Welfare state expenditure and inequalities in voluntary association participation

Erik van Ingen*

Department of Sociology, Tilburg University, Tilburg, The Netherlands

Tom van der Meer

Departement Politieke Wetenschappen, University of Amsterdam, Amsterdam, The Netherlands

Summary There are large gaps in associational involvement along education, income and gender lines and across different organizations. This paper examines the extent to which these gaps vary across countries. We argue that, next to the discussion about crowding out effects that is often found in the literature, it is important to look at conditioning effects of welfare states. Through welfare state policies, resources are redistributed in society. In turn, these resources enable participation in voluntary associations and organizations. Our analyses – based on multi-level models and data of the European Social Survey – indicate that extensive welfare state expenditures reduce participatory inequalities, with some variation according to the kind of organization under study. Our findings suggest that conditioning effects of welfare states deserve greater attention in research and that participatory inequalities may be reduced by social policy.

Keywords civic engagement, crowding out, inequality, voluntary associations, welfare state

Voluntary associations have been connected to egalitarian democratic ideals by scientists, practitioners and policymakers. According to Skocpol (1999), throughout the history of associational involvement in the US, ‘a person of lesser occupational status could work his or her way up an associational ladder all the way to the top’ (1999: 67), thereby offering the opportunity of self-development to everyone. These democratic ideals are based on two interrelated and hoped-for premises. The first premise is that associational involvement has beneficial side effects, such as better health (Piliavin and Siegl, 2007), income (Baer, 2006), status attainment (Lin, 1999, 2001), political skills and involvement (Van der Meer and Van Ingen, 2009) or jobs (Ruiter, 2008). The second premise is that voluntary associations have the ability to bring together many different social groups that would otherwise not come into contact with each other. In other words, the democratic ideal of voluntary association assumes that citizens from different social groups – such as men and women, the rich and the poor, and the highly and the less well educated – are equally likely to participate in associational life. The degree to which members of various social groups are not equally likely to participate in associational life is what we label participatory inequality.
Yet despite the ideals of participatory equality, a good deal of empirical research shows that involvement in voluntary associations is selective with regard to many characteristics (Wilson, 2000): several participatory inequalities exist. Differences in motivation should not be considered a problematic source of participatory inequality: 'If some citizens do not participate because they freely choose not to be active ... then participatory inequalities do not compromise democracy' (Verba et al., 1995: 26). However, participatory inequality that is induced by a lack of structural resources (such as education and income) or ascribed characteristics (such as gender) is a concern for the egalitarian, democratic ideal of voluntary associations. It is not induced by unwillingness, but by being unable to participate due to a lack of resources. In other words, 'A substantial gap ... separates the existing reality of inequality-reinforcing associations and a hoped-for politics of equality-enhancing association' (Fung, 2003: 524).

Although individual differences in associational involvement have been well documented in previous research, two logical follow-up questions have not been answered satisfactorily: is the extent of participatory inequality dependent on context (type of organization and country) and can it be reduced? In this paper, we investigate these context differences in participatory inequality and examine whether welfare state expenditure has a role in the reduction of the inequalities.

The resources perspective offers an interesting explanation of the origins of participatory inequality (Schlozman et al., 1999; Verba et al., 1995; Wilson and Musick, 1998). At the micro level, the lack of individual resources (such as financial means, cognitive abilities or social skills) constrain the possibilities of citizens’ participation. This causes participatory inequality between those with and those without the relevant resources. However, at the macro level, resources can be redistributed. In particular, welfare state policies aim to redistribute individual level resources (such as financial means, possibilities for childcare and parental leave) from the haves to the have-nots. Consequently, individual level resources matter less and participatory inequality should be lower in countries with high levels of welfare state expenditure.

This paper aims to explain participatory inequality through an ‘analysis of individual-level behaviour that is informed by and linked to aggregate-level, institutional and policy developments’ (Jacobs and Skocpol, 2005: 218). We take individual, organizational and institutional differences into account and examine how they are interrelated. We examine whether welfare state expenditure has a role in the reduction of the inequalities. In the course of this paper we will answer three research questions:

1. To what extent do the effects of education, income and gender on participation in voluntary associations differ across countries?
2. To what extent does welfare state expenditure diminish participatory inequality across education, income and gender lines?
3. Are the inequalities in participation and the leveling effect of welfare state expenditures different according to the type of association under study?

By answering these questions we aim to arrive at a better understanding of the relation between the welfare state and initiatives in the voluntary sector. In the current literature, much of the discussion revolves around the validity of the crowding in/crowding out hypotheses (Andreoni and Payne, 2003; Day and Devlin, 1996; Roberts, 1984; Van Oorschot and Arts, 2005). However, welfare states also (or even primarily) deal with the redistribution of resources in society from the haves to the have-nots. Hence, it makes sense to focus on whether this supposed redistribution affects participatory inequalities. The conditioning effect of welfare state expenditure that we examine in this article therefore provides an alternative conceptual scheme and way of thinking about this relation.

All primary analyses are performed on data from the European Social Survey (ESS) 2002. We perform multi-level analyses, with random intercept, random slopes and cross-level interaction models. Moreover, we perform robustness analyses to check the stability of our findings and to explore the extent to which they may be generalized to non-European countries.

Participatory inequality: resources and restrictions

People’s capacities or resources are an important component of theories that explain associational involvement. As they set the limitations of people’s actions, resources partly explain why social groups have different opportunities to participate:
The choice to take part in a particular way is a constrained one. Various forms of participation impose their own requirements – the time to volunteer in a campaign, the money to cover a check to a political cause, the verbal skills to compose a convincing letter. Thus, those who wish to take part also need the resources that provide the wherewithal to participate. (Verba et al., 1995: 3)

Citizens with few resources have fewer means to meet the requirements of becoming and staying involved (Schlozman et al., 1999; Verba et al., 1995), and so they are more restricted in their opportunities. In this sense, resources and restrictions are opposite sides of the same coin. Citizens with abundant resources are more likely to participate: they have money to register or donate, time to spend on activities, as well as social and political skills to use in the organization.

In the current study, we focus on three well-studied inequality gaps in associational involvement: education, income and gender (Bekkers, 2005; Brehm and Rahn, 1997; Verba et al., 1995). Strictly, when we refer to education, income and gender, we mean the resources and restrictions that are brought about by these three factors: social skills, money and time. It is important to realize, however, that these structural characteristics will also cover differences in socialization to some extent, or motivations rather than resources.

