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DEMOCRATIC VALUES

and PROTEST BEHAVIOR

Harmonization of Data
from International
Survey Projects

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Preface and Acknowledgements

This technical report is about the logic of, and methodology for, creating a multi-year multi-country dataset that will facilitate comprehensive comparative research on individual and contextual determinants of people's propensity to engage in political protest. We produced it as part of the project *Democratic Values and Protest Behavior: Data Harmonization, Measurement Comparability, and Multilevel Modeling in Cross-National Perspective* (hereafter, the Harmonization Project), funded by the (Polish) National Science Center under a three-year international cooperation grant for the Institute of Philosophy and Sociology, Polish Academy of Sciences (IFiS PAN), and The Ohio State University (OSU) Mershon Center for International Security Studies (grant number: *Harmonia-2012/06/M/HS6/00322*). The *Cross-National Studies: Interdisciplinary Research and Training* program (CONSIRT, consirt.osu.edu) of PAN and OSU hosts the project in Poland.

The Harmonization Project involves an international multi-disciplinary scientific team of young and established scholars from Poland and the United States, led by Kazimierz M. Slomczynski, professor of sociology at IFiS PAN, emeritus professor of sociology at OSU, and director of CONSIRT; Irina Tomescu-Dubrow, associate professor at IFiS PAN and program manager of CONSIRT; and J. Craig Jenkins,

professor of sociology at OSU and member of CONSIRT's advisory board. Members of our core team are Marta Kołczyńska, PhD student at OSU, Przemek Powalko, research specialist at IFiS PAN, Ilona Wysmułek and Olena Oleksiyenko, PhD students at the Graduate School for Social Research PAN, Marcin W. Zielinski, assistant professor at the University of Warsaw and IFiS PAN, Joshua Dubrow, associate professor of IFiS PAN and Labs Coordinator at CONSIRT, and Matthew Schoene, visiting assistant professor at Davidson College, USA. In addition, we were fortunate to have the help of talented graduate students from PAN: Jakub Wysmułek, Anastas Vangheli, and Anna Franczak. The work of both our core and extended team has been essential for preparing this volume, as well as for other products the Harmonization Project spurred, such as The Winter 2016 special issue of the *International Journal of Sociology* on "Political Behavior and Big Data" (Vol. 46(1), guest edited by Jenkins, Slomczynski and Dubrow, and the bi-annual *Harmonization: Newsletter on Survey Data Harmonization in the Social Sciences*, edited by Tomescu-Dubrow and Dubrow.

Within the Harmonization Project, Poland's National Science Centre contributed to the funding of this volume, as well as of various scientific events held in Warsaw and at The Ohio State University. We are grateful for this support. We extend our thanks to the Committee on Sociology at PAN, the Institute of Philosophy and Sociology at PAN, the Graduate School for Social Research at PAN, the OSU Mershon Center, the OSU Departments of Sociology and of Political Science, and the OSU Polish Studies Initiative for their financial and logistic support in organizing the following meetings:

Survey Data Harmonization, comprised the international conference "Survey Data Harmonization: Harmonia Project" followed by the workshop "Survey Data Harmonization: Practical Issues" (December 18-21, 2013, Warsaw, Poland).

Interdisciplinary Studies of Political Behavior and the Use of Big Data, comprised the conference "Interdisciplinary Studies of Political Behavior: From Elections to Protests," followed by the workshop "Comparability of Data" (May 6-9 2014, Columbus, OH, USA).

Cross-national Survey Harmonization and Analysis: Weights, Data Quality and Multi-level Modeling, international workshop (May 11-16, 2015, Columbus, OH, USA).

Longitudinal Survey Research: Methodological Challenges, comprised the conference “The Present and Future of Longitudinal Cross-sectional and Panel Survey Research” and the workshop “Harmonization of Survey and Non-Survey Data” (December 15-18, 2015, Warsaw, Poland).

We thank CONSIRT, which provided organizational support for the administration of this grant and the project as a whole. At the same time, we thank Andrzej Rychard, who, as director of IFiS PAN, fully supports our team’s work, and Grażyna Drażyk who, as chief officer of the Research Division of IFiS, helps us with managing the project. We appreciate Ewa Dworniak’s administrative assistance.

On the OSU side, we thank Claudia Buchmann and Zhenchao Qian, chairs of the Department of Sociology, and Richard Hermann, chair of the Department of Political Science. We acknowledge the administrative help of Kyle McCray, fiscal coordinator at OSU Mershon Center, and Eileen Klunker, assistant director at OSU Center for Slavic and East European Studies.

We are grateful for the intellectual contribution of the project’s Advisory Board, and extend special thanks to Dean Lillard, Principal Investigator of the Cross-National Equivalence File (CNEF) and associate professor at the OSU College of Human Ecology, and Markus Quandt, Head of the Team “International Survey Programs” at GESIS – Leibniz Institute for Social Sciences. We also gratefully acknowledge the intellectual input of Peter Granda, Associate Director of the Inter-university Consortium for Political and Social Research (ICPSR), Tadeusz Krauze, emeritus professor of sociology at Hofstra University; Zbigniew Sawinski, professor at IFiS PAN; Mitchell Seligson, Centennial Professor of Political Science and Professor of Sociology at Vanderbilt University and founder and Senior Advisor of the Latin American Public Opinion Project (LAPOP); and Christof Wolf, president of GESIS.

We thank Małgorzata Mikucka and Francesco Sarracino for their involvement in analyzing the Harmonization Project data, and for providing useful comments throughout the unfolding of the grant. We also thank the many attendees and presenters at our events for their assistance to the project.

Professor Krzysztof Zagórski reviewed the entire manuscript and provided several useful comments. Michelle Granas assisted us with editing this volume, leading us to clarify a number of substantive issues. Barbara Gruzka, head of IFiS Publishers, offered her professional advice on all stages of production of this volume. Andrzej Zabrowarny solved many technical problems involved in the book's timely publication.

In this volume, we use some text from the following publications:

Tomescu-Dubrow, Irina, and Kazimierz M. Slomczynski. 2014. "Democratic Values and Protest Behavior: Data Harmonization, Measurement Comparability, and Multi-Level Modeling in Cross-National Perspective." *Ask: Research and Methods* 23(1): 103-114.

Tomescu-Dubrow, Irina and Kazimierz M. Slomczynski. 2016. "Harmonization of Cross-National Survey Projects on Political Behavior: Developing the Analytic Framework of Survey Data Recycling." *International Journal of Sociology. Special Issue: Political Behavior and Big Data* 46(1): 58-72.

Powalko, Przemek and Marta Kołczyńska. 2016. "Working with Data in the Cross-National Survey Harmonization Project: Outline of Programming Decisions." *International Journal of Sociology. Special Issue: Political Behavior and Big Data* 46(1): 73-80.

We also use the progress reports written by members of the Harmonization Project team. The readers interested in detailed information on the Harmonization Project are advised to consult our webpage: dataharmonization.org.

*Kazimierz M. Slomczynski
Irina Tomescu-Dubrow
J. Craig Jenkins*

Introduction

This volume shares the knowledge our team of scholars from Poland and the United States produced as we carried out the three-year project *Democratic Values and Protest Behavior: Data Harmonization, Measurement Comparability, and Multilevel Modeling in Cross-National Perspective*, funded by the (Polish) National Science Center (grant number 2012/06/M/HS6/00322). The project, which hereafter we will refer to as the Harmonization Project, poses an important substantive research question: How do personal characteristics, together with the circumstances people live in, shape our propensity to engage in political protest?

The main purpose of the volume is to dwell on the methodology behind the multi-source database, which we built to comprehensively answer this question. At the beginning of this volume we outline the theoretical linkages that we expect between political protest and its determinants. We operationalize protest behavior as peoples' propensity to participate in demonstrations and to sign petitions.¹ As determinants, we consider (a) people's personal characteristics – attitudes

¹ Attending demonstrations and signing petitions are two forms of protest that are considered relatively undemanding, socially legitimate, and low risk (for discussion of these features of the protest behavior, see DiGrazia 2014). These forms of protest are most frequently studied in the survey data context.

toward key public institutions, such as the parliament, the legal system and political parties, (b) the features of countries individuals live in, level of democracy especially, and (c) the interaction between individual- and country-level determinants. However, this volume is not devoted to testing the posited hypotheses. Instead, the focus is on detailing the procedures we took to put together the kind of data that would allow us to perform these substantive analyses. At the end of the volume, we provide examples of the statistical methods which the gathered data could be subjected to.

It may seem straightforward that comparative research, including that on political protest, calls for data with information at both the person- and the country-level that varies over time and across space. In practice, such data prove hard to find within integrated sources. As social scientists we have free, public access to a wealth of international survey projects. However, many encounter shortcomings such as regional focus (e.g. the European Social Survey, the various Barometer studies), underrepresentation of historically marginalized regions and limited country-coverage (even in Europe, as already documented)² or confines on the measurement of major concepts, sometimes lumping together reports on facts with intentions (e.g. the World Values Survey).

The Harmonization Project database that we constructed to overcome these challenges contains information on more than two million people from 142 countries and territories, interviewed between the late 1960s and 2013. We pooled information from 1,721 national surveys stemming from 22 well-known international survey projects, including the European Social Survey, the International Social Survey Programme and the World Value Survey. We assessed the quality of the source materials (e.g., survey documentation and records in the computer files), developed rules for ex-post harmonization and applied them to construct comparable measurements of political protest, social values, and socio-demographic characteristics.

² See, e.g., Slomczynski and Tomescu-Dubrow 2006.

The harmonized individual-level data were then complemented with macro-level variables from external sources, such as the World Bank, OSCE, UN agencies, Transparency International and others. As Chapter 2 details, contextual variables are kept in a separate file in the Master Box, and can be joined with the Master File of survey data via appropriate matching procedures on the level of country*years.

We structure the book in five parts. Part One deals with the linkage between democratic values and protest behavior, and basic methodological issues of data management. In Chapter 1 we discuss how two interrelated research streams – that is, refining the substantive arguments for why people protest, and using multilevel data that allow for appropriate over-time and cross-country analyses – inform the logic of, and work within, the Harmonization Project. Chapter 2 details the process of selecting and managing the data for the Harmonization Project database, including the selection criteria for the 22 international survey projects and given project waves. To deal with the large volume of information, its multilevel structure, and the large amount of national surveys we developed a set of custom programming tools that allows for efficient automation of repeatable and otherwise manual routines. In doing so, we employed freeware and open-source software.

In Part Two we discuss the process of harmonizing individual-level variables stemming from the 22 selected projects. Chapter 3 describes harmonization procedures of variables referring to peoples' trust in public institutions – trust in the national parliament, in the legal system, and trust in political parties. Since the literature consistently ties these attitudes to trust in people, we also harmonize interpersonal trust, as well as interest in politics. The latter is a consistently relevant predictor of political participation, including protest. Chapter 4 is devoted to our outcome of interest, participation in political protest. We discuss harmonization of two types of protest behavior, participation in demonstrations and signing petitions, respectively. As in previous chapters, in the context of ex-post harmonization we also describe relevant control variables dealing, for example,

with question wording and scales. Chapter 5 features socio-demographic variables. Specifically, we report on the process of creating the common measures for gender, age/year of birth, rural/urban place of living, metropolitan area, and respondents' level of education.

Part Three deals with time-varying characteristics of countries, which we, along with the literature, consider to be important for understanding if and how people protest. Specifically, we appended the harmonized individual-level survey data with country measures of level of democracy, economic development, and economic inequality as they correspond to given country-years (i.e. country and year of the national survey). Chapter 6 describes our choice for the indicator of democracy, and what informed it. We considered various possible measures, such as the Polity Score, Democracy Ranking Association, Bollen's Liberal Democracy, the Economist Intelligence Unit score. Since many indexes of democracy build survey data into their make-up (oftentimes from the same project we employ), we faced the potential problem of confounding information. Hence, in analyses reported in Parts Four and Five we use an index based on the Freedom House assessment of political rights and civil liberties, which does not involve data from surveys. Chapter 7 focuses on indexes of economic performance and inequality. Regarding the latter, we take both All the Ginis (ATG) database by Branko Milanović, and The Standardized World Income Inequality Database developed by Frederick Solt. We also provide information on substantive control variables, such as population size and regions of the world.

In the final two parts of the volume (Parts Four and Five) we present basic analyses using the individual and country-year level variables described earlier, as well as selected multilevel models that estimate the effects of individual and macro indicators, and cross-level interactions, on the two dependent variables: odds of participating in a demonstrations, and odds of signing a petition. Chapter 8 presents estimates of trust in parliament, political parties, and the justice system for countries over the world and different periods. It also examines the relationship between these three indicators in terms

of bivariate correlations, as well as their “fit” into a common factor that captures the latent concept of “trust in institutions”. Chapter 9 informs about the variability of political protest – participation in demonstrations, and signing a petition – across countries and across time. We also show the extent to which the two actions coincide for given countries and given periods. It should be noted here that survey questions about protest behavior are asked in various time frames, most commonly in terms of 1-2 years, and 8, 10 years or ever. Hence we provide aggregate information on the level of country-year for these two time frames, titling them “last year” and “ever” since these are the predominant time horizons. Chapter 10 presents general data on sociodemographic variables across all analyzed 1,721 national surveys, while Chapter 11 provides distribution characteristics of three macro variables: the Freedom House Index of Democracy, GDP per capita, and Gini Index (SWIID). Chapter 12 illustrates how the data from the Harmonization Project can be analyzed to answer the questions about determinants of protest behavior. The purpose is to signal certain methodological problems the multilevel structure raises and to point to the lines our research will follow next. We present a selection of three- and two-level population average logistic regression models where the dependent variables are (a) likelihood of participation in demonstrations and (b) of signing petitions, in two time frames of the event: did the action occur “last year,” or “ever.”

We invite readers to enjoy this volume as primarily a technical report on the logic of, and methodology for, producing the multi-country multi-year database and dataset, including the possibility to account for reliability and validity issues in the new, harmonized variables via quality control indicators. The analyses that we present assess the feasibility of the proposed statistical models and offer recommendations on how the Harmonization Project dataset can be used in substantive analyses. This report will also be available on the project’s website dataharmonization.org.

PART ONE

ON THE LINKAGE
BETWEEN DEMOCRATIC
VALUES AND
PROTEST BEHAVIOR

CHAPTER 1

Democratic Values and Protest Behavior: Data Harmonization, Measurement Comparability, and Multilevel Modeling

*Based on reports by
Kazimierz M. Slomczynski
and Irina Tomescu-Dubrow*

1.1. INTRODUCTION

The purpose of the *Democratic Values and Protest Behavior: Data Harmonization, Measurement Comparability, and Multi-Level Modeling* project (hereafter, the Harmonization Project) is to advance theoretical and methodological knowledge on the relation between peoples' propensity to engage in political protest, and features of the contexts within which protest occurs, accounting for individual-level characteristics. From the extensive literature on this topic we identified two interrelated research streams that need further attention: one involves refining the substantive arguments for why people protest; the other concerns using data that allow for appropriate over-time and cross-country analyses. We elaborate on both aspects below, relying on earlier work by Tomescu-Dubrow & Slomczynski (2014; 2015).

1.2. PROBLEM STATEMENT

People engage in protest to various degrees, depending on personal characteristics – civic skills, economic circumstances, gender, age and ideology – to name a few. Current studies on protest behavior

in many, mainly European, countries, focus on micro-determinants, such as gender, age, education, and interest in politics. As Gallego (2007) points out, peoples' socio-economic and demographic characteristics are related to their acquisition of resources, which in turn impact the costs of taking part in politics. The relevance of a person's interest in politics for both electoral and non-electoral political action is also well-established in the literature (e.g., Rosenstone & Hansen 1993; Leighley & Vedlitz 1999; Tomescu-Dubrow & Slomczynski 2014).

These individual-level conditions for action are themselves shaped by the context we live in. Worldwide there is "marked variation in protest across nations, with a 20:1 ratio in protest mean-scores between the highest-ranking (Sweden) and lowest-ranking (Vietnam) nations" (Dalton Sickle & Weldon 2009: 14); hence, on empirical grounds too, limiting explanatory models to individual characteristics is not justified. In recent years researchers have paid increasing attention to macro-determinants of political participation (Benson & Rochon 2004; Kriesi 2004; Dubrow, Slomczynski & Tomescu-Dubrow 2008; Marien, Hooghe & Quintelier 2010; Vrablikova 2013). We still know relatively little about how personal characteristics and contexts interact to shape protest engagement. This is especially the case with respect to the possible effect of discrepancies between peoples' attitudes and values on one hand, and features of the political regime, on the other.

From the point of methodology, most recent research on protest is based on particular data sets involving limited coverage of countries and topics; various kinds of protest activities are inconsistently combined, thus producing biased measures; and the statistical techniques employed in analyses are not fully satisfactory, as often they do not deal explicitly with the hierarchical structure of the data (i.e. people nested in countries and time).

It may seem straightforward that comparative research on political protest calls for data at both the person- and the country-level that vary over time and space. In practice, access

to such data is difficult. The social sciences have a growing wealth of survey projects, but the information is often not easily comparable. First, there is the issue of differences in wording of questions. For example, even questions about participation in demonstrations have been asked differently in major projects, as is discussed in detail in Chapter 4. Second, the regional focus of international surveys – the European Social Survey, Latino Barometer, Asia Europe Survey, among others – hinders research pertaining to issues with global relevance.

The Harmonization Project developed two connected lines of work, one substantive, the other methodological, to deal with these problems. We discuss them in the following sections.

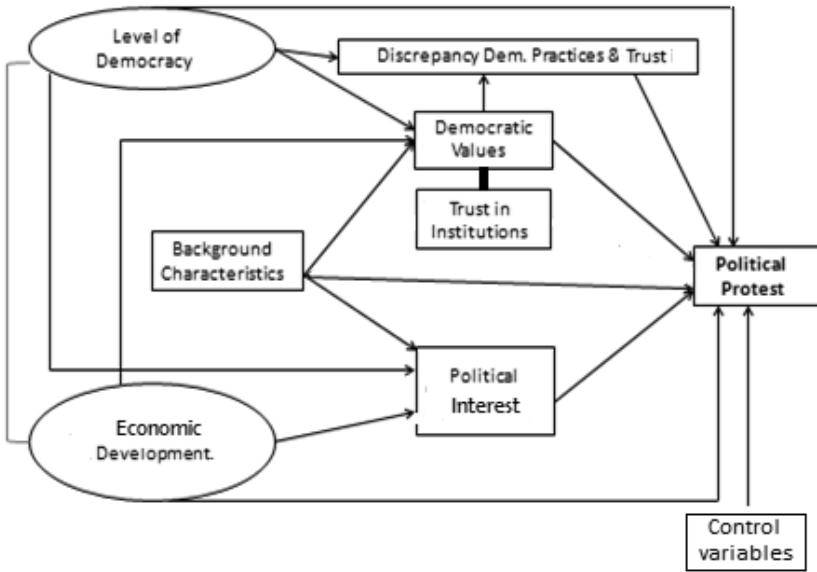
1.3. SOLUTIONS IN THE HARMONIZATION PROJECT

A new theoretical model of protest behavior

Political protest can be of various types. We consider two types of conventional protest (Jenkins & Form 2005): the first is *participation in public demonstrations*, which is a good example of collectivistic behavior in that “the act is designed as physical display of opinion to build solidarity, and the person has the sense of being part of a gathering” (Tomescu-Dubrow & Slomczynski 2014 p. 136). The second form of protest, *signing a petition*, contains both collectivistic and individualistic aspects: preparing a petition calls for cooperation, and signing a petition is a personal act (Dubrow, Slomczynski & Tomescu-Dubrow 2008).

Regarding democracy, we consider democratic practice – usually measured by “democratic indexes” characterizing countries – as well as individual attitudes, especially trust in the main democratic institutions. Figure 1.2.1 depicts the expected relationships.

Figure 1.2.1 Political Protest and its Determinants



The leading hypothesis is that participation in political protest is a linear function of democratic values and a set of socio-demographic variables (measured at the respondent level), economic development and democratic practices (country-level), and the discrepancy (cross-level interaction) between a country’s democratic practices and peoples’ trust in key democratic institutions – that is, political parties, the justice system, and parliament. We expect such tensions to matter for the extent and intensity of political protest, and refer to them explicitly as the literature does not cover them.

For a summary of how the constructs in Figure 1.2.1 relate, see Tomescu-Dubrow & Slomczynski (2015). One observations is in place. Country-level indicators of democracy that do not contain trust in institutions ‘components’ from public opinion sources allow one to measure discrepancies between institutional democratic performance on one hand, and peoples’ attitudes toward democratic institutions, on the other, *via* a cross-level interaction term. This is the core to our

theoretical argument and we elaborate on it in the last chapter of this report.

In addition, to the set of variables presented in Figure 1.2.1 we will introduce an important variable discussed in the literature on political protest, namely *economic inequality*. Since more than quarter of century ago, when Lichbach (1989: 465) noted that “economic inequality may either have positive, negative, or no impact on dissent,” considerable progress has been made in understanding the “economic inequality – political conflict nexus” (Reenock et al 2007; see also Solt 2008). However, the economic inequality – political conflict nexus has not been explored for various political-protest forms, taking into account variation across different regions of the world and different periods. Thus we ask: What is the direction and strength of the impact of income inequality on the proportion of people who engage in soft political-protest? The argument could be made that low income inequality is a base for social integration, stimulating the expression of discontent. In contrast, in polarized societies, people might feel that protesting is counterproductive because the elites, who control the distribution of resources, have very little in common with the disadvantaged groups.

Formalizing the problem

The generic, simplified equation for the multilevel model, for a given time t , is as follows (Tomescu-Dubrow & Slomczynski 2015, pp. 63):¹

$$(1) \quad \mathbf{Y} = \gamma_{00} + \gamma_{10} \mathbf{X}_{ij} + \gamma_{01} \mathbf{W}_j + \mathbf{u}_{1j} \mathbf{X}_{ij} + \mathbf{u}_{0j} + \mathbf{e}_{ij}$$

where Y , the dependent variable, varies among individuals (i) and countries (j). X is a vector of individual characteristics and W is a

¹We assume that most of these variables could be operationalized in different ways. We use similar notations to those used in popular HLM texts like Snijders & Bosker (2012), Hox (2010), Gellman & Hill (2006), and Raudenbush & Bryk (2002) and adjust explanation of coefficients to cross-national research where individuals are nested in countries.

vector of macro-level characteristics. Note that γ_{00} , γ_{10} , and γ_{01} are fixed coefficients/effects and

$$\mathbf{u}_{1j}, \mathbf{u}_{0j}, \mathbf{e}_{ij}$$

are random coefficients/effects.

The key terms for the multilevel modeling in cross-national context are discussed in Tomescu-Dubrow & Slomczynski (2015, p. 63–64). It suffices here to say that under this specification, error terms are heteroscedastic instead of homoscedastic, as is assumed in ordinary regression models where the residual errors are considered independent of the values of the explanatory variable. Dealing with the problem of heteroscedasticity is one of the main reasons for preferring multilevel models over the regular OLS models when analyzing hierarchical nested data (see Gelman & Hill 2007; Hox 2010).

1.4. INTEGRATED DATABASE OF HARMONIZED INDIVIDUAL AND COUNTRY-LEVEL VARIABLES

Combining Data from Major International Survey Projects

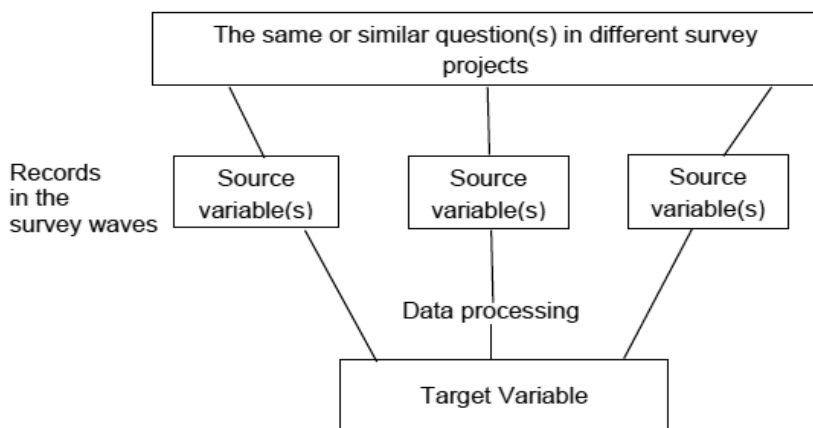
The Harmonization Project relies on data from major International Survey Projects such as the European Social Survey, the World Values Survey, the International Social Survey Programme, the Eurobarometer and its renditions in various parts of the world, and several others containing questions on protest behavior and/or democratic values. We have a wide representation of countries (covering all continents well, with the noticeable exception of Africa) and time coverage (concentrating on the period after 2000). Altogether, for this project we harmonized key variables from 1,721 national surveys. A detailed description of the data used in the Harmonization Project is provided in Chapter 2.

The harmonization process

Data harmonization is a generic term for procedures that aim to achieve, or at least improve, the comparability of surveys over time and of surveys from different countries (Granda & Blasczyk 2010; Granda, Wolf & Hadorn 2010). Ex-post survey data harmonization strives to combine and adjust (i.e. recode, rescale, transform) different survey datasets which were not *a priori* designed to be compared, into a new, integrated, dataset that can be analyzed like a typical single data source. Thus, it offers a different solution than running analyses on several surveys separately, which scholars often adopt when seeking greater country and/or time coverage (a detailed discussion of the rise of cross-national survey data harmonization in the social sciences is provided by Dubrow & Tomescu-Dubrow, 2015).

The literature refers to the original variables in the datasets of particular surveys as *source variables*, and to the harmonized, common, variable produced from the source variables as *target variables* (Gunther 2003; Ehling et al. 2006; Granda & Blasczyk 2010; Granda, Wolf & Hadorn 2010). Figure 1.4.1 depicts, in a simplified way, the relation of source variables to the target variable (Tomescu-Dubrow & Slomczynski 2014, p.108).

Figure 1.4.1 Relationship between Source and Target Variables



We developed specific data processing procedures and harmonization rules that form a complex, labor-intensive and multistage process. We applied all the rules of the Data Documentation Initiative (DDI, www.ddialliance.org) to information pooled from well-known international survey projects to create *standardized technical variables*:

- project ID
- country ID, ISO-1, ISO-2, ISO-3
- wave ID
- year of the study
- country’s administrative unit
- design and post-stratification weights
- respondent ID within a survey and for all surveys

Following the theoretical and methodological approaches presented in Figure 1.1 and Figure 1.2, respectively, we constructed harmonized *individual-level* variables dealing with:

A. Trust in state institutions and other political attitudes

- trust in parliament
- trust in the legal system
- trust in political parties
and (in addition)
- interest in politics
- trust in the current government
- trust in people

B. Political protest

- participation in demonstrations
- signing petitions

C. Background –socio-demographic characteristics of the respondent

- gender
- age and year of birth
- rural/urban locality
- metropolitan area
- education

The innovative aspect of our approach to survey-data harmonization is in introducing variables that *control the harmonization process*. As evidenced in Chapters 3–5, we account for inter-survey deviations in the formulation of questionnaire items from the most frequent way of asking a given question, the properties of original categories of respondent answers with respect to time frame, length and direction of the scale, and many other features that may affect researchers' interpretation of the target variable.

We appended the individual-level survey data with macro-variables taken from external sources, such as the World Bank. As a result, we have a multi-country multi-year dataset with geographic and temporal variability that allows us to adequately analyze the relation between democracy and political protest in comparative perspective. Chapter 2 discusses selecting and managing the data in the Harmonization Project.

Methodological problems

Ex-post survey harmonization is rife with methodological challenges, and the Harmonization Project is no exception. Among them is dealing with the various types of errors in the original data (for details on the Total Survey Error paradigm, see Biemer 2010; Smith 2011), as well as issues of cross-national equivalence (see for example, Przeworski & Teune 1972; Harkness 1998; Jowell 1998; Kennett & Yeates 2001; Harkness, van de Vijver & Mohler 2003; Jowell, Roberts, Fitzgerald & Gillian 2007; Cheung 2008; Medina et al. 2009; Byrne & van de Vijver 2010; Matsumoto & van de Vijver 2010).

To account for methodological problems in the source data, the Harmonization Project opened up three lines of research on original materials stemming from the selected international survey projects on (a) the general survey documentation, (b) the specific data description, and (c) the computer data files.² Lack or inadequate

²General survey documentation: when, by what institution, and how the survey was conducted; type of sample scheme, sample size, response rate; instrument

information in documentation reduces confidence in the data, inconsistencies between the resources defining the meaning of variables and their values decrease interpretability of the data, while errors in data files lead to possible distortion of the empirical results based on the data (for discussion of survey data harmonization and the quality of data documentation in cross-national surveys in the context of the Harmonization Project, see Schoene & Kołczyńska 2014).

In searching through the documentation of the international survey projects we found wide variation in the standards of documentation accompanying each data set. At this point we created quality control variables describing data documentations, which are at the level of the national survey:

- type of the sample
- response rate – whether this information is provided or not
- numerical value of the response rate, if given
- indication of any efforts at controlling the quality of the questionnaire translation
- indication of questionnaire pretesting
- attempts at fieldwork control

In the case of inconsistency between the documentation and the data in computer files, we created variables indicating:

- variable value discrepancy
- contradictory value labeling
- lack of value labels
- misleading variable label

These indicators are at the level of project-wave.

(questionnaire) preparation, pre-test, types of interviews; and fieldwork control. Specific description of data: the questionnaire, codebook and other resources that define the meaning of variables and their values. Computer data files are records of respondents' characteristics, together with technical variables.

The last set of quality-control variables includes:

- non-unique records (at respondent level)
- errors in sampling weights (at national survey level)
- excessive amount of missing data (at respondent level)
- lack of, or, errors in respondents IDs (at respondent level)

The distribution of each quality control variable differentiates national surveys enough to claim that the surveys in the selected international projects are of varying quality. Exploration of the effects of quality control variables is beyond the scope of this report. However, we invite researchers to use them to assess the extent to which they matter for substantive results.

