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Social Capital in Europe

Measurement and Social and Regional Distribution of a Multifaceted Phenomenon

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abstract: This article sorts the various aspects of social capital (networks, trust, civism) theoretically and constructs an instrument for measuring its multifacetedness. The instrument is validated using data from the 1999/2000 wave of the European Values Study survey. Using the same data, the article describes how social capital, by its various aspects, is distributed geographically among European countries and regions (North, West, South, East), and socially among social categories of European citizens. As far as the geographical distribution of social capital is concerned, there are some particular differences, but, on the whole, European countries and regions, with the possible exception of Northern Europe, appear not to be substantially different in aggregate levels of social capital. In Scandinavia, social capital levels tend to be slightly higher, with the exception of family bonding. Some remarkable European patterns are found in regard to the social distribution of social capital. There is evidence of accumulation of human, economic and social capital; social capital is strongly gendered and is related to religious beliefs and behaviour, and to a political left-right stance.

keywords: European values ♦ mapping ♦ social capital

Introduction

In the past decade, social capital has become the darling concept of many social scientists and has proved to be an intuitively highly attractive and potentially promising construct. Overuse and imprecision, however, have rendered it prone to vague interpretation and indiscriminate application. Montgomery (2000) argued that unless we studied social capital in a more structured way there was a danger that this intuitively appealing concept would remain vague and social capital a black box in social science. We heed his call for more structure and precision by treating social capital as a complex phenomenon in need of a composite measurement instrument with which we hope to recover the pattern, if any, beyond the many things that social capital is according to many people. We apply this composite approach, moreover, to acquire knowledge of the social and regional distribution of social capital in contemporary Europe. In doing so, we shed new light on the multifaceted phenomenon of social capital and chart the social capital landscape of Europe.

We intend to attain these goals by presenting the matter within a two-level perspective, i.e. we analyse social capital at both the individual (Europeans) and the aggregate level (Europe at large, European countries and regional clusters). Furthermore, we conceive of social capital as an umbrella concept. In the literature, there is growing consensus that social capital is a

multidimensional construct. Social capital contains various dimensions, and multiple indicators are needed if these dimensions are to be measured properly (e.g. Johnston and Percy-Smith, 2003) – indicators that may not necessarily correlate highly with each other (Woolcock, 1998).

In this article, we address the following questions: (1) What dimensions and indicators can be distinguished in regard to the concept of social capital, and how do the various indicators relate to each other empirically? (2) How is social capital distributed geographically, that is, among European countries and regional clusters of European countries? (3) How is social capital distributed among social categories of European citizens? In other words, what are the social determinants of social capital? (4) Will the general picture of social determinants change when reckoning with where in Europe people live? We will look into the effects of four regions (North, West, South and East), rather than into country effects, because of the large number of countries involved and the limitations of space. And, (5) what is the relative contribution of personal characteristics and region in explaining differences in people's social capital?

We first deconstruct the concept of social capital and reconstruct social capital theory. Next, we operationalize the different dimensions of social capital by constructing indicators using scales and single items from the European Values Study survey 1999/2000. Then we statistically analyse the relations between the indicators. Furthermore, we describe the distribution of the different aspects of social capital over European countries, European regions and social categories of European citizens. Finally, we present our conclusions.

Social capital

The concept of social capital has been used by a great number of authors from a variety of disciplines since the early decades of the twentieth century. It is therefore not surprising that the views on social capital that one can find in the literature are many and varied. What these views have in common is that they more or less explicitly emphasize the importance of, first, social relations within families, communities, friendship networks and voluntary associations, and, second, civic morality, or shared values, norms and habits, and, finally, trust in institutions and generalized trust in other people.

Up until the time Bourdieu (1981, 1985) and Coleman (1988, 1990) constructed their individual level theories of social capital, the social mechanism underlying this phenomenon had remained fairly obscure (cf. Portes, 1998; Flap, 1999). These men argued that social capital was first and foremost social in character, i.e. it resided not in individuals but in relations between individuals. Social capital refers to the resources individuals can tap from the possession of more or less institutionalized relationships of mutual acquaintance and recognition. Second, like other forms of capital, social capital is productive, i.e. it makes the achievement of certain individual ends possible that in its absence would not be possible.

Whereas Bourdieu and Coleman used social capital as the central construct of a micro-sociological theory of social networks and human action, others, like Putnam (1993, 1995, 2000) and Fukuyama (1995), have brought the concept of social capital into a macro-sociological theory of societal structure and culture, on the one hand, and collective action, on the other. They argue that social capital not only has a private aspect – personal goal attainment – but also a public side. Social capital can have positive benefits for the wider society within which it is lodged. Social capital can therefore be aggregated, which means that it cannot be treated solely as a characteristic of individuals and their relations, but also as a property of countries and regions. Different levels of participation in voluntary organizations can characterize countries and regions. The same applies to greater or smaller networks of civic engagement and different degrees of trust. The higher the levels of these features, the more action and cooperation for mutual benefits and collective goods are facilitated. Both Putnam and

Fukuyama argue that countries or regions that are characterized by high levels of aggregate social capital are therefore linked with higher levels of political as well as economic performance. Others, like Paxton (2002), have generalized the individual and aggregate level social capital approaches. They argue that social capital can be analysed at multiple levels, i.e. at the micro level of individuals and small groups, at the meso level of communities and associations, and at the macro level of sub and supranational regions and nation-states.

The widening of social capital theory to the aggregate level has led to a broadening of the very concept. Putnam (1993) has argued that sheer participation in civic organizations forms habits of cooperation, solidarity and public-spiritedness. Membership of cross-cutting groups allows trust to become transitive and spread. This means that there is not only an objective, structural dimension, but also a subjective, cultural dimension to social capital (Newton, 1999; Paxton, 1999, 2002). The objective, structural dimension of social capital has durable social networks of more or less institutionalized positive relationships as its crucial component. The subjective, cultural dimension consists primarily of a set of values and attitudes of individuals relating to trust, reciprocity and willingness to cooperate. In the literature, a long, but not very fruitful, discussion has been going on about the question of whether formal and informal social networks instill or create in individuals the capacity to trust and reciprocate, or whether it is the other way round. This is an obvious chicken-and-egg problem (Newton, 1999). Social scientists therefore use the expression social capital most of the time as a broad term encompassing norms, trust and networks.

Macro-sociological theories see social capital as the cement of society that makes it possible for people to cooperate in the collective interest. Collective action requires generalized mutual trust and 'soft' regulations that exceed the logic of mere instrumental reciprocity. Social networks and voluntary associations have such a trust-engendering effect, because frequent interaction among a diverse set of people tends to produce a norm of generalized reciprocity. A society that is characterized by generalized reciprocity, defined by Putnam (2000) as wider spread and transitive trust and trustworthiness among the members of a large group, is more efficient than a distrustful society because it facilitates collective action for mutual benefit. That does not mean, however, that the externalities or spillovers of social capital are always positive. Social capital can also be directed toward malevolent, antisocial purposes, just like any other form of capital. Putnam (2000) refers to positive consequences of social capital – mutual support, cooperation, trust, institutional effectiveness – and negative manifestations – sectarianism, ethnocentrism, corruption.

