
Patterns of Formal and Informal Social Capital in Europe

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Studies of social capital have concentrated upon either formal associative behaviour or informal social relations (networks). This article looks at the relationship between these two types of social capital by examining social networks, social and family support (informal social capital) on the one hand and associational behaviour along with social trust (formal social capital) on the other. Using the Eurobarometer 62.2 covering a representative sample of 27 countries the analysis found that with this approach, regions in Europe can be grouped according to the two dimensions, whether they are high on both forms of social capital (complementarity) or whether informal social capital substitutes for formal social capital (substitution). The Scandinavian countries and the Netherlands had the highest levels of all forms of social capital. In the South and East of Europe informal social capital was more important, but whilst in the South this was mainly in the form of family support, in the East informal support outside the family was also important. Thus, we can speak of 'social capital regimes' to better understand the various cultures of participation and cohesion across Europe.

Social capital is often assumed to be a universal concept, although it originated in the United States and Western Europe. However, since social capital refers to the way in which people participate in their society and the forms of social bonding that take place, we might expect that these are necessarily relative to the nature of the society or culture in which they are embedded (Delhey and Newton, 2005). In a broader sense, social capital is a measure of social cohesion. In this article, we explore the way in which different kinds of social capital relate to one another, taking into account 27 European countries. This exploratory analysis uses a 'bottom up' approach based upon survey analysis to construct 'social capital regimes' rather than trying to squeeze these forms of social cohesion into regional categories developed for other purposes such as that of 'old' or 'new' EU states or welfare typologies.

Formal and Informal Social Capital

There are a great many indicators of social capital so it is important to establish how it may be defined (Adam and Roncevic, 2003). Here we draw upon two main literatures: one concentrating upon civic participation and one upon social networks. With respect to civic participation, there have been some frequently cited debates about the way in which participation raises social capital either through joining civic organizations or participating in public life. The best known of these has centred on the work of Robert Putnam who argues that civic participation is essential to a thriving democracy and the advantages for the society as a whole are emphasized (Putnam, 1994; Putnam, 1995a,b; Putnam, 2000). We have termed this 'formal social capital' since it involves participation in

formally constituted organizations and activities (we are aware that Putnam also considers many other variables, but participation in civil society is a key one). We can add to this the idea of generalized or social trust—trust in other people—since this gives an indication of the societal level of trust that is universalistic in character. Together they help to indicate the degree of altruistic public spirit in different societies (Fukuyama, 1995).

The initial approaches to informal social capital were provided by Pierre Bourdieu (Bourdieu, 1983) and James Coleman (Coleman, 1988) and enriched by the work of social network theorists. Yet, social network theorists emphasize mainly the informal bonds between people (Burt, 2001; Lin, 2001a, b; Lin *et al.*, 2001; Phillipson *et al.*, 2004) either by using a rational choice perspective, where the advantages of networking for the individual are emphasized: ‘The premise behind the notion of social capital is rather simple and straightforward: investment in social relations with expected returns’ (Lin 2001b: 6), or by using the idea of affective ties and friendship (Crow, 2004). Indeed, friendship could be seen as a basic form of social cohesion in fragmented modern societies, where more traditional bonds of family and community have weakened or disappeared (Pahl, 2000, Spencer and Pahl, 2006). Here, trust is particularistic, tied to particular people and social groups.

It is often assumed that these two forms of social capital are linked—that formal social capital would lead to better forms of informal networking and support, which would reinforce social norms of co-operation and trust. This is behind the observations of James Coleman who argues that social capital can enhance the role of community through strengthening social bonds and norms of behaviour (Coleman, 1988). However, this is not necessarily self-evident: it could also be that strong forms of social support can take over civic organizations through clientalist or ‘cronyist’ ties or can even replace formal participation (Portes, 1998). On the other hand, informal participation could provide compensatory support where formal organizations are absent.

Some scholars have tried to differentiate forms of social capital. Putnam, for example, has identified ‘bonding’ social capital, which is exclusionary and tied to strong social networks as opposed to ‘bridging’ social capital which builds bridges between different social groups and is open to others (Woolcock, 1998, Putnam, 2000). ‘Linking social capital’ should bring together different social groups from different layers of society according to this argument, which is also related to social stratification (Mateju and

Vitaskova, 2006). Our concept of formal/informal social capital is not, however, quite the same as this. Informal relations can be of a bonding kind, but can also involve ‘weak’ or ‘bridging’ social ties (Granovetter, 1974), whilst formal social capital can contain both or neither.

These two literatures, the one based upon social network theories, or what we have called *informal* social capital and the other upon the tradition of the study of democracy and civil society, or what we have called *formal* social capital, do not generally refer to each other and are seldom brought together. Nevertheless, the one implies the other and in this article, we aim to see how both these kinds of social capital might be related in comparative perspective. This approach has a long tradition in sociology, going back to the sociology of Emile Durkheim, even if it is a relatively recent debate in public policy (Pahl, 1991).