CHAPTER 2

Selecting and Managing Data for the Harmonization Project

*Based on reports by
Przemek Powatko and Marta Kólczyńska,
and other members of the research team*

2.1. INTEGRATED DATASET

To increase the data's geographic and temporal variability, which is necessary for analyzing the relation between democracy and political protest in comparative perspective, the Harmonization Team selected well-known international survey projects that meet the following criteria:

- they are non-commercial;
- they are designed as cross-national, and, preferably, multi-wave;
- the samples are intended as representative of the adult population of given country or territory;
- they contain questions about political attitudes and behaviors;
- they are freely available in the public domain;
- their documentation (study description, codebook and/or questionnaire) is provided in English.

Here is the list of projects: Afrobarometer, Americas Barometer, Arab Barometer, Asian Barometer, Asia Europe Survey, Caucasus Barometer, Consolidation of Democracy in Central and Eastern Europe, Comparative National Elections Project, Eurobarometer, European Quality of Life Survey, European Social Survey, European Values

Table 2.1.1 Selected International Survey Projects

Abbrev.	Survey Project	Time span	Waves	Countries / Files territories	Data Sets (a)	Cases	
						Counts	
AFB	Afrobarometer	1999-2009	4	20	4	66	98942
AMB	Americas Barometer	2004-2012	5	24	1	92	151341
ARB	Arab Barometer	2006-2011	2	11	2	16	19684
ABS	Asian Barometer	2001-2011	3	13	3	30	43691
ASES	Asia Europe Survey	2000	1	18	1	18	18253
CB	Caucasus Barometer	2009-2012	4	3	4	12	24621
CDCEE	Consolidation of Democracy (b)	1990-2001	2	16	1	27	28926
CNEP	Comparative National Elections Project (c)	2004-2006	1	8	8	8	13372
EB	Eurobarometer (c)	1983-2012	7	37	7	152	138753
EQLS	European Quality of Life Survey	2003-2012	3	35	1	93	105527
ESS	European Social Survey	2002-2013	6	32	2	146	281496
EVS	European Values Study	1981-2009	4	50	1(d)	128	166502
ISJP	International Social Justice Project	1991-1996	2	14	1	21	25805
ISSP	International Social Survey Programme (c)	1985-2013	13	53	13	363	493243
LB	Latinobarometro	1995-2010	15	19	15	260	294965
LITS	Life in Transition Survey	2006-2010	2	35	2	64	67866
NBB	New Baltic Barometer	1993-2004	6	3	1	18	21601
PA2	Political Action II	1979-1981	1	3	1	3	4057
PA8NS	Political Action – An Eight Nation Study	1973-1976	1	8	1	8	12588
PPE7N	Political Participation and Equality (e)	1966-1971	1	7	7	7	16522
VPCPCE	Values and Political Change (f)	1993	1	5	5	5	4723
WVS	World Values Survey	1981-2008	5	89	1(d)	184	256582
Total		1966-2013	89	142	81	1721	2289060

(a) Corresponds to the national surveys. For CNEP, PA2 and VPCPCE, numbers from the source files after filtering out panel and post-election surveys.

(b) Full name: Consolidation of Democracy in Central & Eastern Europe.

(c) For the Comparative National Elections Project, Eurobarometer, and International Social Survey Programme, only selected survey editions were used.

(d) Common file for the European Values Study and World Values Survey.

(e) Full name: Political Participation and Equality in Seven Nations.

(f) Full name: Values and Political Change in Postcommunist Europe.

Study, International Social Justice Project, International Social Survey Programme, Latinobarometro, Life in Transition Survey, New Baltic Barometer, Political Action II, Political Action – An Eight Nation Study, Political Participation and Equality in Seven Nations, Values and Political Change in Post-Communist Europe, and World Values Survey. In all these survey projects, the units of observations are individuals. Because of the thematic coverage criterion, we include only survey waves that contain relevant questions on protest behavior and/or democratic values; hence not all waves of the International Social Survey Programme, Eurobarometer, and Comparative National Elections Project are in our data. Table 2.1.1 provides description of selected international survey projects in terms of time spans, waves, number of countries included, number of files, number of data sets corresponding to national surveys, and number of respondents (cases).

We consider these survey projects to be well-known on the basis of publication records and the impact they have on the social-science disciplines. As of March 2015, the number of publications using data from the projects listed in Table 2.1.1 was 2,087 at the Web of Science; 11,746 at the projects' homepages; and from 25,051 to 116,377 (depending on how narrow the search restrictions were) at Google Scholar. At the same time, the number of citations of the projects listed in Table 2.1.1 was 19,726 (Web of Science). Table 2.1.2 provides detailed information about the number of publications and the number of citations for each of the projects included in our analyses.

Table 2.1.2 Estimated Number of Publications that Used Data from International Survey Projects

Project	Number of publications listed in			Number of Citations in Web of Science [†]
	homepages [*]	Google Scholar [#]	Web of Science [†]	
AFB ¹	428	1307 (5230)	55	204
AMB ²	312	251 (502)	13	27
ARB ³	30	174 (348)	3	6
ABS ⁴	322	177 (354)	4	2
ASES ⁵	1	37 (74)	2	0
CB ⁶	96	66 (164)	0	0
CDCEE ⁷	1	81 (163)	0	0
CNEP ⁸	65	49 (326)	3	1
EB ⁹	825	1167 (40000)	409	4992
EQLS ¹⁰	70	915 (1830)	27	116
ESS ¹¹	1362	4600 (13800)	590	3637
EVS ¹²	1384	3293 (9878)	175	1397
ISJP ¹³	2	230 (461)	20	518
ISSP ¹⁴	6569	1443 (9660)	283	3281
LB ¹⁵	54	1437 (4600)	21	156
LITS ¹⁶		195 (391)	7	1
NBB ¹⁷	27	118 (237)	2	3
PA2 ¹⁸	12	46 (93)	0	0
PA8NS ¹⁹	50	78 (156)	0	0
PPE7N ²⁰	8	23 (47)	0	0
VPCPCE ²¹		30 (60)	1	0
WVS ²²	128	9334 (28003)	472	5385
Total	11,746	25,051 (116,377)	2,087	19,726

^{*} Data gathered on 2015-02-06

[#] Data gathered on 2015-03-19. For the total number of items found on Google Scholar for a given project (provided in parentheses), we estimated the number of publications that refer to the project data in two steps: first, we decreased the total number of items proportionally to the number of relevant waves (e.g. for Eurobarometer we took 7 waves out of 80, i.e. 40,000 * 0.0875); second, for large projects with a total number of items over 3000, we divided this number by 3; for the remaining projects we divided this number by 2.

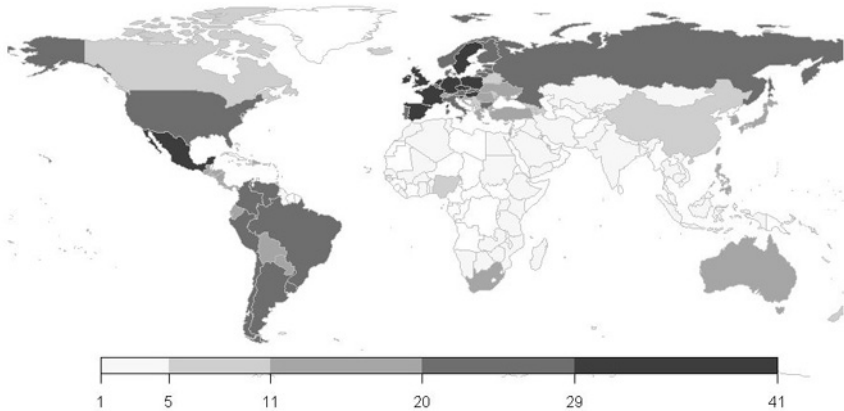
[†] Data gathered on 2015-03-31

The following expressions were used for searches:¹ “afrobarometer” OR “afro-barometer” OR “afro barometer”² “americas barometer”³ “arab barometer”⁴ “asian barometer survey”⁵ “asia europe survey”⁶ “caucasus barometer”⁷ “consolidation of democracy in central and eastern europe”⁸

“comparative national elections project” OR “comparative national election project”⁹ “eurobarometer”¹⁰ “european quality of life survey”¹¹ “european social survey”¹² “european values study” OR “european value study” OR “european values survey” OR “european value survey”¹³ “international social justice project”¹⁴ “international social survey programme” OR “international social survey program”¹⁵ “latinobarometro” OR “latino barometro” OR “latino barometer” OR “latino-barometro”¹⁶ “life in transition survey”¹⁷ “new baltic barometer”¹⁸ “political action ii”¹⁹ “political action” “eight nation study”²⁰ “political participation and equality” “verba”²¹ “values and political change in post-communist Europe”²² “world values survey” OR “world value survey” OR “world values study” OR “world value study”.

In total, we selected 89 waves from the 22 survey projects and pooled them into a relational database, which stores data in structured objects called tables (see Powalko 2014:5). This database contains 81 data files with 1721 survey*wave*countries (i.e., national samples) and a total of almost 2.3 million respondents. For the geographical coverage of the survey data in our database, see Figure 2.1.1.

Figure 2.1.1 Geographic Coverage of National Surveys in the Harmonization Project



In the combined dataset, the average number of cases (respondents) per national sample is 1,330, the average number of variables per national sample is 228, and if each sample is treated separately, the size of the data matrix is 2,289,060 x 228. To handle this large amount of data, as well as the variety of data formats used in so many sources, we have developed, within the project, in-house tools for extracting, transforming and loading the data into a common (relational) database. For a detailed discussion see Powalko and Kołczyńska 2016.

Data contained in the international survey projects presented in Table 2.1.1 have a number of features that make them difficult to analyze using common statistical software packages such as SPSS, Stata, or R, which are most frequently used in social science quantitative research. First of all, the sheer volume of the data makes their storage, manipulation, and especially analysis impractical. Second, the large number of source files calls for programmability, which raises the flexibility of implementation of data harmonization, allows for greater control of the data flow through establishing small and well-defined procedural steps, and facilitates repeatability and replicability. Programmable solutions have the additional advantage of providing documentation of each step for quality control of the process. Finally, given the different units of observation (individual respondent, national survey, project wave, country-year), storing data in a single “diagonal” table, as is essentially the case in most statistical packages, would result in enormous redundancy, not only slowing any manipulation of the data even more, but leading to great inefficiency of the process. Thus, data management in our project requires an innovative strategy. While considering various options, our choice has also been guided by the preference for free and/or open-source software, which reduces the costs of the endeavor, and extends access to online knowledge bases and user communities.

Using Structured Query Language (SQL), we constructed a relational database with 81 data files. A single data file may contain from one country in one wave to many countries in many waves, hence the

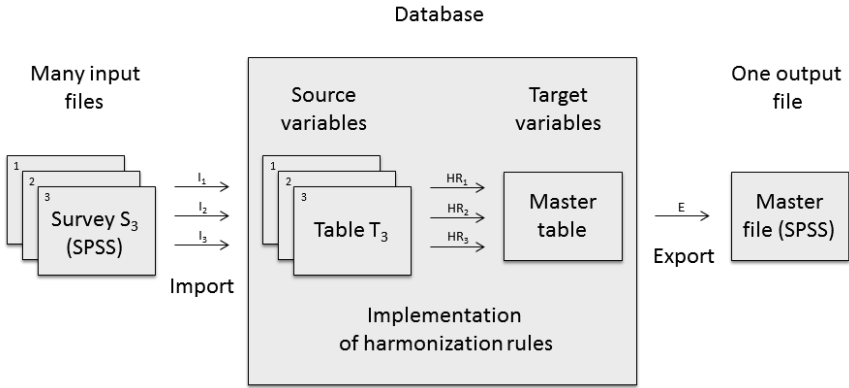
difference between the number of waves (89) and the number of data files (81). The platform for data files of (original) national surveys is organized in such a manner that in the future, any source variable could be extracted and moved to the integrated dataset.

2.2. IMPLEMENTATION

We start with a number of source files downloaded directly from project websites or data repositories, extract data and import them to the database and store them in corresponding source tables, one for each source file. We implement the harmonization rules in the form of a series of independent database operations, and save the results in a single target table, called the master table. Although the database environment provides basic tools for statistical analyses, in order to apply more sophisticated techniques available only in statistical packages, the master table is exported to the master file of the appropriate format. Figure 2.2.1 outlines the flow of data in the Harmonization Project. In the following paragraphs we describe the process of importing data from input source file (S_i) into database tables (T_i) and discuss some of the issues pertaining to specific steps of this process.

Input source files come in various formats, but for the sake of simplicity, repeatability and automation of the subsequent steps we decided to work with the SPSS system or portable files which appear to be the most frequently used. In a few instances, when SPSS files were not available, we converted existing files to the chosen format. To read SPSS data files we use a command-line interface of PSPP, a free alternative to SPSS.

Figure 2.2.1 Data Processing in the Harmonization Project



First releases of survey data sets are rarely error-free. Various problems or errors that are identified in the published data sets are highlighted with alerts or corrected with errata or new versions of the data files. We handle these changes in the following way: (1) if a new version of the source file is published, we replace the file in our repository; (2) if an erratum is published in the form of a syntax patch, we apply it to the original data file; finally, (3) if instructions are given in other ways, usually as explanatory notes, we write them as SPSS syntax and then modify the original data file. The data in our repository represent the state of affairs for the end of the first quarter of 2014.¹

All data processing is scripted and automated in an open-source programming environment called Cygwin which integrates Windows resources and Unix-like² capabilities of manipulating data. Cygwin is equipped with a number of desirable features for the automation of

¹ Details about the preparation of the source files can be found in the following dataverse: <http://dx.doi.org/10.7910/DVN/HPXFA1>

² UNIX is a family of operating systems that are known for the use of plain text for storing data thus providing a large number of sophisticated tools for text processing.

repeatable and otherwise manual and time-consuming tasks: command-line interpreters providing interface to the operating system (e.g. Bash), utilities for text processing (e.g. grep, sed), and programming languages for facilitating complex tasks (e.g. AWK, Perl).

Data from the source files are extracted and stored in corresponding tables in the relational database. These data include survey data (measured at the level of individual respondents), as well as data on countries (measured at the level of countries or country-years), and survey quality control and methodological variables (measured at the level of national surveys or waves).

Tables are composed of rows and columns that in a graphical representation resemble matrices or spreadsheets. Columns correspond to variables and rows correspond to cases, which – depending on the data source – may correspond to individuals, countries, or surveys. In the relational database, tables may be related to each other via explicit or implicit referential integrity mechanisms (keys and joins) which allow for easy, fast and – at the same time – sophisticated access to related data while reducing their redundancy and merging time. This approach improves scalability of the database, which means that adding more data files to the project’s repository – resulting in more tables in the database – scales with the execution time in a predictable – often linear – way.

A great advantage of relational databases is that data from all tables are directly available for browsing and querying without the need to have them all opened at once. Executing a database query leads to a series of small data reads from relevant tables so that even if tables are numerous and large, only a fraction of the data is read from the disk at any time, and loaded into internal memory, making the whole process more efficient in terms of time and computing resources than the standard practice of merging and appending all necessary data into a single data file.

After reviewing the most popular databases, we decided to use MySQL, a free and open-source database, because of its ability to handle large numbers of variables that are present in some of the

source files we work with. MySQL allows for up to 4096 columns in a table, which so far has proven to be a sufficient number. Another advantage of MySQL is the existence of a convenient command-line interface whose seamless integration with a Cygwin terminal facilitates the scripting of data processing. Moreover, MySQL has a variety of built-in storage engines that can be used for different purposes. For storing source data we chose the ARCHIVE engine, which significantly compresses data in tables, therefore making them smaller and making reads from the disk faster. This in turn decreases the demand for internal memory and accelerates data processing.

Communication with the relational database is carried out using SQL, a high-level declarative language with a simple syntax yet powerful capabilities. For writing queries and browsing data in the database we use HeidiSQL, and for writing programs in scripting languages we use Notepad++. Together with Cygwin, PSPP and MySQL, all these tools are free and/or open-source software. This best serves our purpose of building a platform for survey data processing without generating unnecessary costs. At the same time, the open source model attracts both individual users and corporate bodies, creating vigorous user communities boosting online knowledge bases and pushing software developers to deliver new features and solutions to known problems in reaction times much faster than in the world of proprietary software.

2.3. DATA PROCESSING

Next, we turn to the process of loading the survey data into the database. Let us assume that an SPSS source file has been saved to a working directory on our workstation. The following steps are fully automated and executed through a set of Cygwin scripts:

- (1) Extract data from the SPSS source file and save them to a text file. This is done through a PSPP syntax file. The output is a comma separated values (CSV) file, a convenient way of storing regularly

formatted (e.g. tabular, as in our case) data because of its compactness and readability.

(2) Scan and analyze the content of the CSV file and create a corresponding SQL syntax for a source table definition. This is necessary because sometimes SPSS files provide inaccurate information on data types and lengths. We decided that all data in source tables would be stored in columns of character string type, i.e., the way it “looks like” in the source files, without any interpretation. Thus the only parameter of a column’s definition is the length of the data, which is evaluated during this step.

(3) Connect to the database and execute the SQL syntax file to create an empty table with appropriate parameters for storing the source data.

(4) Connect to the database and load the content of the CSV file into the source table.

In addition to the data, an SPSS source file contains information about variable names, formats, acceptable values and missing value codes, as well as variable and value labels. We extract only part of these metadata, i.e., code values and labels corresponding to response categories, and save them into a separate text file, which we call a dictionary (DIC) file. Please note that dictionary files (and corresponding dictionary tables) are only for reference and as such are not used in the further harmonization process, so the following steps are optional:

(5) Extract metadata from the SPSS source file and store them in the DIC file.

(6) Prepare an SQL syntax file for dictionary table definition according to the values in the DIC file.

(7) Connect to the database and execute the SQL syntax file to create an empty dictionary table for storing the metadata.

(8) Connect to the database and load the content of the DIC file into the dictionary table.

The process of loading of the survey data into the database is completed. In the workstation that we use for tests³, the processing of

³ Lenovo Thinkpad T530, Intel Core i5 3210M CPU 2.5 GHz, 8 GB DDR3, SanDisk SDSSDHP256G.

a 45 MB SPSS source file containing 50,000 cases and 300 variables takes roughly 40 seconds, and the corresponding tables occupy about 2MB. The automation of the whole procedure facilitates adding new source files and populating the tables. The data are stored in the database and are ready for use.

According to the procedure described above, we have created one data table and one dictionary table for each source file, resulting in a total of 81 data tables and 81 dictionary tables. The final product of the harmonization process of the survey data is a master table, and a corresponding master file exported outside the database to any format read by statistical packages. Harmonization itself, that is, the various operations performed in SQL to transform a number of source variables into target variables with a unified metric across all surveys, and accompanied by a set of case-specific harmonization control variables that capture significant methodological differences between surveys, is described separately for each target variable, in Chapters 3–5. Detailed information about the harmonization process, as well as all documentation is published on the project's website and announced in a special newsletter.⁴ Suffice to say that the structure of the Master File is flexible and depends on the end-user's needs and expectations in terms of variables and cases, which can be selected according to specific research objectives.

The relational database stores data in different types of tables. Among them, source data tables and source metadata tables produce the Harmonized Master Table (i.e. the integrated survey data table). The Master Table includes four types of variables: (1) standardized technical variables; (2) source variables, preserved for reference; (3) target variables resulting from the harmonization of source variables; (4) harmonization controls.⁵ These data are matched with control

⁴ <http://consirt.osu.edu/newsletter>

⁵ Some of the international survey projects require agreeing to the “click license” stipulating “not to pass along the data to third parties.” For these projects we are seeking permission to include technical and source variables in the Master File that are necessary for a replication of our work.

indicators for the quality of the source data, and with country-level data. We selected country-level structural variables, including types of political systems, indexes of democracy, GDP, and measures of income inequality from electronic and published sources, (e.g. World Bank Indicators, UN Data data.un.org, the Quality of Governance database qog.pol.gu.se). Information from all tables in the relational database can be exported to a textual CSV file, and further converted to any file format used in statistical packages.

2.4. DOCUMENTATION OF HARMONIZED VARIABLES

In our project we aim at standardizing the documentation of harmonization procedures, to ensure their transparency and replicability. This can be achieved by providing clear information about (a) the decision-making process of transforming source variables into target variables, (b) the specific features of source variables, and (c) the quality of the analyzed surveys by means of control variables.

The structure of our target-variable report is compliant with the newest *Data Documentation Initiative* standard (version 3.2) and focuses on a data processing module (DDI, 2014). The report builds on the experience of similar projects such as *CHINTEX* (Günther, 2003), *SHARE* (Phillips, Chien, Angrisani, Meijer & Lee, 2014), and *CharmStats* (Winters & Martin, 2015).

Target variable reports

Each target variable in the Harmonization Project is accompanied by the following documents:

(1) **General target variable report** – a Word document containing definition and operationalization of a target variable, enumeration of the international survey projects involved (with waves, countries, and

years), reference to the documentation of source variables, and the rules for transforming source variables into a target variable, including harmonization control variables.

(2) **Detailed target variable report** – an Excel document containing question wording and response categories of source variables, target variable codes, and control variable codes.

(c) **Target variable syntax file** – a document with a complete SQL syntax implementing the harmonization rules, that is the code transforming source variables into the target variable.

Documenting a target variable in such a detailed manner allows for replicability of the harmonization process, and provides quality control for each stage of work with the variable. Control variables provide researchers with the opportunity to adjust the definition of a target variable to meet their particular goals and the flexibility to handle special cases.

2.5. COMBINING DATA FROM NATIONAL SURVEYS AND CONTEXTUAL DATA AT THE COUNTRY-YEAR LEVEL

In addition to survey data, the database contains (a) information describing the survey process (e.g. response rates) and quality indicators (e.g. data-documentation inconsistencies or non-unique cases), and (b) contextual data from various publicly available sources (e.g., country population or GDP), all of which are added into separate tables, one for each data type. These data are expressed on different levels, other than the individual-level of measurement characteristic for survey data in the Master File.

One way of handling a situation with variables at different levels of measurement when creating a dataset for wide use would be to create a single data table, where each case, representing a survey respondent, would be assigned values characterizing the respective

country, national survey, or project wave. This type of data structure is common among social scientists conducting cross-national research, who use SPSS or Stata. However, having a single data table would involve gigantic data redundancy and given the volume of data we are working with in our project, such a data set would not be manageable by most personal computers.

We opted for an alternative, more efficient solution, to create *separate files for variables at different levels of measurement*. As already mentioned, the integrated survey data files are stored in the Master File.⁶ Four additional data files, called Plugs, contain contextual data about countries, country-years, national surveys, and project waves.⁷ Together, the Plug Files and the Master File make up the Master Box. The structure and content of the Master Box is presented in Table 2.5.1.

Table 2.5.1 Structure of the Master Box: Description of Files and their Contents

Name of file	Content description	Key variables
Master	Individual (respondent) level data and flags for non-unique records	-
Plug-Country	Country-level data (names of geographical macro- and micro-regions, country codes)	Country
Plug-Country-Year	Demographic and economic indicators, democracy and governance indicators	Country, Year
Plug-Survey	Characteristics of national surveys and quality indicators	Project, Wave, Country, Set
Plug-Wave	Quality indicators; discrepancies between data and documentation	Project, Wave

⁶ Master file variables are provided in Appendix I at the end of this volume.

⁷ Specific variables of Plugs are provided in Appendix II at the end of this volume.

The Plug datasets are linked to the Master File by one or more key variables in the form of one-to-many merges. The core of the data structure is the nesting of individuals in national surveys. A national survey is identified uniquely by the combination of project*wave*country, which is conceptually equivalent to project*year*country.⁸ Combinations of these three dimensions form levels of measurement of all contextual variables in the database.

On the level of national surveys (Plug-Survey), we have quality and methodological control variables which characterize each national sample, e.g. the European Social Survey, Poland, 2012. Other quality controls pertaining to discrepancies between data and documentation, are measured on the level of project waves, i.e., project*wave. Contextual characteristics of the level of economic development, and demographic and political characteristics, are measured on the level of country*years, e.g., for Poland in 2012. Finally, countries themselves have characteristics, such as belonging to a particular micro-region or continent, which are measured at the country level.

Websites of programs mentioned in the chapter

Cygwin: <http://www.cygwin.com>

HeidiSQL: <http://www.heidisql.com>

MySQL: <http://www.mysql.com>

Notepad++: <http://notepad-plus-plus.org>

PSPP: <http://www.gnu.org/software/pspp>

SPSS: <http://www.ibm.com/software/analytics/spss>

⁸With the exception of WVS/3/CO and WVS/4/MA, which have two samples each – in this case an additional distinguishing variable *Set* must be used.

PART TWO

DATA HARMONIZATION
OF INDIVIDUAL-LEVEL
VARIABLES

CHAPTER 3

Trust in Public Institutions and other Political Attitudes

*Based on reports by
Marta Kółczyńska
and other members of the team*

3.1. INTRODUCTION

We assume that trust in state institutions plays an essential role in expressing democratic values. Democracy involves, among others, that peoples' basic civic liberties and political rights are guaranteed, safeguarded and enforced. From this perspective, the parliament, the legal system, and political parties are essential components of a democratic system. To the extent that people trust these institutions we speak of levels of social consensus for "the rules of the democratic game." This ties into issues of legitimacy – a system's ability to sustain the belief that its institutions, including the political ones, are adequate and trustworthy. Legitimacy is crucial for the proper functioning of democracy (Dahl 1989; Held 1987; Sorensen 1993; Przeworski 1996).

"Monitoring" peoples' attitudes toward democracy, including public institutions, is common practice in social sciences research, especially around the times of parliamentary elections. Predictions of voters' behavior and voting preferences as well as an ability to properly interpret these findings acquire particular significance. Yet trust in institutions of public life is relevant not only during "election storms" but also in times of political "peace." On everyday basis this trust

points to established values, known in the literature as “prodemocratic” (Mishler & Rose 2005).

This chapter describes the harmonization procedures of variables referring to the respondent’s level of trust in three basic institutions: the national parliament (target variables starting with T_TR_PARLI_), the legal system (T_TR_LEG_), and political parties (T_TR_PARTY_). Since the literature consistently ties these attitudes to trust in people (Almond & Verba 1963; Brehm & Rahn 1997; Norris 2002; Kuenzi 2008; Newton & Zmerli 2011), we also harmonized interpersonal trust. For full reports, see dataharmonization.org. All values and labels, as well as information on survey projects are based on master-20151111.dta version of master file.

The wording of the questions about trust in the national parliament, the legal system, and political parties, and especially the type of response scales and coding of answers vary greatly across international survey projects. Usually the questions on national parliament, the legal system, and political parties are part of the set of items dealing with trust or confidence in variety institutions. A good example is the European Social Survey asking:

- *Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly... [country]’parliament?
the legal system?
the police?
politicians?
political parties?
the European Parliament?
the United Nations?*

To illustrate variation in the used phrases, we provide the wording of questions on trust in parliament, the legal system, and political parties in three other projects: the European Values Study (EVS 4),

Eurobarometer (EB 77.3), and Consolidation of Democracy in Central and Eastern Europe (CDCEE 2). The wording is as follows:

- *Please look at this card and tell me, for each item listed, how much confidence you have in them, is it a great deal, quite a lot, not very much or none at all?*

(...)¹ *parliament*

(...) *the justice system*

(...) *political parties.*

(EVS 4)

- *I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, please tell me if you tend to trust it or tend not to trust it.*

(...) *political parties*

(...) *the (Nationality Parliament) (use proper name for lower house)*

(EB 77.3)

- *In order to get ahead, people need to have confidence and to feel that they can trust themselves and others. To what degree do you think that you trust the following (...)? Totally, to a certain point, little, or not at all?*

(...) *political parties*

(...) *the parliament*

(CDCEE 2)

3.2. TRUST IN PARLIAMENT

Target variables T_TR_PARLI_11, T_TR_PARLI_N, and T_TR_PARLI_DISTRIBUT describe the respondent's level of trust in the national parliament expressed on different scales, as it is shown in

¹ Parentheses (...) mean that in the quoted question some words (referring to evaluated institutions) are omitted.

Table 3.2.1. In this chapter, we explain the transformation of original scales (contained in the original data) into common scales (target variables): 11-point scale, continuous 0-1 scale, and cumulative-distribution scale in percentages (from 0 to 100). The harmonized T_TR_PARLI_ is accompanied by control variables describing the length of original scales (2 to 11 points), their direction (ascending, descending), and their polarity (unipolar *vs.* duo-polar).

Table 3.2.1 Description of the Target Variable TRUST IN PARLIAMENT

	Variable label	Variable name	Variable values ^a
Target variable	Trust in parliament (11-point scale)	T_TR_PARLI_11	0 = completely distrust 10 = completely trust
	Trust in parliament (continuous 0-1 scale)	T_TR_PARLI_N	0 = 0 1 = 1
	Trust in parliament (distribution-preserving scale)	T_TR_PARLI_DISTRIB	0 = 0 100 = 100
Source variables	Source value of trust in parliament	S_TR_PARLI	See: DETAILED VARIABLE REPORT TR_PARLI.xlsx
Control variables	Source trust in parliament scale length	C_TR_PARLI_SRC_SCALE_LENGTH	2 = 2-point scale 4 = 4-point scale 5 = 5-point scale 7 = 7-point scale 10 = 10-point scale 11 = 11-point scale
	Source trust in parliament scale direction	C_TR_PARLI_SRC_ASCEND	0 = descending 1 = ascending
	Source trust in parliament polarity	C_TR_PARLI_SRC_UNIPOLAR	0 = other than unipolar 1 = unipolar

^a For values other than the substantive scale we use the following codes: -9 = missing data, -8 = question not asked in national survey, -7 = insufficient information for all response categories, -6 = insufficient information for single response category, -5 = variable not identified in data file, -4 = value not acceptable, -2 = not applicable, -1 = don't know. This applies also to tables 3.3.1, 3.4.1, and 3.5.2.

Source data

The variable *respondent's trust in the national parliament* appeared in 18 international survey projects: ABS, AFB, AMB, ARB, ASES, CB, CDCEE, CNEP, EB, EQLS, ESS, EVS, ISSP, LB, and, LITS; for specific waves, see Appendix 3.A (at the end of this chapter). In this Appendix we also provide information on countries and years covered. In all projects, the question on trust in parliament requires answers on 2, 4, 5, 7, 10 and 11-point scales. The differences in the original types of these scales, with the division into ascending and descending, are noticed in Table 3.2.2. Having scales (4-item and 5-item) that have been used on both ascending and descending order provide an opportunity of methodological studies on the effect of reversed scales on respondents' answers.