Educational attainment is very important: all modes of associational involvement (that is, membership, participation, volunteering and donation of money) rise with educational level (Bekkers, 2005; Gesthuizen et al., 2008). Education provides citizens with several resources that are helpful in associational involvement. First, through education citizens obtain civic values and skills that promote associational involvement (Gesthuizen and Kraaykamp, 2002; Oesterle et al., 2004). Second, the highly educated have larger social networks and are therefore more likely to know members of associations (Bekkers et al., 2007; McPherson et al., 1992). Since ‘being asked’ is an important incentive to join an organization (Prouteau and Wolff, 2008), this further boosts participation within circles of highly educated people.

Income is one of the most clear-cut resources needed for associational involvement (Li et al., 2003; Ruiter, 2008). Most voluntary associations have entry costs such as membership fees, or additional costs such as expenses for travelling, drinks, meals or materials. This restricts the possibilities for the poor in participating in such associations. Warr (2006) describes why women from socioeconomically disadvantaged neighbourhoods, with low incomes, rarely participate in voluntary associations. Lack of skills, time, money and the concern with their everyday problems keep them away from associational involvement. In turn, this severely restricts their opportunities to improve their skills or meet people with the resources to ‘get ahead’ in life.

A third relevant cleavage in associational involvement is gender. Men and women differ in the type and extent of their associational involvement. Overall, women are less likely to participate in voluntary associations, as they have fewer resources (Paxton et al., 2007). Their social networks are different from men’s in several ways (Lin, 2000): they are generally smaller and show larger proportions of kin and neighbours. Moreover, women generally take up time-consuming care tasks. Indeed, the resource of time is highly determined by ‘such life circumstances as having a job, a spouse who works, or children, especially preschool children’ (Schlozman et al., 1999: 433).

In addition to the actual circumstances, women’s participation can be further restricted by norms about gender roles. As a result, women participate less in voluntary associations in general.

To some extent, education, income and gender tap into similar resources. For instance, education and income are widely known to be positively related. Similarly, women are widely found to have a smaller income than men. Yet, by studying these three structural factors simultaneously in one single model – including control variables – we can argue that they independently point to different types of resources: skills, money and time, respectively.

Hypotheses

Moderating participatory inequality: resource redistribution

These three sources of participatory inequality have been well studied and need not be tested anew. What is interesting is that the degree of participatory inequality seems to be different across countries (Bartowski and Jasinka-Kania, 2004; Van Oorschot and Finsveen, 2009). Böhnke (2008) concludes (about informal social participation, rather than associational involvement): ‘people in a materially
precarious situation are affected more by social disintegration than the privileged classes of the population. However, the degree of accumulation varies from one country to the next' (2008: 147). These findings imply that there may be macro factors that affect the gaps in associational involvement. In our view, welfare state differences are an obvious first candidate to examine (see also Gesthuizen et al., 2008). We argue that welfare state expenditure reduces participatory inequalities in two ways: by redistributing individual level resources and offering collective resources.

First, welfare states redistribute individual level resources from the have to the have-nots, for example by providing social benefits and specific subsidies for the poor and the unemployed. Resource redistribution removes part of the restrictions in becoming involved for the less privileged and hence reduces participatory inequality. Governments can also influence this reduction directly, by providing membership subsidies for the poor. Second, generous welfare states offer collective resources such as subsidies to public facilities and organizations (such as to healthcare or voluntary associations). The availability of these collective resources diminishes the importance of individual level resources: when opportunities are offered to everyone, the underprivileged gain more than those who were already in a position where they did not need government support. Hence, participatory inequality between those with individual resources and those without them should be reduced.

It is important to note that the influence of the welfare state does not have to be restricted to redistributing financial resources only. Welfare state expenditure can also enhance the opportunities for women in associational life by redistributing care and household tasks. Gender gaps in associational involvement can be partly attributed to ‘large-scale social structures, which enhance or limit women’s opportunities for education and employment’ (Paxton et al., 2007). For instance child care, maternity leave and positive discrimination in the job market (Esping-Andersen, 1999) are ways in which states with high levels of social security redistribute care tasks and jobs (Geist, 2005) and thereby remove part of the restrictions that hinder participation.

Finally, although the process is necessarily slow, welfare state policies may redistribute skills in the population. Obviously, it is not possible to take skills from privileged individuals and give them to the less privileged, but it is plausible that – in the long run – the ones with the lowest educational attainment profit the most from investments in the educational system by governments. The level of the group with the lowest educational attainment has considerably improved with laws on child labour, compulsory education and minimal qualifications. Milligan et al. (2004) found empirical support for this idea; they conclude that compulsory schooling laws are beneficial for citizenship as they extend ‘duration in school for would-be dropouts’ (2004: 1669). As the ones with the lowest educational qualifications profit more, the resources difference between the lower and higher educated should decrease. In summary, we expect that welfare state expenditures have a tempering effect on the three inequality gaps under research:

Hypothesis 1a: The effect of education on associational involvement is smaller in countries that spend a large share of their gross domestic product on welfare state policies than in countries with limited welfare state expenditure.

Hypothesis 1b: The effect of income on associational involvement is smaller in countries that spend a large share of their gross domestic product on welfare state policies than in countries with limited welfare state expenditure.

Hypothesis 1c: The effect of gender on associational involvement is smaller in countries that spend a large share of their gross domestic product on welfare state policies than in countries with limited welfare state expenditure.

Gesthuizen et al. (2008) tested a hypothesis similar to H1a, but from a different theoretical starting point. Focusing on the role of education in providing incentives rather than resources to participate, Gesthuizen et al. theoretically expect that the inequality between educational groups in help relations (and by extension associational involvement) should be lower in extensive welfare states. However, empirically, they find mixed evidence for that claim and even an opposite effect on membership. Therefore, the empirical support for H1a remains inconclusive.
Types of organizations

As the resources that are required to participate differ from association to association (Verba et al., 1995), participatory inequality is also likely to differ across types of associations (Curtis et al., 1992; Schlozman et al., 1999; Verba et al., 1995). In particular, the over-representation of affluent, well-educated and male participants in politics and political organizations is well-documented (Schlozman et al., 1999). Consequently, we expect strong participatory inequality within politicized organizations such as interest organizations (that defend their members’ interests, for example, trade unions and consumer organizations) and activist organizations (that promote societal values, for example, humanitarian or environmental organizations).

