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Does the welfare state reduce inequalities in people's social capital?

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Abstract

Purpose – The purpose of this paper is to analyse whether social capital inequalities are smaller in more extensive welfare states.

Design/methodology/approach – The paper analyses data from European/World Values Surveys.

Findings – No effect of welfare stateness on social capital inequality is found.

Research limitations/implications – An extension of the analysis with a broader range of welfare states might show effect.

Originality/value – This is the first time in literature that the relationship between welfare stateness and social capital inequality is empirically studied.

Keywords Social welfare, Social networks, Trust, Social capital

Paper type Research paper

1. Introduction

Are social capital inequalities lower in more generous and comprehensive welfare states? In our view this is an interesting question given, firstly, that it is a central message from Pierre Bourdieu's (1990) work that social capital (like economic and human capital) is a resource for life chances that is unequally divided among social categories, and secondly, that inequality reduction is one of the central aims of the welfare state. We know that welfare states have mostly been trying to reduce economic inequality through welfare benefits and services, as well as inequality in cultural and human capital through educational and health systems. In contrast, the reduction of social capital inequalities has rarely or at all been an explicit aim of welfare policy. This latter may be the reason why the relationship between the welfare state and inequalities in social capital has not been addressed earlier.

The aim of our paper is to explore empirically whether the degree of welfare stateness of a country has a negative effect on the inequalities in social capital between various social categories in its population.

We will first briefly review the literature that gives empirical evidence of social capital being distributed unequally over social categories. Secondly, we will briefly review and discuss how in the literature the processes of the production of social capital inequality are described and understood. Thirdly, we will theoretically discuss the ways in which the welfare state may impact upon these processes to the effect that it reduces inequalities in social capital. In the empirical section of our paper, we will test the hypothetical overall outcome of possible impacts, namely that social capital inequalities are smaller in more developed welfare states. We use data from two waves (1981 and 1999/2000) of the European and World Values Studies (E/WVS) for 13 countries.

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2. Social capital, social capital inequality, and welfare state

2.1 Social capital

In the more recent literature on social capital it is recognized that it is a multi-faceted phenomenon, containing the various aspects of:

(1) *social networks*: relations within and between families and friends (informal sociability), involvement in community and organizational life (e.g. volunteering), and public engagement (e.g. voting);
(2) *social norms*: shared civic values, norms, and habits of cooperation; and
(3) *social trust*: generalized trust in social institutions and in other people (see e.g. Putnam, 2000; Narayan and Cassidy, 2001; OECD, 2001; Rothstein, 2001).

Empirical studies have shown that these aspects tend to correlate positively, but the correlations are usually quite low (Rothstein, 2001; Healey, 2003; Johnston and Percy-Smith, 2003; Van Oorschot *et al.*, 2006), which means that one should distinguish between the different aspects of social capital, and not lump them together. With the data available, in our study we can analyse inequalities in participation in networks, in adherence to social norms, and in personal and institutional trust.

2.2 Social capital inequality
Studies on the determinants of social capital reveal that several of its aspects are unequally distributed over social categories. Given the large amount of studies we will only briefly discuss here the overall patterns that are commonly found in international comparative research. Regarding gender it is usually found that, on average and controlled for other determinants, men are more passively, as well as actively engaged in social networks and in volunteering, and have more trust in other persons, than women, while women tend to adhere more to social norms (e.g. Christoforou, 2004). However, there is also evidence that women take part in other types of social networks, that is, more informal ones, than men, who are more engaged in formal types of networks (Moore, 1990). Regarding people's economic situation, it is commonly found that those with higher incomes have more social capital, of any kind. People with higher incomes are more engaged in social networks, they tend to adhere more to social norms, and they tend to trust other persons and social institutions more (e.g. Van Oorschot *et al.*, 2005). Also here, there is a distinction regarding participation in formal and informal types of networks: poor people are usually more engaged in informal networks, than non-poor people (Lin, 2000; Li *et al.*, 2005). Educational level is often found to be one of the strongest determinants of social capital. Regardless of their income level, people with a higher educational level participate more in social networks, passively as well as actively, and are more engaged in volunteering (Hodgkinson and Weitzman, 1996; Brehm and Rahn, 1997; Wilson and Musick, 1998), and they tend to have a higher trust in other people (Newton, 1999). However, there seems to be no difference between people with a higher or lower education as regards their adherence to social norms (Letki, 2003). With regard to people's age usually little systematic differences are found, and often the relationship between age and social capital is not linear (e.g. Christoforou, 2004). There is a tendency, however, that older people adhere more to social norms, than younger people (Letki, 2003; Van Oorschot and Arts, 2005). In brief, social capital tends to be unequally distributed over social categories. The question is now what influence the welfare state might possibly have on such distribution.