From a social cohesion perspective, perhaps the most important distinction between forms of social capital is that between bridging, inclusive, open social capital characterized by weak ties on the one hand, and bonding, exclusive, closed social capital with strong ties on the other (Gittes and Vidal, 1998; Putnam, 2000; Heffron, 2001). Bonding social capital is inward looking and generates trust that is particularistic and ingrown, limited to someone's family or primary relations and bolstering people's narrower selves and reinforcing their exclusive identities. Bridging social capital generates broader identities and more expansive trust that can be generalized to people who are strangers. Bridging social capital is outward looking and encompasses people across diverse social cleavages. In many circumstances, both bridging and bonding social capital can have powerfully positive social effects. Bonding social capital is often protective and exercising close membership and therefore good for undergirding specific reciprocity and mobilizing informal solidarity; in other words, it cements homogeneous groups and facilitates economically disadvantaged individuals and groups to 'get by'. Bridging social capital, however, is often civically engaged, narrows the gap between different communities and exercising open membership and is therefore crucial to organized solidarity and to 'get ahead'. Weak ties are often temporary and contingent and link actors to distant acquaintances, former associates and colleagues who move in different circles and have

different information. Strong ties are often intensive and repeated and link actors to close relatives and intimate friends within the same social niche. Bonding social capital, by creating strong in-group loyalty, may also create strong out-group antagonism. It can therefore be expected that negative external effects are more common with this latter form of social capital.

The counterpart at the national level of local communities is the civil society. Civil society creates social capital. Not only are norms of reciprocity, citizenship and trust embodied in networks of civic associations, they are also positively influenced by them. A strong and vibrant civil society characterized by a social infrastructure of dense networks of face-to-face relationships that cross-cut existing social cleavages will underpin a strong and responsive government, a strong and resilient economy and a sustainable welfare state (Edwards et al., 2001; Szreter, 2002). The danger of overemphasizing the importance of civil society, however, can be to downplay the role of government in building social capital. To avert this danger, Woolcock (2001) introduced the concept of linking social capital. This concept refers to relationships between parties who know themselves not only to be unlike, as in the case of bridging social capital, but furthermore to be unequal in their power and their access to resources. It takes on a democratic and empowering character where those involved are endeavouring to achieve a mutually agreed beneficial goal (or set of goals) on a basis of mutual respect, trust and equality of status, despite the manifest inequalities in their respective positions. Szreter (2002) offers the thesis that in a liberal democratic society with a market economy, bridging and linking social capital can only grow and flourish in tandem with citizens' positive endorsement of and generalized trust in the organs of the state. When citizens are disillusioned with government, they engage in defensive, self-interested bonding social capital only; when they have faith in the state and in their subsidiary levels of government, they are more likely to participate in bridging and respectful, democratic linking capital.

Clearly, looking at the reconstruction of the theory and the deconstruction of the concept of social capital, the construct of social capital provides a terminological umbrella for grouping together a fairly wide range of social phenomena, which runs the risk of conflating disparate processes and their antecedents and consequences (Adler and Kwon, 2002). One of the academic lamentations concerning social capital is that the concept has not been nailed down sufficiently to be usable in quantitative research into the character of societies (Dasgupta and Serageldin, 1999), and there are complaints that progress in social capital research has been limited because of the lack of standardized, reliable and parsimonious theory-driven instruments for measuring it (Van der Gaag and Snijders, 2002). One could argue, perhaps, that the best way to proceed is to get rid of the concept. However, a vague and multifaceted keyword is not sufficient reason to condemn a promising line of empirical research (Sobel, 2002). In our view, a proper reaction is to acknowledge the multifaceted character of social capital and to analyse it through its three dimensions: (1) networks, (2) trust, and (3) civism (see also Narayan and Cassidy, 2001; OECD, 2001).

Data and operationalization

Data

Our data source is the European Values Study (EVS) survey that provides unique data from national representative samples of most European societies. The EVS questionnaire contains standardized cross-national measures of people's attitudes and self-reported social actions in a broad range of important societal domains. Unfortunately, previous waves of EVS (1981, 1990) tap only a few dimensions of social capital, whereas the latest wave of 1999/2000 contains questions pertaining to most dimensions we need. Therefore we use data from this third wave. The survey was fielded in 33 countries throughout Europe (cf. www.europeanvalues.nl). We

confine our analyses to the 24 countries we had adequate data for at the time of the analyses. The nationwide samples consisted of at least 1000 and at most 2000 respondents each. Our pooled data set contains 28,894 respondents.

Operationalization of the concept of social capital

Our measurement model of social capital is based on the assumption that social capital has three dimensions: (1) networks, (2) trust, and (3) civism. From our earlier discussion of the concept we distinguish two aspects per dimension. Each aspect is operationalized with indicators that are available from the EVS survey (see Table 1).

Networks

According to the literature, the network dimension pertains to families, communities, primary relations and associations. We distinguish two aspects: participation in voluntary organizations and socializing with family and friends. The former refers to bridging social capital, i.e. embeddedness in the wider community and civil society, the latter to bonding social capital, i.e. everyday sociability or informal social contacts in the domain of primary relations.

Participation in voluntary organizations: Participation in civil society is measured by the response to the survey question of whether people are passive or active members of a series of 14 voluntary organizations in various societal domains. According to Putnam (1993), it does not matter so much in which kind of organization people are engaged. Following his suggestion we constructed two count-scales: *passive participation* and *active participation*. Active participation teaches people how to cooperate; passive participation is a sign of community commitment. We just totalled the number of organizations people say they are either a passive or an active member of. Both scales run from low participation to high participation. (We made a correction for *passive participation* in both 'trade unions' and 'religious organizations'. In the first case, this was because some countries have a closed-shop system, or because people have to be members of trade unions in order to receive social security benefits. In the second case it was because several countries have, or recently had, a state church. The tradition of registering as a church member still exists there.)

