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# **VALUES AS DETERMINANTS OF SOCIAL CAPITAL: REGIONAL PERSPECTIVE**

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## **VALUES AS DETERMINANTS OF SOCIAL CAPITAL: REGIONAL PERSPECTIVE<sup>3</sup>**

This research focuses on emancipative value orientations, regional factors and their interaction in determining social capital in Russia. We are especially interested in how the effects vary for formal and informal social capital, measured as different types of civic engagement. Applying multilevel regression modeling on national survey data MegaFOM 2017 and available official statistics, we find that emancipative values significantly increase the probability of taking part in civic activities, yet the effect is larger and more uniform across regions for formal social capital. Contrary to expectations and previous cross-country studies, the moderating effect of emancipative values prevalence is either insignificant or rather unstable and goes in the negative direction. Moreover, other regional resources do not significantly moderate the relation between individual emancipative values preference and social capital.

Keywords: social capital, emancipative values, informal social capital, formal social capital, civic engagement, regional studies

JEL Classification: Z

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## **Introduction**

Recent decades have been marked by a growing attention to the concept of social capital (Farrell 2007). To a great extent this owes to the fact that it has been theorized to have a number of positive social, economic and political outcomes such as higher levels of economic development and social welfare, stable democracy and vibrant civil society (Fukuyama 2000; Knack and Keefer 1997; Putnam 1993). Other studies suggest that social capital is also associated with effectively operating labor markets; lower levels of crime; better health and educational outcomes for population (Aldridge, Halpern, and Fitzpatrick 2002). Many works attempt to clarify the strength and significance of the suggested positive effects of social capital; however, much fewer studies address its sources (Kaasa and Parts 2007). It should be obvious, though, that to reap the aforementioned benefits through, for instance, accordingly adjusting social policies, it is critical to understand its formation mechanisms.

In this research, we seek to contribute to this line of research in the light of two important yet often missed out aspects. To begin with, Putnam's (1995) tradition of social capital emphasizes trust, norms and networks as the main driving force of cooperation within community. When the determinants of social capital are addressed within this framework, they, generally encompass different types of economic and knowledge resources. Yet, from classics (Parsons 1991; Weber 1978) to contemporary scientists (Schwartz 2010; Welzel 2013), there have been claims that the interpretations of social action should not ignore the value-motivational force standing behind it. We attempt to bring together the findings of social capital research and value studies by testing the relationship between emancipative values and formal and informal social capital manifested through civic participation.

Further, the researchers of the determinants of social capital often limit themselves to individual-level factors (e.g. Glaeser, Laibson, and Sacerdote 2002; Kaasa and Parts 2007; van Oorschot and Arts 2005; Parts 2013) or, conversely, study the group-level determinants (e.g. Alesina and La Ferrara 2000; Costa and Kahn 2003; Putnam 2000). If both groups of characteristics are regarded simultaneously, researchers generally rely on cross-country comparisons for drawing conclusions about the driving forces of social capital (e.g. Christoforou 2011; Halman and Luijkx 2006; van Oorschot, Arts, and Gelissen 2006). We argue that while such comparative approach is more beneficial since it allows for a complex and integrative picture of the matter, it still lacks precision treating countries as homogeneous units. Taking up the case of Russia with its internal diversity, we propose that the hypothesized relationship may

systematically vary between its regions due to contextual cultural and socio-economic factors and, therefore, a regional perspective should be employed for a more detailed understanding of the triggers and barriers of social capital in Russian regions.

In this way, we focus on axiological orientations, regional factors and their interaction in determining social capital in Russia by applying multilevel regression modelling on national survey data MegaFOM 2017 and available official statistics.

### **Social capital: concept and measurement**

Social capital is a rather multifaceted concept, yet despite a wide variety of suggested definitions (Lollo 2012; Paldam 2000), it seems possible to identify two main approaches to it marked by the opposition “personal interests – societal interests”. The first approach presents social capital as a set of resources which are available to an individual by the virtue of their social connections (Bourdieu 1985). The second approach, applied in this study, treats it as a societal resource, which manifests itself as social networks, norms and trust that make cooperative action possible (Putnam 1995). Social capital, in this perspective, is fostered in different voluntary associations and hobby groups (Putnam 2000). This study relies on the “latter approach; however, we admit that, as a societal resource, it is “accumulated” in the form of certain individual actions and attitudes, and, therefore, personal characteristics - alongside group-level determinants - should be addressed while investigating its formation mechanism.

Further, several typologies of social capital have been suggested, including the differentiation between the formal and informal one (Nistor and Tîrha 2011.; Putnam 2000; Wuthnow 2002). While formal social capital refers to relationships between people in an organized group (e.g. a voluntary organization, trade unions, political parties), informal social capital has to do with bonds between people in the absence of membership in a formal organization.

Due to its heterogeneous nature, social capital can hardly be measured using just one indicator: at the end of 2013 OECD (Scrivens and Smith 2013) counted approximately 1200 questions in about 50 surveys and survey modules applicable for social capital measurement. The researchers also suggested that those should be grouped into four broader categories: personal relationships, social network support, trust and cooperative norms and civic engagement. Rather than turning to a composite index including all these dimensions, the current research focuses on civic engagement for a number of reasons. To begin with, composite measures often imply

certain circularity by including elements of the variables they seek to predict or be predicted with (Catts 2007). Moreover, there is always a certain gap between attitudes and real action, therefore it is more logical to rely on individual cooperative behavior, a “direct measure of social capital’s productivity” (Welzel, Inglehart, and Deutsch 2005:124). After all, participation in activities can be assessed easily and precisely unlike more abstract aspects of social capital (Alesina and La Ferrara 2000).

### **Social capital in Russia**

Taken in comparative perspective, Russia stands at rather low levels of civic participation. For instance, using wave 6 of European Social Survey data, Sedova (2014) finds that it holds the 22<sup>nd</sup> out of 24 places with only 16% engaging in at least one type of formal civic activities including signing a petition, taking part in a protest or working for a voluntary organization. In the same vein, the EVS data of 2017 shows that less than 1% held membership in ecological organizations, 1,4% were members of charity organizations and about 13% signed petitions (EVS 2018). From the point of view of informal helping activities, Russia also occupies only the 110<sup>th</sup> position out of 144 in CAF World Giving Index 2018, yet the numbers here are more reassuring: 44% helped a stranger, 21% donated money (CAF 2018).

