

# Do Individual-level Value Preferences Impact Country-level Social Cohesion? An Exploratory Multi-level Analysis Based on ESS Data

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## Abstract

This chapter links macro-level social cohesion to individual value preferences. It explores the predictive, concomitant, and consequential character of cohesion in relation to individual value preferences. Is it that prior cohesion predicts later value preferences? Or is it that certain earlier value preferences impact later social cohesion? Or is there, if at all, only contemporaneous covariation? To answer these research questions, ESS values data from rounds 1-4 (2002, 2004, 2006, and 2008 waves) were separately linked with country-level social cohesion scores from (1) a prior time period, (2) the same time period, and (3) a later time period [e.g., ESS values data from 2008 were linked with social cohesion scores from (1) 1996-2003, (2) 2004-2008, and (3) 2009-2012]. Multilevel regression analyses show that conservation and self-enhancement values are negatively related to social cohesion, whereas self-transcendence and openness values exhibit a positive relationship. Evidence remains inconclusive with respect to the causal direction. If one wants to interpret small differences between the obtained coefficients, it seems that security values are rather a consequence than a concomitant or cause of cohesion whereas for self-direction we rather find a vice-versa relationship.

## Introduction

Three years ago, the Bertelsmann Foundation, a major player on the German funding scene for applied political and social research, launched an initiative to develop a benchmark measure for the social cohesion of countries and subunits thereof. A team led by the second author of the present paper was commissioned to lead the development of such measure. To the present day Bertelsmann Foundation has published three reports by the group. The first was one that reviews the available academic literature on social cohesion, simultaneously presenting a preliminary check of available data (Bertelsmann Stiftung 2012), the second report introduced a comprehensive measurement concept and documented a secondary data-analytic assessment of the social cohesion of 34 OECD countries, *i.e.*, 27 EU countries (excluding Croatia) plus the US, Canada, Australia, New Zealand, Israel, Norway, and Switzerland (Bertelsmann Stiftung, 2013). In 2014 the foundation also published a report on the social cohesion of the 16 German states (Bertelsmann Stiftung, 2014). In these reports social cohesion refers to the “quality of interactions among the members of a community, defined in geographical terms, and is based on resilient social relations, a positive emotional connectedness to the community and a strong focus on the common good.” (Bertelsmann Stiftung, 2013, p. 9)

The Bertelsmann benchmarking is grounded in a nine-dimensional understanding of

a country’s social cohesion that groups the nine dimensions into three domains. Table 1 summarizes the concept. Based on the conceptual understanding documented in Table 1, data from numerous data sources (World Values Survey; European Values Study; Gallup World Poll; European Quality of Life Survey; International Social Survey Programme; International Social Justice Project; Eurobarometer; International Crime Victim Survey; International Country Risk Guide; Shadow Economies in OECD Countries, Schneider & Buehn, 2009; Measures of Democracy, Vanhanen, 2011) were analyzed using complex multivariate strategies.

**Table 1**

*Domains and Dimensions of Social Cohesion*

Domain	Dimension	People in the society...
1 Social Relations	1.1 Social Networks	...have strong social networks.
	1.2 Trust in People	...place high trust in each other.
	1.3 Acceptance of Diversity	...consider individuals with different value orientations and lifestyles as equals.
2 Connectedness	2.1 Identification	...feel strongly connected with it and strongly identify with it.
	2.2 Trust in Institutions	...have high trust in its institutions.
	2.3 Perception of Fairness	...feel they are treated fairly.
3 Orientation towards the Common Good	3.1 Solidarity and Helpfulness	...feel responsible for each other and the well-being of others.
	3.2 Respect for Social Rules	...respect and adhere to rules and norms.
	3.3 Civic Participation	...participate in social and political life.

All technical details are omitted here. Descriptions of all methodological strategies as well as the data themselves are available online alongside the reports that have been published so far: <http://www.gesellschaftlicher-zusammenhalt.de/en/>. Appendix A documents social cohesion scores of the 34 countries included in the international comparison for four analytic waves, namely 1989-1995, 1996-2003, 2004-2008, and 2009-2012. The coefficients should be interpreted like factor scores. The table is sorted after scores from the most recent data wave.

The 2013 report concentrated on the measurement of social cohesion and evaluated the degree of social cohesion in an international comparison, its prevalence and connections with socio-economic factors, but did not in detail look into possible causes and effects of social cohesion on an individual level.