2.3 The welfare state and social capital inequality
Among social capital thinkers who pay explicit attention to inequalities, like Pierre Bourdieu and Nan Lin, we find the idea of what one could call "vicious and virtuous circles" as the main mechanisms along which social capital inequalities are produced. Central in Bourdieu's work is the idea that social capital, as a resource that people can

use to their advantage, ultimately translates into economic and cultural capital. On the other hand, Bourdieu stipulates that building up social capital requires investment of economic and cultural capital (Bourdieu, 1986). For people high on economic and cultural capital the virtuous circle is that this leads to high social capital, which increases their economic and cultural capital, which further increases their social capital, etc. At the same time people low on economic and social capital may be trapped in a vicious circle where their various forms of capital tend to diminish over time. Lin theorizes that historical and institutional processes create structural socio-economic inequality between groups, which enforced by homophily leads to inequalities in the quantity and quality of social capital. This in turn reproduces socio-economic inequalities, which translate into greater inequalities in social capital, etc. (Lin, 2000). Schematized, the central idea of the (re)production of social capital inequality by means of vicious and virtuous circles is pictured in Figure 1.

With a view on the process in Figure 1, theoretically the welfare state can have three basic impacts on the (re)production of social capital inequalities. These are schematized in Figure 2. (Note that with the addition of the interaction effect our discussion here is a theoretical improvement of Van Oorschot and Finsveen, 2009.)

One impact of the welfare state that comes to mind immediately is an indirect, but possibly a crucial one, leading along arrow 1 in the model. The welfare state seeks to reduce large economic inequalities by means of often interconnected policies regarding social protection, labour participation, education, working and living conditions, and healthcare. The reduction of large cultural and human capital inequalities mostly results from education policy. To the degree that welfare states succeed in reducing inequalities the model suggests that higher welfare state activity, *ceteris paribus*, results in lower inequalities in social capital.

A second possible impact of the welfare state on social capital inequality is direct, depicted by arrow 2. Direct impacts need not necessarily be the intended results of targeted policies. In our view, traditional welfare policies have mainly been aimed

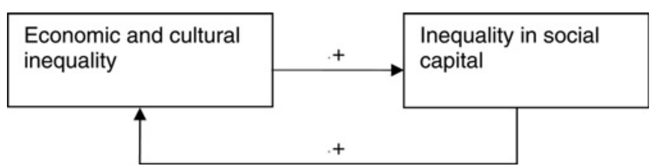

Figure 1.
The (re)production of inequalities in economic, cultural, and social capital

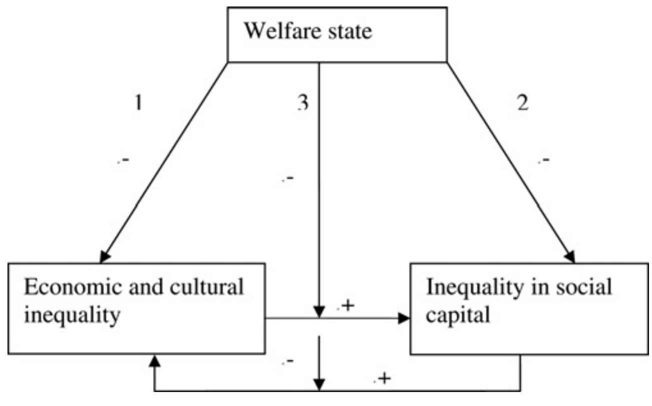

Figure 2.
The theoretical impacts of the welfare state on the (re)production of inequalities in economic, cultural, and social capital