Russian scholars provide quite similar results. Thus, Mersianova et al. (2015) report that a significant share of the Russian population have participated in charities: 56% of women and 48% of men claimed to have made donations to people in need (including alms) in the last two to three years. Moreover, according to Mersianova and Korneeva (2013), 24% of the population took part in community works such as volunteer clean-ups and 20% attended housing cooperative meetings. At the same time, only 8% take part in NPO-organized activities, advocacy initiatives, mass demonstrations, election monitoring, trade unions etc. (Bogomolova et al. 2017). Overall, it can be concluded, that informal helping activities and occasional community activities are much more popular among Russians than formal civic engagement.

Importantly, there is also a significant variation in civic participation across Russian regions (Mersianova and Korneeva 2011, 2013; ZIRCON 2011). For instance, 10% of the population organized collective action to solve a certain problem, while in Lipetsk region only 1% did so. In the case of participation in charity events, the rates vary from 1% in Tomsk region to 18% in Yakutia, and as far as volunteer community works are concerned, from 10% in Volgograd region to 52% in Invanovo region (Mersianova and Korneeva 2013). These

differences suggest that Russian regions may constitute an interesting case for a comparative analysis. In our research, we will try to address the possible determinants of the suggested cross-regional variation.

Unfortunately, the studies of civic engagement in Russia rarely make use of regression analysis to establish its sources resorting rather to direct survey questions about individuals' motivation. Thus, Russians give the following reasons of why they engage in civic activities: to protect their rights, to be in touch with people who share their values and ideas, to make the world a better place (Sedova 2014). At the same time, the strongest deterrents are a disbelief that civic engagement can serve common good, and, to a lesser extent lack of interest or time (Trofimova 2014). This implies that values and concerns about rights and freedoms should be given priority, when trying to disentangle the formation force of social capital. However, as we will see in the following section, it is hardly the case.

### **Determinants of social capital**

Following Putnam's seminal work (1992, 2000), social capital is usually treated as a group level phenomenon determined by a set of factors which are common for a whole unit (neighborhood, state, country etc.). Such determinants generally cover income inequality, ethnical, fragmentation, quality of government institutions, overall levels of general trust and institutional trust, economic development, residential mobility, share of farming households, proportion of college graduates and number of church members (Alesina and La Ferrara 2000; Alexander 2007; Costa and Kahn 2003; Ferragina 2013; Putnam 1995; Rupasingha, Goetz, and Freshwater 2006). Other researchers postulate the importance of individual attitudes and actions in providing the overall stock of the social capital and, therefore, specify their models using individual-level predictors unanimously including a wide range of demographic and socio-economic characteristics (e.g. gender, age, marital status, income, employment, homeownership, town size, education) and more rarely personal dispositions and attitudes (e.g. social and institutional trust, patience, satisfaction with democracy, political stance, individualism) (Glaeser et al. 2002; Halman and Luijkx 2006; Kaasa and Parts 2007; van Oorschot, Arts, and Gelissen 2006; Parts 2013).

In other words, researches test and in many cases show the importance of economic and cultural capital accumulated at individual and community levels and certain group-level characteristics allowing for their accumulation and preventing squandering. However, what is so

often disregarded in such studies are value-motivational orientations, the determinative power of which for social action has been long known to sociologists (Parsons 1991; Weber 1978).

### **Values as a determinant of social capital**

One of the most popular definitions of values as desirable goals that motivate action comes from Schwartz, who suggests and provides some evidence for the fact that “[p]eople for whom social order, justice, and helpfulness are important values are motivated to pursue these goals” (Schwartz 2010:223). Actions themselves rise in their attractiveness and subjective value to an individual when they serve as a means to achieve valued goals. In this way, it would be logical to consider certain values as inductive of broadly understood civic engagement, especially in the light of amounting evidence (e.g. Daniel et al. 2015; Maio et al. 2009; Schwartz 2007).

Emancipative values, those putting emphasis on exercising freedoms and equality of opportunities (Welzel 2013), are among most likely candidates for promoting social capital. Bringing under one roof a range of desirable conceptions that prioritize people’s freedoms to pursue specific values of their choice, they may serve as a motivation force for a great variety of activities. It can be easily deduced from such definition that emancipative values are linked to individualistic orientations. However, it was claimed and proven that the form of individualism they stand for has a "benign", pro-civic nature (Welzel 2010). To be more exact, emancipative values are shown to be positively associated with altruism, welcoming diversity and one of the core components of social capital - generalized trust (Welzel 2013). Hence, it would be logical to suggest that people who hold such values would be more likely to get involved in prosocial community activities.

Moreover, the activating and civic character of emancipative values promises to provide the base for collective action of different kinds. Indeed, values that emphasize freedom and equality prove to have a significant positive effect on legal, non-violent protests promoting social change for the common benefit (Opp 1990; Welzel and Deutsch 2012; Welzel et al. 2005). Further, Bekkers finds that postmaterialist political orientation, which is conceptually synonymous to emancipative values, increases civic engagement both in the form of association membership (e.g. in labor unions, professional organizations, advocacy groups environmental organizations etc.) and in providing unpaid service to those associations (Bekkers 2005). In this

work, we hypothesize (H1) that emancipative values should have a positive effect on both formal and informal social capital manifested through civic engagement.

An important feature of values is that they, much like social capital, can be both regarded as an individual and cultural concept. So far, in this section, we have discussed the link between individual value orientations and individual actions; however, it should be noted that the latter may well be affected by societal orientation towards certain goals (Halman and Luijkx 2006; Schwartz 2006), also termed value prevalence (Welzel 2013; Welzel and Deutsch 2012). Thus, Welzel and Deutsch (2012) propose two possible “ecological” effects of value prevalence on civic action: 1) “Elevator” effect suggests that in societies where emancipative values are more pronounced, the civic participation rates are, on average, higher than in those where it is not the case; in other words, the cultural climate with emphasis on freedoms “elevates” everyone’s engagement regardless of their own value preference. This proposition will be tested as our Hypothesis 2. 2) “Amplifier” effect suggests that in societies where emancipative values are more pronounced, those who hold them should be more likely to encounter like-minded individuals more often, which reinforces the value-action link thus “amplifying” the original effect of emancipative values. This proposition will constitute our Hypothesis 3.

