Economics Bulletin

Volume 40, Issue 1

Social capital and Life Satisfaction : A new approach

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Abstract

Social capital and especially trust are the foundation of most personal relationships and a key factor of many economic and social outcomes. The purpose of this paper is to analyze the impact of social capital on subjective well-being, controlling for individual and national effects. Our original empirical approach addresses the problem of endogeneity between social capital and subjective well-being, using a non-recursive mixed-process model, with bootstrapped standard errors accounting for the sampling design. This strategy also makes it possible to differentiate the specific effects of trust and voluntary association membership on subjective well-being.

We are grateful to Ed Mayo, Julien Salanié and two anonymous reviewers for their comments on a earlier version.
Citation: Anne Musson and Damien Rousselière, (2020) "Social capital and Life Satisfaction : A new approach", *Economics Bulletin*, Volume 40, Issue 1, pages 359-381
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Submitted: April 10, 2019. **Published:** February 05, 2020.

1 Introduction

Various authors suggest that differences in social capital trends may explain differences in subjective well-being trends ((Helliwell, 2006; Vemuri and Costanza, 2006) . Recent literature shows that in the long run economic growth may improve subjective well-being when social trust does not decline and, in richer countries, when income inequality reduces (Mikucka et al., 2017). For Welsch and Kuhling (2016), the impact of a drop in GDP is aggravated by the increase of unemployment, although societal differences between countries may moderate this effect (Eichborn, 2013). Our hypothesis is therefore that the increase of national wealth, including produced capital, may lead to an increase of subjective well-being if the growth of wealth is not detrimental to social capital. The social capital is often apprehended with trust and voluntary association membership variables, but the impact of each variable on subjective well-being can be different (Nannestad, 2008).

Studies looking at the effect of trust on subjective well-being demonstrated a positive effect (Helliwell, 2003, 2006; Helliwell and Putnam, 2004; Bjornskov, 2008). Volunteering and participation in social activities, in general, positively affects life satisfaction for Europeans above 49 (Becchetti et al., 2017). More precisely, using macro and micro data, a recent study shows that economic growth improves subjective well-being when social trust increases and, especially in rich countries, when income inequality decreases (Mikucka et al., 2017). Studying the case of agricultural economies in Ghana, Lyon (2000) shows trust, norms and networks are fundamental in understanding how people can improve their well-being by stabilizing or increasing income. These dimensions have an huge impact on micro-enterprise survival.

Following the methodological considerations of institutional economics (McGregor and Pouw, 2017), an added value of our research note is to link the component of wealth at the macro level to social capital and subjective well-being at the micro level, while disentangling the specific effects of the various dimensions of social capital (trust and voluntary association membership). We use non recursive mixed-process model, with bootstrapped standard errors accounting simultaneously for the sampling design (clustered data) and for the potential endogeneity between trust, voluntary association membership and life satisfaction. The results support the idea that social capital may turn wealth into subjective happiness and can build resilience in time of crisis (D'Errico et al., 2017).

The remainder of this research note is as follow. In a first section, we present the data and the methodology. The variables came from the World Values Surveys and from additional databases such as the World Bank and the Quality of Government Databases. Our strategy aims to identify the impact of the various dimensions of social capital (trust and voluntary association membership) on subjective well-being. We explain in the section 2 the main results of our benchmark model. We explain our identification strategy and the main results of our benchmark model. Finally we discuss in the conclusion some policy implications.

2 Methodology and Data

To control for simultaneity and reverse causality between trust and voluntary association membership (Anheier, 2002), and potential endogeneity with subjective well-

being, we implement an instrumental variables strategy within a non-recursive mixed-process model (Paxton et al., 2011). To our knowledge it is the first attempt to take seriously into account these different problems that may lead to biased estimates (Sonderskov, 2011).

We have:

$$\begin{cases} y_1^* = \alpha_1 \cdot Z + \beta_1 \cdot X_1 + \gamma_1 \cdot C + \mu_1 \cdot K + \epsilon_1 \\ z_1^* = \alpha_2 \cdot z_2 + \beta_2 \cdot X_2 + \gamma_1 \cdot C + \mu_1 \cdot K + \epsilon_2 \\ z_2^* = \alpha_3 \cdot z_1 + \beta_3 \cdot X_3 + \gamma_1 \cdot C + \mu_1 \cdot K + \epsilon_3 \end{cases} \tag{1}$$

with y_1 a life satisfaction index, Z a vector of z_1 and z_2 two dummies variables measuring respectively trust and voluntary association membership, X_i different vectors of sociodemographic variables, C a vector of times dummies and K a vector of variables measuring wealth and intangible capital. ϵ_i are three errors terms distributed according to a multivariate normal distribution with ρ_{ij} the correlation between ϵ_i and ϵ_j.

We are able to account for both direct and indirect impacts of social capital on Life Satisfaction: for example Trust has a direct effect on Life Satisfaction but also an indirect effect through its presence as an explanatory variable in the voluntary association membership equation.

The system includes an ordered probit and two binary probit, i.e.

$$\begin{cases} y_1 = p \text{ if } \tau_{p-1} < y_1^* < \tau_p \text{ with } p = 1, ..., 10, \tau_0 = -\infty \text{ and } \tau_{10} = \infty \\ z_j = 1 \text{ if } z_j^* > 0 \text{ and } z_j = 0 \text{ if } y_j^* \leq 0 \text{ with } j = 1, 2 \end{cases} \tag{2}$$

Our sample contains 106,622 respondents from 65 countries, surveyed between 2005 and 2014 from the World Values Survey (WVS). The descriptive statistics of the various variables are reported in table 1. The WVS consists of nationally representative surveys conducted in almost 100 countries which contain almost 90 percent of the world's population, using a common questionnaire Roudijk et al. (2017).[1].