By contrast, leisure associations may be the kind of organizations that citizens join in a more equal fashion. Analysing voluntary associations in Flanders, Coffé and Geys (2007a, b) found that hobby clubs and arts activities are among the most equal kind of associations in terms of background characteristics. Similarly, sports are often thought of as a domain in which people with different social backgrounds interact. Studies in different countries have indicated that broad segments of society participate in sports and that the percentage of participants is still rising, although certain cleavages subsist (Breedveld, 2003; Scheerder et al., 2005; Wilson, 2002). This view is not uncontested, however. Bourdieu (1984) observed that in France in the 1970s sports also served to express social standing and that certain clubs appeared more exclusive than inclusive in terms of social background. In a more recent publication, Elling and Knoppers (2005) conclude that ‘symbolic exclusion’ exists in several sports, through the images these sports have. However, these images are also constantly challenged. Thus, although leisure associations may be expected to be less unequal than activist or interest organizations, it seems unreasonable to assume full equality.

The extent to which participation requires (civic) skills is important in thinking about differences across types of voluntary associations. Participation in political and quasi-political associations is more demanding in that regard than participation in religious or social associations. In these associations it is still true that active involvement in organizational tasks requires more skills than membership only, but the character of the activities is cognitively less demanding in general. Moreover, volunteers are generally recruited among the members and it can thus be expected that the composition of the membership file is reflected in the composition of the boards, committees, and so on. We formulate the following hypotheses:

Hypothesis 2: The effects of education, income and gender on associational involvement are stronger for interest and activist organizations than for leisure organizations.

A final issue that needs to be discussed is to what extent the conditioning effect of welfare state policy on associational involvement varies across types of organizations. In general, resource redistribution (that is, the conditioning effect) should have the strongest effect among those organizations that require the most resources from their members. Interest and activist organizations are primarily mailing list organizations (Putnam, 2000) with passive members (Lelieveldt et al., 2007; Van der Meer et al., 2009). Hence, while these organizations do require membership fees and donations (that is, money), the resources of skills and time (as determined partly by education and gender) are less relevant than in the more horizontal, face-to-face leisure organizations that require money, social skills and time in more equal measure. Therefore, resource redistribution will probably affect participatory inequalities along income lines through involvement in interest and activist organizations most strongly.

Statistically, when gaps are large, there is more room for reduction than when gaps are small; government policies cannot take away restrictions that are not there. From that, too, it follows that government measures that redistribute resources should have the greatest levelling effect on the types of participation with the largest inequalities, that is, a stronger effect among interest and activist organizations than among leisure organizations. However, given the speculative character of this discussion, we do need to formalize our expectations.

Data and methods

We test our hypotheses on data from the ESS 2002. The data collection in this survey was very tight and uniform and the data contain a lengthy and detailed set of variables capturing associational involvement, which makes it suitable for our current purpose.
We analyse 17 countries from the ESS: Austria, Belgium, Germany (split into East and West), Denmark, Spain, France, Great Britain, Greece, Hungary, Ireland, the Netherlands, Norway, Poland, Portugal, Sweden and Slovenia. Ireland is excluded in the multivariate analyses. The Czech Republic and Switzerland were excluded as they did not survey respondents about their associational involvement. Finland, Israel and Italy were excluded because of severe equivalence issues with the associational involvement measures (Van der Meer et al., 2009). Luxembourg was excluded, since it was an influential outlier on several characteristics, including income, citizenship and economic development.

**Dependent variables: Associational involvement**

The ESS contains more than 60 variables on various types of involvement in various types of voluntary associations. In line with previous studies (Lelieveldt et al., 2007; Maloney and Rossteutscher, 2007; Van der Meer and Van Ingen, 2009) we distinguish between *types of voluntary associations* based on their primary aim. We follow the distinction proposed by Van der Meer et al. (2009), who reduce nine types of organizations in the ESS to three: leisure, interest and activist organizations. Leisure organizations (sports, cultural and social associations) primarily fulfil recreational purposes. Interest organizations (trade unions, professional associations and consumer organizations) aim to represent the interests of their members. Activist organizations (humanitarian or environmental organizations) advocate broad societal interests. Next, for each of these three types of association, we reduced the four *types of involvement* (membership, donating money, active participation and volunteering) to a single scale, ranging from none to four activities. Mokken scale analysis (Van Schuur, 2003) empirically underpins the uni-dimensional, cross-nationally equivalent structure of these four types of associational involvement for each type of association (Van der Meer et al., 2009).

**Individual level determinants: Education, income and gender**

In the design of the survey of the ESS, answering categories were implemented that are uniform for the different countries. *Education* was measured by the level of education (on a five-point scale). *Income* is measured as the net household income, ranked into 12 groups. Finally, *gender* is a dummy variable with men as the reference category. Cases with missing values for income, education or gender were removed from the analyses, but not before we tested the sensitivity of our models to missing values. Table 1 provides an overview of the variables used.

**Welfare state expenditure**

As a proxy for welfare state expenditure, we used International Monetary Fund (IMF) statistics on social security and health expenditure from the annual Government Finance Statistics (International Monetary Fund, 2002–5) from the year before the survey was held. We summed the expenditures for health and social security as a percentage of the gross domestic product (GDP). In Tables 3 and 4 we centered the measure for purposes of clarity. The IMF measure correlates strongly (>0.9) with both Organization for Economic Co-operation and Development (OECD) and International Labour Organization (ILO) data.

This measure fits our hypotheses on welfare state expenditure better than the typology of welfare state regimes (Esping-Andersen, 1990). First, the continuous measure captures more country level variation than the typology would. Second, applying the historical typology of welfare state regimes would require an extension to countries outside north-western Europe. Third, the limited number of countries (and corresponding degrees of freedom) in our dataset forces us to be very restrictive in adding country characteristics. In that respect, the typology requires at least three degrees of freedom, whereas the continuous measure requires only one. These degrees of freedom are better spent on taking rivaling (contextual) explanations into account.