intently at reducing inequalities in economic and cultural/human capital. It seems that only with the rise of the social capital concept, and the related popular idea that social capital is beneficial for a country's or a neighbourhood's economy and the well-being of its population, it is that state interventions aimed intently at promoting social capital among deprived groups become popular (see e.g. OECD, 2001). However, the traditional welfare state may have unintended equalizing impacts on social capital. Firstly, by creating a societal context of basic security, impartiality, and empowerment, which especially for the more deprived groups in society may enhance their trust in others, as well as in institutions. It is, for instance, a central thesis in Bo Rothstein's work that universal welfare arrangements promote trust more than selective arrangements (Rothstein, 1998). Where, in the course of welfare state development, selective, residual policies are replaced with more universal ones, the trust levels of welfare dependants should have gone up, absolutely, as well as relative to that of self-sufficient citizens. Secondly, by creating a context of national solidarity and fellow feeling, which is conducive to trust levels too, but which also offers a role model for adherence to social norms of cooperation and mutual support.

A third effect is depicted by arrow 3, which suggests that welfare may reduce the feedback loops between economic-cultural capital and social capital. For instance, quite some welfare arrangements offer deprived categories possibilities for extending or intensifying their networks (Skocpol, 1996; Kuhnle and Alestalo, 2000; Salamon and Sokolowski, 2003). For instance, many welfare states offer people with less personal social capital access to a generalized, resourceful network of welfare institutions and their services. Especially in the field of welfare rights advice and labour market re-integration unequal starting positions in personal networks may be corrected by the provision of state organized institutional networks.

Clearly, there are mechanisms possible through which the welfare state may have an equalizing effect on social capital differences in society. However, the above discussion is mostly speculative. Theoretically and empirically there is still very little work done in the field. Here we want to contribute mainly by exploring empirically the relationship between welfare state characteristics and social capital inequality.

In our analysis, we will operationalize welfare state characteristics in two ways: one quantitative and one qualitative. The usual quantitative measure of welfare stateness regards the degree of "welfare effort", mostly indicated by social spending as a proportion of gross domestic product (GDP). On the basis of the central hypothesis one would expect to find that social capital inequalities are smaller in countries with a larger welfare effort. The qualitative measure is commonly using a typology of welfare regimes. In this paper, we employ Ferrera's adapted version of the Esping-Andersenian regime types, which distinguishes between the Scandinavian or Social-democratic type, the Bismarckian or Continental type, the Anglo-Saxon or Liberal type, and the Southern or Mediterranean type (Ferrera, 1996). Social-democratic welfare states are regarded as being led primarily by the principle of equality, more than any other type of welfare state. We therefore expect in our explorative study here that social capital inequality will be smallest in the group of social-democratic welfare states, compared to the other groups. The continental welfare states are generally seen as being driven by the aim of status maintenance, which usually leads to larger divides between labour market insiders (roughly: males, higher educated) and outsiders (roughly: women, lower educated) in terms of income, job security and social entitlements. Larger divides between gender roles also fit the status maintenance principle. We therefore would expect that in the group of welfare states of the continental type social capital inequality is relatively large on the dimensions of gender, work status, and education. The liberal welfare states are guided by market principles and a focus on means-tested social assistance schemes. One could expect that in countries of this type the welfare state has the smallest social and economic effects generally. We therefore expect here that social capital inequalities will be greatest in liberal welfare states. In the Mediterranean welfare states the role of state welfare is not very comprehensive either, but this is usually compensated for by a strong tradition of intra-familial help. The possible social capital effects of this type of welfare organization are not immediately clear. For the time being, we expect that social capital inequalities in the Mediterranean type of welfare states are in between those of the social-democratic and liberal types.

In order to obtain an idea of the robustness over time of the relationships at issue, we will use the possibility offered by our data of analysing data from two different periods in time, early 1980s and end 1990s.

3. Data and methods

3.1 Data

We use pooled data from the EVS and WVS surveys waves 1981 and 1999/2000. We can include 13 of the 16 countries that participated in the 1981 EVS round. For most countries we used EVS data for both years: Belgium, Denmark, France, Ireland, Italy, the Netherlands, Spain, Sweden, Great Britain, and West Germany. Some countries did not partake in EVS 1999/2000 but in WVS 2000. These countries are: Canada, Norway, and USA. The survey questions of EVS and WVS that we use in this paper are similar. The pooled data set contained 34,747 respondents.

