was it because they could not afford it. The three items are:

1. A car or van.
2. A home computer.
3. A washing machine.

The final item deals with debt and is built from information on the experience of utility bill arrears in the previous twelve months. The deprivation measure is then constructed as the simple sum of the deficits on the ten mentioned items. Now I can perform a latent class analysis using these indicators as manifest variables. Roughly speaking, latent class analysis is a factor analysis in which the items and the latent trait are categorical variables (Bartholomew and Knott 1999). More precisely, "with latent class analysis it is possible to assume that each observation is a member of one and only one of t latent (unobservable) classes and that local independence[17] exists between the manifest variable" (Magidson and Vermunt 2004:175). Generally speaking, within a specific class t of the latent nominal variable X (X=t), the probability of a specific combination of responses (e.g., A=i, B=j and C=k) can be written as the product of the probability of a respondent belonging to Class t of X, times the product of the conditional probabilities of responding i to item A, j to item B, and k to item C, given that the respondent belongs to Class t:

$$\pi_{ijk}^{ABC} = \pi_t^X \pi_{it}^{A|X} \pi_{jt}^{B|X} \pi_{kt}^{C|X} \quad (1)$$

where π_t^X denotes the probability of being in latent class t=1,2,…, T of latent variable X; $\pi_{it}^{A|X}$ denotes the conditional probability of obtaining the ith response to item A, from members of class t, i=1,2,…, I; and, $\pi_{jt}^{B|X}$, $\pi_{kt}^{C|X}$, j=1,2,…, J, k=1,2,…, K, denote the corresponding probabilities for items B and C respectively. In particular, the model is estimated using the LEM program (Vermunt 1997).

In the analysis, economic stress and material deprivation are treated as dichotomous variables while income includes the four quartiles. Using LEM notation "I" represents income with i=1,2,3,4; "D" deprivation with j=1,2; "E" economic stress with k=1,2 and X is the latent member, whose identification and size estimation will be $\pi_{ijk}^{IDE} = \pi_t^X \pi_{it}^{I|X} \pi_{jt}^{D|X} \pi_{kt}^{E|X}$ f the

17. Local independence refers to the condition when the observed associations are equal to zero within the categories of the latent variable (McCutcheon 1987, McCutcheon and Mills 1998). In other words, the relationships between two variables will be spurious if a third latent variable is considered.

analysis. After introducing the manifest variables' specifications, equation (1) becomes:

$$\pi_{tijkl}^{XIDEZ} = \pi_{t}^{X}\,\pi_{tl}^{X|Z}\,\pi_{it}^{I|XZ}\,\pi_{jt}^{D|XZ}\,\pi_{kt}^{E|XZ} \quad (2)$$

This model is known as homogeneous model, but in this work I will also estimate a heterogeneous model in which $\pi_{il}^{I|X}$, $\pi_{jl}^{D|X}$ and $\pi_{kl}^{E|X}$ depend upon the action of the variable geographic area "Z" with l=1,2,3,4,5. As a consequence, equation (2) becomes:

Table 3. Latent Class Models.

	L^2	*d.f.*	*Expl. Var. (%)*	*Misclassified cases (%)*	*BIC*
1. Independence (I|Z D|Z E|Z)	11,625.31	49	–	21.02	8,055.42
2. Homogeneous LC model (X=2) (X, I|X, D|X, E|X)	3,485.38	60	70.02	15.09	2,880.38
3. Homogeneous LC model (X=3) (X, I|X, D|X, E|X)	1,929.16	50	83.41	8.90	1,425.00
4. Heterogeneous LC model (X=2) (X, I|XZ, D|XZ, E|XZ)	219.50	20	98.11	2.53	17.83

L^2=likelihood ratio; d.f. = degree of freedom; explained variance =11625,3083-L^2/11625,3083 x 100
BIC (bayesian information criterion) = L^2-(d.f.) x ln(N).