Social Capital in Comparative Research

We assume that these forms of social capital will vary across Europe. For example, whilst in the Nordic countries, participation in formal organizations is well established, and even encouraged by the welfare state, we might find that the lack of such organizations in the South would mean less opportunities for participation (Salamon *et al.*, 2003). On the other hand, it is possible that in the absence of formal civil society organizations (or due to lack of trust in them) we might find informal social support and informal social capital to be an alternative way of managing social relationships (Sotiropoulos, 2004). This would be important not just as a source of sociability, but also as a way of providing social support in the event of life crises and risks.

Lack of trust in formal organizations in former Communist countries, might also encourage informal networks to develop since these kinds of reciprocity were a traditional way of managing resources under Communism (Wedel, 1992, Ledeneva, 1998). The absence of formal social capital in Eastern and Central Europe has been attributed to the lack of formal civil society organizations (Howard, 2003, Mihaylova, 2004) and the predominance of informal social capital has been identified as possible negative factors in influencing the transition as they are a way of diverting public goods to private purposes (Sik, 1994; Kolankiewicz, 1996; Mateju and Vitaskova, 2006).

One way of approaching the patterning of social capital is to associate it with the role of the welfare state in different parts of Europe. Hence, social capital is related to the conventional typology of 'worlds of welfare capitalism' (Esping-Andersen, 1990; Von Oorschot and Arts, 2004; Kaariainen and Lehtonen, 2006). For example, where there is lack of state support, social capital in the form of voluntary organizations might provide an alternative form of welfare, as it happened in nineteenth-century Britain. On the other hand, self-help and family help can be a compensation for the absence of welfare provisions, as it happens in some parts of Eastern and Southern Europe. Finally, the welfare state can also build upon aspects of social capital, as is the case in Germany, where churches, the Red Cross and other organizations are used in the administration of welfare. The transformation of the welfare state, with the outsourcing of different services and activities to non-government Organizations since the 1990s had led to an expansion and transformation of civil society rather than its decline (Evers and Lavalle, 2004). Hence, we might expect social capital to vary along with welfare state regimes in Europe. The evidence suggests that rather than 'crowding out' social capital, the welfare state supports it (Evers, 1988; Evers and Lavalle, 2004; Von Oorschot and Arts, 2004).

Whilst acknowledging the contribution of this research, we can also ask if the welfare-typology approach (which in any case does not cover many areas of Europe—particularly the post-communist parts) is really the most helpful. By always tying explanations to the same typology, the old categories are reified instead of new, more appropriate categories being framed. In this article, we suggest developing an alternative framework of 'social capital regimes' that can more accurately reflect the patterns of social capital in Europe.

Alternatively, the usual way of classifying European countries used by the EU in policy documents is to make a distinction between the EU15 (Pre-2004 Member States) the new Member States (NMS10) admitted after 2004 and the candidate countries (mostly meaning Romania and Bulgaria until 2007, although increasingly Turkey and Croatia might be included). This typology is equally arbitrary, being based upon date of accession to the EU, which we do not assume has much bearing upon patterns of social life.

The two main different kinds of social capital that we have described here—formal and informal social capital—could relate to each other in different ways. From the literature we might expect in some instances

that informal capital will reinforce formal capital and in some instances it may represent an alternative. On the other hand, we might also find formal capital in the absence of informal capital, whereby strong associative ties might obviate the need for other kinds of social relationships. This leads us to formulate our two main propositions for this article:

- (i) Complementarity of formal and informal social capital. Formal social capital (in the form of extensive and intensive participation in civil society organizations) is linked to informal social capital through dense relationships of social support and social networking. Where we find stronger social capital in the form of participation in civil society, we would find also stronger forms of social bonding and social support.
- (ii) Substitution of formal social capital by informal social capital. Where participation in formal civil society is weak, we would expect stronger forms of informal networking and social support.

How do these propositions relate to the regional patterns of social capital outlined earlier? Our expectations would be that where there is strong formal social capital, such as in Nordic countries and Western Europe, there would be less need for informal social capital, since patterns of civil society are well established, extensive and even integrated into state systems. In the Anglo-Saxon countries, with their more liberal welfare traditions and more independent civil society we might also assume that formal social capital would be high, but less so than in the Western European and Nordic countries. In Southern Europe, where civil society organizations are less well established, we would assume that informal social relationships would take priority as a form of social support. Turning to Eastern Europe, we might also predict that informal social relationships might substitute formal ones as a way of 'getting things done' through 'network capital' (Sik, 1994; Rose, 1998). However, there are important differences between the 'post socialist' countries. The Baltic states were most soviet dominated, leading perhaps to a more soviet style 'economy of favours' (Ledeneva, 1998). On the other hand, the Baltic states have undergone rapid modernization with much 'Nordic' influence. It is interesting, therefore, to speculate whether formal social capital has replaced informal social capital in those regions. The Balkan countries (Bulgaria and Romania) on the other hand have large rural populations and have

Table 1 Expected regional patterns of social capital: social capital regimes. Clusters in which social capital takes similar forms and relationships

