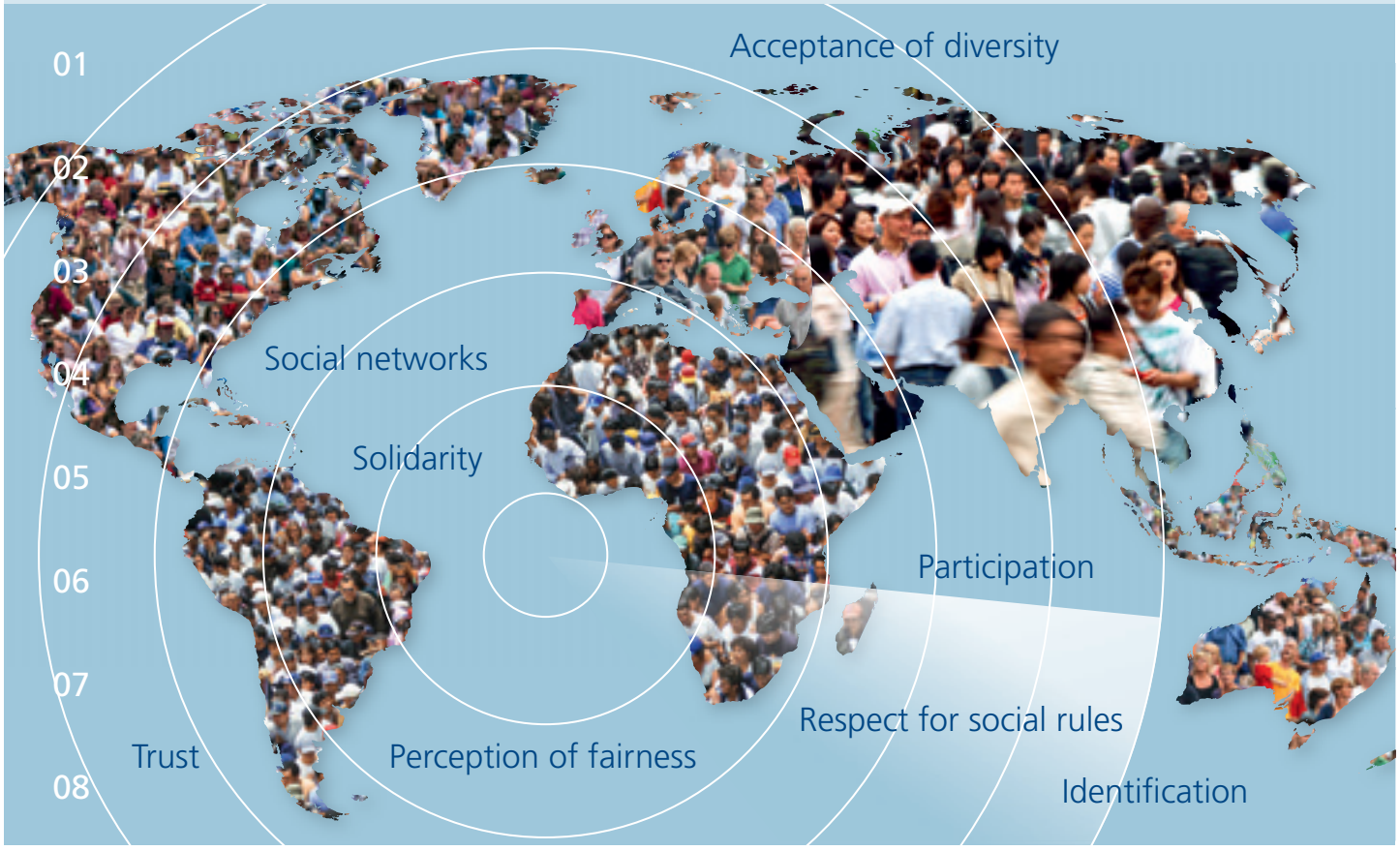
Social Cohesion **Radar**

Measuring Common Ground

An International Comparison of Social Cohesion



BertelsmannStiftung

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Foreword

Liz Mohn
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Executive Board

Western societies have undergone major changes over the past few decades, and the future will bring critical challenges: demographic change and a restructuring of welfare systems, immigration and integration, globalization and international competition, shifts in values and technological advances in both the labor market and private life. What's more, the countries of Europe and North America continue to struggle with the worst economic and financial crisis since World War II. Tensions are mounting in crisis-plagued countries. In Southern Europe there is increasing concern about rising unemployment rates – particularly among young people – and downward social mobility. Young people in Spain are demonstrating for more opportunities to participate and better prospects for the future. In the meantime, many are leaving their home countries and going abroad, to Germany in some cases, in search of work and a better future. In a time of crises and rapid social changes, how can societies ensure that they remain cohesive?

The Bertelsmann Stiftung wants to help build a sustainable, livable society – a society that fosters stable, trust-based relationships, a society to which people feel connected and in which they contribute to other people and the common good.

In today's society, it is important that no one is excluded. One of the greatest dangers

confronting us as a society is the exclusion of those who are weak or somehow different. For a society to be livable, it must include everyone and offer everyone a fair chance for a successful life. The Bertelsmann Stiftung embraces an inclusive kind of social cohesion that not only permits diversity, but also recognizes it as an opportunity.

For most countries, including Germany, immigration is an important and emotional topic. A look at a variety of countries clearly reveals how diverse and multifaceted societies have become – in terms of people's ethnic backgrounds, cultural practices and religious convictions, to name only a few examples. We are interested in understanding how different people, with different values and lifestyles, are able to live and work together, playing an active role in shaping their societies. The goal is to build bridges of understanding between people from different backgrounds, cultures and religious traditions.

Many worry that as societies modernize and become more diverse, social cohesion will decline. People are looking for something to hold onto, a place where they can feel at home. Some are yearning for the past, a time widely thought to have been more stable, humane and moral. But what do we really know about social cohesion today in Germany and similar countries?

The Social Cohesion Radar looks at trends over the past quarter of a century in social cohesion in 34 different countries. With the help of this ambitious tool, we can see which societies have been able to bring people together even during hard times, and in which societies cohesion has declined. By comparing different countries, we can learn from one another across the boundaries that divide us and work together to overcome the difficult challenges that lie ahead.

This study measures cohesion and we offer a transparent summary of our findings. We recognize that there are many different ways of achieving cohesion and that every country has its strengths and weaknesses. A comparison of countries at different points in time tells us about the factors that affect cohesion, either negatively or positively.

Knowing more, and having a better understanding of the relevant processes and interactions, is an important step toward strengthening social cohesion. Our study shows one thing very clearly: when people feel connected to their society and to each other, and when they are dedicated to the common good, they are more likely to have the chance to live a life of contentment and fulfillment.

Introduction

Surveys have shown that the majority of people believe that cohesion is declining or threatened. In a representative survey conducted in Germany in 2011, 74 percent of respondents agreed that "society is becoming increasingly fragmented," while more than half agreed that "cohesion is threatened in Germany" (Zick & Küpper 2012).

Perhaps they are thinking of people who are concerned only with themselves, no longer identifying with their communities; or perhaps they see parallel societies emerging that are no longer connected to society as a whole. Many fear that globalization, immigration, social polarization and technological change are driving people apart. Are these perceptions accurate? What is social cohesion anyway? And how can it be captured using empirical data?

Social cohesion is generally agreed to be valuable in and of itself – as the manifestation of an intact society, marked by solidarity and helpfulness, and by a kind of team spirit. It is a desirable quality that makes a society livable and sustainable. Moreover, social cohesion is often viewed as a resource, a prerequisite for economic success and for a functioning democracy. Finally, each individual's social capital – the sum of the advantages derived from membership in a community – is rooted in social cohesion. If social cohesion were declining, we might expect this to have a variety of negative impacts on life satisfaction, social harmony and economic performance.

In fact, modern Western societies are confronted with a number of challenges seem to threaten social cohesion: not only the economic and financial crisis, but also longer-term trends, including globalization, growing inequality, immigration and increasing cultural diversity. It is therefore all the more important to understand the changes that are taking place, as well as their causes and effects, so that appropriate policy decisions can be made to reinforce cohesion.

Despite the importance of this topic, evidence-based insights are sorely lacking. Although social scientists are expanding their focus to include not only "hard" economic data like gross domestic product, but also "softer" indicators like education and health, aspects of social cohesion are receiving little attention. There is as yet no established field of research that specializes in international comparisons of social cohesion; accordingly, we lack empirical answers to important questions like these: Is cohesion actually disappearing? How is Germany doing, relative to other countries?

In publishing this study, the Bertelsmann Stiftung hopes to promote public debate, but also to encourage research in this area.

The authors, Georgi Dragolov, Zsófia Ignácz, Jan Lorenz, Jan Delhey and Klaus Boehnke, developed a quantitative instrument to measure the state of social cohesion at various different points in time, relying on the definition used in a preliminary study (Bertelsmann Stiftung 2012). Under that definition, 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. Nine dimensions of social cohesion combine to form a measurable construct. This framework makes it possible to compare the state of social cohesion in different countries and to describe trends over time, in specific dimensions and in an overall index.

This investigation, which analyzes data collected over the past two-and-a-half decades, uses a complex methodology and requires a high level of expertise. Incomplete data inevitably require compromises in the selection of indicators. It may be that a specific indicator is not available for certain countries or time periods, or there may be weaknesses related to its content. The authors therefore note that their results should be seen as a "diagnostic tool" rather than as a definitive assessment. However, the study provides data that can be useful in informing and advancing a wider discussion of social cohesion. We believe to most closely satisfy the requirements made by British economist Anthony Atkinson (2005) regarding the quality of social indicators. To guide social policy, according to Atkinson, an indicator should:

a) identify the essence of the problem and have a clear and accepted normative interpretation,
b) be robust and statistically validated,
c) be measurable across countries and comparable as far as practicable,
d) be timely and susceptible to revision, and
e) be responsive to effective policy interventions but not subject to manipulation.

Our thanks go, first of all, to the authors for their innovative and exciting work. We would also like to thank the participants in the expert workshop on "Measuring Social Cohesion: A New System of Indicators," which was held in Gütersloh on January 20, 2013: Eldad Davidov, Tadas Leončikas, Heinz-Herbert Noll, Jost Reinecke, Peter Schmidt, Jürgen Schupp, Claire Wallace and Sabine Walper provided valuable comments and suggestions. We are also grateful to Oscar Gabriel and Roland Habich for their critical comments. Finally, our thanks go to the European Foundation for the Improvement of Living and Working Conditions (Eurofound) for granting us advance access to the EQLS data for 2011.

It is for good reason that this instrument is called the Social Cohesion Radar. Radar allows us to see things that are invisible to the naked eye. The Social Cohesion Radar provides a view of the current state of social cohesion and shows how it is changing; ideally, this will make it possible to identify threats to cohesion at an early stage. This initial report contains an international and chronological overview. In future studies, we will undertake a more detailed, in-depth analysis of the situation in Germany and examine the causes and effects touched upon in this study. In 2014 we will describe possible scenarios for the future and coming challenges. In this process, we hope to continuously refine and improve the Social Cohesion Radar.

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1. Cohesion: A quality of society comprised of nine dimensions

Social cohesion is a relatively new concept in quality-of-life research; it emerged in the 1990s (see, for example, Noll 2000; Pahl 1991), but its roots date back to classic works by Émile Durkheim (1897) and Ferdinand Tönnies (1887). The term refers to a specific aspect of a society's collective quality of life: the solidarity exhibited by the people of that society. In exploring the issue of social cohesion, in other words, we are exploring the sense of community that exists in a society.

"In exploring the issue of social **cohesion,** we are exploring the sense of **community** that exists in a **society.**"

Although studies of societal well-being are increasingly looking at a broader range of measures, and not just economic indices, social cohesion is rarely taken into account when comparing wealth and quality of life in different societies. The Human Development Index (UNDP 2010; UNDP 2013a; 2013b), for example, has spent 30 years measuring human development in terms of life expectancy, educational level and per capita income; social cohesion is not one of its focus areas. The Social Progress Index (Porter, Stern & Loría 2013) measures social progress in three primary dimensions: basic human needs, foundations of well-being and opportunity. Here, too, the quality of social relations is left unexplored. The OECD Better Life Index, in contrast, includes certain aspects of social cohesion under the headings of "community" and "civic engagement." Since there are ten categories in all, however, the topic of cohesion is not a major focus (see http://www.oecdbetterlifeindex.org). The Legatum Prosperity Index (Legatum Institute 2012) measures prosperity through eight dimensions of material and non-material wealth. Social cohesion is included as part of one of those dimensions: social capital. In addition to its Better Life Index, the OECD publishes another study (OECD 2011b) that sheds light on five indicators of social cohesion similar to those in the present study. However, data are reported only for 2011.

At best, therefore, existing studies permit point-in-time comparisons and not an overall assessment of social cohesion. To lay the groundwork for comprehensive empirical measurement, a review study commissioned by the Bertelsmann Stiftung in anticipation of the present project (Bertelsmann Stiftung 2012) reviewed the relevant literature on the theory behind this concept. As that study shows, there is a consensus among scholars that cohesion is a characteristic of a society; while individuals' values and behaviors affect, and are affected by, social cohesion, cohesion itself is not a characteristic of individual members of a society. Moreover,

scholars agree that there are different degrees of cohesion; societies can be more or less cohesive. The level of cohesion is reflected in the attitudes and behavior of the individuals and groups in a given society. Finally, there is a consensus in the literature that social cohesion is a multidimensional construct.

Our definition of social cohesion

The term social cohesion has to do with how members of a community, defined in geographical terms, live and work together. A cohesive society is characterized by resilient social relations, a positive emotional connectedness between its members and the community and a pronounced focus on the common good. Social relations, in this context, are the horizontal network that exists between individuals and groups within the society. Connectedness refers to the positive ties between individuals and their country and its institutions. A focus on the common good, finally, is reflected in the actions and attitudes of the members of society that demonstrate responsibility for others and for the community as a whole. These are the three core aspects of cohesion.

Each of these aspects is, in turn, divided into three dimensions: social relationships are measured by the strength of social networks, the degree to which people trust one another and the acceptance of diversity. Connectedness is measured in terms of the strength of people's identification with their country, the degree to which they trust institutions and their perception of fairness. A focus on the common good manifests itself in the level of solidarity and helpfulness, people's willingness to abide by social rules and the extent to which they participate in society.

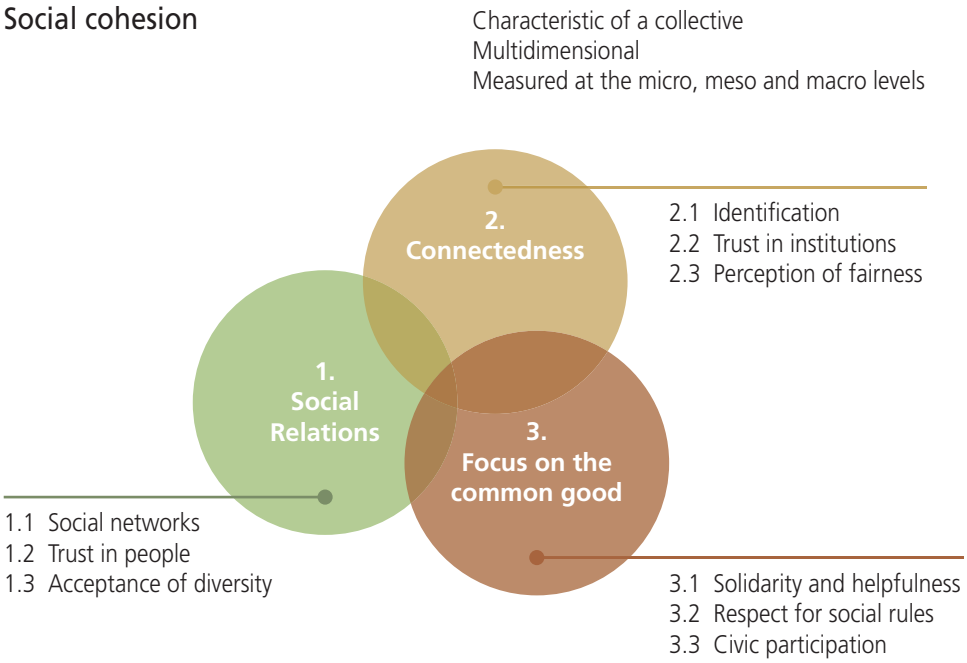
> "The term social cohesion has to do with how members of a **community**, defined in geographical terms, **live** and **work** together."

This definition is based on the review study (Bertelsmann 2012), as well as on consultations with an expert group convened by the Bertelsmann Stiftung in connection with the present study. Figure 1 shows the relevant areas and dimensions.

A streamlined concept

Our definition reflects a consensus among numerous scholars and think tanks with respect to the essential dimensions of social cohesion. It underscores the ideational and relational nature of social cohesion.

Figure 1 The three domains of social cohesion and their respective dimensions



Source: The authors

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Ideational, in this context, refers to cognitive and affective aspects, such as a feeling of belonging, while relational aspects concern the social relations between members of the society and between the groups that make up that society.

Our definition consciously excludes material wealth, social inequality and well-being, although all of these factors may play a role in other definitions of this phenomenon (cf., for example, Berger-Schmitt 2002). This is intended to simplify the concept; for our purposes, measures of cohesion should capture a specific quality of a society, rather than favorable living conditions in general. What is perhaps more important: by excluding from our definition material resources and their distribution, we are able to analyze the extent to which material wealth and inequality affect social cohesion. This is, after all, one of the most urgent questions for social policy.

"For our purposes, measures of cohesion should capture a specific quality of a society, rather than favorable living conditions in general."

By proposing this "streamlined" concept of cohesion, we are, in general, able to distinguish more precisely between the conditions, components and consequences of cohesion. Here, too, the index devised for the Social Cohesion Radar differs from many other aggregate measures of quality of life, such as the Human Development Index and the Social Progress Index. The latter indices, which seek to present a comprehensive view of social welfare, are less suitable for conducting an in-depth analysis of cause and effect.

The roles of fairness and diversity

It is important to note that our definition includes a perception of fairness, rather than objectively measurable (in)equality or (un) fairness. We believe that an observably inequitable distribution of resources is a possible cause for a low level of social cohesion, while a widespread perception of unfairness may be direct evidence of weak cohesion.

Similarly, our definition does not take into account a society's cultural, ethnic or religious diversity, but it does include acceptance of diversity: in modern societies, social cohesion is only possible if people are able to deal appropriately with diversity. This ability may be affected by the degree of cultural, ethnic or religious diversity in a society, but diversity itself is not an indicator of cohesion (or a lack thereof). Rather, social cohesion is reflected in a constructive approach to diversity.

The concept presented here deviates from mainstream research in another respect as well: our approach does not focus primarily on homogeneous values or a value consensus. First of all, it is unclear which values people would have to share to guarantee cohesion; second, it is uncertain whether cohesion in modern societies requires homogeneous values at all. Moreover, not including these aspects in our definition allows us subsequently to investigate the kind of values and level of value consensus that most affect social cohesion.

Our approach specifically avoids equating cohesion and homogeneity – in terms of the distribution of wealth, the religious and ethnic makeup of the population, or values. We believe that a homogeneity-based model is outdated and fails to account for the reality of diverse and complex societies. To paraphrase one of the founders of modern sociology, Émile Durkheim: modern societies are based not on "mechanical solidarity" (solidarity rooted in similarity), but on "organic solidarity" (rooted in diversity and mutual interdependence).

> "Modern societies are based not on solidarity rooted in similarity, but on solidarity rooted in diversity and mutual interdependence."

Inclusion rather than exclusion

Our definition, which allows for heterogeneity, also means that cohesion among the majority must not be achieved by excluding minorities.

> "Cohesion among the majority must not be achieved by excluding minorities."

For example, if a consensus were to be reached that the native-born population should be given preference over immigrants when hiring decisions are made, this would suggest a high level of cohesion, but only of the sort that excludes immigrants. Numerous examples, past and present, show that this type of exclusion can promote cohesion among the majority and is sometimes used specifically for that purpose. However, such examples – and here we need only remember the Nazi era – also show that this can have devastating consequences, particularly for the affected minorities.

In stark contrast, under our definition, which is comprised of three domains – social relations, connectedness and a focus on the common good – and nine dimensions, the goal is to achieve an inclusive form of social cohesion that not only accepts a multitude of lifestyles and identities, but views them as a strength. Further explanation can be found in Table 1, where also each dimension is summarized in a guideline for selecting individual indicators (see Chapter 2.5).