(3)

Table 3 shows the fit of the various models estimated. In particular, I use the independent model as a benchmark. The model that proves the best fit is the fourth model, which shows lower BIC (17.83) and highest percentage of explained variance (98%).[18]

Recently, Goldthorpe (2000) has developed a slightly different class schema based on the contract theory, where the crucial dimensions are the degree of asset-specify involved and the extent of monitoring difficulty. The first dimension considers the specific skills requested for a given job, while the second is related to the autonomy and discretion associated with the occupation considered. As a result I have: service relationship (I and II); labour contract (IIIb, VI, VIIa, and VIIb) and mixed relationship (IIIa and V). The fundamental difference between the two models consists in the positioning of the class IIIb; in fact, it is treated as middle class in the EGP model, and as part of the working class in

18. I have interpreted the reduction in the likelihood ratio as an increase in the explained variance using the independence model as a benchmark. It is also useful to stress that the percentage of cases misclassified by latent class models is different from the index of dissimilarity (Δ). It should be understood in terms of measurement error and not as a measure of goodness of fit (Chan and Goldthorpe 2007:16).

the contract theory. In this article I use a schema based on the contract theory. However, given the low numbers of several occupational classes

Table 4. Descriptive Statistics of the Variable Used in the Analysis.

Categorical variables					
	%	*Sex*	*%*	*Education*	*%*
Economic vulnerability					
Vulnerable	38.3	Female	52.9	Primary	20.3
Not vulnerable	61.7	Male	47.1	Secondary	57.3
Total	100.0	Total	100.0	Degree	20.7
(N)	(12,931)	(N)	(12,931)	None	1.8
				Total	100.0
Social class		*Welfare regimes*		(N)	(12,931)
Service class	18.6	Mediterranean	21.6		
Middle class	38.9	Liberal	6.9		
Self-employed	10.9	Social democratic	18.5		
Working class	31.6	Post communist	31.5		
Total	100.0	Conservative	21.5		
(N)	(12,931)	Total	100.0		
		(N)	(12,931)		

Continuous variables			
	Mean	*Std. dev.*	*MIN – MAX*
Trust	0.50	0.28	0 – 1
Quality	0.54	0.20	0 – 1
Tension	0.45	0.22	0 – 1
Alienation	0.62	0.20	0 – 1
Age	46.5	16.1	18 – 96

in the sample of subjects considered, I grouped the occupational classes using a four-category model: service class, middle class, self employed, and working class. In this way I have a small number of social classes, which reduces errors in classifying individuals in classes. Table 4 reports the descriptive statistics for the variables used in the analysis.

Interpretation of Results

The first research question regards the role of economic inequality. Looking at the models estimated (Table 5), I note that economic vulnerability exerts a negative effect on social cohesion. People with economic problems tend to show lower levels of social cohesion than individuals who do not experience economic difficulties. This result could be explained by the more general problem of social exclusion. More precisely, the risk

Table 5. OLS Estimates of the Score on the Different Indicators of Social Cohesion