Pattern	Characteristics	Countries
Nordic	High on all formal social capital	Denmark, Sweden, and Finland
Western–Central	Moderate levels of formal social capital	France, Germany, Belgium, Luxembourg, the Netherlands, and Austria
British–Irish	Moderate levels of formal social capital	United Kingdom, Ireland
Southern	Low levels of formal social capital, high levels of informal social capital	Portugal, Spain, Italy, Greece, Malta, and Cyprus
Eastern–Central	Low levels of formal social capital, informal networks important	Poland, Czech Republic, Slovakia, Hungary, and Slovenia
Baltic	Low levels of formal social capital, informal networks important	Estonia, Latvia, and Lithuania
Balkan	Low levels of formal social capital, informal networks important	Bulgaria and Romania

suffered longer from the ‘transition’ than have other new Member States. We might expect them to be more typical of ‘Southern’ countries in the reliance on informal social capital. In the Central European new Member States, the development of civil society has been most extensive. We might expect formal social capital to becoming more ascendant there. A summary of the expected patterns in different social capital regimes is presented in Table 1.

As we have argued, there are at least two different approaches to social capital and these are associated with different kinds of measurements. Since social capital is difficult to measure, a range of proxy indicators are used. In the next section, we identify a range of measures that can help us to analyse both formal and informal social capital before going on to show how they are related.

Data

Data are derived from the only survey in Europe specifically designed to measure social capital across all 27 countries—the Eurbarometer 62.2 conducted in November 2004. It covers 27 countries (all EU members and two candidate countries: Romania and Bulgaria). Sample sizes are approximately 1,000 per country which are representative at the country level. In our analysis, we use weighted data to account for within-country deviations and different population sizes.

We begin by defining and operationalizing key indicators along with their variations across European countries to create meaningful regional categories that are based upon sociological analysis of data

rather than arbitrary classifications (Haller and Hadler, 2004–2005). We start with regions as the unit of analysis, before moving on to countries, since the political system, the welfare state and civil society are normally organized on a national basis. Hence, regional results are contrasted with those from countries (within-region variation).

Indicators of Formal Social Capital

The most common measure of formal social capital is that of *participation in civil society*. Here, we use membership of social clubs and voluntary organizations such as Churches or Sports Clubs as an indicator. In the EuroBarometer 62.2, people were asked to mention if they were members of any of the 14 different types of organizations.¹ In addition to serving the community in various ways, participation in these organizations is expected to help build social networks and to develop and enforce social norms and so the density of associations and numbers participating in them is often seen as a good indicator of social capital. However, critics of this approach have pointed out that participation can take many different forms (Baron *et al.*, 2000; Maloney and Smith, 2000; Field, 2003). Many people subscribe to an organization, but never attend a meeting, so that this will not help them to build networks of social support or reinforce social norms. Hence, we operationalize participation both in terms of membership and active participation.

Another common indicator of formal social capital is that of generalized (social) trust. In the EuroBarometer 62.2, people were asked whether they think that most people can be trusted or that one cannot be too careful in dealing with other people.²

Although it is only a single indicator, it is a powerful measurement of the universalistic levels of social cohesion in a society. That is, the extent that there is a belief that *people can generally be trusted*, even without knowing anything about their particular qualities. Generalized trust is taken as a measure of the extent of openness and acceptance of public social ties and public spiritedness (Fukuyama, 1995; Lin, 2001a; Uslaner, 2003; Mateju and Vitaskova, 2006).

Indicators of Informal Social Capital

Indicators of informal social capital are less well explored. Here the density, strength and extensiveness of *social networks* is very important, but difficult to operationalize in comparative surveys. There is a substantial literature on social networks and how they work as social capital, but not usually using these kinds of data (Burt, 2001; Lin, 2001b; Lin *et al.*, 2001). We have taken here three different measures of social network capital: frequency of contact with friends, with colleagues, and with neighbours.³ Together these can cover a range of different kinds of sociability describing the extensiveness of a social network (meeting *different* people) as well as the density (*frequency* of meetings).

A concrete indication of the *strength* of informal social capital is social support meaning the extent to which people give or provide services of different kinds within informal networks, or on a neighbourhood level. It is a measurable outcome of the links and connections that might exist at an affective level. Social support can either operate in a complementary fashion in the context of a strong welfare state, where local services are integrated with state provision, or as substitution for welfare services, where the state fails to provide them. Social support is generally reciprocal and so we consider the giving and receiving of social support. The EuroBarometer 62.2 asks its respondent to choose from eight different situations in which they would be able to rely on friends, colleagues, neighbours or other acquaintances (without paying them) and in which they helped the same categories of people during the last 12 months (for instance, lending money and discussing problems). For our analysis we calculate sum indices for both support provided by other people and provision of help to other people. Those indices show satisfactory reliability for both measures of social capital.⁴

Next, we consider the cross-national variations in each of these indicators before going on to look at how these indicators relate to one another. Our main argument is that there will be important differences

as well as similarities between different European societies depending upon the development of civil society and the nature of informal social cohesion, which reflects in turn cultural differences between different European regions. In addition, particular historical legacies, such as that of Communism, may have an impact. This will be reflected in the kinds of social capital that are prevalent in different societies in Europe.