Sociability: The EVS survey contains several questions that can be used for measuring everyday sociability. People are asked about the time they spend with family and friends, about the importance of primary relations, and the degree to which they are concerned about the living conditions of close relations. We constructed two scales. One measures social capital related to one's relations with friends, and the other to relations with family. The 'friends' scale is 1 if people spend little or no time with friends, do little or do not regard friends as important;

Table 1 *Social capital: dimensions and indicators*

Dimensions	Indicators
Networks	
Participation in voluntary organizations	Passive participation (sum scale) Active participation (sum scale)
Sociability	Socializing with friends (3-point scale) Socializing with family (3-point scale)
Trust	
Generalized trust	Trust in others in general (single item)
Trust in institutions	Trust in (welfare) state institutions (Likert scale)
Civism	
Trustworthiness	Civic commitment and morality (Likert scale)
Political engagement	Discussing and following politics (sum scale)

3 if people spend much time with friends and regard friends as important; and 2 for all other cases. The 'family' scale is 1 if people do not regard family relations as important and are little concerned about the living conditions of family members; 3 if people find family relations very important and are very much concerned with living conditions of family members; and 2 for all other cases.

Trust

Regarding the trust dimension, we distinguish between interpersonal trust and trust in institutions.

Generalized trust: Generalized trust is measured by way of the answers of respondents to the question: 'Generally speaking, would you say that most people can be trusted or that you cannot be too careful in dealing with people?' Using this 'either, or' question, we can measure whether people are characterized by a high degree of generalized trust or not. Unfortunately, there is no question in the questionnaire that makes it possible to measure the degree of particularized trust of people.

Trust in institutions: Institutional trust or confidence in institutions is the second dimension of trust. The EVS questionnaire contains a question pertaining to confidence in a great number of institutions. We selected the (welfare) state institutions of 'the police', 'the social security system', 'the health care system', 'parliament', 'the civil service', 'the justice system'. Institutional trust is measured as the Likert sum scale of answers to this question. The scale has an alpha reliability of 0.80 and ranges from low to high trust.

Civism

The third dimension, which we dubbed *Civism*, neither refers to people's relations with others nor to their trust in others, but to particular attitudinal and behavioural characteristics of people themselves. The first dimension is trustworthiness, which refers to people's civic commitment and morality. The second dimension refers to people's political engagement, which comes close to linking social capital.

Trustworthiness: People's trustworthiness, i.e. their civic commitment and morality, is measured by means of a Likert sum scale constructed on the basis of the survey questions: 'Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: . . . claiming state benefits you are not entitled to; . . . cheating on tax if you have the chance; . . . lying in your own interest; . . . someone accepting a bribe in the course of their duties'. The sum scale *trustworthiness* has an alpha reliability of 0.84 and ranges from weak to strong trustworthiness.

Political engagement: There are two questions in the EVS questionnaire that tap political engagement. One asks respondents to say whether they discuss politics with friends (never-sometimes-often) and another whether they follow politics in the media (never, less often, once or twice a week, several times a week, every day). We added up the answers to both questions to form the scale for political engagement, which runs from low to high.

Operationalization of determinants of social capital

The variables we use in describing the social distribution of social capital among European citizens concern the structural characteristics of gender, age, household income, educational level and work status, as well as the cultural characteristics of religiousness and political left-right preference. Gender is a dummy variable (0=male, 1=female); age is measured in years passed since birth; level of education is measured by the highest level of education reached (8 categories); household income is measured by a self-rating in the deciles categories of a net household income scale; work status is a categorical variable with categories 'employed', 'retired', 'housewife', 'student' and 'unemployed'; political stance is measured

through self-placement on a 10-point left–right scale. Religiousness is indicated by denomination and frequency of church attendance.

When describing the geographical distribution of social capital over European regions, we cluster nation-states into four regions: North (Sweden, Finland, Denmark), West (Austria, Belgium, France, Germany, Ireland, The Netherlands and the United Kingdom), South (Greece, Italy, Portugal and Spain) and East (Bulgaria, Croatia, the Czech Republic, Estonia, Latvia, Lithuania, Poland, Hungary, Slovakia and Slovenia). To get a deeper insight into the factors associated with regional diversity, we control for certain characteristics of the countries included in regions. These are characteristics that, according to the literature, are related to social capital. For instance, social capital levels, especially regarding trust and participation in voluntary organizations, are reported to be lower in countries that spend less on welfare (Arts et al., 2003), have a higher level of wealth or affluence (as suggested, for example, by Yankelovich, 1994; Kuhnle and Alestalo, 2000), and have a lower degree of religiosity among their population (Greeley, 1997; Smidt, 2003). In Europe, there are typical regional differences as regards these characteristics. As Table 2 indicates, the Northern region, for example, combines high welfare spending with a relatively higher level of wealth (GDP) and a large majority of Protestants in the population. In the Southern region, low welfare spending goes together with a lower level of wealth and, with the exception of Greece, a Catholic majority. In Western countries there is more religious diversity, as there is in the Eastern countries, but both regions differ significantly in welfare spending and wealth.

Welfare effort is measured by a country's total social spending as a percentage of GDP. Social spending includes expenditure on old age cash benefits, disability, sickness, occupational injury and disease benefits, unemployment cash benefits and active labour market programmes and health. To average out some of the differences in GDP development between countries, differences which have a direct effect on the welfare effort percentage, we took the arithmetic means of welfare effort over a certain period. For the Western European countries this period ranges from 1990 to 1998, and data are from the OECD Social Expenditure Database 2001. For the Eastern and Central European countries, data are less available, which is why we had to confine ourselves to averaging out the figures for 1996 and 1998, which we obtained from GVG (2000). The OECD data and the GVG data have been calculated in different ways, which is why they are not directly comparable. However, they still reflect that social spending is much less in the former communist countries of Central and Eastern Europe than in Western European countries. We measure a country's level of wealth by its 1994–1999 average GDP relative to the yearly EU15 index in PPS (Purchasing Power Standards) (*source*: Eurostat website, 12–09–2003). Religious composition is measured by the percentage of respondents that report to be Protestant, Catholic, 'other' (Buddhist, Hindu, Jew, Muslim, Orthodox) or 'none'.

Table 2 Average welfare effort, wealth and religious composition of European regions

	Welfare effort	Wealth	% Protestant	% Catholic	% Other	% No religion
North	31.7	106.7	80	1	3	16
West	27.1	105.1	17	47	6	30
South	20.8	79.0	1	66	20	14
East	19.5	43.3	8	43	11	39

Analysis and results

Validation of the measurement model of social capital

We used LISREL 8.54 (Jöreskog and Sörbom, 2003) to test a second-order confirmatory factor analysis model including the set of indicators for the three dimensions of social capital, as outlined in Table 1. In particular, we anticipated that the first-order factors 'Networks', 'Trust' and 'Civism' could be explained by some higher-order structure, which in our case is a single second-order factor of general social capital. In addition, we postulated that the first-order factors could explain the indicators that are available from the EVS survey. By doing so we were able to check whether the theoretically informed pattern that we imposed on the data turns up empirically.