Trust is measured in the WWS with the classical "generalized trust question": "Generally speaking, would you say that most people can be trusted, or that you can't be too careful when dealing with others?". While there is some criticism and controversies on how well this dummy variable may measured the complexity of trust, Uslaner (2015) highlights the key advantages of this longitudinal and international measure (see also the recent paper of Leibrecht and Pitlik (2019)). For the voluntary association membership variable, we follow the distinction made by Knack (2003) between "Olson" and "Putnam" groups: this dummy is equal to 1 if the individual is a member at least one "bridging" association in the following sector: "sport or recreation", "art, music or educational", "environmental", or "charitable or humanitarian". While Generalized Trust Question aims to apprehend interpersonal trust, being a member of an association lies to networks, which are an important part of social capital. Social connections as association membership are hypothesized to foster generalized trust since trust is inferred from ongoing social experiences (Glanville et al., 2013; Paxton, 2007). Nannestad (2008) propose the association membership as an important explanation of trust but empirical literature shows that trust and associative life may not increase

[1] `http://www.worldvaluessurvey.org/WVSContents.jsp`

together or even can perform in different ways (Delhey and Newton, 2003).

Finally, life satisfaction ("All things considered, how satisfied are you with your life as a whole nowadays?") is measured in the World Values Survey on a 10-item likert scale from 1 means ("completely dissatisfied") to 10 ("completely satisfied"). While being controversial (Rojas, 2019), this global measurement of Life satisfaction is standard in cross-national surveys (Lee et al., 2016; Mikucka et al., 2017).

As independent variables, we use the socio-economic variables (age, income, sex, diploma, and economic status) as well as the variable "freedom of choice scale" commons to most of the studies on social capital and well being (Orru et al., 2017; Roudijk et al., 2017).

In order to control for macroeconomic dimensions, wealth data were obtained from the World Bank estimations (2011) and fixed at the origin (2005) to avoid endogeneity problem. Total wealth is the sum of produced capital (machinery, structures, and equipment), natural capital (agricultural land, protected areas, forests, minerals, and energy) and intangible capital (the residual, including measures of human, social, and institutional capital) (Hamilton and Hepburn, 2014).

To control for endogeneity, we have matched the WWS database with an additional database (Quality of Government Database developed by Dahlberg et al. (2019). We adopt the same empirical strategy as Becchetti and Conzo (2018), using contextual instrumental variables. Following Kim et al. (2011) or Appau et al. (2019), we use fractionalization indicators (language, religion or ethnicity) as instrumental variables for trust. Following Becchetti and Conzo (2018), we use existence of specific regulations for an instrument of a social activity such as associational membership. In order to avoid potential omitted bias, following Lun and Bond (2016), we introduce gender interaction effects with the main explanatory variables. Finally, we test for models misspecifications using RESET Test (Peters, 2000) 2000) mimicking Wulff (2019) strategy. The results show that the models are not misspecified.

This system of equations is estimated according to the method of simulation of maximum likelihood based on draws from Halton sequences [2]. Standard errors are obtained through bootstrapping at the cluster (country) level using 100 replications. This procedure has been shown to be a convenient way to address the structure of clustered data without relying on the assumptions of multilevel modeling (Cameron et al., 2008) that although traditionally used for cross-sectional data may lead to intractable models in a case of high-dimensional problems (Bartus and Roodman, 2014).

3 Results

The main results of the estimations are reported in the appendix. The cross equation correlation parameter ($\rho_{12} = -2.915$) is significant and supports the hypothesis that trust and voluntary association membership are complementary proxies of social capital (Nannestad, 2008). It is a corroboration of our empirical strategy that addresses endogeneity. As ρ_{13} and ρ_{23} are not significant, we tend to reject the hypothesis of a endogenous relationship between social capital and life satisfaction, once controlled for a vector of observable variables. As a robustness checks, we estimate alternative

[2]Note that continuous independent variables have been standardized in order to facilitate the estimations.

specifications such as a simple recursive mixed model (Roodman, 2011). This model leads to the qualitatively same results (see appendix).

Due to interaction effects, the coefficients are not by themselves informative. Therefore we report in the table 3 the direct marginal effects.

The impacts of individual socio-economic characteristics on subjective well-being are similar to those typically found in the literature. The subjective well-being of an individual is affected by the level and the structure of the wealth of the country where he belongs to. Interestingly these impacts are different in some part for the various dimensions of social capital: they are similar for diploma, sex or income, but differ for age (opposite sign) and status. Interestingly the various component of social capital have a positive effects on each other. Contrary to association membership, trust seems to have a direct positive impact on the higher levels of life satisfaction while association seems to have a direct negative impact (while being insignificant on the highest level of satisfaction).

In order to take into account direct and indirect effects of social capital on Life Satisfaction, we report the total marginal effects in the table 4. These effects tend to decrease in absolute value. While the positive effect of Trust on Life Satisfaction tends to be significant, the negative effect of association becomes insignificant for some levels of life Satisfaction (and even positive for individuals at the level 7 of the life satisfaction scale).

4 Conclusion

We underline a link between the structure of wealth and subjective well-being, emphasizing the role of social capital. Trust is a component of social capital that directly and positively impacts the subjective well-being. Our model suggests that the interpersonal trust and the voluntary association membership seem to share the same driving forces but do not have the same effect on life satisfaction. In particular interpersonal trust increase the effect of voluntary association membership on life satisfaction. In addition, greater socialization may correspond to a weaker family bond (Ermisch and Gambetta, 2010; Alesina and Giuliano, 2011), which may also explain the negative direct effect of association membership on well-being, which results in an ambiguous total effect. This results supports the idea that interpersonal trust and voluntary association membership measure two different aspects of social capital (Nannestad, 2008). Nevertheless, even if we have only considered association membership for "Putnam associations", we did not completely address the problem of "bonding" (that may reinforce social isolation) and "bridging" (that may have positive effects on the wider society) associations (Coffe and Geys, 2008; Paxton, 2002).

One implication of the fact that different types of social capital exist is that government policies designed to affect social capital and build resilient societies may not generate the desired economic, political and social outcomes (Coffe and Geys, 2008). When catastrophic events occur at a macroeconomic level, well-being will be negatively impacted, but at the same time trust will be strengthened, which will later offset the negative effect on well-being. For example, a natural disaster may positively affect trust and/or reciprocity (Cassar et al., 2017; Coleman, 1988; Alesina and La Ferrara, 2002). Cassar et al. (2017) describe how the 2004 tsunami in Thailand led to substantial long- lasting increases in prosocial behavior.