3.2 Methods

3.2.1 Social capital. As explained we distinguish between three different aspects of social capital:

(1) *Social networks*. Here we distinguish between passive and active participation in voluntary associations. The E/WVS questionnaires put a number of such associations to the respondents and ask them if they are a passive member of each of them. Our measure of people's passive participation is defined as the count of organizational types the respondent says to belong to. Membership in trade unions and churches and religious organizations were excluded: churches because of the presence of state churches in Scandinavia, and trade unions because of practically obligatory membership in countries where the trade unions are responsible for unemployment or disability-related benefits. After the question on which organizations the respondent belongs to, they were asked if they currently do unpaid work for any of those organizations. The positive answers are counted, forming the active participation variable.

(2) *Trust*. As is common in the social capital literature we distinguish between interpersonal trust and trust in institution. Interpersonal trust is defined as the answer to the survey question "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" Those answering that one cannot be too careful score 1, and those saying that most people can be trusted score 2.

The institutional trust index is based on the question how much confidence people have in a series of institutions presented to them. The various surveys name some different institutions, but the police, the parliament, and the civil service are common to all. Our measure of institutional trust is the summation of people's answers to each of these three institutions. The scale runs from 3 (low trust) to 12 (high trust).

(3) *Social norms*. The degree to which people adhere to social norms is measured with the summation of their answers to the question "Please tell me, for each of the following statements whether you think it can always be justified, never be justified or something in between". The statements refer to certain types of behaviour of which we included in our scale: "Claiming state benefits which you are not entitled to", "avoiding a fare on public transportation", "cheating on tax if you have the chance", and "someone accepting a bribe in the course of their duties". The answers are recoded to give high values for more moral answers, and combined to a Likert scale with 4 as bottom point and 40 as top.

3.2.2 Social dimensions. We are interested in the distribution of social capital over the dimensions gender, age, employment status, income, and education. Because we base our measure of social capital inequality on average social capital scores in categories of the dimensions, we need to create groups for the continuous variables. Therefore, age is recoded into the four groups 18-29 year olds, 30-44 year olds, 45-64 year olds, and 65 years and older, meant to capture different stages of adulthood. Employment status was coded into the groups of employed (including the full-time employed, part-time employed, and self-employed) on the one hand, and the unemployed on the other. Other groups (like students, retired pensioners, housewives) were left out of this analysis. For income, we divided the population of each country into three equally sized groups, i.e. the highest earning, medium earning, and lowest earning third. Unfortunately, we were able to include educational level only for the samples from 1999, due to problems in several countries with the way in which education was measured in the wave of 1981. The educational levels where coded into three levels: lower, middle, and upper.

3.2.3 Welfare state characteristics. As mentioned, we will measure welfare state characteristics in two ways: qualitative and quantitative. The qualitative measure uses Ferrera's adapted version of the Esping-Andersenian regime types, which distinguishes between the Scandinavian or social-democratic type (here: Denmark, Norway, and Sweden), the Bismarckian or Continental type (here: Belgium, France, West Germany, and the Netherlands), the Anglo-Saxon or Liberal type (here: Canada, Great Britain, Ireland, and the USA) and the Southern or Mediterranean type (here: Italy and Spain) (Ferrera, 1996). Quantitative welfare effort is measured as total public social expenditure as per cent of GDP at t-1 (i.e. 1980 for 1981, and 1998 for 1999), taken from the Organization of Economic Co-operation and Development (OECD) Social Expenditure Database (SOCX). (Where total expenditure is a sum of the gross state expenditures on old age cash benefits, disability, sickness, occupational injury and disease benefits, active labour market programmes, unemployment cash benefits, and health expenditure.)[1]

3.2.4 Social capital inequality. We basically measure social capital inequality as the degree to which the average social capital levels of categories of a social dimension differ from each other. This degree is calculated as the sum of the absolute differences between category averages and the overall mean, divided by the number of categories. This gives the average absolute difference from the mean. The larger this average, the larger is the social capital inequality on a given dimension. If the measure is zero, all categories of a dimension have the same average of social capital (all are equal to the overall mean), which means that in that case there is no social capital inequality at all. Our measure can be schematized as follows:

$$\mathrm{SCINC}x = \frac{(\sum |M\mathrm{cat}xi - M|)}{N\mathrm{cat}x}$$

where SCINCx is the social capital inequality on social dimension x, M is the overall social capital average, Mcatxi is the social capital average for category i of social dimension x, and Ncat$x$ is the number of categories of social dimension X.