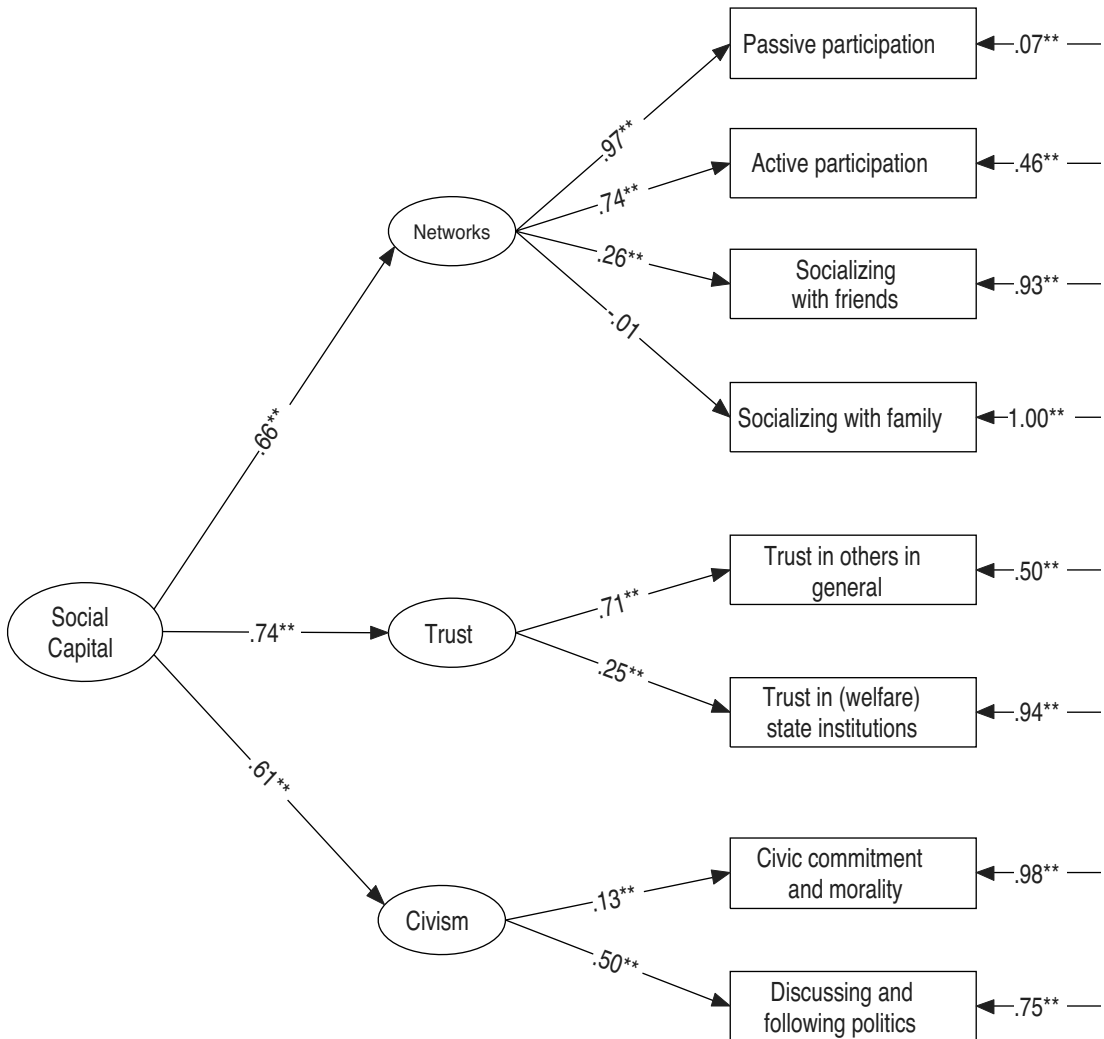
The pooled data for this analysis yielded an effective sample size of 23,021 cases (after listwise deletion of missing values) and included indicators of dichotomous, ordinal and continuous measurement level. Descriptive statistics of the indicators are presented in Table 3.

Jöreskog and Sörbom (1993) recommend that when indicators are mixed scale type variables, and the effective sample size is relatively large, a confirmatory factor analysis should be based on a correlation matrix including polychoric, polyserial or biserial correlations together with an asymptotic covariance matrix, using a weighted least squares (WLS) procedure. Note that the estimation of these correlations is based on the hypothesis of underlying bivariate normality. Prior to the actual confirmatory factor analysis we tested this hypothesis using the RMSEA measure of population discrepancy (Jöreskog, 2001). This analysis showed that for none of the indicators did the hypothesis of approximate underlying bivariate normality need to be rejected. The results of the subsequent confirmatory factor analysis are presented in Figure 1.

In general, goodness-of-fit results for this model reveal a well-fitting model (e.g. RMSEA = 0.046, RMR = 0.039 and GFI = 1.00; see Byrne (1998) for a summary on how to interpret the various goodness-of-fit measures). The coefficients in Figure 1 are the standardized factor loadings of the first- and second-order theoretical constructs on the indicators. We see that most indicators are significantly related to the first-order theoretical constructs. Only socializing with family is not significantly related to the 'networks' dimension of social capital, presumably because relatively few persons have only limited informal contacts with family. We also see that per first-order dimension all loadings on the indicators vary considerably in strength. Thus, on the one hand, the overall goodness-of-fit statistics suggest that our theoretically informed pattern is sufficiently reproduced by the data, and that all measures seem to tap the postulated underlying commonalities. On the other hand, the diverging loadings per dimension suggest that the various measures cannot simply be used to construct a composite measure for each dimension of social capital. Finally, with respect to the second-order part of

Table 3 Descriptive statistics for indicators of dimensions of social capital

	<i>n</i>	Minimum	Maximum	Mean	St. dev.
Passive participation	28894	0	12	0.714	1.218
Active participation	28887	0	3	0.453	0.809
Socializing with friends	28894	1	3	2.061	0.711
Socializing with family	28894	1	3	2.373	0.755
Trust in others in general	27725	1	2	1.317	0.465
Trust in (welfare) state institutions	25564	6	24	14.600	3.474
Civil commitment and morality	26705	4	40	34.408	6.057
Discussing and following politics	28538	2	8	5.877	1.662
Valid <i>n</i> (list-wise)	23021				



** $p < 0.01$.

Indicators of model fit: $\chi^2 = 827.30$; d.f. = 17; p value = 0.000; RMSEA = 0.046; p value for test of close fit (RMSEA < 0.05) = 1.00; RMR = 0.039; GFI = 1.00; AGFI = 0.99.

Figure 1 Second-order confirmatory factor analysis of dimensions of social capital

the model, we see that the three dimensions of social capital are all strongly related to general social capital. The 'Trust' dimension appears to be somewhat stronger related to general social capital than the other two dimensions, but overall the loadings in the second-order part of the model diverge considerably less than in the first-order part. What we can conclude from these findings is that the factor analysis confirms to a high degree our operationalization of the distinctive dimensions of social capital.