**Control variables**

Finally, we control our models for several individual and contextual characteristics that might explain inequality within and between countries. On the individual level, we control for the following well-known correlates of participation: age (and age-squared to capture non-linear tendencies), marital status, employment status, religious denomination,
church attendance, citizenship of the country in which one resides, household composition, length of residence and urbanization.⁶ We limited our analyses to the adult populations and removed outliers on age (that is, those reported to be older than 100 years).

On the macro level, we include the most consistently found cross-national determinants of associational involvement: economic development, political regime (democratic rule) and welfare state expenditure.⁷ Economic development has been found to be an important macro level determinant of participation rates (Curtis et al., 2001). Well-developed countries are characterized by well-developed infrastructures and high levels of income and education. As a result, an extensive ‘supply side’ of associations emerges, which makes it easier to become involved for those who have not yet participated. The length of democratic rule⁸ stimulates associational involvement (Curtis et al., 2001; Parboteeah et al., 2004): to deal with state repression and insecurity, citizens of authoritarian and communist states often refrained from associational involvement (Howard, 2003; Völker and Flap, 2001) and ‘compartmentalized their lives into small social networks made up of people whom they knew well’ (Uslaner and Badescu, 2003).

### Analytical design

We assess the magnitude of participatory inequalities by looking at regression coefficients.⁹ If a strong effect of education on associational involvement occurs, this means that there is a large gap between the less well and the highly educated in their levels of participation. These coefficients can be compared across countries; basically, if the coefficient is larger in country X than in country Y, this implies that participatory inequality is greater in this country. Accordingly, the variation in these coefficients reflects the degree to which participatory inequalities are different across countries.

In order to simultaneously analyse individual, country and cross-level interaction effects on our

### Table 1  Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation (number of modes of involvement)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any organization</td>
<td>29,879</td>
<td>0</td>
<td>4</td>
<td>1.227</td>
<td>1.269</td>
</tr>
<tr>
<td>Leisure organizations</td>
<td>29,879</td>
<td>0</td>
<td>4</td>
<td>0.836</td>
<td>1.153</td>
</tr>
<tr>
<td>Interest organizations</td>
<td>29,879</td>
<td>0</td>
<td>4</td>
<td>0.506</td>
<td>0.770</td>
</tr>
<tr>
<td>Activist organizations</td>
<td>29,879</td>
<td>0</td>
<td>4</td>
<td>0.338</td>
<td>0.721</td>
</tr>
<tr>
<td>Education (0 = none ... 6 = 2nd stage of tertiary education)</td>
<td>29,287</td>
<td>0</td>
<td>6</td>
<td>2.90</td>
<td>1.53</td>
</tr>
<tr>
<td>Income (groups)</td>
<td>24,760</td>
<td>1</td>
<td>12</td>
<td>5.85</td>
<td>2.52</td>
</tr>
<tr>
<td>Gender (1 = men, 2 = women)</td>
<td>29,955</td>
<td>1</td>
<td>2</td>
<td>1.53</td>
<td>0.50</td>
</tr>
<tr>
<td>Age</td>
<td>29,966</td>
<td>18</td>
<td>98</td>
<td>47.54</td>
<td>17.538</td>
</tr>
<tr>
<td>Age squared (/100)</td>
<td>29,966</td>
<td>3.24</td>
<td>96.04</td>
<td>25.67</td>
<td>17.728</td>
</tr>
<tr>
<td>Church attendance (1 = never ... 7 = daily)</td>
<td>29,864</td>
<td>1</td>
<td>7</td>
<td>2.71</td>
<td>1.590</td>
</tr>
<tr>
<td>Citizenship of country of residence (1 = no, 2 = yes)</td>
<td>29,954</td>
<td>1</td>
<td>2</td>
<td>1.97</td>
<td>0.167</td>
</tr>
<tr>
<td>Child(ren) in household (1 = no, 2 = yes)</td>
<td>29,842</td>
<td>1</td>
<td>2</td>
<td>1.42</td>
<td>0.493</td>
</tr>
<tr>
<td>Household size</td>
<td>29,958</td>
<td>1</td>
<td>15</td>
<td>2.80</td>
<td>1.439</td>
</tr>
<tr>
<td>Length of residence</td>
<td>29,966</td>
<td>0</td>
<td>98</td>
<td>24.31</td>
<td>19.443</td>
</tr>
<tr>
<td>Marital status (nominal)</td>
<td>29,865</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious denomination (nominal)</td>
<td>29,776</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urbanization (1 = countryside ... 5 = large city)</td>
<td>29,869</td>
<td>1</td>
<td>5</td>
<td>3.08</td>
<td>1.208</td>
</tr>
<tr>
<td>Work status (nominal)</td>
<td>29,561</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP/capita PPS (indexed on EU mean)</td>
<td>17 (L2)</td>
<td>46.30</td>
<td>146.60</td>
<td>103.135</td>
<td>27.244</td>
</tr>
<tr>
<td>Years of democracy</td>
<td>17 (L2)</td>
<td>10</td>
<td>82</td>
<td>52.06</td>
<td>31.622</td>
</tr>
<tr>
<td>Welfare state expenditure (proportions of GDP)</td>
<td>16 (L2)</td>
<td>-0.072</td>
<td>0.059</td>
<td>0</td>
<td>0.036</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>29,966</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PPS, Purchasing Power Standards (Eurostat).
proportional and dichotomous dependent variables, we apply multilevel logistic regression (Snijders and Bosker, 1999) using the MLwin 2.10 package (Rasbash et al., 2004). We subsequently estimate (1) random intercept models, (2) random slope models and (3) random slope models with cross-level interaction effects. In all models, the second order PQL procedure for linearization in the maximum likelihood estimation process was used (Rasbash et al., 2004). In the random slope models, covariances between the slopes and between slopes and intercepts were simultaneously estimated. P-values for variance tests are halved, as recommended by Snijders and Bosker (1999).

The idea behind the random intercept models is that the variation in associational involvement may originate from both individual and country differences and the total variation in the dependent variable is split up accordingly. Similarly, the idea behind the random slope models is that the effects of education, gender and income are different (not fixed) across countries, due to contextual differences (that is, the slopes of these three determinants are allowed to vary across countries). The cross-level interaction models examine whether one of these contextual differences (welfare state expenditure) affects these country differences in the realms of gender, education and income (the slope differences).