3.2.5 Analyses. In order to assess the relationships between welfare characteristics and social capital inequalities we will firstly analyse the Pearson correlations between welfare effort and our measures of social capital inequality at the aggregated level of countries in our dataset. Since we have only 13 country cases the relative influence of possible outliers may be large, which is why we also will inspect the scatter plots of welfare effort by inequality scores. The large number of scatter plots involved precludes their presentation in this paper. Secondly, comparing the averages of our social capital inequality measures between regime types will assess the relationship between regime type and social capital inequality. We will use t-tests with adjusted p-values for multiple comparisons (Bonferroni method), with alpha 0.05.

Note that for reasons of space we do not present the country averages of the social capital scales, nor their correlation with our welfare measures[2].

4. Findings

Table I presents the Pearson correlations between welfare effort and social capital inequality at the aggregated level of countries. Negative correlations imply that higher welfare effort is associated with lower inequality, as the central hypothesis would predict. Positive correlations imply the opposite.

What Table I shows, firstly, is that even with a rather high significance level of 10 per cent, a majority of the correlations turns out to be non-significant, implying that generally the degree of a country's welfare spending has no effect on inequalities in social capital. However, there are some exceptions of significant correlations, which all happen to have a negative sign. In our sample of countries, in 1999, the difference in interpersonal trust between men and women is smaller in countries that spend a larger share of GDP on welfare. We also see that the age-related inequality in active participation in voluntary associations is smaller in higher spending countries, both in 1981 and 1999. In 1999, income level-based and education level-based inequalities in active participation were smaller in higher spending countries, while in that same year also educational level-based inequalities in interpersonal trust were smaller. So, if in our sample of countries there is a significant effect of welfare spending, it is in the expected direction, lending credit to the overall idea that more comprehensive welfare states produce smaller inequalities in people's social capital.

However, for the time being this is not a firm conclusion we would want to draw from our findings. This is because the significant correlations form a minority only, and because some of the correlations in Table I seem to be affected quite strongly by outliers, as is shown by scatter plots (not presented here) of spending levels by levels of average social capital inequality. Among the significant correlations this is the case for interpersonal trust in 1999: in 1999 the Irish gender-based inequality in interpersonal trust is relatively very high, and deleting the Irish case from the sample would result in no clear relationship at all. Among the non-significant relationships outlier effects are visible in the case of gender-based inequalities in active participation in 1999, and income-based inequalities in active participation in 1981, where exclusion of the USA would result, not in insignificant negative relationships as presented in Table I, but in

Year	Gender	Age	Work status	Income level	Educational level
Passive participation					
1981	0.079	−0.129	0.105	−0.272	–
1999	0.400	−0.170	0.249	−0.468	− 0.238
Active participation					
1981	0.180	−0.523*	− 0.136	−0.212	–
1999	−0.052	−0.496*	−0.320	−0.512*	−0.573*
Interpersonal trust					
1981	0.441	0.327	0.266	0.008	–
1999	−0.498*	−0.019	0.272	0.304	−0.577*
Institutional trust					
1981	−0.138	−0.366	−0.044	−0.448	–
1999	−0.109	−0.406	−0.307	0.098	0.323
Social norms					
1981	0.366	−0.184	0.087	0.444	–
1999	−0.118	−0.251	0.253	−0.361	−0.389

Note: *Significant at $p < 0.10$

Table I. Pearson correlations between welfare effort and measure of inequality in social capital on social dimensions, by year (at aggregate level, $N = 13$ countries)

rather strong positive relationships. A strong outlier influence is also produced by Norway in the 1981 relationship between gender inequality in personal trust and welfare spending: exclusion of Norway would result in a significantly strong positive relationship, instead of in the insignificant positive relation presented in Table I. And finally, when Spain would be excluded from the sample, the 1999 relationship between income-related inequality in institutional trust and welfare spending would not be close to zero, but strongly positive.