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5 Tables

Table 1 – Descriptive statistics

Variable	description	Mean	Std. Dev.	Min	Max
Year	Year of the survey	2009.42	3.05	2005	2014
Sex	Male = 0; female =1	0.51	0.49	0	1
AgeInt	Age of respondent in years. 1=less than 25; 2=25-34; 3=35-44; 4=45-54; 5=55-64; 6=65 and more	3.14	1.58	1	6
Diplom	1=Inadequately completed elementary education; 2=Completed (compulsory) elementary education; 3=Incomplete secondary school: technical; 4=Complete secondary school: technical; 5=Incomplete secondary: university-preparation; 6=Complete secondary: university-preparation; 7=Some university without degree/Higher education; 8=University with degree/Higher education	4.88	2.20	1	8
Status	1= Full time; 2= Part time; 3= Self employed; 4= Retired; 5= Housewife; 6= Students; 7= Unemployed; 8= Other	3.29	2.15	1	8
Income	Scale of Incomes (self-reported) from 1 (lower step) to 10 (Tenth step)	4.86	2.17	1	10
Trust	Response to ”Generally speaking, would you say that most people can be trusted, or that you can’t be too careful when dealing with others?” 0=No, 1=Yes	0.25	0.43	0	1
Asso	1 if the individual is a member at least one ”bridging” association in the following sector: ”sport or recreation”, ”art, music or educational”, ”environmental”, or ”charitable or humanitarian”; 0 otherwise	0.37	0.48	0	1
Life Satisfaction	Response to ”All things considered, how satisfied are you with your life as a whole nowadays?”) from 1 (“completely dissatisfied”) to 10 (“completely satisfied”)	6.89	2.21	1	10
Control	Response to ”How much freedom of choice and control you feel you have over the way your life turns out” from 1 (none at all) to 10 (A great deal)	7.16	2.17	1	10
TotalWealth	Sum of produced capital, natural capital and intangible capital (at the country level)	190634.9	232592.7	3439.11	861797.3
perc_intangible	Percentage of intangible capital over total capital (at the country level)	0.64	0.20	0	0.89
A.O.R.	Associational and Organization Rights from 0 (Worst) to 12 (Best) (at the country level)	8.42	3.57	0	12
C.L.	Civil Liberties from 1 (Most Free) to 7 (Least Free) (at the country level)	2.87	1.73	1	7
Ethnic	Ethnic Fractionalization (at the country level)	0.41	0.23	0.00	0.85
Language	Language Fractionalization (at the country level)	0.35	0.25	0.00	0.87
Religious	Religion Fractionalization (at the country level)	0.46	0.25	0.00	0.86

Table 2 – Correlation between the errors of the equations of the non-recursive mixed model

	Asso	Trust	Life Satisfaction
Asso	1	-2.915***	-0.558
		(0.039)	(0.356)
Trust		1	0.555
			(0.351)
Life Satisfaction			1

Lecture: $Nindividuals = 106,622$; $Ncountries = 65$; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; bootstrapped standard errors (based on 100 replications) in parentheses; Country dummies not reported.

Table 3 – Direct Marginal Effects of the non recursive mixed-process model

	(1)	(2)	Life Satisfaction									
	Asso	Trust	1	2	3	4	5	6	7	8	9	10
Asso		0.539***	0.060	-0.003**	-0.004**	0.030*	0.045**	0.021***	0.002	-0.040*	-0.043**	-0.129
		(0.009)	(0.058)	(0.001)	(0.002)	(0.016)	(0.019)	(0.005)	(0.006)	(0.023)	(0.020)	(0.083)
Trust	0.555***		-0.049	0.029***	0.042***	-0.038***	-0.070***	-0.044**	-0.032*	0.024**	0.052***	0.215*
	(0.010)		(0.030)	(0.001)	(0.001)	(0.014)	(0.026)	(0.018)	(0.020)	(0.010)	(0.010)	(0.130)
Sex (ref. Male)												
Female	-0.029***	0.011*	-0.001	-0.000*	-0.001*	-0.001	-0.002	-0.001*	-0.001	0.000	0.001	0.005*
	(0.009)	(0.006)	(0.003)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)	(0.003)
Age (Ref: Less than 25)												
25-34	-0.015***	0.005	0.008***	0.003***	0.005***	0.005***	0.008***	0.004***	0.002***	-0.005***	-0.007***	-0.025***
	(0.005)	(0.005)	(0.002)	(0.000)	(0.000)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.003)
35-44	-0.036***	0.030***	0.014**	0.003***	0.005***	0.008***	0.013***	0.007***	0.003***	-0.009***	-0.011***	-0.038***
	(0.005)	(0.005)	(0.005)	(0.000)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.007)
45-54	-0.044***	0.034***	0.018**	0.004***	0.007***	0.010***	0.016***	0.008***	0.003***	-0.011***	-0.014***	-0.046***
	(0.005)	(0.006)	(0.007)	(0.000)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.008)
55-64	-0.052***	0.046***	0.015**	0.002***	0.004***	0.008***	0.014***	0.007***	0.003***	-0.009***	-0.012***	-0.040***
	(0.006)	(0.005)	(0.007)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.010)
65 and more	-0.048***	0.058***	0.006	-0.002***	-0.003***	0.004**	0.007**	0.004***	0.002***	-0.004**	-0.006***	-0.020*
	(0.007)	(0.005)	(0.006)	(0.000)	(0.001)	(0.002)	(0.003)	(0.001)	(0.000)	(0.002)	(0.002)	(0.012)
Income (ref. First step)												
2	-0.020**	0.021**	-0.002	-0.002***	-0.003***	-0.001	-0.001	-0.001	0.000	0.002	0.001	0.004
	(0.009)	(0.009)	(0.003)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.000)	(0.002)	(0.002)	(0.004)
3	-0.025***	0.033***	-0.002	-0.003***	-0.005***	-0.001	-0.001	-0.000	0.000	0.001	0.001	0.003
	(0.010)	(0.008)	(0.003)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.000)	(0.003)	(0.002)	(0.005)
4	-0.016	0.030***	-0.011***	-0.006***	-0.009***	-0.005**	-0.007**	-0.003*	0.001***	0.008**	0.007**	0.019***
	(0.010)	(0.007)	(0.002)	(0.001)	(0.001)	(0.002)	(0.004)	(0.002)	(0.000)	(0.004)	(0.003)	(0.004)
5	0.001	0.021***	-0.021***	-0.010***	-0.015***	-0.011***	-0.016***	-0.007**	-0.000	0.015***	0.016***	0.043***
	(0.010)	(0.008)	(0.004)	(0.001)	(0.001)	(0.003)	(0.005)	(0.003)	(0.001)	(0.005)	(0.005)	(0.003)
6	0.009	0.021***	-0.027***	-0.012***	-0.019***	-0.014***	-0.022***	-0.010***	-0.002	0.019***	0.021***	0.060***
	(0.010)	(0.007)	(0.005)	(0.001)	(0.001)	(0.003)	(0.007)	(0.004)	(0.001)	(0.006)	(0.006)	(0.003)
7	0.015	0.020**	-0.033***	-0.015***	-0.024***	-0.019***	-0.030***	-0.015***	-0.004**	0.023***	0.027***	0.083***
	(0.010)	(0.008)	(0.007)	(0.001)	(0.001)	(0.004)	(0.009)	(0.005)	(0.002)	(0.008)	(0.008)	(0.004)
8	0.029***	0.010	-0.038***	-0.017***	-0.027***	-0.023***	-0.037***	-0.019***	-0.007***	0.026***	0.032***	0.105***
	(0.010)	(0.008)	(0.009)	(0.001)	(0.001)	(0.004)	(0.009)	(0.006)	(0.003)	(0.008)	(0.009)	(0.004)
9	0.025*	0.029**	-0.038***	-0.018***	-0.029***	-0.023***	-0.037***	-0.019***	-0.007**	0.026***	0.032***	0.105***
	(0.014)	(0.012)	(0.009)	(0.001)	(0.001)	(0.005)	(0.010)	(0.006)	(0.003)	(0.008)	(0.009)	(0.005)
10th step	0.027*	0.039***	-0.041***	-0.020***	-0.032***	-0.025***	-0.042***	-0.022***	-0.010**	0.027***	0.036***	0.121***