Table 3.2.2 Trust in the Parliament: Original Types of Scales

Length of scale	Direction of scale	
	Traditional (descending)	Reversed (ascending)
2	EB (waves 54.1, 73.4, and 77.3)	
4	ABS/3, ARB/1-2, ASES, CDCEE/1-2, EVS/1-4, LB/1995-2010, NBB (waves 1 and 3), WVS/1-5	ABS/1-2, AFB/2-4
5	ISSP (waves 1991, 1998, 2004, 2008), VPCPCE	CB/2009-2012, LITS/1-2
7		AMB/2004-2012, NBB/5-6
10		EQLS/2-3
11		CNEP/3/ES and UY, ESS

Rules for the transformation of source variables into target variables

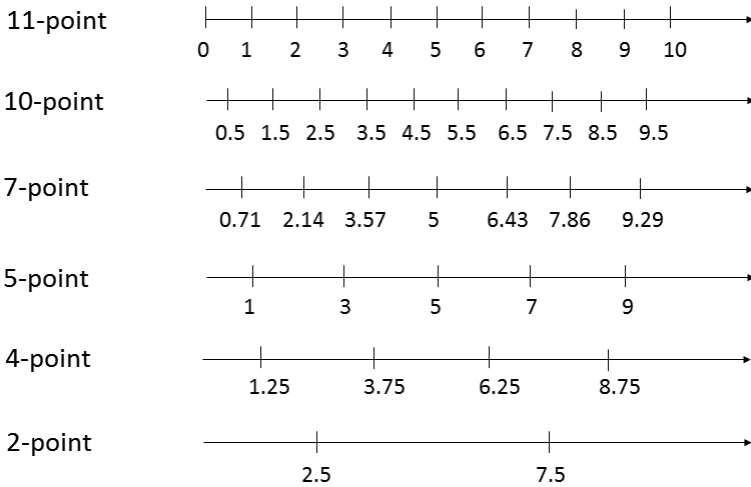
The variation in the length of response makes source variables not readily comparable. In the first step, variables coded in the descending or traditional order were reversed, so that in all variables lower scores correspond to less trust and higher scores correspond to more trust. Next, variables were harmonized using two types of transformations,

which led to the generation of three version of the target variable “trust in parliament”.

The first target variable ($T_TR_PARLI_11$) is a result of rescaling, or “stretching” of shorter scales into the 0-10 range, while the 11-point scale remains unchanged. It was assumed that particular values, for scales shorter than the longest 11-point scale, correspond to a range of values on the 0-10 scale. In the target variable each value in the source variable was assigned the mean value of the corresponding range on the 0-10 scale.

For the source n -point scale, for values k ranging from 1 to n , k was recoded to $\frac{10}{n*2} + (k-1)*\frac{10}{n}$. A transformation of this rescaling is pictured in Figure 3.2.1.

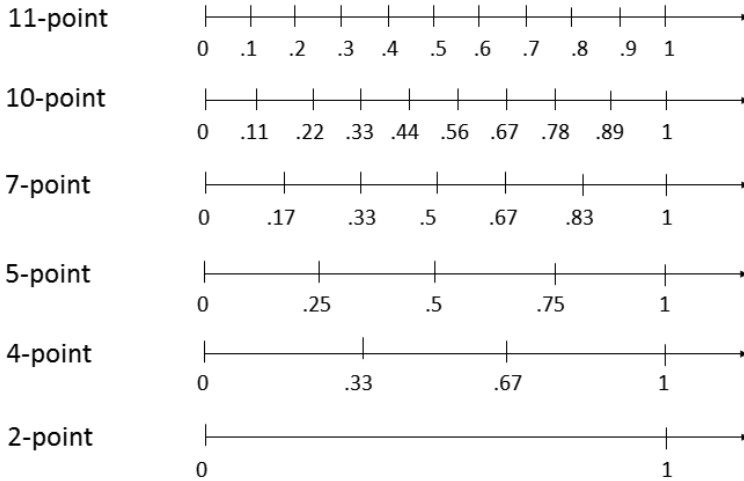
Figure 3.2.1 Transformation of Source Values into the 0-10 Scale



The second target variable ($T_TR_PARLI_N$) is a result of rescaling, or “squeezing” scales into the 0-1 range, where the lowest value in each case becomes 0, the highest becomes 1, and the rest are spread evenly in the 0-1 range. For the source n -point scale, for values k ranging from

1 to n , k was recoded to $(k-1) * \frac{1}{n-1}$. Figure 3.2 presents the rescaling graphically.

Figure 3.2.2 Transformation of Source Values into the 0-1 Scale



The third version of the target variable (`T_TR_PARLI_DISTRIB`) preserves the distribution of the original values in the sample. Source values, in the ascending order (from most negative to most positive) are assigned values of the mid-point from the cumulative distribution. This transformation produces a variable that contains information about the relative position of an individual in the distribution of trust in a given survey (national sample), more specifically, it tells what share of the sample has lower trust than the individual. The variable was computed using the unweighted sample.

For the source n -point scale, for values k ranging from 1 to n , where X_k is the distribution of the variable, k was recoded to: $\sum_{j=1}^{k-1} X_j + \frac{X_k}{2}$. Table 3.2.4 illustrates this transformation with the example of the 5-point scale in the Life in Transition Survey, Wave 2 from Poland.

Table 3.2.4 Distribution-Based Transformation: Trust in the National Parliament, LITS/2/PL

Source value k	Distribution X_k	Cumulative distribution $\sum_{i=1}^k X_i$	$\sum_{i=1}^{k-1} X_i$	$\sum_{i=1}^{k-1} X_i + \frac{X_k}{2}$	Target value (rounded to integer)
1	10.68	10.68	0	$= 10.68/2 = 5.340$	5
2	32.75	43.44	10.68	$= 10.68 + 32.75/2 = 27.055$	27
3	32.11	75.55	43.44	$= 43.44 + 32.11/2 = 59.495$	59
4	21.69	97.23	75.55	$= 75.55 + 21.69/2 = 86.395$	86
5	2.77	100	97.23	$= 97.23 + 2.77/2 = 98.615$	99

Different versions of the target variable have different properties, and are suitable for different types of comparative designs. The first and second version, 0-10 and 0-1, allow cross-national comparisons, while the second is better suited, in particular, for over-time analyses within the same geographical unit, country, or region, in particular.

Harmonization control variables

All questions about trust in the parliament have relatively equivalent wording and form, so control variables refer only to the variation in response scales. Initially, based on the review of English-language versions of original questions, a control variable was constructed to distinguish items that use the word “confidence” from those that use the word “trust”. However, after a more thorough inspection of original languages, it turned out that the difference in terms used in the English version of the questions may not translate into differences in country-specific questionnaires in different languages. We compared pairs of questionnaires from European Social Survey and the European Values Study, which use different terms in the main questionnaire, in selected European countries (see Table 3.2.5), and ultimately eliminated the control variable from the dataset.

Table 3.2.5 Comparison of Translations of “Trust” and “Confidence” in Selected Languages

Country	Trust (ESS) / confidence (EVS) in the local language as used in the questionnaire	Result: No – no difference between trust and confidence Yes – otherwise
Albania	besim	no
Belgium (Dutch)	vertrouwen	no
Belgium (French)	confiance	no
Bulgaria	доверие	no
Croatia	tpovjerenje	no
Czech Republic	důvěřovat / důvěra	verb / noun
Denmark	tillid	no
Estonia	usaldade	no
France	confiance	no
Germany	vertrauen /Vertrauen	verb / noun
Italy	fiducia	no
Poland	zaufanie	no

Source: Country questionnaires in ESS/6 and EVS/4.

Control variables:

- *Scale length* (C_TR_PARLI_SRC_SCALE_LENGTH): Number of points/options in response scale. Values: 2, 4, 5, 7, 10, 11.
- *Scale direction* (C_TR_PARLI_SRC_ASCEND): Coded 1 if the scale is ascending, i.e., responses are ordered from least trust to most/full trust, 0 otherwise.
- *Scale polarity* (C_TR_PARLI_SRC_UNIPOLAR): Coded 1 if the scale is unipolar, i.e., the concept is measured along one dimension (from no trust to a lot of trust), 0 otherwise (e.g., from a lot of distrust to a lot of trust).

Special Cases

- In VPCPCE survey there are two questions about trust in parliament, one is country-specific (only for Russia) and one for all countries participating in survey except Russia. The question for Russia is: (RQ6X1) *I'd like to ask how much you feel you can trust some people and other things. Please could you choose the answer that best represents your opinion? The old parliament suspended by Yeltsin* (Response categories: 1 = Completely trust; 2 = Mostly trust; 3 = Neither; 4 = Mostly distrust; 5 = Completely distrust; 9 = DK). The general question is: (ERQ6X) *I'd like to ask how much you feel you can trust some people and other things. Please could you choose the answer that best represents your opinion? Parliament* (Response categories: 1 = Completely trust; 2 = Mostly trust; 3 = Neither; 4 = Mostly distrust; 5 = Completely distrust; 9 = DK). There is a second variable for Russia only (RQ6X2), but it was excluded from the analysis, because the question was asked only as a part of panel study within the project.
- In ABS waves 1 and 2 there is a discrepancy between variable values in codebooks and values in datasets; for wave 1 (q010) question is *I'm going to name a number of institutions. For each one, please tell me how much trust you have in them. Is it a great deal of trust, quite a lot of trust, not very much trust, or none at all? Parliament* (scale from codebook: 1 = A great deal of trust; 2 = Quite a lot of trust; 3 = Not very much trust; 4 = None at all; vs. the scale from the SPSS dictionary: 0 = Not sure; 1 = None at all; 2 = Not very much trust; 3 = Quite a lot of trust; 4 = A great deal of trust; 98 = Don't know; 99 = No Answer); for wave 2 (q010) the question is: *I'm going to name a number of institutions. For each one, please tell me how much trust do you have in them? Parliament* (scale from codebook: 1 = A great deal of trust; 2 = Quite a lot of trust; 3 = Not very much trust; 4 = None at all; 7 = DU; 8 = CC; 9 = DA; vs. the scale from the SPSS dictionary: 1 = None at all; 2 = Not Very Much Trust; 3 = Quite a Lot of Trust; 4 = A Great Deal of Trust;

7 = *Do not understand the question*; 8 = *Can't choose*; 9 = *Decline to answer*). Priority is given to the data, and the scale present in SPSS dictionaries is used for rescaling, although the discrepancy is to be explained.

- CNEP/3/ES, CNEP/3/UY – unipolar question, bipolar scale. Coded as bipolar because respondents were presented a show card, which was bipolar.

3.3. TRUST IN THE LEGAL SYSTEM

In the case of respondent's trust in the legal system, we created three target variables analogous to those for trust in the national parliament, that is, using three different scales: an 11-point scale (T_TR_LEG_11), a continuous scale (T_TR_LEG_N), and a cumulative distribution scale (T_TR_LEG_DISTRIBUT) describe the respondent's level of trust in the legal system as in Table 3.3.1.

Source data description

The variable “respondent's trust in the legal system” appeared in 17 international survey projects; see Appendix 3.B. The question about trust in the legal system is among the most popular items related to political attitudes. The exact wording and especially the type of response scales and coding of answers in the questionnaire item about trust in the legal system varied greatly across survey projects. An example of this variation in the case of response scales is presented in Table 3.3.2.

Table 3.3.1 Description of the Target Variable TRUST IN THE LEGAL SYSTEM

	Variable label	Variable name	Variable values
Target variable	Trust in legal system (11-point scale)	T_TR_LEG_11	0 = completely distrust 10 = completely trust
	Trust in legal system (continuous 0-1 scale)	T_TR_LEG_N	0 = 0 1 = 1
	Trust in legal system (distribution-preserving scale)	T_TR_LEG_DISTRIB	0 = 0 100 = 100
Source variables	Source value of trust in legal system	S_TR_LEG	See: DETAILED VARIABLE REPORT TR_LEG.xlsx
Control variables	Object of trust in question includes courts, court system, judiciary	C_TR_LEG_COURTS	0 = no 1 = yes
	Question extends object of trust beyond legal system	C_TR_LEG_EXTENDED	0 = no 1 = yes
	Source trust in legal system scale length	C_TR_LEG_SRC_SCALE_LENGTH	2 = 2-point scale 4 = 4-point scale 5 = 5-point scale 7 = 7-point scale 10 = 10-point scale 11 = 11-point scale
	Source trust in legal system scale direction	C_TR_LEG_SRC_ASCEND	0 = descending 1 = ascending
	Source trust in legal system scale polarity	C_TR_LEG_SRC_UNIPOLAR	0 = other than unipolar 1 = unipolar

Table 3.3.2 Trust in the Legal System: Types of Scales

Length of scale	Direction of scale	
	Traditional (descending)	Reversed (ascending)
2	EB/54.1	
4	ABS/3, ARB/1-2, ASES, EVS/1-4, LB/1995-2010, NBB (waves 1 and 3), WVS (waves 1-3 and 5)	ABS/1-2, AFB/1-4
5	ISSP (waves 1991, 1998, 2008), VPCPCE	CB/2009-2012, EB/21, LITS/1-2
7		AMB/2004-2012, NBB/5-6
10		EQLS/2-3
11		CNEP/3/UY, ESS/1-6

*Rules for the transformation
of source variables into target variable*

The rules are the same as in the case of trust in parliament, as detailed in section 3.2 Rules for the transformation of source variables into target variable.

Harmonization control variables

The main feature of source questions identified as worth controlling for was the object of trust, i.e., whether the item mentions the courts or not, and whether the description of the object extends the meaning beyond the legal system. Distinguishing between trust in the legal system and trust in the courts is important, because (1) the term “courts” often occurs in survey items; (2) substantively, courts are often associated with corruption, more so than “legal system” or “the law”. Seven source variables included neither the reference to courts, nor an extension, and asked about trust/confidence in “the justice system” (AMB/2004-2012, EB/54.1, EVS/1-4, WVS, waves 1-3 and 5) or “the legal system” (EQLS/1-3, ESS/1-6). Altogether 42 source questions refer to courts, and include the term “courts,” “courts of law,” “judiciary,” “court system,” etc. Six source questions included an extension of the legal system: “the law and the courts” (ASES) and “judges and courts” (all countries in VPCPCE).

The case of ISSP requires additional explanation. The question asks about trust in “courts and the legal system”. It was coded 1 for including the word “courts” and 0 for extension, even though the description of the object of trust includes two elements: the courts and the legal system. It was in ISSP waves 1991, 1998, and 2008: 1 for courts; 0 for extension. “courts and legal system,” because the word “courts” is used, but the meaning does not go beyond the “legal system”.

Control variables:

- *Courts* (C_TR_LEG_COURTS): In the question, the object of trust is or includes courts, the court system, judiciary. Coded 1 whenever the word “courts” or alternatives are used, 0 otherwise.
- *Extension* (C_TR_LEG_EXTENDED): Coded 1 if extends the object of trust beyond the legal system, 0 otherwise.
- *Scale length* (C_TR_LEG_SRC_SCALE_LENGTH): Number of points/options in the response scale. Values: 2, 4, 5, 7, 10, 11.
- *Scale direction* (C_TR_LEG_SRC_ASCEND): Coded 1 if the scale is ascending, i.e., responses are ordered from least trust to most/full trust, 0 otherwise.
- *Scale polarity* (C_TR_LEG_SRC_UNIPOLAR): Coded 1 if the scale is unipolar, i.e., the concept is measured along one dimension (from no trust to a lot of trust), 0 otherwise (e.g., from a lot of distrust to a lot of trust).

Special Cases

In AFB/1 countries included in the South African Barometer (Botswana, Lesotho, Malawi, Namibia, South Africa, Zambia and Zimbabwe), the item (source item in data set `trsects`) has a non-standard set of response options that refer to the frequency of trust rather than the degree of trust. The item for these countries was hence dropped, and they have no target variable for trust in the legal system. Question: 78. *What about the following institutions? How much of the time can you trust them to do what is right: ... Courts of law?* (Response categories: *Never; Only some of the time; Most of the time; Just about always; Don't know enough about them*).

Also excluded are:

- Questions about trust in judges (concerns items from CB/2010, LB/1996, and LB/2003).
- The question about “R’s feeling” towards the courts, coded on a 0-100 sympathy scale (PA2, source variable name in data set `v1093`, item number in questionnaire `Q.C5(N)`).

3.4. TRUST IN POLITICAL PARTIES

Target variables T_TR_PARTY_11, T_TR_PARTY_N, and T_TR_PARTY_DISTRIB describe the respondent's level of trust in political parties as in Table 3.4.1.

Table 3.4.1 Description of the target variable TRUST IN POLITICAL PARTIES

	Variable label	Variable name	Variable values
Target variable	Trust in political parties (11-point scale)	T_TR_PARTY_11	0 = completely distrust 10 = completely trust
	Trust in political parties (continuous 0-1 scale)	T_TR_PARTY_N	0 = 0 1 = 1
	Trust in political parties (distribution-preserving scale)	T_TR_PARTY_DISTRIB	0 = 0 100 = 100
Source variables	Source value of trust in political parties	S_TR_PARTY	See: DETAILED VARIABLE REPORT TR_PARTY.xlsx
Control variables	Source trust in political parties scale length	C_TR_PARTY_SRC_SCALE_LENGTH	2 = 2-point scale 4 = 4-point scale 5 = 5-point scale 7 = 7-point scale 10 = 10-point scale 11 = 11-point scale
	Source trust in political parties scale direction	C_TR_PARTY_SRC_ASCEND	0 = descending 1 = ascending
	Source trust in political parties polarity	C_TR_PARTY_SRC_UNIPOLAR	0 = other than unipolar 1 = unipolar -

Source data description

The variable *respondent's "trust in political parties"* appeared in 15 international survey projects; see Appendix 3.C. The question about trust in political parties is among the most popular items related to political attitudes. The exact wording and especially the type of response scales and coding of answers in the questionnaire item about trust in

political parties varied greatly across survey projects. An example of this variation in the case of response scales is presented in Table 3.4.2.

Rules for the transformation of source variables into target variable

The rules are the same as in case of trust in parliament, see section 3.2 Rules for the transformation of source variables into target variable.

Harmonization control variables

All questions about trust in political parties have relatively equivalent wording and form, so control variables refer only to the variation in response scales.

Control variables:

- *Scale length* (C_TR_PARTY_SRC_SCALE_LENGTH): number of points/options in the response scale. Values: 2, 4, 5, 7, 10, 11.
- *Scale direction* (C_TR_PARTY_SRC_ASCEND): Coded 1 if the scale is ascending, i.e., responses are ordered from least trust to most/full trust, 0 otherwise.
- *Scale polarity* (C_TR_PARTY_SRC_UNIPOLAR): Coded 1 if the scale is unipolar, i.e., the concept is measured along one dimension (from no trust to a lot of trust), 0 otherwise (e.g., from a lot of distrust to a lot of trust).

Table 3.4.2. Trust in Political Parties: Types of Scales

Length of scale	Direction of scale	
	Traditional (descending)	Reversed (ascending)
2	EB (waves 54.1, 73.4, and 77.3)	
4	ABS/3, ARB/1-2, ASES, CDCEE/1-2, EVS/4, LB/1995-2010, NBB (waves 1 and 3), WVS/2-5	ABS/1-2
5		CB/2012, LITS/1-2
7		AMB/2004-2012, NBB/5-6
10		EQLS/2
11		CNEP/3/ES and UY, ESS/2-6

Special Cases

Excluded are:

- Questions that pertained to named political parties, e.g., seven items in CNEP/3/ZA (Z.SA.B.TrustIFP, Z.SA.B.TrustNNP, Z.SA.B.TrustACDP, Z.SA.B.TrustANC, Z.SA.B.TrustDA, Z.SA.B.TrustUDM, Z.SA.B.TrustID), three items in PA2 (v1081, v1087, v1095), and three items in PA8NS (v71, v77, v82).
- Questions about trust in politicians (ESS/1-5, LB/2003), and trust in *People we elect as (MPs) try to keep the promises they have made during the election* (ISSP/1996).
- Questions about trust in the ruling party and trust in the opposition party from surveys that did not have questions about trust in political parties in general: AFB/2-4, CNEP/3/MZ. It was not clear how to construct the target variable from this pair of source variables.

3.5. OTHER ATTITUDINAL VARIABLES

In our project we harmonized two additional variables on trust. The first is *trust in government*, constructed in the same way and with the same template as presented for trust in state institutions.

The other is *trust in people*, which is supposed to measure generalized social trust. We used 46 source variables from 46 data files.² Most of international survey projects use the standard question: *Generally*

² Source variables are not available in the files (according to Common file v. 19): AFB/2, ASES, CNEP/3/ES, CNEP/3/HU, CNEP/3/MX, CNEP/3/MZ, CNEP/3/PT, CNEP/3/TW, CNEP/3/UY, CNEP/3/ZA, EB/1983, EB/1984, EB/1989, EB/2000, EB/2010, EB/2012, ISJP/1-2, ISSP/1985, ISSP/1989, ISSP/1990, ISSP/1991, ISSP/1996, ISSP/2009, ISSP/2011, ISSP/2011, LB/1995, LITS/1, PA2, PA8NS, PPE7N_AT, PPE7N_IN, PPE7N_JR, PPE7N_NG, PPE7N_NL, PPE7N_US, PPE7N_YU.

speaking, would you say that most people can be trusted or that you must be very careful in dealing with people? The rest use some other wording that refers to trust in people in general: *There are many people I can trust completely* (CB/2009). *There are only a few people I can trust completely* (ISSP/2006), *Most ordinary people that you meet in everyday life* (VPCPCE, all countries).

For the *trust in people* target variable, we use three control variables:

- a. Non-standard question wording = 1, 0 otherwise.
- b. Scale length: Number of points/options in response scale. Values: 2, 4, 5, 7, 10, 11.
- c. Scale direction: Coded 1 if the scale is ascending, i.e. responses are ordered from least trust to most/full trust, 0 otherwise.

The transformation of response scales in the question about generalized social trust differs from that of trust in institutions. Here, original response scales have been dichotomized, i.e. transformed into a dichotomous 0-1 variable, where 1 indicates “trust in people in general”, and 0 means the lack of trust. In case of odd-numbered original scales, the mid-point qualifies as the presence of trust. Length of scales of the original items pertaining to generalized social trust, together with the direction of scales, is provided in Table 3.5.1.

Table 3.5.1 Generalized Social Trust. Types of Scales

Length of scale	Direction of scale	
	Traditional (descending)	Reversed (ascending)
2	AFB (Wave 1), AMB, ARB, ABS (Wave 3), EVS, LB, NBB (Wave 1 and 3), WVS	AFB (Wave 3), ABS (Waves 1 and 2)
3		CB
4	ISSP (Waves 1998, 2004, 2007, 2008)	
5	VPCPCE	ISSP (Waves 2006, 2010), LITS
7		NBB (Wave 5 and 6)
10		CB, EQLS
11		ESS

Interest in politics

The target variable *interest in politics* is a general indicator of the respondent's interest in politics. Despite restricting the source variables to survey items with most direct and similar wording, there is still some variation in the wording, and hence meaning, of the source variables we used to construct the target variable 'interest in politics'. We constructed control variables to distinguish surveys where the questions asked exactly about 'interest in politics' from those that restricted (e.g. CB/2009: *And how interested would you say you are in local policy on the regional, municipal, or village levels?*) or extended (e.g. AFB/2: *How interested are you in public affairs?*) the meaning of the question. We also constructed controls to identify surveys from which we took more than one source variable.

The transformation of source variables into target variables involved three steps. First, where a given survey contained more than one question about interest in politics (e.g. asking separately about interest in local, domestic, and foreign politics (CB/2009, INTERFP, INTERDP, INTERLP)), we constructed a single *interest in politics* variable by taking the average of the values from all source variables and rounding it to the closest integer; within survey, variables are consistently coded (either in ascending or descending order). Next, we ensured (via recoding) that across surveys all source variables are consistently coded, with lower scores corresponding to less interest and higher scores to more interest. Finally, we used two types of transformations to harmonize the source variables and to create three versions of the target variable "interest in politics".

The first target variable (T_INT_POLIT_5) is a result of rescaling, or "stretching" scales shorter than 5 points into the 0-4 range; extant 5-point scale was recoded to fit the new range, of 0 to 4 (rather than 1 to 5). It was assumed that particular values, for scales shorter than the longest 5-point scale, correspond to a range of values on the 0-4 scale. In the target variable each value in the source variable was assigned the mean value of the corresponding range on the 0-4 scale.

For the source n -point scale, for values k ranging from 1 to n , k was recoded to $\frac{4}{n*2} + (k-1)*\frac{4}{n}$.

Table 3.5.2 Description of the Target Variable INTEREST IN POLITICS

	Variable label	Variable name	Variable values
Target variable	R's interest in politics	T_INT_POLIT	4 = Very interested 1 = Not at all interested -9 = missing data -8 = question not asked in national survey -7 = insufficient information for all response categories -6 = insufficient information for single response category -5 = variable not identified in data file -4 = value not acceptable -2 = not applicable -1 = don't know
Source variables	Source value of R's interest in politics	S_INT_POLIT	See: DETAILED VARIABLE REPORT-INT_POL V1.XLSX
Control variables	Nonstandard wording of the question item 'interest in politics'	C_INT_POLIT_NON-STANDARD	0 = false 1 = true -2 = not applicable
	Source interest in politics scale length	C_INT_POLIT_SRC_SCALE_LENGTH	3 = 3-point scale 4 = 4-point scale 5 = 5-point scale -2 = not applicable
	More than one question about R's interest in politics	C_INT_POLIT_SET_OF_QUESTIONS	0 = false 1 = true -2 = not applicable

The second target variable (T_INT_POLIT_N) is a result of rescaling, or “squeezing” scales into the 0-1 range, where the lowest value in each case becomes 0, the highest becomes 1, and the rest are spread evenly in the 0-1 range. For the source n -point scale, for values k ranging from 1 to n , k was recoded to $(k-1)*\frac{1}{n-1}$.

The third version of the target variable (T_INT_POLIT_DISTRIB) preserves the distribution of the original values in the sample. Source values, in ascending order (from least to most interest in politics) are assigned values of the mid-point from the cumulative distribution. This transformation produces a variable that contains information about the relative position of an individual in the distribution of interest in politics in a given survey (national sample), more specifically, it tells what share of the sample has lower interest in politics than the individual. The variable was computed using the unweighted sample. For the source n -point scale, for values k ranging from 1 to n , where X_k is the distribution of the variable, k was recoded to:

$$\text{to: } \sum_{i=1}^{k-1} X_i + \frac{X_k}{2} .$$

Control variables:

- Non-standard question wording (C_INT_POL_NONSTANDARD): Coded 1 if the question asked about anything else than just “politics”, which includes extensions to e.g. “economic and political affairs” (PPE7N_YU, v82, v150, v166) or restrictions, such as “national politics” (PPE7N_AT, v38); 0 when the questions asked about just “interest in politics”.
- Scale length (C_INT_POL_SRC_SCALE_LENGTH): Number of points/options in the response scale. Values: 3, 4, 5.
- Set of source questions (C_INT_POL_SET_OF_QUESTIONS): Coded 1 if more than one source variable was used to construct the target variable in a given survey; 0 = one source variable used.
- Scale direction (C_INT_POL_SRC_SCALE_ASCEND): Coded 1 if scale is ascending, i.e., responses are ordered from least trust to most/full trust, 0 otherwise.

In Table 3.5.3 we list non-standard items and surveys with more than one source variable.