Table 1 The dimensions of social cohesion and their guiding principles

Domain	Dimension	Guideline
 **1. Social relations** create cohesion through a network of horizontal relationships between individuals and societal groups of all kinds, which is characterized by trust and allows for diversity.	1.1 Social networks	People have strong, resilient social networks.
	1.2 Trust in people	People have a high level of trust in others.
	1.3 Acceptance of diversity	People accept individuals with other values and lifestyles as equal members of society.
 **2. Connectedness** promotes cohesion through positive identification with the country, a high level of confidence in its institutions and a perception that social conditions are fair.	2.1 Identification	People feel strongly connected to their country and identify with it.
	2.2 Trust in institutions	People have a high level of confidence in social and political institutions.
	2.3 Perception of fairness	People believe that society's goods are fairly distributed and that they are being treated fairly.
 **3. Focus on the common good** promotes cohesion through actions and attitudes that help the weak, are in keeping with society's rules and allow for a collaborative approach to the organization of society.	3.1 Solidarity and helpfulness	People feel responsibility for others and are willing to help them.
	3.2 Respect for social rules	People abide by the fundamental rules of society.
	3.3 Civic participation	People participate in society and political life and enter into public discussions.

2. Method of measurement: Analysis of existing data sources

Unlike one's body temperature, for example, cohesion is not an objective condition that can be easily measured. Accordingly, the measurement instrument developed for this study is inevitably complex, and a number of steps are required to determine even an approximate level of cohesion in a society, expressed as a value of an overall index.

"The measurement instrument is inevitably complex, and a number of steps are required to determine the level of cohesion in a society, expressed as a value in an overall index."

The following section outlines the analytic pathway leading to that determination: the selection of time periods and countries, the data sets used, the choice of individual indicators and the fundamental principles of our calculation method. The country-specific data sets, along with the overall index of cohesion, will be made available for download, along with data on the various dimensions and indicators. A separate report on our methodology will contain more information detailing how we calculated the dimension values and the overall index, based on the raw data.

2.1 Countries studied

Our study looks at the level of social cohesion in 34 countries. They include the 27 members of the European Union (EU) before the accession of Croatia as well as seven other Western members of the Organization for Economic Cooperation and Development (OECD): Australia, Israel, Canada, New Zealand, Norway, Switzerland and the United States. These countries were selected for conceptual as well as pragmatic reasons. First, most of them are at a similar stage in their social, political and economic development – which is crucial for a useful comparison. Second, sufficient data are available for these countries. Table 2 provides an overview of the countries in the study.

2.2 Time periods

We measure social cohesion over a period of nearly 25 years, from 1989 to 2012. This was a time of considerable global upheaval, including the collapse of the socialist countries and the expansion of the EU. People's daily lives were revolutionized by new communications technologies and the transition to a knowledge society. It was a time of massive immigration – in larger numbers than many Western countries had ever before experienced – and reforms of the welfare

Table 2 Countries in the study

EU and OECD		
Belgium (BE)	United Kingdom (GB)	Portugal (PT)
Denmark (DK)	Ireland (IE)	Sweden (SE)
Germany (DE)	Italy (IT)	Spain (ES)
Estonia (EE)	Luxembourg (LU)	Slovakia (SK)
Finland (FI)	Netherlands (NL)	Slovenia (SL)
France (FR)	Austria (AT)	Czech Republic (CZ)
Greece (GR)	Poland (PL)	Hungary (HU)

EU alone		
Bulgaria (BG)	Lithuania (LT)	Romania (RO)
Latvia (LV)	Malta (MT)	Cyprus (CY)

OECD alone		
Australia (AU)	New Zealand (NZ)	United States (US)
Israel (IL)	Norway (NO)	
Canada (CA)	Switzerland (CH)	

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state. Today, Western societies are more globally connected and under greater pressure to change than they were in the "golden age" of the welfare states, which ended in the 1980s.

Since the fabric of a society is unlikely to change from one day to the next, even in turbulent times, it is only logical for our analysis to cover long periods. We therefore focus on four time periods (Table 3). Here, too, we are guided by conceptual as well as pragmatic considerations: it is important to define the survey periods in a logical and historically appropriate way, but we also need to keep in mind the data sets that are available.

"Since the composition of a society is unlikely to change from one day to the next, it is only logical for our analysis to cover long periods of time."

Table 3 The four survey periods

1.	2.	3.	4.
1989 to 1995	1996 to 2003	2004 to 2008	2009 to 2012

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The first period starts with the fall of the Berlin Wall and continues through the terms of office of the first democratically elected governments in the countries of the former Eastern Bloc. The second encompasses the years in which intense preparations were underway to expand the European Union – primarily by admitting post-socialist countries. The third period begins with the year of the major expansion of the EU toward the east and ends in 2008, when the global economic and financial crisis began. The fourth period, finally, begins in the crisis year 2009 and ends in 2012, the last year for which usable data are available. Assigning the two crisis years 2008 and 2009 to separate periods was largely a pragmatic decision; insufficient data were available for the period 2010–2012, but this problem was solved by including the year 2009 in the final period of our study.

2.3 Secondary data analysis

The present study constitutes a secondary data analysis. It is based on existing data that were collected for a wide variety of research purposes. We rely on data from representative international surveys as well as expert assessments and information provided by international institutions.

A secondary data analysis offers numerous advantages. It enables us to compile valid, reliable indicators for measuring social cohesion. Moreover, a secondary data analysis is the only reasonable method for comparing time periods. The alternative – retrospective surveys ("What was it like 20 years ago?") – reveals less about the past than about our perspective on it today.

"A secondary data analysis enables us to compile valid, reliable indicators for measuring social cohesion."

Secondary data analyses have disadvantages as well, of course, but in this case they are outweighed by the advantages outlined above. The first disadvantage is that secondary data are typically generated from research projects with different purposes. Consequently, they do not always include indicators that reflect the same conceptual approach and thus measure precisely what we hope to measure based on our definition of social cohesion. The second disadvantage is particularly evident when a study covers a substantial period of time, as ours does; in that case data are often drawn from different sources and are thus not entirely comparable. Finally, there are gaps in the data available for certain countries if – for whatever reason – specific studies were not conducted at the appropriate time.

Luckily, quantitative social research methods have improved substantially over the past two decades. Statistical methods such as factor analyses (see glossary in the Appendix) make it possible to capture only the part of an indicator that is relevant for measuring the dimension in question. In addition, algorithms can be used to impute missing data based on the complete data set. To confirm the validity of this method, existing data are removed

from the data set, their values are imputed with the help of the remaining data, and the results are compared. Contemporary statistical programs – in our case generally the Mplus program (Muthén & Muthén 1998–2011) – provide nearly ideal estimation possibilities. Our methodology report contains a detailed description of the relevant problems and solutions (www.social-cohesion.net).

2.4 Data selection

Data sources used

We have used the following data sets in our analysis:

1. World Values Survey (WVS or WEVS)
2. European Values Study (EVS or WEVS)
3. Gallup World Poll (GWP)
4. European Social Survey (ESS)
5. European Quality of Life Survey (EQLS)
6. International Social Survey Program (ISSP)
7. International Social Justice Project (ISJP)
8. Eurobarometer (EB)
9. International Crime Victims Survey (ICVS)
10. International Country Risk Guide (ICRG)
11. Shadow Economies in Highly Developed OECD Countries (Schneider & Buehn 2012, abbreviated S&B)
12. Measures of Democracy 1810–2010 (Vanhanen 2011, abbreviated VAN)

More precise information about the individual data sets and a table showing which data sets were used for which survey periods and countries can be found in the Appendix (Section 7.1).

Certain value judgments are inevitable

A study of social cohesion is not a value-free endeavor. Conducting such a study, in itself, suggests that social cohesion is a positive value. Moreover, our definition of cohesion, along with its various domains and dimensions, is based on certain value judgments, not on a completely neutral summary of the existing academic literature (which, for its part, is not value-neutral either). Similarly, the idea that social cohesion requires an acceptance of diversity is a value judgment as well.

"Conducting such a study, in itself, suggests that social **cohesion** is a **positive** value."

Nor is our selection of indicators, described in Section 2.5, value-neutral, although it was based on guidelines developed by psychologists and social scientists for ensuring high-quality measurement. At any rate, a value judgment is always involved in the initial choice of indicators whose measurement quality is to be reviewed. While the subsequent quantitative and statistical assessment of those indicators is intended to demonstrate their suitability, it does not produce value-neutral measures.

Finally, it is important to distinguish between normative/evaluative and neutral/descriptive indicators. Respondents might be asked, for example, whether they believe that gays and lesbians should be able to live as they see fit (acceptance of diversity) but they might also be asked whether conditions in a given residential area, region or country are such that gays and lesbians would be able live a good life there. The first question tends to be normative/evaluative, the second neutral/descriptive. We have made every effort to include both types of indicators. Whenever it was necessary to choose between equally valid indicators, however, for example when there was an overabundance of indicators related to a specific dimension, we have given preference to the neutral/descriptive type.

2.5 The procedure, step by step

Plausibility-based selection of indicators

We presented our definition of cohesion in Chapter 1. Based on that definition, our research team reviewed the available data sets and selected indicators they believed to be plausible. If an indicator was selected by all five members of the team, independent of one another, that indicator was included in the steps described below.

From individual data to country measures

Most of our data were drawn from surveys including an average of 1,000 respondents in each country. By averaging the results, we converted the data into country measures. As noted above, we define social cohesion as a quality of a societal unit (in this case a country) rather than of an individual. Accordingly, our analyses relate to countries and not to specific individuals.

The Gallup World Poll, too, deals with individual data; however, the data that were available to us from that source had been aggregated, i.e. they had already been converted into country-based measures. Indicators from other sources, such as expert ratings of ethnic conflicts or informal labor, are usually available at the country level. Such data are sometimes referred to in the literature as "objective" indicators because they are not (or at least not directly) derived from individual interviews. We believe that this is misleading, and prefer instead to speak of neutral/descriptive indicators. As noted above, however, indicators are located on a continuum between normative/evaluative and neutral/descriptive; there are not two distinct types (such as subjective vs. objective).

From years to survey periods

As described above, we measure social cohesion in four time periods. In the rare cases when data on a given indicator were available from a single data set for two different years that were part of the same survey period, we averaged the relevant indicators.

Limiting the number of indicators

The next step was to eliminate many of the indicators, either because they were available only for a single period or because they were only available for some of the countries. When indicators were similar or identical, we selected those that included the largest number of countries and time periods.

From a statistical perspective, the 34 countries we selected constitute a relatively small sample. According to a widely accepted rule of thumb, no more than 11 indicators should be used for each dimension and time period (Cattell 1966). An additional selection step was therefore needed. We were guided by the following principle: indicators could be used only if data were available for at least two survey periods and ten countries. There is an exception to every rule, however: indicators drawn from a data set that was available for only a single time period could still be used if a similar indicator could be found in a different data set for another time period. We also made an exception for neutral/descriptive indicators recognized in the literature as particularly well suited to capturing a certain dimension of social cohesion. This permits us to draw comparisons between our results and those of other studies.

"We take a narrow-choice approach to social research, using a limited number of indicators to capture theoretically based variables."

Following the selection rules described above, we take a narrow-choice approach to social research, using a limited number of indicators to capture theoretically based variables. A prominent example of this approach is the Human Development Index, mentioned above, which compiles information on average life expectancy, educational level (with three subindicators) and per capita income using the geometric mean (the nth root of the product of n indicators) into an index of a country's level of development.

Evaluating data quality using exploratory factor analyses

The next step, aimed at ensuring that the selected indicators were reliable measures of their intended dimensions, was to conduct exploratory factor analyses at the country level. It was assumed that these are reflective indicators (see glossary in the Appendix). These analyses allowed us to determine whether the correlation between the selected indicators was strong enough to show that they all measure the same dimension of social cohesion, or at least some part of it. Indicators that were only weakly correlated were excluded. In keeping with relevant review articles (cf. Peterson 2000), we set the threshold value for factor loading (the correlation between the indicator and the dimension) at 0.25. Table 5 in the Appendix shows a list of all 58 indicators used to calculate measures for the nine dimensions of cohesion.

Measuring the nine dimensions

It is important to repeat that not all indicators are available for all time periods. Using reflective indicators, however, we have the alternative of capturing each dimension using various individual indicators. To put it in simple terms, those individual indicators serve as proxies for the dimensions of interest – and if one proxy (indicator) is not available, another can take its place.

Our data fulfill the necessary statistical requirements: our confirmatory factor analyses show correlations between the indicators that are available for all time periods and those available for only some of our measurement times. These analyses also generate the desired measures of social cohesion for the 34 countries in their nine dimensions.

This approach has one limitation: it is not always possible to determine whether changes in results over time reflect societal processes, i.e. actual changes, or rather the use of different indicators. However, after conducting longitudinal confirmatory factor analyses we are confident that we are dealing here primarily with real changes.

Another aspect of our reflective measurement model is that it permits only relative conclusions about a country's social cohesion, showing where each country stands in a given survey period relative to the other 33 countries. It is impossible to draw conclusions about the absolute level of social cohesion, or about whether cohesion has become stronger or weaker in absolute terms. Although we would like to be able to do so, this is not possible using existing data.

Calculating dimension values

As noted above, data on specific dimensions, in specific countries, at specific times are incomplete. A reliable statistical method known as full-information maximum-likelihood estimation is a straightforward solution to this problem. Available data from other periods are used to impute missing values in a given time period. The statistical properties of this method are superior to any other alternative, such as simply substituting data from other time periods. Dimension values estimated in this way are clearly marked in our results section, and although this is a

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Example of reflective indicators

An example from a different area may shed light on the issue of determining plausibility: universities in many countries require applicants to take the SAT test, which measures mathematics and English skills. Questions (= individual indicators) are changed from year to year to prevent students from sharing them with one another. Yet the results of the test remain comparable over time and are a reliable measure of math and English skills (= underlying phenomenon).

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Threshold values for the five groups

Uniform threshold values for each dimension were used to determine where one group ended and the next began. All of the dimension values were standardized in this process, i.e. they had a mean value of zero and a standard deviation of one. The threshold values were set in a way that ensured a normal distribution (bell-shaped curve), with approximately 20 percent of the countries in each group. For our sample of 34 countries, this meant that there would normally be six countries in the middle group and seven in each of the others. We used the same procedure for grouping the countries in the overall index, which is based on the mean of all of the dimension values. The empirical values in the dimensions, however, do not have a normal distribution. As a result, the individual dimensions and the overall index may differ with respect to the number of countries in each group.

proven method of estimation, greater caution is advised when interpreting imputed data.

When all dimension values are available for all countries and survey periods, the calculated values are standardized based on their variance to ensure that the country values for all nine dimensions have the same variance from zero. After this step is completed, the overall index of social cohesion can be calculated.

Overall index of social cohesion

Our calculations produce values for the nine dimensions of social cohesion for all of the countries in the study. However, it is helpful to combine these dimensions into a single score. To do this, we have calculated an overall index of cohesion by averaging across nine dimension values. We have also calculated partial indexes for the three domains of cohesion – social relations, connectedness and a focus on the common good – by taking the means of their respective three dimensions. Since the values of each of those dimensions are standardized, all dimensions have equal weight in the calculation of the overall index.

We generally use a formative method of indexing, with the various dimensions acting as building blocks for the respective index, without further consideration of correlations. This is a common method used in social science as well as economic research. The Human Development Index, too, uses this approach. The previous study (Bertelsmann Stiftung 2012) provides evidence that this choice is appropriate; we generate indices using dimensions that belong together, based on the scientific literature.

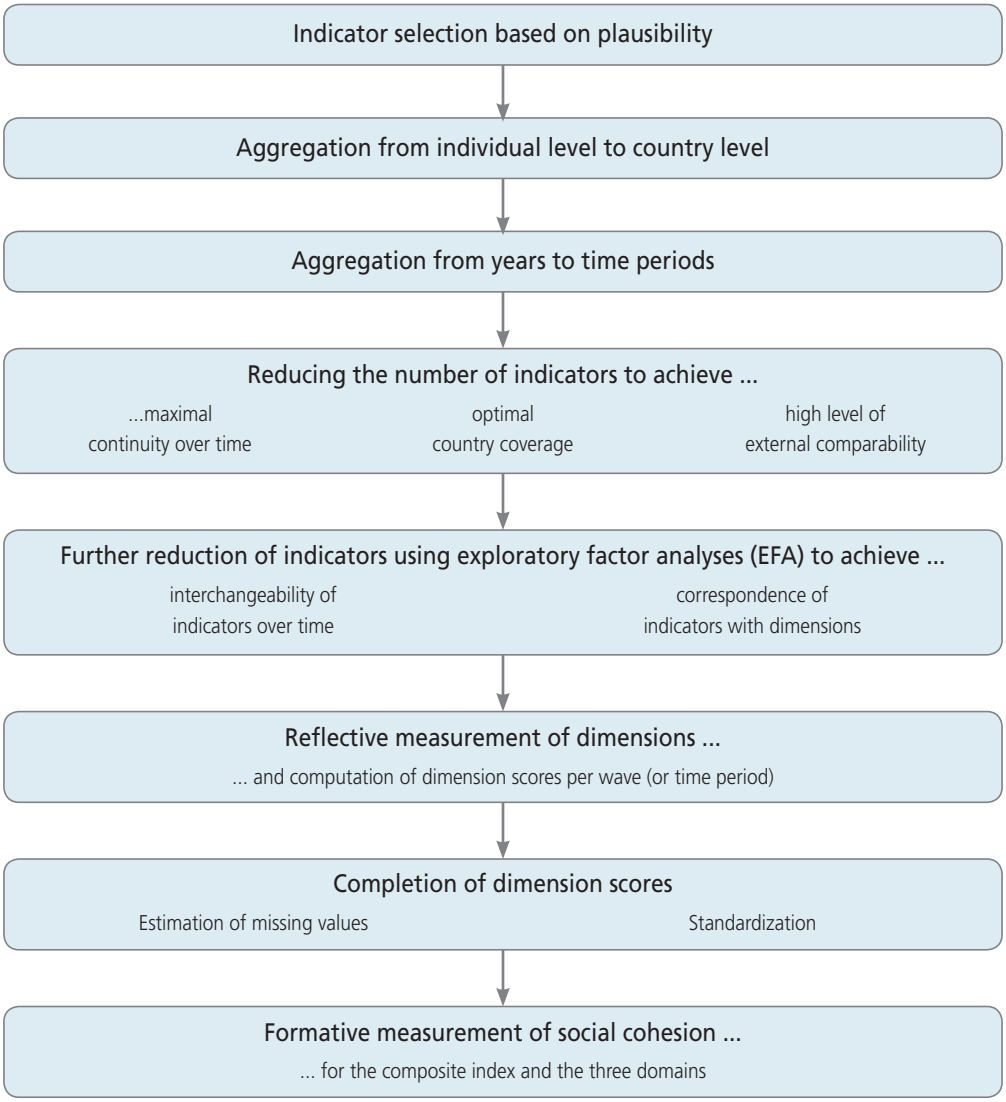
Grouping the countries

Based on the values of the various dimensions, the countries were divided into five groups. This was done separately for each dimension, resulting in the following structure: top tier (dark blue), second tier (blue), middle tier (light blue), fourth tier (yellow) and bottom tier (orange).

It is important to underscore once again that a comparison of a country's group membership over time shows only a relative change compared with other countries. If, for example, a country moves from the third to the second tier between the third and fourth survey periods, this does not necessarily mean that cohesion, in absolute terms, has become stronger, since cohesion in comparison countries may have declined. However, it is possible to identify absolute trends in individual indicators that are found in several survey periods in identical form.

We are not including precise dimension values in this report – although they are available in the data set – because we want to avoid the temptation to overinterpret our results as showing absolute differences. Otherwise, readers might look at these seemingly precise figures and conclude, for example, that "cohesion in country X is twice as strong as in country Y." Our data base and measurement method do not allow for such conclusions. Note also that because of our uniform threshold values, two very similar countries might still be found in different groups.