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	(1)	(2)	Life Satisfaction									
	Asso	Trust	1	2	3	4	5	6	7	8	9	10
	(0.016)	(0.011)	(0.009)	(0.001)	(0.001)	(0.005)	(0.012)	(0.008)	(0.004)	(0.009)	(0.011)	(0.008)
Diplom (ref. Inadequately completed elementary education)												
Completed elementary education	0.008	0.018**	-0.006***	-0.004***	-0.006***	-0.003*	-0.005*	-0.003	-0.001	0.004*	0.005*	0.015***
	(0.011)	(0.008)	(0.001)	(0.001)	(0.001)	(0.002)	(0.003)	(0.002)	(0.001)	(0.002)	(0.003)	(0.006)
Incomplete secondary school: technical/vocational	0.024***	-0.002	-0.002	-0.001	-0.001	-0.001	-0.002	-0.001	-0.000	0.001	0.002	0.005
	(0.009)	(0.008)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.004)
Complete secondary school: technical/vocational	0.032***	-0.003	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000
	(0.009)	(0.007)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.004)
Incomplete secondary: university-preparatory	0.041***	0.006	0.002	0.000	0.001	0.001	0.002	0.001	0.000	-0.002	-0.002	-0.006
	(0.010)	(0.007)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.000)	(0.002)	(0.002)	(0.005)
Complete secondary: university-preparatory	0.045***	0.008	0.000	-0.001**	-0.002**	0.000	0.000	0.000	0.000	-0.000	-0.000	-0.001
	(0.010)	(0.007)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.004)
Some University without degree/Higher education	0.069***	-0.012	0.002	0.000	0.000	0.001	0.001	0.001	0.000	-0.001	-0.001	-0.004
	(0.009)	(0.008)	(0.003)	(0.001)	(0.001)	(0.002)	(0.003)	(0.002)	(0.000)	(0.002)	(0.003)	(0.008)
University with degree/Higher education	0.056***	0.005	0.001	-0.002***	-0.004***	0.000	0.001	0.000	0.000	-0.001	-0.001	-0.002
	(0.009)	(0.007)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.000)	(0.001)	(0.001)	(0.004)
Status (ref. Full time)												
Part-time	0.025***	-0.015***	-0.002	-0.000	-0.000	-0.001	-0.002	-0.001	-0.000	0.001	0.001	0.005
	(0.005)	(0.004)	(0.002)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.005)
Self-employed	0.031***	-0.027***	-0.004	0.001***	0.001***	-0.002*	-0.004**	-0.002**	-0.001***	0.002**	0.003**	0.010
	(0.006)	(0.004)	(0.003)	(0.000)	(0.001)	(0.001)	(0.002)	(0.001)	(0.000)	(0.001)	(0.001)	(0.007)
Retired	-0.032***	0.001	0.012***	0.005***	0.008***	0.006***	0.010***	0.005***	0.001	-0.009***	-0.009***	-0.027***
	(0.007)	(0.007)	(0.004)	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)
Housewife	-0.009	-0.015	-0.002	-0.003***	-0.004***	-0.001	-0.002	-0.001	-0.001*	0.001	0.002	0.006
	(0.028)	(0.012)	(0.003)	(0.000)	(0.001)	(0.001)	(0.002)	(0.001)	(0.000)	(0.002)	(0.002)	(0.006)
Students	0.054***	-0.040***	-0.004	0.001**	0.002**	-0.002	-0.003	-0.002	-0.001	0.002	0.003	0.010
	(0.007)	(0.006)	(0.005)	(0.001)	(0.001)	(0.002)	(0.003)	(0.002)	(0.001)	(0.002)	(0.003)	(0.011)
Unemployed	0.008	-0.027***	0.012***	0.008***	0.012***	0.006**	0.010**	0.004*	0.001	-0.008*	-0.009**	-0.027***
	(0.006)	(0.005)	(0.001)	(0.001)	(0.001)	(0.003)	(0.005)	(0.003)	(0.001)	(0.004)	(0.005)	(0.006)
Other	-0.025**	0.030***	0.009*	0.000	0.001	0.005***	0.007***	0.003***	0.000	-0.006***	-0.007***	-0.020***
	(0.012)	(0.009)	(0.006)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.000)	(0.002)	(0.002)	(0.008)
Year (ref.: 2005)												
2006	0.052***	-0.009	-0.002	0.001***	0.002***	-0.001	-0.002	-0.001	-0.000	0.001	0.001	0.005
	(0.008)	(0.007)	(0.003)	(0.000)	(0.001)	(0.001)	(0.002)	(0.001)	(0.000)	(0.001)	(0.002)	(0.007)
2007	0.089***	-0.021**	0.007*	0.006***	0.010***	0.004	0.006	0.003	0.001	-0.005	-0.006	-0.017

