

# Social Capital and Social Class in Europe: The Role of Social Networks in Social Stratification

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Social capital has become a much researched concept and there has been much theoretical speculation about unequal access to it. However, the cross-national empirical analysis of social capital in relation to social stratification and social inequality is lacking. In this article, we explore the relationship between social stratification and social capital across 27 European countries using the Eurobarometer (EB) 62.2 ( $N=27,000$ ) carried out in autumn 2004. Through the use of statistical modelling we are able to determine the extent to which individual characteristics, including occupational position and education, are associated with different measures of social capital and to set this within a cross-national context. We find that social stratification is an important element in understanding social capital both at a country and at an individual level. Upper layers of society have higher levels of social capital, especially through associational networks (formal social capital), although informal contacts were not so clearly stratified by class. Countries with high levels of inequality magnified these differences between classes, giving the upper classes further advantages. Patterns of social capital, therefore, tend to reflect or even perpetuate the stratification patterns of the society.

## Social Capital and Social Class

Despite the burgeoning literature on social capital, some key aspects have been neglected. Here, we focus upon the relationship between social networks and social class, which formed part of the original formulation of social capital by Pierre Bourdieu and elaborated by others. New data available from the EB 62.2 (European Commission, 2004) on social capital enable us to bring back a class perspective and to look at variations across countries. Building on Pichler and Wallace's (2007) work about different dimensions of social capital, such as formal and informal, bridging and bonding, we consider: is there a relationship between social capital and social class? Do different social classes use different kinds of social capital? Do these dimensions differ across nation states in Europe?

The formulation of the concept of social capital at a theoretical level is heavily influenced by its relationship to the reproduction of inequality. For example, Bourdieu's (1986) concept of social capital as 'the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition' (Bourdieu, 1986, p. 248) argues that social capital is constituted in networks as a resource, which can be accumulated over time and transmitted to the next generation and which requires deliberate economic and cultural investments. Bourdieu was concerned with the way in which the privileged classes in France retained and reproduced their social positions. Hence, he argued that the upper classes use their different kinds of capital (economic, cultural, and social) to maintain their social positions and exclude other groups.

His theory of social capital was thus concerned to explain how social inequality is perpetuated.

Nan Lin has taken up this reference to social class, but by embedding it in a more 'rational choice' perspective (Lin, 2001a, b). For Lin, actors invest in social capital in order to maximize their positions (or minimize their potential losses). However, he argues that social capital is embedded in social structures, which determine the resources available to the network as well as the rules of behaviour governing participation. Networks embedded in the layers of the social hierarchy try to monopolize resources and this is especially the case with those in the upper layers. Therefore, he argues that in the upper layers of the social hierarchy networks will be smaller, more dense, and more closed in character than at other levels. On the other hand, actors whose networks can span social layers are more likely to be socially mobile, especially if their networks can bridge crucial 'structural holes' (Burt, 2001). However, the principle of 'homophily' will tend to encourage people to seek other network members most like themselves, which might limit access to resources. Furthermore, the shape of the social hierarchy could have an important influence on the kinds of networks embedded there: the size of the different social layers as well as their distance from one another could also determine the way in which social capital operates. Hence, Lin sees social capital as forming the basis for social inequalities: 'inequalities in social capital explain the framework for inequalities in social stratification' (Lin, 2001b, p. 96).

The heterogeneity of social networks is also seen as an advantage by Granovetter who argued that it was weak ties which could form dispersed links that could help to get jobs (Granovetter, 1974) and Putnam has further argued that it is bridging capital, which links different networks and resources that is more advantageous than bonding capital, which inheres in densely knit social groups (Putnam, 2000). It is not clear, however, to what extent bridging or bonding social capital inheres to different social groups. Hall (2002) links these social networks to social class in an analysis of Great Britain, where he argues that the middle class have more extensive and diverse social networks through their participation in associational life and the working class are more likely to have bonding relationships with people in particular spheres of endeavour. Moreover, these differences have widened over time in the UK, partly as a result of increased participation in education. We could also point to the increased economic polarization in that country as a possible factor. In this article we ask: is this the case for other countries too? Does the extent of inequality

affect the way in which social capital is distributed around different social classes?

Other social capital theorists refer to the properties of social networks more obliquely. For example, Coleman defines social capital as 'the value of those aspects of social structure to actors, as resources that can be used by the actors to realize their interests' (Coleman, 1990, p. 305). For him, social capital includes expectations of reciprocity, trust, shared values, and obligations. Importantly, social capital is Coleman's explanation as to why people cooperate (Field, 2003). Although Coleman does not mention Bourdieu's work in his concept (Portes, 1998) the understandings of social capital overlap with one another. Both of these approaches emphasize social networks and relationships between members of a social group. As Portes (1998) sums up the communalities between Coleman and Bourdieu: 'social capital inheres in the structure of their [the people's] relationships. To possess social capital, a person must be related to others and it is those others, *not himself*, who are the actual source of his or her advantage' (Portes, 1998, p. 7, emphasis added). Yet, their differences should not be overlooked. Whereas for Bourdieu, social capital is an individual characteristic in the struggle over resources determined by societal structures whilst for Coleman social capital is a means of social exchange—that is, the use of social capital is rational and individualistic (Blackshaw and Long, 2005). Yet, Coleman acknowledges communal aspects of social capital, which depart from a strict rational choice approach.

However, in emphasizing the individualistic aspect of social capital in terms of investment in social networks, social capital theorists have neglected the way in which social networks (as well as social capital) inhere in social groups, ones which form part of a social structure (Somers, 2005). Others too have criticized the rationalistic approach to social capital for seeing it as the property of individuals instead of a property of *relations among* individuals (Edwards and Foley, 1997).