The aforementioned value effects on civic engagement have often been demonstrated using cross-country comparisons, which, on the one hand, serves to verify their universality but, on the other, may hinder the accuracy of conclusions. For instance, the relationships are often more visible in developed countries, where different types of civic engagement practices are more widespread, but the picture for states in transition is much more blurry: the value effects on activism found in Western Europe may be rather weaker (Roets, Cornelis, and Hiel 2014) or even insignificant in Eastern Europe (Hafner-Fink 2012). In the context of emancipative values, it was argued that the value-action link may be disrupted in non-democratic regimes through ideological propaganda and increasing repression (Welzel 2013:219). Yet, according to Welzel, this may happen only in the situation of lacking action resources such as individual formal education or technological advancement of a society (2013). Therefore, and in the light of previous research on social capital determinants, we consider it necessary to account for the direct effect of economic and cultural resources, both on individual and regional level and their interaction with emancipative values. Thus, apart from controlling for these effects, we hypothesize (H4) that both individual level and regional-level resources should moderate the effect of emancipative values preferences on civic engagement: the better-off the person or the



region they reside in, to the greater extent their emancipative values will result in civic engagement.

## **Data and Sample**

The current study aims to investigate the effect of emancipative values, both individual and "ecological", and their interaction with personal and regional resources on informal and formal social capital understood as civic engagement in Russian regions. For this purpose, we rely on mass survey data as well as official statistics.

MegaFOM, a large research project exploring a wide range of individual activities and preferences of the Russian population, is well-suited for our purposes. It is held at least once a year by the Public Opinion Foundation (FOM) and provides data which is representative both for Russia in general and for each of the Russian regions, totaling 85, thus allowing for cross-regional comparison. The data is collected from individuals over 18 via face-to-face interviews. The sample from 2017, used in this study, contains 60 500 respondents (from 500 to 800 in each region); the margin of its sampling error is 1%. After deleting the regions with a low share of valid answers to the questions on dependent and key independent variables (lower than 100 in Tyva Republic, Altay Republic, Evreyskiy Autonomous Region, Magadanskiy Region, Chukotsky Autonomous Region and Nenetsky Autonomous Region) and the regions which results raised doubts (Chechen Republic, Kabardino-Balkar Republic), the sample size was reduced to 56 200 respondents in 77 regions.

## **Variables and Measurement**

*Individual-level variables.* The dependent variables for our analysis were constructed on the basis of the following multiple-choice question: "Which of the listed activities have you practiced within half a year or year?" **Informal social capital** was operationalized as "helping strangers" and/or "donating to charity (excluding alms); **formal social capital** was operationalized as "participating in non-profits' activities, volunteering", and/or "participating in advocacy initiatives (protection of consumers, people with disabilities, draftees' rights)". The variables are dichotomous with 0 indicating non-participation and 1 for engaging in at least one of the specified activities.

It is important to mention that our data does not provide an opportunity to measure **emancipative values preferences directly** as it was originally done by Welzel (2013). However,

we follow the author's lead and operationalize values in the same manner as orientations which emphasize on exercising freedoms and equality of opportunities. The following question was used to measure emancipative values preferences: "Constitution guarantees the following rights and freedoms to Russian citizens. Which of them are the most important for you?". Respondents were asked to choose not more than 7 out of the following list of 22 options: "right to freedom and personal immunity", "right to possess land as private property", "right to free education", "right to medical aid", "right to favorable environment", "right to a home", "right to personal and family secrets", "right to inviolability of the home and property", "right to qualified legal assistance", "right to social security", "right to a fair trial and equality before the court", "right to labor and its fair remuneration", "right to participate in managing society and state affairs", "right to submit individual and collective appeals to state organs", "right to determine and indicate one's nationality", "right to free travel and residence", "freedom of entrepreneurship", "freedom of speech", "freedom of assembly and manifestations (demonstrations, meetings)", "freedom of conciseness", right to have any beliefs", "freedom of association (trade unions, political parties, civic organizations)", "freedom of creative activity and teaching". Respondents could also refuse to answer.

The 8 options chosen for the construction of an index of emancipative values included "right to freedom and personal immunity", "right to participate in managing society and state affairs", "right to submit individual and collective appeals to state organs", "mobility and residence rights", "freedom of speech", "freedom of assembly and manifestations (demonstrations, meetings)", "freedom of conciseness, right to have any beliefs", "freedom of association (trade unions, political parties, civic organizations)". First, the total number of chosen rights and freedoms from the list of emancipative values ranging from 0 to 7 was calculated. Zero means that none of eight possible emancipative orientations were chosen by a respondent, seven - that all seven selected rights belong to the emancipative orientations. Since each respondent could select less than seven items, at the second step, we calculated the relative importance of emancipative rights. To do this we divided the number of selected emancipative rights by the total amount of all selected items. The final index resulted in a continuous variable from 0 to 1. Those respondents who have chosen more than 7 options (576 respondents) were assigned NA along with those who hesitated to answer (2171 respondents).

Individual level resources include education (ordinal, 7 levels from "incomplete secondary" to "higher or PhD"), employment status (binary, 1 if employed at the moment),

income (purchasing power, ordinal, 5 levels), and internet use (binary, 1 if used internet within a week). We also control for sex, age, town size (ordinal, 8 levels, recoded from smaller to larger). Unfortunately, questions for other variables often included in the studies of social capital are not present in our data.

*Regional-level variables.* To account for the **prevalence of emancipative values**, mean emancipative values for each region was computed and used as a group-level variable.

Further, several measures of regional development are used to account for group-level resources. Economic development is operationalized as an average annual wage in the region for 2017 as reported by Russian Federal State Statistics Service (FSSS), the cultural development of the region is assessed as a share of its employed residents aged between 25 and 64 with tertiary education for 2017 as reported by FSSS and the strength of civil society is measured as a number of non-governmental organizations per 10 000 residents for 2017 as reported by the Russian Ministry of Economic Development (2018).

## **Estimation Approach**

To test our hypotheses, we apply a multilevel modeling framework (Heck and Thomas 2000; Raudenbush and Bryk 2002; Snijders and Bosker 1999) with distinguishing two levels: individual and regional, and estimate a series of one and two-level models, moving from simpler to more complex specifications. This approach has been chosen for the current study since it both allows to approximate the amount of variation in the relationship between a key predictor (emancipative values) and outcomes (types of social capital) across regions and provides more reliable estimates by taking into account residual components at each level of the hierarchy. To estimate our models, we use `glmer` function in `lme4` statistical package in R (Bates et al. 2015).

To begin with, models with no predictors and random effect for the intercept are estimated for each type of social capital (M0a, M0b) to calculate the intraclass correlation coefficient (ICC) for generalized linear mixed models applying a latent variable approach (Goldstein, Browne, and Rasbash 2002:227). ICC indicates how much variance in social capital can be explained by regional differences as opposed to individual differences; in case if it exceeds 0.05, showing that there are significant differences between our group-level units, the proposed multilevel approach will be justified (Gelman and Hill 2006). It is worth noting, however, that since we focus not only on group-level predictors, but also on cross-level interactions, even an ICC value lower than 0.05 would be acceptable.