Figure 2 Steps for identifying measures of social cohesion



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3. Findings: An international comparison of social cohesion

3.1 Overview of rankings

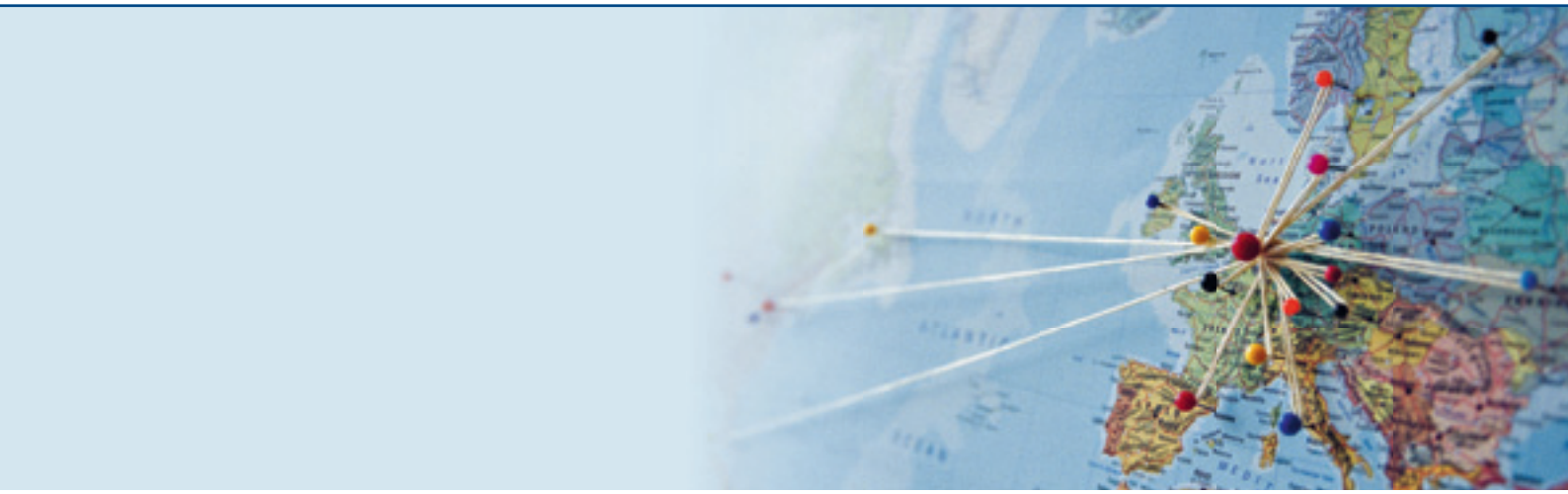
Which countries have a relatively high level of social cohesion? In which countries is it weak? Figure 3 shows the current rankings of the 34 countries and to which of the five groups they belong. They are listed in descending order, according to their score in the overall index of social cohesion. The columns to the right show the groups to which each country belongs relative to the nine dimensions (the Appendix shows the rankings for the three prior survey periods: Figures 16–18). Figure 4 shows the trend over time (relative changes) in the overall index of social cohesion from 1989 to 2012 for all countries.

"Social cohesion is strongest in **Denmark,** followed by Norway, Finland and Sweden."

Social cohesion is strongest in Denmark, followed by Norway, Finland and Sweden. The English-speaking non-European countries are next, ranking fifth through eighth. They are followed by relatively small, wealthy countries in Western Europe, as well as Germany, which manages to join the second tier. The middle tier includes three of the major EU countries: the UK, France and Spain. The fourth tier, consisting of countries of eastern Central Europe and the Mediterranean region, ranges from Estonia to Cyprus. The bottom tier, finally, includes the two Baltic states Lithuania and Latvia, as well as the Southeastern European countries of Bulgaria, Greece and Romania. Overall, a surprisingly clear geographic pattern emerges, ranked from top to bottom: Northern Europe; North America and Oceania; Western Europe; Southern Europe and eastern Central Europe; the Baltic region; Southeastern Europe. This is the same pattern we find in other international comparisons that focus on such issues as quality of life or subjective well-being.

Typical and atypical dimensions

If we look at the nine dimensions, we see that in each country, the level of individual aspects of cohesion may vary. Norway and Sweden, for example, are in the top group for nearly every dimension, but in the middle for their citizens' identification with their country. Similarly, the Netherlands, Germany and the UK are in the second tier for many of the dimensions, but the level of identification is low – putting them in the bottom group. Conversely, countries with a relatively low overall score for cohesion may do well in certain areas: Portugal and Romania, for example, have a considerably higher score for acceptance of diversity than for most of the other dimensions – and they do better



in this regard than many Western European countries. In Cyprus, Bulgaria and Greece, people identify strongly with their country; they are in the top group for this dimension, despite generally low levels of cohesion. Overall, however, the picture is quite consistent. Social cohesion manifests itself in a similar way in a variety of areas.

"Social cohesion manifests itself in a similar way in a variety of areas."

Identification with one's country and acceptance of diversity are more likely than other dimensions to differ from the overall level of social cohesion, and it is no accident that the examples in the previous paragraph relate to those dimensions. In other words, information about how strongly citizens identify with their country does not necessarily reveal the overall strength of social cohesion. However, if we know how resilient a country's social networks are, or how fair or unfair people perceive their societies to be, we have a good idea of the state of social cohesion in general. This is borne out by an empirical analysis of correlations between the various dimensions. That analysis shows that while most dimensions are closely correlated, identification and acceptance of diversity are exceptions. Particularly close associations are found for social networks, trust in other people and a perception of fairness. Our empirical analysis examined the dimensions' correlation and distance matrices; multidimensional scaling was used to provide a visual representation.

This can mean that identification with one's country reflects a kind of "mechanical solidarity," something post-industrial societies may no longer need in order to sustain other aspects of social cohesion. The leverage effect of identification on other dimensions is likely to be small, since they are only loosely correlated. The situation is likely to be different with regard to trust in other people; for example, in this case there are probably positive effects on other dimensions, which means that increasing trust can be a valuable means of strengthening cohesion overall. Acceptance of diversity is also an exception, as noted above, probably because it involves a complicated mix of fundamental solidarity, current problems (large numbers of immigrants, for example) and political strategies (assimilation versus a multicultural society). Add to that specific situational factors, such as the murder of Theo van Gogh in the Netherlands and the shifts in public opinion that followed, and the result is a relatively loose connection to other aspects of cohesion.

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Explanation of figure:

Figure 3 lists the 34 countries based on the overall index of social cohesion. To avoid over-interpretation, the precise numbers of the cohesion index are not given; rahter, the scores are used to divide the countries into five color-coded groups: countries in the top tier (Denmark to Australia) are identified by a dark blue dot in the left-hand column. They are followed by the second tier (blue dot), the middle tier (light blue dot), the fourth tier (yellow dot) and the bottom tier (orange dot). Germany manages to join the second tier; Romania brings up the rear.

The same procedure is followed for the nine dimensions. Denmark is in the top group for nearly every dimension; it ranks "only" in the second tier for solidarity and helpfulness and for respect for the social rules. The United States and the Netherlands are in the top group for these two dimensions. Germany, for its part, is in the second tier for most of the dimensions as well as in the overall ranking. Its results are somewhat worse for acceptance of diversity (third tier) and considerably worse for identification (bottom group). Germany's ranking for respect for the social rules, in contrast, is above average; among the top countries in this category are Germany, the United States and the Netherlands.

All of the above relates to the fourth survey period (2009 to 2012), while Figure 4 shows the overall trend across all four survey periods since 1989. Here we show only the overall rankings based on the summary index, which is also the basis for the column at the far left. Denmark, Norway and Sweden are always positioned in the top group (four yellow dots), while Finland moved from the second to the top tier in the second survey period. Germany only recently joined the second tier; during the three previous periods it was in the middle tier along with Spain, Belgium, France and Malta.

Changes over time

Figure 4 also sheds light on changes that have occurred over time. Numerous countries have maintained their position throughout all four time periods, as reflected in their color coding. In all of the Nordic countries except Finland, cohesion has remained at a very high level throughout the 24-year period; they rank at the top. Other examples of stability include the Netherlands, Austria, Spain, Poland, Italy and Cyprus.

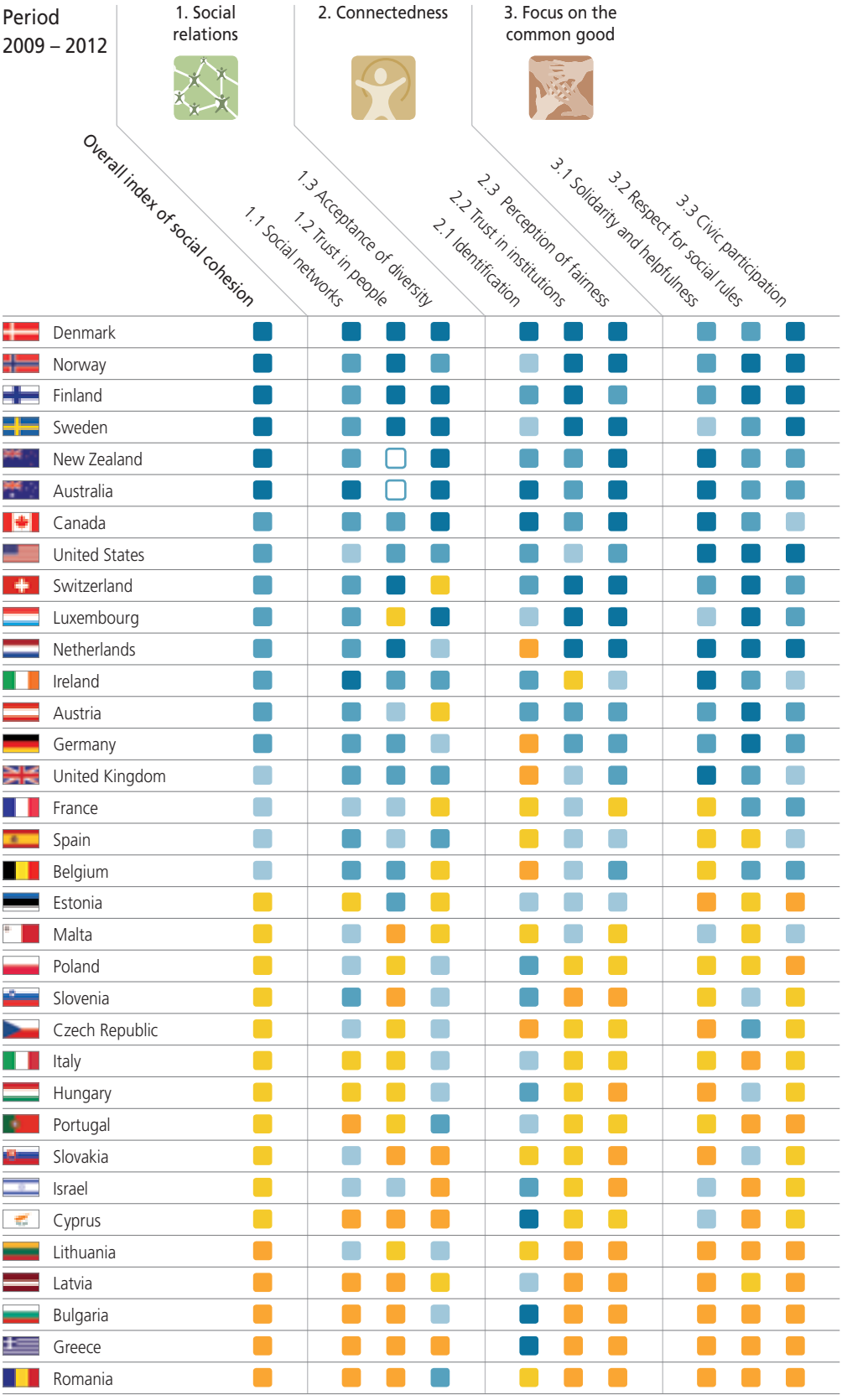
"Social cohesion is a very stable characteristic of a society."

Our results show that social cohesion is a very stable characteristic of a society. As a rule, it does not change dramatically over the short term (although it will be important to take a closer look in the next few years at the Southern European countries that have been particularly affected by the economic and financial crisis). Changes that do occur usually involve moving to the next higher or lower group. It was only in the case of Malta that rankings changed by more than one tier. Among the countries that have shown relative improvement are Finland, New Zealand, Australia, Germany and Slovakia; the trend was downward for the United States, the UK, France, Latvia and Bulgaria, as well as – as mentioned above – Malta. Canada has fluctuated between the two top groups. Future analyses will have to explore the causes of these changes in more detail.

3.2 Germany ranks in the second tier

Germany is in the second tier with regard to the overall index of social cohesion, and this also holds true for several individual dimensions: social networks, trust in other people,

Figure 3 An international comparison of social cohesion (2009 – 2012)



The figure shows mean values for the nine dimensions for the EU and Western OECD countries. The five colors designate the top tier (dark blue = ■), second tier (blue = ■), middle tier (light blue = ■), fourth tier (yellow = ■) and bottom tier (orange = ■). White dots (□) designate dimension values that were estimated based on other time periods.

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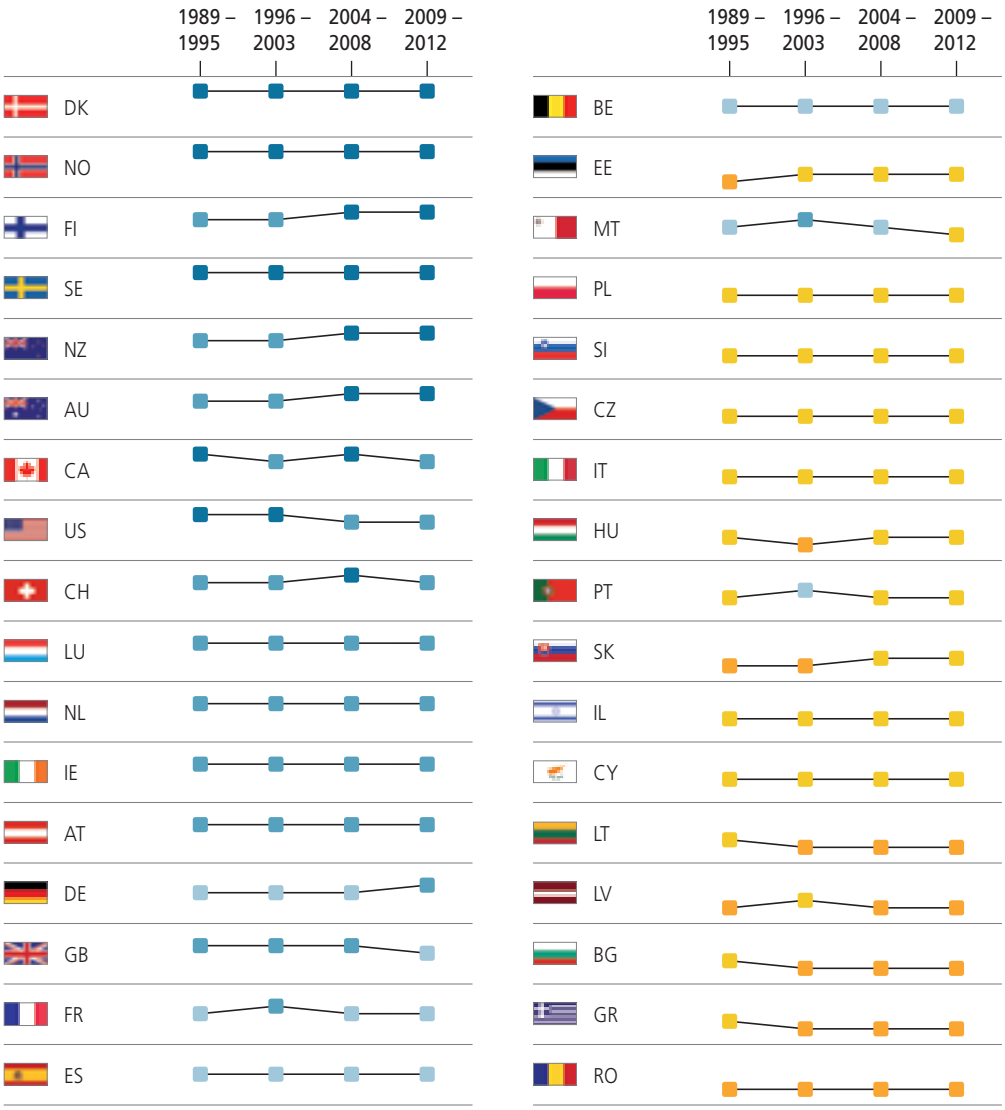
Figure 4 Social cohesion over time



The figure shows trends in the overall index of social cohesion over the four survey periods. The five colors designate the top tier (dark blue =),second tier (blue =), middle tier (light blue =), fourth tier (yellow =) and bottom tier (orange =).

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trust in institutions, perception of fairness, solidarity and helpfulness and civic participation. Its results are by no means uniform, however. Germany does particularly well when it comes to respect for social rules,

"Germans do not identify strongly with their country – a fact that can probably be attributed to their **experiences** with the disastrous **Nazi era** and its crimes."

ranking among the top countries. This confirms the stereotype of Germans as orderly, law-abiding people.

Germany does less well in two dimensions: most notably, Germans do not identify strongly with their country – a fact that can probably be attributed to their experiences with the disastrous Nazi era and its crimes. Germany ranked 33rd out of 34 countries during the first three survey periods. The theory that this is due to Germany's history

is supported by the fact that identification remained weak throughout the period of the study; even the ebullient national mood that accompanied the country's hosting of the World Cup in 2006 did not fundamentally change the situation (Germany moved up from 34th to 30th place, but was still in the bottom group). However, it appears that a certain distance toward one's own national identity is fairly common in Western Europe – and this may be a positive thing. Two other countries were also consistently in the bottom tier: Belgium and the Netherlands.

A worrisome trend with regard to acceptance of diversity

Germany is only in the middle tier for acceptance of diversity, with numbers similar to those of the Netherlands. The trend for this dimension appears to be most problematic (see Figure 5); Germany has lost considerable ground since the turn of this century. This trend has long been evident, and cannot be attributed to the economic crisis of the past few years – which, after all, Germany has weathered more successfully than many other European countries.

"Integration is needed – not only of immigrants, but of anyone who is 'different.' "

Steps should be taken to give immigrants and people with different lifestyles access to Germany's relatively intact social networks: integration – not only of immigrants, but of anyone who is "different" – is needed if Germany is to reap the benefits of diversity. Note, once again, that Germany's decline in this area is relative to other countries rather than absolute.

Further trends

As Figure 5 also shows, Germany's social cohesion has remained relatively stable since reunification, relative to other countries, with a positive trend since 2008.

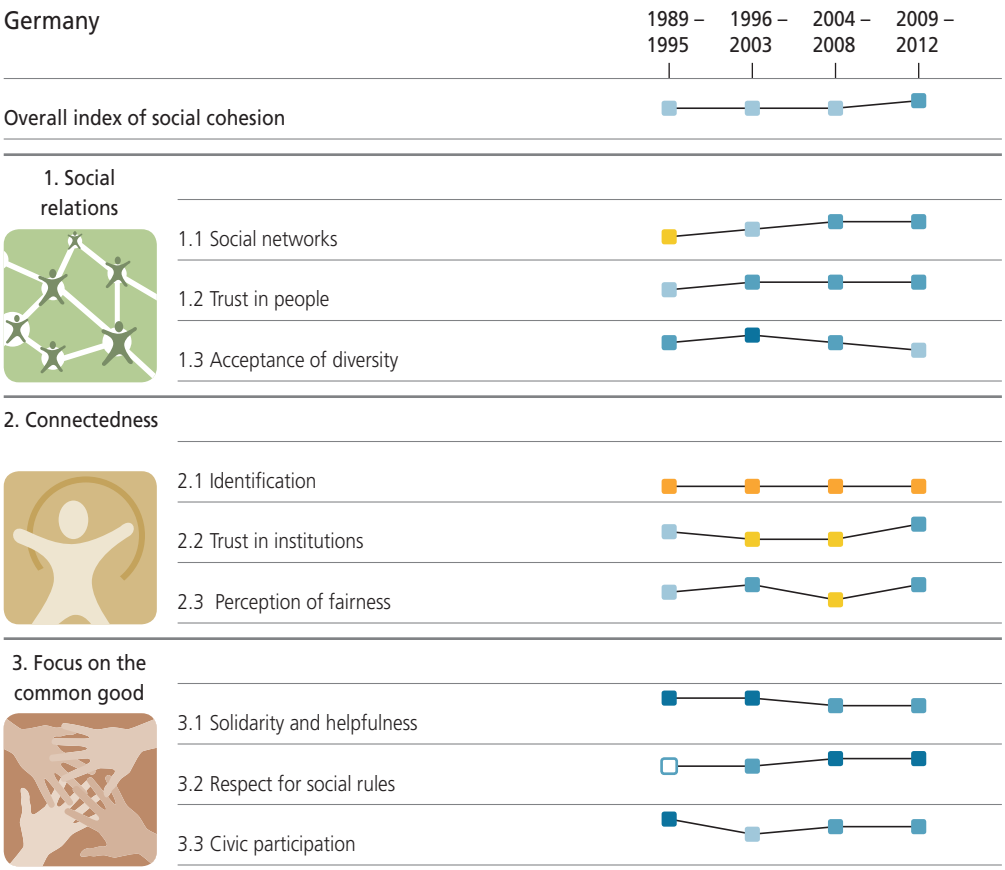
"Relative to other countries, social cohesion in Germany is showing a positive trend."