Method

We applied multiple discriminant analysis (MDA) to assess the validity of the assumption of a regional patterning of social capital regimes. Discriminant analysis examines whether a pre-defined group membership can be traced with prediction criteria, in the form of discriminant variables. MDA sets up a number of discrimination functions (roots), similar to latent variables as in factor analysis. The number of functions equals the number of groups minus 1 or the number of discriminant variables, whichever is smaller. These independent functions maximize the distance between the means of the criterion variables. A statistical test shows how many of those functions are meaningful in separating the groups. To assess model fit, a global *F*-test for 'Wilk's Lambda' is used. The contribution of each individual discriminant variable, or its importance for the discrimination between groups, can also be assessed by statistical tests as well as by the so-called standardized canonical discrimination function coefficients (SCDFC) and the structure coefficient matrix (SCM). The former indicate partial correlations, the latter total (zero-order) correlations between the discriminant variables and the discriminant functions. Finally, the hit ratio (HR) shows the percentage of correctly specified cases. Usually, the hit ratio has to be significantly higher than a *priori* probabilities to talk about good prediction.

Subsequently we explore whether the seven regional patterns—or regimes of social capital—can be correctly predicted by these indicators at the individual level. The discriminant power of eight indicators on four dimensions: generalized social trust (cf. Delhey and Newton 2005), membership of and participation in civil society (voluntary associations), meeting friends, colleagues and neighbours (social networks), and giving and providing help to others (social support) are explored. That is, we explore whether the application of a multi-dimensional concept of social capital (instead of using generalized trust and/or participation in

voluntary organizations alone) leads towards more precise regional groupings.

Results

Table 2 gives us the means of eight indicators of social capital by regional patterns. People in the Nordic countries (Denmark, Sweden, and Finland) show rather high levels on almost all social capital, whereas the difference between the Western–Central Europeans and the British and Irish, respectively are much smaller. However, these three regions can be clearly separated from the remaining regions of Europe. Southern and Eastern European regions, the latter covering Eastern–Central Europe, Baltic and Balkan areas, reveal remarkable similarities. These four regions can all be described as rather low on formal social capital and social support and high on informal social networks. The Balkan region, that is Bulgaria and Romania, score exceptionally low on indicators of participation in voluntary associations. By looking at informal social capital, one also finds that people in Southern Europe score considerably lower on the majority of indicators for informal non-family networks. Southern Europeans particularly lack networks of social support. Statistical tests for these differences show significant results when compared to the largest region of Western–Central Europe (Table 2).

Another important issue is whether the discriminating variables are correlated or not. MDA assumes independent discriminating variables, like in regression analysis. Bivariate correlations between the eight discriminant variables show that this is generally the case. Only two correlations exceed a value of 0.4. The considerable correlations between membership of and participation in voluntary associations ($r=0.59$) and between giving and getting support in informal networks ($r=0.61$), however, do not impinge on the results presented subsequently as was shown by alternative MDA models where they were left out.

We do not find hard evidence of different within-group variances either. Although Box's M is significant (12,851; $F_{\text{approx.}} = 59.429$, $df = 216$, $P = 0.00$), we can rule out the danger that in-group variation violates model assumptions because of rather similar log determinants (Table 2). That is, the significance of Box's M is largely due to the large sample size of 23,000 cases. Smaller deviations, however, do not lead to substantial variation in the log determinants. Therefore, the assumptions of homogeneity of covariances and correlations respectively hold.

Table 2 Mean differences of social capital indicators among European countries. $N = 22,995$

Group means (M)	Trust	VO (Members)	VO (Participants)	SN (Friends)	SN (Colleagues)	SN (Neighbours)	SS (Get)	SS (Give)	Log determinant in MDA
Nordic (2,808)	67**	2.37**	0.67**	3.74**	1.81**	1.93	4.24**	3.12**	4.00
Western–Central (5,187)	36	1.37	0.59	3.60	1.52	2.01	3.27	2.54	3.79
British–Irish (1,885)	36	1.12**	0.57	3.70**	1.80**	2.15**	3.19	2.69	3.76
Southern (4,188)	24	0.48**	0.28	3.40**	1.54	2.06**	2.10**	1.76**	1.93
Eastern–Central (4,777)	18**	0.53**	0.30**	3.43**	1.75**	2.62**	3.14*	2.66*	1.07
Baltic (2,302)	22	0.44**	0.30**	3.33**	2.03**	2.74**	2.89**	2.83**	2.00
Balkan (1,848)	17	0.23	0.13	3.52	1.44*	2.80**	2.47**	2.31**	-1.03

Notes: Trust (percentage of people responding to 'most people can be trusted').

VO, voluntary organizations (mean number of memberships, 0–14); VO, voluntary organizations (mean number of participants, 0–14); SN, social networks (mean frequency of meeting friends: 0 'never' to 5 'several times a week'); SN, social networks (mean frequency of meeting colleagues: 0 'never' to 5 'several times a week'); SN, social networks (mean frequency of meeting neighbours: 0 'never' to 5 'several times a week'); SS, social support (mean number of situations in which people get support, 0–8); SS, social support (mean number of situations in which people give support, 0–8).