Table 3.5.3 Interest in Politics: List of Non-Standard Items and Surveys with More than One Source Variable

Survey/ wave	Original variable name	Questionnaire item	C_INT_ POL_NON- STANDARD	C_INT_ POL_SET_ OF_QUE- STIONS
AFB/2	Q27	How interested are you in public affairs?	1	0
AFB/3	Q16	How interested would you say you are in public affairs?	1	0
AFB/4	Q13	How interested would you say you are in public affairs?	1	0
CB/2009	INTERFP	How interested would you say you are in /country's/ foreign policy? Are you ...	1	1
CB/2009	INTERDP	How interested would you say you are in /country's/ domestic policy? Are you ...	1	1
CB/2009	INTERLP	And how interested would you say you are in local policy on the regional, municipal, or village levels? Are you ...	1	1
PPE7N_AT	V37	How interested are you in local politics and community governments here in	1	1
PPE7N_AT	V38	What about questions of Austrian national politics. Are you:	1	1
PPE7N_IN	V169	How interested are you in the politics and affairs of the nation?	1	0
PPE7N_JP	V50	How interested are you in politics and the affairs of the nation as a whole?	1	0
PPE7N_NG	V175	Respondent's degree of interest in national affairs	1	0
PPE7N_US	V268	Q.55. How interested are you in politics and national affairs - are you very interested, somewhat interested, only slightly interested, or not at all interested?	1	0
PPE7N_YU	v82	Could you tell me if you are interested in the economic and political affairs of your commune?	1	1
PPE7N_YU	v150	Are you interested in the economic and political affairs of your republic? Are you very interested, somewhat interested, or not at all interested?	1	1
PPE7N_YU	v166	Are you interested in the economic and political affairs of Yugoslavia? Would you say that you are very interested, somewhat interested, or not at all interested?	1	1

Appendix 3.A Information on the International Survey Projects and the Total Number of Source Variables Used to Create the Target Variable on RESPONDENT'S TRUST IN PARLIAMENT

Project waves (N=67)

ABS/1, ABS/2, ABS/3, AFB/2, AFB/3, AFB/4, AMB/2004, AMB/2006, AMB/2008, AMB/2010, AMB/2012, ARB/1, ARB/2, ASES, CB/2009, CB/2010, CB/2011, CB/2012, CDCEE/1, CDCEE/2, CNEP/3, EB/54.1, EB/73.4, EB/77.3, EQLS/2, EQLS/3, ESS/1, ESS/2, ESS/3, ESS/4, ESS/5, ESS/6, EVS/1, EVS/2, EVS/3, EVS/4, ISSP/1991, ISSP/1998, ISSP/2004, ISSP/2008, LB/1995, LB/1996, LB/1997, LB/1998, LB/2000, LB/2001, LB/2002, LB/2003, LB/2004, LB/2005, LB/2006, LB/2007, LB/2008, LB/2009, LB/2010, LITS/1, LITS/2, NBB/1, NBB/3, NBB/5, NBB/6, VPCPCE, WVS/1, WVS/2, WVS/3, WVS/4, WVS/5

Countries/territories (N=137)

AL, AM, AR, AT, AU, AZ, BA, BA-FBH, BA-RSR, BD, BE, BE-FLA, BF, BG, BJ, BO, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CV, CY, CY-TCC, CZ, DE, DE-E, DE-W, DK, DO, DZ, EC, EE, EG, ES, ET, FI, FR, GB, GB-GBN, GB-NIR, GE, GH, GR, GT, GY, HK, HN, HR, HT, HU, ID, IE, IL, IL-ARB, IL-JEW, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KR, KS, KZ, LB, LR, LS, LT, LU, LV, MA, MD, ME, MG, MK, ML, MN, MT, MW, MX, MY, MZ, NA, NG, NI, NL, NO, NZ, PA, PE, PH, PK, PL, PR, PS, PT, PY, RO, RS, RU, RU-KRA, RW, SD, SE, SG, SI, SK, SN, SV, TH, TJ, TR, TT, TW, TZ, UA, UG, US, UY, UZ, VE, VN, YE, ZA, ZM, ZW

Years (N=29)

1981, 1982, 1983, 1984, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

Source variables/questions

See document: DETAILED VARIABLE REPORT TR_PARLI.xlsx

Appendix 3.B Information on the International Survey Projects and the Total Number of Source Variables Used to Create the Target Variable on RESPONDENT'S TRUST IN THE LEGAL SYSTEM

Project waves (N=62)

ABS/1, ABS/2, ABS/3, AFB/1, AFB/2, AFB/3, AFB/4, AMB/2004, AMB/2006, AMB/2008, AMB/2010, AMB/2012, ARB/1, ARB/2, ASES, CB/2009, CB/2010, CB/2011, CB/2012, CNEP/3, EB/21, EB/54.1, EQLS/2, EQLS/3, ESS/1, ESS/2, ESS/3, ESS/4, ESS/5, ESS/6, EVS/1, EVS/2, EVS/3, EVS/4, ISSP/1991, ISSP/1998, ISSP/2008, LB/1995, LB/1996, LB/1997, LB/1998, LB/2000, LB/2002, LB/2003, LB/2004, LB/2005, LB/2006, LB/2007, LB/2008, LB/2009, LB/2010, LITS/1, LITS/2, NBB/1, NBB/3, NBB/5, NBB/6, VPCPCE, WVS/1, WVS/2, WVS/3, WVS/5

Countries/territories (N=139)

AD, AL, AM, AR, AT, AU, AZ, BA, BA-FBH, BA-RSR, BD, BE, BE-FLA, BF, BG, BJ, BO, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CV, CY, CY-TCC, CZ, DE, DE-E, DE-W, DK, DO, DZ, EC, EE, EG, ES, ET, FI, FR, GB, GB-GBN, GB-NIR, GE, GH, GR, GT, GY, HK, HN, HR, HT, HU, ID, IE, IL, IL-ARB, IL-JEW, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KR, KS, KZ, LB, LR, LS, LT, LU, LV, MA, MD, ME, MG, MK, ML, MN, MT, MW, MX, MY, MZ, NA, NG, NI, NL, NO, NZ, PA, PE, PH, PK, PL, PR, PS, PT, PY, RO, RS, RU, RW, SA, SD, SE, SG, SI, SK, SN, SV, TH, TJ, TN, TR, TT, TW, TZ, UA, UG, US, UY, UZ, VE, VN, YE, ZA, ZM, ZW

Years (N=29)

1981, 1982, 1983, 1984, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

Source variables/questions

See document: DETAILED VARIABLE REPORT TR_LEG.xlsx

Appendix 3.C Information on the International Survey Projects and the Total Number of Source Variables Used to Create the Target Variable on RESPONDENT'S TRUST IN POLITICAL PARTIES

Project waves (N=50)

ABS/1, ABS/2, ABS/3, AMB/2004, AMB/2006, AMB/2008, AMB/2010, AMB/2012, ARB/1, ARB/2, ASES, CB/2012, CDCEE/1, CDCEE/2, CNEP/3, EB/54.1, EB/73.4, EB/77.3, EQLS/2, ESS/2, ESS/3, ESS/4, ESS/5, ESS/6, EVS/4, LB/1995, LB/1996, LB/1997, LB/1998, LB/2000, LB/2001, LB/2002, LB/2003, LB/2004, LB/2005, LB/2006, LB/2007, LB/2008, LB/2009, LB/2010, LITS/1, LITS/2, NBB/1, NBB/3, NBB/5, NBB/6, WVS/2, WVS/3, WVS/4, WVS/5

Countries/territories (N=125)

AD, AL, AM, AR, AT, AU, AZ, BA, BA-FBH, BA-RSR, BD, BE, BF, BG, BO, BR, BY, BZ, CA, CH, CL, CN, CO, CR, CY, CY-TCC, CZ, DE, DE-E, DE-W, DK, DO, DZ, EC, EE, EG, ES, ET, FI, FR, GB, GB-GBN, GB-NIR, GE, GH, GR, GT, GY, HK, HN, HR, HT, HU, ID, IE, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KG, KH, KR, KS, KZ, LB, LT, LU, LV, MA, MD, ME, MK, ML, MN, MT, MX, MY, NG, NI, NL, NO, NZ, PA, PE, PH, PK, PL, PR, PS, PT, PY, RO, RS, RU, RU-KRA, RW, SD, SE, SG, SI, SK, SV, TH, TJ, TN, TR, TT, TW, TZ, UA, UG, US, UY, UZ, VE, VN, YE, ZA, ZM, ZW

Years (N=24)

1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

Source variables/questions (N=38)

See document: DETAILED VARIABLE REPORT TR_PARTY.xlsx

CHAPTER 4

Protest Behavior: Demonstrations and Petitions

*Based on reports by Ilona Wyszumutek
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4.1. INTRODUCTION

Classic and recent cross-national studies of political conflict tend to define protest broadly as both unadventurous and rebellious, combining the long and short-duration, the legal and illegal, and the violent and non-violent behavior into a single construct (Jenkins & Schock 1992; Dalton & Sickle 2005). Yet, there are a variety of protest types, each with different country-level economic and political contexts that influence “who does what” in expressing discontent. The most prevalent type of dissent in contemporary societies consists of performances that, following the literature, we define as *conventional protest* (Van Aelst & Walgrave 2001; Jenkins & Form 2005; Tilly & Tarrow 2007; DiGrazia 2014). By this we mean claims directed toward government in a form that has a short duration, is usually legal and legitimate, and has relatively little potential for violence.

Conventional protest is said to include *participation in demonstration* and *signing petitions* (Jenkins & Form 2005). In conceptual terms, our measures of political protest can be considered along a collectivistic-individualistic dimension (see also Dubrow et al. 2008). Collectivistic means that the act is designed for the purpose of the physical display and building of solidarity and a person has a sense of

being part of a gathering. Public demonstrations are a good example of collectivistic behavior. Signing a petition is an in-between indicator on the collectivistic-individualistic dimension of protest behavior: preparing a petition requires cooperation and individualistic aspects while petition signing is a personal act. Our initial approach is to analyze two indicators along this dimension, giving the more weight to demonstrations as more overt or radical expression of protest than signing petitions.

4.2. PARTICIPATION IN DEMONSTRATIONS

On the basis of all relevant source variables (S_PR_DEMONST) containing information about respondent's participation in demonstrations, we created the target variable T_PR_DEMONST_FACT. It measures the reported fact of someone having taken part in demonstration at any point (coded 1) or not (coded 0).

Here are two examples of the relevant questions:

- Question: *During the last 12 months, have you done any of the following? Have you taken part in a lawful public demonstration?* Response categories: 1 = Yes; 2 = No; 7 = Refusal; 8 = Don't know; 9 = No answer (ESS/1-6)
- Question: *I'm going to read out some different forms of political action that people can take, and I'd like you to tell me, for each one, whether you have actually done any of these things, whether you might do it or would never, under any circumstances, do it. Attending lawful demonstrations.* Response categories: -5 = other missing; -4 = question not asked; -3 = not applicable; -2 = no answer; -1 = don't know; 1 = have done; 2 = might do; 3 = would never do (EVS/1-4) Response categories: 1 = Yes; 2 = No; 7 = Refusal; 8 = Don't know; 9 = No answer (ESS/1-6)

Source variables differ in formulation, with respect to the timing when respondents could have demonstrated, as well as to other

aspects. Hence, we propose that the harmonized target variable on participation in demonstrations be used with control variables of specific features of the source questions, namely:

(a) period of time that appears in the question, during which respondent could have participated in demonstrations – C_PR_DEMONST_YEARS,

(b) whether the question refers only to “demonstrations” or also includes other wordings, such as marches, rallies, pickets, or sit-ins – C_PR_DEMONST_EXTENDED,

(c) information about legal status of demonstrations – C_PR_DEMONST_ILLEGAL,

(d) whether there was a subset of specific questions about demonstrations in a given survey, or there was only one – C_PR_DEMONST_SET_OF_QUESTIONS.

For the information on variable names, values and labels used in the Harmonization Project master file, see Table 4.2.1.

Source data description

The questions on actual participation in demonstration appeared in 19 international survey projects, 59 project waves. We have information about 136 countries/territories from 1966 to 2013; see, Appendix 4.A. The source variables used in the project generally aimed to capture public experience with participation in demonstration, either actual or potential. We identified variations in how questions were asked. These pertained to the time span when participation happened, whether the legal status of demonstration was mentioned, and whether the exact aim of demonstration was specified.

There are instances when more than one question appeared in the questionnaire, so there can be more than one source variable for the same country in the same survey. Detailed information on the source variables for each survey project (question number, questions wording, response categories, variable label and variable name) is available in: DETAILED_VARIABLE_REPORT-PR_DEMONST.xlsx.

Table 4.2.1 Description of the Target Variables PARTICIPATION IN DEMONSTRATIONS

	Variable label	Variable name	Variable values ^a
Target variable	Question about R's participation in demonstrations deals with facts	T_PR_DEMONST_FACT	0 = false 1 = true
	Question about R's participation in demonstrations deals with opinion	T_PR_DEMONST_OPINION	0 = false 1 = true
Source variables	Source value of R's participation in demonstrations	S_PR_DEMONST	See: DETAILED VARIABLE REPORT-PR_DEMONST.xlsx
Control variables	Time span for R's participation in demonstrations	C_PR_DEMONST_YEARS	1 = last year 2 = 2 years 3 = 3 years 4 = 4 years 5 = 5 years 8 = 8 years 10 = 10 years 11 = ever
	Question about R's participation in demonstrations deals with other forms of protest	C_PR_DEMONST_EXTENDED	0 = false 1 = true
	Illegal demonstrations	C_PR_DEMONST_ILLEGAL	0 = false 1 = true
	More than one question about R's participation in demonstrations	C_PR_DEMONST_SET_OF_QUESTIONS	0 = false 1 = true

^a For missing and other technical values, see Table 3.2.1.*Rules of transformation of source variables into target variable*

In the target variable T_PR_DEMONST_FACT we recoded source variable values so that 1 indicates respondent participated in demonstration (e.g., *yes, once, more than once, yes, several times, have done*, etc.), and 0 = no, meaning respondent did not declare in clear way that he or she partook in demonstrations (e.g., *no, I have never participated, might do, I could do it*, etc.).

Harmonization control variables

We have created four control variables, corresponding to specific features of the source variables:

- *Demonstration time* (C_PR_DEMONST_YEARS) – Control variable indicating whether in the question there is information about the exact time span when the respondent took part in demonstrations. Questions vary in this respect and in 15 survey/waves there are questions in which respondent was asked whether he took part in demonstrations in past year (coded as 1), 1 survey/wave with the question about whether it happened within 2 years, 7 survey/waves with questions about 3 years, 1 survey/wave with questions ask about 4 years, 4 survey/waves with questions ask about 5 years, 1 question asks about 8 years, and 3 questions ask about 10 years. All general questions, in which the year was not specified, or it was asked whether respondents have ever taken part in demonstrations was coded as 11 (33 survey/waves).
- *Demonstration extended* (C_PR_DEMONST_EXTENDED) – Commonly the respondent was asked only about participation in demonstrations. However, there are also instances where in the same question, or in a set of questions within the same survey, the respondent is asked about demonstrations as well as marches, protests or sits-in. These cases we call *extended questions* on demonstrations. Codes: 1 = true (meaning the question scope extended on other forms of protest behaviors); 0 = false (meaning question did not specify any other form of protest behavior, and asked only about demonstrations).
- *Demonstration illegal* (C_PR_DEMONST_ILLEGAL) – Dichotomous control variable; records whether there is information about the legal status of the demonstrations in the wording of the source variable. If the respondent was asked about participation in unlawful demonstrations, either through a separate question in the set of questions of the survey, or as part of the same question that distinguishes legal and illegal status of demonstrations, we

coded this as 1 (variations: 1 = *illegal / unlawful / unauthorized demonstrations*). If the question did not qualify the nature of demonstrations, we coded them as 0.

- *Set of questions* (C_PR_DEMONST_SET_OF_QUESTIONS) – This control allows us to check for those instances when a given survey “divides” the question about demonstrations into a subset of questions. For example there are surveys where respondents are asked about participation in lawful demonstrations (first question) and unlawful demonstrations (second question). The cases when only one question on demonstrations appears are coded as 0. Codes: 1 = set of questions for demonstrations; 0 = one question on demonstrations.

While recoding the set of questions, we used the rule that the strongest answer wins, meaning that if the respondent answered yes to participation in lawful demonstrations, but no to participation in unlawful ones, we code it as yes, the respondent participated in demonstrations. Table 4.2.2 provides an example of recoding of the set of two questions.

Table 4.2.2 Rules of Recoding a Set of Two Questions on Actual Participation in Demonstrations (T_PR_DEMONST_FACT) for the Same Survey/Country/Year

1st answer	2nd answer	Recoded
Yes	Yes	Yes
No	Yes	Yes
Don't know	Yes	Yes
Missing	Yes	Yes
No	No	No
Don't know	No	No
Missing	No	No
Don't know	Don't know	Don't know
Don't know	Missing	Don't know
Missing	Missing	Missing

Special Cases

While working with the source variable on participation in demonstrations we encountered several specific problems:

- ABS – there is an unlabeled value 7 (ABS/2) and undescribed nulls (ABS/2 and ABS/3) in the codebook that appeared in the data.
- AMB/2006-2012 – there was the set of questions on protest, from which we have chosen only variables `prot1` and `prot3`.
- ARB/1 and ARB/2 – variable on protest has null values for some countries in the data, neither labeled nor described in the codebook what null exactly means.
- CNEP/3/HU – the question on protest appeared in the questionnaire but was not included in the data file. Although the question meets our criteria, the item could not be harmonized.
- CNEP/3/MX – there are undescribed nulls in the data. How to code them in the control variable `C_PR_DEMONST_YEARS` is not clear. While in most other CNEP/3 surveys the question on protest refers to 1 year time span, in this survey timing was not specified. From the sequence of questions and the context in which the question appears, it seems that the respondent is led to the logics of one year time span, but this is not asked explicitly. All neighboring questions were asked in Past Simple tense (*Did you...?*) while the question on protest was asked in Present Perfect Tense (*Have you...?*). Since there is no exact information on the time span in the question itself, we code it as `C_PR_DEMONST_YEARS = 11` (i.e. 11 = “Ever”, cf. Table 4.2.1).
- ISSP/2004 – there are two options of positively answering the question on demonstration: 1 = *yes, last year*; 2 = *yes, long time ago*. We merged them and coded as `C_PR_DEMONST_YEARS = 11` i.e. 11 = “Ever”, cf. Table 4.2.1).
- NBB/1-6 – source variables `pp1`, `pp2` appear in wave 1; `pp3`, `pp4` in waves 1-3; no questions in other waves.

We did not take questions that referred to general attitude to demonstrations as a form of expressing opinion in democratic society, nor did we analyze the questions about fear of taking part in demonstrations, mainly due to the low number of surveys where such questions appeared. However, we created another target variable dealing with potential participation in demonstrations, which is not part of this report.

4.3. SINGING A PETITION

The target variable `T_PR_PETITION_FACT` identifies whether respondents reported to have engaged in the specific type of political action of signing a petition. We took only questions concerning reported facts. Questions concerning approval of this type action, so-called *sympathy scales*, as well as the general evaluation of effectiveness of this means of political engagement were not considered. All values and labels, as well as information on survey projects are based on `master-2015121207.sav` version of master file. Table 4.3.1 provides description of the variable.

Source data description

The questions on signing petitions appeared in 16 international survey projects (see Appendix 4.B), with various differences across surveys. Below are examples of differences in wording and scaling:

- Question: *Here is a list of actions that people sometimes take as citizens. For each of these please tell me whether you, personally, have ever done each of these things in the past three years. Join together with others to draw attention to an issue or sign a petition* Response categories: 1 = Once; 2 = More than once; 3 = Never; 97 = Not clear; 98 = Can't Choose/Don't know; 99 = Decline to Answer (ARB/1)
- Question: *Now I'd like you to look at this card. I'm going to read out some different forms of political activity that people can become involved in, and I'd like you to tell me, for each one, whether you*

Table 4.3.1 Description of the Target Variable SIGNING PETITIONS-FACT

	Variable label	Variable name	Variable values
Target variable	Question about R's signing petition deals with facts	T_PR_PETITION_	0 = false
		FACT	1 = true
Source variables	Source value of R's signing petition	S_PR_PETITION	See: DETAILED VARIABLE REPORT-PR_PETITION_FACT.XLSX
Control variables	Question about R's signing petition deals with specific issue	C_PR_PETITION_	0 = false
		ISSUE	1 = true
	Time span for R's signing a petition	C_PR_PETITION_	1 = last year
		YEARS	2 = 2 years
			3 = 3 years
		5 = 5 years	
		8 = 8 years	
		10 = 10 years	
		11 = ever	
	Question about R's signing petition deals with other forms of protest	C_PR_PETITION_	0 = false
		EXTENDED	1 = true

have actually done any of these things, whether you might do it or would never, under any circumstances, do it. (Circle one answer for each statement) a) Sign a petition Response categories: 1 = Have often done; 2 = Have done once or twice; 3 = Might do; 4 = Would never do; 5 = Don't know; 6 = No answer (ASES)

- Question: *There are different ways of trying to improve things in [country] or help prevent things from going wrong. During the last 12 months, have you done any of the following? Have you signed a petition? Response categories: 1 = Yes; 2 = No; 7 = Refusal; 8 = Don't know; 9 = No answer (ESS/1-6)*
- Question: *Which of the following, if any, have you done during the last twelve months. Signed a petition Response categories: 0 = Not mentioned; 1 = Mentioned (EB/62.2)*
- Question: *Now I'd like you to look at this card. I'm going to read out some different forms of political action that people can take, and*

I'd like you to tell me, for each one, whether you have actually done any of these things, whether you would/might do it or would not/never, under any circumstances, do it/any of them. Signing a petition
 Response categories: -5 = other missing; -4 = question not asked; -3 = not applicable; -2 = no answer; -1 = don't know; 1 = have done; 2 = might do; 3 = would never do (EVS/1-4)

Rules for the transformation of source variables into target variable

For each of the source variables, answers identifying signing petitions (*have done; have done often; have done once or twice* etc.) are coded as 1, otherwise 0. The target variable T_PR_PETITION_FACT is a dichotomous variable, where reports of having signed petitions = 1, else = 0.

Harmonization control variables

To control for the differences in question wording three control variables were constructed.

- *Specific issue* (C_PR_PETITION_ISSUE) – The variable identifies whether the question about signing a petition was asked in connection with a specific issue, e.g., environmental problems. It was coded 1 for one survey – ISSP/2010 – in order not to lose the information from this survey, but at the same time to distinguish between specific and general questions about signing petitions.
- *Time span* (C_PR_PETITION_YEARS) – The variable identifies the time span in years mentioned in the question, e.g., *last year* or *last 12 months* then it is coded as 1, if in the *last 2 years*, then 2, and so one, if *ever* or indefinite, then it is coded as 11.
- *Extension* (C_PR_PETITION_EXTENDED) – The variable identifies whether the question contains more than one activity, meaning the question extends to activities other than signing a petition. If the question wording contains at least one additional activity, then this control is coded as 1, otherwise 0.

Special Cases

- C_PR_PETITION_YEARS is coded differently for selected countries in ISJP/1991 and ISJP/1996, accounting for differences in country-specific wording of questions, e.g., the time span is “since 1991” in Russia instead of the general time frame “ever” etc. Question: *On this card are kinds of actions that people sometimes take to make their own views publicly known and to influence others when they see injustice. Please tell me if you have ever [1996:B,H: since 1988; 1996:R: since 1991] done any of these things over an issue that was important to you. Q45a. Signed a petition (ISJP/1991 and ISJP/1996)*
Question *How likely are you to...Sign petitions* (response categories: 1 = *have done*; 2 = *might do*; 3 = *would never do*) from LITS/1 q704_4 and LITS/2 q715_4 is treated as a question about fact, not opinion, although the wording might suggest differently.
- C_PR_PETITION_YEARS = 11 for v17 ISSP/2004, since the *ever* category also contains *the distant past*. Question: *Here are some different forms of political and social action that people can take. Please indicate, for each of one, whether: you have done any of these things in the past year; you have done it in the more distant past; you have not done it but might do it; or have not done it and would never, under any circumstances, do it.*

There are some *blanks* in the source data on the country level; for details see: DETAILED VARIABLE REPORT-PETIT.xlsx.

Appendix 4.A Information on the International Survey Projects and the Total Number of Source Variables Used to Create the Target Variable PARTICIPATION IN DEMONSTRATIONS – FACT

Survey project waves (N=59)

ABS/1, ABS/2, ABS/3, AFB/1, AFB/2, AFB/3, AFB/4, AMB/2004, AMB/2006, AMB/2008, AMB/2010, AMB/2012, ARB/1, ARB/2, ASES, CNEP/3, EB/19, EB/21, EB/31, EB/62.2, EQLS/2, EQLS/3, ESS/1, ESS/2, ESS/3, ESS/4, ESS/5, ESS/6, EVS/1, EVS/2, EVS/3, EVS/4, ISJP/1991, ISJP/1996, ISSP/1996, ISSP/2004, LB/1995, LB/1996, LB/1998, LB/2000, LB/2001, LB/2002, LB/2003, LB/2004, LB/2005, LB/2006, LB/2007, LB/2008, LITS/1, LITS/2, PA2, PA8NS, PPE7N, VPCPCE, WVVS/1, WVVS/2, WVVS/3, WVVS/4, WVVS/5

Countries/territories (N=136)

AD, AL, AM, AR, AT, AU, AZ, BA, BA-FBH, BA-RSR, BD, BE, BE-FLA, BF, BG, BJ, BO, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CV, CY, CY-TCC, CZ, DE, DE-E, DE-W, DK, DO, DZ, EC, EE, EG, ES, ET, FI, FR, GB, GB-GBN, GB-NIR, GE, GH, GR, GT, GY, HK, HN, HR, HT, HU, ID, IE, IL, IL-ARB, IL-JEW, IN, IQ, IS, IT, JM, JO, JP, KE, KG, KR, KS, KZ, LB, LR, LS, LT, LU, LV, MA, MD, ME, MG, MK, ML, MN, MT, MW, MX, MY, MZ, NA, NG, NI, NL, NO, NZ, PA, PE, PH, PK, PL, PR, PS, PT, PY, RO, RS, RU, RW, SA, SD, SE, SG, SI, SK, SN, SV, TH, TJ, TR, TT, TW, TZ, UA, UG, US, UY, UZ, VE, VN, YE, ZA, ZM, ZW

Years (N=39)

1966, 1967, 1969, 1971, 1973, 1974, 1975, 1976, 1979, 1980, 1981, 1982, 1983, 1984, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

Source variables/questions

See: DETAILED VARIABLE REPORT-PR_DEMONST.xlsx

Appendix 4.B Information on the International Survey Projects and the Total Number of Source Variables Used to Create the Target Variable signing petitions-FACT

Survey project waves (N = 39)

ABS/2, ABS/3, ARB/1, ARB/2, ASES, EB/31, EB/62.2, EQLS/3, ESS/1, ESS/2, ESS/3, ESS/4, ESS/5, ESS/6, EVS/1, EVS/2, EVS/3, EVS/4, ISJP/1991, ISJP/1996, ISSP/2004, ISSP/2010, LB/2002, LB/2004, LB/2005, LB/2006, LB/2007, LB/2008, LITS/1, LITS/2, PA2, PA8NS, PPE7N, VPCPCE, WVS/1, WVS/2, WVS/3, WVS/4, WVS/5

Countries/territories (N = 120)

AD, AL, AM, AR, AT, AU, AZ, BA, BA-FBH, BA-RSR, BD, BE, BE-FLA, BF, BG, BO, BR, BY, CA, CH, CL, CN, CO, CR, CY, CY-TCC, CZ, DE, DE-E, DE-W, DK, DO, DZ, EC, EE, EG, ES, ET, FI, FR, GB, GB-GBN, GB-NIR, GE, GH, GR, GT, HN, HR, HU, ID, IE, IL, IL-ARB, IL-JEW, IN, IQ, IS, IT, JO, JP, KG, KR, KS, KZ, LB, LT, LU, LV, MA, MD, ME, MK, ML, MN, MT, MX, MY, NG, NI, NL, NO, NZ, PA, PE, PH, PK, PL, PR, PS, PT, PY, RO, RS, RU, RW, SA, SD, SE, SG, SI, SK, SV, TH, TJ, TR, TT, TW, TZ, UA, UG, US, UY, UZ, VE, VN, YE, ZA, ZM, ZW

Years (N = 36)

1971, 1973, 1974, 1975, 1976, 1979, 1980, 1981, 1982, 1983, 1984, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

Source variables/questions

See: DETAILED VARIABLE REPORT-PR_PETITION_FACT.xlsx

CHAPTER 5

Socio-Demographic Variables

*Based on reports by
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and other members of the team*

5.1. INTRODUCTION

While there is no common set of measures for background variables, various attempts of standardizing the measurement of single background variables exist in international research (for an early statement, see Wolf & Hoffmeyer-Zlotnik 2003; Kolsrud & Skjåk 2005). In some international survey projects, the European Social Survey in particular, input harmonization for background variables is well-executed. The problem is that the standards do not apply across different projects. Even such basic variables as gender and age/year of birth are coded differently across projects and require careful checking before uniform codes could be applied. In the case of more complex socio-demographic variables, such as education, the discussion about measurement comparability continues for years (e.g., Braun & Müller 1997; Kerckhoff, Ezell, & Brown 2002; Barro & Lee 2010; Schneider 2013).

5.2. GENDER

The target variable `T_GENDER` refers to respondent's gender as asked in the questionnaire or coded by the interviewer. Information on gender appeared in all 22 international survey projects (89 waves); the data cover 142 countries and 42 years. However, the relevant information is missing for EB/77.3: Montenegro and Serbia and WVS/1: Finland, Mexico, and South Africa; these cases are coded as -8 in the master file. Total item non-response for gender pertains to 8,062 cases, out of 2.3 million.

Target variable `T_GENDER` identifies males and females, as in Table 5.2.1. Since all source variables included this division, the harmonization procedure involved simple recoding such that males are assigned the value 0, and females the value 1.

Table 5.2.1 Description of the Target Variable RESPONDENT'S GENDER

	Variable label	Variable name	Variable values
Target variable	R's gender	<code>T_GENDER</code>	0 = male 1 = female
Source variables	Source value of R's gender	<code>S_GENDER</code>	See: DETAILED VARIABLE REPORT-GENDER.XLSX

5.3. AGE/YEAR OF BIRTH

The target variable `T_AGE` is based on the transformation of the source variables measuring the age of respondents in years, or, preferably, on the transformation of the birth year into age in years. Priority is always given to the variable derived from the birth year, even if the source variable reporting age in years is also available.

If a question about the year of birth was asked in the survey, the age is calculated based on this variable (`S_BIRTH_YEAR`) since the date of the interview is often available in the dataset or documentation (`S_INTERVIEW_DATE`). For information on variable names, values, and labels used in the Harmonization Project master file, see Table 5.3.1.

Table 5.3.1 Description of the Target Variable AGE AND YEAR OF BIRTH

	Variable label	Variable name	Variable values
Target variable	R's age	<code>T_AGE</code>	14 = 14 years* 96 = 96 years*
	R's year of birth	<code>T_BIRTH_YEAR</code>	-2 = not applicable
Source variables	Source value of R's age	<code>S_AGE</code>	See: DETAILED VARIABLE REPORT-AGE.XLSX
	Source value of R's year of birth	<code>S_BIRTH_YEAR</code>	See: DETAILED VARIABLE REPORT-AGE.XLSX

* The lower and upper limits of the range of `T_AGE` vary across national surveys.

Source data description

The source variable on age of the respondent (`S_AGE`) appeared in all 89 waves of 22 international survey projects. The data cover 142 countries and 42 years. In some international survey projects, respondents are asked their exact age; in some age is derived from birth year and the interview year. Very few surveys report both year of birth and exact age of respondent: ABS/3, CB/2009-2012, CDCEE/1-2, CNEP/3 (Mexico, Taiwan, and Uruguay), ESS/1-6, EVS/1-4, ISJP/1991 and 1996, ISSP/2010 and 2011, PA8NS, PA2, PPE7N (The Netherlands), and WVS/1-5.

Rules for the transformation of source variables into the target variable

The main rule for constructing the target variable `T_AGE` is:

- If there is no information about the year of birth, use age in years variable from the source data. If `S_BIRTH_YEAR` is available, derive `T_AGE` based on it and `S_INTERVIEW_DATE`.