Germany was in the middle tier from the 1990s to the first decade of this century, but has since managed to join the second tier, if only barely. There is still a large gap between its current position and the top group.

A particularly positive development – again, relative to other countries – is apparent in the area of social networks, which are more tight-knit today than they were in the 1990s. Germany moved up somewhat in its rankings for trust in people, trust in institutions and perception of fairness. In the case of the latter two dimensions, however, no linear trend can be identified. As for perception of fairness, Germany was in the second tier during the second half of the 1990s, only to slip down to the fourth tier as the Hartz reforms of unemployment and welfare benefits were being implemented. Today, with declining unemployment and rising wages, it has again moved up to the second tier. Trust in institutions has risen during this same period, and this too can probably be attributed to Germany's success at weathering the euro crisis, which by far exceeded expectations. How the burdens of the euro and debt crisis will affect perception of fairness and trust in institutions in the near future remains to be seen.

Respect for social rules is also on the rise in Germany, whereas there is a slight decline in solidarity and helpfulness. Overall, in this aspect of cohesion (focus on the common good) Germany maintained ist place in the second tier.

Figure 5 Trends in social cohesion in Germany



The figure shows values over time for the overall index of social cohesion and the nine dimensions. White dots designate dimension values that were estimated based on other time periods.

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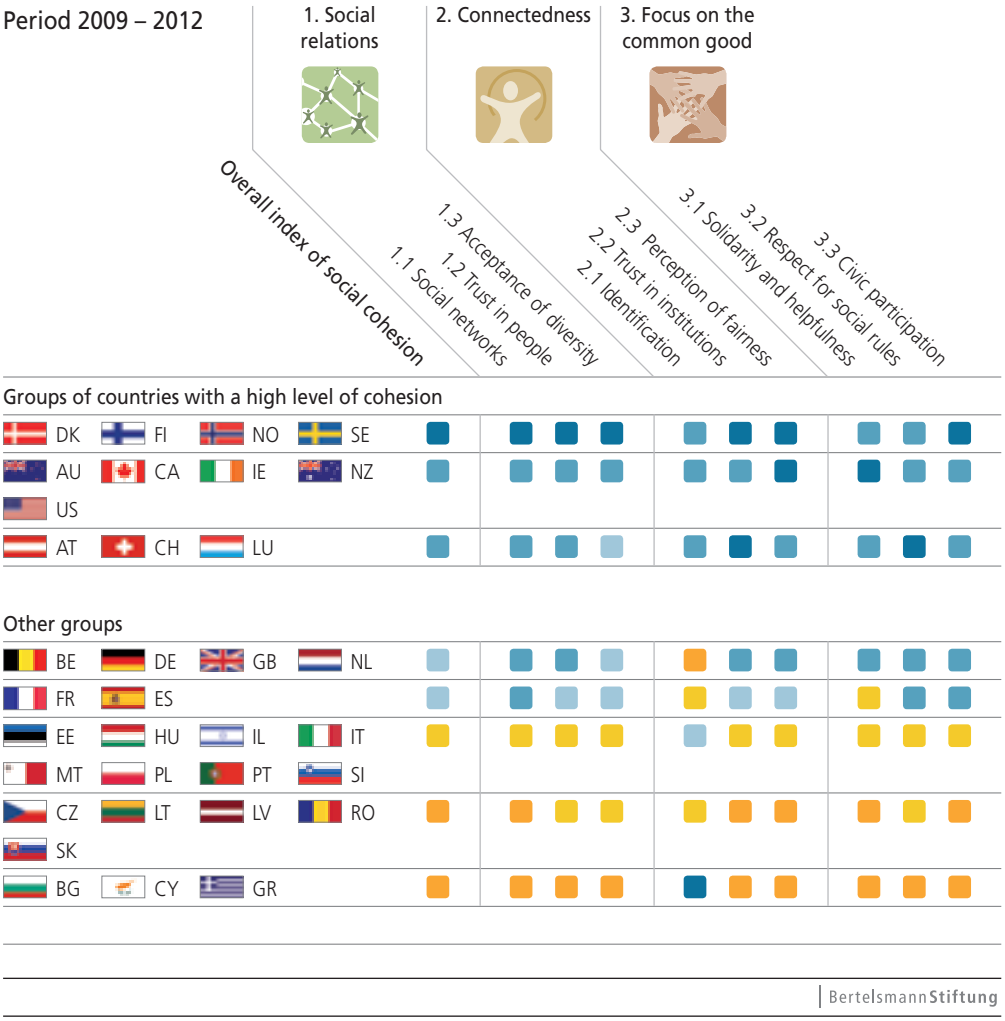
3.3 Three patterns of cohesion: Nordic, English-speaking and Alpine countries

So far our discussion has focused on the overall index. Another approach is to look at the various dimensions and form groups of countries with a typical pattern of social cohesion. This is precisely what we have done by conducting a similarity analysis (multidimensional scaling). We have grouped together countries with similar profiles. There are a number of statistical methods for analyzing such groupings. Our similarity analysis is intended to provide initial insights and we encourage others to conduct a more detailed analysis. Figure 6 shows the groups of countries and their profiles. These groups are quite similar to those identified based on the overall index of social cohesion. The three top groups include a variety of successful patterns of strong social cohesion: a “Nordic” pattern, an “English-speaking” pattern (but not including the UK) and an “Alpine” pattern (which also includes Luxembourg, although it is obviously not an Alpine country).

In the Nordic countries of Denmark, Finland, Norway and Sweden, which consistently rank at the top, a universal welfare state actively redistributes wealth and promotes equality of opportunity. The quality of these countries’ institutions is also unusually high. These appear to be the factors behind the strong social cohesion in the Nordic pattern.

Figure 6 Typical patterns of similar countries (2009 – 2012)



A second pattern is found in the English-speaking countries of Australia, Canada, New Zealand and the United States, as well as Ireland, which generally rank right behind the Scandinavian countries. They are equal to the Nordic countries in terms of perception of fairness, and outperform them on solidarity and helpfulness. It is interesting to note that conditions in these countries are quite different from conditions in the Nordic countries; for example, their welfare systems are less active in redistributing wealth, and their societies are characterized by a larger gap between rich and poor. As immigrant societies, the non-European countries are ethnically and religiously heterogeneous; multicultural policies are in place to manage that heterogeneity. Ireland, traditionally a country of emigration, has seen considerable immigration over the past ten years. In this group are two relatively religious countries: Ireland and the United States. These countries appear to be able to achieve a level of social cohesion similar to that found in the relatively non-religious Nordic countries, under very different circumstances.

"The English-speaking countries appear to be able to achieve a level of social cohesion similar to that found in the Nordic countries, under very different circumstances."

The third group, which has a particular profile and is also characterized by an above-average level of social cohesion, is made up of Luxembourg, Austria and Switzerland. These countries are particularly strong with respect to trust in institutions and respect for social rules. Acceptance of diversity is relatively weak, particularly in Switzerland and Austria, which have below-average scores on that dimension. This is also the dimension that has shown a negative trend in these two countries. Populist political parties and Switzerland's notorious referendum proposing a ban on minarets are in keeping with these results. Most notably, the countries in this group are small and wealthy.

Germany, the UK, the Netherlands and Belgium share a similar profile with respect to social cohesion. While they are in the second tier for numerous dimensions, they are generally in the bottom group for identification and in the fourth tier for acceptance of diversity. The countries in this group have seen a relative decline in acceptance of diversity; this is not a new phenomenon, but a trend that has been observed for the past ten years. France and Spain rank generally somewhat behind Germany's group; however, the level of identification in these countries is slightly higher than in Germany.

The lower half of the rankings, which includes the Central, Eastern and South-eastern European countries as well as Israel, is divided into two groups. One group typically ranks in the fourth tier for nearly every dimension, but higher with respect to identification. The countries in the other group show lower scores for identification and are in the bottom group with respect to several other dimensions, but they often outperform the countries mentioned above in terms of acceptance of diversity, although their average scores, too, place them in the fourth tier. Bulgaria, Greece and Cyprus are in the top tier for identification, but in the bottom group for every other dimension.

The three top groups in terms of social cohesion have remained quite stable since 1989. This is not true of the other groups, where certain fluctuations can be observed. For example, results for Ireland and the UK were very comparable in the 1990s, but then their paths diverged and they became more similar to the other countries in their current groups. Similarly, the group made up of Germany, France, Belgium and the Netherlands was almost indistinguishable in the 1990s from the group comprised of Austria, Switzerland and Luxembourg; since that time, clear differences in social cohesion have emerged. Among the top groups, the situation is reversed: the profiles of the three types of successful countries described above are more similar today than they were 20 years ago.

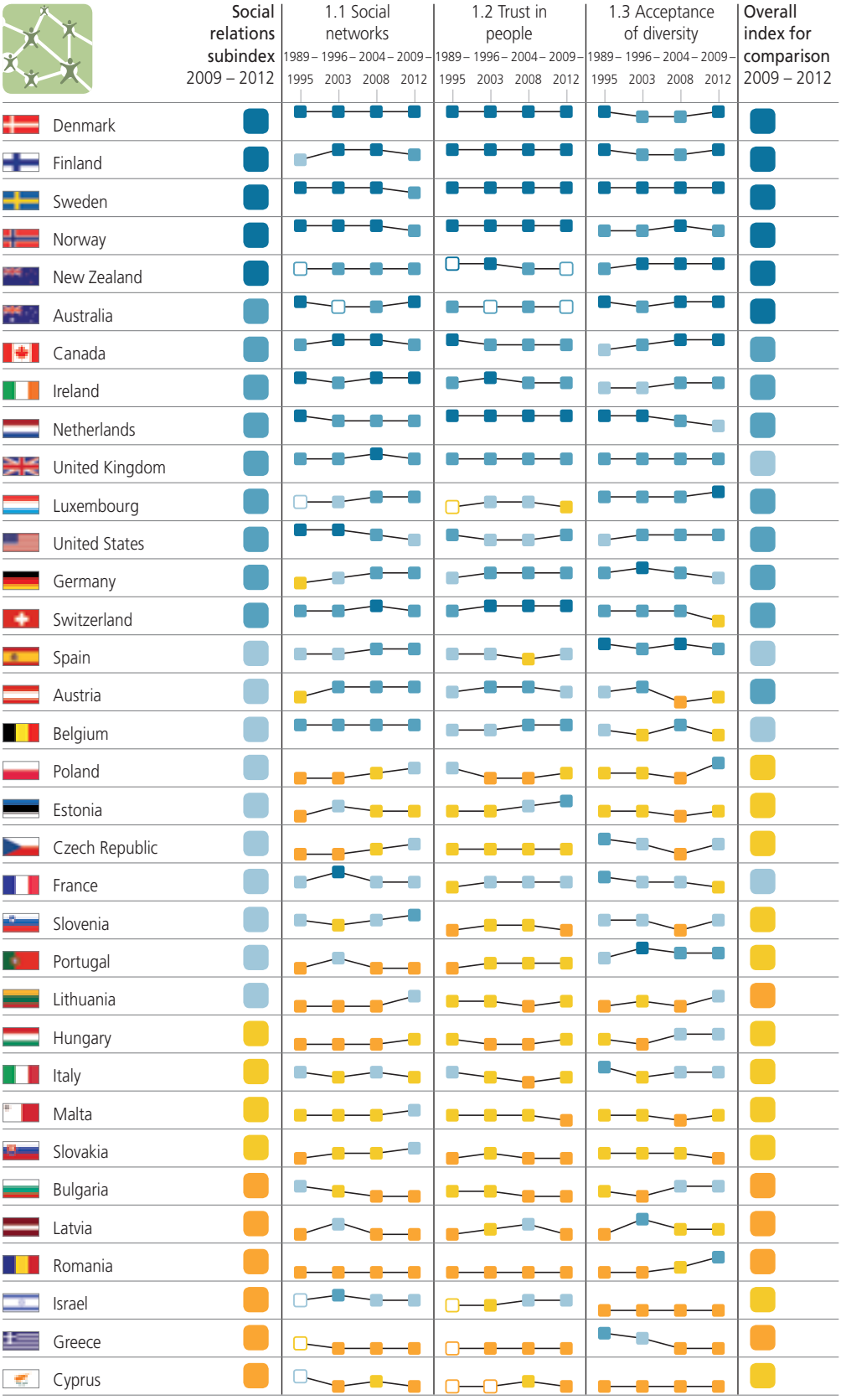
3.4 Social cohesion from 1989 to 2012

How did results change for the nine dimensions over the (nearly) quarter century of our study? In the following section we describe significant trends in the three domains of cohesion – social relations, connectedness and a focus on the common good. Here, as in the entire report, we focus primarily on relative changes; however, we also point out some absolute changes in individual indicators.

Social relations

Figure 7 lists countries based on their scores in the fourth survey period for the subindex of social relations. The other columns show trends over time in the three related dimensions: social networks, trust in other people and acceptance of diversity, as well as the current overall index for comparison purposes.

Figure 7 Social relations subindex (survey period 2009 – 2012)



The figure shows the rankings for all countries, sorted according to the social relations subindex in the current survey period, as well as the trend over time in the three related dimensions. For purposes of comparison, the overall index of social cohesion for the current survey period is shown the right.

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The countries' rankings are most stable for trust in other people, followed by social networks. Rankings for acceptance of diversity have changed the most, and this is likely due primarily to changes in migration patterns since the fall of the Iron Curtain. The Netherlands and Germany – both countries that have experienced a substantial increase in immigration – have slipped from the top to the middle group; Switzerland has dropped still further, from the top to the fourth tier. In contrast, Poland and Romania – both emigration countries – have improved their weak scores sufficiently to join the middle or even the second tier. In the case of Poland, a trend toward secularization has probably led to greater acceptance of more "colorful" lifestyles (e.g. homosexuality). Rankings for acceptance of diversity, which might also be inter-preted as a more cosmopolitan world view, differ substantially from overall rankings – in contrast to the other two dimensions. Ireland and Australia are among the top countries when it comes to social networks. The United States is experiencing a downward trend and now finds itself no higher than the middle tier. Trust in other people has increased in Estonia and declined in Italy and Poland.

"Ireland, Australia and the UK are among the top countries when it comes to social networks."

An analysis of changes in trust in other people, based on the individual indicators and averaging all of the countries, shows a somewhat positive trend over the past 20 years. This holds true for Germany, too. Depending on the indicator, trends for the other two dimensions are inconsistent. While acceptance of gays and lesbians is growing, there has been a drop in the number of people who believe that immigrants enrich society. Religious and ethnic tensions are also increasing. In contrast, results for social networks, the most personal dimension of social cohesion, have remained quite stable.

Across all countries, an average of 91 percent (Germany: 93 percent) of people currently report that they have friends or relatives who will help them if they are in difficulty. This figure was 92 percent (Germany: 94 percent) in the middle of this century's first decade. People are attaching somewhat more importance to friendship.

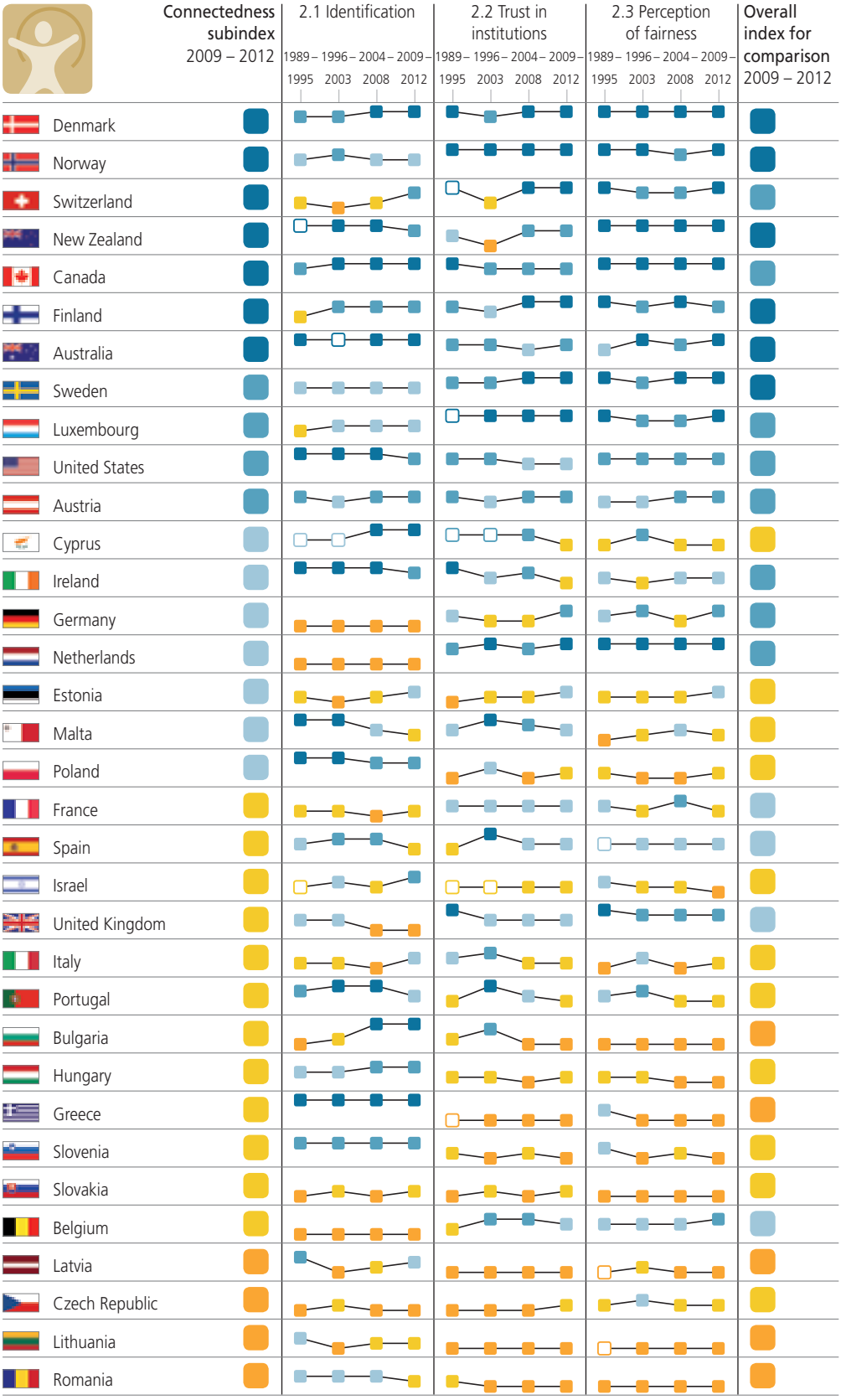
Connectedness

Figure 8 shows the rankings for the current "connectedness" subindex, the trend over time in countries' rankings for the related three dimensions – identification, trust in institutions and perception of fairness – as well as the overall index for purposes of comparison.

As noted above, identification is an atypical dimension of social cohesion, and high scores by no means guarantee a high rating for social cohesion overall. Some of the Scandinavian countries (Norway and Sweden) rank no higher than the middle tier when it comes to identification. Cyprus, Greece and Bulgaria are in the top group – the score for Bulgaria having increased dramatically – along with Australia, Canada and Denmark. The lower half includes the Western and Central European countries surrounding Germany and France. When countries were adversely affected by the euro crisis of 2010 and 2011, their citizens' identification with their societies changed in a variety of ways. Identification is declining in Ireland, Portugal and Spain, but increasing or remaining at a high level in Greece, Italy and Cyprus. As far as the absolute level of identification is concerned, averaged over all countries, trends in individual indicators show no striking changes between 1989 and 2012.

Rankings for trust in institutions are subject to frequent fluctuations. A look at the absolute values of individual indicators, averaged over all of the countries, shows a slight upward

Figure 8 Connectedness subindex (survey period 2009 – 2012)



The figure shows the rankings for all countries, sorted according to the connectedness subindex for the current survey period, as well as the trend over time in the three related dimensions. For purposes of comparison, the overall index of social cohesion for the current survey period is shown the right.

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trend for trust in the police and the healthcare system and a slight downward trend for trust in parliament and the judicial system. Trust in financial institutions is declining sharply: as recently as the middle of the first decade of this century, an average of 64 percent of people trusted financial institutions. Today that number has dropped to 49 percent (in Germany it has declined from 53 to 41 percent). This is probably due to the role of the banking sector in triggering the economic and financial crisis.