We are therefore arguing that we would need to consider the character of social networks to understand how social class is related to social capital. Many have argued that this cannot be done using large-scale surveys (Edwards and Foley, 1997) and many scholars have preferred to carry out case studies, small-scale analysis, and network analysis (see for example, Lonkila, 1997; Mouw, 2003; Smith, 2005). Although this has been a fruitful approach, it cannot tell us in general how different social groups might have different kinds of social capital and can only hypothesize the relationship to larger social structures. Yet, we agree with their

claim that social capital should mainly consider the *relationships* between individuals. However, this can nevertheless be operationalized with survey data when referring to a broader measure of network activities such as in voluntary associations. Yet, we cannot fully test all the suggestions put forward by Bourdieu and others as to the way social capital operates in the stratification system because large-scale cross-national surveys more often than not offer proxy variables and somewhat indirect indicators of social capital. Nevertheless, we can suggest some ways of operationalizing these concepts in a cross-national perspective.

Recalling the definition of social capital by both Pierre Bourdieu and James Coleman, we clearly find that social capital also inheres in the volume of social ties and the extent to which social networks bridge various different social groups, i.e. the range of social capital. In other words, both the size of the social network is important (extensivity) as well as the frequency of interactions (intensivity). Surveys explore a range of people's involvement in networks by asking about membership of and participation in voluntary associations. The size of networks corresponds to the individuals' potentials to activate ties or access the resources of other people. Of course, it could be argued that it is not only the size of the social network that matters since having a few but also very powerful connections could be more useful than many links with few resources (cf. Smith, 2005). Yet, given the idea of diversification in other forms of capitals we find good reasons to believe that larger and especially broader networks, i.e. more heterogeneous networks, contain higher potentials in the long run. Hence, being a member and participant of many associations can help promote the diversification of linkages, the potential enlargement of connections, and the creation of bridging social capital.

This is not an argument that social capital is fully embodied in these measures. These measures do only embrace one aspect of social capital whereas the whole concept remains rather intangible. Yet, surveys can go beyond network analysis in providing much needed data on individual embeddedness in these networks of organizations at a general and representative level. With surveys, it is possible to describe inequalities in social capital both within and across countries, which is hardly feasible with network analysis.

Here, we concentrate upon the breadth and intensity of social networks held by individuals. We divide the different kinds of social capital in *formal* (as measured by the involvement in voluntary associations) and *informal* social networks, or the relationships between neighbours, friends, and work colleagues. In order to

conceptualize this further, we have analysed these social networks in terms of first of all their *extensivity*: to what extent do they include formal organizations in terms of active membership, as well as informal networks with friends, work colleagues, or neighbours? This gives us an idea about the heterogeneity of these networks. Second, we look at social networks in terms of their *intensivity*: how frequently do people participate in voluntary associations and how often the person interacts with people in the network. These four dimensions of social capital (see also Pichler and Wallace, 2007) then form the basis of this analysis.

## Hypotheses

Our hypotheses concern the role of social networks and social structures. Following Bourdieu's thesis, we assume inequalities in social capital due to different social positions. Bourdieu (1987) convincingly argues that social class position impacts on the accumulation and properties of cultural capital. Similarly, we ground our causality assumption on the idea that social classes deliberately engage in very specific ways to establish very specific networks. That is, the structure of social networks, and thus the potential of access to other people's resources, might depend on positions in the stratification system (here measured by occupational classification) and education. Class status and educational differences express dominant forms of inequality within the society. If Lin, Bourdieu, and Hall's theories are correct, those in upper positions will particularly engage in formal social networks, i.e. be members of and participate in voluntary associations. Their networks will be both more extensive and more intensive. However, this is only the case with formal social capital. This leads towards our first hypothesis:

H1: Higher social classes will have more extensive and intensive formal social networks. They are more likely to be members of a larger number of different associations. Additionally, their involvement in voluntary associations (participation, intensivity) is also higher.

For informal networks, i.e. having contact to various groups of people (extensivity/heterogeneity) and the intensivity (frequency) of encounters within those groups, there is no reason to assume that higher social status is associated with higher (more extensive, more intensive) involvement. Instead, the social exclusion of poor communities is often portrayed as the lack of social connections outside of the deprived neighbourhood (Wilson, 1997). On this note, we expect lower social classes to engage more with their

immediate surroundings in terms of establishing informal relationships. Hence, we might expect that despite having rather limited formal social network, the lower layers of society show more 'bonding' than 'bridging' social capital. On this note, we can formulate our second hypothesis:

H2: Lower social classes have less extensive and more intensive informal social networks. The limited access to resources (Hypothesis 1) makes it likely that lower classes develop forms of bonding social capital in informal relationships with 'similar' people around them.

But how does this differ between countries? It is assumed that where social stratification is strongest (as measured by indicators of the extent of inequality) there will be less extensive social networks, because these are more likely to be limited to particular social classes. Otherwise, the distance between social classes is larger in more unequal countries. According to Lin (2001b), this and the size of various social classes determine the ways in which social capital operates. Other studies have already shown the potential of variation in social capital across Europe (e.g. Sik, 1994; Howard, 2003; Uslaner, 2003; Mihaylova, 2004) and the connection with welfare regimes has been well documented (Esping-Andersen, 1990; van Oorschot and Arts, 2005; Kaariainen and Lehtonen, 2006). However, social capital has not been explored with respect to the stratification system. Hence our third hypothesis is that

H3: National differences in social capital can be explained by economic inequalities, which are the result of differences in social structure. Where social inequality is higher, class differences concerning social capital are generally larger.