According to the specifications of all selected international projects, respondents should be at least 15 years old. However, within certain projects and countries, the documentation of the sample indicates explicitly that respondents aged 14 years old were included. (e.g., WVS and ISSP, for more details of the `S_AGE`, please see: `DETAILED_VARIABLE_REPORT-AGE.xlsx`, sheet `S_AGE`). Thus, the lowest possible value for `T_AGE` is 14 years old, but only for those surveys whose documentation explicitly mentions 14 years as acceptable value.

We decided on the lower and upper bounds of `T_AGE` according to the following rules:

- If the lowest age value in a survey's documentation is greater than the value found in that survey's dataset, we exclude the lowest values if they do not create a sequence of adjacent values, e.g., for a documented minimum 18, if we find the sequence 15, 17, 18, etc., we exclude 15 (coding it as -4 = value not acceptable) and take 17 as the lower bound of the age. If the sequence has no gap, we accept as the lower bound the lowest value of the sequence greater or equal than 15.
- We set the upper bound for the value of age at 96 years, since 97, 98 and 99 often code missing data values in source variables. All values above 96 are treated as missing data of a special sort and coded as -4.

There are additional rules we applied for coding the age of respondent:

- If source variables are available, but their values cannot be interpreted, we apply corrections. For example, in WVS/1 there is an invalid and undocumented value for respondents' year of birth; at

the same time, the value of the age variable is valid. Hence, in this instance we used the age in years variable to construct the target variable.

- If the age or the birth year variables cannot be corrected, they are marked as missing data (-9), e.g., blanks in ABS/3.
- If age is coded in brackets, the midpoints ($29 = 25 - 34$) or edge points ($75 = 75$ and more, $19 = 19$ and less) are used to create the target variable (as in ABS/1, ARB/1, CB/2009, ISSP/1985, PPE7N for India, Japan, and Yugoslavia).

In all waves of LB we have encountered the problem of misleading presentation of age categories in the data documentation, while exact age in year is available in the datasets.

Special cases

The special cases considering all three source variables, i.e., S_AGE, S_BIRTH_YEAR, S_INTERVIEW_DATE are listed below:

- There are waves in which the question on age was not asked in some countries, e.g., in AMB/2008 there is no information about the age of respondent for United States, in CDCEE/1 there are no data for Lithuania and Romania, in WVS/1 – Finland, Hungary, South Korea, Mexico, and South Africa are lacking data about respondent's age. There are also interesting cases of Argentina and Japan in WVS/1, since only a few respondents report their age.
- On the level of country, there are blanks in data for the S_BIRTH_YEAR, e.g., CNEP/3: Spain, Hungary, Mozambique, Portugal, and South Africa; PPE7N: Austria, India, Japan, Nigeria, United States, and Yugoslavia.
- There are two exceptional cases, where questions were asked about birth year, but in the data one finds age derived from the birth year (CNEP/3 Uruguay and PPE7N The Netherlands).
- Age is calculated using the birth month, birth year and date of interview in ISJP/1991, ISJP/1996 and PA2, therefore the derived age variable for these two surveys is used for transformation.

- Despite the recommendations not to code age in brackets, we encountered several instances where the age variable contains brackets. Examples: PPE7N: age coded in brackets for three countries: India, Japan and Yugoslavia; ISSP/1985: all countries report age in years, except for Italy, where data are coded in brackets; ARB/1: no exact age for Morocco is reported, therefore we use the variable with age brackets for all countries within this survey/wave to create the variable for this survey. Similar situation occurred in ABS/1, since there are two variables describing age of respondent – the exact age in years and age in brackets – but the first variable lacks data for Mongolia.
- In CB/2009 information about how the exact age of respondent was calculated is missing, but we have both year of birth and age brackets for this survey.
- There are cases in which interview year is different in the documentation and in the dataset. We treat the interview year from the dataset as the accurate information. Moreover, we did additional research of documentation to extract the exact information about the year the survey was conducted for each country/survey/wave unit. In project/waves that have a specific variable containing the year of conducting the survey, for some countries this information is still missing. On the country level, information about interview data is missing for the whole samples of: ABS/2: South Korea, Philippines, Singapore, and Thailand and CNEP: Spain, Mexico, Mozambique, Portugal, Taiwan, Uruguay, and South Africa.

5.4. RURAL-URBAN PLACE OF LIVING

This section describes the target variable ‘rural/urban locality’ (T_RURALURB), which is a comparable cross-surveys measure of the type of respondent’s place of living. All relevant source variables (S_RURALURB) referring to the respondent’s locality type were recoded so that T_RURALURB takes the value 1 if a type of place

of living is rural and 0 if it is urban. The locality is coded as rural if textual response in source variable says it is rural and/or if the locality size is smaller than 5,000 inhabitants. The locality is coded as urban if textual response item says it is urban and/or its size is equal/higher than 5,000 inhabitants, respectively.

We propose to use the harmonized target variable on type of locality with control variables that capture special features of source variables, such as (a) whether the question on locality type was answered by respondent – C_RURALURB_RESP, (b) whether response item extends the standard definition of rural or urban locality and assigning it to one of this two types is based on additional sources and/or analysis – C_RURALURB_UNCLEAR. For the information on variable names, values and labels used in the Harmonization Project master file, see Table 5.4.1.

Table 5.4.1 Description of the Target Variable RURAL/URBAN LOCALITY

	Variable label	Variable name	Variable values ^a
Target variable	R's rural/urban place of living	T_RURALURB	0 = urban 1 = rural
Source variables	Source value of R's rural/urban place of living	S_RURALURB	See: DETAILED VARIABLE REPORT-RURALURB V4.xlsx
Control variables	Rural/urban information based on R's declaration	C_RURALURB_RESP	0 = false 1 = true
	Unclear rural/urban assignment	C_RURALURB_UNCLEAR	0 = false 1 = true

^a For missing and other technical values, see Table 3.2.1.

Survey Projects

The source variables describing respondent's type of place of living, which we used for creating the target variable T_RURALURB, appeared in all 22 international survey projects, in most of the survey project

waves (86 out of 89 waves). Source variables are available for 141 countries. We have data for almost every year from at least one source survey, with exception of 1970, 1972-1973, 1976-1978 and 1987-1988 years (exact total number of years for which we have data is 40).

Source data description

The source variables used to create T_RURALURB contain sufficient information to assign either rural or urban locality type to each respondent. However, the methods of gathering respondent's locality type varied from survey to survey. The main differences in source variables can be summed up as follows:

- Response origin – in some survey projects respondents answered the question on locality type, in other survey projects the interviewer/coordinator coded the locality type of respondent.
- Response values – in some projects the questions were dichotomous (rural/urban), others had more detailed information on locality type, which was either numeric (locality size) or textual (description of locality type with more than two categories) or a mix of both.
- Country-specific vs values recoded by survey administrators – some survey projects offer only country-specific codes for a place of locality, in other projects, project organizers offer also their recoded comparable categories from the country-specific ones. For example, World Value Survey provides both detailed country-specific categories (e.g. Japan – 1. 12 major large cities i.e., Tokyo, Osaka, etc. 2. 150,000 more residents cities 3. 50,000 to 150,000 residents cities 4. Up to 50,000 residents cities 5. Rural districts) and the recodes to three categories (1. rural/village 2. small/medium town 3. large town). There are project waves with country-specific categories only for some countries.

It is worth underlining that in some survey projects more than one variable on locality type is available, mostly with difference in response origin, response values and/or aggregation level.

Rules for the transformation of source variables into target variable

In transforming source variables of location type into a dichotomous target variable of rural/urban locality, the rules were as follows:

- if the survey project contains more than one variable on location type for a given country/year, and it is possible to identify their “origin” (i.e. respondent vs. interviewer/coordinator), give priority to the variable ‘produced’ by respondent, even if it is less detailed than that ‘produced’ by interviewer/coordinator;
- if there is no variable ‘produced’ by respondent but more than one variable produced by project organizers (e.g. country specific Japan code and a common, recoded, variable for all countries within project wave) – take the more detailed variable (i.e. whenever possible, take original variable, not the one created via recoding by survey administrators) if the size of locality is smaller than 5,000 inhabitants, code it as T_RURALURB = 1;
- if textual response item in source variable says it is: *rural, village, country, countryside, remote area, farm, smaller areas* or *tribal* code it as T_RURALURB = 1;
- if less than 5,000, but described as town, code it as T_RURALURB = 0 – textual response categories take priority over numeric ones;
- if the smallest size category is 30,000 inhabitants and less, code as T_RURALURB = 1 with control variable C_RURALURB_UNCLEAR = 1;
- if more than 30,000 and says rural, code it as urban (T_RURALURB = 0) with control variable C_RURALURB_UNCLEAR = 1;
- if size category is less than 5,000 but higher than 30,000 inhabitants (e.g., *1 500-100 000*), code it as urban (T_RURALURB = 0) with control variable C_RURALURB_UNCLEAR = 1;
- if says *village/small town* or *town or village* or *rural/mixed* and this is the lowest response category, code it as rural (T_RURALURB = 1) with control variable C_RURALURB_UNCLEAR = 1;
- if the lowest response item includes the numeric value higher than 30,000 inhabitants with adding *and below* or *or less* (e.g., *less*

- than 150 000*) code it urban (T_RURALURB = 0), with control variable C_RURALURB_UNCLEAR = 1;
- if response items include the name of city and *area* (e.g., *Jerusalem and area*), code it as urban (T_RURALURB = 0), with control variable C_RURALURB_UNCLEAR = 1.

Harmonization control variables

We created two control variables for T_RURALURB: response origin (C_RURALURB_RESP) and rural/urban unclear (C_RURALURB_UNCLEAR) Both refer to decisions made during the harmonization process and allow to control for specific features of source variables.

- *Response origin* (C_RURALURB_RESP) – dummy control variable indicating whether respondent actually answered the question (subjective report of the locality type; coded as 1) or information comes from other sources, e.g., coded by interviewer/field coordinator or defined by sampling procedures (objective information of the locality type; coded as 0)
- *Rural/urban unclear* (C_RURALURB_UNCLEAR) – dummy control variable, indicates whether response item extends the standard definition of rural or urban locality and assigning it to one of this two types is based on additional sources and/or analysis. The control variable unclear is option-specific, meaning that in the same variable some response items can be unclear (1), but other – clear (0).

Special Cases and Comments

Table 5.4.2 provides information about special cases and decisions we made. In addition, we note that in three cases – CNEP/3/ES (Z.Sp.L.Habitat), ISJP/1-2 (v25025) and LB/1996 (th) – we found source variables whose names and labels suggest they refer to the locality type of respondent, but whose response categories are not documented. This made their use in harmonization procedures impossible.

In some cases single response items had insufficient information in light of our target variable definition. We coded them in the harmonized dataset as -6, a value that refers to such source value labels as *refugee camp* (ARB/2 v13), *no settlement* (CNEP/3/HUZ.Hu.L.urban), *autres localites* (EB/2000 v387), *other answer* (ISSP/2010 urbrural), *otras* (LB/2000 tamciud), *non self-representing PSU's* and *all locations in non-SMSA* (PA8NS v297), *other country* (PPE7N/NL v453) and *other* (WVS/1-5 x049cs).

To assist decisions on rural/urban cuts, when needed we also used information from the World Bank: Percentage of Population in Rural Areas (in % of Total Population) [http://data.worldbank.org/indicator/ SP.RUR.TOTL.ZS](http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS).

Table 5.4.2 Information about Variable Name, Values and Codes for Special Cases

Dataset, variable name, country (if country level)	Case	Coding		Comment
		T_RURALURB	C_RURALURB_UNCLEAR	
ASES v0361	2 = 2,001-10,000 <i>Semi-urban</i>	1	1	Coding here is based on numeric information, although <i>semi-rural</i> and <i>semi-urban</i> are usually coded as 0 (urban).
EB/2000 v400 Finland	4 = <i>Rural center</i>	1	0	There is no explanation in documentation of what rural center means: <i>rural population center (densely pop. comm.)</i> . There is also option <i>Countryside (sparsely pop. comm.)</i> which we don't have here. All analysis concluded, we decided to code it as rural.
EB/2000 v402	2 = <i>Mixed urban / rural(Klein- / Mittelstadt)</i>	0	1	Based on textual information, we coded it as urban with control variable C_RURALURB_UNCLEAR.

Dataset, variable name, country (if country level)	Case	Coding		Comment
		T_RURALURB	C_RURALURB_ UNCLEAR	
ISJP/1-2 V11008	10	0	0	Undocumented value, survey's codebook not helpful. We presume that categories 9,11,12 were misdocumented and should read 10,11,12.
ISSP/1985 v119 USA	8 = <i>Town, greater than 2.500</i>	1	1	Marked as rural with remark UNCLEAR=1 because the next value in options of answers is 10,000 and consistently with NORC size code in other variables, where 2,500 - 9,999 in USA is defined as town or village. We made USA options consistent across all ISSP waves.
ISSP/2004 v378 Czech Republic	4 = <i>Incl. other type of community</i>	1	1	Consistent with other waves of ISSP for which this option for the Czech Republic reads <i>country village, other type of community</i> .
PA2 v1284 Netherlands	6 = <i>B2 ... 5.000 to 10.000</i> 7 = <i>B3. Commuter village</i>	0	0	Based on additional sources and lengthy discussions, we coded it as urban, treating this item as suburban population. Same with PA8NS v297.
PPE7N/US v453	12	0	0	Undocumented option 12, most probably identical to that of PA2.
ISSP/1990 v105 Norway	3 = <i>Rural, 30.000 - 99.999 inhabitants or rural with</i>	0	1	After additional analysis we concluded that the textual information in this response item is probably mistaken, thus it is coded as urban, with control variable C_RURALURB_UNCLEAR. Same situation appeared in ISSP/1991 v123.
ISSP/1990 v105 Norway	4 = <i>Urban, 3.000 - 29.999 inhabitants or rural with 7.000 and more in urban area</i>	0	0	We gave priority to textual information in this case, coding it as urban. Same situation appeared in ISSP/1991 v123.

5.5. METROPOLITAN AREA

Target variable T_METRO is a dichotomous variable measuring a specific type of urban settlement, metropolitan area (1 = metropolitan area, 0 = otherwise). To code an urban settlement as metropolitan we take (a) OECD (2013) definition of the functional urban areas as those with population of 500,000 and more inhabitants, for those countries where such settlements exist;¹ (b) the UNICEF 2012 definition of 100,000 & more inhabitants for countries lacking urban settlements with population of 500k or more (we checked information for each country separately);² and (c) for small countries, such as Luxemburg or Malta, that lack urban settlements of 100,000, we take the most highly populated city in that country. If descriptions of the settlement type were unclear, we used external sources to determine whether this locality is metropolitan area or not.

Table 5.5.1 Description of the Target Variable on RESPONDENT'S PLACE OF LIVING-METROPOLITAN AREA

	Variable label	Variable name	Variable values
Target variable	R's residence in a metropolitan area	T_METRO	0 = other than metropolitan area 1 = metropolitan area
Source variables	Source value of r's residence in metropolitan area	S_METRO	See: DETAILED VARIABLE REPORT-METRO.xlsx
Control variables	Unclear metropolitan area assignment, metropolitan area	$C_METRO_UNCLEAR$	0 = false 1 = true
	Information based on R's statement	C_METRO_RESP	0 = false 1 = true

¹ www.oecd.org/regional-policy/Definition-of-Functional-Urban-Areas-for-the-OECD-metropolitan-database.pdf

² UNICEF 2012 definition sets population of at least 100k as minimal requirement for assigning the settlement to the metropolitan area; www.unicef.org/sowc2012/pdfs/SOWC-2012-DEFINITIONS.pdf

Source data description

The source variables on the locality type, which were used to create T_METRO appeared in 20 international survey projects, 79 waves; we have information on the location type of respondents from 122 countries and 39 years; see, Appendix 5.A. Source variables used to create target variable T_METRO differ in terms of a) the source of the data, i.e., provided by respondent or by interviewer/survey coordinator, b) the scale length and its precision, and c) whether they are country-specific variables, with information about each country's urban-rural division as a separate variable (e.g. ISSP), or this is one variable with common categories for all countries within a project (e.g. ESS).

Rules for the transformation of source variables into target variable

The rules which determined the selection of the particular source variables were:

- If the survey project contained more than one variable on location type for a given country/year, if “origin” can be attributed, give priority to variable filled in by the interviewer or project coordinator vs. that ‘produced’ by respondent). We assumed that the interviewer/project coordinator would have more accurate information on actual size of given cities.
- If both country-specific variables and variables common for all countries in the project wave exist, or if more than one common variable is available, give priority to the variable with more detailed answers category.

To determine whether certain locality is a metropolitan area, we applied the following scheme:

STEP 1. Check the scale length: The scale must contain at least 3 points, preferably 4 and more.

EB/2004 v508 for United Kingdom – ‘good’ 3-point scale

1 = *Rural*

2 = *Urban*

3 = *Metropolitan (Great Britain)*

If the scale is just a distinction between urban and rural, the source variable is excluded from the further harmonization process and coded as -7.

EB/2004 v515 Cyprus – ‘bad’ 2-point scale

1 = *Rural area or village*

2 = *Small or middle sized town*

EB/2012 p6rs for Serbia – ‘bad’ 4-point scale

1 = *Rural*

2 = *Small town*

3 = *City*

4 = *Suburban*

The exception for the 3 points scale is made only if it contains verbal identification of the capital city.

STEP 2. Check the position on scale: the highest option, i.e., the most populated locality in country, is metropolitan area, unless it’s an urban settlement with less than 100,000. If the highest response category is ambiguous, e.g., 100,000+ inhabitants, code it as $T_METRO = 1$, but with the control variable $C_METRO_UNCLEAR = 1$ (detailed description of this control variable is in the Harmonization control variables section).

STEP 3. Check other response categories: If categories other than the highest option are urban settlements with the population 500,000+, include it as $T_METRO = 1$, e.g., in case of AMB/2004-2012 variable `tamaño` we coded the second response category (*Ciudad grande*) as metropolitan area, however to control for the accuracy of this decision, we highly recommend using the population size and the level of urbanization as control variables in the multilevel models.

STEP 4. If the scale is verbal non-numeric, include only those categories, which directly refer to the capital city/capital city area or the name of the city (check the population size in case of the city's name).

- Metropolitan suburbs and areas are coded as T_METRO = 1, if it is directly stated that they are incorporated into the metropolitan area, e.g., there is a name of the capital city or other explicit wording.
- If in one response category there are two cities of the different size merged, we preserve the information for the city of the sufficient size and add the control variable C_METRO_UNCLEAR = 1 to stress the expanded definition.
- In case of 'small countries', such as Malta, that lack cities exceeding 100,000 people, we code as metropolitan area the city with the largest population, and also assign the control C_METRO_UNCLEAR = 1. To control for the accuracy of this decision, we highly recommend to using the population size and the level of urbanization as control variables in the models.

Harmonization control variables

For the coding purposes we considered several control variables, such as *suburbs*, *small country*, and *key word*, however they did not prove to be useful and they are not included into the final version of the data set. These indicators are preserved in the DETAILED VARIABLE REPORT-METRO.xlsx to keep the track of the decision-making process of the research team.

The final version of the data provides two control variables:

- Response origin (C_METRO_RESP) – Control variable indicating whether respondent answered the question (C_METRO_RESP = 1) or information comes from other sources, e.g., coded by interviewer/field coordinator or defined by sampling procedures (objective information of the locality type, C_METRO_RESP = 0).
- Metro unclear (C_METRO_UNCLEAR) – Control variable indicates whether response item extends the standard definition of the

metropolitan area, which is the urban locality with the population exceeding 500,000 inhabitants / the largest urban settlement in country. $C_METRO_UNCLEAR = 1$ means that the decision was based neither on precise numbers 500,000 nor explicit key words (metro area, capital, name of the capital etc.), nor the position on the scale. $C_METRO_UNCLEAR = 0$ means the decision was clear and based on the standard definition.

Special Cases

- IVS – we code the highest response category as $T_METRO = 1$, if it does not match the merged variable, the control variable $C_METRO_UNCLEAR = 1$; for the detailed scheme of coding, see: DETAILED VARIABLE REPORT-METRO.XLSX, sheet EVS+WVS.
- ABS/1 ir114 – response category 2 = *Regional center or Other major cities* is coded as $T_METRO = 1$, despite the lack of numbers identifying population size. This decision is based on the next waves of the survey, where the second response category is 2 = *Regional center or Other major cities (100,000 plus)*. This decision is aimed at ensuring consistency and comparability between survey waves.
- ASES V0347 China, V0350 Indonesia, V0351 Thailand – all response categories were coded as $T_METRO = 1$.
- CNEP/3/MZ z.Mz.L.TypeCity – both response categories (4 = *Big city or town*; 3 = *Suburb of a big city or town*) are coded as $T_METRO = 1$, since it seems to us the only possible solution with the highest response category formulated in this manner. The situation is the same with CNEP/3/PT z.pt.L.Locality.
- EB/19 v266, EB/21 v251, EB/31 v518 – for the United Kingdom urban settlement defined as ‘conurbation’ is coded as $T_METRO = 1$.
- EB/21 v251 Northern Ireland – T_METRO is coded as -7 due to suspicious data.

- EB/54.1 v396 Greece – 4 = 50.001 - 1.000.000 inhabitants is treated as T_METRO = 0, since this response category is too inclusive or could result from an error in coding.
- EB/62.2 and EB/73.4 Denmark – all the following response categories are coded as T_METRO = 1: 9 = Remaining groups in metropolitan area; 10 = Other municip. in metrop. area - min. 10.000; 11 = Metropolitan suburbs; 12 = The capital.
- EB/62.2, EB/73.4, EB/77.3 Ireland – T_METRO is coded as -7, since even the highest response category, 5 = Cities/County Boroughs, is not precise enough.
- EQLS/1-3 Y11_Urbanisation is coded as -7, the data is impossible to interpret; EQLS/1-3 Y11_Q49 is kept instead, even despite the poor scale. This decision aims at saving at least some information about the locality type for the EQLS/1-3.
- ESS/1-6 domicil – the highest category (1 = A big city) is coded as T_METRO = 1, despite the imprecise definition of the top category. This decision is aiming to save at least some information about the locality type for the ESS.
- ISSP Israel – the following scale is imprecise and coded as -7: 1 = Big cities – center; 2 = Small cities – center; 3 = Jerusalem and area; 4 = Beer-7 and area; 5 = Haifa and area.
- ISSP/2006-2009 Great Britain – the following scale 0 = NAP, other countries; 1 = More than 37.3 persons per square hectare; 2 = 18.11 to 37.3 persons per square hectare; 3 = 3.96 to 18.11 persons per square hectare; 4 = Less than 3.96 persons per square hectare is imprecise and coded as -7.
- ISSP/2007 PH_SIZE – variable values are impossible to interpret, coded as -7.
- ISSP/2006, ISSP/2007, ISSP/2008 – DO_SIZE is imprecise, since it is not clear whether the numbers indicate the population of the province; province was classified by population according to the official census, therefore the variable is indicating the geographical rather than administrative division, coded as -7.
- ISSP/2009 – EE_SIZE is impossible to interpret, coded as -7.

- ISSP/2010 and ISSP/2011 URBRURAL – the two highest categories (1 = *A big city with the second response option*; 2 = *The suburbs or outskirts of a big city*) are coded as T_METRO = 1 to preserve at least some information about the locality type (lack of country-specific variables).
- LB/1996 – the variable is coded as -7 due to the lack of codebook for this wave.
- PPE7N/NL V453 – the response category 12 is undocumented but if compared to the PA survey, we assume that it might stand for *over 100.000*, since coded as T_METRO = 1.

The harmonization of this variable required many compromises. In the DETAILED VARIABLE REPORT-METRO.xlsx we provide all the decisions and additional sources collected to make decision.

5.6. EDUCATIONAL LEVEL

This section describes the target variable *education level* (T_EDU). All relevant source variables (S_EDU) referring to the respondent's education level were recoded to ten categories, which relate to the first digit of the International Standard Classification of Education levels (ISCED 2011). Specifically, in target variable T_EDU, 0 stands for less than primary level, 10 is primary level, 20 is lower secondary, 30 is upper secondary, 40 is post-secondary non-tertiary, 50 is short-cycle tertiary, 60 is bachelor's or equivalent level, 70 is master's or equivalent level, 80 is doctoral or equivalent level, and 90 is not elsewhere classified.

We propose to use our harmonized target variable on education level with control variables: (a) incomplete education level C_EDU_INCOMPLETE, (b) vocational education C_EDU_VOCATIONAL, (c) certain complete level and additional training C_EDU_AND_HIGHER. For information on variable names, values and labels used in the Harmonization Project master file, please see Table 5.6.1.

Table 5.6.1 Description of the Target Variable EDUCATION LEVEL

	Variable label	Variable name	Variable values
Target variable	R's education level	T_EDU	0 = less than primary 10 = primary 20 = lower secondary 30 = upper secondary 40 = post-secondary non-tertiary 50 = short-cycle tertiary 60 = bachelor's or equivalent level 70 = master's or equivalent level 80 = doctoral or equivalent level 90 = not elsewhere classified
Source variables	Source value of R's education level	S_EDU	See: DETAILED VARIABLE REPORT-EDU.XLSX
Control variables	Education level is incomplete	C_EDU_INCOMPLETE	0 = false 1 = true
	Education level with vocational component	C_EDU_VOCATIONAL	0 = false 1 = true
	Education level includes higher levels	C_EDU_AND_HIGHER	0 = false 1 = true

Source data description

The source variables on respondent's education level used to create the target variable T_EDU appeared in 75 survey project waves of 21 international survey projects. We have information on education level of respondents from 138 countries measured at various points from 1966 till 2013. Appendix 5.B provides detailed information on data coverage.

Source variables on education from different survey projects capture in different ways the highest level of education respondent completed. Although the formulation of the question on education level is often similar across questionnaires (asking about the highest education level of respondent), what differs is the richness of the scale of possible responses and applied categorization. We summarize variations according to the following issues:

- International vs country specific classification – some survey waves have only country specific classification of education, some surveys use international categorization (like ISCED), while yet others employ their own categorization common for all countries. In some cases the questionnaire asks about education level using national (country-specific) categorization.
- Additional information to completed education level – every source variable that we use includes information about the highest completed education level. However sometimes we also encountered additional information on education of respondent, such as, for example, whether respondent started but not finished some level of education (complete vs incomplete education level) or what type of school he or she attended (for example technical college). To preserve these pieces of information, we constructed control variables C_EDU_INCOMPLETE and C_EDU_VOCA-TIONAL.
- Merged categories – some surveys combine a couple of different education outcomes of respondents, for example: *MA and higher*, which includes MA degrees and PhD degrees; or *primary or incomplete secondary*, which includes both respondents that had only primary education and those who have some years of secondary education, or for example *primary + training* which captures respondents who have completed certain level with and without additional training. To capture such situations, we constructed the control variable C_EDU_AND_HIGHER.

Rules for the transformation of source variables into target variable

In matching source variables of education level (S_EDU) into the harmonized target variable (T_EDU), we created a standard classification of education level, which relates to the first digit of the International Standard Classification of Education levels (ISCED 2011). T_EDU has ten categories, and can be used with control variables. Taking into account the specificity of source variables, we followed such rules:

- T_EDU codes less than primary level as 0, primary level as 10, lower secondary as 20, upper secondary as 30, post-secondary non-tertiary as 40, short-cycle tertiary as 50, bachelor's or equivalent level as 60, master's or equivalent level as 70, doctoral or equivalent level as 80, and not elsewhere classified as 90
- incomplete primary/basic level of education is coded as less than primary, with control variable C_EDU_AND_HIGHER = 1, e.g., for *incomplete elementary school* T_EDU=0 and C_EDU_AND_HIGHER = 1.
- starting from secondary education: code incomplete levels of education as corresponding completed level, but with control variable C_EDU_INCOMPLETE = 1, e.g., for *incomplete secondary/high school* T_EDU=30, C_EDU_INCOMPLETE = 1, and for *some university education* T_EDU = 60, C_EDU_INCOMPLETE = 1. This approach allows us to preserve the original codes in the best possible way. To illustrate, a person whose level of education is coded in the source data as incomplete tertiary would get the code of 50 (short-cycle tertiary) on T_EDU and the code 1 on _EDU_INCOMPLETE.³
- tertiary education: code university and college education as T_EDU = 60 unless wording or place on scale suggests that it is master's or equivalent level, than code as T_EDU = 70 (e.g., *Higher than Bachelor degree*).
- if respondent is still in schooling, or received education abroad, code it as not elsewhere classified, T_EDU = 90.
- in the case of those systems of education that pay attention to leaving certificates (the UK, France), check to which level of education a particular certificate belongs and code it appropriately; if it is stated that respondent completed education without receiving a certificate, code corresponding level with control variable C_EDU_INCOMPLETE = 1.

³ If this person would have been coded 40 (post-secondary non-tertiary) on T_EDU and given code 1 on the control variable C_EDU_AND_HIGHER, it would be impossible to say whether "above" refers to bachelor, MA or PhD.

- check the names of schools, especially vocational ones, in the original language before assigning a specific level (this is especially the case for categorizations for education levels in Germany).
- if it is mentioned that respondent has vocational/technical training, or any kind of special education above general schooling, e.g., nursing schools, agricultural schools, code as a corresponding education level with control variable C_EDU_VOCA-TIONAL, e.g., for *complete secondary, technical* T_EDU = 30 and C_EDU_VOCA-TIONAL = 1.

Some response categories were challenging because they could be matched to different target values. Secondary education was especially problematic, since it was not always divided into higher and lower level, therefore ‘secondary’ may refer to codes 20 and 30, depending on the scale length and precision.

Harmonization control variables

We have coded three control variables for T_EDU, which allow to capture and control for important additional information about respondent’s educational level: incomplete education level (C_EDU_INCOMPLETE), vocational education (C_EDU_VOCA-TIONAL) and complete education level and higher (C_EDU_AND_HIGHER).