Perceptions of fairness have fluctuated considerably in countries like Germany and France. In many other countries, this dimension tends to be quite stable. Bulgaria, Romania and Slovakia, for example, are consistently in the bottom group, while Denmark, the Netherlands and New Zealand rank consistently at the top. Scores for countries in the middle range, such as the United States and the UK, have also remained quite stable. There is a slight upward trend in the percentage of people who believe that they are receiving fair pay for their work. In addition, more and more people wish that their government would do more to reduce the income gap – a response to the fact that income inequality has increased in many countries (OECD 2011a). These trends can be observed for all countries on average; Germany is in keeping with the general trend.

Focus on the common good

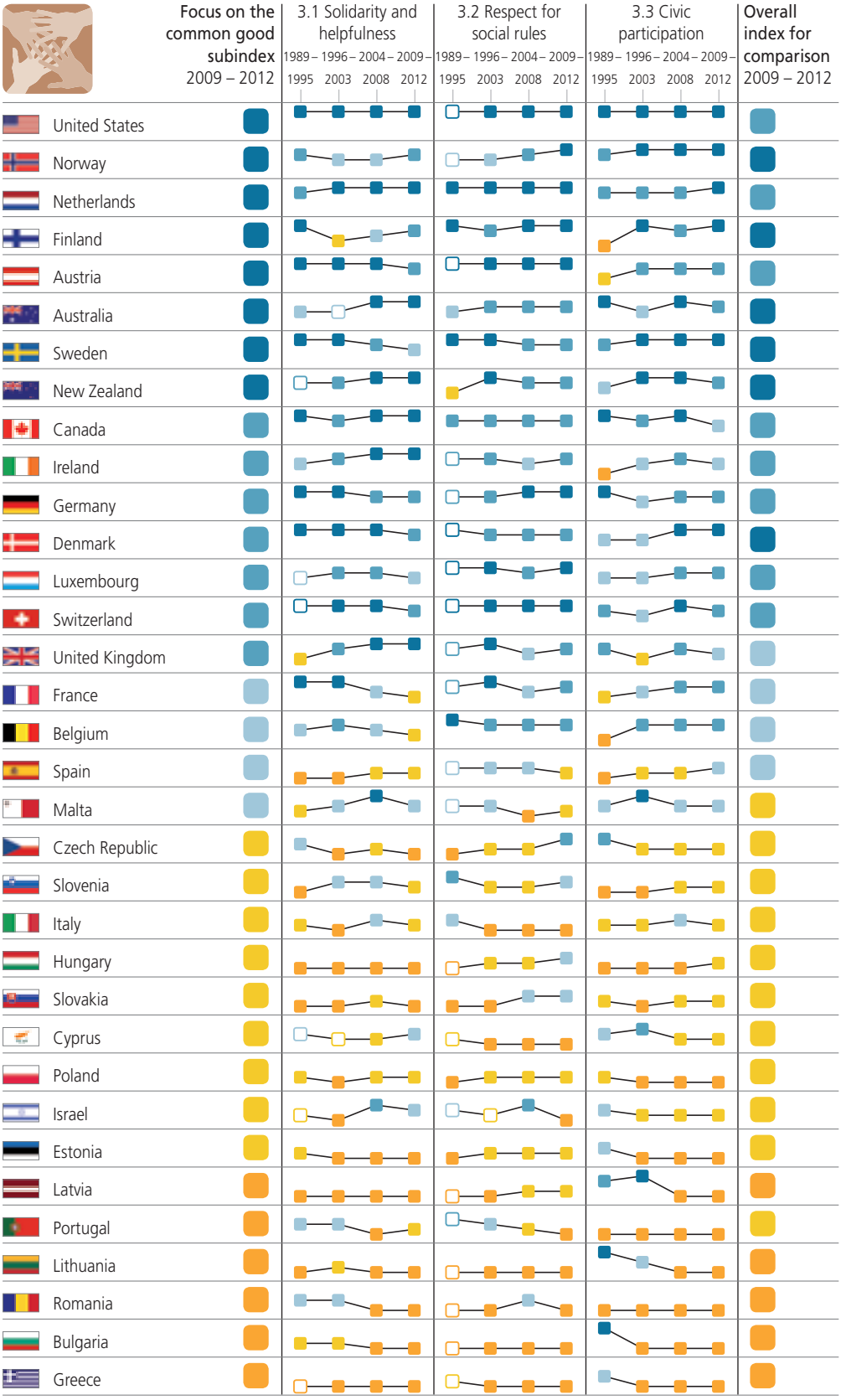
Figure 9 shows the rankings for the "focus on the common good" subindex (2009–2012), as well as trends for the three related dimensions – solidarity and helpfulness, respect for social rules and civic participation – and the current overall index for purposes of comparison.

Denmark – otherwise a leader in numerous areas, even among the Scandinavian countries – ranks only in the second tier for focus on the common good, and even behind Germany. The Netherlands, Austria and the United States are in the top group.

As for solidarity and helpfulness, it is striking to note how dramatically Sweden and France have dropped in the relative rankings, while the UK has rapidly improved. Absolute changes in these indicators over the past ten years show two fairly weak trends: the share of people who donate to charitable causes has declined slightly (from 45 to 44 percent averaged over all countries, from 55 to 47 percent in Germany), while the share of those reporting that they have helped a stranger has slightly increased (from 44 to 47 percent averaged over all countries, from 52 to 54 percent in Germany).

Respect for social rules is a consistent strength of Western European countries like Switzerland, the Netherlands and Austria, but also of the United States. Germany has moved into the top group and maintained this position. Several former Eastern Bloc countries are experiencing a clear upward trend, particularly the Czech Republic, Slovakia and Hungary; this reflects these countries' success at establishing new social order. The steepest decline is found in Portugal. Based on the absolute numbers for the individual indicators, respect for social rules seems to be growing: the shadow economy accounts for a decreasing share of economic activity. There is a slight increase in people's sense of safety on the streets. These trends hold true for Germany as well. For some countries, rankings for civic participation changed considerably between the first two survey periods and 2012; Finland, Ireland and Belgium have gained ground, while Bulgaria, Latvia and Lithuania have moved down in the rankings. In absolute terms, civic participation has declined slightly. Voter turnout and interest in politics have fallen, for example, while volunteer work for organizations remains at roughly the same level. Germany, however, has not seen the same negative trend; here the numbers have gone up slightly.

Figure 9 Focus on the common good subindex (survey period 2009 – 2012)



The figure shows the rankings for all countries, sorted according to the focus on the common good subindex for the current survey period, as well as the trend over time in the three related dimensions. For purposes of comparison, the overall index of social cohesion for the current survey period is shown the right.

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4. Causes and effects of social cohesion

4.1 Socioeconomic factors affect cohesion, while immigration does not

One of the starting points for our study was the widespread view that German society – like modern societies in general – is drifting apart: many believe that people are concerned only with themselves, and no longer show solidarity with others. In the public arena, such concerns are often voiced in connection with worries about globalization, immigration, structural changes in the economy, and – most recently – the economic and financial crisis. In the following section we examine the extent to which these issues are actually related, and seek to identify the conditions that affect social cohesion, both positively and negatively.

"We seek to identify the **conditions** that affect social cohesion, both **positively** and **negatively.**"

To that end, we look at correlations (see glossary in the Appendix) between the overall index of social cohesion and possible determinants. Measures for the latter are taken from the period 2004–2008; the overall index shows the level of social cohesion during the most recent period (2009–2012). Although correlations, strictly speaking, do not allow to draw conclusions about causation, the fact that we are dealing with two different time periods at least increases the plausibility of a causal interpretation.

We looked at five types of determining factors. The following section shows simple and partial correlations. In the latter case, the correlation between the respective determining factor and social cohesion is adjusted for gross domestic product, generally used to measure a country's wealth (which, in turn, can be assumed to affect a number of determining factors). Scatter diagrams provide a visual representation of several striking correlations.

Causes related to level of wealth and economic situation

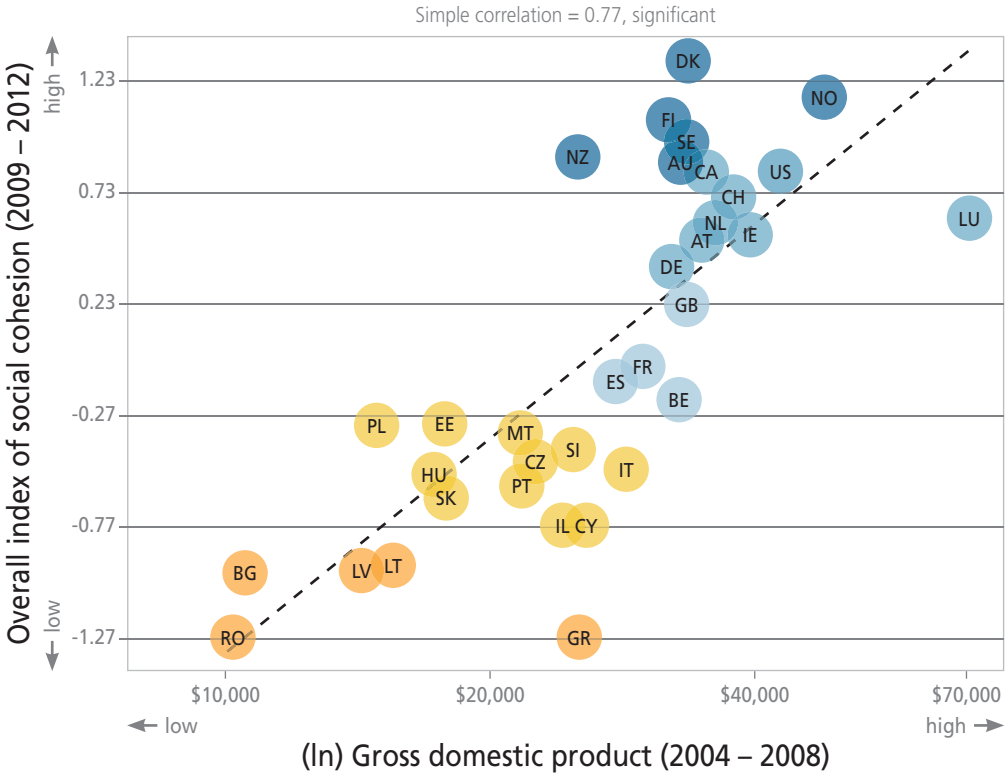
One would expect wealthy societies with thriving economies and greater resources to be more successful at promoting social cohesion.

"The higher the **GDP,** the stronger a country's social cohesion."

We find a very high positive correlation (r = 0.77) between gross domestic product (GDP, World Bank 2012b) and social cohesion:

the higher the GDP, the stronger a country's social cohesion. Money is therefore a positive factor, but it is only one of several, as we will see below. Denmark and New Zealand, for example, have a higher level of social cohesion than their GDP would suggest. The reverse is true for Greece; here, too, it is clear that other social forces are at work.

Figure 10 Overall index of social cohesion relative to gross domestic product



– – – – Simple linear correlation

Gross domestic product per capita is adjusted by purchasing power parity in 2005 international dollars under a fixed exchange rate and is expressed in natural logarithmic form (ln) to adjust the distribution for linear analyses (World Bank 2012b). The colors indicate the groups to which countries belonged during the specified time period, based on the overall index of social cohesion.

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INFO

These **country abbreviations** are used in the figures that follow:

AT	Austria
AU	Australia
BE	Belgium
BG	Bulgaria
CA	Canada
CH	Switzerland
CY	Cyprus
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
ES	Spain
FI	Finland
FR	France
GB	United Kingdom
GR	Greece
HU	Hungary
IE	Ireland
IL	Israel
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
NL	Netherlands
NO	Norway
NZ	New Zealand
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia
US	United States

The Human Development Index (HDI, UNDP 2013b) also shows a very high positive correlation with social cohesion (r = 0.80). A broader interpretation of wealth, like that used in the HDI, reveals more about social cohesion than does gross domestic product alone. If we eliminate the influence of GDP, i.e. purely economic prosperity, leaving only the factors of education and health, the correlation between the HDI and social cohesion is smaller, but still positive (r = 0.43).

As expected, the correlation between the unemployment rate (World Bank 2012b) and social cohesion is negative: the higher the unemployment rate, the lower the level of cohesion (r = - 0.51). However, if we adjust for GDP differences, the correlation disappears (i.e., it is no longer statistically significant). Thus unemployment has only a minimal independent effect on social cohesion. The negative correlation that was first calculated is spurious, since it can be explained by the simultaneous effect of GDP on both measures. As noted above, this means that a booming economy promotes cohesion and provides employment for more people.

Causes related to inequality and the welfare state

An unequal distribution of wealth would be expected to weaken cohesion, since inequality leads to conflicting interests and polarization. We would also expect the welfare state to promote integration and cohesion.

Indeed, our calculations show that a higher level of income inequality (UNU-WIDER 2008), expressed as Gini coefficient, is associated with weaker social cohesion (r = - 0.57). This correlation remains statistically significant (r = - 0.36) even after adjustment for a country's wealth (GDP). Our study confirms the notion that equality leads to social well-being, as argued by Wilkinson and Pickett in their bestselling book "The Spirit Level" (Wilkinson & Pickett 2010).

"A higher level of **income inequality** is associated with weaker social cohesion."

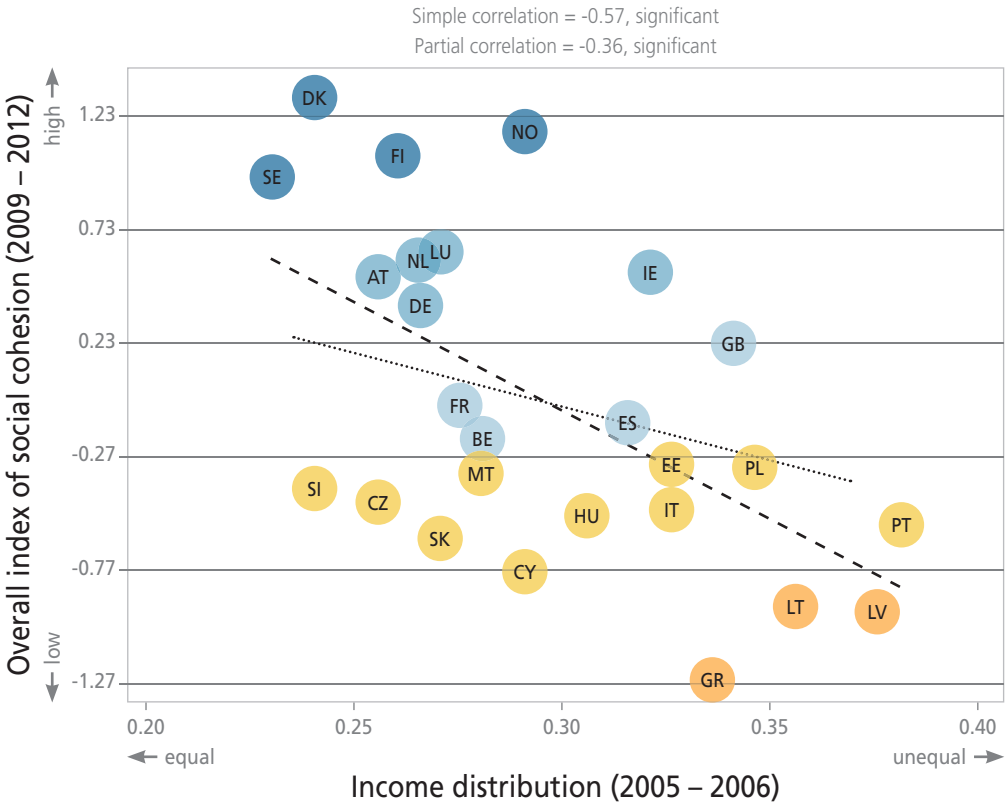
We measure the strength of the welfare state by the percentage of public spending on social benefits relative to GDP (OECD 2012). We find no significant correlation, either before or after adjusting for GDP (before: r = 0.14; after: r = 0.03). This is no surprise, given the country rankings discussed above. Highly developed welfare states lead the rankings for social cohesion, but they are followed closely by the countries of North America and Oceania, which have traditionally had weaker welfare states relative to the OECD average.

Causes related to modernization of social structures and technology

An often-heard argument in the public discussion is that modernization tends to weaken a society's sociomoral resources, and thus also social cohesion. While new technologies and international networks make societies more efficient, they also deprive them of a basis for solidarity.

The World Bank's Knowledge Index (World Bank 2012a) shows how far countries have come toward achieving a knowledge society. This index compiles information on educational level, economic innovation and infrastructure related to information and communications technology. Contrary to the argument referred to above, however, the correlation is not negative, but clearly positive. The most innovative societies are precisely the ones in which social cohesion is strong (r = 0.87). These factors are positively correlated even after adjustment for the country's wealth (r = 0.68), which suggests that

Figure 11 Overall index of social cohesion relative to income distribution



Shown here is the Gini coefficient for income distribution, which reveals the level of equality or inequality of a country's income distribution, and ranges from zero (complete equality) to one (complete inequality) (UNU-WIDER 2008). The colors indicate the groups to which countries belonged during the specified time period, based on the overall index of social cohesion.

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technological modernization is more likely to strengthen than to weaken social cohesion.

"Globalization does not appear to undermine social cohesion. The most innovative societies are precisely the ones in which social cohesion is strong."

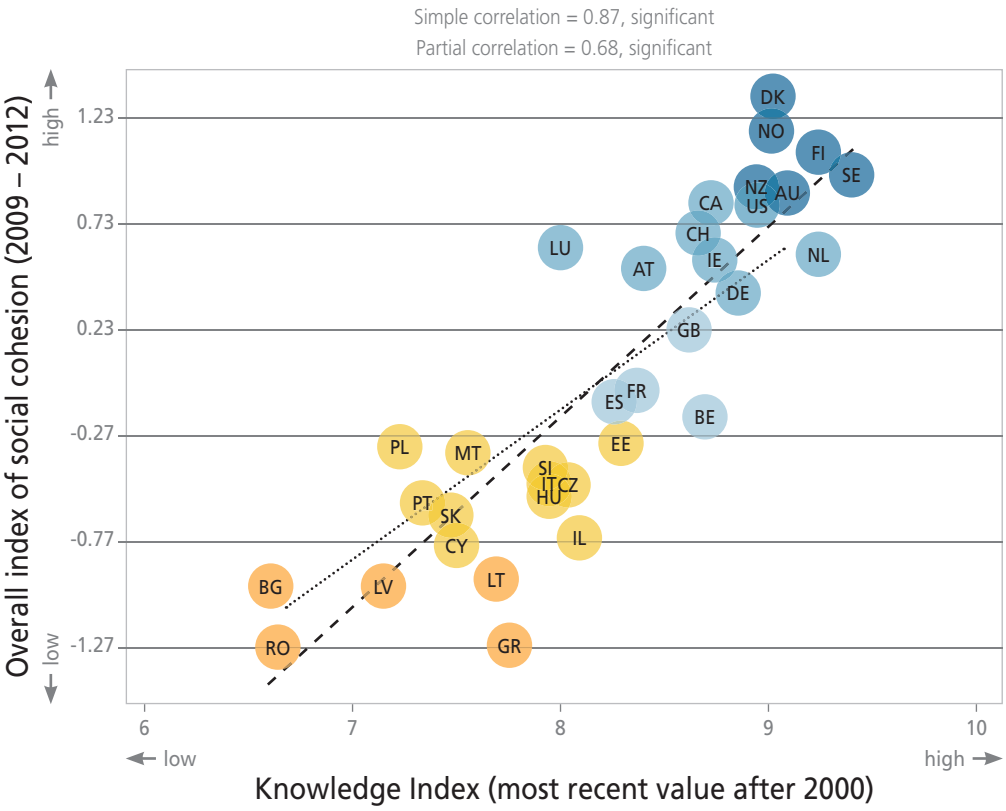
The same picture emerges for globalization, which we measure using the KOF Index of Globalization (r = 0.56) (Dreher, Gaston & Martens 2008). However, adjustment for a country's wealth nearly eliminates the positive correlation with social cohesion (r = 0.17). Nevertheless, globalization does not appear to undermine social cohesion.

Causes related to diversity

Is an ethnically and religiously heterogeneous society less cohesive? Many people seem to think so. And indeed there is some evidence to support this view, particularly in the United States (Putnam 2000; 2007) and Australia (Leigh 2006). It appears that people show less trust, are less likely to participate in clubs and associations, and are less engaged in ethnically heterogeneous communities and regions.

Our data show a different picture. For example, we find no statistically significant correlation between ethnic fractionalization (Alesina et al. 2003) and the overall index of social cohesion (r = −0.08), even after

Figure 12 Overall index of social cohesion relative to the Knowledge Index



The Knowledge Index (KI) summarizes key variables for each country in the three areas of education, innovation, and information and communication technology, producing a score for each country that ranges between zero and ten (World Bank 2012a). The colors indicate the groups to which countries belonged during the specified time period, based on the overall index of social cohesion.