Results

Involvement in any organization

Table 2 shows the results of the analyses of the unspecified, overall measure of associational involvement. The first model is the random intercept model, which replicates findings from many previous studies of participation. Education has a strong and positive effect (B = 0.20): those who are highly educated are more likely to participate than those with lower educational attainments. In addition, income has a positive effect on participation (B = 0.08) and women are in general less likely to participate than men (B = −0.22). All this confirms the previous findings on participatory inequality.

In model 2, the effects of education, income and gender are allowed to vary across countries (random slopes). These variances are significant. They may appear to be small at first sight, but the actual range of the effects across countries is considerable (as shown in Table 3).

Model 3 of Table 2 finally shows the cross-level interactions in which we are most interested. The interaction effects of welfare state expenditure with education and income are significant and positive; the interaction with gender is positive. In other words, the main effects of education and income are positive and the main effect of gender was negative. The interaction effects show that the overall effects of education, income and gender are smaller in countries with higher levels of welfare state expenditure. This supports hypotheses 1a, 1b and 1c. In sum, participatory inequalities are smaller in countries with high levels of welfare state expenditure than in countries with low levels of welfare state expenditure.

The models in Table 2 throw various types of voluntary associations on one heap. However, the size and even direction of participatory inequality may not be similar across types of association. Consequently, the moderating effect of welfare state expenditure on participatory inequality may not be similar across these types. To offer a more stringent test, we therefore perform more detailed analyses for the three types of associations.

Involvement in three types of organization

Cross-national differences in participatory inequality

First, Table 3 shows the estimates of the random slopes models when we distinguish between interest, activist and leisure organizations. The rows with ‘effect sizes’ display the estimated average effects, similar to model 2 in Table 2. The control variables were included in the model but are not displayed in the table. In line with previous studies, education and income show significant and positive effects on involvement in all three types of association. However, the effect of gender is mixed. Men are more likely to participate in leisure and interest organizations than women, but less likely to join activist organizations. The participatory inequality between men and women in activist organizations is the sole mode of inequality that does not fit the resource theory. Explanations of the higher likelihood of women participating in activist organizations possibly depends on differing incentives (aims).
Second, Table 3 shows to what extent the effect sizes differ across types of association. According to hypothesis 2, the degree of participatory inequality should be stronger for interest and activist organizations than for leisure organizations. The participatory inequalities differ in strength between leisure,
interest and activist organizations. However, these differences are not consistent. The effect of education is stronger in activist organizations than in other types. The effect of income does not differ significantly across the three types. Finally, in absolute terms the gender effect is strongest in interest organizations and smallest in activist organizations. All in all, hypothesis 2 is rejected.

Before we turn to the question whether the individual level effects of education, income and gender are weaker in countries with higher levels of welfare state expenditure, we take a look at whether the effects differ significantly across countries. Table 3 shows the variances of the effects, as well as the 95 percent range of the estimated effects across countries. The variance estimates (U) show that the effects of education, income and gender varied significantly across countries for all types of organizations. Although the size of the variances appears small, the range of the estimated effects is not. Table 3 demonstrates this through the estimated ranges in which 95 percent of the national effects (country averages) are located under the assumption of normal distribution. Inequality is rather strong in some countries, while it is nearly lacking in others. In particular the estimated gender effects differ strongly: regarding participation in leisure associations, for instance, they range from strongly negative (−0.877) to a small positive (0.123) effect. Both the significant variance estimates and the ranges of effect sizes imply that most participatory inequalities differ strongly across the 17 countries under study. This urges the question of what determines these differences in participatory inequality.

Welfare state expenditure and participatory inequality

Table 4 is similar to Model 3 in Table 2, but differentiated according to type of organization again. The first block (Level 1) shows the main effects of the individual level characteristics under study (that is, the effects of education, income and gender in a country with an average level of welfare state expenditure). The third block (Cross-level) shows whether the individual level effects differ significantly across countries with differing levels of welfare state expenditure and finally, the fourth block shows the variances of the slopes.12

The cross-level interactions are similar to those we found in Table 2 in terms of the direction of the effects (welfare state expenditure is consistently

---

**Table 3** The context dependent resource model: the diverging effects of education, income and gender on involvement in three types of voluntary associations (multilevel, random slope models)

<table>
<thead>
<tr>
<th></th>
<th>Interest</th>
<th>Activist</th>
<th>Leisure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Effect size (B)</td>
<td>0.195**</td>
<td>0.307**</td>
</tr>
<tr>
<td></td>
<td>Variance (U)</td>
<td>0.011**</td>
<td>0.016**</td>
</tr>
<tr>
<td></td>
<td>95% range*</td>
<td>−0.011 &lt; B &lt; 0.401</td>
<td>0.059 &lt; B &lt; 0.555</td>
</tr>
<tr>
<td>Income</td>
<td>Effect size (B)</td>
<td>0.081**</td>
<td>0.090**</td>
</tr>
<tr>
<td></td>
<td>Variance (U)</td>
<td>0.004**</td>
<td>0.002**</td>
</tr>
<tr>
<td></td>
<td>95% range*</td>
<td>−0.043 &lt; B &lt; 0.205</td>
<td>0.002 &lt; B &lt; 0.178</td>
</tr>
<tr>
<td>Gender</td>
<td>Effect size (B)</td>
<td>−0.456**</td>
<td>0.239**</td>
</tr>
<tr>
<td></td>
<td>Variance (U)</td>
<td>0.072**</td>
<td>0.010†</td>
</tr>
<tr>
<td></td>
<td>95% range*</td>
<td>−0.982 &lt; B &lt; 0.070</td>
<td>0.043 &lt; B &lt; 0.435</td>
</tr>
</tbody>
</table>

Source: European Social Survey (2002).

Note: Level 1: N = approx. 21,700; Level 2: N=17. Models are controlled for: Age, Age squared, Marital status, Employment status, Church attendance, Denomination, Citizenship, Having children, Household size, Length of residence, Urbanization of the community, GDP/capita (PPS) and Years of democracy.