## Data and Methods

The data used are from the EB 62.2 (European Commission, 2004). This edition of the EB uses a stratified random sample of approximately 1,000 respondents per participating country ( $n=27$ ) that equals a total sample size of approximately 27,000. The EB 62.2 was dedicated to aspects of social capital like no other large-scale cross-national survey so far. Other reasons why it is preferable, for instance, to the European Social Survey (ESS) and the European Values Study (EVS) are that EB 62.2 offered more recent data (2004 instead of 2002 and 1999/2000, respectively) and included more countries than the ESS.

We use several indicators to measure extensivity and intensity of social networks. Table 1 addresses the

exact question wording. Starting with formal networks, we conceive of extensivity as inhering in formal networks, which are developed through activity in civil society associations (Putnam, 2000). Extensivity is generally described as the size of the network. The broader the range of different association a person belongs to the more extensive their networks. Therefore, extensivity also refers to the heterogeneity of networks. It is measured by the number of memberships of different types of associations. In total, we count the number of memberships of a series of 14 different kinds of voluntary organizations, irrespective of whether people are active or inactive members. As a result, we do not have information about the number of total memberships, but we do get vital insights into the range of *different* memberships. The intensity of formal social networks is measured by the number of active participations a respondent has, i.e. in how many different types of voluntary associations our respondents participate but not 'how often' (daily, weekly, monthly, or annually) this is the case.

In informal social networks, extensivity refers to contact with friends, neighbours, and work colleagues. Unfortunately, contact to family members was not asked in this survey. In this case, extensivity/heterogeneity is measured by counting the number of different groups of people in the informal network. Hence, it is important to note that as for the extensivity measure we examine *whether or not* people meet others. Intensity then refers to *how often* people engage within the network. That is, within informal networks we explore whether people meet others at all as well as the frequency of social contacts with friends, work colleagues, and/or neighbours.

The two dimensions of social networks form different dimensions of social capital. Thus, we also consider the relationships between extensivity and intensity of social networks. We assume that extensive networks are less likely to be intensive; participation takes time and thus limits the possibility to 'meet everybody' and this would be the case with both formal and informal networks. Hence, the more people are members of organizations, the less time they have to actively participate in every one of them. In terms of statistical associations between these aspects of social capital, we assume that there will be a weak link between intensity and extensivity. Methodologically speaking, intensity and extensivity do not constitute a common measure of social capital in this respect but they are likely to compensate each other.

This article examines social capital from an occupational class perspective. Unfortunately, EB 62.2 does not include an extended version of the ISCO scheme.

**Table 1** Question wording: social capital indicators in the EB 62.2 (European Commission, 2004)**Formal social networks (social capital)**

Extensivity: Memberships in Organizations (#)

*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. (answer categories: mentioned—not mentioned)*

- Qd9a.1- A sports club or club for outdoor activities (recreation organisation)  
 Qd9a.14. Education, arts, music or cultural association  
 A trade union  
 A business or professional organisation  
 A consumer organisation  
 An international organisation such as development aid organisation or human rights organisation  
 An organisation for the environmental protection, animal rights, etc.  
 A charity organisation or social aid organisation  
 A leisure organisation for the elderly  
 An organisation for the defence of elderly rights  
 Religious or church organizations  
 Political party or organisation  
 Organisation 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

Intensivity: *And, for which, if any, do you currently participate actively or do voluntary work? (answer categories: mentioned—not mentioned)*

- Qd9c.1- A sports club or club for outdoor activities (recreation organisation)  
 Qd9c.14. Education, arts, music or cultural association  
 A trade union  
 A business or professional organisation  
 A consumer organisation  
 An international organisation such as development aid organisation or human rights organisation  
 An organisation for the environmental protection, animal rights, etc.  
 A charity organisation or social aid organisation  
 A leisure organisation for the elderly  
 An organisation for the defence of elderly rights  
 Religious or church organizations  
 Political party or organisation  
 Organisation 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

**Informal social networks (social capital)**

Extensivity: *Do you ...? (answer categories: yes—no; yes includes original answers of never, less than once a month, once a month, two or three times a month, once a week, several times a week)*

- QD5.1 Meet socially with friends  
 QD5.2 Meet work colleagues outside working time  
 QD5.3 Meet socially with neighbours

Intensivity: *How often do you ...? (answer categories: never, less than once a month, once a month, two or three times a month, once a week, several times a week)*

- QD5.1 Meet socially with friends  
 QD5.2 Meet work colleagues outside working time  
 QD5.3 Meet socially with neighbours

Hence, applying the Erikson–Goldthorpe–Protocolero social classification scheme or the recent ESeC by Rose and Harrison (2007) is not feasible.<sup>1</sup> Nevertheless, the measures provided enable us to distinguish between various social positions based upon occupational status. With respect to the ISCO classification scheme, we found a way to re-categorize the given measures, which results in four distinct social groups and one ‘other’ category. We use these five occupational groups as a proxy for social class: the professional-managerial class [ $n=5,278$ ], intermediate class [ $n=8,209$ ], ‘petty bourgeoisie’ [ $n=1,829$ ], working class [ $n=8,238$ ], and never in paid work [ $n=3,008$ ].<sup>2</sup> Second, we use educational level as a measure of social structure (cf. also Gesthuizen *et al.*, 2008) because this also reflects social class and is especially relevant for Bourdieu’s concept of social stratification (Bourdieu and Passeron, 1977).

In multilevel models, our measures of extensivity and intensity of both formal and informal social capital are regressed on a number of socio-demographic characteristics. To separate class effects from more general ones, we control for age, gender, urban–rural place of living (domicile), and employment status. These could affect the ways in which social capital is structured because social networks vary between age groups (for example, young people have more friends, but it takes time to build up extensive networks) as well as gender, since women and men are differently situated with respect to their interactions within the neighbourhood and the workplace. Additionally, we might expect differences between urban and rural areas, the former offering the opportunity for more heterogeneous networks, perhaps. The fact that someone is employed would of course offer opportunities to interact with work colleagues and so this has also been controlled for. To explain country differences in extensivity and intensity of formal and informal networks we used the GINI coefficient as the most reliable source of general socio-economic inequality.