Initial HR: 22.6.

t-tests for mean differences: ** $P < 0.01$, * $P < 0.05$, based on independent sample t-tests with Western–Central countries as the reference group.

Source: the EuroBarometer 62.2 (2004), own calculations.

Distinguishing Patterns of Social Capital

Subsequently we present the results of MDA which is based on six discriminant functions. Table 3 shows the predictive statistics of MDA for the chosen eight social capital indicators. Altogether, the model yields good fit. A total Wilk's Lambda of 0.642 is highly significant, and the null hypothesis that all groups have the same mean discriminant function scores can be rejected. In fact, we find considerable differences between the groups. The first two functions are very important for discriminating patterns of social capital. Canonical correlations for the first two functions are rather high: 0.55 and 0.22, respectively, showing the strong association between groups formed by the dependent variable and the given discriminant function. The increase of the HR from 22.6 per cent of correctly specified cases before and 34.2 per cent of correctly specified cases after the analysis also shows the discriminant power of the analysis.

Based on standardized canonical discriminant function coefficients (SCDFC) and Wilk's Lambda, the two most powerful items discriminating between the seven groups are the number of memberships of voluntary associations and generalized social trust.

This is in line with previous research on social capital. The most often used indicators distinguish between social capital regimes. However, the inclusion of additional indicators, especially those for informal social capital, further contributes to a more precise description of the data. SCDFC and Wilk's Lambda show that the inclusion of other aspects of social capital refines our understanding of different regional patterns. This becomes evident if we look at the structure coefficient matrix (SCM) in Table 3.

SCM shows the zero-order correlations of discriminant variables with discriminant functions. On the first function, membership in voluntary associations and generalized trust score highest. This means that the first function (latent variable) refers to *formal* social capital. Along with this function we can distinguish patterns according to the degree of formal social capital involved. The second function shows that the three highest correlations refer to measures of social support and social networks. That is, the second discriminant function refers to *informal* social capital. By combining the information provided by the first two functions we can describe patterns of social capital in both its outlined dimensions: formal and informal social capital. This is presented graphically in Figure 1 where we also look at the variation within regions, that is the scores of individual countries if they had not been clustered.⁵

Table 3 Results of discriminant analysis of social capital indicators

Discriminant variables	SCDFC		Wilk's Lambda	F-Test (P)	SCM	
	1 (84%)	2 (10%)			1	2
Trust	0.406	-0.052	0.890	475.5***	0.526	0.016
VO (Members)	0.888	0.018	0.774	1116.2***	0.818	0.109
VO (Participants)	-0.221	-0.193	0.949	204.9***	0.319	-0.016
SN (Friends)	0.095	-0.402	0.992	32.6***	0.120	-0.008
SN (Colleagues)	-0.083	0.293	0.990	39.7***	0.012	0.338
SN (Neighbours)	-0.280	0.462	0.971	116.1***	-0.193	0.486
SS (Get)	0.270	0.289	0.928	295.3***	0.345	0.652
SS (Give)	-0.152	0.620	0.955	178.5***	0.175	0.775

Notes: Trust (percentage of people responding to 'most people can be trusted').

VO, voluntary organizations (mean number of memberships, 0-14); VO, voluntary organizations (mean number of participants, 0-14); SN, social networks (mean frequency of meeting friends: 0 'never' to 5 'several times a week'); SN, social networks (mean frequency of meeting colleagues: 0 'never' to 5 'several times a week'); SN, social networks (mean frequency of meeting neighbours: 0 'never' to 5 'several times a week'); SS, social support (mean number of situations in which people get support, 0-8); SS, social support (mean number of situations in which people give support, 0-8).

Model fit: HR, 34.2 of the respondents correctly classified; Wilk's Lambda=0.642 (functions 1 through 6), Canonical correlation for function 1: 0.550; Canonical correlation for function 2: 0.224.

SDFC, standardized canonical discrimination function coefficients (partial coefficients) of first two significant discrimination functions, functions 3 through 6 not meaningful.

Wilk's Lambda, F-ratio, *P<0.1, **P<0.05, ***P<0.01.

SCM, structure coefficient matrix (zero-order coefficients), first two functions shown.

Box's M = 12,851.45, F_{approx.} = 59.43, df = 216, P = 0.00.

Source: the Eurobarometer 62.2 (2004), own calculations.