	Trust		*Quality*		*Tension*		*Alienation*	
	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$
Constant	0.583***	0.021	0.653***	0.015	0.513***	0.018	0.693***	0.015
Ec. vulnerability								
Vulnerable	-0.054***	0.005	-0.040***	0.004	-0.025***	0.005	-0.066***	0.004
Not vulnerable[a]	0	-	0	-	0	-	0	-
Social Class								
Service class	-0.003	0.008	0.001	0.005	0.026***	0.007	0.056***	0.006
Middle class	0.001	0.006	-0.007	0.004	0.002	0.005	0.019***	0.004
Self-employed	-0.033***	0.008	-0.019**	0.006	0.007	0.007	0.026***	0.006
Working class[a]	0	-	0	-	0	-	0	-
Age	2.296***	0.152	1.226***	0.105	0.757***	0.129	-0.245*	0.110
Age^2	0.051***	0.008	0.035***	0.006	0.026***	0.007	0.011	0.006
Welfare regime								
Mediterranean	-0.017*	0.007	-0.140***	0.005	0.058***	0.006	-0.038***	0.005
Liberal	0.015	0.010	-0.106***	0.007	0.027**	0.008	0.000	0.007
Social democratic	0.159***	0.008	0.039***	0.005	0.097***	0.007	0.080***	0.006
Post communist	-0.110***	0.007	-0.173***	0.005	0.028***	0.006	-0.091***	0.005
Conservative[a]	0	-	0	-	0	-	0	-
Sex								
Female	-0.004	0.005	0.010**	0.003	-0.033***	0.004	0.003	0.003
Male[a]	0	-	0	-	0	-	0	-
Education								
Primary	-0.003	0.018	0.004	0.012	-0.040**	0.015	-0.004	0.013
Secondary	-0.012	0.018	0.013	0.012	-0.030*	0.015	0.012	0.013
Degree	0.016	0.019	0.009	0.004	-0.013	0.016	0.050***	0.014
None[a]	0	-	0	-	0	-	0	-
	$R^2 = 0.136$		$R^2 = 0.209$		$R^2 = 0.036$		$R^2 = 0.151$	
	R^2 adj = 0.135		R^2 adj = 0.208		R^2 adj = 0.035		R^2 adj = 0.150	
	N = 12,931		N = 12,931		N = 12,931		N = 12,931	

a: reference category.
* = p < 0.10; ** = p < 0.05; *** = p < 0.01.
Age has been centred around the mean and divided by 1,000.

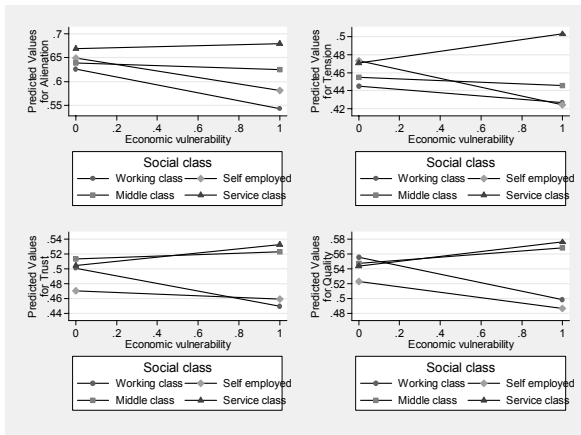
connected with economic vulnerability lies in the link with social exclusion (Sen 1992). Following Sen (1992), a lack of economic resources could lead to a deprivation in the capability space; economic vulnerability has a negative influence on a number of abilities, including the skill to

take part in community life. This may be mirrored in low levels of trust and negative attitudes toward institutions.

The second hypothesis regards the influence of social class.[19] Given its crucial role in the formation of life chances, social class could attenuate the role played by economic inequality. A direct effect of class inequalities is coherent with an explanation that takes into account the expectations of the reference group (Merton 1949; Runciman 1966). Indeed, it is possible that people who live in disadvantages settings will have an higher probability of developing negative attitudes toward society and its institutions. These attitudes come from comparing one's own situation with the conditions of people living in social positions characterized by better structural conditions and opportunities.

The hypothesis about the effects of social class and welfare regime is addressed in more detail by looking at the effect of economic vulnerability across social classes and across welfare regimes. In order to present the results efficiently I exploit a graphical representation.[20] The results (Fig. 2)[21] corroborate the hypothesis of a class effect. Individuals in service and middle class have, on average, higher levels of social cohesion than people belonging to the other classes (self-employed and working

Figure 2.Graphical representation of the interaction between economic vulnerability and social class.



19. A partial class effect is tracked down also in Table 5, where there is a positive and significant effect, as supposed, of service class on "Tension" and "Alienation."