We use multilevel modelling to assess the impact of social class on social capital. Because three of the dependent variables are counts (both measures of formal social capital, extensivity of informal social capital), we use Poisson hierarchical regressions in these instances. In the remaining case of intensity of informal social capital, we can use linear hierarchical regressions because the dependent variable is a scale consisting of three variables (see above). We include social class and inequality (GINI) in two ways. First, as main effects they explain differences in the averages concerning the extensivity and intensity of formal and informal social capital. Second, we address the unequal distribution of social capital within countries across social classes by including a so-called cross-level interaction effect. This should explain the varying importance of social class membership across countries, i.e. different levels of inequality concerning social capital within European societies.

## Results

### Measuring the Extensivity and Intensity of Social Networks

Table 2 presents descriptive findings of indicators covering extensivity and intensity of both formal and informal social networks.

Concerning memberships of types of organizations, the average respondent is not even a member of any type of voluntary associations. A mean of 0.82 suggests that few people join more than one type of voluntary association. Since some types of associations might be more popular in some countries than in others, we briefly examine whether we can find national differences in the composition of this index. We find that Sweden, the Netherlands, Luxembourg, Denmark, and Finland almost always score highest with respect to the average level of membership, no matter what type of association we are considering. This is a sign

**Table 2** Social capital: indices of social networks

Social capital characteristics	Mean	SD	Min	Max	<i>N</i>
Formal social networks					
Extensivity: memberships	0.82	1.22	0	13	27,008
Intensity: participation	0.40	0.76	0	13	27,008
Informal social networks					
Extensivity: meeting	2.11	0.82	0	3	26,914
Intensity: frequency	3.17	1.31	0	5	26,914

Notes: SD = standard deviation (assuming normal distribution). The first three measures are, however, count data where SD equals the mean (Poisson distributed). Question wording and answer categories see Table 1.

Source: The EB 62.2 (2004), weighted data by design and country.

that memberships are widespread in these countries and shows that higher rates of memberships are not particularly distorted by higher levels of trade union membership or memberships of political or church organizations only. Furthermore, 'nordic exceptionalism' with respect to social capital (Delhey and Newton, 2005) seems to not only apply to social trust, but can be extended to patterns of participation in voluntary associations as well (cf. Pichler and Wallace, 2007). Exploring the intensity of formal networks, we find that active participation in formal networks is generally low. On average, a rate of participation of 0.40 informs us that people seldom engage in different types of organizations in terms of active work.

The measure of extensivity within informal networks indicates that on average people meet 2.11 out of three different circles of people (friends, colleagues, and neighbours). Table 2 further shows the frequency of contacts to all three kinds of people within the informal networks. It provides evidence that people have quite a lot of social contacts on average, as the scale ranges from 0 (never) to 5 (every day) and the average score is 3.17. Additional analysis shows that these informal networks mainly consist of friends.

Next we examine the correlations both within and between the outlined dimensions of social capital. This raises interesting questions as to how far informal and formal networks relate to each other and the relationship between intensity and extensivity. As mentioned earlier, we generally assume weak associations between intensity and extensivity as time constraints limit the possibility to intensively engage in extensive networks. Further to this, compensation might be more common than a strong reinforcement between formal and informal networks, which would rather imply negative correlations.

Bivariate associations (Pearson correlations) between measures of extensivity and intensity of social networks show that intensity and extensivity are more closely related within formal networks ( $r=0.63$ ) than within informal networks ( $r=0.25$ ). The unexpectedly high correlation between extensivity and intensity in formal social networks is most likely grounded in the coincidence of membership and active participation: people are very unlikely to participate without being a member of this particular type of association. The results, however, also show that informal and formal networks are only loosely associated in terms of extensivity ( $r=0.20$ ) and intensity ( $r=0.07$ ). That is, in terms of extensivity, informal and formal networks slightly reinforce each other whereas in terms of intensity the association is too weak to suggest a meaningful coincidence between informal and formal networks.

To sum up, the bivariate correlations show interesting patterns between and among the various indicators of extensivity and intensity. The overlap between informal and formal networks is rather weak. The tendency of reinforcement is more obvious in the case of extensivity, since participants in types of voluntary organizations do not meet their friends (colleagues, neighbours) more often than others (intensity).

The findings suggest that dimensions of social capital can be treated separately. For the following analyses of the relationships between social class and social capital, this implies a detailed analysis of the patterns of social capital in a social class perspective. In what ways do social classes<sup>3</sup> differ in terms of social capital? This question is analysed in the remainder of the article.