- *Incomplete education level* (C_EDU_INCOMPLETE) – control variable given for all variable values that precisely state that the level is incomplete. In this case we code the corresponding education level with the control variable that it is incomplete. For example: *lower secondary education incomplete* is coded as T_EDU = 20, and C_EDU_INCOMPLETE = 1. In the case of incomplete primary education, we code it as less than primary T_EDU = 0, and C_EDU_INCOMPLETE = 1. We have also coded a level without leaving certificate as incomplete (e.g., UK educational system).
- *Vocational education* (C_EDU_VOCA-TIONAL) – this variable indicates vocational/technical training, any kind of special education above general schooling, e.g., nursing schools, agricultural

schools etc. general + vocational training (Vocational + maturity) in one category – control variable for vocational is added (coded as “special” at the time of writing). However, if there is no clear identification that this type of schooling is not only general (e.g., not university doesn’t necessarily mean vocational, might be also preparatory level) this control variable equals 0.

- *Complete education level and higher* (C_EDU_AND_HIGHER) – this variable indicates three types of situations: (1) completed level of education with some additional training, e.g., primary education with some vocational component, (2) explicit information about completed level, together with incomplete next level, e.g., *middle completed or some high school* (different from still in schooling, which we code as 90, since we have no information about respondent’s current level of education), (3) if the highest applied code for respondent’s education level is 50, or 60, or 70 it is always coded with the C_EDU_AND_HIGHER = 1, due to the assumption that some respondents may have education above these codes. For example, a source variable has tertiary as the highest possible level of education. On T_EDU we assign respondents who on the source variable were coded as having completed tertiary the code 60 (bachelor’s or equivalent level); at the same time, we assign them the code 1 on the control variable C_EDU_AND_HIGHER, since it is possible that they had more than tertiary, but the source variable has no option for recording it.

Special Cases

- CDCEE_1_2 v603, Russia 7 = *High school, University* is coded as T_EDU = 60. We assume this mix of categories might be due to a poor translation and high school in this response category does not stand for secondary, but for tertiary level.
- CNEP_3_UY L. Education 55 = *5th and more* – university is not coded with the control variable C_EDU_AND_HIGHER = 1, since it is not the last response category on the scale.

- ISSP_1989 v101 7 = *Secondary - higher level (AHS, BHS) with certificate (Matura)* – vocational and non-vocational training mixed in one category, coded as C_EDU_VOCATIONAL = 1.
- ISSP_1990 v81 USA 3 = *Less than high school (incomplete secondary and complete or incomplete (primary))* coded as T_EDU = 10.
- ISSP_1991 v99 2 = *Primary school, no education* – priority was given to the complete primary school category, and while *no education* might be both incomplete primary and illiteracy, we found a compromise in coding this response category as T_EDU = 10, C_EDU_INCOMPLETE = 1 not T_EDU = 0.
- ISSP_1991 v99 3 = *Less than high school (incomplete secondary and complete or incomplete primary)* coded as completed primary education T_EDU = 10, not as secondary T_EDU = 30 with C_EDU_INCOMPLETE = 1 (which is usually the case).
- ISSP_2004 1 = *Lowest formal qualification* (T_EDU = 10); 2 = *Above lowest qualification* (T_EDU = 20); 3 = *Higher secondary completed* (T_EDU = 30); 4 = *Above higher sec level, other educ* (T_EDU = 40); 5 = *University degree completed* (T_EDU = 60). We assumed, that one level above elementary corresponds to lower secondary, and one level above higher secondary corresponds to post-secondary, non-tertiary.
- In PA8NS we kept the original variables for Austria, Finland and Switzerland, i.e., in the original languages for coding, since they have better response scales than the merged educational variable.
- WVS/2-5 025 7 = *Some university without degree/Higher education* – lower-level tertiary certificate is treated as short cycle tertiary T_EDU = 50.

ADDITIONAL COMMENTS

Our main additional source is the document on the International Standard Classification of Education ISCED 2011 issued by UNESCO: <http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf>

Appendix 5.A Survey Project Waves, Countries/territories, and Years for the Target Variable RESPONDENT'S PLACE OF LIVING-METROPOLITAN AREA

Survey Project Waves (N = 79)

ABS/2, ABS/3, AMB/2004, AMB/2006, AMB/2008, AMB/2010, AMB/2012, ASES, CB/2009, CB/2010, CB/2011, CB/2012, CDCEE/1, CDCEE/2, CNEP/3, EB/19, EB/21, EB/31, EB/54.1, EB/62.2, EB/73.4, EB/77.3, EQLS/1, EQLS/2, EQLS/3, ESS/1, ESS/2, ESS/3, ESS/4, ESS/5, ESS/6, EVS/1, EVS/2, EVS/3, EVS/4, ISJP/1991, ISJP/1996, ISSP/1985, ISSP/1989, ISSP/1990, ISSP/1991, ISSP/1996, ISSP/1998, ISSP/2004, ISSP/2006, ISSP/2007, ISSP/2008, ISSP/2009, ISSP/2010, ISSP/2011, LB/1997, LB/1998, LB/2000, LB/2001, LB/2002, LB/2003, LB/2004, LB/2005, LB/2006, LB/2007, LB/2008, LB/2009, LB/2010, LITS/1, LITS/2, NBB/1, NBB/2, NBB/3, NBB/4, NBB/5, NBB/6, PA2, PA8NS, PPE7N, VPCPCE, WVS/2, WVS/3, WVS/4, WVS/5

Countries/Territories (N = 122)

AD, AL, AM, AR, AT, AU, AZ, BA, BA-FBH, BA-RSR, BD, BE, BE-FLA, BE-WAL, BF, BG, BO, BR, BY, BZ, CA, CH, CL, CN, CO, CR, CY, CY-TCC, CZ, DE, DE-E, DE-W, DK, DO, DZ, EC, EE, EG, ES, ET, FI, FR, GB, GB-GBN, GB-NIR, GE, GH, GR, GT, GY, HN, HR, HT, HU, ID, IE, IL, IL-ARB, IL-JEW, IN, IQ, IR, IS, IT, JM, JO, JP, KG, KH, KR, KS, KZ, LT, LU, LV, MA, MD, ME, MK, ML, MN, MT, MX, MY, MZ, NG, NI, NL, NO, NZ, PA, PE, PH, PK, PL, PR, PT, PY, RO, RS, RU, RU-KRA, RW, SA, SE, SG, SI, SK, SV, TH, TJ, TR, TT, TW, UA, US, UY, UZ, VE, VN, ZA, ZM

Years (N = 39)

1966, 1967, 1968, 1969, 1971, 1974, 1975, 1979, 1980, 1982, 1983, 1984, 1985, 1986, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

Source variables/questions

See: DETAILED VARIABLE REPORT-METRO.xlsx

Appendix 5.B illustrates the variation of source variable values matched to particular standardized categories of education level. It captures country or survey-level education descriptions, which were assigned to a particular harmonized education level. It also contains possible wordings, including descriptions in languages other than English. For more detailed information and especially for information about control variables assigned to the categories presented below, see `DETAILED VARIABLE REPORT-EDU.xlsx`

Appendix 5.B Information on the International Survey Projects and the Total Number of Source Variables Used to Create the Target Variable for Education Level

Survey Project Waves (N = 75)

ABS/1, ABS/2, ABS/3, AFB/1, AFB/2, AFB/3, AFB/4, ARB/1, ARB/2, ASES, CB/2009, CB/2010, CB/2011, CB/2012, CDCEE/1, CDCEE/2, CNEP/3, EB/54.1, EQLS/1, EQLS/2, EQLS/3, ESS/1, ESS/2, ESS/3, ESS/4, ESS/5, ESS/6, EVS/3, EVS/4, ISJP/1991, ISJP/1996, ISSP/1985, ISSP/1989, ISSP/1990, ISSP/1991, ISSP/1996, ISSP/1998, ISSP/2004, ISSP/2006, ISSP/2007, ISSP/2008, ISSP/2009, ISSP/2010, ISSP/2011, LB/1995, LB/1996, LB/1997, LB/1998, LB/2000, LB/2001, LB/2002, LB/2003, LB/2004, LB/2005, LB/2006, LB/2007, LB/2008, LB/2009, LB/2010, LITS/1, LITS/2, NBB/1, NBB/2, NBB/3, NBB/4, NBB/5, NBB/6, PA2, PA8NS, PPE7N, VPCPCE, WVS/2, WVS/3, WVS/4, WVS/5

Countries/territories (N = 138)

AD, AL, AM, AR, AT, AU, AZ, BA, BA-FBH, BA-RSR, BD, BE, BE-FLA, BE-WAL, BF, BG, BJ, BO, BR, BW, BY, CA, CH, CL, CN, CO, CR, CV, CY, CY-TCC, CZ, DE, DE-E, DE-W, DK, DO, DZ, EC, EE, EG, ES, ET, FI, FR, GB, GB-GBN, GB-NIR, GE, GH, GR, GT, HK, HN, HR, HU, ID, IE, IL, IL-ARB, IL-JEW, IN, IQ, IR, IS, IT, JO, JP, KE, KG, KH, KR, KS, KZ, LB, LR, LS, LT, LU, LV, MA, MD, ME, MG, MK, ML, MN, MT, MW, MX, MY, MZ, NA, NG, NI, NL, NO, NZ, PA, PE, PH, PK, PL, PR, PS, PT, PY, RO, RS, RU, RU-KRA, RW, SA, SD, SE, SG, SI, SK, SN, SV, TH, TJ, TN, TR, TT, TW, TZ, UA, UG, US, UY, UZ, VE, VN, YE, YU, ZA, ZM, ZW

Years (N = 39)

1966, 1967, 1968, 1969, 1971, 1973, 1974, 1975, 1976, 1979, 1980, 1981, 1985, 1986, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

Source variables/questions

See document `DETAILED VARIABLE REPORT-EDU.xlsx`

Appendix 5.C Examples of Source Educational Categories Matched to the Target Variable Values, ISCED 2011

Target variable value	Source variable value
0= less than primary education	1 GRADE, 1 year, 1st school, 2 GRADES, 2 TO 5 YEARS ELEMENTARY SCHOOL, 2 years, 2nd school, 3 GRADES, 3 years, 3rd school, 4 GRADES, 4 years, 4 years of elementary school or less, 4th school, 5 years, 5th school, 6 years, Basic education incomplete, Did not finish primary education, Did not receive formal education, ECOLE PRIMAIRE NON-TERMINEE, Elementary school without leaving certificate, Four years or less of a primary school, Has no education at all, ILLITERATE, ILLITERATE, 1 YEAR ELEMENTARY SCHOOL, Illiterate, Inadequately completed elementary education, Inc. primary, Incomplete elementary school, Incomplete elementary school (Scuola elementare non conclusa), Incomplete primary, Incomplete primary (4-6 years elementary), Incomplete primary, none, Incomplete primary/elementary, Incompl primary, Informal schooling only, LITERATE OR SOME PRIMARY SCHOOL, LITTLE OR NO SCHOOLING (BASIC LEVEL, GENERAL), Less than primary, Level 1a: less th primary formal edu, NO DEGREE / NO EDUCATION, NO SCHOOLING, No education, No education completed (ISCED 0), No formal education, No formal qualification, No formal qualification, incomplete primary, No formal schooling, No primary education, Primary incomplete, Primary or less, Primary school not completed, SANS SCOLARITEE Some primary schooling, VAEHEMAEN KUIN KANSAKOULU, Without education, Illiterate
10 = primary level	5 GRADES OR 1ST-8TH GRADE, NA EXACT LEVEL COMPLETED, 6 GRADES, 7 GRADES, 8 GRADES, ADVANCED ELEMENTARY, Complete elementary school (Licenza elementare), Complete elementary school (Scuola elementare con licenza), Completed (compulsory) elementary education, Completed Elementary, Compulsory (elementary) school (9 years), Compulsory school (Pflichtschule), Compulsory school without vocational training (Pflichtschule ohne Lehre), ECOLE PRIMAIRE TERMINEE ELEMENTARY LEVEL, GRAMMAR OR ELEMENTARY (1-8 YEARS), Grammar school, KANSAKOULU TAI VASTAAVA, Less than high school (incomplete secondary and complete or incomplete (primary), NUR PFLICHTSCHULE, Primary education (ISCED 1), Received formal education without gaining qualifications, primary school graduate

Target variable value	Source variable value
20 = lower secondary	<p>1st high school, 2nd high school, Basic level (9 years of school), Complete lower middle school (Licenza di scuola media inferiore), Compulsory school with vocational training (Pflichtschule mit Lehre), ECOLE SECONDAIRE INFÉRIEURE, ES-ISCED II, lower secondary, ETUDES PENDANT L'APPRENTISSAGE, Grammar school plus job apprenticeship, Incomplete secondary/high school: technical/vocational type</p> <p>Incomplete secondary:technical/vocational, Junior high school, LESS THAN 3 YEARS SECONDARY SCHOOL (LOWER OR INCOMPLETED EXTENDED LOWER LEVEL, GENERAL), LOWER MIDDLE (MEDIA INFERIORE, AVVIAMENTO, SCUOLA TECNICA), LOWER SECONDARY EDUCATION, MIDDLE COMPLETED OR SOME HIGH SCHOOL, Secondary school (without certificate), Secondary technical or trade school - lower level (Fach-, Handelsschule), Vocational school without secondary</p>
30 = upper secondary	<p>(UPPER) SECONDARY EDUCATION, 10 GRADES, 10 GRADES PLUS NON-COLLEGE TRAINING, 3 OR 4 YEARS SECONDARY SCHOOL (EXTENDED LOWER OR INCOMPLETED MIDDLE LEVEL, GENERAL), 4th high school</p> <p>4th technical education, 5 OR 6 YEARS SECONDARY SCHOOL (MIDDLE LEVEL, GENERAL), 9 GRADES PLUS NON-COLLEGE TRAINING, A level (Higher certificate, matriculation, city & guilds certificate-advanced/part II or part III, ordinary national certificate ONC or diploma-OND), A level (Higher certificate, matriculation, city & guilds certificate-advanced/part II or part III, ordinary national certificate-ONC or diploma-OND)</p> <p>A levels/ Junior College/ Matriculation, ABITUR, Erweiterte Oberschule mit Abschluß 12. K. (Hochschulreife), Advanced level (13 years of school), COMPLETED HIGH SCHOOL (12 YEARS), Certification from a secondary technical or trade school (Fachhochschulreife, Abschluß einer Fachoberschule), Certification from a secondary technical or trade school (Fachhochschulreife, fachgebundene Hochschulreife, Abschluss einer Fachoberschule) D(E): Fachabitur, Complete secondary, technical, Complete secondary:technical/vocational, ECOLE SECONDAIRE (AVEC MATURITE)</p> <p>ECOLE SECONDAIRE (SANS MATURITE), ECOLE TECHNIQUE, ES-ISCED IIIb, lower tier upper secondary, EXTENDED LOWER (OR INCOMPLETED MIDDLE) OCCUPATIONAL SCHOOL, FACHSCHULE, HANDELSSCHULE, GRAMMAR SCHOOL, Gymnasium, Higher education below university, general qualification (12 years), HIGH SCHOOL COMPLETED, MATURA, SONSTIGE BERUFSFACHSCHULE ODER FACHSCHULE, Secondary completed, Senior High School (new school system) or Secondary School (old school system) Includes vocational schools, Technical (CAP), UPPER MIDDLE (MEDIA SUPERIORE, CONSERVATORIO, ISTITUTO D'ARTE, ISTITUTO PROFESSIONALE), Upper secondary education (ISCED 3), Vocational secondary, technical secondary completed (12 years)</p>

Target variable value	Source variable value
40 = post-secondary non-tertiary	1st military and police academies, 2nd military and police academies, Above higher, COMMERCIAL TRAINING (SECRETARIAL, BUSINESS ETC.), HIGHER (NON-ACADEMIC) OCCUPATIONAL STUDY, Higher education below university, technical and business qualification (13 years), POST-SECONDARY NON TERTIARY EDUCATION, Post Secondary (not academic), Post-secondary including pre-vocational or vocational education but not tertiary (ISCED 4), SEMI-HIGHER (NON-ACADEMIC) OCCUPATIONAL STUDY, SEMI-HIGHER, NOT UNIVERSITY, Seminary or divinity school, VOCATIONAL TRAINING (NURSING, RADIOGRAPHER, ETC.), high-level vocational training beyond maturity (13+years)
50 = short-cycle tertiary	COLLEGE, INCOMPLETE, College/University (1-2 years), ES-ISCED IV, Higher education below degree level (City & guilds certificate-full technological, higher national certificate-HNC or Diploma-HND, teachers training, nursing, technical or business qualification), INCOMPLETED GRADUATE STUDY (SEMI-HIGHER, ACADEMIC) Junior College, SOME COLLEGE, TEACHER TRAINING, Technical/ Vocational (Diploma level), YLIOPPILASTUTKINTO SEKAE VAHINTAEAEEN YHDEN VUODEN AMMATTIKOULUTUS (MYOES KORKEAKOULU-OPINNOT) college diploma- two years
60 = bachelor's or equivalent level	BACHELOR'S DEGREE (4 OR 5 YEARS COLLEGE), COLLEGE, GRADUATED, Completed College, Completed higher education, Completed university, ECOLE NORMALE, ES-ISCED V1, lower tertiary education, BA level, FREQUENZA UNIVERSITARIA, Higher education, Tertiary education – first level (ISCED 5)\, Tertiary education completed (ISCED 5-6), Tertiary/College, UNIVERSITE OU POLYTECHNIQUE FEDERALE (AVEC LICENCE), University (16 years), University degree (3 years), University education completed, University graduation (Laurea), University with degree/Higher education - upper-level tertiary certificate, BA, higher professional degree (university, college), university graduate
70 = master's or equivalent level	Academic (MA, PHD), College/University (5 years or more), ES-ISCED V2, higher tertiary education, >= MA level, Graduate, MASTER'S DEGREE (OR GRADUATE LEVEL BACHELOR'S DEGREE SUCH AS LLB OR BS), POST-UNIVERSITY INSTITUTE, Post graduate degree, Tertiary education – advanced level (ISCED 6), University degree (5 years), University, technical academy completed, Master's studies and specialization studies, university completed(17+years)
80 = doctoral or equivalent level	Above Higher, JD, JSD, SJD, MD, DDS, DVM, VS, PHD, LITD, SCD, DFA, DLIT, DPH, DPHIL, DSC, doctorate studies
90 = not elsewhere classified	Completed education abroad, Foreign and other (Overseas school leaving exams), INAP, R is still in education/on training, None, still at school, OTHER, Other school qualification, Still at school/college, Still in school

PART THREE

CONTEXTUAL
VARIABLES

CHAPTER 6

Indexes of Democracy

*Based on reports by
all team members*

6.1. INTRODUCTION

Initially in this project we considered several measures of democracy such as the Polity Score, Democracy Ranking Association, Democracy-Dictatorship Index, Bollen's Liberal Democracy, Vanhanen's Index of Democracy, Coppedge-Reinicke Polyarchy Scale, Gurr's Institutionalized Democracy Scale, Democracy Barometer, Unified Democracy Scores, and several others.¹ In the next section of this chapter, we give examples of three complex measures of democracy and opt for the inclusion of one provided by the Economist Intelligence Unit. However, the main problem with use of this measure in our project is that it relies on, among other things, data from surveys – the data we have already included. The same applies for another attractive measure of governance that we describe in this chapter. However, for most analyses, we use a measure of democracy that does not involve data from surveys: Freedom House's assessment of political rights and civil liberties.

¹ Seawright & Collier (2014) discuss the criteria of choosing measures of democracy using different research strategies. We use indexes that cover the maximum number of country-years in our project. For definitions and reviews of measures of democracy, see Inkeles 1991, Beetham 1995, Munck 2009; see also Bollen & Paxton 2000, Munk 2003, Pemstein, Meserve & Melton 2010.

6.2. COMPLEX MEASURES OF DEMOCRACY

We study the relationship between individuals' protest behavior and their attitudes toward democracy in the context of an "objective" state of how democracy actually functions. Any assessment of this objective state obviously carries some error or bias resulting from the manner of analyzing the "components" of democracy. To minimize possible inaccuracies, we initially considered the assessments of three independent organizations: *The Economist*, Demos, and CADAL. Each of these organizations has assessed the level of democracy in many countries using its own criteria and large sets of data first collected around 2005. Below we present a short description of the scales that we have utilized for our analyses of data for Europe:

1. The Democracy Index, commonly known as the EIU Index (Economist Intelligence Unit, see Kekic 2007), is based on a meticulous analysis of 60 variables grouped into five categories: (a) election protocols and political pluralism, (b) citizens' rights, (c) functioning of government institutions, (d) participation in political life, and (e) elements of political culture. Each of these categories has been represented on a ten-point scale and the resulting general index is an arithmetic mean of the country scores on the sub-scales. From the set of EIU values we have chosen those concerning the countries of the European Union and, additionally, Russia and Ukraine. Index ranks presented in Table 6.2.1 concern all these countries as well as those for which the values of the other measure are provided.

2. Authors associated with Demos (Skidmore & Bound 2008) created the Everyday Democracy Index, EDI, based on information pertaining to (a) elections and protocols of establishing political authorities, (b) citizens' activities and participation in public life, (c) people's attitudes toward democratic methods of solving problems, (d) freedom in assuming social roles and egalitarian treatment, including in the family, and (e) the existing channels for controlling the authorities, and citizens' engagement in the control processes. The EDI was created by using statistical methods on a rich data set

involving 25 European countries. The values of this scale range from 51.7 to 10.3.

3. The last index is known as the DMT (Democracy, Markets, and Transparency) (Salvia & Alberro 2007). It is a compilation of indexes published in *Freedom in the World* (Freedom House), *Index of Economic Freedom* (Heritage Foundation and *Wall Street Journal*), and *Corruption Perception Index* (Transparency International). While *Freedom in the World* takes into account political legislation and citizen's rights, the *Index of Economic Freedom* focuses on legal limitations to the market system as well as regulations concerning property possession. The *Corruption Perception Index*, in turn, reflects the spread of corruption in government institutions – corruption being understood as an abuse of public office for personal gain. The average DMT score is .523; 67 of the countries analyzed were above this value while the remaining 85 were below. As in the case with the EIU, we have chosen 29 European countries.

The data presented in Table 6.2.1 have an unambiguous pattern. Sweden, Denmark, Holland, and Finland are the four countries holding the upper positions on each scale. Countries such as Belgium, Ireland, Austria, Luxemburg, the United Kingdom, France, Germany, and Spain occupy the middle positions. Located slightly lower are Italy, the Baltic countries (Estonia, Latvia, and Lithuania), and some countries of Central and Eastern Europe (the Czech Republic, Hungary, Slovakia, and Slovenia). The two countries from outside the European Union – Russia and Ukraine – occupy the lowest positions.

Among the countries of the European Union – except for Malta and Cyprus – Poland occupies a position at the bottom of the hierarchy. In the case of EDI and EIU, it is on 23rd position, preceding Romania and Bulgaria, and in the case of the DMT – in 22nd position, preceding Greece, Bulgaria, and Romania. Such consistency of positions on different scales is not an artifact. For example, Greece and Portugal hold quite diverse positions on these scales, where the difference in rank is more than a few points. Meanwhile, Poland appears in the lowest part of each of the three scales – regardless of which aspects of democracy are measured.

Table 6.2.1 Measures of Democracy According to the Economist (EIU), Demos (EDI) and CADAL (DMT)

Countries	EIU ^a		EDI ^b		DMT ^c	
	Index	Rank ^d	Index	Rank ^d	Index	Rank ^d
Countries of the European Union						
Sweden	9.88	1(1)	51.7	1	0.883	4(4)
Denmark	9.52	3(3)	50.7	2	0.903	1(1)
Holland	9.58	2(2)	44.6	3	0.887	3(3)
Finland	9.25	4(4)	38.7	4	0.900	2(2)
Luxembourg	9.10	5(5)	35.1	5	0.872	6(6)
Belgium	8.15	12(11)	33.3	6	0.808	10(10)
Ireland	9.01	6(6)	32.0	7	0.845	7(7)
Austria	8.69	8(8)	31.6	8	0.844	8(8)
United Kingdom	8.08	15(14)	31.4	9	0.879	5(5)
France	8.07	16(15)	29.9	10	0.787	12(12)
Germany	8.82	7(7)	29.2	11	0.830	9(9)
Greece	8.13	14(13)	25.3	12	0.631	25(23)
Spain	8.34	10 (9)	24.4	13	0.781	13(13)
Slovenia	7.96	17(16)	23.7	14	0.753	15(15)
Italy	7.73	19(18)	22.9	15	0.700	23(21)
Estonia	7.74	18(17)	22.3	16	0.797	11(11)
Czech Republic	8.17	11(10)	20.5	17	0.721	18(16)
Hungary	7.53	21(19)	19.9	18	0.713	19(17)
Slovakia	7.40	23(21)	18.0	19	0.706	21(19)
Latvia	7.37	24(22)	17.2	20	0.701	22(20)
Portugal	8.16	12(11)	16.9	21	0.759	14(14)
Lithuania	7.43	22(20)	16.0	22	0.714	20(18)
Poland	7.30	25(23)	13.5	23	0.648	24(22)
Romania	7.06	27(25)	10.7	24	0.582	27(25)
Bulgaria	7.10	26(24)	10.3	25	0.628	26(24)
Malta	8.39	9	-	-	0.737	16
Cyprus	7.60	20	-	-	0.736	17
Additional countries from outside the European Union						
Ukraine	6.94	28	-	-	0.449	28
Russia	5.02	29	-	-	0.311	29

^a Kekic (2007) ^b Skidmore & Bound (2008) ^c Salvia & Alberro (2007) ^d Ranks in parenthesis refer to 25 countries that have assigned values on all three scales.

For some analyses we chose the EIU scale because it is based on the analysis of a maximum number of variables while correlating very highly ($r < 0.75$) with the other two scales (EDI and DMT). As we reported in another paper (Dubrow, Slomczynski & Tomescu-Dubrow 2008), the correlation between the proportion of people engaged in conventional protest and the EIU is positive and significant. However, this analysis was performed for selected European countries, with data from around 2005. Now we have extended the space and time coverage, with the most reliable estimates for 119 countries.

In our contextual data we have the EIU Democracy Index for 2006, with updates for 2008, 2010, 2011, 2012, and 2013. We cover 657 national surveys and 394 country-years.

6.3. WORLDWIDE GOVERNANCE INDICATORS

For a description of Worldwide Governance Indicators (WGI), we rely on the World Bank webpage.² The basic definition of governance is as follows:

Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.

The WGI project reports aggregate and individual governance indicators for 215 economies over the period 1996–2014, for six dimensions of governance:

1. Voice and Accountability – *Perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.*

² <http://info.worldbank.org/governance/wgi/index.aspx#home>

2. Political Stability and Absence of Violence – *Perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism.*
3. Government Effectiveness – *Perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies.*
4. Regulatory Quality – *Perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.*
5. Rule of Law – *Perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.*
6. Control of Corruption – *Perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “capture” of the state by elites and private interests.*

These aggregate indicators combine the views of a large number of business, citizen, and expert survey respondents in industrial and developing countries. They are based on 32 individual data sources produced by a variety of survey institutes, think tanks, non-governmental organizations, international organizations, and private-sector firms. These data sources can be grouped in four different categories:

1. Surveys of households and firms (9 data sources including Afrobarometer surveys, Gallup World Poll, and Global Competitiveness Report survey);
2. Commercial business-information providers (4 data sources including the Economist Intelligence Unit, Global Insight, Political Risk Services);

3. Non-governmental organizations (11 data sources including Global Integrity, Freedom House, Reporters Without Borders); and
4. Public sector organizations (8 data sources including the CPIA assessments of the World Bank and regional development banks, the EBRD Transition Report, the French Ministry of Finance Institutional Profiles Database).

6.4. FREEDOM HOUSE RATINGS

The *Universal Declaration of Human Rights*, adopted by the United Nations General Assembly in 1948 in Paris, is a form of resolution providing common standards of achievements for all peoples and all nations. It sets out fundamental rights to be universally protected. It is based on the premise that these standards apply to all countries, irrespective of geographical location, ethnic or religious composition, or level of economic development. However, these standards are applied in varying degrees. The methodology for assessing political rights and civil liberties proposed by Freedom House is derived in large measure from the *Universal Declaration of Human Rights*.³

Freedom House has been publishing *Freedom in the World* annually since 1978. This publication was produced by Raymond D. Gastil until 1989 (Gastil 1990). In the mid-1990s, the expansion of country coverage required hiring of regional experts from academic, media, and human rights communities. Here is a description of the purpose of assessing political rights and civil liberties:

Freedom in the World assesses the real-world rights and freedoms enjoyed by individuals, rather than governments or government performance per se. Political rights and civil liberties can be affected by both state and nonstate actors, including insurgents and other armed groups. (...) Freedom House does not equate legal guarantees of rights

³ The full text of the *Universal Declaration of Human Rights* is published by the United Nations on its website.

with the on-the-ground fulfillment of those rights. While both laws and actual practices are factored into the ratings decisions, greater emphasis is placed on implementation.⁴

Although Freedom House's reports have been criticized (e.g., Bolen 1986, Przeworski 2003) they provide well-defined variables that measure democratic performance. *Freedom in the World* is produced by a team of internal and external analysts, and advisers from the academic, think tank, and human rights communities. The sources used include news articles, academic analyses, reports from non-governmental organizations, and individual professional contacts. Freedom House stresses that:

The final scores represent the consensus of the analysts, advisers, and staff, and are intended to be comparable from year to year and across countries and regions. The advisers also provide a detailed review of and commentary on a number of key country and territory reports. Although an element of subjectivity is unavoidable in such an enterprise, the ratings process emphasizes methodological consistency, intellectual rigor, and balanced and unbiased judgments.⁵

Political rights

The political rights questions to which Freedom House seeks clear answers are grouped into three subcategories:

Subcategory 1: Electoral Process

Questions: (a) *Is the head of government or other chief national authority elected through free and fair elections?* (b) *Are the national legislative representatives elected through free and fair elections?* (c) *Are the electoral laws and framework fair?*

Subcategory 2: Political Pluralism and Participation

Questions: (a) *Do the people have the right to organize in different political parties or other competitive political groupings of their choice, and*

⁴ <https://freedomhouse.org/report/freedom-world-2016/methodology>

⁵ <https://freedomhouse.org/report/freedom-world-2016/methodology>

is the system open to the rise and fall of these competing parties or groupings? (b) Is there a significant opposition vote and a realistic opportunity for the opposition to increase its support or gain power through elections? (c) Are the people's political choices free from domination by the military, foreign powers, totalitarian parties, religious hierarchies, economic oligarchies, or any other powerful group? (d) Do cultural, ethnic, religious, or other minority groups have full political rights and electoral opportunities?