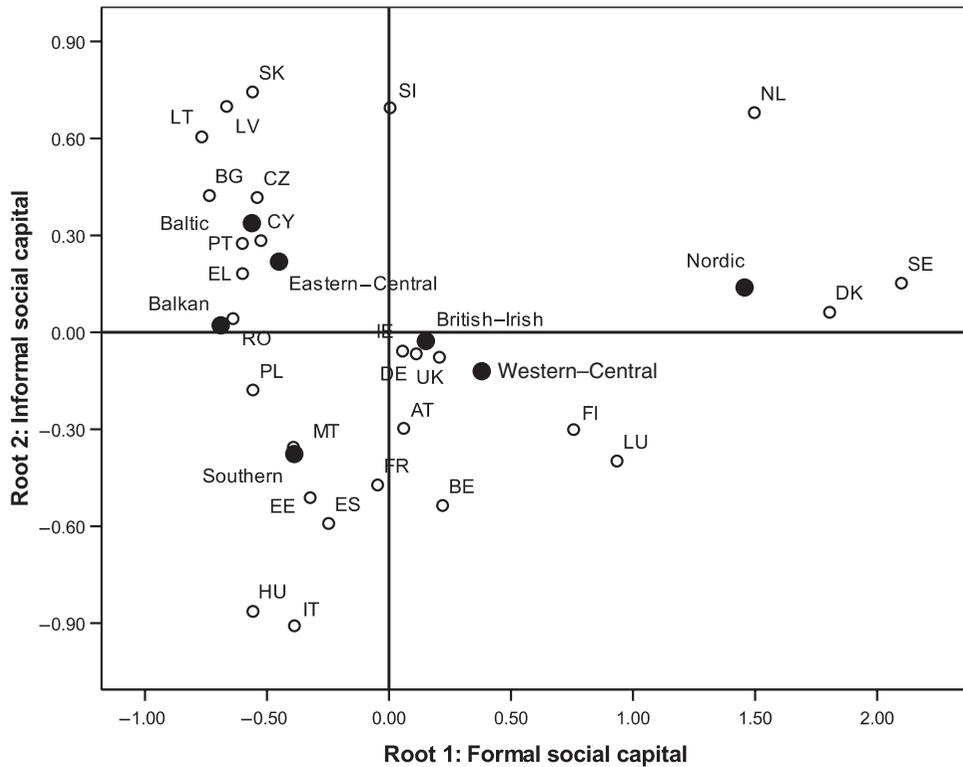


Figure 1 Discriminant function scores for regional and country patterns of social capital across Europe. Discriminant function scores of regions and countries are based on separate MDA as mentioned in the text and endnote 5. Because of the strong similarity of their results, we use the same dimensions for reasons of clear presentation

Figure 1 plots group centroids for the hypothesized seven regional patterns (large, filled dots) and 27 countries (empty, small dots) along the scores of the two discriminant functions. Group centroids are the group means of the latent variables calculated from the discriminant functions. It can be clearly seen, that the Nordic pattern (in this case Denmark and Sweden but not Finland) is separated from all others especially by the first latent dimension. That is, Nordic exceptionalism (cf. Delhey and Newton, 2005) concerning social capital mainly refers to the high levels of generalized social trust and the high number of average memberships of voluntary associations. It further shows that the Southern, Eastern-Central, Baltic and Balkan patterns cannot be clearly distinguished by this root. Yet, on the second dimension, the Baltic pattern is most distinct to the Southern one. That is, informal social capital is very important in the Baltic pattern whereas the Southern pattern does not show a great deal of constitutive informal social capital. This clearly separates the Southern pattern of social capital from

an Eastern one. However, when looking at countries, we observe considerable within-region variation in some regimes. Smaller regions represent their countries to a very satisfactory extent. That is especially true for the Balkan and British-Irish regime and partly the case in Nordic and Baltic countries. In Eastern-Central, Western-Central and Southern Europe, we observe larger within-region variation across countries. Whereas the Southern and Eastern-Central regions are rather heterogeneous, Western-Central European countries reveal similar patterns with the exception (outlier) of the Netherlands. Therefore, although considerable variation occurs within some regions, the categorization into social capital regimes informs us about major patterns across regions in Europe.

Figure 1 also gives preliminary answers to the two propositions formulated in this article as it plots formal against informal social capital. Scoring high on both dimensions indicates complementary social capital. This can be clearly found in the Nordic countries (Sweden and Denmark) and the Netherlands,

although Finland does not form part of this group, despite having high levels of formal capital. Scoring low on both dimensions indicates that neither form of social capital is evident. This is only true for the Southern pattern of social capital. Substitution takes place in Eastern Europe. Low levels of formal social capital are replaced by rather high levels of informal social capital, whereas Western–Central European and British–Irish patterns score averagely on both dimensions.

Figure 1 further implies that we can reduce the patterns of formal and informal social capital to a smaller number. We see that in fact Eastern patterns, including Eastern–Central, Baltic and Balkan, are very much alike, whereby Eastern patterns show rather low levels of formal social capital, whereas the informal side of social capital is above average. The Western–Central and British–Irish patterns of social capital also go together with moderate levels of formal and informal social capital. The Southern pattern shows low levels of both social capital dimensions, whereas the Nordic pattern favours very high levels of formal social capital and above average informal social capital. This leaves four distinct patterns of social capital: Northern, Western–European, Southern, and Eastern European.

So far, the description of these patterns has given the impression of a ‘perfect’ fit between region and a specific form of social capital. However, we should not misunderstand the nature of MDA as a probabilistic analysis. Regimes of social capital do not fully coincide with regions as clearly evidenced by the HR of 34.2. For instance, the ‘Nordic’ pattern also occurs in other regions. We find many incidences where people living in Western–Central Europe show the ‘Southern’ pattern. Yet, the point we want to stress here is that opting for regional patterns is based on the analysis which gives evidence that the majority of people living in a certain region also show the corresponding pattern. As has been shown, in using social capital indicators we significantly increase correct classifications of people according to patterns which strongly coincide with regions in Europe.