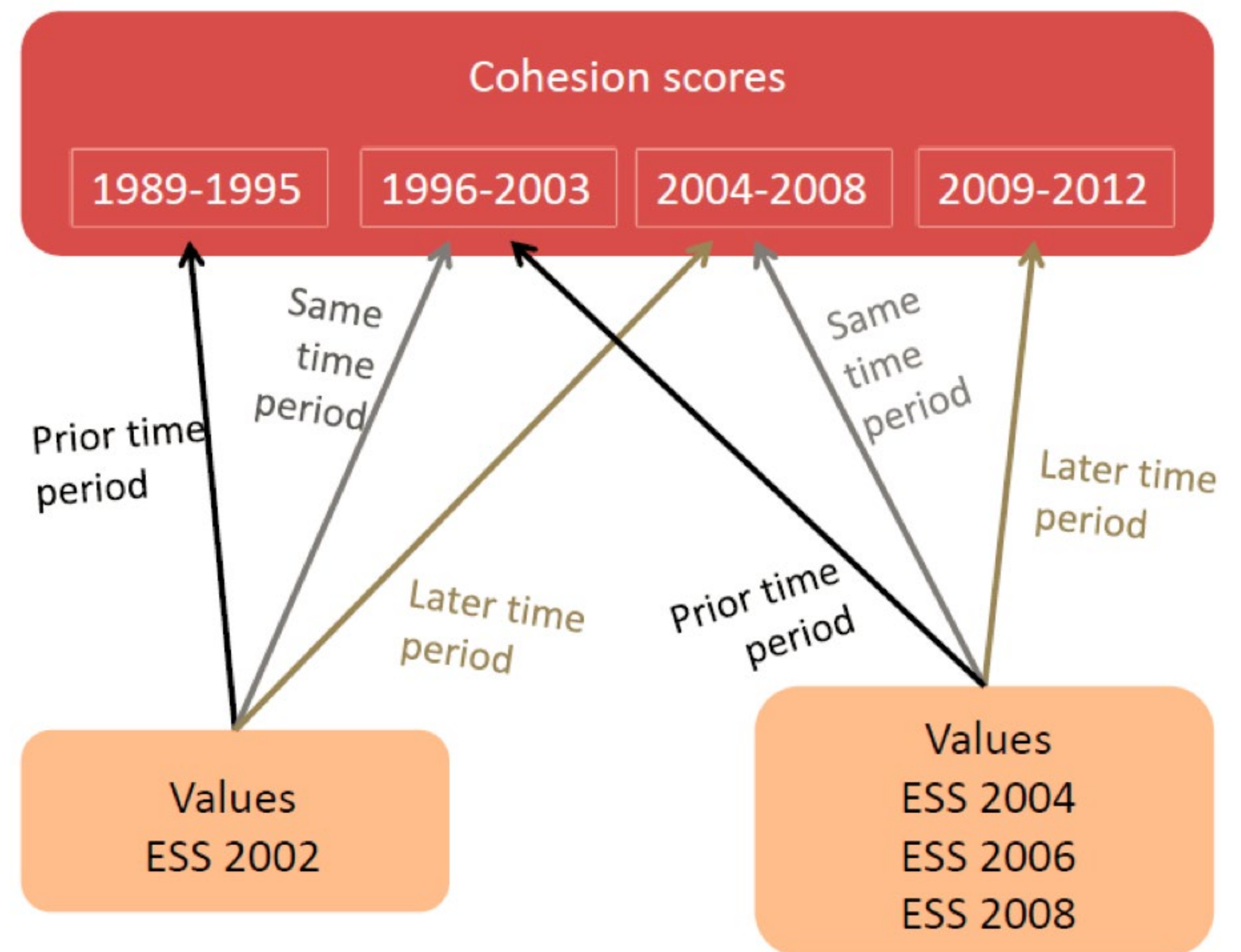
Furthermore, the relationship between values and cohesion has not yet been explained in depth from an empirical perspective. Although researchers agree that individuals' values and behaviors affect, and are affected by social cohesion, it is debatable whether a cohesive society really needs homogeneous values or whether this is an outdated concept. It also remains unclear which values must be shared in order to enable cohesion and whether consensus as such is the only thing that matters. Does a society need consensus about certain fundamental values that are considered to be core values (e.g. the dominant culture), or consensus about those values in general that seem to promote cohesion, such as the acceptance of minorities?