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controlling for a country's wealth (r = −0.07). Ethnic fractionalization is an indicator used by economists to describe the ethnic diversity of a society, corresponding to the probability that two individuals selected at random will not be part of the same ethnic group. The higher the probability, the more diverse (fragmented) the society.

Another indicator of diversity that contradicts conventional wisdom is the percentage of immigrants (UN 2006). Our calculations show not a negative, but instead a positive correlation (although it is not statistically significant): the higher the percentage of immigrants, the higher the level of social cohesion. Interestingly, the correlation is negative if we adjust for GDP. However, it remains relatively weak (r = - 0.21) and is not significant. Luxembourg and Israel have particularly large percentages of immigrants. If we eliminate these two countries from our sample, the correlation – adjusted for GDP – between percentage of immigrants and cohesion is somewhat positive, but still not statistically significant.

"Immigration and diversity are not fundamentally detrimental to social cohesion."

Our findings show that wealth and the percentage of immigrants in a society are clearly related – wealthy countries attract immigrants. They also show that current levels of immigration and diversity are not fundamentally detrimental to social cohe-

sion. These results are in agreement with comparative studies conducted in other countries (e.g. Gesthuizen, van der Meer & Scheepers 2009). But it is conceivable that heterogeneity has stronger effects on a smaller scale, for example at the regional or local level. Those levels, however, are not the subject of this report, which focuses on social cohesion in society as a whole.

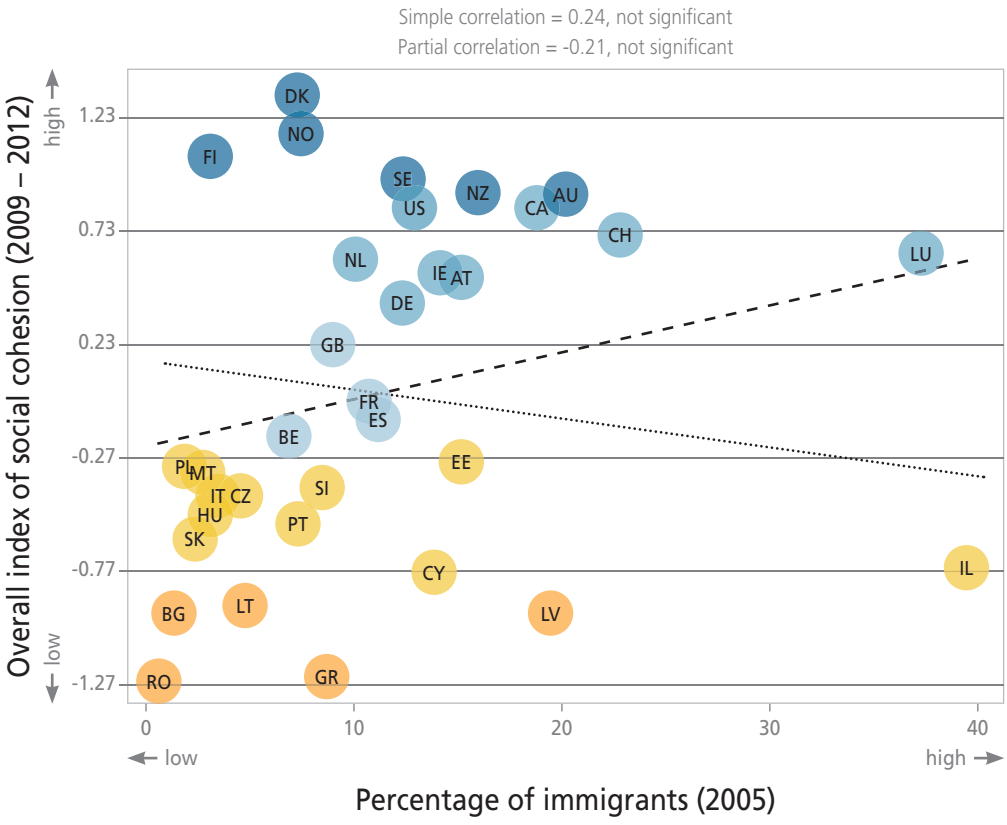
Causes related to culture and values

The assumption here is that cohesion is largely dependent on cultural and moral resources, and requires a stable framework of values. Since religion is often believed to provide such a framework, we might expect the fabric of social cohesion to be particularly strong in societies where religion plays an important role.

Our data give cause for doubt. There is a distinct negative correlation between the importance of religion in everyday life (Gallup 2009) and social cohesion (r = −0.46; after controlling for the level of wealth: r = −0.43).

The findings are similar when we look at the percentage of religious individuals (WVS 2009): the higher the percentage of people who describe themselves as religious, the lower a country's level of social cohesion (r = - 0.49; after controlling for GDP: r = - 0.32).

Figure 13 Overall index of social cohesion relative to the percentage of immigrants



Foreigners or individuals born abroad as a percentage of a country's total population. The precise measure depends on the country (UN 2006). The colors indicate the groups to which countries belonged during the specified time period, based on the overall index of social cohesion.

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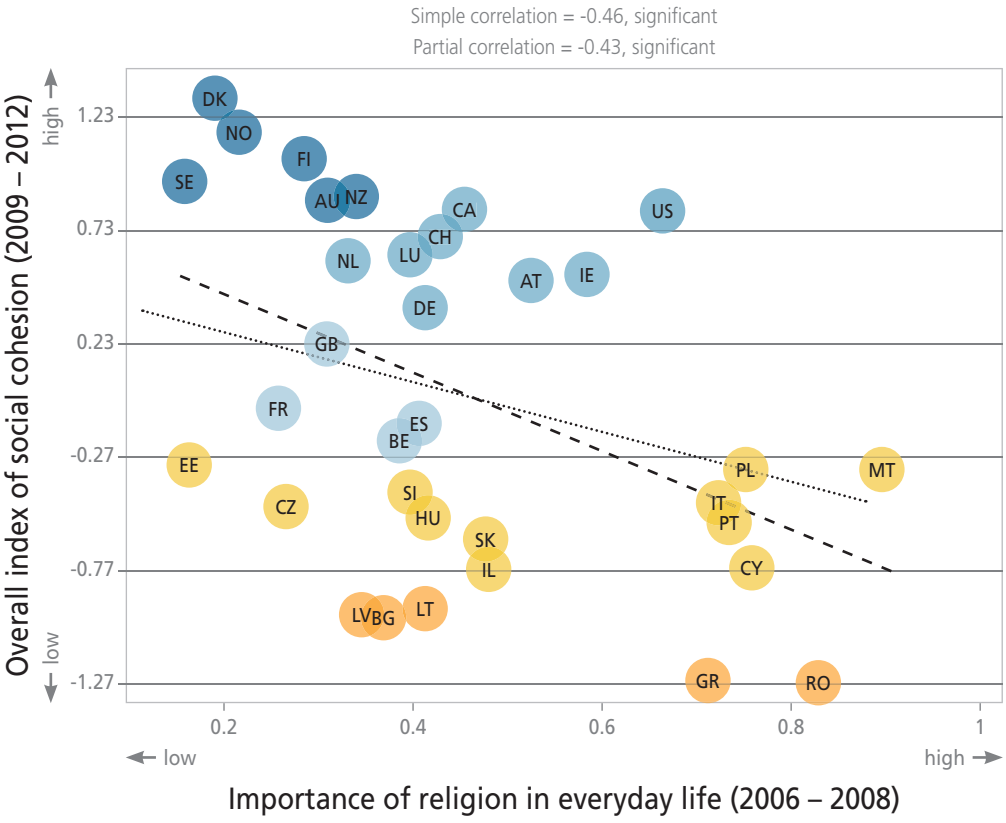
"Competitive societies are somewhat less cohesive than cooperation-oriented societies, but the correlation is weak and by no means statistically significant."

We might also expect that a society's values would make a difference. There are a variety of approaches to studying values: Hofstede, Hofstede & Minkov (2010) distinguish between masculine and feminine cultures, for example. While a masculine society stresses competition, a feminine society places more emphasis on tolerance and compassion. However, our study shows no effect, at least for these values in particular: competitive (masculine) societies do indeed tend to be somewhat less cohesive than cooperation-oriented (feminine) societies, but the correlation is weak and by no means statistically significant ($r = -0.12$; after controlling for wealth: $r = -0.19$). Whether this is also true of other values is a question for future research to explore.

Influencing factors: Overview of findings

Table 4 summarizes our findings with regard to the five types of causes.
Overall, a country's socioeconomic, technical/

Figure 14 Overall index of social cohesion relative to the importance of religion in everyday life



For each country, the figure shows the percentage of individuals who respond affirmatively when asked "Is religion an important part of your everyday life?" (Gallup World Poll 2006 – 2008). The colors indicate the groups to which countries belonged during the specified time period, based on the overall index of social cohesion.

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Table 4 Overview of correlations between the overall index of social cohesion and possible causes

	Simple correlation of overall index of social cohesion (2009–2012) with ...	Correlation after adjusting for GDP	Number of countries	Source of data (cause)
Causes related to level of wealth and economic situation				
Gross domestic product (ln)	0.77***	n/a	34	World Bank 2012b
Human Development Index	0.80***	0.43**	34	UNDP 2013a, UNDP 2013b
Unemployment rate	-0.51***	-0.20	34	World Bank 2012b
Causes related to inequality and the welfare state				
Income inequality	-0.57**	-0.36*	26	UNU-WIDER 2008
Strength of the welfare state	0.14	0.03	28	OECD 2012
Causes related to modernization of social structures and technology				
Knowledge Index	0.87***	0.68***	34	World Bank 2012a
KOF Index of Globalization	0.56***	0.17	34	Dreher et al. 2008
Causes related to diversity				
Ethnic fractionalization	-0.08	-0.07	34	Alesina et al. 2003
Percentage of immigrants	0.24	-0.21	34	UN 2006
Causes related to culture and values				
Importance of religion in everyday life	-0.46***	-0.43**	34	Gallup 2009
Percentage of religious individuals	-0.49***	-0.32*	32	WVS/EVS 2009–2011
Masculine/feminine culture	-0.12	-0.19	33	Hofstede, Hofstede & Minkov (2010)

The table shows the correlation coefficient r (see glossary in the Appendix) for the simple correlation and for the correlation after adjustment for gross domestic product. It also shows the number of countries included in each analysis. Significance of the correlations: in the case of two-tailed tests * significant at the 10 percent level, ** significant at the five percent level and *** significant at the one percent level.

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structural and religious characteristics have a much stronger effect on social cohesion than do immigration and ethnic heterogeneity. Our analysis also shows that unemployment, the strength of the welfare state, globalization and fundamental values play a less important, and sometimes very minimal, role as independent factors affecting social cohesion – that is, independent of their interactions with GDP. These results relate to the quality of social cohesion in general. It cannot be ruled out that factors like ethnic diversity or widespread unemployment might weaken certain aspects of cohesion; this is a topic that requires further analysis.
In addition, it would be useful to conduct further investigations to determine whether and how values and social cohesion affect one another. This requires taking a closer look at other values and value patterns.

Further analysis is also required to explore the relationship between religiosity and cohesion. In particular, it is important to

determine whether this is a matter of reverse causation: might religiosity be a strategy used to compensate for weak social cohesion? Findings from the Bertelsmann Stiftung's recently published Religion Monitor (Bertelsmann Stiftung 2013) suggest that this might be the case. They show that religious people have more social capital than nonreligious people do, at least at an individual level.

It should also be kept in mind that even high correlations leave room for interpretations. In other words, a strong negative correlation with religiosity does not automatically mean that cohesion is weak in all countries where religion plays a major role. There are certainly exceptions to this rule, like the United States. Nor can it be ruled out that the relatively high level of social cohesion in the United States is reinforced by the country's religiosity. However, this does not appear to be the case in other countries.

4.2 Cohesion has a positive effect on life satisfaction

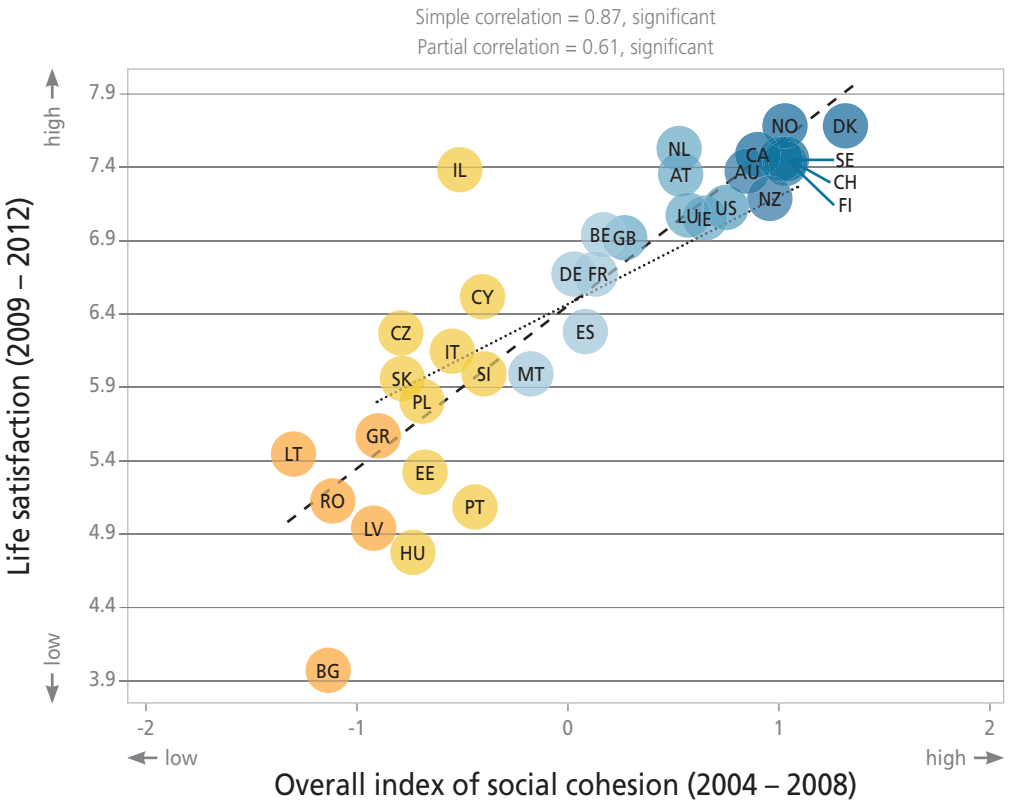
Finally, we take a brief look at the effects of social cohesion. Cohesion is widely regarded as a resource that can be used either collectively or individually. One method of determining its concrete "benefits" is to examine how it correlates with life satisfaction: if cohesion is a positive quality that makes a society more livable, then it should be reflected in people's satisfaction with their lives.

We test this hypothesis using a temporal correlation analysis analogous to those used in connection with possible causes of cohesion, but reverse the chronological order: since in this case we assume that the overall index of social cohesion is a cause, we use the figures from the next-to-last survey period (2004–2008) and calculate the correlation with life satisfaction between 2009 and 2012.

"People in countries with a high level of social cohesion see their **lives** in much more **positive** terms."

The picture is clear: people in countries with a high level of social cohesion see their lives in much more positive terms. The Scandinavian countries are at the top end of the regression lines (high level of cohesion and life satisfaction); the Baltic and Southeastern European countries are at the bottom (weaker cohesion and much lower level of life satisfaction). The correlation between these two variables is extremely high ($r = 0.87$), and the partial correlation – after adjusting for GDP – remains very high and statistically significant ($r = 0.61$). Echoing Wilkinson & Pickett, we are tempted to conclude that "cohesion is happiness."

Figure 15 Life satisfaction relative to the overall index of social cohesion



The figure shows the mean values for responses to the following question: "Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. The top of the ladder represents the best possible life for you and the bottom represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time, assuming that the higher the step the better you feel about your life, and the lower the step the worse you feel about it? Which step comes closest to the way you feel?" This scale is known as "Cantril's ladder" (1965) (Gallup World Poll 2009 – 2012). The colors indicate the groups to which countries belonged during the specified time period, based on the overall index of social cohesion.

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5. Summary and conclusion

There is a great deal of discussion about social cohesion, in particular about whether and why it is declining and what consequences such a decline might have. Although cohesion is generally recognized to be a positive value and an important social resource, few attempts have been made to measure it. The present study seeks to fill this gap. Using a quantitative approach, we have looked at nine dimensions of social cohesion within three domains – social relations, connectedness and a focus on the common good – and have compiled an overall index.

These measures have been calculated for 34 Western OECD and the EU countries (EU plus Australia, Israel, Canada, New Zealand, Norway, Switzerland and the United States) for four survey periods between 1989 and 2012. We relied on a set of indicators drawn from comparative international surveys and other scientific materials. This study is designed to be an innovative diagnostic tool for assessing social cohesion in Germany and beyond, and is not intended to offer definitive conclusions.

Our most important findings can be summarized as follows:

1. Scandinavia leads the pack.

After comparing 34 countries, we can present a clear picture of various "families of countries" at different levels of social cohesion. At the top are the Scandinavian countries, and they lead with regard to nearly every dimension. The traditional immigration societies of North America and Oceania also show a high level of cohesion, as do the small, wealthy Western European countries of Switzerland, Luxembourg and the Netherlands. The larger Western European Countries score average. The Southern and Eastern European countries are in the middle to below-average range. At the bottom of the rankings are the countries of Southeastern Europe and two of the three Baltic nations (Latvia and Lithuania). In these countries in the bottom group (such as Greece, Bulgaria and Cyprus), people often identify closely with their homelands, but this is not enough to offset the centrifugal forces reflected in other dimensions of social cohesion.

2. Relative to the other countries, Germany has shown some improvement.

Germany currently ranks in the second tier and earns high scores for respect for social rules, while Germans traditionally identify only weakly with their country. As for the availability and resilience of social networks, trust in institutions and perceptions of fairness, the trend is positive relative to other countries. This may well stem from Germany's economic success despite the financial and euro crises. More worrisome is a downward trend for acceptance of diversity – the willingness to engage with people from

different cultural backgrounds or with different lifestyles. Here Germany has fallen from the top to the middle group, and countries like the UK, Spain, Portugal and Romania currently rank above Germany in this category.

3. Considerable stability, little change in the country rankings.

Over the four periods of the study, the positions of the 34 countries have remained remarkably stable: cohesion is not something that can easily be changed; rather, it is a relatively constant characteristic of a society. Countries that have shown relative improvement include Finland, New Zealand and Australia in the top third; Germany and Estonia in the middle third; and Slovakia in the bottom third. Those that have moved down in the rankings are Canada in the top third; the UK and Malta (the country that showed the most dramatic decline) in the middle third; and Lithuania, Bulgaria and Greece in the bottom third. Since these declines date back to the 1990s, they cannot be attributed to the recent financial crisis.

4. Relatively small changes in absolute terms.

Over the past 23 years, social cohesion in the OECD countries has changed relatively little, as reflected in periodic surveys that measure such absolute changes. The only exception is trust in institutions: there has been a dramatic decline in the reputation of financial institutions.

5. Three conditions that promote social cohesion.

The most important are prosperity, an equitable income distribution and technological progress toward achieving a knowledge society. A high level of religiosity appears to be detrimental to a strong, cohesive society, at least in the countries we studied. Contrary to conventional wisdom, cohesion is not undermined by globalization, ethnic diversity or a competitive culture.

6. "Cohesion is happiness."

Subjective well-being, as manifested in such things as life satisfaction, is higher for people who live in cohesive societies. Simply put, the greater the cohesion, the better.

This study represents a first evidence-based overview of social cohesion in a variety of countries, showing relative trends and influences and describing the role it plays in life satisfaction. While happiness is by no means the sole factor to consider in determining social policy, our results show how important social cohesion is for subjective quality of life. Other possible effects of cohesion – economic strength, the quality of a democracy, a society's ability to solve problems, educational level – were not part of this study. Further research is needed in these areas.

Are there ways to strengthen social cohesion through social policy? Specific policy recommendations are beyond the scope of this study, aside from noting the obvious: prosperity is helpful, as is eliminating a wide gap between rich and poor. We need to know more about how social forces and conditions interact to promote cohesion. Moreover, there is no one-size-fits-all approach. Countries like Sweden and the United States, for example, achieve similarly high scores for social cohesion, but under very different conditions and in very different ways.

Virtually every country has at least some weak points, and these are the areas interventions should target. In the case of Germany it is the willingness to accept people who are different – indeed, to recognize the opportunities inherent in diversity. The political parties talk a great deal about an "social justice gap"; it is more important, however, to focus on the need (and opportunity) to achieve a broader kind of inclusion aimed at increasing acceptance for immigrants and, in general, anyone with a different lifestyle.