20. The following graphs (Figure 1 and 2) are built using the stata routine predxcon that can be downloaded at the following address: http://ideas.repec.org/c/boc/bocode/s402602.html (Access date: 08/04/2010).

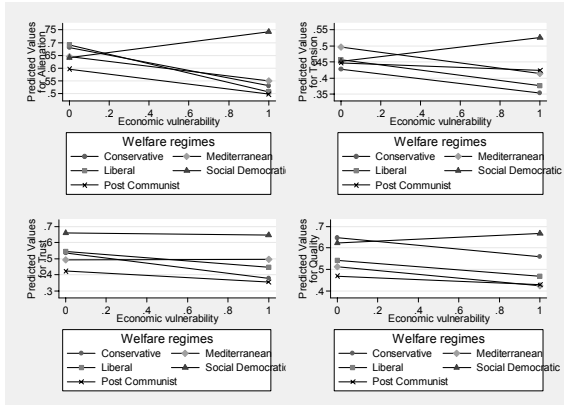
21. The models from which these graphs have been drawn are reported in the appendix (Table 1.a). Economic vulnerability is a dummy variable, the value "0" means "Not vulnerable," while "1" stands for "Vulnerable."

class). There are no dramatic class differences between wealthy people and it is possible to notice a class effect for vulnerable individuals. In the variables "Trust" and "Quality" a class polarization emerges: vulnerable people belonging to service and middle classes show positive attitudes toward institutions, while the opposite is true for self-employed and working classes.

Looking at "Alienation" the results show a clear class ranking. Vulnerable people in higher social classes have, on average, low alienation levels.[22] The image is a bit different with regard to "Tension," where the polarization is between service class and all the other classes. In general, the empirical evidence illustrates that vulnerable people in higher social positions show high levels of social cohesion. This could be because they perceive their situation as temporary, without losing trust in the whole society.

Regarding the role of the welfare state, it is interesting to note the distinctive pattern of the social democratic regime (Fig. 3).[23] Vulnerable people who live in this area have a higher social cohesion than individuals in other areas. However, the social democratic regime is a peculiar case because the vulnerable group tends to show higher level of social cohesion than the nonvulnerable group. It emerges that people living in the social democratic area are less aware of the effect of economic vulnerability. The protection against social risks makes them more trustful of institutions and the whole society in general. This suggests that the so-

Figure 3. Graphical representation of the interaction between economic vulnerability and welfare regimes.



22. An high score on this index means an high level of social cohesion and, as a consequence, a low level of alienation.

23. See Table 2.a in the appendix for the complete results.

cial democratic regime has better integrative power than other regimes. It is important to emphasize that the last statement is always true only for people living in a situation of economic vulnerability. Indeed, as shown in Figure 3, wealthy people show no dramatic differences between the various welfare regimes.

In general, the social democratic regime seems to possess a remarkable integrative power. A first explanation highlights the role of egoistic interests in attitude formation (Goodin and LeGrand 1987). The basic idea is that people living with a notable protection against the risks connected with the uneven distribution of resources tend to show positive attitudes toward society and the functioning of its institutions. This is possible because institutional context is able to shape the individual's perception of his own opportunities structure. Another explanation is based on models of solidarity and of social justice. These principles are historically embedded in the welfare institutions that shape public discourse and individual values (Mau 2004). In this case the institutional context affects the inequalities' acceptability. The underlying argument suggests that welfare benefits could broaden the individual horizons making possible a greater inclination to contribute to the public goods' formation (Titmuss 1968; Marshall 1975).

Concluding Discussion

This article draws attention to the relationship between social cohesion and social inequalities. The empirical analysis was guided by a set of research questions about the role of economic vulnerability, social class, and institutional contexts in shaping social cohesion.