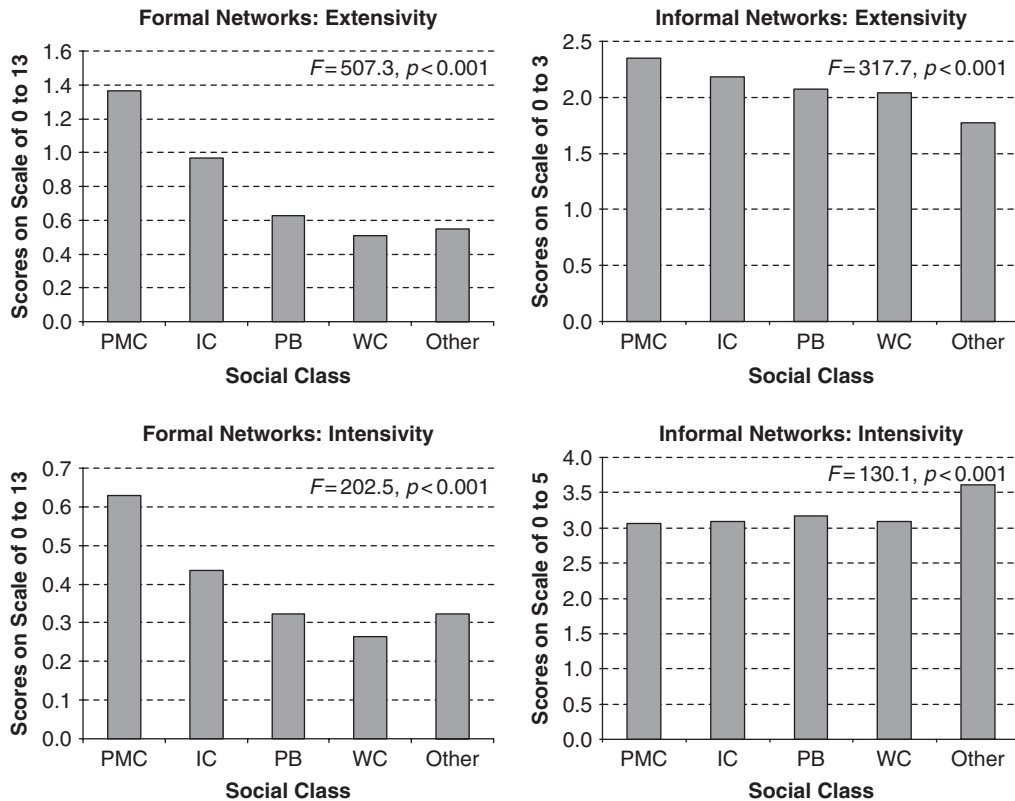
### Social Networks and Social Class

Figure 1 addresses class differences along the four indicators of extensivity and intensity of social capital. With the exception of intensity of the informal network all indicators of social capital/social networks tend to be higher in higher status groups, such as the professional/managerial or the intermediate class. Statistical tests provide significant results that group means differ.

As for formal social networks, higher status groups can be characterized as having more heterogeneous networks. The largest differences concern memberships of different types of voluntary associations. Members of the professional/managerial class and intermediate class are more often members of a broader range of organizations. In the highest class, people are members of 1.4 organizations on average, whereas in the working class (manual, unskilled manual workers) this figure is only 0.5. Petty bourgeoisie, working class and other show approximately the same (low) levels of extensivity. Exactly the same trend can be observed concerning intensity of formal networks.

In terms of informal networks, statistical evidence suggests that those in the higher social class have contact to a broader circle of people in their informal networks. Hence, extensivity of informal networks is also larger among the upper layers of society. Intensity of the informal network (friends, colleagues, and neighbours), however, hardly varies across social classes. This suggests that whilst bridging social capital is more widespread among the higher status classes, lower status groups tend to resort to bonding social capital alone.

To sum up, from descriptive figures we conclude that the higher the social class a person has, the more



**Figure 1** Extensivity and intensity of social networks across social groups. Mean levels of four indices of social capital. Notes: PMC professional/managerial class, IC intermediate/non-manual class, PB petty bourgeoisie, WC working class, Other all other classes. Source: The EB 62.2 (European Commission, 2004), data weighted by design and country

formal social capital they have access to, with the professional and managerial class having the most, the intermediate class the next most, followed by the petty-bourgeoisie and then the working class. Yet, in terms of intensity we have to distinguish between informal and formal networks. Higher status groups appear to have less intensive contact with friends, neighbours, and work colleagues. Their engagement (or active participation) in voluntary organizations, however, is substantially larger than those of lower classes.

Using multilevel regression models, we can extend our analysis to the investigation of cross-national variation in the relationships between social class on the one hand and intensity and extensivity of formal/informal social capital on the other. The results are presented in Table 3.<sup>4</sup>

After controlling for a variety of socio-demographic and contextual variables,<sup>5</sup> we can confirm that social class differences prevail. In terms of formal social capital, social classes vary considerably both in

extensivity and intensity. Our findings indicate that the professional/managerial class possesses the highest levels of social capital. This is shown by the positive and significant log coefficients of 0.24 for extensivity in formal networks and 0.23 for intensity, respectively. The log coefficients of  $-0.40$  (extensivity) and  $-0.43$  (intensity) for the working class clearly provide evidence of the largest class differences here; with petty bourgeoisie also scoring significantly lower than the intermediate class. However, members of the working class in paid work score significantly higher than their fellow members not in paid work as indicated by the significant interaction terms (0.15 in both extensivity and intensity).

In short, we can widen the conclusions about class differences in formal social networks. Whereas the professionals/managerial class score consistently higher than any other class, we have to differentiate among working class members. Those who are not in paid work show significantly lower levels of social capital