At the next step, socio-economic individual-level predictors are included in the models (M1a, M1b) and, further, emancipative values are added (M2a, M2b). Our Hypothesis 1 (H1) will be confirmed if we find that even controlling for a number of socio-economic characteristics, the *b* coefficient for emancipative values is significant and positive for both types of social capital. Further, we estimate models which allow the regression coefficients for emancipative values to vary across regions (M3a, M3b). These random slope models are to indicate whether the effects have a significant random component.

Our next group of models (M4a, M4b) contain both individual and region-level predictors. We will be able to confirm our Hypothesis 2 (H2) if we see that the coefficients for the prevalence of emancipative values are significant even when controlling for the individual value effect and regional resources. Finally, models 5a1-5a4 and 5b1-5b4 include, above all, cross-level interactions between individual emancipative values and their prevalence in the region as well as regional resources. Our Hypothesis 3 (H3) or/and Hypothesis 4 (H4) will be confirmed if the interaction term coefficient(s) is/are significant and positive.

At the last step, interaction effects between emancipative values and individual resources will be included in individual-level model (M6a, M6b) for a further test of Hypothesis 4.

## **Descriptive analysis**

As descriptive statistics and preliminary correlation analysis (see Tables A1, A2 and A3 in Appendix) suggest, emancipative values are not very pronounced in Russia ( $M=0.17$ ) and are more widespread among younger men with higher income, better educated, currently employed and residing in bigger cities. The distribution of emancipative values preference is highly skewed yet unimodal, which is a necessary prerequisite for its further aggregation: As Welzel points out, “[t]he mean only represents a cultural anchor point if distributions are single-peaked” (2013:85), while bimodal distribution would be indicative of a highly polarized society and the mean would represent none of the groups.

As far as the dependent variables are concerned, 28% offered help to those they do not know personally and only 3% either volunteered or took part in advocacy initiatives. These numbers are rather low in comparison with earlier findings (Bogomolova et al. 2017; Mersianova and Korneeva 2013), yet this can be the result of different question wordings (e.g. donating in our data did not include alms) and aggregation procedures. The levels of engagement are somewhat higher among those with a higher level of emancipative values.

Concerning the regional level (see Table A4 in Appendix), there are stark differences between regions in terms of both dependent variables, which goes in line with previous research (Mersianova and Korneeva 2011). Thus, the share of those who take part in informal social capital activities ranges from 11% in Novosibirsk region to 49% in Khanty-Mansiysk and Yamalo-Nenetsk AO. As far as formal engagement is concerned, the regional variation is smaller due to uniformly low values: just 1% in Ingushetia and Kalmykia is involved with Yakutia and Crimea at the opposite end scoring 8%. Further, the distribution of emancipative values prevalence provides an even more surprising picture. Firstly, it does not vary to a great extent, just from 0.11 to 0.25 with standard deviation equaling 0.03, which indicates that the emancipative values preferences within regions are much more spread apart than emancipative values prevalence across regions. Moreover, the expected leaders such as Saint-Petersburg, Moscow, Kaliningrad, Sevastopol, Crimea neighbor with, for instance, such Southern regions as North Osetia and Dagestan and Chechen Republic and Kabardino-Balkar Republic before deletion.

### **Multilevel analysis**

We begin with specifying two null models, where we allow group intercepts to vary. Further, ICC (see section 2.3) is calculated for it. Since ICC for the null models in our study equals 0.05 for informal social capital and 0.07 for formal social capital, which is equal to or higher than the minimum assumed value of 0.05, we conclude that multilevel analysis is justified by the variance structure of the data. However, this finding indicates that only 5% and 7% of variance in civic engagement between individuals from different regions may be explained simply by their belonging to that region. Therefore, it hints to a certain homogeneity in the Russian population in terms of social capital of both types despite the variance observed from raw aggregated data. The estimation results of the subsequent multilevel regression models are reported in Tables A5 and A6 in Appendix while the substantive summary is provided in Table 1 at the end of this section.

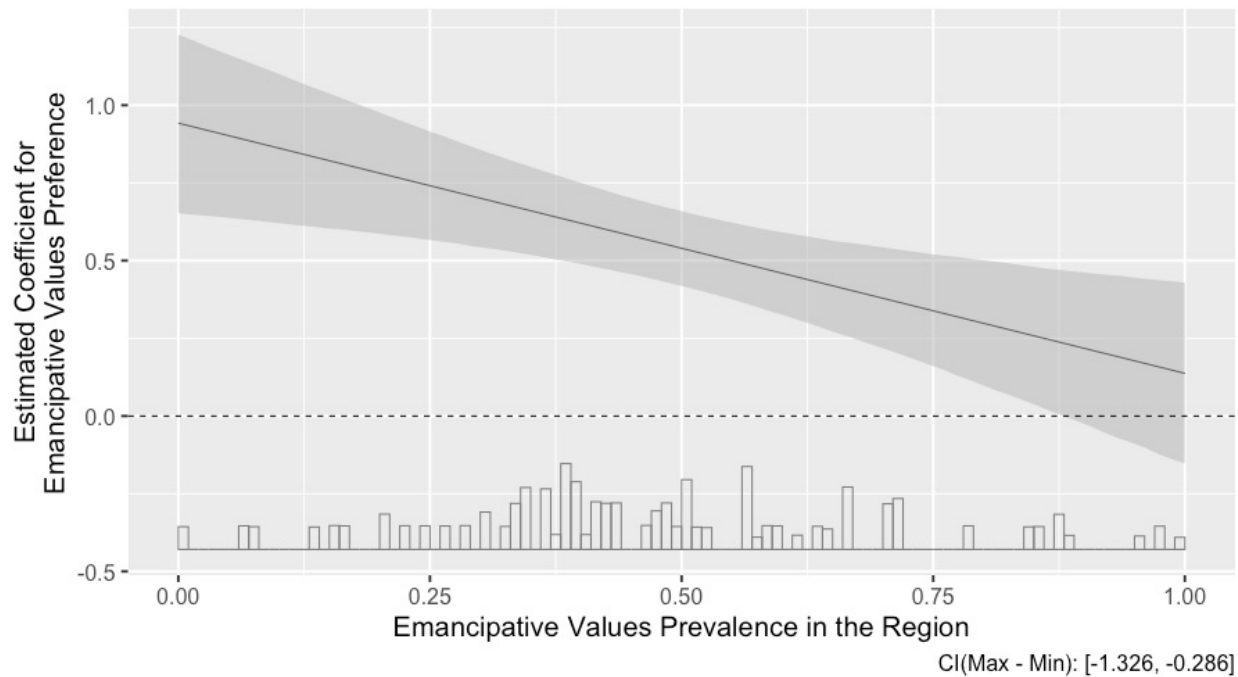
Models 1a and 1b indicate that the major part of the presented socio-demographic variables (all except town size) are significant predictors of both formal and informal social capital. Even though the analysis of these variables is not central to our study, a couple words should be said about the observed effects. Firstly, we indeed find strong evidence of “capital accumulation effect” (van Oorschot et al. 2006) with income and education positively