First of all, I found that economic vulnerability negatively influences social cohesion. With the second research question, I evaluated the effects exerted by social class. I noted that people in higher social positions tend to have higher levels of social cohesion and the effect of economic vulnerability follows different patterns inside different classes. Indeed, a class polarization emerges with service and middle classes that exploits their better structural position and reduces the consequences of economic vulnerability. I also assessed the influence of the institutional context in welfare regimes theory. The most interesting result was the divergent pattern exhibited by the social democratic regime, which could attenuate the negative effects of economic vulnerability. The suggested mechanism was that vulnerable people in the Nordic countries believe in institutional protection against the risks of the market economy. Despite the strong effect of economic conditions, it is clear that the indi-

vidual structural position in welfare regime— measured by social class and institutional context — could partially weaken the negative effect of economic vulnerability on social cohesion. As a consequence, I found some empirical evidences in favour of the theoretical model previously sketched. It seems clear that economic interest is a driving force for social cohesion and that institutional context and social position can reduce the role played by economic interest. In any case, more research is needed in order to reach a deeper understanding of the relationship between social cohesion and social inequalities. Due to data limitations, I tried to detect if and how actual inequalities influence social cohesion without considering the effect of cognitive processes at the base of perceived inequalities. The reference is to the role played by criteria of social justice that emerge from the relationships between rewards, costs and investments linked to social actors' activities (Homans 1974). From this point of view, social cohesion could be threatened not only by the actual level of inequalities, but even more by the degree of acceptance of inequalities.[24] Thus future work should focus the attention on the interplay between social cohesion and the actual and perceived inequalities.

24. In some cases, perceived inequalities could be more important than the actual ones in determining social discontent and propensities to social struggles (Gijsberts, 2002). This means that high levels of inequalities could coexist with social cohesion if these inequalities are considered fair.

Appendix

In this appendix I report the complete models from which I derive the results graphically presented in figure 2 and 3.

TABLE 1.a. OLS Estimates of the Score on the Different Indicators of Social Cohesion.

	Trust		*Quality*		*Tension*		*Alienation*	
	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$
Constant	0.528***	0.021	0.622***	0.014	0.490***	0.017	0.640***	0.015
Economic vulnerability								
Vulnerable	-0.054***	0.008	-0.053***	0.006	-0.024***	0.007	-0.085***	0.006
Not vulnerable[a]	0	-	0	-	0	-	0	-
Social Class								
Service class	-0.031**	0.010	-0.017*	0.007	0.019*	0.009	0.025***	0.007
Middle class	-0.001	0.008	-0.020***	0.005	0.004	0.006	0.004	0.005
Self-employed	-0.001	0.009	-0.007	0.006	0.019*	0.008	0.041***	0.007
Working class[a]	0	-	0	-	0	-	0	-
Age	2.298***	0.152	1.214***	0.105	0.749***	0.129	-0.265*	0.110
Age^2	0.052***	0.008	0.036***	0.006	0.027***	0.007	0.011	0.006
Welfare regime								
Mediterranean	-0.017*	0.007	-0.140***	0.005	0.058***	0.006	-0.038***	0.005
Liberal	0.015	0.010	-0.107***	0.007	0.027**	0.008	-0.001	0.007
Social democratic	0.160***	0.008	0.037***	0.005	0.095***	0.007	0.076***	0.006
Post communist	-0.110***	0.007	-0.173***	0.005	0.027***	0.006	-0.092***	0.005
Conservative[a]	0	-	0	-	0	-	0	-
Sex								
Female	-0.004	0.005	0.009**	0.003	-0.034***	0.004	0.003	0.003
Male[a]	0	-	0	-	0	-	0	-
Education								
Primary	-0.003	0.018	0.003	0.012	-0.041**	0.015	-0.005	0.013
Secondary	-0.012	0.018	0.011	0.012	-0.032*	0.015	0.009	0.013
Degree	0.017	0.019	0.008	0.013	-0.016	0.016	0.047***	0.014
None[a]	0	-	0	-	0	-	0	-
Vulnerability*class								
Service class*Vuln.	-0.008	0.014	0.017	0.010	0.028*	0.012	0.041***	0.010
Middle class*Vuln.	0.005	0.011	0.032***	0.008	-0.004	0.010	0.036***	0.008
Self-employed*Vuln.	-0.008	0.018	-0.018	0.012	-0.041**	0.015	-0.014	0.013
	$R^2 = 0.136$		$R^2 = 0.210$		$R^2 = 0.037$		$R^2 = 0.152$	
	R^2 adj = 0.135		R^2 adj = 0.209		R^2 adj = 0.036		R^2 adj = 0.151	
	N = 12,931		N = 12,931		N = 12,931		N = 12,931	