Empirical relations between the separate indicators of social capital

A first impression of the relations between the different indicators of social capital in Europe today can be acquired by looking at the inter-correlations as presented in Table 4. The inter-correlations at the aggregate level are – as far as they are statistically significant – quite high

and positive. Most inter-correlations, however, are not statistically significant, which can be attributed to the small N at the aggregate level. Statistically, this means that the results may not be robust. The fact that the significant inter-correlations all have a positive sign indicates, however, that several social capital phenomena have the tendency to cluster at the aggregate level. A main cluster is found within the social network indicators: countries with higher levels of active and passive participation are also countries in which people engage more with friends. This might be self-evident; in so far as people have friends in the voluntary organizations they are involved in. This network cluster is positively associated with the cluster of trust indicators: in countries with larger network activities people trust generalized others, and (welfare) state institutions more. This finding is in accordance with Putnam's (1993) expectation that membership of and participation in cross-cutting social groups, such as civic organizations, allows trust to become transitive and spread. Furthermore, Table 4 indicates a positive correlation between trustworthiness and trust in institutions: in countries where people trust institutions more, there is also a higher level of civic morality. This, again, tallies with Putnam's (1993) conjecture that sheer participation in civic organizations forms habits of cooperation, solidarity and public-spiritedness. Indicators of social capital that, at country level, are not associated with any other indicator are political engagement and family networking. The latter finding squares with the notion that familialistic countries are almost by definition countries with much bonding social capital and therefore sooner have an elective affinity with particularized trust than with generalized trust, trust in institutions and civic morality. The former finding is much more difficult to explain. One could argue, contrary to the evidence, that because the activities of government are valued by a population of active, associated citizens, they vigorously and constructively discuss with each other the pros and cons of certain government policies (Szreter, 2002). On the other hand, however, one could argue that political engagement is much more a product of a tradition of political partisanship or a situation of political polarization. Such confounding variables can disturb the inter-correlation between political engagement and the other indicators of social capital.

At the individual level, we notice that almost all inter-correlations are statistically significant. The large N will play a favourable part here. The correlations are rather low, however, which indicates, as assumed in the introduction and in addition to the findings of our factor analyses, that the various measures cannot simply be added up to construct a composite measure. But all measures do seem to tap an underlying commonality because almost all inter-correlations are positive. There is one exception, however. The indicator that measures informal contacts with next-of-kin is negatively correlated with generalized trust: people who are more strongly family oriented tend to trust other people less. The family network indicator

Table 4 Bivariate correlations between social capital dimensions (individual level [lower left triangle] \ aggregate level [upper right triangle])

	Civism		Trust		Networks			
	Trustworthiness	Political engagement	Trust in institutions	Generalized trust	Passive participation	Active participation	Friends	Family
Trustworthiness	–	ns	0.437*	ns	ns	ns	ns	ns
Political engagement	0.059****	–	ns	ns	ns	ns	ns	ns
Trust in institutions	0.138****	0.021****	–	0.627***	ns	0.466*	0.534**	ns
Generalized trust	0.044****	0.093****	0.138****	–	0.714***	0.530***	0.683***	ns
Passive participation	0.019****	0.148****	0.090****	0.199****	–	0.795***	0.664**	ns
Active participation	0.026****	0.120****	0.056****	0.136****	0.574****	–	0.731***	ns
Friends	0.054****	0.012**	0.094****	0.141****	0.161****	0.132****	–	ns
Family	ns	0.038****	ns	–0.040****	ns	ns	0.037****	–

* $p < 0.20$ (20%), ** $p < 0.10$ (10%), *** $p < 0.01$ (1%), **** $p < 0.001$ (0.1%).
ns = not significant.

is exceptional in more respects in as far as it is the only one that is not correlated with several other indicators, such as participation in voluntary organizations (actively or passively), trustworthiness and trust in institutions. Family-related social capital seems to extend to friends, since both related indicators are positively correlated. This fact may explain why there is also a positive correlation between the family indicator and political engagement: one of the items underlying the political engagement measurement is the degree to which people discuss politics with friends. It seems then that the family network aspect of social capital is of a different quality, which might reflect the difference between bonding and bridging social capital. Bonding, then, includes networks among next-of-kin and friends, and goes together with having less trust in generalized others.

Geographical distribution of social capital in Europe

Table 5 presents the country and region scores on our social capital scales. On average, the trustworthiness of European citizens is quite high (with a 34.4 average on a 4–40 scale), while their political engagement and their trust in institutions and in other people are fairly

Table 5 Country's and region's scores on social capital indicators

	Civism		Trust		Networks			
	Trustworthiness (4–40)*	Political engagement (2–8)	Trust in institutions (6–24)	Generalized trust (1–2)	Passive participation (0–12)	Active participation (0–3)	Friends (1–3)	Family (1–3)
Countries								
Denmark	37.5	6.3	16.7	1.7	1.1	0.6	2.2	1.6
Sweden	35.1	6.5	15.9	1.7	1.6	1.0	2.5	2.7
Finland	35.1	5.4	16.5	1.6	1.0	0.6	2.2	1.6
Germany	34.5	6.5	14.9	1.4	0.5	0.2	2.9	2.7
France	31.8	5.8	15.1	1.2	0.5	0.4	2.2	2.5
Austria	34.9	6.1	16.5	1.3	1.0	0.4	2.1	2.2
Netherlands	35.1	6.0	15.6	1.6	2.4	0.8	2.3	2.5
Belgium	32.1	5.5	15.1	1.3	1.2	0.6	2.1	2.6
UK	34.8	4.7	14.8	1.3	0.4	0.7	2.4	2.3
Ireland	36.0	5.0	15.9	1.3	0.8	0.5	2.4	2.5
Italy	35.9	5.6	13.9	1.3	0.6	0.4	2.0	2.3
Spain	34.5	5.1	15.1	1.4	0.4	0.3	2.1	2.5
Portugal	35.3	5.2	14.5	1.1	0.3	0.2	2.0	2.7
Greece	29.7	6.1	12.1	1.2	1.0	0.8	2.2	2.7
Estonia	32.8	5.9	14.1	1.2	0.3	0.3	1.9	2.4
Latvia	35.7	6.3	14.4	1.2	0.2	0.3	1.7	2.3
Lithuania	32.2	6.6	12.1	1.3	0.2	0.2	1.8	2.6
Poland	36.0	6.1	14.6	1.2	0.2	0.2	1.7	2.6
Czech Rep.	35.2	6.4	13.1	1.2	0.8	0.5	1.9	1.5
Slovakia	32.9	6.1	13.7	1.2	0.7	0.8	1.9	2.5
Hungary	35.2	5.6	13.7	1.2	0.2	0.2	1.8	2.8
Bulgaria	36.7	5.9	12.8	1.3	0.3	0.3	2.0	2.7
Slovenia	34.6	5.6	14.4	1.2	0.6	0.5	2.1	2.4
Coefficient of variation (%)								
	4	9	8	11	50	74	10	15
Range of scores as % of scale								
	21	23	24	30	30	20	40	40
North								
	35.8	6.0	16.3	1.6	1.2	0.7	2.3	1.9
West								
	34.6	5.6	15.4	1.3	0.8	0.5	2.2	2.5
South								
	34.1	5.5	13.9	1.3	0.6	0.4	2.1	2.5
East								
	34.5	6.1	13.6	1.2	0.4	0.4	1.9	2.3
Overall average								
	34.4	5.9	14.6	1.3	0.7	0.5	2.1	2.4