influencing social capital activities. Yet, as far as employments is concerned, we get some mixed results: it has a positive effect on informal social capital and a negative one on formal social capital. This can be explained by addressing the activities which comprise both types: While donating to charities puts a pressure on individual economic resources which are mainly received when doing a paid job, volunteering requires rather time than money. Finally, in line with Parts (2013), we find a strong negative effect of age on both types of social capital in transitional Russia.

Turning to models 2a and 2b, where emancipative values are added, it appears that even controlling for a number of individual characteristics, values have their own positive effect on social capital. Moreover, it appears the strongest of all for informal social capital and is second only to age in the case of formal social capital. Thus, we may confirm Hypothesis 1. Further, models 3a and 3b are estimated and it is found that the variance in the effect of emancipative values on social capital across regions is worth accounting for only for the informal type (the chi-square test of the deviances is significant and AIC value drops from 60,514.84 to 60,450.54, see Figure A1 in Appendix). At the same time, both statistics for formal social capital indicate that there are no significant differences in the effect of emancipative values across regions. Thus, it was decided to further include random slopes only in the models of informal social capital

Before turning to the analysis, models 4a and 4b were tested for influential region-level observations using Cook's distances (Meer, Pelzer, and Grotenhuis 2010) after which the data for Khanty-Mansiysky Autonomous District was excluded from subsequent models of informal social capital. Overall, the estimation results at this stage show that the prevalence of emancipative values in the region does not significantly influence civic engagement of its residents, thus, Hypothesis 2 about the "elevator" effect does not get enough evidence and we have to reject it. That is to note, the only direct positive effect among regional-level predictors is observed for the level of civil society development measured as the number of non-profit organizations per 10 000 residents on formal social capital, which increases the odds of volunteering and/or taking part in advocacy initiatives by 112%. At the same time, individual emancipative values preferences keep a significant and positive coefficient even controlling for a number of individual and regional-level resources and demographic variables. At its maximum, emancipative values preference increases the odds of taking part in informal social capital activities by 71% ( $(\exp[.540 \times 1] - 1) \times 100$ ) while for formal activities it reaches whopping 243%.

In turn, models 5a1 and 5b1 yield rather unexpected results: while the cross-level interaction effect for formal social capital is insignificant, as far as informal social capital is concerned, the moderating effect of emancipative values prevalence on emancipative values preferences appear to be significant and negative. As Figure 1 indicates, when the emancipative values prevalence is at its maximum, the positive effect of individual values becomes insignificant. That is to say, instead of an “amplifier” effect of emancipative culture, we observe a “halting” effect. However, it may not be very robust: if slopes are allowed to vary in the model, the interaction effect turns insignificant (see Table A7 in Appendix). Other models with cross-level interaction effects do not provide evidence for the differentiated influence of emancipative values due to regional resources. Overall, judging by AIC values, the best models we observe are M3a and M2b, which points to the fact that individual level predictors are more important for social capital activities than regional ones.



**Figure 1. Coefficient of emancipative values preference on informal social capital across regions with different emancipative value prevalence**

Finally, when testing the other part of Hypothesis 4 in M6a1-3 and M6b1-3 (see Table A8 in Appendix), we find that none of individual resources moderate the effect of emancipative values at 95% confidence level. Thus, the Hypothesis 4 does not hold even partly. Importantly, while

the emancipative values prove to be a significant predictor of social capital at the individual level they do not add almost anything to the socio-economic factors in terms of predictive power as indicated by Pseudo-R<sup>2</sup> (Cox and Snell 1989).

**Table 1. Summary of observed effects on social capital**

Variables/ SC Type	Informal	Formal		Informal	Formal
<i>Individual level</i>			<i>Regional level</i>		
Gender	pos	pos	EV prevalence	neg	ns
Age	neg	neg	Average Wage	ns	ns
Town Size	ns	ns	Share Higher Education	ns	ns
Education	pos	pos	NGOs per 10 000	ns	pos
Employment	pos	neg	EV*EV preval	ns	ns
Income	pos	pos	EV*Average Wage	ns	ns
Internet Use	pos	pos	EV*Share HE	ns	ns
EV preference	pos	pos	EV*NGOs per 10k	ns	ns

### Robustness check

This study has a number of important limitations stemming from the fact that the dataset used for our analysis was not originally designed to investigate social capital through the lens of emancipative values. For instance, the question used for calculating emancipative values does not allow us to measure individual values per se, its phrasing may invoke rather varying interpretations. Moreover, as mentioned above, it does not provide for estimation of emancipative values either as presented by Welzel (2013).

For this reason, we decided to crosscheck our results using the data more suitable for our purposes, yet inferior in other relations. The data was collected online as a part of the project *Values Transformation and Subjective Well-being: Regional Perspective* supported by Russian Science Foundation. The survey contains a wide variety of questions on behaviors and attitudes including civic engagement and the original measure of emancipative values. It was conducted on the base of an access panel Online Market Intelligence (<http://www.omirussia.ru>) and covers 1021 respondents from all 8 Russian federal districts.

The number of the group-level units in these data makes multilevel analysis impossible; however, running similar individual-level models could provide a valuable check for our



findings. The variables used in the analysis were very much like those from the main results section. Thus, the respondent gets a 1 on informal social capital if they helped their acquaintances in the last couple of years and/or donated to charities in the last three years. Formal social capital included volunteering and/or signing a petition in the last three years. Emancipative values index is a 12-item measure including (1) reproductive choice (acceptance of divorce, abortion, homosexuality), (2) gender equality (support of women's equal access to education, jobs and power), (3) people's voice (priorities for freedom of speech and people's say in national, local and job affairs), and (4) personal autonomy (independence, imagination and non-obedience as desired child qualities). The controls included were age, gender, town size (7 categories, max – Moscow), education (7 categories, max – PhD), income (14 categories, max – more than 300 000 rub). We also controlled for trust to “people you know personally” and “people you see for the first time” (4-points from “completely” to “absolutely not”, reversed), which are often used in the studies of social capital. All the items were rescaled to vary from 0 to 1.