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	(1)	(2)	Life Satisfaction									
	Asso	Trust	1	2	3	4	5	6	7	8	9	10
	(0.009)	(0.011)	(0.004)	(0.001)	(0.001)	(0.004)	(0.006)	(0.003)	(0.001)	(0.005)	(0.006)	(0.013)
2009	-0.187***	0.118***	0.077**	0.015***	0.023***	0.028***	0.037***	0.011*	-0.011**	-0.052***	-0.044***	-0.105***
	(0.029)	(0.020)	(0.033)	(0.001)	(0.001)	(0.003)	(0.009)	(0.006)	(0.005)	(0.005)	(0.004)	(0.018)
2010	-0.038*	-0.010	0.010***	0.006***	0.009***	0.006***	0.009***	0.004***	0.001	-0.007***	-0.008***	-0.025***
	(0.020)	(0.021)	(0.004)	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)	(0.001)	(0.002)	(0.002)	(0.005)
2011	-0.033***	0.043***	0.011**	0.003***	0.005***	0.006***	0.009***	0.005***	0.001	-0.007***	-0.009***	-0.026***
	(0.008)	(0.008)	(0.005)	(0.000)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.005)
2012	0.062***	-0.014*	-0.009*	-0.002***	-0.003***	-0.006***	-0.010***	-0.006***	-0.003***	0.006***	0.008***	0.030***
	(0.009)	(0.007)	(0.005)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.008)
2013	-0.010	0.036***	0.009***	0.003***	0.004***	0.005***	0.008***	0.004***	0.001	-0.007***	-0.008***	-0.023***
	(0.014)	(0.008)	(0.004)	(0.000)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.004)
2014	0.049***	0.006	0.011***	0.005***	0.008***	0.006**	0.009**	0.004*	0.001	-0.007**	-0.008**	-0.025***
	(0.013)	(0.010)	(0.002)	(0.001)	(0.001)	(0.002)	(0.005)	(0.003)	(0.001)	(0.004)	(0.004)	(0.006)
Control (ref. 1: None at all)												
2			0.041***	0.013***	0.016***	0.009**	0.007**	-0.003***	-0.014***	-0.025***	-0.015***	-0.023***
			(0.008)	(0.002)	(0.003)	(0.004)	(0.003)	(0.001)	(0.005)	(0.008)	(0.004)	(0.006)
3			0.012**	0.004**	0.006**	0.003**	0.003*	-0.001*	-0.004**	-0.008**	-0.005**	-0.008**
			(0.005)	(0.002)	(0.002)	(0.002)	(0.002)	(0.000)	(0.002)	(0.004)	(0.002)	(0.004)
4			-0.003	-0.000	-0.000	-0.001	-0.001	0.000	0.001	0.002	0.001	0.002
			(0.005)	(0.002)	(0.002)	(0.001)	(0.001)	(0.000)	(0.002)	(0.004)	(0.002)	(0.004)
5			-0.028***	-0.009***	-0.012***	-0.009***	-0.010**	-0.001	0.008***	0.021***	0.014***	0.025***
			(0.006)	(0.002)	(0.002)	(0.003)	(0.004)	(0.001)	(0.003)	(0.007)	(0.004)	(0.005)
6			-0.043***	-0.014***	-0.020***	-0.016***	-0.019**	-0.003*	0.011***	0.033***	0.024***	0.045***
			(0.007)	(0.002)	(0.002)	(0.005)	(0.007)	(0.002)	(0.004)	(0.011)	(0.006)	(0.006)
7			-0.057***	-0.020***	-0.029***	-0.023***	-0.030***	-0.008**	0.012***	0.045***	0.035***	0.072***
			(0.010)	(0.002)	(0.002)	(0.007)	(0.011)	(0.004)	(0.004)	(0.015)	(0.009)	(0.006)
8			-0.071***	-0.026***	-0.039***	-0.033***	-0.046***	-0.016**	0.010***	0.057***	0.049***	0.112***
			(0.013)	(0.002)	(0.002)	(0.009)	(0.016)	(0.007)	(0.003)	(0.019)	(0.013)	(0.006)
9			-0.080***	-0.030***	-0.047***	-0.041***	-0.060***	-0.025**	0.004**	0.064***	0.060***	0.152***
			(0.016)	(0.002)	(0.002)	(0.010)	(0.019)	(0.010)	(0.002)	(0.021)	(0.017)	(0.005)
10: A great deal			-0.089***	-0.035***	-0.056***	-0.051***	-0.080***	-0.039***	-0.009	0.065***	0.074***	0.218***
			(0.020)	(0.002)	(0.002)	(0.011)	(0.024)	(0.014)	(0.006)	(0.021)	(0.021)	(0.006)
Total Wealth (standardized)	-0.004	0.031***	-0.005**	-0.006***	-0.009***	-0.002	-0.004	-0.002	-0.000	0.003	0.003	0.010*
	(0.013)	(0.006)	(0.002)	(0.000)	(0.000)	(0.002)	(0.003)	(0.002)	(0.000)	(0.003)	(0.003)	(0.006)
Perc_intangible (standardized)	0.026***	-0.058***	-0.009**	0.001**	0.001***	-0.005***	-0.008***	-0.004***	-0.001***	0.006***	0.007***	0.022***
	(0.009)	(0.011)	(0.004)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.007)
Associational & Organization Rights (ref. 0-1:Worst)												
2	0.014											
	(0.032)											
3	0.104***											

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	(1) Asso	(2) Trust	Life Satisfaction 1	2	3	4	5	6	7	8	9	10
	(0.025)											
4	0.042											
	(0.039)											
5	0.030											
	(0.033)											
6	0.021											
	(0.037)											
7	0.184***											
	(0.070)											
8	0.144***											
	(0.054)											
9	0.286***											
	(0.066)											
10	0.279***											
	(0.071)											
11	0.356***											
	(0.081)											
12: best	0.378***											
	(0.080)											
Civil Liberties (Ref. 1: Most Free)												
2	0.077***											
	(0.019)											
3	0.095***											
	(0.032)											
4	0.311***											
	(0.061)											
5	0.326***											
	(0.082)											
6	0.297***											
	(0.089)											
7: Least free	0.462***											
	(0.116)											
Fractionalization												
Langage (standardized)		-0.002										
		(0.005)										
Ethnic (standardized)		-0.017**										
		(0.008)										
Religion (Standardized)		-0.012*										
		(0.007)										

Lecture: $Nindividuals = 106,622$; $Ncountries = 65$; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; bootstrapped standard errors (based on 100 replications) in parentheses; Country dummies not reported.