Complementarity and Substitution

So far we have argued that the combination of formal and informal social capital takes two forms in general. Complementarity of social capitals refers to the mutual nurturing of various forms of social capital whereas substitution of formal social capital by informal social

capital reflects the trend that informal networks replace formal associative ties. Somewhat surprising is the fact that in Southern Europe there was low social capital of all kinds. But perhaps in these countries families were more important than non-family networks? Since the Eurobarometer did not include questions that would allow us to explore this, we turned instead to the European Quality of Life Survey, which covers the same countries but includes a number of questions about family support (European Foundation, 2003).⁶

Table 4 present percentages of people in various social capital regimes turning to the family first in need of help in a number of situations. In the Southern and Eastern–Central regimes, people most often turn towards family. However, whilst in Southern Europe, this indicates a further substitution: strong family bonds replace low levels of social capital, in Eastern–Central Europe, the Baltic and Balkan regions familialism enhances informal social (network) capital and substitutes formal social capital. In the Nordic, Western–Central, and British–Irish countries, we observe somewhat lower levels of familialism, but not crowded out by other kinds of social capital. Rather, it seems that high or moderate levels of social capital are found together with familialism in these regions. Therefore, the dimension of familial and non-familial social capital deserves to be seen as a further dimension.

Conclusions

The literature about social capital represents a quest for a precise measurement of the large number of indicators associated with the concept. Theoretically, social capital inheres in social ties and includes norms or trust and reciprocity. The quantitative literature has concentrated predominantly upon the measurement of formal social capital—associative ties and generalized trust. Informal social capital has been neglected in quantitative studies and yet we show that this is also an important dimension, without which some countries would appear to be lacking in social cohesion. We show that it is important to take into account these different dimensions of social capital and that they are regionally differentiated. Moreover, their patterns indicate specific social capital regimes.

Although formal social capital plays the more important role, the additional value of informal social capital indicators is evident. Whereas formal social capital describes particular characteristics of Northern and Western regions, informal social capital separates Eastern and Southern Europe.

Table 4 Familialism in Europe. Social support through the family

Regime	Percentage who turn to family member first in case of help needed concerning ...			
	The house when ill	Advice about personal/family matter	Depression	To Raise €1,000/500 in an emergency
Nordic	80**	56**	47	64*
Western–Central	76	61	50	67
British–Irish	78**	64*	52*	66
Southern	90**	72**	56**	78**
Eastern–Central	91**	77**	54**	64**
Baltic	80	62	42**	34**
Balkan	85**	75**	62**	41**

Notes: Wording: 'From whom would you get support in each of the following situations? For each situation, choose the most important person:

(a) If you needed help around the house when ill.

(b) If you needed advice about a serious personal or family matter.

(c) If you were feeling a bit depressed and wanting someone to talk to.

(d) If you need to urgently raise €1,000 (€500 in the candidate countries) to face an emergency.

Answer categories: 1 family member, 2 colleague, 3 friend, 4 neighbour, 5 someone else, 6 nobody, 7 don't know.'

t-tests for percentage differences: ** $P < 0.01$, * $P < 0.05$, based on independent sample t-tests with Western–Central countries as the reference group.

Source: the European Quality of Life Survey 2003 (EQLS).

People following the Southern European pattern report much lower levels of social support and report meeting less often with friends, colleagues, and neighbours. This apparent lack of even informal social capital in some countries could be explained by the greater importance of family bonding: the family could be the first port of call for those needing a loan or help with a personal problem. The family is then also an alternative to associational life, especially in more traditional societies. Since other studies have pointed to the fact that the family is stronger and more dominant in social welfare and social organization in the South and the East this may come as no surprise (Wallace, 1995; Hantrais and Letablier, 1996; Pfau-Effinger, 2003; Evandrou and Glaser, 2004). Therefore, it is not necessarily the case that there is no social capital in Southern European societies, but it could be that social capital is concentrated in the family. However, in Eastern Europe, both friends and family are important. There is a limited and concentrated set of social relationships. Thus, the more extended defamilialization that we find in the Nordic countries means that friends and associations may have an enhanced role (Esping-Andersen, 1990).

Another factor affecting our findings is that the idea of 'friends' may be interpreted differently in different parts of Europe. There may be a broader definition of friends in those countries where respondents report more frequent contact. It could also be the fact that where family is the predominant form of social

relationship, those without family nearby are significantly disadvantaged, whilst those societies with less sanguinary and affinal ties offer more opportunities for social relationships—people are more embedded in a loose but extensive network of ties.

Complementarity is borne out for some countries but not for others. In some countries, substitution is more apparent, either of the familial or non-familial kind. Hence, we cannot argue that there is a general tendency towards one or the other, but rather that the ways in which different types of social capital interact depend upon particular national cultural configurations. We find in general four geo-cultural regimes: in the North (Nordic) region there is a high and complementary level of formal and informal social capital, in the Western regions moderate levels of both forms of social capital, in the East substitution of informal for formal social capital whilst in the South social capital takes a predominantly familial form.