The results of the models are available in Table 2. Firstly, emancipative values are significant for both types of social capital and their effect exceeds the effects of socio-economic and demographic variables as well as trust. Yet, the change in pseudo- $R^2$  is rather small when we compare the models with and without emancipative values. Moreover, the interaction coefficients with personal resources (income and education) are insignificant, which means that we do not find enough prove that resources moderate the effect of emancipative values. All these results mimic our findings made while analyzing MegaFOM data. At the same time, in comparison with the latter, when the original measure of emancipative values is used, their effect on social capital activities gets even stronger: at its maximum, personal emancipative orientation increases the odds of getting involved into formal and informal social capital activities by almost 3 times and 7 times respectively.

**Table 2. Robustness check using data from "Values Transformation and Subjective Well-being: Regional Perspective" Project**

	Informal SC				Formal SC			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	0.453***	0.395***	0.414***	0.396***	0.384***	0.307**	0.334**	0.303**
Age	-0.207	-0.136	-0.192	-0.137	-1.520***	-1.438***	-1.551***	-1.449***
Town Size	-0.167	-0.253	-0.279	-0.25	0.457	0.351	0.311	0.357
Education	0.186	0.116	0.128	-0.016	0.740**	0.652**	0.694**	-0.747
Income	0.328	0.274	0.277	0.574	-0.199	-0.287	-0.247	0.267
EV		1.594***	1.638	1.566		2.092***	2.155***	0.586
Trust Stranger			0.175				-0.261	
Trust								
Acquaintance			0.550				1.166***	
EV*Education				0.286				2.961
EV*Income				-0.649				-1.17
Observations	1,021	1,021	1,021	1,021	1,021	1,021	1,021	1,021
Akaike Inf.								
Crit.	1,281.96	1,273.57	1,273.97	1,277.51	1,359.41	1,341.89	1,334.36	1,343.78
Pseudo-R2	0.01	0.02	0.03	0.02	0.05	0.07	0.08	0.07

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01. Entries are unstandardized regression coefficients. All variables are recoded from 0 to 1.

Additionally, when we calculate the SD for emancipative values at an individual and district levels, we see a similar picture to what we have encountered in the previous section: while an average individual deviation from the mean is 0.14, at a group level it equals 0.02. Despite the fact that districts are much larger units than regions and regional variations within them could cancel each other out, this result may still be interpreted as follows: even when a more precise measure of emancipative values is used, we do not find much consensus within districts and much variation between them to consider the prevalence of emancipative values as a possible group-level predictor of individual civic engagement.

## Discussion

Social capital perceived as a community stock of cooperative potential is both a very promising and a very vague concept. An almost uncountable number of the ways to conceptualize and operationalize it and a wide range of data sources make research in this field extremely challenging rendering direct comparisons questionable. Yet, we hold that if there are some universal effects in terms of its constitution and determination, they should reappear often enough to force the research in the right direction. A bright example here is the effect of education, quite stable over a great number of studies (Christoforou 2011; Glaeser et al. 2002; van Oorschot et al. 2006; Putnam 1995 and many others). We attempted to shed some light onto

another determinant, which, to our mind, could accompany education in this respect, values. Our results indeed point to the fact that values should secure a place in the studies of the determinants of social capital, yet there is still a lot to be done in terms of specifying the exact formation mechanism.

Thus, in line with previous studies (Welzel 2013; Welzel and Deutsch 2012), we find that individuals who value autonomy and freedom more, on average, are also more likely to take part in both informal civic activities (helping strangers or donating) and formal ones (volunteering or advocacy). This effect holds regardless of operationalization and exceed those of socio economic resources and even commonly referred to trust in strangers. At the same time, it explains just a small proportion of the variance in individual behavior. Moreover, the effect is not that uniform: in case of *informal* social capital, in some regions, people with more emancipative orientations are not observed to help strangers and/or donate more. And yet the effect of emancipative values on *formal* engagement is universally positive across Russian regions, which allows for a more precise understanding of the nature and motivational specifics of this axiological orientation.

Next, at a regional level, we do not find evidence that emancipative values prevalence in a region increases the odds of civic participation in individuals over what is expected from their personal value orientation. Neither does it seem to increase the effect for more “emancipated” persons. Instead, what we observe is that people in more emancipated regions are less likely to take part in informal social capital activities when compared to people with similar values in less emancipated ones. This unintuitive at first sight moderating effect could be explained in the following manner: We may suggest that people who score high on emancipative values preference but come from less emancipated regions feel more obliged to get involved into informal practices, while alike individuals from regions which hold a higher position in terms of emancipative values prevalence feel less such pressure due to diffusion of responsibility. However, we should stress here that high heterogeneity within regions in terms of individual emancipative values preference should lead to some caution in interpreting results of emancipative values prevalence. Other than that, neither personal resources, such as income, internet use and education, nor regional resources seem to significantly influence the effect of individual emancipative values preference on their action.

Overall, we observe that the social capital practices of Russians from one region differ only slightly from those from another region, which paints a picture of a rather homogeneous in this respect country. However, there are certain regional resources that do make a difference.

Thus, the level of civil society development has been shown to be conducive to volunteering and advocacy even when controlling for economic development of the region. This seems only logical given that volunteering and advocacy activities are often organized, promoted and facilitated by civil society organizations. There is an ongoing debate on whether governmental support is beneficial for civil society (e.g. Evans 2006), yet there is evidence to the fact that cooperation between Russian NPO's and state creates a foundation for social change at least in some spheres (Fröhlich 2012). It is important to mention though that the observed relationship could well go the opposite way: individual practices may lay down a foundation for more stable and thriving non-profit organizations.

As it has been mentioned above, there are some limitations to our study which we tried to partly address by using another data source to cross-check the observed effects. However, the conclusions would be even more convincing if full multilevel analysis would include a well-established and reliable measure of values such as the original Emancipative Values Index (Welzel 2013) or, for instance, Portrait Values Questionnaire (Schwartz 2010) to account for other competing axiological orientations. We also rely on theoretical assumptions and previous research (e.g. Welzel 2013) when establishing the direction of the observed effect: it has been found that values, generally, precede action and not vice versa; however, it is quite probable that the relationship is recursive which is yet to be tested. Further still, our measure of social capital allows to shed light on solely its direct manifestation bracketing out the question about the relations between values and its separate dimensions such as trust, norms and networks. Finally, it is also important to understand whether this case is peculiar to Russia or can be extrapolated to a number of countries in transitions with low levels of civic engagement. For this purpose, comparative analysis using cross-cultural datasets can be applied.