Table 4 – Direct and Total Effects on Social Capital on Life Satisfaction

	Life Satisfaction									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Direct effect										
Asso	0.060	-0.003**	-0.004**	0.030*	0.045**	0.021***	0.002	-0.040*	-0.043**	-0.129
	(0.058)	(0.001)	(0.002)	(0.016)	(0.019)	(0.005)	(0.006)	(0.023)	(0.020)	(0.083)
Trust	-0.049	0.029***	0.042***	-0.038***	-0.070***	-0.044**	-0.032*	0.024**	0.052***	0.215*
	(0.030)	(0.001)	(0.001)	(0.014)	(0.026)	(0.018)	(0.020)	(0.010)	(0.010)	(0.130)
Total Effect										
Asso	0.005	0.004	0.008	0.010	0.023*	0.019*	0.022*	0.007	-0.012***	-0.085
	(0.005)	(0.003)	(0.005)	(0.006)	(0.013)	(0.010)	(0.012)	(0.007)	(0.003)	(0.057)
Trust	-0.012	-0.013*	-0.018**	-0.016**	-0.020***	-0.005***	0.010	0.033**	0.024**	0.037*
	(0.021)	(0.007)	(0.009)	(0.007)	(0.007)	(0.001)	(0.006)	(0.016)	(0.011)	(0.020)

Lecture: $Nindividuals = 106,622$; $Ncountries = 65$; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; bootstrapped standard errors (based on 100 replications) in parentheses; Country dummies not reported.

Table 5 – Coefficients of the non recursive mixed-process model

VARIABLES	(1) Trust	(2) Asso	(3) Life Satisfaction
Trust		1.532***	0.856**
		(0.036)	(0.432)
Asso	1.486***		-0.602
	(0.036)		(0.424)
Trust#Asso			-0.077***
			(0.017)
Sex (ref. Male)			
Female	-0.035	0.546	0.019
	(0.057)	(0.505)	(0.071)
Age (Ref: Less than 25)			
25-34	0.008	-0.055**	-0.131***
	(0.030)	(0.026)	(0.017)
35-44	0.130***	-0.162***	-0.191***
	(0.033)	(0.026)	(0.039)
45-54	0.135***	-0.191***	-0.210***
	(0.034)	(0.025)	(0.044)
55-64	0.173***	-0.213***	-0.185***
	(0.032)	(0.029)	(0.054)
65 and more	0.237***	-0.220***	-0.068
	(0.033)	(0.037)	(0.068)
Income (ref. First step)			
2	0.079**	-0.070**	0.021
	(0.033)	(0.032)	(0.026)
3	0.126***	-0.087***	0.015
	(0.030)	(0.033)	(0.030)
4	0.114***	-0.054	0.103***
	(0.028)	(0.035)	(0.026)
5	0.081***	0.003	0.220***
	(0.029)	(0.036)	(0.024)
6	0.081***	0.031	0.299***
	(0.029)	(0.035)	(0.024)
7	0.076**	0.050	0.393***
	(0.030)	(0.035)	(0.029)
8	0.039	0.098***	0.483***
	(0.032)	(0.035)	(0.027)
9	0.112**	0.084*	0.484***
	(0.045)	(0.046)	(0.033)
10th step	0.146***	0.091*	0.544***
	(0.043)	(0.055)	(0.044)
Diplom (ref. Inadequately completed elementary education)			
Completed (compulsory) elementary education	0.067**	0.029	0.069***
	(0.030)	(0.040)	(0.027)
Incomplete secondary school: technical/vocational type	-0.008	0.083**	0.024
	(0.030)	(0.033)	(0.019)
Complete secondary school: technical/vocational type	-0.013	0.110***	0.001
	(0.028)	(0.031)	(0.019)
Incomplete secondary: university-preparatory type/Secondary	0.022	0.143***	-0.028
	(0.028)	(0.035)	(0.023)

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	(1)	(2)	(3)
VARIABLES	Trust	Asso	Life Satisfaction
Complete secondary: university-preparatory type/Secondary	0.029	0.156***	-0.005
	(0.028)	(0.035)	(0.017)
Some University without degreee/Higher education	-0.046	0.235***	-0.019
	(0.031)	(0.033)	(0.038)
University with degree/Higher education	0.021	0.194***	-0.010
	(0.025)	(0.031)	(0.020)
Status (ref. Full time)			
Part-time	-0.043*	0.093***	-0.020
	(0.024)	(0.023)	(0.027)
Self-employed	-0.081***	0.081***	-0.004
	(0.018)	(0.025)	(0.030)
Retired	0.006	-0.111***	-0.149***
	(0.034)	(0.032)	(0.019)
Housewife	-0.046	0.015	-0.094
	(0.085)	(0.192)	(0.063)
Students	-0.110***	0.129***	-0.007
	(0.029)	(0.029)	(0.046)
Unemployed	-0.055**	-0.001	-0.180***
	(0.023)	(0.022)	(0.028)
Other	0.124***	-0.091	-0.204***
	(0.043)	(0.079)	(0.040)
Control (ref. 1: None at all)			
2			-0.208***
			(0.061)
3			-0.059
			(0.049)
4			0.026
			(0.047)
5			0.241***
			(0.046)
6			0.365***
			(0.047)
7			0.517***
			(0.051)
8			0.698***
			(0.057)
9			0.853***
			(0.063)
10: A great deal			1.099***
			(0.078)
Gender interaction with Social Capital			
Asso#Female	0.227***		-0.048*
	(0.060)		(0.025)
Trust#Female		0.195***	0.033
		(0.059)	(0.030)
Asso#Trust#Female			0.030
			(0.026)
Gender interaction with Age			
25-34#Female	0.035*	-0.048**	-0.090***
	(0.021)	(0.022)	(0.018)
35-44#Female	0.096***	-0.085***	-0.156***
	(0.022)	(0.022)	(0.026)