This outlier analysis suggests a third reason why one should be careful to conclude that higher spending would result in smaller social capital inequalities: It suggests that aggregate relationships between welfare spending and inequalities on the various aspects of social capital may depend quite strongly on the composition of the sample of countries one is analysing. This is an issue we will return to in the conclusions section of the paper.

Let us now turn to Table II, which shows the relationships between our measures of social capital inequality and types of welfare regime.

What the table shows convincingly is that there is no such relationship to be found in our data, in 1981, nor in 1999. With the exception of only two cases, there generally is no significant difference in the average social capital inequalities between regime types. So, despite the stronger emphasis on the principle of equality in the Scandinavian welfare states, social capital inequalities are not smaller here than in other regime types. And despite their stronger focus on the reproduction of social hierarchies the social capital inequalities are not higher in the continental welfare states, compared to other regime types.

Having observed this, Table II also shows that over both years and over regime types work status (being unemployed versus having work) is the social dimension on which social capital inequalities are most pronounced. Work status-related inequalities are relatively large regarding passive and active participation, as well as regarding institutional trust and adherence to social norms. In the case of active and passive participation, educational level is an additional dimension with more pronounced inequality, while in the case of institutional trust and social norms the age dimension is

Table II.
Average inequality in social capital on social dimensions, by welfare regime types and year

	Year	Gender	Age	Work status	Income level	Educational level
Passive participation						
Scandinavian	1981	0.05	0.09	0.22	0.13	–
	1999	0.05	0.09	0.21	0.14	0.28
Continental	1981	0.07	0.07	0.11	0.11	–
	1999	0.04	0.08	0.20	0.12	0.23
Anglo-Saxon	1981	0.04	0.10	0.16	0.17	–
	1999	0.01	0.07	0.11	0.19	0.28
Mediterranean	1981	0.08	0.06	0.05	0.07	–
	1999	0.02	0.04	0.04	0.07	0.19
Active participation						
Scandinavian	1981	0.03	0.07	0.10	0.08	–
	1999	0.03	0.06	0.09	0.07	0.11
Continental	1981	0.05	0.06	0.11	0.07	–
	1999	0.02	0.04	0.07	0.05	0.10
Anglo-Saxon	1981	0.04	0.10	0.11	0.10	–
	1999	0.03	0.10	0.18*	0.17	0.24**
Mediterranean	1981	0.04	0.06	0.05	0.05	–
	1999	0.02	0.03	0.02	0.06	0.09
Interpersonal trust						
Scandinavian	1981	0.04	0.06	0.09	0.06	–
	1999	0.01	0.07	0.09	0.08	0.12
Continental	1981	0.02	0.05	0.06	0.05	–
	1999	0.03	0.04	0.08	0.07	0.11
Anglo-Saxon	1981	0.01	0.03	0.08	0.06	– 0.08
	1999	0.02	0.04	0.07	0.07	
Mediterranean	1981	0.01	0.05	0.03	0.02	– 0.08
	1999	0.01	0.03	0.05	0.04	
Institutional trust						
Scandinavian	1981	0.06	0.21	0.26	0.06	–
	1999	0.04	0.07	0.15	0.08	0.17
Continental	1981	0.08	0.31	0.25	0.10	–
	1999	0.04	0.16	0.22	0.11	0.12
Anglo-Saxon	1981	0.12	0.31	0.29	0.14	–
	1999	0.03	0.19	0.31	0.07	0.10
Mediterranean	1981	0.20	0.44	0.61	0.14	–
	1999	0.09	0.27	0.22	0.16	0.21
Social norms						
Scandinavian	1981	0.55	1.06	1.73	0.25	–
	1999	0.53	1.02	0.83	0.11	0.30
Continental	1981	0.79	1.61	1.61	0.47	–
	1999	0.47	1.52	1.28	0.25	0.46
Anglo-Saxon	1981	0.37	1.36	1.20	0.23	–
	1999	0.47	1.55	1.06	0.24	0.49
Mediterranean	1981	0.55	1.07	1.52	0.17	–
	1999	0.31	1.18	1.02	0.13	0.36