* Scale ranges.

moderate (with mid-scale scores on average). European citizens are passive and active members of on average 0.7 and 0.5 organizations, respectively. Their contacts with and feelings towards family are strong (2.4 average on a 1–3 scale), and clearly stronger than those towards friends (2.1 average on a 1–3 scale). What is striking is the remarkably small variation in social capital over the European countries at large. The coefficient of variation (standard deviation as percentage of the mean) of these scales is very low (15 per cent or less), except for passive and active participation. But in these two cases the scores of all countries are within a range that covers only 20 per cent and 30 per cent of the full scale range, respectively. That is, there is variation, but within a relatively small range of the scale. Nevertheless, some countries occupy extreme positions on some of the scales. For instance, trustworthiness is particularly low in Greece; with the Lithuanians the Greeks also have a particularly low trust in institutions; interpersonal trust is clearly highest in the Scandinavian countries; the Dutch population has a remarkably high level of passive membership of voluntary organizations; the Germans score exceptionally high on ‘friends’; Czech, Danish and Finish people score very low on ‘family’, as opposed to Hungarian, Portuguese and Greek people. But, again, on our measurement scales the extreme country scores are not that far from the overall means.

As could be expected from the national averages, there are no large differences in mean scores across the regional clusters. The Scandinavian countries from the northern cluster score systematically higher on all indicators except on informal contacts with next-of-kin, where this cluster scores lowest. The East scores lowest on most indicators, except on political engagement, where it has a relatively high score, and trustworthiness, where it has an average score. The South scores relatively low on trustworthiness, trust in institutions, active participation and political engagement. The West scores slightly lower on political engagement and higher on trust in institutions and more or less average on the other dimensions. But these differences between the regional clusters are, as already mentioned, rather small.

In order to explore what remains from regional differences, if accounting for country characteristics that may affect levels of social capital, we conducted a series of regression analyses, the results of which are given in Table 6. In model 1, regressing region dummies on our social

Table 6 Regression of region and national characteristics on the dimensions of social capital

	Civism		Trust		Networks			
	Trustworthiness	Political engagement	Trust in institutions	Generalized trust	Passive participation	Active participation	Friends	Family
MODEL 1								
Region (ref. = North)								
West	-0.145	-0.076	-0.140	-0.304	-0.356	-0.131	-0.099	0.345
South	-0.108	-0.115	-0.287	-0.297	-0.426	-0.147	-0.136	0.275
East	-0.094	ns	-0.377	-0.425	-0.531	-0.192	-0.305	0.233
MODEL 2								
Region (ref. = North)								
West	ns	-0.134	-0.225	-0.267	-0.574	-0.126	-0.117	0.248
South	0.111	-0.159	-0.344	-0.222	-0.523	-0.109	-0.152	ns
East	0.339	ns	-0.384	-0.251	-0.122	ns	-0.307	-0.446
Welfare effort	-0.143	ns	0.050	-0.038	0.197	0.058	-0.039	0.357
Wealth	0.372	ns	0.057	0.161	-0.237	ns	0.045	X
% Protestant	0.160	-0.056	ns	0.041	ns	ns	ns	-0.180
Adjusted R ² model 1	0.008	0.015	0.083	0.069	0.119	0.015	0.050	0.049
Adjusted R ² model 2	0.029	0.016	0.087	0.072	0.148	0.018	0.050	0.140

X: In the case of the family scale there is a problem of multi-collinearity between wealth (gdp) and welfare effort. Therefore, wealth is excluded from this row in model 2. The coefficients are significant at $p < 0.01$.

ns = not significant.

capital scales, we see of course the same effects as in Table 5. The Northern region has the highest average scores on all indicators, except for relations with family. Scandinavians seem to be the social capital champions of Europe. However, including several country characteristics in model 2 reveals some interesting deeper insights in the effect of region. Regarding people's trustworthiness, it shows that the higher average score of the Scandinavians, indicated in Table 5 or in model 1 of Table 6, is not due to any 'northern-ness'. On the contrary, what remains from this factor when controlling for the other variables is exactly the opposite effect. Scandinavians' higher average level of trustworthiness is mainly related to their countries' wealth and dominant Protestant culture, while their greater welfare spending detracts from their trustworthiness. In the case of political engagement, the region effect remains the same (highest in the north and the east of Europe), while there is no relationship with a country's wealth and welfare spending. It shows, however, that political engagement tends to be a bit lower among people living in countries with a strong Protestant culture. Regarding the trust scales, the region effects also remain as they are, but here we see relations with the other variables. People's trust in institutions is a bit higher in more affluent countries that spend more on welfare. Generalized trust is also higher among people living in more affluent countries, but here welfare state generosity has a restraining effect.

As for passive participation in voluntary organizations, Table 6 indicates that the region effect remains, but there are important effects from welfare effort and wealth. Living in a higher spending welfare state stimulates people to participate more, while living in a wealthy country detracts from it. In the case of active participation, there is still the welfare spending effect, but the wealth effect is absent. Regarding people's contacts with friends, the region effect also remains. Table 6 indicates, furthermore, that higher welfare spending has a small negative effect on friends networking, while wealth has a small positive effect. In the case of family networking, the region effect changes clearly. When controlling for the other variables, it shows that there is no longer a difference between the Scandinavian and the Southern region, while family networking in the Eastern region is considerably lower than in Scandinavia. The table suggests that this is related to the lower level of wealth in the East, but the lower proportion of Protestants, compared to the Scandinavian countries, countervails this.

Clearly, our analyses show that European regional differences in social capital aspects need to be analysed at a deeper level if underlying mechanisms are to be understood. They also show that such mechanisms may differ substantially between social capital indicators, which again is a reason why studying social capital phenomena with a composite additive or multiplicative measure is inadequate.

Social distribution of social capital in Europe

To analyse the distribution of social capital among social categories of European citizens, we regressed a set of personal characteristics on our social capital scales. The results are presented in Table 7 in the model 1 columns. To answer the question whether the overall picture of social determinants will change when reckoning with the region people live in, we added region to the regression analysis. These results are presented in the model 2 columns of Table 7.