The current study cannot answer these questions but wants to shed light on the relationship of individual values and social cohesion of a community by relating country-level cohesion scores provided by the recent study to individual-level value preferences as defined by Schwartz (1992) in order to discover if values of individuals are related to the cohesion of social entities.

How the values held by residents of countries included in the European Social Survey (ESS) interact with their country's social cohesion as determined in the international study (Bertelsmann Stiftung, 2013) briefly portrayed above. As the ESS only includes countries from the European Research Area (European countries plus Israel), our analyses have to exclude the US, Canada, New Zealand, and Australia. Analyses address the question what the causes, concomitants, and consequences of social cohesion are. Is it that what people have as the guiding principles of their lives (i.e., their value preferences) enables (causes) social cohesion? Or is it that the degree of social cohesion they experience in their country shapes (causes) their value preferences? Or are individual level value preferences and societal level cohesion mere concomitants in the sense that they significantly covary (certain values being preferred more in cohesive countries, others in less cohesive countries, without a causal relationship)? As our undertaking is—presumably—the first of its kind, we refrain from formulating hypotheses, but see our study as an endeavor of uncovering the reciprocal influences of values and societal features.

### Method

In order to address the three questions spelt out above, we conducted multi-level analyses using the MIXED MODELS procedure of SPSS. As aggregate-level predictors we used (a) country-level cohesion scores (see Appendix A) from a time phase entirely before an ESS round, (b) country-level cohesion scores from a time phase that includes a given ESS round, and (c) country-level cohesion scores from a time phase entirely after an ESS round. Figure 1 illustrates the analytic design.



**Figure 1**  
Analytic design of the study

This analytic design allows us to estimate the predictive, concomitant, as well as consequential character of social cohesion in relation to value preferences. As individual-level variables we used the ten Schwartz value types assessed via a 21-item instrument in the ESS: Universalism (UN), Benevolence (BE), Tradition (TR), Conformity (CO), Security (SE), Power (PO), Achievement (AC), Hedonism (HE), Stimulation (ST), and Self-Direction (SD). Table 2 documents the meaning of the ten Schwartz value types.

**Table 2**  
Definitions of the Ten Schwartz Value Types Assessed in the ESS

Value Type	Definition
<b>UNIVERSALISM</b>	Understanding, appreciation, tolerance, and protection for the welfare of all people and for nature
<b>BENEVOLENCE</b>	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact
<b>TRADITION</b>	Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide
<b>CONFORMITY</b>	Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms
<b>SECURITY</b>	Safety, harmony, and stability of society, of relationships, and of self
<b>POWER</b>	Social status and prestige, control or dominance over people and resources
<b>ACHIEVEMENT</b>	Personal success through demonstrating competence according to social standards
<b>HEDONISM</b>	Pleasure or sensuous gratification for oneself
<b>STIMULATION</b>	Excitement, novelty, and challenge in life
<b>SELF-DIRECTION</b>	Independent thought and action -- choosing, creating, exploring

The Schwartz value types were entered separately into the models after a so-called MRAT correction, *i.e.*, scores were centered around the mean of individuals across all 21 value items. Countries do differ significantly on values preferences (as judged on the basis of a significant Wald test); details on simple country differences are omitted from the subsequent tables.

**Table 3**  
Results with ESS Round 1 of 2002

	UN	BE	TR	CO	SE	PO	AC	HE
Cohesion 1989-1995	.10*	.18***	-.20**	—	-.31***	-.12*	---	---
Cohesion 1996-2003	.08*	.18***	-.19***	—	-.28***	-.11*	---	---
Cohesion 2004-2008	.09*	.17***	-.20***	—	-.27***	-.11*	---	---

Note: The table shows unstandardized regression coefficients. Significance of the estimates in the case of two-sided tests: \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ .

## Results

Evidence on the relationship between individual-level value preferences, as obtained in the ESS Rounds 1 to 4, and country-level social cohesion is documented in Tables 3

to 6, respectively. Positive associations are given in green; negative associations in red; shaded cells.

**Table 4**  
Results with ESS Round 2 of 2004

	UN	BE	TR	CO	SE	PO	AC	HE	ST	SD
Cohesion 1996-2003	.07*	.17***	-.19***	—	-.27***	-.15*	---	.22*	.10***	.16***
Cohesion 2004-2008	.09**	.18***	-.19***	—	-.25***	-.18**	-.13*	.22*	.10**	.17***
Cohesion 2009-2012	.09*	.17***	-.22***	—	-.25***	-.18**	---	---	.11**	.18**

Notes: The table shows unstandardized regression coefficients. Significance of the estimates in the case of two-sided tests: \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ .

Tables 3 to 6 show that social cohesion in a country is negatively related to individual preferences of tradition (TR), conformity (CO), security (SE), power (PO), and achievement (AC) values. The relationship with conformity values is not significant in any single case, but always negative in its sign. The relationship with power values is insignificant in 6 out of 12 cases, but again always negative in its sign. The relationship with achievement values is insignificant in 5 out of 12 cases, but once again negative in every single case. The relationship with security values is the strongest of all relationships; in no case is there a relationship of less than  $b = .25$ . For tradition values the relationship is also fairly strong. In substantive terms this means that people in non-cohesive countries express substantially higher security and higher tradition values than people in cohesive countries.

**Table 5**  
Results with ESS Round 3 of 2006

	UN	BE	TR	CO	SE	PO	AC	HE	ST	SD
Cohesion 1996-2003	.10*	.16***	-.21***	—	-.32***	—	-.18*	.22*	.10*	.18***
Cohesion 2004-2008	.11**	.15***	-.20***	—	-.29***	—	-.20**	.22*	.09*	.19***
Cohesion 2009-2012	.10*	.15***	-.24***	—	-.30***	—	-.18*	---	.10*	.20***

Note: The table shows unstandardized regression coefficients. Significance of the estimates in the case of two-sided tests: \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ .

**Table 6**  
Results with ESS Round 4 of 2008

	UN	BE	TR	CO	SE	PO	AC	HE
Cohesion 1996-2003	.11**	.18**	-.14**	—	-.32***	—	-.18*	.20*
Cohesion 2004-2008	.11**	.18***	-.15**	—	-.30***	—	-.20**	.20*
Cohesion 2009-2012	.11**	.17***	-.16***	—	-.29***	—	-.20**	—

Note: The table shows unstandardized regression coefficients. Significance of the estimates in the case of two-sided tests: \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ .

Social cohesion in a country is positively related to universalism (UN), benevolence (BE), hedonism (HE), stimulation (ST), and self-direction (SD) values. The relationship with hedonism values is significant in 6 out of 12 cases, but all coefficients are positive in their sign. In total, the relationship of social cohesion with benevolence values and with self-direction values is strongest, whereas with universalism and stimulation values it is moderate. In substantive terms this means that people in cohesive countries express higher self-direction and benevolence values as well as moderately higher universalism and stimulation values than people in non-cohesive countries.

### Discussion

Conceptually it is highly interesting that in light of the circumplex structure of Schwartz's value theory, there is the very firm finding that all conservation (TR, CO, SE) and self-enhancement values (PO, AC) exhibit a negative (though not always significant) relationship with social cohesion (shaded in red in the tables), while all self-transcendence (UN, BE) and openness values (HE, ST, SD) exhibit a positive relationship (shaded in green).

As for the question whether societal cohesion serves as a predictor of (later) value preferences or whether value preferences at a given time impact (later) social cohesion, i.e., the question of the causal direction between cohesion and values, evidence is inconclusive. The fact that for security values in four out of four cases the relationship between prior cohesion and later values is larger than vice versa suggests that this might reflect a causal relationship from cohesion to values. Low social cohesion can thus possibly be seen as a source of increased security values. For tradition values the reverse causality may emerge as plausible: In four out of four cases coefficients are higher for the relationship between values and later social cohesion than for values and earlier social cohesion. Thus, countries with large proportions of people expressing high tradition values may be the ones that later experience lower social cohesion. Less conclusive evidence emerges for the causal relationship between social cohesion and the other value preferences. Solely for self-direction values there might be some indication that also

here we find value preferences predicting later social cohesion; in three out of four cases the relationship from values to later social cohesion is stronger than the reverse relationship. For benevolence values the opposite is true; they are more frequently predicted by prior social cohesion. Although both of these conclusions seem to make intuitive sense, they should currently be treated with care as they are only weakly supported by statistical analyses. The finding related to self-direction values can, however, be seen as being in line with propositions by Inglehart and Welzel (2005), who show that self-expression values (a close conceptual relative of self-direction values) are a driving force in the development of participatory, civically engaged democracies.