*Defined as the interval of B±1.96 SD.
†p < 0.10; *p < 0.05; **p < 0.01.
associated with smaller participatory inequality). However, with these split-ups, not all of the cross-level interactions are significant. We expected that welfare state expenditures would reduce the effect of education, income and gender on associational involvement the least for leisure organizations (hypothesis 3). For education this is true, but for income and gender it is not clearly the case. Welfare state expenditure reduces participatory inequality between the higher and the lower educated in interest and activist organizations. We illustrate this for activist organizations. The main effect of education is 0.30 – which is the effect of education in the average welfare state. In countries with 4 percent less welfare state expenditure than average (which corresponds to one standard deviation), the effect of education on involvement in activist organizations is 0.30 − 0.04 × −1.65 = 0.37. In countries with 4 percent more welfare state expenditure than the average, the effect of education is 0.30 + 0.04 × −1.65 = 0.23. In other words, welfare state expenditures make a reasonable difference for the education effect among interest and activist organizations. However, this was not the case for leisure organizations (thereby rejecting hypothesis 3): the cross-level interactions were not significant.

Subsequently, Table 4 shows that the positive effect of income is smaller in countries with more social security spending for leisure and interest organizations. In other words, participatory inequality across income groups is smaller in more generous welfare states. However, the models imply that the income gap in participation in activist organizations is not affected by welfare state expenditure.

Finally, we find that the relationship between gender and associational involvement varies according to welfare state expenditure for all three types of organizations. However, the interpretation of the effects is somewhat different than for education and income. In leisure and interest organizations women participate less than men in the average welfare state (respectively −0.30 and −0.46). In states with 4 percent more social expenditure these gender effects are weaker (respectively −0.16 and −0.28), that is, participatory inequality is lower. In activist organizations, women are more likely to participate (+0.24) than men. This effect becomes even stronger in states with 4 percent more social expenditure (namely 0.34). In other words, regarding associational involvement, welfare state expenditure is more beneficial for women than for men (for activist

Table 4  The welfare-state dependent resource model: the effects of education, income and gender vary in accordance with welfare state expenditure (multilevel, random slope models with cross-level interaction effects)

<table>
<thead>
<tr>
<th></th>
<th>Interest</th>
<th>Activist</th>
<th>Leisure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>0.20**</td>
<td>0.30**</td>
<td>0.18**</td>
</tr>
<tr>
<td>Income</td>
<td>0.06**</td>
<td>0.09**</td>
<td>0.08**</td>
</tr>
<tr>
<td>Women</td>
<td>−0.46**</td>
<td>0.24**</td>
<td>−0.30**</td>
</tr>
<tr>
<td>Welfare state expenditure</td>
<td>10.57**</td>
<td>7.32†</td>
<td>8.19**</td>
</tr>
<tr>
<td>Education × Social security expenditure</td>
<td>−2.28**</td>
<td>−1.65**</td>
<td>−0.57</td>
</tr>
<tr>
<td>Income × Social security expenditure</td>
<td>−0.71**</td>
<td>−0.45</td>
<td>−0.54**</td>
</tr>
<tr>
<td>Women × Social security expenditure</td>
<td>4.60**</td>
<td>2.73**</td>
<td>3.62†</td>
</tr>
<tr>
<td>Slope variance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.007**</td>
<td>0.013**</td>
<td>0.002**</td>
</tr>
<tr>
<td>Income</td>
<td>−</td>
<td>0.002**</td>
<td>0.001**</td>
</tr>
<tr>
<td>Gender</td>
<td>0.059**</td>
<td>0.001</td>
<td>0.070**</td>
</tr>
</tbody>
</table>

Source: ESS (2002).

Notes: Level 1: N = approx. 21,700; Level 2: N=17. Models are controlled for: Age, Age squared, Marital status, Employment status, Church attendance, Denomination, Citizenship, Having children, Household size, Length of residence, Urbanization of the community, GDP/capita (PPS) and Years of democracy.

*p < 0.10; **p < 0.05; ***p < 0.01.
organizations participatory inequality is enlarged). Note, however, that the effect of welfare state expenditure on participatory inequality between men and women is in line with the resource perspective (the position of those who generally have fewer resources is improved), even though the effect of gender on involvement in activist organizations is not.

Robustness

We compared the results of our analyses to the Citizenship Survey 2004 of the International Social Survey Programme (a large and diverse set of 38 countries from various continents with more crude measures), to assess the robustness of the findings and their generalizability to non-European countries. These additional analyses show that our findings are indeed robust (see Appendix Table A1). Despite fewer and less detailed measures of participation, different measurement of income and education and a much larger sample, the general conclusions are the same. At the individual level, the highly educated, the (relatively) rich and men are more likely to participate in leisure and interest organizations than the less well educated, the (relatively) poor and women. The cross-level interactions are in the same direction: social security expenditure enhances the resources of the less privileged, lowering participatory inequality.

Summary and discussion

In this article, we contribute to the literature about participatory inequalities by examining an institutional explanation of differences in participation according to education, income and gender. Based on the resource perspective, we tested hypotheses about contextual effects on these inequalities, which confirmed that welfare state expenditure moderates participatory inequality.

First, we described participatory inequalities between the haves and the have-nots in more detail. Across all types of organizations, the greatest inequality in participation occurs between groups with different educational attainment. The gap between people with high and low incomes is very persistent, but smaller than that of education. Gender is a more ambiguous source of participatory inequality for which a differentiation between types of associations is needed: women are less involved in interest and leisure organizations, but more involved in activist organizations. Contradicting popular belief, we found that leisure associations do not have a more equal composition than do other types of association.

Second, our analyses revealed that welfare state expenditures condition participatory inequality. When countries redistribute resources from the haves to the have-nots and offer collective resources, the likelihood of associational involvement is improved for those who are most constrained in their choices: the less well educated, the poor and women. We found confirmation for this mechanism in our analyses of activist, leisure and, particularly, interest organizations.

Although welfare state expenditure strengthens the overrepresentation of women in activist organizations, this interaction effect is in line with the resource approach. Extensive welfare states provide more resources such as time and money to women. This resource redistribution strengthens women’s level of associational involvement: in leisure and interest organizations the disadvantage to their male counterparts is therefore diminished, while their edge in involvement in activist organizations is increased.