6. References

A

Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S. & Wacziarg, R. (2003). Fractionalization. Journal of Economic Growth, 8 (2), 155–194.

Atkinson, A. B. (2005). Social Indicators, Policy, and Measuring Progress. In S. Svallfors (ed.), Analyzing Inequality – Life Chances and Social Mobility in Comparative Perspective (pp. 83–107). Stanford University Press.

B

Berger-Schmitt, R. (2002). Considering Social Cohesion in Quality of Life Assessments. Concept and Measurement. Social Indicators Research (58), 403–428.

Bertelsmann Stiftung (2012). Kohäsionsradar: Zusammenhalt messen. Gesellschaftlicher Zusammenhalt in Deutschland – ein erster Überblick. (authors: David Schiefer, Jolanda van der Noll, Jan Delhey and Klaus Boehnke), Gütersloh.

Bertelsmann Stiftung (2013). Religionsmonitor – verstehen was verbindet. Religiosität und Zusammenhalt in Deutschland. (authors: Detlef Pollack and Olaf Müller), Gütersloh.

C

Cantril, H. (1965). The Pattern of Human Concerns. New Brunswick, N. J.: Rutgers University Press.

Cattell, R. B. (1966). Handbook of Multivariate Experimental Psychology. Chicago: Rand McNally.

D

Dreher, A., Gaston, N. & Martens, P. (2008). KOF Index of Globalization. Measuring Globalization – Gauging its Consequences. New York: Springer.

Durkheim, E. (1897). Le suicide: Étude de sociologie. Paris: Félix Alcan.

E

EB. (2012a). Eurobarometer 62.0 (Oct–Nov 2004). INRA, Brussels. European Commission. Cologne: GESIS Data Archive.

EB. (2012b). Eurobarometer 65.2 (Mar–May 2006). INRA, Brussels. European Commission. Cologne: GESIS Data Archive.

EB. (2012c). Eurobarometer 43.1bis (May–Jun 1995). INRA, Brussels. European Commission. Cologne: GESIS Data Archive.

EB. (2012d). Eurobarometer 54.1 (Oct–Nov 2000). INRA, Brussels. European Commission. Cologne: GESIS Data Archive.

EB. (2012e). Eurobarometer 63.4 (May–Jun 2005). INRA, Brussels. European Commission. Cologne: GESIS Data Archive.

EB. (2012f). Eurobarometer 67.1 (Feb–Mar 2007). INRA, Brussels. European Commission. Cologne: GESIS Data Archive.

EB. (2012g). Eurobarometer 67.2 (Apr–May 2007). INRA, Brussels. European Commission. Cologne: GESIS Data Archive.

EB. (2012h). Eurobarometer 73.3 (Mar–Apr 2010). INRA, Brussels. European Commission. Cologne: GESIS Data Archive.

EQLS. (2006). European Quality of Life Survey, 2003. European Foundation for the Improvement of Living and Working Conditions and WZB Berlin Social Research Center. Colchester, Essex: UK Data Archive.

EQLS. (2009). European Quality of Life Survey, 2007. European Foundation for the Improvement of Living and Working Conditions. Colchester, Essex: UK Data Archive.

EQLS. (2013). European Quality of Life Survey, 2012. European Foundation for the Improvement of Living and Working Conditions. Colchester, Essex: UK Data Archive.

ESS. (2012a). European Social Survey Round 1 Data. ESS-1 2002 Documentation Report. Edition 6.3. Bergen, Norway: European Social Survey Data Archive; Norwegian Social Science Data Services.

ESS. (2012b). European Social Survey Round 2 Data. ESS-2 2004 Documentation Report. Edition 3.4. Bergen, Norway: European Social Survey Data Archive; Norwegian Social Science Data Services.

ESS. (2012c). European Social Survey Round 3 Data. ESS-3 2006 Documentation Report. Edition 3.4. Bergen, Norway: European Social Survey Data Archive; Norwegian Social Science Data Services.

ESS. (2012d). European Social Survey Round 4 Data. ESS-4 2008 Documentation Report. Edition 5.1. Bergen, Norway: European Social Survey Data Archive; Norwegian Social Science Data Services.

ESS. (2012e). European Social Survey Round 5 Data. ESS-5 2010 Documentation Report. Edition 3.0. Bergen, Norway: European Social Survey Data Archive; Norwegian Social Science Data Services.

EVS. (2011). European Values Study 1981–2008, Longitudinal Data File. GESIS Data Archive, Cologne, Germany, ZA4804 Data File Version 2.0.0 (2011-12-30) DOI:10.4232/1.11005.

G

Gallup. (2009). Gallup World Poll 2006–2008. The Gallup Organization.

Gallup. (2013). Gallup World Poll. The Gallup Organization.

Gesthuizen, M., van der Meer, T. & Scheepers, P. (2009). Ethnic Diversity and Social Capital in Europe: Tests of Putnam's Thesis in European Countries. Scandinavian Political Studies, 32(2), 121–142.

H

Hofstede, G. (2001). Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations. (2nd ed.) Beverly Hills CA: Sage.

Hofstede, G., Hofstede, G. J. & Minkov, M. (2010). Cultures and Organizations. Software of the Mind. (3rd ed.) New York: McGraw Hill Professional.

I

ICRG. (2013). International Country Risk Guide. New York: PRS Group.

ICVS. (2010). Integrated Database from the International Crime Victims Survey (1989–2006). Den Haag: DANS.

ISJP. (2002). International Social Justice Project 1991 and 1996 (ISJP 1991 and 1996). ZA3522 Data File Version 1.0.0. Wegener, Bernd and Mason, David S. Cologne: GESIS Data Archive.

ISSP. (1994). International Social Survey Program (ISSP): Social Inequality II – ISSP 1992. Codebook ZA2310. ISSP Research Group. Cologne: GESIS Data Archive.

ISSP. (2002). International Social Survey Program: Social Inequality III – ISSP 1999. Codebook ZA3430. Cologne: GESIS Data Archive.

ISSP. (2012). International Social Survey Program: Social Inequality IV – ISSP 2009. Codebook ZA5400. Cologne: GESIS Data Archive.

P

Legatum Institute. (2012). The 2012 Legatum Prosperity Index. London: Legatum Institute.

Leigh, A. (2006). Trust, Inequality and Ethnic Heterogeneity. Economic Record, 82, 268–280.

M

Muthén, L. K., & Muthén, B. O. (1998–2011). Mplus User's Guide. Sixth Edition. Los Angeles: Muthén & Muthén.

N

Noll, H. H. (2000). Konzepte der Wohlfahrtsentwicklung: Lebensqualität und „neue" Wohlfahrtskonzepte. Berlin: WZB Berlin Social Research Center, interunit group on Work and Ecology.

O

OECD. (2011a). Divided We Stand. Why Inequality Keeps Rising. OECD Publishing.

OECD. (2011b). Society at a Glance 2011: OECD Social Indicators. OECD Publications. doi:10.1787/soc_glance-2011-en

OECD. (2012). Social Expenditure: Aggregated Data. OECD Social Expenditure Statistics.

P

Pahl, R. E. (1991). The search for social cohesion: From Durkheim to the European Commission. Archives Europeennes de sociologie, 32(2), 345–360.

Peterson, R. (2000). A Meta-Analysis of Variance Accounted for and Factor Loadings in Exploratory Factor Analysis. Marketing Letters, 11(3), 261–275.

Porter, M. E., Stern, S. & Loría, R. A. (2013). Social Progress Index 2013. Washington DC: Social Progress Imperative.

Putnam, R. (2000). Bowling Alone. New York: Simon & Schuster.

Putnam, R. (2007). E Pluribus Unum: Diversity and Community in the Twenty-first Century. The 2006 Johan Skytte Prize Lecture. Scandinavian Political Studies, 30 (2), 137–174.

S

Schneider, F. & Buehn, A. (2012). Shadow Economies in Highly Developed OECD Countries. What Are the Driving Forces? (IZA Discussion Paper 6891). Zurich: IZA.

T

Tönnies, F. (1887). Gemeinschaft und Gesellschaft. Abhandlung des Communismus und des Socialismus als empirischer Culturformen. Leipzig: Fues's Verlag.

U

UN. (2006). International Migration 2006. New York: United Nations Department of Economic and Social Affairs.

UNDP. (2010). Human Development Report 2010: The Real Wealth of Nations: Pathways to Human Development. New York: United Nations Development Programme.

UNDP. (2013a). Human Development Report 2013: The Rise of the South: Human Progress in a Diverse World. New York: United Nations Development Programme.

UNDP. (2013b). Human Development Report. International Human Development Indicators. New York: United Nations Development Programme.

UNU-WIDER. (2008). World Income Inequality Database. Helsinki: United Nations University, World Institute for Development Economics Research.

V

van Kesteren, J. (2007). Integrated Database from the International Crime Victims Survey (ICVS) 1989–2005, Codebook and Data. Tilburg: INTERVICT.

Vanhanen, T. (2011). Measures of Democracy 1810–2010. FSD1289, version 5.0 (2011-07-07). Tampere: Finnish Social Science Data Archive.

W

Wilkinson, R. G. (1996). Unhealthy Societies: The Afflictions of Inequality. New York: Routledge.

Wilkinson, R. G. & Pickett, K. (2010). The Spirit Level: Why Equality is Better for Everyone. London, New York: Penguin Books.

World Bank. (2012a). Knowledge for Development. Washington DC: World Bank.

World Bank. (2012b). World Development Indicators. Washington DC: World Bank.

WVS. (2009). World Values Survey 1981–2008 Official Aggregate v.20090901. World Values Survey Association. Madrid: ASEP/JDS.

Z

Zick, A. & Küpper, B. (2012). Zusammenhalt durch Ausgrenzung? Wie die Klage über den Zerfall der Gesellschaft und die Vorstellung von kultureller Homogenität mit gruppenbezogener Menschenfeindlichkeit zusammenhängen. In W. Heitmeyer (ed.), Deutsche Zustände Folge 10 (pp. 152–176). Berlin: Suhrkamp.

7. Appendix

7.1 Glossary

Indicator

Measure in a scientific investigation. Here: item (individual question) in a survey that captures a respondent's view or attitude on a specific topic. Example: on a scale of one to five, how important are friends in your life?

Dimension

Here: one of nine aspects of social cohesion under the definition in Chapter 1. Example: solidarity and helpfulness.

Index

Summary measure, derived from several dimensions, which allows for comparisons of countries, for example. Example: overall index of social cohesion.

Mean

Also referred to as the arithmetic mean. Average, calculated by adding individual values and dividing by the total number of those values.

Correlation

Statistical measure of the relationship between two variables; not indicative of causation. If the number of storks in Germany's districts is correlated with the number of births, this means that more children are born in districts with a large number of storks (but does not prove that babies are brought by storks).

Correlation coefficient r

Measures the strength of the association between two variables. When its value is one, there is a perfect linear relationship between the two variables: if r = 1, the data points will form a line with a positive slope of 45 degrees in a scatter diagram. If r = −1, there is a perfect negative relationship: the larger the value of x, the smaller the value of y (a negative slope of 45 degrees in a scatter diagram). When values are between 1 and -1, the statistical correlation is less than perfect and the slope of the line falls (in absolute value) until the variables are completely independent and r = 0 (expressed as a random scatter plot with a flat line).

Factor analysis

A complex mathematical/statistical procedure used to estimate a small number of underlying factors (also known as latent variables) from a larger number of measured variables. Factor analyses, used for example in the field of personality psychology, identify fundamental character traits based on an extensive range of survey items. Each character trait is a factor accounting for a certain portion of the variance of each survey item.

Used here to calculate the nine dimensions of social cohesion based on a larger number of individual indicators in each country.

Reflective indicators

Indicators that are causally associated with and thus reflect an underlying phenomenon (here: the dimension of social cohesion). This concept plays an implicit role in factor analysis. Reliable reflective indicators of a specific dimension must be highly correlated with one another. If the dimension changes, all of the related individual indicators change to approximately the same degree. In other words, each individual indicator can stand for the dimension as a whole. Reflective indicators are therefore interchangeable measures of an underlying phenomenon.

Formative indicators

Indicators (here: dimensions) that are the "building blocks" of an underlying phenomenon (here: social cohesion). They combine to produce this phenomenon, but are not necessarily correlated with one another. A well founded theory (here: our definition of social cohesion in Chapter 1) explaining why certain formative indicators create the phenomenon in question fulfills scientific requirements. Formative indicators are not interchangeable.

7.2 Data sets

Description of the data sets

1) World Values Survey (WVS)

The World Values Survey is conducted by an international network of social scientists and looks at values and their effects on social and political life. The World Values Survey is an offshoot of the European Values Study (EVS, see below). Between 1981 and 2007, the WVS conducted five surveys of representative samples of the population of more than 90 countries, in cooperation with the EVS (WVS 2009).

2) European Values Study (EVS)

The European Values Study is a research initiative of the foundation of the same name, which focuses on human values (ideas, beliefs, preferences, attitudes and opinions). Since 1981, the study has been conducted at nine-year intervals in a number of European countries; new countries have been added over time. The fourth wave, in 2008, included 48 countries and regions. This study, too, surveyed representative samples of the population (EVS 2011). Because survey items in the WVS and the EVS were so similar, we were able to use the two surveys in combined form (WEVS).

3) Gallup World Poll (GWP)

The Gallup World Poll is prepared and administered by the Gallup organization, one of the world's leading market and opinion research institutes. The GWP has been conducted each year since 2005, in some countries on a quarterly basis. It surveys representative samples of the population in more than 150 countries on various political, economic and social issues. Data from the Gallup World Poll are also an essential component of the Social Progress Report, the Legatum Prosperity Index, the OECD Better Life Dimensions and the OECD Social Indicators (GWP 2013).

4) European Social Survey (ESS)

The European Social Survey, an academic project, seeks to identify long-term changes in the attitudes and behaviors of people in Europe by surveying representative samples of the population of 32 countries in Europe and beyond. It was launched in 2001 by the European Science Foundation and has been implemented every two years since then. It records Europeans' self-descriptions and gathers data on their perceptions and attitudes, focusing on a variety of topics of importance to Europe today. Among them are immigration, trust, political orientation, values, subjective well-being and health (ESS 2012a; ESS 2012b; ESS 2012c; ESS 2012d; ESS 2012e).

5) European Quality of Life Survey (EQLS)

Eurofound's European Quality of Life Survey examines various aspects of life, such as income, education, family, health, life satisfaction and perceived quality of a society. It was conducted for the first time in 2003, and included 28 countries at that time. Additional surveys followed in 2007 and 2011, once again administered to representative population samples (EQLS 2006; EQLS 2009; EQLS 2013).

6) International Social Survey Program (ISSP)

The International Social Survey Program is a collaborative effort by various institutions that conduct surveys for the purpose of social science research. The ISSP was formed through cooperation between what was formerly the German Center for Survey Research and Methodology (ZUMA) in Mannheim and the National Opinion Research Center of the University of Chicago. It is an annual program that adds an international and intercultural dimension (module) to national surveys in 48 countries. Particularly useful for our purposes is the "Social Inequality" module, which was included in 1992, 1999 and 2009 (ISSP 1994; ISSP 2002; ISSP 2012).

7) International Social Justice Project (ISJP)

The International Social Justice Project is an international research initiative focusing on social, economic and political aspects of justice, which was initially run by social scientists from 12 countries. Representative population samples from 12 countries were surveyed in 1991; that number dropped to six in 1996 and declined still further later on. Because of its limited coverage, we use the ISJP to supplement the ISSP (ISJP 2002).

8) Eurobarometer (EB)

The Eurobarometer was launched in 1973 by the European Commission and has been conducted every six months since that time. Representative samples of the population were drawn in the EU member states. The survey gathers data on social and political attitudes that are of crucial importance for the European Union's strategies and courses of action. Only a few of its questions relate to cohesion in units smaller than the EU itself, and those are asked only on an irregular basis. The Eurobarometer is particularly useful for measuring the "identification" dimension (EB 2012a; EB 2012b; EB 2012c; EB 2012d; EB 2012e; EB 2012f; EB 2012g; EB 2012h).

9) International Crime Victims Survey (ICVS)

The International Crime Victims Survey was implemented for the first time in 1989, and its purpose was to assess aspects of crime and safety by surveying representative samples of the population. Five waves have been completed in Europe. The survey gathers data on perceptions and attitudes about criminality and justice (ICVS 2010; van Kesteren 2007).

10) International Country Risk Guide (ICRG)

The International Country Risk Guide was launched in 1980 by the editors of International Reports; today it is compiled by the Political Risk Services Group. Its purpose is to inform businesspeople of investment risks in selected countries. The survey has been expanded several times to include questions about social and political risks, such as corruption and ethnic and religious tensions (ICRG 2013).

11) Shadow Economies in Highly Developed OECD Countries (S&B)

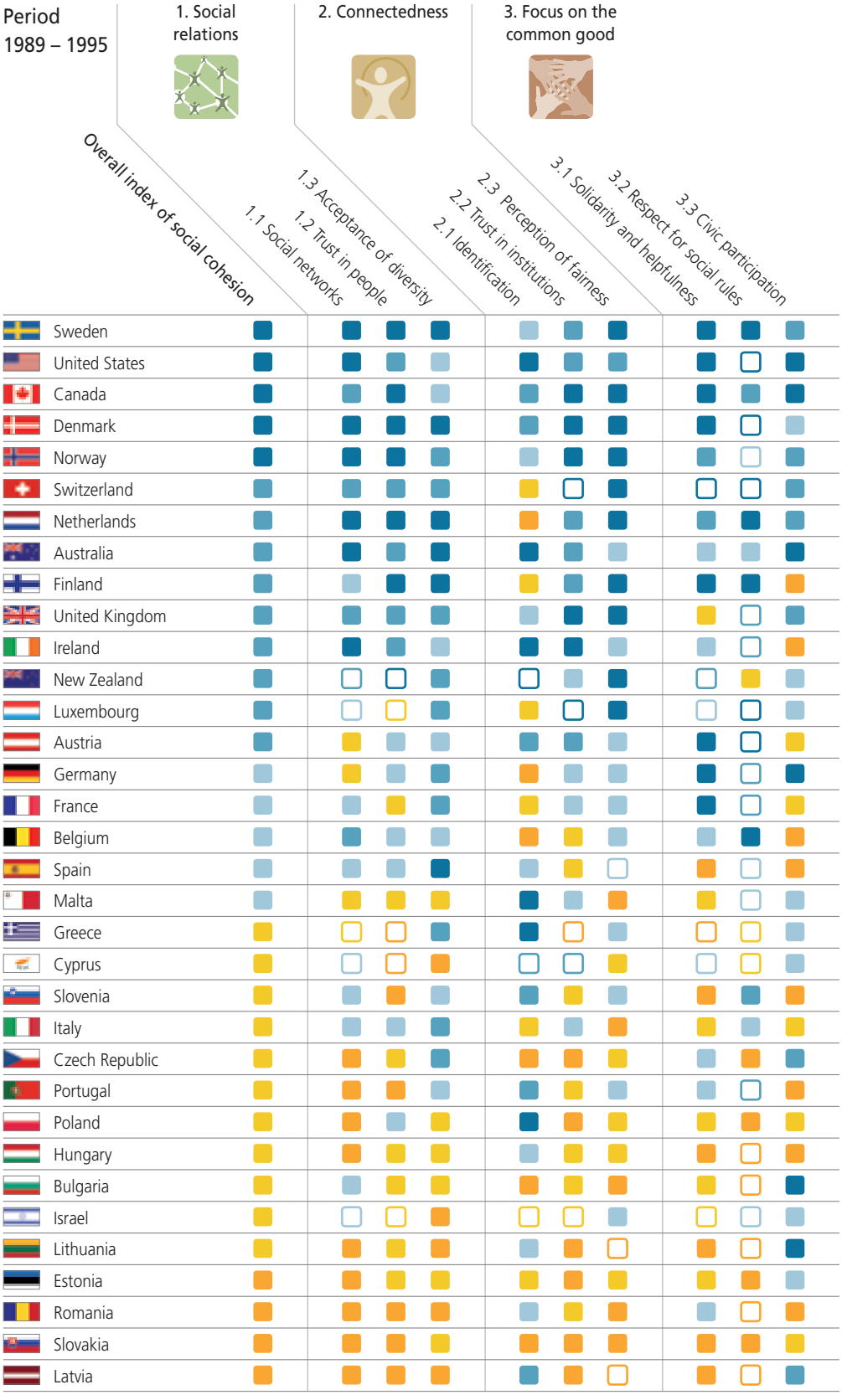
The study conducted by Schneider and Buehn sheds light on the role of the informal economy in the OECD countries (2012). Since national economic data do not include the informal economy, indicators relating to tax burdens, tax compliance, unemployment and entrepreneurial freedom are used instead. Data are available from 1995 to 2010 for a wide range of countries.