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## Appendix

**Table A1. Descriptive statistics: individual level**

Variables	%	Min	Mean	Max	SD
Informal SC	28%				
Formal SC	3%				
Emancipative orientations		0	0.17	1	0.17
Age		18	45.5	99	17.2
Female	55%				
Employment	57%				
Internet Use (within a week)	68%				

Entries are group mean scores, range and standard deviation or proportions for individual-level dependent and independent variables.

**Table A2. Descriptive statistics: individual level. Continued.**

Education level	incomplete secondary	secondary	vocational	incomplete higher	higher/ PhD
%	6	24	45	3	23

Income (can afford)	not even food	food	clothing	large appliances	car or apartment
%	10	28	43	14	5

Entries are proportions for individual-level independent variables.

**Table A3. Correlatives of social capital and emancipative values: individual level**

	Informal SC	Formal SC	EV preference
Female	0.03	n.s.	-0.09
Age	-0.11	-0.11	-0.12
Education	0.10	0.05	0.06
Employment	0.11	0.02	0.05
Income	0.09	0.06	0.10
Internet Use	0.15	0.08	0.10
Town Size	0.03	0.03	0.05
Emancipative val.	0.06	0.06	1

Entries are Spearman's rank correlation coefficients (rho). If not indicated otherwise (n.s. = not significant), all correlations are significant at the .01-level.

**Table A4. Descriptive Statistics: Regional level**

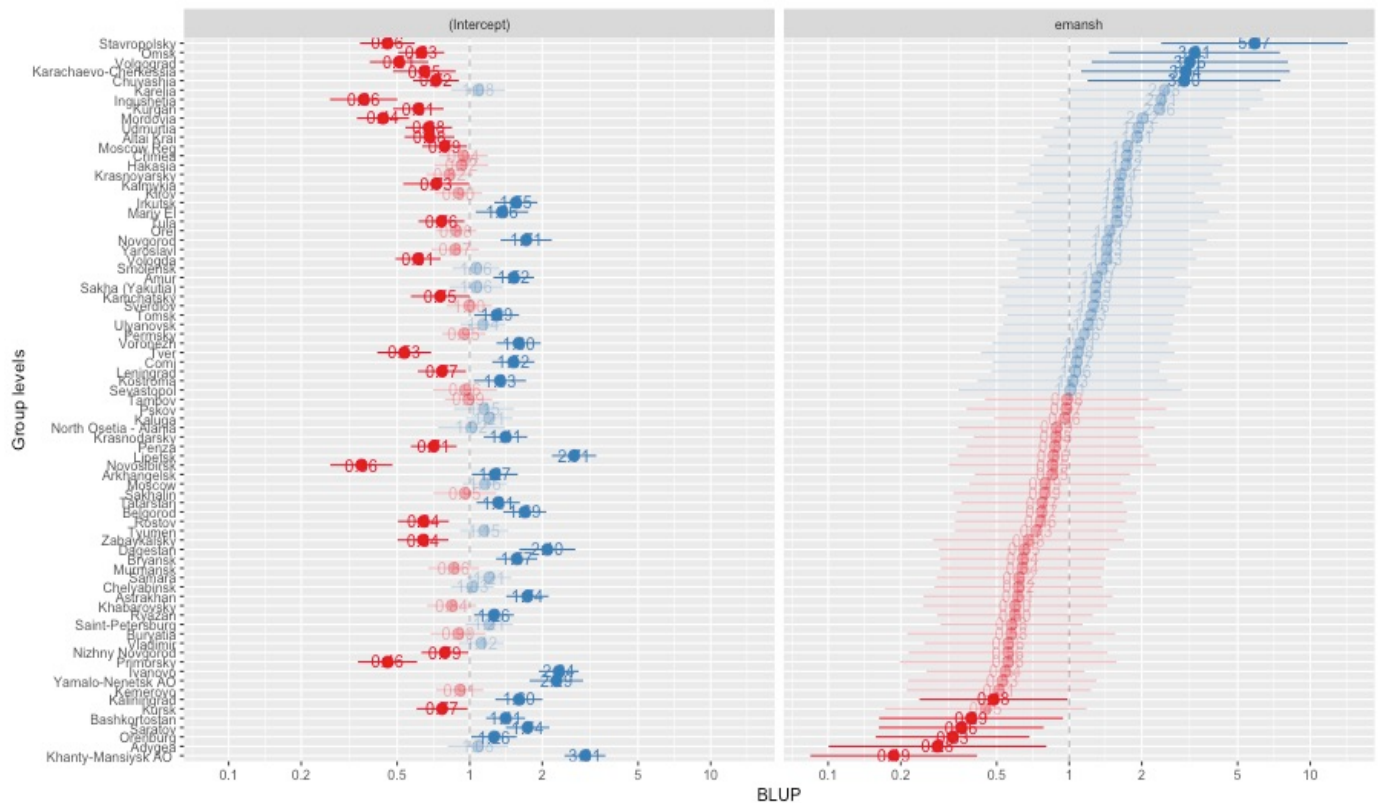
Variable	Min	Mean	Max	SD
Informal SC	0.11	0.28	0.50	0.08
Formal SC	0.01	0.03	0.08	0.02



EV prevalence	0.11	0.18	0.25	0.03
Average wage (rub)	21 797	33 867	89 915	13 014
Share Higher Education	0.26	0.33	0.50	0.05
NPOs per 10 000	4.7	11.03	25.2	3.63

Entries are mean scores, range and standard deviation of aggregated dependent and independent variables.