Remarkably, Gesthuizen et al. (2008) did not find that welfare state expenditure reduces the education effect. Differences in research design are probably responsible. First, in our study associational involvement is a hierarchical scale of activities (ranging from 0 to 4), whereas Gesthuizen et al. focus on three modes of involvement (donation, membership, participation) separately. Because these three modes are not studied simultaneously (or with a control of membership on participation), they all primarily measure the membership effect (for which skills are less important than more active forms of participation). Second, Gesthuizen et al. do not distinguish between 14 types of associations (they used a count of memberships), whereas our study showed that such a distinction is relevant for the education effects: we found no significant effects for leisure organizations. We think that using a similar typology, Gesthuizen et al. would have found similar effects with the Eurobarometer data as we did.
The conclusions of our study open up new research perspectives. Primarily, this study calls for future cross-national research on inequalities in associational involvement, which could follow various paths. First, the kind of data and analyses employed in this paper do not allow further elaboration about the mechanisms that connect welfare state expenditure to participatory inequality. In-depth studies are needed to examine such mechanisms, for instance the national and local programmes that subsidize membership fees alleviate financial burdens for the poor, or the effect of programmes that reduce family-care burdens for women. This requires more specific data: our multi-level models are already strained by the inclusion of only one overall welfare state measure. Nevertheless, the strong and consistent findings of this study imply that further research into the mechanisms will be fruitful and necessary.

A second extension of the current study would be to look at other structural sources of inequality. For instance, the relationship between ethnicity and associational involvement has recently been put on the agenda (Gesthuizen et al., 2009; Letki, 2008; Putnam, 2007). Our data did not allow us to analyse this due to the under-representation of ethnic minorities in the cross-national survey data.

Given the supposedly beneficial effects of associational involvement for the participants, this study implies that voluntary associations are not egalitarian organizations, but rather operate as organizations that reproduce social inequality (cf. Gesthuizen et al., 2009; Ruiter, 2008). Those citizens who need the benefits of associational involvement most are actually the least involved (Schlozman et al., 1999). Conversely, privileged citizens – who do not need the benefits of associational involvement in the first place – show the highest membership rates and occupy the most important positions within associations. Let us end, however, on a more positive note: although welfare state arrangements will not make participatory inequalities disappear, this study has shown that such arrangements may reduce participatory inequalities.

Appendix

Table A1 Results of comparable analysis based on ISSP data explaining involvement in two types of voluntary associations (random slope logistic models )

<table>
<thead>
<tr>
<th></th>
<th>Interest</th>
<th>Leisure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>0.090**</td>
<td>0.086**</td>
</tr>
<tr>
<td>Income</td>
<td>0.120**</td>
<td>0.144**</td>
</tr>
<tr>
<td>Women</td>
<td>−0.378**</td>
<td>−0.463**</td>
</tr>
<tr>
<td>Welfare state expenditure</td>
<td>0.035</td>
<td>−0.001</td>
</tr>
<tr>
<td>Education × Welfare state expenditure</td>
<td>−0.005**</td>
<td>−0.001</td>
</tr>
<tr>
<td>Income × Welfare state expenditure</td>
<td>−0.007*</td>
<td>0.001</td>
</tr>
<tr>
<td>Women × Welfare state expenditure</td>
<td>0.010†</td>
<td>0.013†</td>
</tr>
<tr>
<td>Slope variance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.003*</td>
<td>0.002**</td>
</tr>
<tr>
<td>Income</td>
<td>0.006</td>
<td>0.005</td>
</tr>
<tr>
<td>Gender</td>
<td>0.004</td>
<td>0.081**</td>
</tr>
</tbody>
</table>


Notes: Level 1: N = approx 27,000; Level 2: N=31. Models are controlled for: Age, Age squared, Marital status, Current employment, Church attendance (except model religious participation), Denomination, Education (between country), GDP/capita (PPS), and years of democracy.

†p < 0.10; *p < 0.05; **p < 0.01.
Figure A1  Participatory inequality (highly educated : less well educated): education, leisure organizations (% more involved by the highest group)

Figure A2  Participatory inequality (highly educated : less well educated): education, interest organizations (% more involved by the highest group)
Figure A3  Participatory inequality (highly educated : less well educated): education, activist organizations (% more involved by the highest group)

Figure A4  Participatory inequality (rich : poor): income, leisure organizations (% more involved by the highest group)
**Figure A5**  Participatory inequality (rich : poor): income, interest organizations (% more involved by the highest group)

**Figure A6**  Participatory inequality (rich : poor): income, activist organizations (% more involved by the highest group)
Figure A7  Participatory inequality (men : women): gender, leisure organizations (% more involved by the highest group)

Figure A8  Participatory inequality (men : women): gender, interest organizations (% more involved by the highest group)
Welfare state expenditure and inequalities in voluntary association participation

Journal of European Social Policy 2011 21 (4)

Notes

We would like to thank Jan van Deth, Paul Dekker, Wim van Oorschot, Matthijs Kalmijn, Wouter van der Brug, Koen van Eijck and the members of CINEFOGO work-package 11 for their useful comments on previous versions of the paper.

1. On the other hand, when women have children this does not necessarily mean that their voluntary participation is endangered; in fact, school-age children can have an effective positive influence, especially for women who are not working (Rotolo and Wilson, 2007).

2. Throughout this paper we analyse types of organizations. We are aware that our analyses on types of organizations do not account for segmentation within these types, but our data do not allow a more concise operationalization.

3. The income of the respondents in France, Hungary and Ireland in this variable was calculated using their respective country-specific categories. In the most recent version of the ESS the income data in these countries was excluded from the data set for equivalence issues. As we are primarily interested in the effect sizes, this is a somewhat less stringent issue. Regardless, we performed additional robustness analyses by leaving the three countries out of the analyses sequentially and re-estimating the models. This did not affect the outcomes in any substantial way: even the effect sizes remain highly similar.

4. We performed sensitivity analyses to assess the impact of the missing values on the three central determinants (education, income, gender) on the outcomes of our models. There were too few missing values for gender (0.4 percent) and education (2 percent) to affect our findings. The effect of age of missing values on income was larger (17 percent). However, analyses using the ML-Win Macro as well as the Imputation add-on to ML-Win (see http://missingdata.lshtm.ac.uk/) showed that people with missing values were somewhat less likely to participate, but, what is more important, that the random intercept models were not sensitive to the missing values on income. Unfortunately, we could not successfully perform the multi-level sensitivity analyses to missing value imputation in the random intercept models, as they were strained with the additional variance and covariance estimates. Although we thus did not perform a strict sensitivity test on the final models, we are confident that the missing values would not have had a significant impact as other robustness analyses (see previous note) and the sensitivity analyses on the random intercept models showed a high level of stability.