Notes: *Significantly larger than the Mediterranean mean ($p < 0.001$); **Significantly larger than the Continental mean ($p < 0.001$)

also more important. Since at the individual level employed people and people with higher education tend to have more social capital than their counterparts[3], effective employment and education policies of welfare states could have a positive effect on individual people's levels of social capital (especially regarding social participation, institutional trust, and norms), but the findings in Table II suggest that the aggregate degree of social capital inequality is not easily affected by such policies. Effective employment and educational policies may lead to more people having higher levels of social capital, but they do not seem to lead to a more equal distribution of social capital as such. Possibly this is because such policies, in any type of welfare regime, have a more or less universal or generic effect on people's level of social capital, in stead of targeted or selective effects on the social capital of unemployed people and people with lower education only.

5. Conclusions and discussion

Combining the fact that social capital tends to be unequally distributed over social dimensions with the idea that welfare states aim at reducing inequalities in society, we raised the question whether social capital inequalities are smaller in more developed welfare states. After developing some theoretical arguments for why this could be the case, we empirically analysed the question with survey data from 13 Western countries that took part in two rounds of the EVS/WVS (1981 and 1999). The data allowed us to use measures for the three commonly distinguished aspects of social capital: networks, norms, and trust.

The general conclusion from our empirical investigation is that the alleged relationship does not show up clearly in our sample of countries. Firstly, because country averages of inequalities in social capital on dimensions of gender, age, work status, income level, and educational level generally do not consistently correlate significantly with countries' welfare effort in terms of overall levels of social spending as percentage of GDP. To be sure, there are some significant relationships, and they are in the expected direction, but these significant correlations form a minority only. In addition, in some cases "outlying countries" have a strong influence on the correlations that we found. Secondly, the average inequalities in social capital do not differ significantly between regime types, irrespective of the aspect of social capital at issue or the social dimensions and time periods concerned.

However, it might be a bit too early to conclude that welfare provision never has any effect on social capital inequalities. The present analysis is, as far as we know, the first one that has explored the relationship. It might be that in our limited sample of Western industrialized countries there is too little variation in "welfare stateness" and/ or in social capital inequality. It could be that welfare provision does have a reducing effect on social capital inequalities, but mostly, or only, in relatively early stages of welfare state development, and in societies where there are also still large economic and cultural inequalities between social classes. This could be analysed with a cross-national design provided that welfare and social capital data are available for a larger range of countries, with more variation in welfare stateness and social capital inequalities, than is present in our sample. From a European perspective one could think of inclusion of Central and Eastern European countries, while from a global perspective the range could even be broader if one could include countries from the various continents. With sufficient countries included one could more directly test the model in Figure 2, and analyse the relative importance of direct and indirect effects. In that case one could also decompose the concept of "welfare stateness" in more detail, compared to our rather superficial measurements of total social spending and regime type. One could analyse, for instance, the relative effects of types and levels of benefit schemes, of types and degrees of service provision, of degrees of targeting of welfare, of differences in administrative practices, etc. Another possibility to further our knowledge of the relationship between welfare state and social capital inequality would be to carry out a historical analysis, where developments in welfare provision and social capital inequalities are studied as they took place in Western welfare states from around 1900 till present. But because of a possible lack of data this might be an option in theory only.

Notes

1. We are aware that there is a discussion on measuring welfare stateness with expenditure data. OECD publications of Willem Adema show that between country differences in gross public spending are larger than differences in net (after tax) and total (also including private expenditures) spending (Adema and Ladaique, 2005). Obviously, using the one or the other measure will lead to different outcomes. However, Castles defends gross public expenditure as a measure of welfare state spending, with the emphasis on state spending (Castles, 2008). The practical issue is that for 1981 and a number of the countries in our dataset net total expenditure figures are not available. Therefore, in our paper we could not use them.
2. We did analyse these correlations and found that social capital levels are higher in more developed welfare states. Also other studies have shown this, using different sets of EU and OECD countries, different data sources (The International Social Survey Problem (ISSP), EVS, European Social Survey (ESS)), and different years. See e.g. Van Oorschot and Arts (2005) and Kaarianinen and Lehtonen (2006).
3. This we learned from the inspection of tables on social capital levels by the categories of our social dimensions. For reasons of space limitation these tables are not reported here.

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