continued from previous page

	(1)	(2)	(3)
VARIABLES	Trust	Asso	Life Satisfaction
45-54#Female	0.122***	-0.111***	-0.216***
	(0.020)	(0.020)	(0.030)
55-64t#Female	0.178***	-0.144***	-0.182***
	(0.022)	(0.023)	(0.042)
65 and more#Female	0.200***	-0.104***	-0.103**
	(0.026)	(0.028)	(0.043)
Gender interaction with Status			
Part-time#Female	-0.029	-0.016	0.081***
	(0.032)	(0.031)	(0.025)
Self-employed#Female	-0.044*	0.048	0.098***
	(0.025)	(0.030)	(0.021)
Retired#Female	-0.003	-0.004	0.026
	(0.037)	(0.039)	(0.027)
Housewife#Female	-0.025	-0.090	0.231***
	(0.085)	(0.197)	(0.067)
Students#Female	-0.084**	0.103***	0.099***
	(0.037)	(0.038)	(0.032)
Unemployed#Female	-0.092***	0.061**	0.089***
	(0.033)	(0.029)	(0.030)
Other#Female	-0.030	0.007	0.202***
	(0.061)	(0.099)	(0.048)
Gender interaction with Control			
2#Female			-0.037
			(0.082)
3#Female			-0.032
			(0.072)
4#Female			-0.016
			(0.064)
5#Female			-0.087
			(0.061)
6#Female			-0.081
			(0.058)
7#Female			-0.093
			(0.061)
8#Female			-0.079
			(0.060)
9#Female			-0.067
			(0.060)
10: A great deal#Female			-0.089
			(0.063)
Year (ref.: 2005)			
2006	-0.033	0.176***	0.022
	(0.025)	(0.025)	(0.033)
2007	-0.082**	0.299***	-0.082
	(0.041)	(0.030)	(0.066)
2009	0.425***	-0.775***	-0.632***
	(0.073)	(0.153)	(0.111)
2010	-0.039	-0.137*	-0.118***
	(0.081)	(0.072)	(0.023)
2011	0.162***	-0.119***	-0.126***
	(0.031)	(0.028)	(0.024)
2012	-0.056*	0.210***	0.130***

continued from previous page

	(1)	(2)	(3)
VARIABLES	Trust	Asso	Life Satisfaction
	(0.029)	(0.030)	(0.033)
2013	0.136***	-0.034	-0.111***
	(0.030)	(0.050)	(0.018)
2014	0.022	0.166***	-0.122***
	(0.039)	(0.043)	(0.033)
TotalWealth (standardized)	0.149***	-0.079***	0.097***
	(0.022)	(0.029)	(0.036)
perc_intangible (standardised)	-0.188***	0.036	0.140***
	(0.028)	(0.043)	(0.023)
TotalWealth#perc_intangible	-0.020	0.108**	-0.042
	(0.041)	(0.050)	(0.037)
perc_intangible#perc_intangible	-0.054*	-0.029	0.033***
	(0.029)	(0.032)	(0.009)
TotalWealth#perc_intangible#perc_intangible	-0.029	0.067*	-0.045***
	(0.029)	(0.036)	(0.010)
Associational & Organization Rights (ref. 0-1:Worst)			
2		0.202	
		(0.275)	
3		0.683**	
		(0.295)	
4		0.440	
		(0.336)	
5		0.306	
		(0.288)	
6		0.294	
		(0.314)	
7		1.112**	
		(0.551)	
8		0.912**	
		(0.465)	
9		1.489**	
		(0.598)	
10		1.488**	
		(0.612)	
11		1.778***	
		(0.674)	
12: best		1.856***	
		(0.689)	
Civil Liberties (Ref. 1: Most Free)			
2		0.367***	
		(0.122)	
3		0.477**	
		(0.224)	
4		1.319***	
		(0.474)	
5		1.426**	
		(0.573)	
6		1.326**	
		(0.593)	
7: Least free		2.134**	
		(0.850)	

continued from previous page

	(1)	(2)	(3)
VARIABLES	Trust	Asso	Life Satisfaction
Language fractionalization	-0.020		
	(0.020)		
Ethnic fractionalization	-0.058*		
	(0.030)		
Religious fractionalization	-0.037		
	(0.037)		
language#ethnic	0.007		
	(0.019)		
language#religious	0.012		
	(0.010)		
ethnic#religious	-0.066***		
	(0.011)		
lanuage#ethnic#religious	-0.016		
	(0.018)		
Gender interaction with Associational & Organization Rights			
2#Female		-0.228	
		(0.214)	
3#Female		-0.345	
		(0.236)	
4#Female		-0.410*	
		(0.241)	
5#Female		-0.268	
		(0.233)	
6#Female		-0.332	
		(0.222)	
7#Female		-0.577*	
		(0.345)	
8#Female		-0.483	
		(0.298)	
9#Female		-0.614	
		(0.448)	
10#Female		-0.664	
		(0.432)	
11#Female		-0.717	
		(0.474)	
12#Female		-0.727	
		(0.506)	
Gender interaction with Civil Liberties			
2#Female		-0.099	
		(0.071)	
3#Female		-0.182	
		(0.150)	
4#Female		-0.312	
		(0.405)	
5#Female		-0.411	
		(0.452)	
6#Female		-0.417	
		(0.439)	
7#Female		-0.730	
		(0.522)	
Gender interaction with Fractionalization			
language#Female	0.027**		

continued from previous page

	(1)	(2)	(3)
VARIABLES	Trust	Asso	Life Satisfaction
	(0.012)		
Ethnic#Female	-0.000		
	(0.011)		
Religious#Female	-0.002		
	(0.013)		
Constant	-1.230***	-2.548***	
	(0.056)	(0.764)	
cut_3_1			-1.362***
			(0.082)
cut_3_1			-1.117***
			(0.077)
cut_3_1			-0.809***
			(0.073)
cut_3_1			-0.538***
			(0.074)
cut_3_1			-0.075
			(0.081)
cut_3_1			0.263***
			(0.090)
cut_3_1			0.720***
			(0.106)
cut_3_1			1.329***
			(0.133)
cut_3_1			1.744***
			(0.153)
ρ_{ij}		-2.915***	-0.558
		(0.039)	(0.356)
			0.555
			(0.351)

Lecture: $N = 106,622$; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; bootstrapped standard errors (based on 100 replications) in parentheses; time dummies not reported.