The research suggests that it is worthwhile to categorize countries according to 'bottom up' criteria of country types rather than using *a priori* typologies, such as that of welfare regimes. Whilst there is a relationship between social capital and welfare regimes established in other research cited here, we see that much of the strength of this relationship relates only to some welfare regimes—mainly some of the Nordic ones. The variation in welfare regimes represented by the rest of EU states is not directly reflected in the forms of social capital. For example, Britain and

Ireland are clustered together with the continental welfare regimes and the various countries of the East do not form one cluster. Nor is there a straightforward distinction between old Member States, new Member States, and candidate countries, since there are divisions within and between these groups.

We should note that these clusters of 'social capital regimes' reflect different cultures of association and participation in Europe. The way in which these different factors interact reflects the historical legacies of communist or authoritarian regimes on the one hand, but also the kind of social cohesion found in different cultural contexts. For example, in those countries with strong substitution or little social capital, we found that the family rather than the non-family networks is important. Hence, in those countries we find a kind of particularistic 'amoral familism' (Banfield, 1958) rather than the opportunity for the formation of a public, universalistic social capital.

Countries where both a more universalistic civic culture of association and affective bonding might develop are the established democracies (especially the Nordic countries) as well as those countries of Western Europe where associational life is relatively strongly developed. In countries where family or informal social capital predominate to a much greater extent it may be more difficult to establish a vibrant civil society of the kind described by Putnam because the culture does not allow it. Yet, societies change. As civil society is rekindled in Southern and Eastern Europe, we might find new forms of social cohesion emerging.

This study has indicated some ways in which social capital can be used for identifying regional patterns of social cohesion. It represents an exploratory account of how social capital could be sociologically patterned in Europe, taking into account both formal and informal dimensions and contrasting it with familism. This research indicates that there are different social and cultural forms of social cohesion across Europe. It is not satisfactory to assume that social capital works in universal ways without taking into account the cultural context. Future research should take into account the way in which social capital is embedded in different European societies.

Notes

1. Now, I would like you to look carefully at the following list of organizations and activities. Please say in which, if any, you are a member. And, for

which, if any, do you currently participate actively or do voluntary work? A sports club or club for outdoor activities (recreation organization), education, arts, music, or cultural association, a business or professional organization, a consumer organization, an international organization such as development aid organization or human rights organization, an organization for the environmental protection, animal rights, etc., a charity organization or social aid organization, a leisure organization for the elderly, an organization for the defence of elderly rights, religious or church organizations, political party or organization, organization defending the interest of patients and/or disabled, other interest groups for specific causes such as women, people with special sexual orientations or local issues, none of these, don't know.

2. Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people? Answers: (a) most people can be trusted, (b) you can't be too careful, (c) it depends (spontaneous).
3. How often do you... meet socially with friends, meet work colleagues outside working time, meet socially with neighbours? Answers: several times a week, once a week, several times a month, once a month, less than once a month, never.
4. We calculated Guttman's λ_3 for both indices, yielding sufficiently high coefficients of 0.76 for support by others and 0.70 for the provision of help (λ_3 equals Cronbach's alpha).
5. Therefore, we calculate a MDA whereby we do not group countries into regions and compare the results to the regional ones. Due to limitations of space, the results cannot be presented here in detail. Briefly, this MDA yields very similar results, whose main outcomes are as follows: Due to the larger number of groups (27 countries instead of seven regions), MDA (Wilk's Lambda = 0.43; Box's $M = 17,746$, $F_{\text{approx}} = 18.89$, $df = 936$, $P = 0.00$) extracts eight functions, of which two are important. The first function (Eigenvalue = 0.61, canonical correlation of 0.61) captures the contents of formal social capital, whereas the second function (Eigenvalue = 0.23, canonical correlation of 0.43) revolves around informal social capital. SCDFC, Wilk's Lambda and SCM show that the same indicators (number of memberships of voluntary organizations, generalized social trust for formal social capital; social support and meeting neighbours for informal social capital) determine the

latent dimensions to similar strengths, i.e. they yield very similar and comparable coefficients too.

6. The European Quality of Life Survey was carried out by the European Foundation for the Improvement of Living and Working Conditions and has resulted in a whole series of reports, including one on social capital and participation, that this team was involved in (<http://www.eurofound.eu.int/>). The survey included a representative sample covering 1,000 people in each country with a much longer and more detailed questionnaire than that of the Eurobarometer.

Acknowledgements

We are grateful to the anonymous reviewers of the *European Sociological Review*, who provided excellent suggestions on how to improve a previous version of the article. We would like to thank the European Commission, especially Unit 1 of DG Employment and Social Affairs for making these data available to us through contribution to the report 'The Social Situation in the European Union'. We would also like to thank the European Foundation for the Improvement of Living and Working Conditions in Dublin for access to the EQLS.

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Manuscript received: October 2006