a: reference category.
* = p < 0.10; ** = p < 0.05; *** = p < 0.01.
Age has been centred around the mean and divided by 1,000.

TABLE 2a. OLS Estimates of the Score on the Different Indicators of Social Cohesion.

	Trust		*Quality*		*Tension*		*Alienation*	
	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$	$\hat{\beta}$	$\hat{\sigma}(\hat{\beta})$
Constant	0.537***	0.020	0.627***	0.014	0.503***	0.017	0.642***	0.014
Economic vulnerability								
Vulnerable	-0.159***	0.015	-0.089***	0.011	-0.075***	0.013	-0.151***	0.011
Not vulnerable[a]	0	-	0	-	0	-	0	-
Social Class								
Service class	-0.035***	0.008	-0.023***	0.006	0.002	0.007	0.017**	0.006
Middle class	-0.001	0.006	-0.010*	0.004	-0.002	0.005	0.013**	0.004
Self-employed	-0.007	0.008	-0.006	0.005	0.019**	0.006	0.044***	0.005
Working class[a]	0	-	0	-	0	-	0	-
Age	2.261***	0.152	1.162***	0.105	0.683***	0.128	-0.319**	0.108
Age^2	0.050***	0.008	0.036***	0.006	0.027***	0.007	0.010	0.006
Welfare regime								
Mediterranean	-0.044***	0.008	-0.131***	0.006	0.069***	0.007	-0.038***	0.006
Liberal	0.010	0.011	-0.107***	0.007	0.029**	0.009	0.009	0.008
Social democratic	0.121***	0.010	-0.024**	0.007	0.027**	0.009	-0.039***	0.007
Post communist	-0.115***	0.008	-0.178***	0.005	0.020**	0.007	-0.086***	0.006
Conservative[a]	0	-	0	-	0	-	0	-
Sex								
Female	-0.003	0.005	0.009**	0.003	-0.034***	0.004	0.003	0.003
Male[a]								
Education								
Primary	-0.001	0.018	0.002	0.012	-0.042**	0.015	-0.001	0.013
Secondary	-0.006	0.018	0.010	0.012	-0.034*	0.015	0.016	0.013
Degree	0.021	0.019	0.003	0.013	-0.021	0.016	0.048***	0.013
None[a]	0	-	0	-	0	-	0	-
Vulnerability*regime								
Mediterranean*Vuln.	0.157***	0.019	-0.001	0.013	-0.010	0.016	0.052***	0.013
Liberal*Vuln.	0.059*	0.028	0.013	0.019	-0.006	0.024	-0.034	0.020
Soc. dem.*Vuln.	0.145***	0.019	0.134***	0.013	0.146***	0.016	0.249***	0.013
Post comm.*Vuln.	0.090***	0.017	0.047***	0.012	0.051***	0.015	0.052***	0.012
	$R^2 = 0.142$		$R^2 = 0.220$		$R^2 = 0.048$		$R^2 = 0.186$	
	R^2 adj = 0.141		R^2 adj = 0.219		R^2 adj = 0.047		R^2 adj = 0.185	
	N = 12,931		N = 12,931		N = 12,931		N = 12,931	

a: reference category.
* = p < 0.10; ** = p < 0.05; *** = p < 0.01.
Age has been centred around the mean and divided by 1,000.

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