Do personal characteristics matter for people's amount of social capital, and, if so, how? The model 1 columns show some remarkable patterns across scales. Firstly, the findings strongly suggest that there is what could be termed an 'accumulation of capital' effect. With only a few exceptions, social capital measured by the various indicators is higher among Europeans who are older, who have a higher educational level, who live in households with higher incomes, and who have jobs compared to those who do not. More human capital (life experience and education), and more economic capital (income and work) tend to go together with more social capital, whatever its form. This relation is weaker in the case of people's trustworthiness (no effect from education and income), and in case of their orientation to next-of-kin (no effect

Table 7 Regression of personal characteristics and region on the dimensions of social capital (pooled data)

	Civism				Trust				Networks							
	TW 1	TW 2	PE 1	PE 2	TI 1	TI 2	GT 1	GT 2	PP 1	PP 2	AP 1	AP 2	FR 1	FR 2	FA 1	FA 2
Gender	0.067	0.067	-0.121	-0.130	ns	ns	-0.019	-0.018	-0.018	-0.019	-0.053	-0.055	ns	ns	0.034	0.033
Age	0.196	0.205	0.208	0.231	0.037	0.033	0.043	0.058	0.053	0.064	ns	0.030	-0.236	-0.240	ns	ns
Educational level	ns	ns	0.225	0.259	-0.049	-0.040	0.128	0.147	0.149	0.194	0.117	0.146	0.061	0.067	0.035	0.047
Household income	ns	ns	0.048	0.044	0.052	0.028	0.092	0.063	0.137	0.101	0.097	0.079	0.060	0.032	0.058	0.054
Status																
Retired	ns	ns	ns	ns	0.039	0.040	-0.034	-0.036	-0.052	-0.050	-0.026	-0.029	0.068	0.074	ns	ns
Housewife	ns	ns	-0.068	-0.040	0.041	0.029	-0.030	-0.031	-0.033	-0.036	-0.024	-0.018	ns	ns	0.037	0.021
Student	-0.027	-0.025	-0.025	-0.017	0.042	0.041	0.028	0.025	0.026	0.023	ns	ns	0.080	0.074	-0.027	-0.030
Unemployed (ref. = employed)	-0.045	-0.045	-0.031	-0.031	-0.019	ns	-0.029	-0.019	-0.056	-0.046	-0.046	-0.041	ns	ns	ns	ns
Religion																
Catholic	-0.060	-0.054	-0.031	ns	-0.021	ns	-0.070	-0.064	-0.072	-0.054	-0.056	-0.035	-0.024	-0.035	0.069	0.054
Protestant	0.041	ns	ns	ns	0.118	ns	0.128	ns	0.065	ns	0.075	ns	0.085	ns	-0.063	ns
Other (ref cat. = none)	-0.088	-0.092	ns	ns	-0.094	-0.067	-0.041	-0.038	-0.030	-0.018	0.020	0.030	ns	ns	0.086	0.091
Church attendance	0.124	0.122	0.036	0.037	0.106	0.126	0.051	0.068	0.088	0.109	0.171	0.182	0.028	0.048	0.077	0.081
Political stance	ns	ns	ns	-0.019	ns	ns	-0.054	-0.050	-0.034	-0.030	-0.027	-0.027	-0.027	-0.017	-0.066	-0.058
Region																
West		-0.135		-0.081		-0.137		-0.272		-0.125		-0.109		-0.059		0.321
South		-0.075		-0.133		-0.286		-0.268		-0.230		-0.171		-0.125		0.204
East (ref cat. = North)		-0.075		ns		-0.350		-0.395		-0.312		-0.182		-0.278		0.208
Adjusted R ²	0.084	0.090	0.105	0.132	0.050	0.104	0.067	0.106	0.077	0.123	0.068	0.083	0.085	0.124	0.048	0.078
R ² model 2-R ² model 1		0.006		0.027		0.054		0.039		0.046		0.015		0.039		0.030

Notes: all coefficients significant at $p < 0.01$; ns = not significant; Estonia not included because of incomplete data.

TW = trustworthiness, PE = political engagement, TI = trust in institutions, GT = generalized trust, PP = passive participation, Ap = active participation, FR = friends, FA = family. ns = not significant.

from age and work). Otherwise, however, there is a clear accumulation of various forms of capital that people can possess.

Secondly, seen over Europe as a whole, there are clear overall patterns regarding religion. Compared to non-religious people, Catholics tend to have less social capital in terms of trustworthiness, political engagement, trust in others and in institutions, participation in voluntary organizations and friends networking, while Protestants tend to have more. With regard to family capital, however, the relation is in the opposite direction. Catholics bond stronger with family than Protestants do. Religious Europeans, who are neither Catholic nor Protestant, differ on most social capital indicators from non-religious people, but not in a consistent way. What is consistent, however, is the fact that people who attend church (more frequently), regardless of their denomination, have higher levels of social capital. To the degree that church attendance indicates a form of cultural capital that people can have, this finding would add to the 'accumulation of capital' effect. In a way, church attendance almost necessarily implies active participation, socializing and trusting. There is also a tendency that leftist people have higher trust in others, and they have more network capital. This might fit the, generally, more collectivist orientation of left-wing ideology, and the more individualist orientation of right-wing liberal ideologies.

As for the other variables, there are no overall patterns. Regarding gender, Table 7 shows that European women tend to be more involved in family networking, politically less engaged and participate less in voluntary organizations compared to men. Women are also more trustworthy, but they trust other people a bit less. Women tend to bond more than men and men bridge more than women. Whether this gender effect should be ascribed to differential socialization or sooner to biological and cultural co-evolution is not immediately clear. When looking at work status, and comparing some non-employed groups with people in jobs, it shows that European retirees are less active in voluntary organizations, they trust other people a bit less, and (welfare) state institutions a bit more. They are, however, more engaged in friends' networks. Housewives show the typical female pattern that we saw above: compared to working people they are more family oriented, less politically engaged, less active in voluntary organizations, and they have less trust in other people. Like retirees, housewives put more trust in (welfare) state institutions. Compared to working people, students are less trustworthy, politically engaged and family oriented, but they have more trust in institutions and in other people, and participate more (passively) in voluntary organizations and in friends' networks. Unemployed people tend to have less social capital than people in jobs, with the exception of contacts with family and friends. In short, working people, compared to non-employed people, tend to be more politically engaged, they have less trust in institutions (with the exception of unemployed people, who score even lower on this indicator), they have higher trust in other people (except for students, who trust other people even more), they participate more in voluntary organizations (despite their being busy working too), and they tend to be less engaged in friends' networks.