Subcategory 3: Functioning of Government

Questions: (a) Do the freely elected head of government and national legislative representatives determine the policies of the government? (b) Is the government free from pervasive corruption? (c) Is the government accountable to the electorate between elections, and does it operate with openness and transparency?

Political rights are rated on a 7-point scale, with 1 representing the greatest degree of freedom and 7 the smallest degree of freedom. For details, see Appendix 6.4.1.

Civil Liberties

The civil liberties questions are grouped into four subcategories:

Subcategory 1: Freedom of Expression and Belief

Questions: (a) Are there free and independent media and other forms of cultural expression? (b) Are religious institutions and communities free to practice their faith and express themselves in public and private? (c) Is there academic freedom, and is the educational system free of extensive political indoctrination? (d) Is there open and free private discussion?

Subcategory 2: Associational and Organizational Rights

Questions: (a) Is there freedom of assembly, demonstration, and open public discussion? (b) Is there freedom for nongovernmental organizations? Are there free trade unions and peasant organizations or equivalents, and is there effective collective bargaining? (c) Are there free professional and other private organizations?

Subcategory 3: Rule of Law

Questions: (a) *Is there an independent judiciary? (b) Does the rule of law prevail in civil and criminal matters? Are police under direct civilian control? (c) Is there protection from political terror, unjustified imprisonment, exile, or torture, whether by groups that support or oppose the system? Is there freedom from war and insurgencies? (d) Do laws, policies, and practices guarantee equal treatment of various segments of the population?*

Subcategory 4: Personal Autonomy and Individual Rights

Questions: (a) *Do individuals enjoy freedom of travel or choice of residence, employment, or institution of higher education? (b) Do individuals have the right to own property and establish private businesses? Is private business activity unduly influenced by government officials, the security forces, political parties/organizations, or organized crime? (c) Are there personal social freedoms, including gender equality, choice of marriage partners, and size of family? (d) Is there equality of opportunity and the absence of economic exploitation?*

Civil liberties are rated on a 7-point scale, with 1 representing the greatest degree of freedom and 7 the smallest degree of freedom. For details, see Appendix 6.4.1.

Appendix 6.4.1 Original Scores for Political Rights and Civil Liberties Provided by Freedom House

Political Rights

1 – Countries and territories with a rating of 1 enjoy a wide range of political rights, including free and fair elections. Candidates who are elected actually rule, political parties are competitive, the opposition plays an important role and enjoys real power, and the interests of minority groups are well represented in politics and government.

2 – Countries and territories with a rating of 2 have slightly weaker political rights than those with a rating of 1 because of such factors as political corruption, limits on the functioning of political parties and opposition groups, and foreign or military influence on politics.

3, 4, 5 – Countries and territories with a rating of 3, 4, or 5 either moderately protect almost all political rights or strongly protect some political rights while neglecting others. The same factors that undermine freedom in countries with a rating of 2 may also weaken political rights in those with a rating of 3, 4, or 5, but to a greater extent at each successive rating.

6 – Countries and territories with a rating of 6 have very restricted political rights. They are ruled by one-party or military dictatorships, religious hierarchies, or autocrats. They may allow a few political rights, such as some representation or autonomy for minority groups, and a few are traditional monarchies that tolerate political discussion and accept public petitions.

7 – Countries and territories with a rating of 7 have few or no political rights because of severe government oppression, sometimes in combination with civil war. They may also lack an authoritative and functioning central government and suffer from extreme violence or rule by regional warlords.

Civil Liberties

1 – Countries and territories with a rating of 1 enjoy a wide range of civil liberties, including freedoms of expression, assembly, association, education, and religion. They have an established and generally fair legal system that ensures the rule of law (including an independent judiciary), allow free economic activity, and tend to strive for equality of opportunity for everyone, including women and minority groups.

2 – Countries and territories with a rating of 2 have slightly weaker civil liberties than those with a rating of 1 because of such factors as limits on media independence, restrictions on trade union activities, and discrimination against minority groups and women.

3, 4, 5 – Countries and territories with a rating of 3, 4, or 5 either moderately protect almost all civil liberties or strongly protect some civil liberties while neglecting others. The same factors that undermine freedom in countries with a rating of 2 may also weaken civil liberties in those with a rating of 3, 4, or 5, but to a greater extent at each successive rating.

6 – Countries and territories with a rating of 6 have very restricted civil liberties. They strongly limit the rights of expression and association and frequently hold political prisoners. They may allow a few civil liberties, such as some religious and social freedoms, some highly restricted private business activity, and some open and free private discussion.

7 – Countries and territories with a rating of 7 have few or no civil liberties. They allow virtually no freedom of expression or association, do not protect the rights of detainees and prisoners, and often control or dominate most economic activity.

CHAPTER 7

Indexes of Economic Performance and Inequality

*Based on the report by
Marta Kółczyńska
and other members of the team*

7.1. INTRODUCTION

In this chapter we present further data on the country-year level, which we use as contextual variables for explaining individual protest behavior. Theories of political engagement often link protest behavior not only to political factors but to economic factors such as economic development and inequality. In this chapter we also provide information on substantive control variables such as population size and regions of the world. As explained in Chapter 2, contextual variables are kept in a separate file in the Master Box and can be joined with the Master File of survey data via appropriate matching procedures on the level of country*years.

7.2. GROSS DOMESTIC PRODUCT PER CAPITA

Gross Domestic Product per capita in Purchasing Power Parity (GDP pc PPP) is equal to the total value of all goods and services produced in a country in a given year divided by that country's population and corrected for the differences in purchasing power across countries. GDP can also be calculated as the sum of final expenditures at purchasers'

prices. It is one of the most popular country-level indicators used in social science research. It is most frequently used as an indicator for economic development and economic modernization, or as a proxy of well-being and welfare. One of the reasons for this popularity is the fact that GDP datasets are compiled by recognized international organizations, such as the World Bank or the International Monetary Fund, on the basis of national central-statistical-office data. The practical advantage of this measure is its availability for most countries of the world and for time-series of several decades.

The GDP pc PPP measure is calculated based on the GDP data provided by national statistical offices in national currency, converted to international dollars using the implied purchasing power conversion rate, and finally divided by the total population of that country. In the harmonized dataset, this measure comes from the International Monetary Fund's World Economic Outlook Database, compiled by EconStats (<http://econstats.com/weo/V011.htm>, accessed April 2015).

7.3. ECONOMIC INEQUALITY

The Gini index is one of the most commonly used measures of income inequality (Allison 1978). The Gini index is equal to the average absolute difference between all pairs of observations, standardized by dividing by twice the mean (Allison 1978). It is frequently expressed in terms of the Lorenz curve, which is a graphic representation of the cumulative distribution of some value, in this case income, held by consecutive centiles of the population arranged from poorest to richest (Campano & Salvatore 2006). Such a presentation allows researchers to say that, for example, the poorest 50% of the population account for 20% of the total income in that population. In a situation of perfect equality, where all individuals have the same income, all shares of the population own equivalent shares of the total income and the Lorenz curve overlaps with the 45° line. As inequality increases, the Lorenz curve becomes more concave.

The Gini index can be calculated as the area between the Lorenz curve and the 45° line divided by the area below the 45° line, and takes the value of 0 in case of perfect equality, and 1 in case of perfect inequality, when one individual controls all the income.

Although the method of calculation is fairly straightforward, the choice of source data and estimation techniques leads to different estimates for the same country-years (Ferreira, Lustig & Teles 2015). In the Harmonization Project, we decided to include two sets of Gini index estimates: the “All the Ginis” database created by Branko Milanović (Milanović 2014), and the Standardized World Income Inequality Database (SWIID) by Frederick Solt (SWIID 2009).

All the Ginis (Milanović)

The All the Ginis (ATG) database by Branko Milanović compiles Gini coefficients obtained from nine sources: the Luxembourg Income Study (LIS), the Socio-Economic Database for Latin America and the Caribbean (SEDLAC), the Survey of Income and Living Conditions (SILC), the World Bank’s Eastern Europe and Central Asia (ECA) database, the World Income Distribution (WYD) database, World Bank-based dataset POVCAL, the World Institute for Development Research WIDER database (WIID1), historical data on Latin American countries obtained from published documents by CEPAL, and from individual data sets which report or provide own Gini-coefficient estimates calculated from micro data (a detailed description is available in Milanović 2014). In total, the database contains 4,132 estimates for 2,218 country-years.

In the case of overlapping information, the authors use the “choice by precedence rule,” in conformity with which data sources are ranked according to decreasing preference as follows: individual country studies, regional studies, and finally global studies (Milanović 2014: 4-5). In this way each country-year is assigned a value from the highest ranked data source.

In addition to Gini coefficient estimates, the data base contains information about the methodology used in the original study, which makes it possible to distinguish whether the studies were based on households or on individuals, focused on income or on consumption, and if income was gross or net (disposable).

Standardized World Income Inequality Database (Solt)

The Standardized World Income Inequality Database developed by Frederick Solt is generated through multiple imputation methods from a group of primary and secondary sources, including the ATG dataset. Source data are categorized into eleven groups based on the welfare definition (net income, market income, or expenditure) and equivalence scale (household per capita, household adult equivalent, household unadjusted, or person), in addition to two separate categories for the two series of LIS calculated using the household adult equivalent and net and market income (Solt 2014). Instead of choosing the preferred value in case of overlaps as in the case of the ATG dataset, the SWIID generates estimates of the Gini coefficient comparable with the LIS net income standard by estimating a series of models to predict pairwise conversion ratios between categories of the source data, corrected for measurement errors with a five-year weighted moving average algorithm.

The newest version of the SWIID, version 5.0, provides 100 imputed estimates for net and market income inequality, for each country-year. The 100 imputations and differences in their values within a single country-year represent the uncertainty of measurement and limitations in comparability of estimates (Solt 2014). In analyses in this volume we use the median value of the index. We prefer to use it over ATG due to larger country-year coverage. We also note that the correlation between these two measures is very high ($r > 0.9$ on continental subsets of country-years).

7.4. DEMOCRACY, ECONOMIC PERFORMANCE, AND INCOME INEQUALITY

We provide correlations between the Freedom House Index of Democracy and two economic variables: GDP per capita and the Gini index (SWIID) to check whether our selection of country-years introduces some systematic bias. Table 7.4.1 shows that the correlations of the Freedom House Index of Democracy and GDP per capita (ranging from $r = 0.621$ to $r = 0.633$) and Gini index (ranging from $r = -0.428$ to $r = -0.461$) are relatively stable in time and in agreement with corresponding correlations found in the literature (Perotti 1996; Reuveny & Li 2003; Acemoglu, Naidu, Restrepo & Robinson 2014).

The increase of negative correlation between GDP per capita and inequality through time was also recently reported, although the correlation may mask a complicated relationship (Brueckner & Lederman 2015). It has been claimed that while the average effect of income inequality on GDP per capita is negative and significantly different from zero, it varies with countries' initial income level, which could change through time. Indeed, in our case this correlation ranges from $r = -0.538$ for 1973–2000, to $r = -0.635$ for 2008–2013.

We conclude this section with the statement that both economic variables discussed in this chapter, GDP per capita and Gini index (SWIID), provide a solid basis for contextual analysis of protest behavior. However, their correlation is relatively high, especially for 2008–2016, and, potentially, in the context of the Freedom House Index, may introduce a problem of multicollinearity in the regression analyses.

Table 7.4.1 Correlations Between the Freedom House Index of Democracy, GDP Per Capita, and the Gini Index (SWIID)

1973–2000			
	Freedom House Index	GDP per capita PPP	Gini, Solt
Freedom House Index	1.000		
N	403		
GDP per capita PPP	0.621	1.000	
N	365	371	
Gini, Solt	-0.449	-0.538	1.000
N	394	367	411
2001–2007			
Freedom House Index	1.000		
N	432		
GDP per capita PPP	0.600	1.000	
N	426	429	
Gini, Solt	-0.428	-0.629	1.0000
N	419	418	423
2008–2013			
Freedom House Index	1.000		
N	375		
GDP per capita PPP	0.633	1.000	
N	372	372	
Gini, Solt	-0.461	-0.635	1.000
N	321	321	321

7.5. POPULATION SIZE AS A CONTROL VARIABLE

As a control variable we include population size on the basis of statistics contained in data of the World Bank and the United Nations. This variable is attached to the Master File on the basis of identification of a given national survey through identification of the country-year, as for GDP per capita and two measures of income inequality: see Chapter 2 for details.

PART FOUR

CROSS-NATIONAL
AND OVER-TIME
COMPARISONS

CHAPTER 8

Trust in State Institutions

*Based on the report prepared by
Marta Kółczyńska
and other members of the team*

8.1. INTRODUCTION

There is a long tradition of conceptualizing political trust as pertaining to institutions operating at different levels of society. Since Easton (1957) researchers have distinguished targets of trust at the national level of political authority. From this perspective, political institutions, such as the legislature and political parties, and also the judiciary, are essential. The public's trust in political institutions varies because it depends on the ups and downs of political achievements. In this chapter, we present one of the major analyses by our project: estimates of trust in parliament, political parties, and the justice system for countries around the world and at different periods.

8.2. ESTIMATES OF AVERAGE TRUST IN PARLIAMENT, POLITICAL PARTIES, AND THE JUSTICE SYSTEM

Table 8.2.1 contains estimates of average trust in parliament, political parties, and the justice system obtained in four steps: (1) for each institution we chose an 11-point scale, from 0 (the lowest trust) to 10 (the highest trust); (2) we computed averages for all country-years,

practically for each national survey; (3) we extracted this information for 1981–2000, 2001–2007, and 2008–2013, averaging it for two or more surveys; (4) to account for inter-survey variability, we computed the standard deviation. For each institution – parliament, political parties, and the justice system – Table 8.2.1 contains three columns: average trust, inter-survey standard deviation, and number of relevant surveys. This information is provided for country-periods for world regions, starting with Africa and ending with Oceania.

Data on trust in parliament were available in 1,314 national surveys, on trust in political parties in 973, and on trust in the justice system in 1,140 surveys. In the case of each institution the overall means are below the middle point of the scale, 5: 4.59 for parliament, 3.84 for political parties, and 4.38 for the justice system. For instances when there are two or more national surveys for a given country-period, we note an overall agreement. The ratio of the inter-survey standard deviation to the overall mean values is around 10% for the entire data set. However, we encourage readers to pay special attention to some large inter-survey discrepancies: those above 1. The reliability of average estimates in these instances is much lower than in the rest.

From Table 8.2.1 it is evident that mean values of trust in political institutions differ greatly among countries and periods. In the case of parliament, the range of these values is from 2.38 to 8.06. The highest values, above 7.00, occur in authoritarian countries where the role of parliament is limited: Mozambique (2008–2013), Tajikistan (2001–2007), Uzbekistan (2001–2007 and 2008–2013), China (2001–2007 and 2008–2013), Vietnam (2001–2007 and 2008–2013), and Bangladesh (2001–2007). In contrast, the lowest values, below 3.0, occur in post-communist countries: Armenia (2001–2007), Bulgaria (2001–2007 and 2008–2013), Romania (2008–2013), Ukraine (2008–2013), Latvia (2008–2013), Lithuania (2008–2015), Croatia (2008–2013), and Macedonia (2001–2007); the exception is Ecuador (2001–2007), also with a very low value (2.40).

Table 8.2.1 Trust in Parliament, Political Parties, and the Justice System Around the World, for Different Periods, 1981–2013

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Africa: Eastern Africa									
Ethiopia 2001-2007	3.85	.	1	4.50	.	1	4.01	.	1
Kenya 2001-2007	5.09	0.30	2	.	.	0	5.05	0.67	2
Kenya 2008-2013	5.13	.	1	.	.	0	4.80	.	1
Madagascar 2001-2007	4.97	.	1	.	.	0	4.63	.	1
Madagascar 2008-2013	5.29	.	1	.	.	0	4.52	.	1
Malawi 2001-2007	5.01	0.71	2	.	.	0	6.71	1.01	2
Malawi 2008-2013	5.50	.	1	.	.	0	6.92	.	1
Mozambique 2001-2007	6.49	1.05	2	.	.	0	6.30	1.14	2
Mozambique 2008-2013	7.01	.	1	.	.	0	6.97	.	1
Rwanda 2001-2007	6.45	.	1	4.59	.	1	6.52	.	1
Tanzania 2001-2007	6.79	0.88	3	5.50	.	1	6.18	1.13	3
Tanzania 2008-2013	6.91	.	1	.	.	0	6.26	.	1
Uganda 1981-2000	.	.	0	.	.	0	5.82	.	1
Uganda 2001-2007	5.90	0.76	3	4.51	.	1	5.72	1.01	2
Uganda 2008-2013	5.31	.	1	.	.	0	5.22	.	1
Zambia 1981-2000	.	.	0	.	.	0	.	.	0
Zambia 2001-2007	4.71	0.19	3	3.94	.	1	5.12	0.11	3
Zambia 2008-2013	5.25	.	1	.	.	0	6.00	.	1
Zimbabwe 1981-2000	.	.	0	.	.	0	.	.	0
Zimbabwe 2001-2007	4.76	0.34	3	3.97	.	1	5.51	0.19	2
Zimbabwe 2008-2013	5.53	.	1	.	.	0	5.22	.	1
Africa: Northern Africa									
Algeria 2001-2007	3.68	0.22	2	2.97	0.01	2	4.25	.	1
Algeria 2008-2013	3.09	.	1	2.94	.	1	4.52	.	1
Egypt 1981-2000	5.90	.	1	4.91	.	1	.	.	0
Egypt 2008-2013	.	.	0	3.75	.	1	7.25	.	1
Morocco 2001-2007	3.62	0.79	4	3.27	0.61	4	5.05	1.04	2

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Sudan 2008-2013	4.71	.	1	3.62	.	1	6.23	.	1
Tunisia 2008-2013	.	.	0	3.40	.	1	4.93	.	1
Africa: Southern Africa									
Botswana 1981-2000	.	.	0	.	.	0	.	.	0
Botswana 2001-2007	5.21	1.18	2	.	.	0	5.87	0.76	2
Botswana 2008-2013	6.21	.	1	.	.	0	6.76	.	1
Lesotho 1981-2000	.	.	0	.	.	0	.	.	0
Lesotho 2001-2007	5.38	0.61	2	.	.	0	6.00	1.13	2
Lesotho 2008-2013	5.43	.	1	.	.	0	6.45	.	1
Namibia 1981-2000	.	.	0	.	.	0	.	.	0
Namibia 2001-2007	5.51	0.92	2	.	.	0	5.40	1.15	2
Namibia 2008-2013	6.26	.	1	.	.	0	6.62	.	1
South Africa 1981-2000	5.32	0.63	3	5.02	0.58	2	5.73	0.42	3
South Africa 2001-2007	5.17	0.61	5	4.37	0.19	2	5.45	0.76	3
South Africa 2008-2013	4.87	0.14	2	.	.	0	5.53	0.53	2
Africa: Western Africa									
Benin 2001-2007	4.97	.	1	.	.	0	4.80	.	1
Benin 2008-2013	5.35	.	1	.	.	0	5.20	.	1
Burkina Faso 2001-2007	4.32	.	1	3.73	.	1	4.79	.	1
Burkina Faso 2008-2013	6.46	.	1	.	.	0	6.26	.	1
Cabo Verde 2001-2007	4.65	0.90	2	.	.	0	5.77	0.86	2
Cabo Verde 2008-2013	5.11	.	1	.	.	0	5.43	.	1
Ghana 1981-2000	.	.	0	.	.	0	5.28	.	1
Ghana 2001-2007	5.72	0.64	3	4.57	.	1	5.54	0.65	3
Ghana 2008-2013	5.97	.	1	.	.	0	5.63	.	1
Liberia 2008-2013	4.80	.	1	.	.	0	4.89	.	1
Mali 2001-2007	6.16	0.69	3	4.20	.	1	5.32	0.56	4
Mali 2008-2013	5.88	.	1	.	.	0	4.78	.	1
Nigeria 1981-2000	4.59	0.84	3	4.31	0.54	3	5.29	0.66	3
Nigeria 2001-2007	3.05	0.34	2	.	.	0	3.87	0.49	2
Nigeria 2008-2013	4.12	.	1	.	.	0	4.58	.	1

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Senegal 2001-2007	5.99	0.12	2	.	.	0	6.93	0.35	2
Senegal 2008-2013	4.34	.	1	.	.	0	6.60	.	1
Asia: Central Asia									
Kazakhstan 2001-2007	5.82	.	1	4.69	.	1	4.76	.	1
Kazakhstan 2008-2013	5.91	.	1	5.13	.	1	5.09	.	1
Kyrgyzstan 2001-2007	4.30	0.26	2	3.92	0.28	2	3.45	.	1
Kyrgyzstan 2008-2013	4.11	.	1	4.08	.	1	3.47	.	1
Tajikistan 2001-2007	7.35	.	1	6.28	.	1	6.74	.	1
Tajikistan 2008-2013	6.94	.	1	5.87	.	1	6.67	.	1
Uzbekistan 2001-2007	7.09	.	1	5.81	.	1	6.36	.	1
Uzbekistan 2008-2013	7.74	.	1	7.03	.	1	7.05	.	1
Asia: Eastern Asia									
China 1981-2000	6.86	.	1	6.54	.	1	6.42	.	1
China 2001-2007	7.49	0.88	3	7.34	1.01	3	6.67	0.46	2
China 2008-2013	7.73	.	1	7.79	.	1	6.57	.	1
Hong Kong 2001-2007	5.23	0.24	3	4.34	0.12	3	6.08	0.23	2
Japan 1981-2000	3.86	0.47	6	3.67	0.04	3	5.55	0.42	5
Japan 2001-2007	3.60	0.25	4	3.55	0.18	3	5.64	0.60	3
Japan 2008-2013	3.22	.	1	.	.	0	4.80	.	1
Korea, Republic 1981-2000	4.20	1.41	4	3.25	0.94	2	5.37	1.12	4
Korea, Republic 2001-2007	3.50	0.60	5	3.33	0.34	4	4.62	0.53	3
Korea, Republic 2008-2013	3.14	0.21	2	3.19	.	1	4.70	0.54	2
Mongolia 2001-2007	5.08	0.39	3	4.27	0.23	3	4.28	0.51	3
Mongolia 2008-2013	4.17	0.39	2	3.47	0.32	2	3.90	0.58	2
Taiwan 1981-2000	4.02	1.22	2	4.10	0.71	2	4.73	0.89	2
Taiwan 2001-2007	3.63	0.43	4	3.48	0.46	3	4.58	0.33	3
Taiwan 2008-2013	3.73	0.05	2	3.60	.	1	4.31	0.01	2
Asia: South-Eastern Asia									
Cambodia 2008-2013	6.05	.	1	5.48	.	1	4.77	.	1

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Indonesia 1981-2000	5.52	.	1	5.00	.	1	4.57	.	1
Indonesia 2001-2007	4.82	0.37	3	4.41	0.15	3	5.10	0.04	2
Indonesia 2008-2013	4.89	.	1	4.52	.	1	4.93	.	1
Malaysia 1981-2000	6.08	.	1	5.60	.	1	5.84	.	1
Malaysia 2001-2007	5.77	0.04	2	5.29	0.01	2	6.08	0.38	2
Malaysia 2008-2013	6.01	.	1	5.30	.	1	6.22	.	1
Philippines 1981-2000	5.45	0.25	4	4.67	0.20	2	5.61	0.28	4
Philippines 2001-2007	5.08	0.47	5	4.37	0.42	3	5.02	0.37	3
Philippines 2008-2013	4.67	.	1	4.29	.	1	4.76	.	1
Singapore 1981-2000	6.49	.	1	6.34	.	1	6.91	.	1
Singapore 2001-2007	6.38	.	1	5.77	.	1	6.77	.	1
Singapore 2008-2013	6.29	.	1	5.81	.	1	6.47	.	1
Thailand 1981-2000	4.44	.	1	3.72	.	1	5.13	.	1
Thailand 2001-2007	5.15	0.61	3	4.82	0.62	3	6.10	0.03	3
Thailand 2008-2013	5.06	.	1	4.53	.	1	5.81	.	1
Vietnam 2001-2007	8.06	0.12	3	7.44	0.20	3	7.39	0.23	2
Vietnam 2008-2013	7.70	.	1	6.96	.	1	6.97	.	1
Asia: Southern Asia									
Bangladesh 1981-2000	6.69	.	1	5.88	.	1	6.39	.	1
Bangladesh 2001-2007	7.11	.	1	6.27	.	1	.	.	0
India 1981-2000	5.55	0.15	2	4.91	0.19	2	5.92	0.31	2
India 2001-2007	5.46	0.39	2	4.52	0.54	2	6.11	.	1
Iran 1981-2000	5.97	.	1	4.43	.	1	.	.	0
Iran 2001-2007	4.94	.	1	4.08	.	1	5.06	.	1
Pakistan 1981-2000	.	.	0	4.37	.	1	5.28	.	1
Pakistan 2001-2007	6.34	.	1	3.87	.	1	.	.	0
Asia: Western Asia									
Armenia 1981-2000	3.61	.	1	3.12	.	1	3.95	.	1
Armenia 2001-2007	2.89	.	1	3.36	.	1	3.55	.	1
Armenia 2008-2013	3.97	0.27	6	3.69	0.19	3	4.01	0.22	6
Azerbaijan 1981-2000	6.06	.	1	5.13	.	1	4.82	.	1

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Azerbaijan 2001-2007	5.78	.	1	5.05	.	1	5.43	.	1
Azerbaijan 2008-2013	5.63	0.25	6	4.71	0.88	3	4.99	0.46	6
Cyprus 1981-2000	4.99	.	1	.	.	0	5.43	.	1
Cyprus 2001-2007	5.21	0.50	4	3.90	0.54	3	5.86	0.39	3
Cyprus 2008-2013	4.49	0.87	9	3.60	0.58	9	5.38	0.86	7
Georgia 1981-2000	4.21	.	1	3.94	.	1	4.53	.	1
Georgia 2001-2007	4.79	.	1	4.20	.	1	4.36	.	1
Georgia 2008-2013	5.04	0.76	7	4.10	0.64	4	4.70	0.64	7
Iraq 2001-2007	.	.	0	.	.	0	.	.	0
Iraq 2008-2013	3.78	.	1	2.89	.	1	4.90	.	1
Israel 1981-2000	3.81	0.20	2	.	.	0	6.37	0.31	2
Israel 2001-2007	4.50	0.13	2	.	.	0	6.63	.	1
Israel 2008-2013	3.98	0.47	5	3.03	0.10	3	5.33	0.35	5
Jordan 2001-2007	5.62	0.41	3	3.85	0.09	3	7.08	0.56	2
Jordan 2008-2013	4.78	.	1	3.84	.	1	6.71	.	1
Lebanon 2001-2007	4.01	.	1	2.89	.	1	3.83	.	1
Lebanon 2008-2013	3.35	.	1	2.95	.	1	3.26	.	1
Palestine 2001-2007	5.74	.	1	4.26	.	1	4.99	.	1
Palestine 2008-2013	4.41	.	1	3.40	.	1	5.11	.	1
Saudi Arabia 2001-2007	.	.	0	.	.	0	.	.	0
Saudi Arabia 2008-2013	.	.	0	.	.	0	7.36	.	1
Turkey 1981-2000	5.03	0.58	2	3.57	.	1	5.84	0.09	2
Turkey 2001-2007	5.23	1.08	6	3.74	0.45	5	5.98	0.49	5
Turkey 2008-2013	5.44	0.33	7	3.86	0.80	5	6.02	0.47	5
Yemen 2001-2007	3.61	.	1	3.18	.	1	3.74	.	1
Yemen 2008-2013	3.54	.	1	3.44	.	1	4.13	.	1
Europe: Eastern Europe									
Belarus 1981-2000	4.03	0.24	4	3.22	0.50	3	4.58	0.49	3
Belarus 2001-2007	5.75	.	1	4.43	.	1	5.77	.	1
Belarus 2008-2013	5.51	0.38	2	4.32	0.36	2	5.57	0.38	2
Bulgaria 1981-2000	4.13	0.70	6	3.84	0.40	3	4.03	0.75	4

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Bulgaria 2001-2007	2.89	0.59	5	2.47	0.65	4	3.11	0.85	4
Bulgaria 2008-2013	2.78	0.70	8	2.53	0.70	7	2.64	0.48	6
Czech Republic 1981-2000	4.00	0.71	7	4.12	0.72	3	4.32	0.63	6
Czech Republic 2001-2007	3.49	0.41	6	2.93	0.28	4	3.90	0.28	4
Czech Republic 2008-2013	3.14	0.26	9	2.97	0.26	7	4.06	0.27	7
Hungary 1981-2000	4.69	1.04	9	3.68	0.19	3	5.44	0.77	7
Hungary 2001-2007	3.93	0.74	6	2.81	0.36	4	4.65	0.47	5
Hungary 2008-2013	3.72	0.76	8	3.15	0.68	6	4.38	0.53	6
Moldova 1981-2000	4.32	.	1	3.32	.	1	4.89	.	1
Moldova 2001-2007	4.00	0.14	3	3.54	0.19	3	3.95	0.14	2
Moldova 2008-2013	3.93	0.50	2	3.55	0.00	2	4.05	0.68	2
Poland 1981-2000	4.57	0.98	8	2.89	0.29	3	4.84	0.34	6
Poland 2001-2007	3.08	0.46	7	2.45	0.46	5	3.81	0.49	6
Poland 2008-2013	3.46	0.52	9	2.95	0.65	7	4.31	0.67	7
Romania 1981-2000	3.84	0.87	5	3.20	0.39	3	4.78	0.26	3
Romania 2001-2007	3.43	0.12	3	3.07	0.01	3	3.91	0.11	3
Romania 2008-2013	2.88	0.74	5	2.93	0.51	4	3.41	0.97	3
Russia 1981-2000	3.46	0.77	8	3.09	1.24	4	4.31	0.41	6
Russia 2001-2007	3.93	0.61	4	3.10	0.32	3	4.04	0.28	3
Russia 2008-2013	3.98	0.46	6	3.37	0.35	5	4.03	0.33	6
Slovakia 1981-2000	4.25	0.21	7	3.88	0.30	3	4.66	0.27	6
Slovakia 2001-2007	3.76	0.44	6	3.28	0.41	5	3.96	0.30	4
Slovakia 2008-2013	3.94	0.77	9	3.47	0.47	7	3.88	0.51	7
Ukraine 1981-2000	3.48	0.62	5	2.92	0.50	3	4.28	0.31	3
Ukraine 2001-2007	3.30	0.85	4	2.98	0.52	4	3.28	0.74	4
Ukraine 2008-2013	2.38	0.73	5	2.51	0.85	4	2.65	0.70	5
Europe: Northern Europe									
Denmark 1981-2000	4.81	0.49	5	4.22	.	1	6.23	0.21	5
Denmark 2001-2007	6.22	0.26	5	5.61	0.08	3	7.33	0.19	4
Denmark 2008-2013	5.90	0.33	8	5.10	0.37	6	7.13	0.52	6
Estonia 1981-2000	4.48	0.38	5	3.28	0.35	4	4.86	0.53	5