### Conclusions

In summary, our analyses support the conclusion that the value preferences of people living in a given country do reflect the level of social cohesion in that country: People in low cohesion countries tend to prefer conservation values and self-enhancement values more than people do in high cohesion countries. Conversely, people in high cohesion countries have higher preferences for openness and for self-transcendence values than people in low cohesion countries do. There were only limited indications of a causal relationship between values and cohesion. Only for security values can one legitimately conclude that they are a consequence of low social cohesion more so than a concomitant or a cause of cohesion. Conversely, self-direction values are likely to be fostering social cohesion in a country more so than just being mere concomitants or consequences of the level of social cohesion in that country.

### References

- Bertelsmann Stiftung (2012). *Cohesion radar: Measuring cohesiveness. Social cohesion in Germany—a preliminary review*. Gütersloh: Bertelsmann Stiftung (authors: David Schiefer, Jolanda van der Noll, Jan Delhey, & Klaus Boehnke) <http://www.gesellschaftlicher-zusammenhalt.de/downloads/>
- Bertelsmann Stiftung (2013). *Social cohesion radar—measuring common ground. An international comparison of social cohesion*. Gütersloh: Bertelsmann Stiftung (authors: Georgi Dragolov, Zsófia Ignácz, Jan Lorenz, Jan Delhey, & Klaus Boehnke) <http://www.gesellschaftlicher-zusammenhalt.de/downloads/>
- Bertelsmann Stiftung (2014). *Radar gesellschaftlicher Zusammenhalt—messen was verbindet. Gesellschaftlicher Zusammenhalt in Deutschland*. Gütersloh: Bertelsmann Stiftung (authors: Georgi Dragolov, Zsófia Ignácz, Jan Lorenz, Jan Delhey, & Klaus Boehnke) <http://www.gesellschaftlicher-zusammenhalt.de/downloads/>
- Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change and democracy. The human development sequence*. New York: Cambridge University Press.
- Schneider, F., & Buehn, A. (2012). *Shadow economies in highly developed OECD countries. What are the driving forces?* (IZA Discussion Paper 6891). Zürich: IZA.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology*, 28 (pp. 1-65). London: Academic Press.
- Vanhanen, T. (2011). *Measures of Democracy 1810-2010*. FSD1289, version 5.0 (2011-07-07). Tampere: Finnish Social Science Data Archive.

**Appendix A**

*International Comparison of Social Cohesion over Time*

	<b>1989-1995</b>	<b>1996-2003</b>	<b>2004-2008</b>	<b>2009-2012</b>
<i>Denmark</i>	.94	1.06	1.31	1.32
<i>Norway</i>	.88	1.06	1.02	1.16
<i>Finland</i>	.59	.60	.99	1.05
<i>Sweden</i>	1.24	1.03	.98	.95
<i>New Zealand</i>	.42	.68	.96	.89
<i>Australia</i>	.72	.62	.90	.88
<i>Canada</i>	.99	.72	.89	.83
<i>United States</i>	1.15	.97	.73	.82
<i>Switzerland</i>	.79	.59	.91	.65
<i>Luxembourg</i>	.35	.54	.57	.62
<i>Netherlands</i>	.76	.75	.51	.58
<i>Ireland</i>	.44	.47	.64	.54
<i>Austria</i>	.33	.54	.53	.52
<i>Germany</i>	.06	.06	.06	.39
<i>United Kingdom</i>	.46	.37	.26	.24
<i>France</i>	.05	.35	.09	-.07
<i>Spain</i>	-.23	-.11	.06	-.11
<i>Belgium</i>	-.17	-.03	.16	-.20
<i>Estonia</i>	-.86	-.76	-.68	-.32
<i>Malta</i>	-.23	.29	-.18	-.33
<i>Poland</i>	-.56	-.77	-.70	-.33
<i>Slovenia</i>	-.37	-.55	-.40	-.42
<i>Czech Republic</i>	-.46	-.75	-.80	-.47
<i>Italy</i>	-.40	-.39	-.56	-.49
<i>Hungary</i>	-.70	-.93	-.73	-.53
<i>Portugal</i>	-.47	.25	-.45	-.57
<i>Slovakia</i>	-.97	-.87	-.79	-.65
<i>Israel</i>	-.72	-.69	-.52	-.77
<i>Cyprus</i>	-.32	-.36	-.40	-.77
<i>Lithuania</i>	-.73	-.98	-1.30	-.93
<i>Latvia</i>	-.99	-.54	-.92	-.97
<i>Bulgaria</i>	-.71	-.88	-1.13	-.97
<i>Greece</i>	-.30	-.97	-.90	-1.26
<i>Romania</i>	-.96	-1.28	-1.11	-1.28