6 Appendix

Table 6 – Results of the recursive mixed-process model

VARIABLES	(1) Trust	(2) Asso	(3) Life Satisfaction
Trust			0.111***
			(0.008)
Asso			0.063
			(0.078)
Control (ref. 1 : None at all)			
2			-0.252***
			(0.052)
3			-0.077**
			(0.037)
4			0.019
			(0.037)
5			0.219***
			(0.034)
6			0.356***
			(0.034)
7			0.518***
			(0.032)
8			0.728***
			(0.036)
9			0.906***
			(0.034)
10: A great deal			1.170***
			(0.036)
Age (Ref: Less than 25)			
25-34	0.001	-0.059***	-0.111***
	(0.015)	(0.014)	(0.012)
35-44	0.092***	-0.140***	-0.137***
	(0.018)	(0.014)	(0.011)
45-54	0.102***	-0.172***	-0.171***
	(0.015)	(0.018)	(0.013)
55-64	0.163***	-0.177***	-0.121***
	(0.020)	(0.022)	(0.012)
65 and more	0.270***	-0.100***	-0.008
	(0.024)	(0.028)	(0.015)
Sex (ref: Male)			
Female	-0.023**	-0.127***	0.020***
	(0.009)	(0.009)	(0.007)
Diplom (ref: Inadequately completed elementary education)			
Completed (compulsory) elementary education	0.091***	-0.024	0.103***
	(0.020)	(0.021)	(0.020)
Incomplete secondary school: technical/vocational type	0.063**	0.117***	0.005
	(0.025)	(0.024)	(0.017)
Complete secondary school: technical/vocational type	0.085***	0.130***	-0.019
	(0.022)	(0.021)	(0.018)
Incomplete secondary: university-preparatory type/Secondary	0.170***	0.234***	-0.055***
	(0.024)	(0.021)	(0.018)

continued from previous page

	(1)	(2)	(3)
VARIABLES	Trust	Asso	Life Satisfaction
Complete secondary: university-preparatory type/Secondary	0.206***	0.221***	-0.016
	(0.023)	(0.022)	(0.018)
Some university without degree/Higher education	0.266***	0.449***	-0.072***
	(0.025)	(0.024)	(0.023)
University with degree/Higher education	0.378***	0.420***	-0.026
	(0.022)	(0.020)	(0.021)
Status (ref. Full time)			
Part-time	0.066***	0.179***	-0.008
	(0.018)	(0.019)	(0.010)
Self-employed	-0.065***	0.145***	-0.015
	(0.016)	(0.012)	(0.010)
Retired	-0.114***	-0.202***	-0.139***
	(0.018)	(0.022)	(0.016)
Housewife	-0.128***	-0.129***	0.119***
	(0.018)	(0.017)	(0.010)
Students	0.027	0.311***	-0.039**
	(0.016)	(0.021)	(0.017)
Unemployed	-0.169***	0.020	-0.202***
	(0.020)	(0.014)	(0.013)
Other	0.163***	-0.059*	-0.063**
	(0.032)	(0.033)	(0.026)
Income (ref. First step)			
2	0.036*	-0.096***	0.048**
	(0.020)	(0.023)	(0.021)
3	0.122***	-0.063***	0.054***
	(0.021)	(0.019)	(0.018)
4	0.141***	0.002	0.140***
	(0.020)	(0.019)	(0.018)
5	0.147***	0.078***	0.253***
	(0.019)	(0.016)	(0.017)
6	0.198***	0.152***	0.335***
	(0.022)	(0.015)	(0.017)
7	0.235***	0.200***	0.433***
	(0.020)	(0.015)	(0.019)
8	0.208***	0.264***	0.512***
	(0.024)	(0.025)	(0.021)
9	0.328***	0.320***	0.529***
	(0.033)	(0.028)	(0.026)
10th step	0.405***	0.384***	0.601***
	(0.029)	(0.025)	(0.030)
TotalWealth	-5.33e-06***	-8.93e-06***	-4.80e-07
	(6.55e-07)	(5.86e-07)	(4.60e-07)
perc_intangible	2.477***	2.486***	-2.016***
	(0.123)	(0.075)	(0.106)
TotalWealth#c.perc_intangible	1.86e-05***	2.31e-05***	5.94e-06***
	(1.82e-06)	(1.54e-06)	(1.22e-06)
perc_intangible#perc_intangible	-3.269***	-3.125***	2.326***
	(0.122)	(0.089)	(0.115)
TotalWealth#perc_intangible#perc_intangible	-1.21e-05***	-1.24e-05***	-6.33e-06***
	(1.26e-06)	(1.03e-06)	(7.88e-07)
Constant	-1.443***	-0.952***	
	(0.045)	(0.036)	

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	(1)	(2)	(3)
VARIABLES	Trust	Asso	Life Satisfaction
cut_3_1			-1.645***
			(0.048)
cut_3_2			-1.374***
			(0.048)
cut_3_3			-1.033***
			(0.048)
cut_3_4			-0.732***
			(0.048)
cut_3_5			-0.219***
			(0.048)
cut_3_6			0.156***
			(0.049)
cut_3_7			0.662***
			(0.050)
cut_3_8			1.339***
			(0.051)
cut_3_9			1.799***
			(0.052)
ρ_{ij}		0.070***	0.005
		(0.005)	(0.004)
			0.012
			(0.048)

Lecture: $N = 106,622$; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; bootstrapped standard errors (based on 100 replications) in parentheses; time dummies not reported.