**Figure A1. Random effects of emancipative values and regions on informal SC**



**Table A5. Regression coefficients for models of informal social capital**

	<i>Informal SC</i>							
	M1a	M2a	M3a	M4a	M5a1	M5a2	M5a3	M5a4
Gender	0.212***	0.232***	0.233***	0.232***	0.232***	0.232***	0.232***	0.232***
Age	-0.457***	-0.418***	-0.423***	-0.421***	-0.420***	-0.422***	-0.422***	-0.422***
Town Size	0.002	-0.018	-0.02	-0.03	-0.02	-0.03	-0.03	-0.03
Education	0.461***	0.446***	0.447***	0.451***	0.453***	0.453***	0.453***	0.453***
Employment	0.236***	0.242***	0.242***	0.232***	0.232***	0.232***	0.232***	0.232***
Income	0.455***	0.437***	0.438***	0.413***	0.412***	0.413***	0.413***	0.415***
Internet Use	0.398***	0.383***	0.382***	0.391***	0.390***	0.390***	0.391***	0.391***
EV preference		0.507***	0.545***	0.540***	0.940***	0.651***	0.642***	0.337***
EV prevalence				0.083	0.238	0.082	0.084	0.084
Average Wage				0.304	0.307	0.432	0.306	0.301
Share Higher Education				-0.229	-0.227	-0.23	-0.162	-0.226
NPOs per 10 000				-0.003	-0.009	-0.006	-0.006	-0.131
EV*EV prevalence					-0.803***			
EV*Average Wage						-0.617*		
EV*Share Higher Edu							-0.339	
EV*NPOs per 10 000								0.667*
Observations	55,018 in 77 reg	52,949 in 77 reg	52,949 in 77 reg	52,165 in 76 reg	52,165 in 76 reg	52,165 in 76 reg	52,165 in 76 reg	52,165 in 76 reg
Log Likelihood	- 31,870.53	-30,247.42	-30,213.27	-29,706.68	-29,702.16	-29,704.91	-29,705.95	-29,704.84
Akaike Inf. Crit.	63,757.07	60,514.84	60,450.54	59,441.36	59,434.32	59,439.81	59,441.89	59,439.68

*Note:* in models M4a – M5a4 data on Khanty-Mansiysk Autonomous District is excluded; \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table A6. Regression coefficients for models of formal social capital**

	<i>Formal SC</i>							
	M1b	M2b	M3b	M4b	M5b1	M5b2	M5b3	M5b4
Gender	0.195***	0.240***	0.240***	0.239***	0.241***	0.238***	0.240***	0.239***
Age	-3.003***	-2.904***	-2.903***	-2.910***	-2.911***	-2.911***	-2.910***	-2.910***
Town Size	0.181**	0.171**	0.172**	0.179**	0.179**	0.179**	0.178**	0.179**
Education	0.813***	0.790***	0.789***	0.792***	0.792***	0.793***	0.792***	0.792***
Employment	-0.388***	-0.366***	-0.366***	-0.369***	-0.369***	-0.369***	-0.369***	-0.369***
Income	0.847***	0.772***	0.772***	0.768***	0.766***	0.768***	0.769***	0.768***
Internet Use	0.533***	0.524***	0.524***	0.523***	0.521***	0.521***	0.523***	0.522***
EV preference		1.241***	1.212***	1.233***	1.507**	1.366***	1.317***	1.255**
EV prevalence				0.214	0.34	0.213	0.215	0.214
Average Wage				-0.057	-0.057	0.11	-0.056	-0.056
Share Higher Education				-0.16	-0.16	-0.159	-0.097	-0.161
NPOs per 10 000				0.752**	0.747**	0.749**	0.749**	0.768**
EV*EV prevalence					-0.533			
EV*Average Wage						-0.695		
EV*Share Higher Edu							-0.265	
EV*NPOs per 10 000								-0.069
Observations	55,018 in 77 reg	52,949 in 77 reg	52,949 in 77 reg	52,949 in 77 reg	52,949 in 77 reg	52,949 in 77 reg	52,949 in 77 reg	52,949 in 77 reg
Log Likelihood	-6,577.13	-6,398.49	-6,398.38	-6,395.41	-6,395.03	-6,394.96	-6,395.32	-6,395.40
Akaike Inf. Crit.	13,172.27	12,816.99	12,820.75	12,818.81	12,820.05	12,819.92	12,820.63	12,820.81
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01							

**Table A7. Random slope multilevel models of informal social capital**

	M4a	M5a1	M5a2	M5a3	M5a4
Gender	0.234***	0.234***	0.233***	0.234***	0.234***
Age	-0.423***	-0.423***	-0.423***	-0.423***	-0.423***
Town Size	0.0004	0.00002	0.0002	0.0002	0.0004
Education	0.453***	0.453***	0.453***	0.453***	0.453***
Employment	0.232***	0.232***	0.232***	0.232***	0.232***
Income	0.413***	0.413***	0.413***	0.413***	0.414***
Internet Use	0.391***	0.391***	0.391***	0.391***	0.391***
EV preference	0.573***	0.923***	0.694***	0.683***	0.391*
EV prevalence	0.057	0.227	0.056	0.057	0.058
Average Wage	0.282	0.283	0.45	0.284	0.281
Share Higher Education	-0.23	-0.229	-0.229	-0.142	-0.228
NPOs per 10 000	0.041	0.038	0.04	0.039	-0.098
EV*EV prevalence		-0.719			
EV*Average Wage			-0.696		
EV*Share Higher Edu				-0.371	
EV*NPOs per 10 000					0.591
Observations	52,165	52,165	52,165	52,165	52,165
Log Likelihood	-29,680.12	-29,678.91	-29,679.34	-29,679.83	-29,679.60
Akaike Inf. Crit.	59,392.24	59,391.82	59,392.68	59,393.65	59,393.21

*Note:*

\* \*\* \*\*\* p<0.01

**Table A8. Regression coefficients for individual-level models of social capital**

	<i>Informal Social Capital</i>			<i>Formal Social Capital</i>		
	M6a1	M6a2	M6a3	M6b1	M6b2	M6b3
Gender	0.232***	0.232***	0.232***	0.232***	0.232***	0.232***
Age	-0.421***	-0.420***	-0.422***	-0.422***	-0.422***	-0.421***
Town Size	0.003	0.002	0.003	0.003	0.003	0.003
Education	0.453***	0.451***	0.453***	0.453***	0.453***	0.453***
Employment	0.232***	0.232***	0.232***	0.232***	0.232***	0.232***
Income	0.413***	0.412***	0.413***	0.413***	0.415***	0.413***
Internet Use	0.391***	0.390***	0.390***	0.391***	0.391***	0.391***
EV preference	0.297**	0.474***	0.296**	1.792***	1.834***	1.849***
EV*Education	0.341*			-0.810*		
EV*Income		0.034			-1.043*	
EV*Internet			0.260*			-0.631
Observations	52,949	52,949	52,949	52,949	52,949	52,949
Akaike Inf. Crit.	61,913.010	61,916.080	61,912.390	12,982.750	12,982.230	12,983.720
Pseudo R2	0.03	0.03	0.03	0.02	0.02	0.02

Note:

\*p<0.1; \*\* p<0.05; \*\*\* p<0.01

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