Is the structure of determinants of social capital affected by region? To answer this question we compare the results of models 1 and 2 as presented in Table 7, which show that, generally, the answer is in the negative. When adding region to the regression of personal characteristics on social capital scales, the relations between characteristics and scales on the whole do not change significantly. The findings are still in line with the 'accumulation of capital' hypothesis. Women respond, furthermore, still as women usually do, and men as men. The case for the political 'collectivism-individualism' hypothesis is still strong. The effects of church attendance stay more or less the same. This means that personal characteristics and region exert (near) independent influences on people's social capital. However, there is one important exception. When adding region to the analysis, all effects of being Protestant disappear. This means that it is not being Protestant as such that gives people higher levels of social capital

on all indicators (except family, where Protestants score lower), but rather living in a Scandinavian country. The effect of being Catholic disappears in the case of political engagement and trust in institutions, but remains in the other cases. That is, regardless of the region people live in, Catholics tend to have less trust in others; they participate less in voluntary organizations, interact less with friends, but value family more than non-religious people. Region has no effect on the relationships between social capital and belonging to the group of other religions.

Finally, Table 7 indicates that the relative importance of social determinants and region depends on the social capital indicator at issue. People's trustworthiness is least, indeed hardly at all, related to living in the North, West, South or East of Europe. The same is true of people's active participation in voluntary associations. With respect to all other social capital indicators, region does add to the explanation of differences between people. However, with the exception of trust in institutions, the social determinants as a whole are relatively more important than region for understanding people's social capital.

Conclusion and discussion

Social capital has proved to be an attractive concept for economists, political scientists and sociologists alike, but its practical value has been criticized for being a too broad, ill-defined concept. However, acknowledging the multifaceted character of social capital opens the way for further theoretical and empirical analysis of this promising construct. The first aim of our article was to sort out the various aspects of social capital theoretically, and to construct a measurement instrument that reckons with its multifaceted-ness. The second aim was to describe how social capital, by its various aspects, is distributed geographically among European countries and regions (North, West, South, East) and socially among social categories of European citizens.

Guided by the literature we distinguished between three dimensions of social capital: networks, trust and civism. Within each, we further distinguished two aspects, which were operationalized with data from the 1999/2000 wave of the EVS survey. This resulted in eight indicator scales for social capital: trustworthiness, political engagement, trust in institutions, trust in other people, passive and active participation in voluntary organizations, friends networking and family networking. These scales were validated in a LISREL-based confirmatory factor analysis encompassing all underlying survey items. This validation, as well as the finding that the inter-correlations between the scales at the individual level were all positive, but rather small, led us to conclude that social capital is a multifaceted phenomenon indeed, and that it is worthwhile to construct a multidimensional measurement model of social capital using multiple indicators.

As for the geographical distribution of social capital, we found that social capital levels tend to be higher in Scandinavia, except for family networking. However, on the whole, European countries and regions do not differ substantially in aggregate levels of social capital. This might come as a surprise to those who have an eye mainly for European diversity, especially for North–South or East–West fault lines, and less for European unity. But our findings seem to suggest that when one is really interested in regional variations in social capital one should sooner take a global than a European perspective. Although Europe shows a great deal of diversity, there appears to be a considerable degree of unity in this diversity. From a global vantage point Europe, today's European countries have much in common. They are all modern, relatively affluent, and have more or less comprehensive (post) industrial welfare states. It would be interesting to replicate our analyses using data from the World Value Surveys, which include more traditional, poor, agricultural countries with no extensive welfare state arrangements. The advantage would not only be a bigger N, but also more cross-country and cross-region variation. The disadvantage, however, would be that the quality of

the data is inferior to that in EVS, and not all indicators of the social capital dimensions are part of the WVS questionnaire.

As for the social distribution of our social capital scales, we found some remarkably common patterns. Firstly, there are grounds for positing a capital-accumulation hypothesis. That is, we found that, over Europe as a whole, Europeans with more human capital (life experience and education), and more economic capital (income and a job) also tend to have higher levels of social capital, of whatever form. This finding strongly suggests that people's social capital should be incorporated in the sociological and economic analysis of the causes and consequences of inequality, poverty and social exclusion. However, social capital should also figure in social studies and debates with a gender perspective. We found that European women as a group, compared to European men, have a particular structure of social capital: they are more trustworthy and more family oriented, but they are less politically engaged, they have less trust in generalized others, and they are less involved in voluntary associations, actively or passively. From a political perspective, social capital is an interesting concept too, because we found that leftist people trust other people more, and they also have more network capital. This could fit the collectivity orientation of ideologies of the left. In addition, cultural factors play a role, especially religion. We found that frequent churchgoers have more social capital, on all eight scales, than people who attend church less, or not at all. One could see church attendance as a form of cultural capital people can have, which would further substantiate the capital-accumulation thesis. We also found that Catholic Europeans, compared to non-religious people, tend to trust other people less, and have less network capital. The exception is their orientation towards the family, which is higher. In the first instance, we found that on most of our scales Protestant Europeans have higher social capital than non-religious people, but with region in the equation this effect disappeared. Our conclusion is that, in a European context, higher social capital levels are not so much a matter of being Protestant, but of living in Scandinavia.

Finally, there are hardly any regional differences in people's trustworthiness and their being active in voluntary associations. With regard to all other aspects of social capital there are regional differences, but on the whole people's social capital depends more on their personal characteristics, that is, on who and what they are, than on where in Europe they live.

We are aware that our article is partly methodological and partly descriptive. We did not intend to test any hypotheses regarding the causal mechanisms that underlie the relations we found at the aggregate and individual levels of analysis. But explanatory questions will have to be raised if we are to arrive at a full understanding of the causes and consequences of social capital in its different forms. We tentatively explored some of the venues leading to such explanations. The literature seeking (better) explanations of the interrelations between the various aspects of social capital, and of the relations between social capital and personal and contextual variables, is growing (e.g. Stolle and Rochon, 1999; Wilson, 2000; Bekkers, 2001; Dekker and Uslaner, 2001; Uslaner, 2002; Dekker and Halman, 2003; Delhey and Newton, 2003). But there is still a world to win. One of the problems is that the literature on social capital does not distinguish sufficiently between the interrelations of its indicators at the individual and aggregate levels, and is therefore susceptible to ecological fallacies. One has to be careful here, since, as we found, the political engagement of a population does not correlate with all other social capital variables at country level, but at the level of individuals the more politically engaged have higher social capital, regardless of form. Another problem is that the multifacetedness of social capital implies there may be quite a diversity in strength and direction of underlying causal mechanisms. What is found to explain one aspect of social capital will not necessarily explain another. Moreover, little is known yet about the causal relationships among the different aspects and indicators of social capital. Putnam (2000: 137) is not far off the mark when he considers them to be 'as tangled as well-tossed spaghetti'.

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