12) Measures of Democracy (VAN)

Tatu Vanhanen (2011) has compiled a unique data base on the development of democracy/democracies, made up of annual data from 1810 to 2010. We use the "participation" indicator, which measures participation in elections.

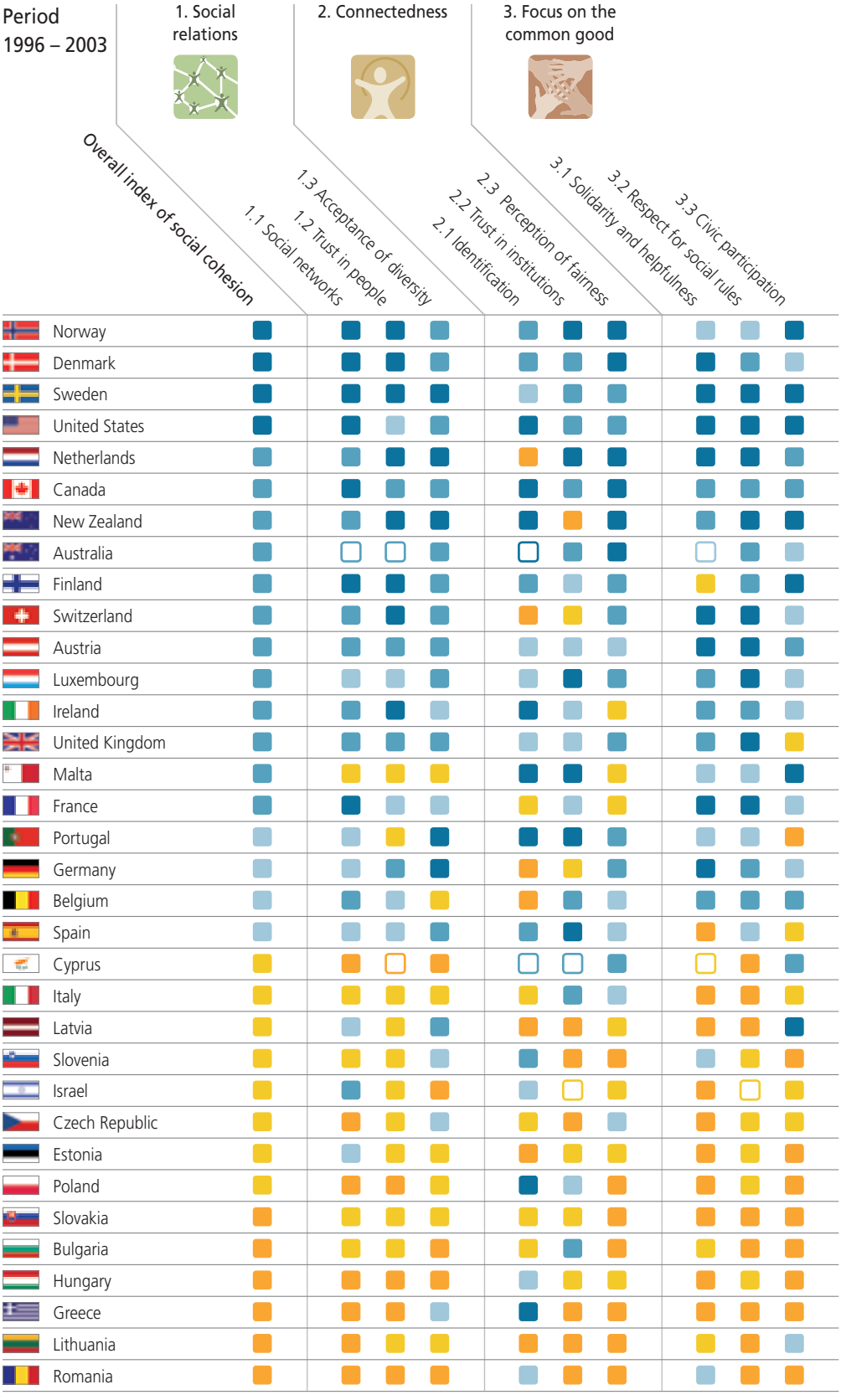
7.3 Additional figures and tables

Figure 16 An international comparison of social cohesion (1989 – 1995)



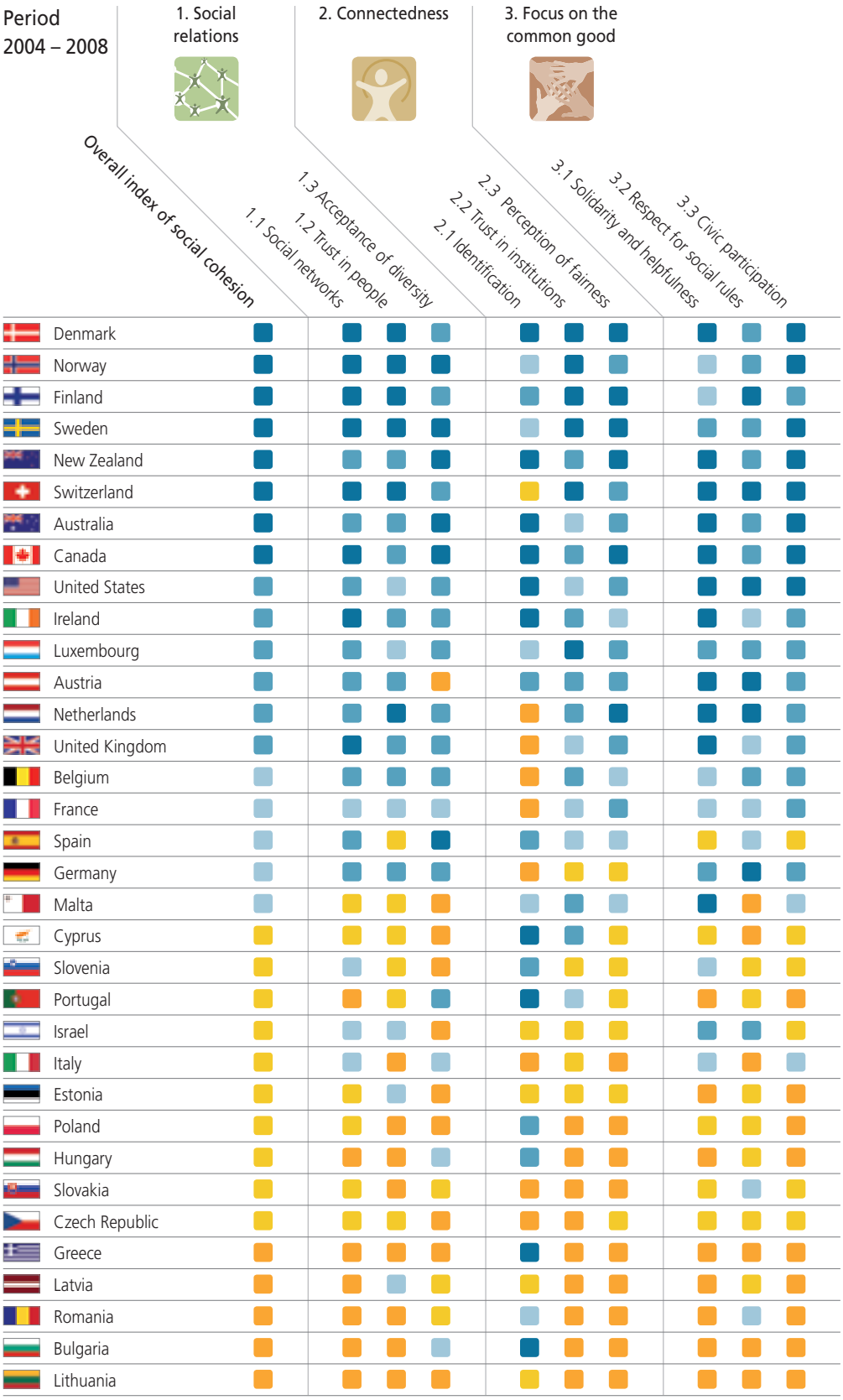
The figure shows mean values for the nine dimensions for the EU and Western OECD countries. The five colors designate the top tier (dark blue = ■), second tier (blue = ■), middle tier (light blue = ■), fourth tier (yellow = ■) and bottom tier (orange = ■). White dots (□) designate dimension values that were estimated based on other time periods.

Figure 17 An international comparison of social cohesion (1996 – 2003)



The figure shows mean values for the nine dimensions for the EU and Western OECD countries. The five colors designate the top tier (dark blue = ■), second tier (blue = ■), middle tier (light blue = ■), fourth tier (yellow = ■) and bottom tier (orange = ■). White dots (□) designate dimension values that were estimated based on other time periods.

Figure 18 An international comparison of social cohesion (2004 – 2008)



The figure shows mean values for the nine dimensions for the EU and Western OECD countries. The five colors designate the top tier (dark blue = ■), second tier (blue = ■), middle tier (light blue = ■), fourth tier (yellow = ■) and bottom tier (orange = ■). White dots (□) designate dimension values that were estimated based on other time periods.

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Table 5 List of indicators

	Dimension	Indicators
1. Social relations 	1.1 Social networks	Important in life: Friends
		How much time during past week you felt lonely (–)?
		How often socially meet with friends, relatives or colleagues?
		Support if needed advice on serious personal or family matter
		Count on to help
	1.2 Trust in people	People can be trusted
		People try to be fair
		Most of the time people helpful
	1.3 Acceptance of diversity	Would not like to have neighbor: of different race
		Would not like to have neighbor: immigrants/ foreign workers
		Rating of ethnic tension (–)
		Justifiable: homosexuality
		Gays and lesbians free to live life as they wish
		Country's cultural life enriched by immigrants
		Country's culture undermined by immigrants (–)
		Rating of religious tension (–)
		City/area good place for: Racial/ethnic minorities
		City/area good place for: Gay or lesbian people
2. Connectedness 	2.1 Identification	How attached to country?
		How proud of nationality?
		Ideally, would permanently move to another country (–)
	2.2 Trust in institutions	Confidence in police
		Confidence in parliament
		Confidence in political parties
		Confidence in justice system
		Confidence in health care
		Confidence in financial institutions
		Honesty of elections
		Didn't report a crime, because feared/did not like the police (–)
	2.3 Perception of fairness	Corruption (–)
		Corruption within businesses (–)
		To get ahead need to be corrupt (–)
		To get ahead, forced to do things that are not correct (–)
		Government should reduce differences in income levels (–)
		I earn what I deserve
		Get paid about what deserved
		Tensions between the rich and the poor (–)
3. Focus on the common good 	3.1 Solidarity and helpfulness	Government provide for people (–)
		Help others excl. family/work/voluntary organizations
		Unpaid voluntary work through community and social services
		Donated money
		Helped a stranger
	3.2 Respect for social rules	To what extent people obey traffic laws
		How wrong to commit traffic offense (–)?
		Feel safe after dark on the street
		Feel safe walking alone at night
		Size of shadow economy (–)
	3.3 Civic participation	Important in life: politics
		Interest in politics
		Worn or displayed campaign badge/sticker
		Signed a petition
		Contacted politician or public official
		Voiced opinion to public official
		Served on committee or done voluntary work for organization
		Volunteered time to organization
		Worked in association or organisation
		Voting turnout in elections or referenda

Indicators marked (–) are reversed when calculating the dimension. Explanation of abbreviations: EB = Eurobarometer, EQLS = European Quality of Life Survey, ESS = European Social Survey, GWP = Gallup World Poll, ICRG = International Country Risk Guide, ICVS = International Crime Victims Survey, ISJP = International Social Justice Project, ISSP = International Social Survey Program, S&B = Schneider & Buehn (2012), VAN = Vanhanen (2011), WEVS = World Values Survey or European Values Study.

	Period 1	Period 2	Period 3	Period 4
	WEVS	WEVS	WEVS	
			ESS	EQLS
		ESS	ESS	ESS
		EQLS	EQLS	EQLS
			GWP	GWP
	WEVS	WEVS	WEVS	GWP
		ESS	ESS	ESS
		ESS	ESS	ESS
	WEVS	WEVS	WEVS	
	WEVS	WEVS	WEVS	
	ICRG	ICRG	ICRG	ICRG
	WEVS			
		ESS	ESS	ESS
		ESS	ESS	
				EQLS
	ICRG	ICRG	ICRG	ICRG
			GWP	GWP
			GWP	GWP
	EB	EB	EB	EB
	WEVS	WEVS	WEVS	
			GWP	GWP
	WEVS	WEVS	GWP	GWP
		WEVS	WEVS	EQLS
		WEVS	WEVS	ESS
	WEVS	WEVS	GWP	GWP
			GWP	GWP
			GWP	GWP
			GWP	GWP
	ICVS	ICVS	ICVS	
	ICRG	ICRG	ICRG	ICRG
			GWP	GWP
		ISSP		ISSP
		EQLS	EQLS	
		ESS	ESS	ESS
		ISSP		ISSP
	ISJP	ISSP		ISSP
		EQLS	EQLS	EQLS
	WEVS	WEVS	WEVS	
		ESS	ESS	
				EQLS
			GWP	GWP
			GWP	GWP
			EQLS	
				ESS
	ICVS	ICVS		
			GWP	GWP
	S&B	S&B	S&B	S&B
	WEVS	WEVS	WEVS	
	WEVS	WEVS	WEVS	ESS
		ESS	ESS	ESS
	WEVS	WEVS	WEVS	EQLS
		EQLS		
			GWP	GWP
		EQLS		
			GWP	GWP
		ESS	ESS	ESS
	VAN	VAN	VAN	VAN

Table 6 Country coverage

	1st survey period (1989 – 1995)											2nd survey period (1996 – 2003)										
	WEVS	EQLS	ESS	GWP	EB	ISSP	ISJP	ICRG	S&B	ICVS	VAN	WEVS	EQLS	ESS	GWP	EB	ISSP	ISJP	ICRG	S&B	ICVS	VAN
Australia	WEVS							ICRG		ICVS	VAN						ISSP		ICRG	S&B	ICVS	VAN
Austria	WEVS				EB			ICRG			VAN	WEVS	EQLS	ESS		EB	ISSP		ICRG	S&B	ICVS	VAN
Belgium	WEVS				EB			ICRG		ICVS	VAN	WEVS	EQLS	ESS		EB			ICRG	S&B	ICVS	VAN
Bulgaria	WEVS						ISJP	ICRG			VAN	WEVS	EQLS				ISSP		ICRG	S&B	ICVS	VAN
Canada	WEVS							ICRG		ICVS	VAN	WEVS					ISSP		ICRG	S&B	ICVS	VAN
Cyprus								ICRG			VAN		EQLS				ISSP		ICRG	S&B		VAN
Czech Republic	WEVS						ISJP	ICRG		ICVS	VAN	WEVS	EQLS	ESS			ISSP		ICRG	S&B	ICVS	VAN
Denmark	WEVS				EB			ICRG			VAN	WEVS	EQLS	ESS		EB			ICRG	S&B	ICVS	VAN
Estonia	WEVS						ISJP			ICVS	VAN	WEVS	EQLS						ICRG	S&B		VAN
Finland	WEVS				EB			ICRG		ICVS	VAN	WEVS	EQLS	ESS		EB			ICRG	S&B	ICVS	VAN
France	WEVS				EB			ICRG			VAN	WEVS	EQLS	ESS		EB	ISSP		ICRG	S&B	ICVS	VAN
Germany	WEVS				EB		ISJP	ICRG			VAN	WEVS	EQLS	ESS		EB	ISSP		ICRG	S&B		VAN
Greece					EB			ICRG			VAN	WEVS	EQLS	ESS		EB			ICRG	S&B		VAN
Hungary	WEVS						ISJP	ICRG			VAN	WEVS	EQLS	ESS			ISSP		ICRG	S&B	ICVS	VAN
Ireland	WEVS				EB			ICRG			VAN	WEVS	EQLS	ESS		EB			ICRG	S&B		VAN
Israel								ICRG			VAN	WEVS		ESS			ISSP		ICRG			VAN
Italy	WEVS				EB			ICRG		ICVS	VAN	WEVS	EQLS	ESS		EB			ICRG	S&B		VAN
Latvia	WEVS										VAN	WEVS	EQLS				ISSP		ICRG	S&B	ICVS	VAN
Lithuania	WEVS										VAN	WEVS	EQLS						ICRG	S&B	ICVS	VAN
Luxembourg					EB			ICRG			VAN	WEVS	EQLS	ESS		EB			ICRG	S&B		VAN
Malta	WEVS							ICRG			VAN	WEVS	EQLS						ICRG	S&B	ICVS	VAN
Netherlands	WEVS				EB		ISJP	ICRG		ICVS	VAN	WEVS	EQLS	ESS		EB			ICRG	S&B	ICVS	VAN
New Zealand								ICRG		ICVS	VAN	WEVS					ISSP		ICRG	S&B		VAN
Norway	WEVS							ICRG			VAN	WEVS		ESS			ISSP		ICRG	S&B		VAN
Poland	WEVS						ISJP	ICRG		ICVS	VAN	WEVS	EQLS	ESS			ISSP		ICRG	S&B	ICVS	VAN
Portugal	WEVS				EB			ICRG			VAN	WEVS	EQLS	ESS		EB			ICRG	S&B	ICVS	VAN
Romania	WEVS							ICRG			VAN	WEVS	EQLS						ICRG	S&B	ICVS	VAN
Slovakia	WEVS						ISJP	ICRG		ICVS	VAN	WEVS	EQLS						ICRG	S&B	ICVS	VAN
Slovenia	WEVS						ISJP			ICVS	VAN	WEVS	EQLS	ESS			ISSP		ICRG	S&B	ICVS	VAN
Spain	WEVS				EB					ICVS	VAN	WEVS	EQLS	ESS		EB	ISSP			S&B	ICVS	VAN
Sweden	WEVS				EB			ICRG		ICVS	VAN	WEVS	EQLS	ESS		EB	ISSP		ICRG	S&B	ICVS	VAN
Switzerland	WEVS							ICRG			VAN	WEVS		ESS					ICRG	S&B	ICVS	VAN
United Kingdom	WEVS				EB		ISJP	ICRG			VAN	WEVS	EQLS	ESS		EB	ISSP		ICRG	S&B	ICVS	VAN
United States	WEVS						ISJP	ICRG			VAN	WEVS					ISSP		ICRG	S&B	ICVS	VAN

The table shows the sources of indicators used during the various survey periods. Explanation of abbreviations: EB = Eurobarometer, EQLS = European Quality of Life Survey, ESS = European Social Survey, GWP = Gallup World Poll, ICRG = International Country Risk Guide, ICVS = International Crime Victims Survey, ISJP = International Social Justice Project, ISSP = International Social Survey Program, S&B = Schneider & Buehn (2012), VAN = Vanhanen (2011), WEVS = World Values Survey or European Values Study.

	3rd survey period (2004 – 2008)											4th survey period (2009 – 2012)										
	WEVS	EQLS	ESS	GWP	EB	ISSP	ISJP	ICRG	S&B	ICVS	VAN	WEVS	EQLS	ESS	GWP	EB	ISSP	ISJP	ICRG	S&B	ICVS	VAN
	WEVS			GWP				ICRG	S&B		VAN				GWP		ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS		GWP	EB	ISSP		ICRG	S&B		VAN
		EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS			GWP				ICRG	S&B		VAN				GWP				ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B		VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B		VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB			ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B		VAN		EQLS	ESS	GWP	EB			ICRG	S&B		VAN
			ESS	GWP				ICRG			VAN			ESS	GWP		ISSP		ICRG			VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS		GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B		VAN		EQLS		GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS		GWP	EB			ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B		VAN		EQLS		GWP	EB			ICRG	S&B		VAN
	WEVS	EQLS		GWP				ICRG	S&B		VAN		EQLS		GWP				ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B		VAN		EQLS	ESS	GWP	EB			ICRG	S&B		VAN
	WEVS			GWP				ICRG	S&B		VAN				GWP		ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP				ICRG	S&B	ICVS	VAN			ESS	GWP		ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B		VAN		EQLS		GWP	EB			ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B		VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B		VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB				S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP			S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS		ESS	GWP				ICRG	S&B		VAN			ESS	GWP		ISSP		ICRG	S&B		VAN
	WEVS	EQLS	ESS	GWP	EB			ICRG	S&B	ICVS	VAN		EQLS	ESS	GWP	EB	ISSP		ICRG	S&B		VAN
	WEVS			GWP				ICRG	S&B		VAN				GWP		ISSP		ICRG	S&B		VAN

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Social Cohesion **Radar**

Measuring Common Ground

An International Comparison of Social Cohesion

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