**Table 3** Multilevel models of formal and informal social capital: extensivity and intensivity of social networks

Network Fixed effects	Formal Social Networks						Informal Social Networks					
	Extensivity			Intensivity			Extensivity			Intensivity		
	C	SE	P	C	SE	P	C	SE	P	C	SE	P
Social class (intermediate)												
Professional/managerial	<b>0.244</b>	<b>(0.040)</b>	**	<b>0.232</b>	<b>(0.046)</b>	**	<b>0.036</b>	<b>(0.020)</b>	***	<b>0.002</b>	<b>(0.037)</b>	
Petty bourgeoisie	<b>-0.134</b>	<b>(0.068)</b>	**	<b>-0.179</b>	<b>(0.089)</b>	*	<b>-0.025</b>	<b>(0.030)</b>	**	<b>0.158</b>	<b>(0.057)</b>	**
Working class	<b>-0.397</b>	<b>(0.048)</b>	**	<b>-0.433</b>	<b>(0.051)</b>	**	<b>-0.054</b>	<b>(0.016)</b>	**	<b>-0.001</b>	<b>(0.034)</b>	**
Other	-0.286	(0.056)	**	-0.165	(0.060)	**	-0.084	(0.190)	**	0.131	(0.032)	**
Gender (female)	0.060	(0.014)	**	0.173	(0.020)	**	0.042	(0.009)	**	0.161	(0.015)	**
Age (centred at 45)	0.005	(0.000)	**	0.003	(0.001)	**	-0.001	(0.000)	**	-0.015	(0.001)	**
Education (centred at 16)	0.030	(0.002)	**	0.036	(0.002)	**	0.004	(0.001)	**	0.007	(0.002)	**
Domicile (small towns)												
Rural	0.006	(0.016)		0.063	(0.023)	**	0.031	(0.010)	**	0.066	(0.018)	**
Urban	-0.039	(0.017)	**	-0.098	(0.025)	**	-0.030	(0.011)	**	-0.075	(0.019)	**
Work status (not in paid work)	0.192	(0.025)	**	0.041	(0.036)		0.178	(0.016)	**	-0.504	(0.028)	**
Intercept	-0.309	(0.132)	**	-1.089	(0.083)	**	0.689	(0.024)	**	3.348	(0.058)	**
<b>Interactions</b>												
Social class/work status												
Professional/managerial	<b>0.035</b>	<b>(0.035)</b>		<b>0.079</b>	<b>(0.051)</b>		<b>-0.017</b>	<b>(0.025)</b>		<b>-0.021</b>	<b>(0.043)</b>	
Petty Bourgeoisie	<b>0.075</b>	<b>(0.060)</b>		<b>0.100</b>	<b>(0.089)</b>		<b>-0.006</b>	<b>(0.036)</b>		<b>0.071</b>	<b>(0.063)</b>	
Working Class	<b>0.148</b>	<b>(0.037)</b>	**	<b>0.146</b>	<b>(0.055)</b>	**	<b>0.038</b>	<b>(0.021)</b>		<b>0.104</b>	<b>(0.038)</b>	**
Other	0.000	(0.000)		0.000	(0.000)		0.000	(0.000)		0.000	(0.000)	
<b>Random part</b>												
Intercept	0.493	(0.130)	**	0.168	(0.047)	**	0.011	(0.003)		0.080	(0.022)	**
Social Class (intermediate)												
Professional/managerial	<b>0.022</b>	<b>(0.008)</b>	**	<b>0.011</b>	<b>(0.007)</b>		<b>0.000</b>	<b>(0.000)</b>		<b>0.003</b>	<b>(0.004)</b>	
Petty bourgeoisie	<b>0.060</b>	<b>(0.023)</b>	**	<b>0.070</b>	<b>(0.033)</b>	*	<b>0.000</b>	<b>(0.000)</b>		<b>0.020</b>	<b>(0.012)</b>	***
Working class	<b>0.045</b>	<b>(0.015)</b>	**	<b>0.026</b>	<b>(0.013)</b>	*	<b>0.000</b>	<b>(0.000)</b>		<b>0.012</b>	<b>(0.005)</b>	*
Other	0.061	(0.021)	**	0.044	(0.021)	*	0.000	(0.000)		0.000	(0.000)	

Notes: Multilevel Poisson regression models; for intensivity of informal networks a multilevel linear regression model is used. Reference categories of independent variables in parentheses. Log coefficients (C, Poisson models) and non-standardized coefficients (C, linear models, for informal network intensivity only) presented. Robust standard errors. Coefficients of the effects of social class are printed in bold face.

\* $p < 0.01$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.1$ . Two-tailed tests.

Source: The EB 62.2 (2004).

than those working class members in paid work. The significant interactions provide grounding for the speculation that working class people establish their formal networks at their own workplace to a greater extent than professional/managerial classes.

As for informal networks, we have to differentiate between extensivity and intensivity. Social class differences are more pronounced in the former. Coefficients of 0.04 (professional/managerial) and -0.05 (working class), respectively indicate rather small differences. As for intensivity, there are no differences between professional/managerial, intermediate,

and working class members, everything else being equal. Only the petty bourgeoisie have more intensive informal networks as shown by a significant coefficient of 0.16. However, if we consider work status again, we find evidence that members of the working class in active employment enjoy more intensive informal networks. This is shown by the significant interaction term between social class and work status. Thus, because working class members in paid work score 0.10 units higher, there is evidence that those people enjoy a similarly high level of intensivity in informal contacts as the petty bourgeoisie. This leads

us to ask whether these class differences are more or less pronounced across various countries and territories within the European Union.

As shown in the lower part of Table 3, coefficients of the random effects of social class are significant in some domains of social capital. We find most cross-national variation in formal social networks, both their extensivity and intensivity. In informal social networks, we only find one significant coefficient in the case of intensivity for the working class population. As for extensivity of informal networks, there is no statistical evidence of an occurrence of cross-national differences.<sup>6</sup>

Because of these findings, we concentrate on formal networks in the remainder of this analysis. From the extensive formal social network it can be seen that all the effect of professional/managerial class, petty bourgeoisie, and working class membership vary significantly across countries. Random coefficients of 0.022, 0.060, and 0.045, respectively, show that the effect of being working class varies more than the effect of being in the professional/managerial class across countries. That members of the petty bourgeoisie is even more dissimilar across countries will be mainly based on the rather small number of observations ( $n = 1,829$ ) rather than on more substantial reasons. In the case of intensive formal networks, we find a statistically significant effect for the influence of membership of the petty bourgeoisie (0.070) and working class (0.026). In substantive terms, this suggests that there are countries in which class differences are either more or less pronounced than on average (as indicated by the fixed effects). Where is that the case in Europe?