5. This statistic consists of three elements: (1) social security benefits, which are ‘benefits payable in cash or in kind to households by social security schemes’ (such as sickness and invalidity benefits, maternity allowances, children’s or family allowances, unemployment benefits, retirement and survivors’ pensions and death benefits); (2) social assistance benefits, ‘transfers payable to households to meet the same needs as social insurance benefits but which are not made under a social insurance scheme’; and (3) employer social benefits, which are ‘social benefits payable in cash or in kind by government units to their employees or employees ... similar to those listed for social security schemes’.

6. Note that none of these control factors would intermediate the resource measures of education/skills, income/money and gender difference/time. Although marriage and household size do capture some of the time resource, these do not affect the gender difference: generally speaking, there are little differences in the household sizes of men and women.

Figure A9  Participatory inequality (men : women): gender, activist organizations (% more involved by the highest group)

Notes

We would like to thank Jan van Deth, Paul Dekker, Wim van Oorschot, Matthijs Kalmijn, Wouter van der Brug, Koen van Eijck and the members of CINEFOGO work-package 11 for their useful comments on previous versions of the paper.

1. On the other hand, when women have children this does not necessarily mean that their voluntary participation is endangered; in fact, school-age children can have an effective positive influence, especially for women who are not working (Rotolo and Wilson, 2007).

2. Throughout this paper we analyse types of organizations. We are aware that our analyses on types of organizations do not account for segmentation within these types, but our data do not allow a more concise operationalization.

3. The income of the respondents in France, Hungary and Ireland in this variable was calculated using their respective country-specific categories. In the most recent version of the ESS the income data in these countries was excluded from the data set for equivalence issues. As we are primarily interested in the effect sizes, this is a somewhat less stringent issue. Regardless, we performed additional robustness analyses by leaving the three countries out of the analyses sequentially and re-estimating the models. This did not affect the outcomes in any substantial way: even the effect sizes remain highly similar.

4. We performed sensitivity analyses to assess the impact of the missing values on the three central determinants (education, income, gender) on the outcomes of our models. There were too few missing values for gender (0.4 percent) and education (2 percent) to affect our findings. The effect of age of missing values on income was larger (17 percent). However, analyses using the ML-Win Macro as well as the Imputation add-on to ML-Win (see http://missingdata.lshtm.ac.uk/) showed that people with missing values were somewhat less likely to participate, but, what is more important, that the random intercept models were not sensitive to the missing values on income. Unfortunately, we could not successfully perform the multi-level sensitivity analyses to missing value imputation in the random intercept models, as they were strained with the additional variance and covariance estimates. Although we thus did not perform a strict sensitivity test on the final models, we are confident that the missing values would not have had a significant impact as other robustness analyses (see previous note) and the sensitivity analyses on the random intercept models showed a high level of stability.

5. This statistic consists of three elements: (1) social security benefits, which are ‘benefits payable in cash or in kind to households by social security schemes’ (such as sickness and invalidity benefits, maternity allowances, children’s or family allowances, unemployment benefits, retirement and survivors’ pensions and death benefits); (2) social assistance benefits, ‘transfers payable to households to meet the same needs as social insurance benefits but which are not made under a social insurance scheme’; and (3) employer social benefits, which are ‘social benefits payable in cash or in kind by government units to their employees or employees ... similar to those listed for social security schemes’.

6. Note that none of these control factors would intermediate the resource measures of education/skills, income/money and gender difference/time. Although marriage and household size do capture some of the time resource, these do not affect the gender difference: generally speaking, there are little differences in the household sizes of men and women.
7. Welfare state expenditure is studied primarily for its effects on participatory inequality, i.e. its interaction effect with education, income and gender. To assess this interaction effect correctly, we also need to model its overall effect. However, we will not delve extensively into the debate on the supposed crowding out effect of the welfare state (Curtis et al., 2001; Gesthuizen et al., 2008; Scheepers et al., 2002; Van Oorschot and Arts, 2005).

8. We cap the length of democratic rule at 1920, the time of socialization of the last living generation in our survey.

9. Descriptive (bivariate) overviews of the participatory inequalities across the different ESS countries are available in the appendix.

10. Logistic regression analysis is used to estimate models with proportions, based on a binary distribution. The regression models effectively explain the proportion of activities in which respondents are engaged, without any determinants at the level of activities.

11. Among the other ‘usual participants’ are the employed, church-goers, Protestants, those who are a citizen of the country in which they were interviewed and those living in rural areas. Two out of three of the macro factors were significant. In accordance with previous studies economic development (GDP) was found to be positively correlated to participation; however, length of democracy was not. In addition, we find a positive effect of welfare state expenditure on participation in voluntary associations, in line with the ‘crowding in’ hypothesis.

12. The model for interest organizations did not converge. The only way to make it converge was by not allowing the slope of income to vary across countries. This is a considerable constraint, which increases the risk of Type I errors (false positives), i.e. finding a significant effect where this is not the case. To cope with this issue, additional models were estimated in which each cross-level interaction was modelled separately. For these models no additional constraints needed to be set. The obtained results were similar to Table 4.

13. The International Social Survey Programme (ISSP) includes data on whether the respondent participates actively in (1) a sports, leisure or cultural group, or (2) within a trade union, business or professional organization. These two types mirror the leisure and interest organizations constructed for the ESS data set. The obtained results were similar to Table 4.

14. Associational involvement is only measured as active participation in an organization in the ISSP, rather than the scale of activities in the ESS. Education is measured as the number of years it took for respondents to finish their education. The measurement of income in the ISSP does not allow a cross-national comparison for several reasons: the monetary unit, the standard price level (i.e., the effective height of the income) and the time span in which the income was gathered (i.e., monthly vs annually) differs between countries in the ISSP. These problems were solved by standardizing income within countries. The resulting measure indicates the relative differences in the income distribution within countries.

15. The sample included Austria, Germany (East), Germany (West), Denmark, Spain, France, Great Britain, Hungary, Netherlands, Norway, Poland, Portugal, Sweden, Slovenia, Bulgaria, Cyprus, Czech Republic, Slovak Republic, Switzerland, Latvia, United States, Australia, Canada, New Zealand, Chile, Japan, Mexico, Philippines, Uruguay and Venezuela.

16. In the replication on the ISSP data, the cross-level interactions do not seem to reach levels of significance as easily as in the ESS data. Both differences in measurement and sampling could be responsible for that, but the examination of those differences falls outside the scope of this paper.

References