In Portugal, Great Britain, and Latvia, class differences concerning extensivity of formal networks are largest, whereas they are smallest in Luxembourg, Finland, and Denmark.<sup>7</sup> As for intensivity of formal networks, we find that the professional/managerial and working classes are most distinct in Latvia, Spain, and Bulgaria and most similar in Sweden, Finland, and France. Interestingly, these findings coincide with what we could have expected according to the theories of welfare regimes, economic development, or social inequality (e.g. Esping-Andersen, 1990; van Oorschot and Arts, 2005; Kaariainen and Lehtonen, 2006). Class differences are also smallest in Sweden, Finland, and Denmark concerning social capital. On the other hand, class differences are more pronounced in Eastern Europe (Latvia, Bulgaria), Southern Europe (Spain, Portugal), and also Great Britain. What could explain these country differences?

Since we are concerned with social inequalities in social capital, structural inequality within particular

societies might give us the most adequate explanation of these country differences. Inequality at the societal level could thus determine class differences at the individual level (within countries). The more unequally material and financial resources are distributed, the more unequally social capital could be distributed as well since we would expect cultural, social, and economic capital to reinforce one another in theory and in our analysis so far. Thus, we consider structural indicators such as the GINI coefficient as one possible explanation for cross-national variation in class differences concerning social capital.

In multilevel models it is possible to explain the varying effects of individual predictor variables, such as social class, with characteristics of countries (more generally with characteristics of the higher level units). In this respect, we include the GINI coefficient to explain cross-national variation in the effects of social class on social capital. We expect that in countries where societal inequalities are most pronounced, the effects of social class will also be the strongest. In countries where the opposite is the case, that is where low GINI coefficients signal more social equality, we hypothesize that social stratification does not make so much difference to social capital.

In Table 4 we present the results of this exercise. GINI coefficients ranged from 22 in Slovenia to 37 in Portugal. We have centred all values on the score of 29 to indicate an average of inequality in Europe. The models still control for socio-demographic characteristics, although we are not presenting these effects again. As can be seen in the table, structural inequality already explains a small amount of the total variation in the extensivity of formal social capital across countries (log coefficient of  $-0.06$ ,  $p < 0.1$ ). We first conclude that the higher the structural inequality the lower the average level of social capital. Cross-level interactions explain the varying effects of social class membership across countries. In other words, they take account of within-country variation between social classes. This is evidenced by the diminishing size and significance of random effects. Comparing the random parts between Table 3 and Table 4 clearly shows that the significant cross-country variation of the effect of the professional/managerial class has decreased from 0.022 to 0.012 in the extensivity of formal social networks. More importantly, the differences in the effect of the working class have been fully explained away. As for intensivity, previously significant variation (Table 3) has been explained away (Table 4) as coefficients are not significant any longer apart from the one of petty bourgeoisie.

**Table 4** Explaining cross-national variation in social class effects on formal social capital

Indicators	Extensivity			Intensivity		
Fixed effects	C	SE	P	C	SE	P
Social class (intermediate)						
Professional/managerial	0.255	(0.035)	**	0.237	(0.043)	**
Petty bourgeoisie	-0.168	(0.069)	*	-0.200	(0.088)	*
Working class	-0.444	(0.033)	**	-0.452	(0.046)	**
Other	-0.292	(0.061)	**	-0.175	(0.063)	**
Inequality (Gini coefficient)	-0.059	(0.033)	***	-0.023	(0.021)	
Intercept	-0.337	(0.122)	**	-1.095	(0.084)	**
Interactions						
Social Class/Work Status						
Professional/managerial	0.037	(0.034)	*	0.081	(0.051)	
Petty bourgeoisie	0.076	(0.061)	*	0.100	(0.090)	
Working class	0.149	(0.036)	**	0.143	(0.055)	**
Other	0.000	(0.000)		0.000	(0.000)	
Cross-level interactions						
Social class/inequality						
Professional/managerial	0.017	(0.007)	*	0.025	(0.008)	**
Petty bourgeoisie	-0.028	(0.015)	*	-0.030	(0.018)	
Working class	-0.036	(0.007)	**	-0.034	(0.010)	**
Other	-0.007	(0.016)		-0.013	(0.016)	
<b>Random Part</b>						
Intercept	0.415	(0.110)	**	0.173	(0.048)	**
Social class (intermediate)						
Professional/managerial	0.012	(0.005)	*	0.004	(0.005)	
Petty bourgeoisie	0.060	(0.023)	**	0.060	(0.031)	*
Working class	0.007	(0.004)		0.013	(0.009)	
Other	0.077	(0.026)	**	0.054	(0.024)	*

Notes: Multilevel Poisson regression models; controlling for socio-demographic effects. Reference categories of independent variables in parentheses. Log coefficients presented (C). Robust standard errors (SE).

\*\* $P < 0.01$ , \* $P < 0.05$ , \*\*\* $P < 0.1$ . Two-tailed tests.

Source: The EB 62.2 (2004). Data not weighted.

Examining the cross-level interactions, we conclude that in countries with high inequality, the professional/managerial class show higher levels of extensivity and intensivity of formal social networks compared with the same group in 'more equal' countries. This is evidenced by two significant and positive regression coefficients (0.017 for the extensivity and 0.025 for the intensivity, respectively). For the working class, the opposite is the case. Working class people show lower scores on extensivity and intensivity of formal social capital in more unequal countries. A one unit increase in the GINI coefficient leads towards a  $-0.036$  decrease and a  $-0.034$  decrease in the corresponding effects on extensivity and intensivity of formal social networks.

## Discussion and Conclusions

Social capital in its various forms inheres in social relationships between people. Some have argued that social class is an important resource for reproducing social positions (Bourdieu) or that social classes have quite different forms of social capital (Lin and Hall). Others have clearly stated that heterogeneity in social relationships helps bridge various interests and 'getting on' whereas networks consisting of 'similar' people mainly support intimate sociability or bonding (Burt, Granovetter, Putnam). In this research, we examined various forms of social capital (formal and informal

ties) as well as some of their qualities (extensivity and intensivity) with respect to social stratification.

Our results clearly showed that social capital, in almost every form, is socially stratified everywhere in Europe. The biggest differences arise in formal participation in civil society. Higher social classes, including people in professional or managerial jobs are more embedded in a broader range of networks through their activities in formal associations. There was also evidence that higher classes meet different people more often whereas working class people tend to have a smaller circle of social connections. Their broader range of activities comprises members of different interest groups with different skills, resources, connections, and so on. Knowing different people thus helps cope with different situations, whereas knowing similar people might limit the possibilities to move out of a social position. Yet, we could not find empirical support for Lin's claims that social networks of the upper layers of the social hierarchy are smaller, denser, and more closed. The data provided by the EB 62.2 (European Commission, 2004) did not allow us to fully analyse these aspects of his theories as the indicators did not refer in detail to these qualities of networks. Nevertheless, we were able to show that the extensivity/heterogeneity and intensivity of formal and informal networks are not smaller among the higher classes most of the time—in fact, the opposite is the case.

A further finding was that whilst we could confirm that working classes have more intensive informal contacts, this depends also upon their participation in the workforce. Those not active were cut off and this was not the case for the higher classes. This suggests that working class social capital is more situational.

We can further suggest that social class differences are not the same in every country. Corroborating Lin's (2001a, b) assumptions that distances between social classes matter, we showed that social stratification is more closely linked to social capital in Southern and Eastern Europe as well as Great Britain. In Nordic countries, however, social class differences were smaller though still significant. An explanation lies with the greater levels of social inequality in these countries. Where social inequality is more pronounced we found bigger class differences concerning social capital. This was most evident in Portugal and Latvia. However, in countries with more social equality, especially the Nordic countries (Denmark, Sweden, and also Finland), we found the smallest class differences in social capital of all.

This seems to confirm the theories such as those of Bourdieu, Lin, and Hall that social capital is unevenly distributed in society and could be used to maintain

resources in the upper layers of society. However, we can go beyond these theories to show that the way in which social capital is distributed depends upon the social structure of society more generally. In highly unequal countries, much of the social capital is concentrated in the hands of the higher social classes, making it difficult to generalize about a national 'stock' of social capital in those countries. This could be a matter of maintaining power as the cleavage between the classes is more palpable. In contrast in countries with lower levels of social inequality, there is less to maintain (and less to lose) for the higher classes as wealth is spread across the population. In this respect, social capital re-enforces social class positions.

The EB 62.2 (European Commission, 2004) does not allow us to analyse every aspect of social capital theory. This could be why we did not find existing differences across social classes with respect to informal social networks. Yet, quantitative data contribute to the investigation of social capital and its relationship to social class in an important way by providing information about broad social groups in aggregate and by providing the possibility for systematic cross-country comparison. In addition to qualitative research and network analysis, this approach has highlighted the important differences across social classes and showed that social inequality partly accounts for national differences in civic participation patterns. This leads us to reflect on the meaning of civic participation in Europe, since civil society associations are not attractive to everybody in society. In some countries, civil society mainly attracts participants from the upper layers, which means that there is potential for civil society and social movements to help conserve hierarchical power relationships.

This suggests that we should consider claims that promoting social capital as a way to empower the weaker members of the society more critically. To rely on civil society in terms of proving 'self-help' or 'empowering' people does not automatically lead towards the empowerment of everyone, as those who actively engage are the better off. Civil society might not be able to perform the tasks that are sometimes expected of it. We might also be sceptical about the role of social change through active civil society in the light of these findings, since we would expect the upper layers of the social hierarchy to resist significant losses of their own resources (Bourdieu, 1986) and in fact participation in civic associations could even be a means of consolidating class power. Hence, the stratification of civic associations across European societies should be properly understood before this kind of activity is seen as a general panacea

for social problems. For example, it remains difficult to motivate people to engage in voluntary organizations and this is particularly the case for people from lower social classes. Without tackling these aspects of social stratification, future research may overlook the potential limitations of a strong civil society.

## Notes

1. This is a clear disadvantage compared to the ESS or EVS. Considering all circumstances, however, the EB 62.2 nevertheless remains the most comprehensive data source.
2. We categorized the proxy of social class as follows:
  - (a) Professional/managerial: professional; business proprietors, owner (full or partner) of a company; employed professional, general management, director, or top management; middle management, other management ( $n=5,278$ ).
  - (b) Intermediate class: employed position mainly at a desk; employed position not at a desk but travelling; employed position not at a desk but in a service job; supervisor ( $n=8,209$ ).
  - (c) Petty Bourgeoisie: owner of a shop, craftsmen, other self-employed person; farmer; fishermen ( $n=1,829$ );
  - (d) Working class: skilled manual worker; other (unskilled) manual worker, servant ( $n=8,238$ ).
  - (e) Other: never in paid work ( $n=3,008$ ).
3. This measure allows for an ordinal distinction between social classes, with the professional/managerial class being the highest one in terms of social status and prestige. In our analyses, social class is treated as a nominal variable.
4. When interpreting the differences in the effects of social class, we do not reference the 'other class'.
5. We have included gender, age, education, domicile, and working status to separate effects of class membership from other socio-demographic variables. Working status seemed important to us because parts of the dependent scales referred to the work-place.
6. The little random variation we find when building this model is explained away after the inclusion of individual-level variables.

7. Based on a residual analysis of random parts in the multilevel models, we briefly list the countries in which class differences are most pronounced.

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