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Estonia 2001-2007	4.06	0.44	7	3.25	0.23	7	5.06	0.29	6
Estonia 2008-2013	4.15	0.28	8	3.47	0.36	7	5.04	0.33	6
Finland 1981-2000	4.86	0.62	5	3.53	0.16	2	5.90	0.39	5
Finland 2001-2007	5.70	0.34	6	4.78	0.44	4	6.75	0.29	5
Finland 2008-2013	5.37	0.47	8	4.36	0.60	6	6.58	0.53	6
Iceland 1981-2000	5.39	0.40	3	.	.	0	5.76	0.17	3
Iceland 2008-2013	4.12	0.38	5	3.43	0.29	4	5.70	0.13	3
Ireland 1981-2000	4.52	0.49	7	3.82	0.14	2	5.22	0.28	7
Ireland 2001-2007	4.68	0.21	5	3.93	0.08	3	5.05	0.15	4
Ireland 2008-2013	3.80	0.43	8	3.36	0.42	6	4.83	0.33	6
Latvia 1981-2000	3.80	0.57	6	3.02	0.25	4	4.57	0.43	6
Latvia 2001-2007	3.32	0.64	5	2.74	0.37	4	4.12	0.57	4
Latvia 2008-2013	2.79	0.50	6	2.84	0.16	4	4.18	0.53	4
Lithuania 1981-2000	4.37	0.82	5	3.63	0.16	4	4.24	0.59	5
Lithuania 2001-2007	3.19	0.41	5	2.90	0.37	5	3.77	0.41	4
Lithuania 2008-2013	2.83	0.62	5	3.04	0.22	4	3.54	0.61	3
Norway 1981-2000	5.52	0.37	5	4.40	.	1	6.00	0.33	5
Norway 2001-2007	5.45	0.41	5	4.41	0.08	3	6.37	0.12	4
Norway 2008-2013	5.68	0.41	6	4.72	0.35	5	6.59	0.44	6
Sweden 1981-2000	4.75	0.35	7	3.75	0.42	3	5.38	0.34	7
Sweden 2001-2007	5.49	0.33	6	4.57	0.22	4	5.95	0.13	5
Sweden 2008-2013	5.76	0.52	9	4.71	0.39	7	6.11	0.54	7
United Kingdom 1981-2000	4.53	0.29	13	3.39	0.19	3	5.13	0.39	14
United Kingdom 2001-2007	4.33	0.26	6	3.51	0.13	4	5.05	0.19	5
United Kingdom 2008-2013	3.88	0.24	13	3.45	0.13	10	4.99	0.40	9
Europe: Southern Europe									
Albania 1981-2000	5.29	.	1	3.88	.	1	5.37	.	1
Albania 2001-2007	4.02	0.83	2	3.26	0.74	2	3.76	.	1
Albania 2008-2013	4.05	0.03	2	3.60	0.34	2	3.68	0.03	2
Andorra 2001-2007	.	.	0	3.59	.	1	4.38	.	1

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Bosnia/Herzegovina 1981-2000	5.28	0.13	2	4.79	0.14	2	5.91	0.04	2
Bosnia/Herzegovina 2001-2007	3.56	0.36	3	3.29	0.28	3	3.65	.	1
Bosnia/Herzegovina 2008-2013	3.68	0.30	2	3.17	0.11	2	4.21	0.48	2
Croatia 1981-2000	4.20	0.68	2	3.87	.	1	4.62	0.69	2
Croatia 2001-2007	3.13	0.47	2	2.57	0.35	2	3.07	0.51	2
Croatia 2008-2013	2.88	0.41	8	2.59	0.50	6	3.15	0.29	6
Greece 1981-2000	4.11	0.60	3	3.24	0.28	2	4.99	0.60	3
Greece 2001-2007	4.61	0.25	3	3.56	0.01	2	5.47	0.81	3
Greece 2008-2013	3.03	0.92	6	2.61	0.74	5	4.06	0.96	4
Italy 1981-2000	3.87	0.40	7	3.01	0.29	2	4.11	0.45	8
Italy 2001-2007	4.22	0.60	4	3.18	0.37	3	4.84	0.73	4
Italy 2008-2013	3.52	0.64	6	3.06	0.33	4	4.13	0.44	4
Kosovo 2008-2013	3.97	1.34	4	3.76	1.65	3	3.98	1.26	4
Macedonia 1981-2000	3.14	.	1	3.04	.	1	3.96	.	1
Macedonia 2001-2007	2.82	0.44	2	2.80	0.01	2	2.87	.	1
Macedonia 2008-2013	3.65	0.65	6	3.29	0.52	5	3.49	0.57	4
Malta 1981-2000	4.88	0.07	3	.	.	0	4.92	0.34	3
Malta 2001-2007	4.81	.	1	4.16	.	1	4.68	.	1
Malta 2008-2013	4.55	0.51	4	4.22	0.18	3	4.47	0.41	2
Montenegro 1981-2000	4.72	.	1	3.57	.	1	5.45	.	1
Montenegro 2001-2007	4.30	0.68	2	3.90	0.02	2	4.74	.	1
Montenegro 2008-2013	4.27	0.63	4	3.88	0.66	3	4.54	0.81	3
Portugal 1981-2000	4.54	0.29	5	3.58	0.18	2	4.49	0.26	5
Portugal 2001-2007	3.97	0.28	5	2.55	0.45	3	4.06	0.14	4
Portugal 2008-2013	3.44	0.58	8	2.68	0.67	6	3.74	0.54	6
Serbia 1981-2000	4.05	.	1	3.31	.	1	4.77	.	1
Serbia 2001-2007	3.46	0.23	3	3.09	0.21	3	3.53	0.49	2
Serbia 2008-2013	3.05	0.49	4	2.97	0.50	3	3.35	0.67	3
Slovenia 1981-2000	4.15	0.74	7	3.19	0.37	3	4.87	0.32	5

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Slovenia 2001-2007	4.06	0.36	7	3.33	0.32	5	4.12	0.35	6
Slovenia 2008-2013	3.59	0.70	9	3.09	0.65	7	3.89	0.72	7
Spain 1981-2000	4.83	0.51	11	4.22	0.50	7	4.75	0.27	10
Spain 2001-2007	4.95	0.33	9	3.93	0.45	7	4.80	0.30	7
Spain 2008-2013	4.11	0.61	11	3.05	0.52	9	4.26	0.28	9
Europe: Western Europe									
Austria 1981-2000	4.72	0.25	5	3.60	.	1	5.71	0.29	5
Austria 2001-2007	4.82	0.53	5	3.68	0.51	3	6.00	0.12	4
Austria 2008-2013	4.63	0.47	5	4.11	0.63	3	5.53	0.11	3
Belgium 1981-2000	4.50	0.22	4	3.61	.	1	4.75	0.39	5
Belgium 2001-2007	4.80	0.20	5	4.15	0.30	3	4.74	0.23	4
Belgium 2008-2013	4.42	0.41	8	3.89	0.28	6	4.74	0.29	6
France 1981-2000	4.50	0.43	6	3.18	0.12	2	4.74	0.31	7
France 2001-2007	4.34	0.16	6	3.37	0.19	4	4.73	0.26	5
France 2008-2013	4.37	0.36	8	3.33	0.27	6	4.74	0.30	6
Germany 1981-2000	4.49	0.52	17	3.74	0.39	8	5.09	0.52	15
Germany 2001-2007	3.89	0.38	8	3.25	0.24	5	5.33	0.24	6
Germany 2008-2013	4.47	0.32	13	3.46	0.23	10	5.48	0.49	9
Luxembourg 1981-2000	5.66	0.54	2	4.56	.	1	5.80	0.70	2
Luxembourg 2001-2007	5.59	0.20	3	4.79	0.20	2	5.85	0.51	3
Luxembourg 2008-2013	5.59	0.17	4	4.56	0.16	3	5.75	0.01	2
Netherlands 1981-2000	5.03	0.40	6	4.71	.	1	5.32	0.28	7
Netherlands 2001-2007	4.86	0.48	6	4.67	0.56	4	5.38	0.45	5
Netherlands 2008-2013	5.06	0.39	8	4.83	0.38	6	5.57	0.42	6
Switzerland 1981-2000	4.76	0.14	2	3.95	.	1	5.39	0.21	2
Switzerland 2001-2007	5.52	0.23	5	4.49	0.29	3	6.10	0.12	4
Switzerland 2008-2013	5.70	0.32	5	4.60	0.42	4	6.12	0.36	5
Latin America and the Caribbean: Caribbean									
Dominican Republic 1981-2000	3.31	.	1	3.13	.	1	3.50	.	1
Dominican Republic 2001-2007	4.53	0.44	5	3.72	0.13	5	4.72	0.38	5

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Dominican Republic 2008-2013	4.63	0.47	7	3.64	0.22	6	4.40	0.43	7
Haiti 2001-2007	4.76	.	1	3.28	.	1	4.10	.	1
Haiti 2008-2013	3.61	0.18	3	3.64	0.33	3	4.04	0.33	3
Jamaica 2001-2007	4.26	.	1	3.80	.	1	4.54	.	1
Jamaica 2008-2013	4.52	0.32	3	4.00	0.36	3	4.97	0.31	3
Puerto Rico 1981-2000	4.05	.	1	3.59	.	1	5.03	.	1
Puerto Rico 2001-2007	4.18	.	1	3.75	.	1	.	.	0
Trinidad and Tobago 2001-2007	3.61	.	1	3.25	.	1	4.30	.	1
Latin America and the Caribbean: Central America									
Belize 2008-2013	5.79	0.49	3	4.36	0.63	3	5.37	0.53	3
Costa Rica 1981-2000	3.86	0.42	4	3.38	0.40	4	4.89	0.43	4
Costa Rica 2001-2007	4.11	0.64	9	3.26	0.45	9	4.93	0.62	8
Costa Rica 2008-2013	4.71	0.65	6	3.59	0.32	6	4.83	0.36	6
El Salvador 1981-2000	4.36	0.46	5	3.83	0.70	5	4.59	0.31	5
El Salvador 2001-2007	3.85	0.73	9	3.30	0.51	9	4.09	0.68	8
El Salvador 2008-2013	4.60	0.50	6	3.95	0.39	6	4.55	0.51	6
Guatemala 1981-2000	3.97	0.48	4	3.64	0.42	4	4.20	0.38	4
Guatemala 2001-2007	3.23	0.60	10	2.94	0.57	10	3.73	0.67	8
Guatemala 2008-2013	3.80	0.37	6	3.43	0.27	6	4.05	0.52	6
Honduras 1981-2000	4.68	0.67	4	3.90	0.70	4	4.77	0.55	4
Honduras 2001-2007	4.19	0.60	9	3.23	0.35	9	4.24	0.62	8
Honduras 2008-2013	4.27	0.72	6	3.70	0.66	6	4.23	0.65	6
Mexico 1981-2000	4.11	0.40	9	3.89	0.34	8	4.31	0.69	8
Mexico 2001-2007	4.05	0.77	11	3.50	0.56	10	3.96	0.78	9
Mexico 2008-2013	4.55	0.78	7	3.64	0.47	6	4.29	0.62	7
Nicaragua 1981-2000	3.75	1.07	4	3.48	1.00	4	4.00	0.95	4
Nicaragua 2001-2007	3.36	0.56	9	2.93	0.46	9	3.68	0.63	8
Nicaragua 2008-2013	3.90	0.66	6	3.29	0.46	6	4.10	0.79	6
Panama 1981-2000	3.66	0.29	4	3.46	0.29	4	4.10	0.29	4
Panama 2001-2007	3.38	0.57	9	3.29	0.51	9	3.99	0.61	8
Panama 2008-2013	4.04	0.50	6	3.78	0.42	6	4.29	0.68	6

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Latin America and the Caribbean: South America									
Argentina 1981-2000	3.81	0.95	9	3.08	0.42	7	3.89	0.70	8
Argentina 2001-2007	3.18	0.51	8	2.65	0.42	8	3.37	0.57	7
Argentina 2008-2013	4.05	0.24	4	3.15	0.27	4	3.87	0.26	4
Bolivia 1981-2000	3.64	0.36	4	2.96	0.39	4	3.74	0.12	4
Bolivia 2001-2007	3.60	0.69	9	2.65	0.42	9	3.78	0.48	8
Bolivia 2008-2013	4.15	0.47	4	3.08	0.25	4	3.93	0.49	4
Brazil 1981-2000	3.52	0.29	7	3.14	0.27	6	4.69	0.24	7
Brazil 2001-2007	3.79	0.26	10	3.12	0.27	9	4.63	0.25	8
Brazil 2008-2013	4.17	0.26	6	3.34	0.13	6	4.74	0.20	6
Chile 1981-2000	4.60	0.61	9	3.85	0.60	8	4.43	0.46	8
Chile 2001-2007	4.19	0.55	10	3.32	0.40	9	3.87	0.31	8
Chile 2008-2013	4.31	0.56	5	3.64	0.44	4	4.06	0.55	5
Colombia 1981-2000	3.54	0.48	6	3.09	0.41	6	4.50	0.41	6
Colombia 2001-2007	3.78	0.68	10	3.25	0.45	10	4.38	0.59	9
Colombia 2008-2013	4.49	0.53	6	3.66	0.33	6	4.74	0.58	6
Ecuador 1981-2000	3.27	0.54	4	2.91	0.42	4	3.83	0.42	4
Ecuador 2001-2007	2.40	0.26	9	2.33	0.20	9	2.86	0.27	7
Ecuador 2008-2013	3.86	0.67	6	3.05	0.24	6	3.73	0.46	6
Guyana 2001-2007	5.48	.	1	4.87	.	1	5.15	.	1
Guyana 2008-2013	5.45	0.35	3	4.94	0.28	3	5.27	0.30	3
Paraguay 1981-2000	4.18	0.58	5	3.58	0.52	5	4.16	0.25	5
Paraguay 2001-2007	3.05	0.37	8	2.67	0.29	8	3.18	0.43	7
Paraguay 2008-2013	3.71	0.51	6	3.14	0.38	6	3.56	0.44	6
Peru 1981-2000	3.72	0.39	6	3.16	0.22	6	3.50	0.28	6
Peru 2001-2007	3.23	0.29	9	3.07	0.40	9	3.14	0.27	7
Peru 2008-2013	3.21	0.41	7	2.99	0.32	7	3.35	0.53	7
Uruguay 1981-2000	4.66	0.27	6	4.28	0.28	6	5.25	0.20	6
Uruguay 2001-2007	4.69	0.76	11	4.07	0.49	10	4.97	0.42	9
Uruguay 2008-2013	5.32	0.73	7	4.51	0.34	6	5.21	0.35	7
Venezuela 1981-2000	3.54	0.35	7	2.95	0.30	7	4.25	0.48	6

Country – period	Mean trust in parliament	Inter-survey discrepancy	N surveys in parliament	Mean trust in political parties	Inter-survey discrepancy	N surveys in political parties	Mean trust in justice system	Inter-survey discrepancy	N surveys in justice system
Venezuela 2001-2007	4.43	0.77	9	3.57	0.61	8	4.36	0.74	7
Venezuela 2008-2013	4.33	0.44	5	4.11	0.22	4	4.13	0.19	5
Northern America:									
Canada 1981-2000	4.40	0.36	4	3.92	.	1	5.08	0.58	3
Canada 2001-2007	5.11	0.78	3	4.43	0.70	2	5.91	0.38	2
Canada 2008-2013	5.63	.	1	4.53	.	1	5.85	.	1
United States 1981-2000	4.71	0.37	6	3.98	0.00	2	4.95	0.39	5
United States 2001-2007	4.64	0.69	3	4.09	0.42	2	5.65	0.50	2
United States 2008-2013	4.04	0.16	2	3.48	.	1	5.01	0.10	2
Oceania: Australia and New Zealand									
Australia 1981-2000	4.61	0.40	4	3.71	.	1	4.78	0.44	4
Australia 2001-2007	4.76	0.45	2	3.71	.	1	5.16	.	1
Australia 2008-2013	4.30	.	1	.	.	0	4.66	.	1
New Zealand 1981-2000	3.38	0.11	3	3.09	.	1	4.82	0.09	3
New Zealand 2001-2007	4.72	0.48	2	3.70	.	1	4.85	.	1
New Zealand 2008-2013	3.97	.	1	.	.	0	4.54	.	1

Analysis of trust in political parties and trust in the justice system reveals similarities with trust in parliament. In the next section, we show that trust in all three institutions has much in common. However, some differences are noticeable. For example, in the United States and a number of European countries the justice system is trusted much more than political parties or even parliament. However, there are countries in which the justice system is trusted less than parliament: Mexico (2001–2007 and 2008–2013), Ethiopia (2001–2007), and Zambia (2008–2013) are just a few examples.

8.3. THE RELATIONSHIP BETWEEN TRUST IN PARLIAMENT, TRUST IN POLITICAL PARTIES, AND TRUST IN THE JUSTICE SYSTEM

In general terms, trust in political parties is lower than trust in parliament but both variables are very highly correlated, $r = 0.922$. Correlation between trust in the justice system and trust in parliament is also very high, $r = 0.819$. The lowest correlation occurs between trust in political parties and the justice system, $r = 0.748$. These correlations suggest that trust in political institutions can be indexed by one factor. Indeed, table 8.3.1 provides evidence that such a factor is relatively strong, at least for the majority of countries.

We computed factor scores for all country-years combined and separately. For the combined set of country-years, the factor loadings are within a range of 0.670 to 0.776, with the highest value for trust in parliament and the lowest for the justice system. The eigenvalue and the proportion of explained variance are above the thresholds for acceptable measurement models.

The measurement model of trust in political institutions works very well in most of the countries. In Table 8.3.1 we provide the values of factor loadings for countries with the best and worst fit of the model. For the worst country-years, identified by project abbreviation/wave/country-code, the factor loadings for trust in parliament and political parties are above the threshold values (but not for trust in the justice system). Moreover, in the worst case, the eigenvalue is below one and explained variance is only 15.1%. We discovered that, in terms of eigenvalue and explained variance, in a few countries the model based on the assumption of a strong relationship between trust in parliament, trust in political parties, and trust in the justice system cannot be confirmed.

Table 8.3.1 Factor Analysis of Trust in Institutions

Items	Factor loadings		
	All surveys	Survey with highest value	Survey with lowest value
Trust in parliament	0.776	0.903 (ESS/6/CZ)	0.376 (ABS/1/MN)
Trust in political parties	0.710	0.887 (LB/1996/PA)	0.355 (ABS/1/MN)
Trust in the justice system	0.670	0.884 (LITS/1/MD)	0.272 (WVS/3/AZ)
Eigenvalue	1.554	2.230 (LITS/1/MD)	0.452 (ABS/1/MN)
% of explained variance	51.8	74.33 (LITS/1/MD)	15.1 (ABS/1MN)

$N_{\text{total}}=1,009,126$ individuals; 740 national surveys.

However, it is a matter of empirical analysis to detect to what extent the deviations from a common model introduce a serious bias. We applied the factor analysis to all country-years together as well as to each one separately. For each individual (respondent), the values of the construct for a universal measure and for a country-specific measure were saved. Next, we computed the correlation coefficient between the universal measure and the country-year measure. Our analyses show that the country-year specific indexes correlate with the general index of trust in political institutions from $r = 0.865$ (ABS1//CN) to $r = 1.00$ (EVS/4/UA). Thus, even in the worst case, the country-specific index explains 75% of the variance of the overall index. This proves that idiosyncratic tendencies in regard to trust in democratic institutions are not very large. The correlation analysis shows that it is justifiable to use the common construct, measuring it in the same metric for all countries. Applying a common measurement model of institutional trust does not distort the relationship of the implied construct with other variables, protest behavior included. We use this measure, showing its correlation with participating in demonstrations and signing petitions, in Chapter 12.

CHAPTER 9

Protest Behavior

*Based on reports
from all members of the team*

9.1. INTRODUCTION

As indicated in Chapter 4, we harmonized two indicators of protest behavior: participation in demonstrations and signing petitions. Survey questions about protest behavior are asked in various time frames, most commonly in terms of (a) 1–2 years, and (b) 8 and 10 years or “ever.” In this chapter we provide aggregate information on the country-year level for these two time frames, titling them “the past year” and “ever” since these are the predominant time horizons. We checked that the data for one year and two years have the same distributional properties. The time horizon of 8 and 10 years or “ever” can also be joined, since the patterns of answers are the same for various groups of the population.

The next two sections of this chapter enable readers to learn about the distribution of protest behavior around the world. Since protest behavior is our dependent variable, the issue of its variability across countries and across time is particularly important. It is also important to examine the extent to which participation in demonstrations and signing petitions coincides for given countries and given periods. Generally, the correlation between these two forms of protest, computed for overlapping data for country-years, is significant. It

equals 0.386 for responses related to “the past year” (N = 186) and 0.586 for responses related to “ever” (N = 626).

9.2. PARTICIPATION IN A DEMONSTRATION AND SIGNING A PETITION DURING THE PAST YEAR

The proportion of people participating in demonstrations differs greatly from country to country and from period to period; it ranges from 0.1 to 0.23 per country-period. Low values, between 1–2% appear in surveys of Lithuania (2008–2013), Hungary (2008–2013), Poland (2002–2007 and 2008–2013), Romania (2002–2007 and 2008–2013), Slovakia (2008–2013), Finland (2008–2013), Latvia (2008–2013), Lithuania (2002–2007), Malta (2008–2013), and Slovenia (2008–2013).

These instances contrast with countries and periods for which the proportion of people taking part in demonstrations is particularly high, above 15%; these are: Tanzania (2002–2007 and 2008–2013), Spain (2002–2007), Botswana (2002–2007), South Africa (2002–2007 and 2008–2013), Namibia (2002–2007), Benin (2008–2013), Haiti (2008–2013), Mali (2008–2013), Nigeria (2002–2007 and 2008–2013), Senegal (2002–2007), France (2002–2007), and Luxembourg (2002–2007).

In a similar way we can look at the data on the proportion of persons signing petitions. First, however, we have to note that the data pertaining to petitions are sparser than in the case of demonstrations. There are no data for Africa, Latin America, and the Caribbean. The minimum appears in Lithuania (2002–2007) and the maximum in Switzerland (2002–2007).

Table 9.2.1 Participation in a Demonstration and Signing a Petition During the Past Year, Around the World in Different Periods, 1961–2013

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Africa: Eastern Africa				
Kenya 2002-2007	0.15	2	.	0
Kenya 2008-2013	0.14	1	.	0
Madagascar 2002-2007	0.13	1	.	0
Madagascar 2008-2013	0.04	1	.	0
Malawi 2002-2007	0.07	2	.	0
Malawi 2008-2013	0.10	1	.	0
Mozambique 2002-2007	0.15	3	.	0
Mozambique 2008-2013	0.13	1	.	0
Tanzania 2002-2007	0.23	2	.	0
Tanzania 2008-2013	0.21	1	.	0
Uganda 2002-2007	0.10	2	.	0
Uganda 2008-2013	0.09	1	.	0
Zambia 2002-2007	0.10	2	.	0
Zambia 2008-2013	0.07	1	.	0
Zimbabwe 2002-2007	0.12	2	.	0
Zimbabwe 2008-2013	0.08	1	.	0
Africa: Northern Africa				
No observations	.	.	.	.
Africa: Southern Africa				
Botswana 2002-2007	0.19	2	.	0
Botswana 2008-2013	0.13	1	.	0
Lesotho 2002-2007	0.06	2	.	0
Lesotho 2008-2013	0.08	1	.	0
Namibia 2002-2007	0.18	2	.	0
Namibia 2008-2013	0.13	1	.	0
South Africa 2002-2007	0.16	3	.	0
South Africa 2008-2013	0.19	1	.	0
Africa: Western Africa				
Benin 2002-2007	0.12	1	.	0

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Benin 2008-2013	0.18	1	.	0
Burkina Faso 2008-2013	0.14	1	.	0
Cabo Verde 2002-2007	0.11	2	.	0
Cabo Verde 2008-2013	0.15	1	.	0
Ghana 2002-2007	0.08	2	.	0
Ghana 2008-2013	0.09	1	.	0
Liberia 2008-2013	0.12	1	.	0
Mali 2002-2007	0.08	2	.	0
Mali 2008-2013	0.17	1	.	0
Nigeria 2002-2007	0.17	2	.	0
Nigeria 2008-2013	0.17	1	.	0
Senegal 2002-2007	0.16	2	.	0
Senegal 2008-2013	0.12	1	.	0
Asia: Central Asia				
No observations	.	.	.	.
Asia: Eastern Asia				
Taiwan 2002-2007	0.03	1	.	0
Asia: South-Eastern Asia				
No observations	.	.	.	.
Asia: Southern Asia				
No observations	.	.	.	.
Asia: Western Asia				
Cyprus 2002-2007	0.05	3	0.07	2
Cyprus 2008-2013	0.05	4	0.07	4
Israel 2002-2007	0.10	1	0.17	1
Israel 2008-2013	0.08	3	0.12	3
Turkey 2002-2007	0.05	2	0.06	1
Turkey 2008-2013	0.04	2	0.04	2
Europe: Eastern Europe				
Bulgaria 2002-2007	0.03	3	0.04	2
Bulgaria 2008-2013	0.03	4	0.06	4
Czech Republic 2002-2007	0.05	4	0.13	3
Czech Republic 2008-2013	0.05	4	0.16	4

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Hungary 2002-2007	0.03	4	0.05	3
Hungary 2008-2013	0.02	3	0.05	3
Poland 2002-2007	0.02	5	0.07	4
Poland 2008-2013	0.02	4	0.09	4
Romania 2002-2007	0.02	2	0.02	1
Romania 2008-2013	0.02	1	0.06	1
Russia 2002-2007	0.05	1	0.07	1
Russia 2008-2013	0.04	3	0.06	3
Slovakia 2002-2007	0.04	4	0.21	3
Slovakia 2008-2013	0.02	4	0.18	4
Ukraine 2002-2007	0.14	2	0.07	2
Ukraine 2008-2013	0.04	2	0.03	2
Europe: Northern Europe				
Denmark 2002-2007	0.09	5	0.30	4
Denmark 2008-2013	0.06	4	0.27	4
Estonia 2002-2007	0.03	4	0.05	3
Estonia 2008-2013	0.03	4	0.08	4
Finland 2002-2007	0.05	5	0.24	4
Finland 2008-2013	0.02	4	0.26	4
Iceland 2008-2013	0.14	2	0.51	2
Ireland 2002-2007	0.07	4	0.24	3
Ireland 2008-2013	0.08	4	0.19	4
Latvia 2002-2007	0.03	2	0.02	1
Latvia 2008-2013	0.02	1	0.08	1
Lithuania 2002-2007	0.02	2	0.01	1
Lithuania 2008-2013	0.01	1	0.07	1
Norway 2002-2007	0.12	4	0.38	3
Norway 2008-2013	0.09	3	0.36	3
Sweden 2002-2007	0.12	5	0.44	4
Sweden 2008-2013	0.07	4	0.42	4
United Kingdom 2002-2007	0.06	6	0.34	5
United Kingdom 2008-2013	0.03	4	0.31	4

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Europe: Southern Europe				
Croatia 2002-2007	0.04	1	.	0
Croatia 2008-2013	0.07	3	0.23	3
Greece 2002-2007	0.05	3	0.04	3
Greece 2008-2013	0.10	3	0.05	3
Italy 2002-2007	0.09	4	0.13	3
Italy 2008-2013	0.07	1	0.12	1
Kosovo 2008-2013	0.12	2	0.18	2
Macedonia 2008-2013	0.07	2	0.07	1
Malta 2002-2007	0.05	2	0.08	1
Malta 2008-2013	0.02	1	0.08	1
Montenegro 2008-2013	0.08	1	0.10	1
Portugal 2002-2007	0.04	4	0.04	3
Portugal 2008-2013	0.04	4	0.06	4
Serbia 2008-2013	0.03	1	0.12	1
Slovenia 2002-2007	0.04	5	0.10	4
Slovenia 2008-2013	0.02	4	0.09	4
Spain 2002-2007	0.21	6	0.20	4
Spain 2008-2013	0.18	4	0.22	4
Europe: Western Europe				
Austria 2002-2007	0.07	5	0.20	4
Austria 2008-2013	0.07	1	0.16	1
Belgium 2002-2007	0.09	5	0.27	4
Belgium 2008-2013	0.06	4	0.22	4
France 2002-2007	0.16	5	0.32	4
France 2008-2013	0.15	3	0.30	3
Germany 2002-2007	0.08	6	0.25	5
Germany 2008-2013	0.07	4	0.27	4
Luxembourg 2002-2007	0.16	4	0.22	3
Luxembourg 2008-2013	0.08	1	0.21	1
Netherlands 2002-2007	0.07	5	0.22	4
Netherlands 2008-2013	0.03	4	0.24	4
Switzerland 2002-2007	0.08	3	0.38	3
Switzerland 2008-2013	0.05	3	0.35	3

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Latin America and the Caribbean: Caribbean				
Dominican Republic 2008-2013	0.07	2	.	0
Haiti 2008-2013	0.18	2	.	0
Jamaica 2008-2013	0.03	2	.	0
Latin America and the Caribbean: Central America				
Belize 2008-2013	0.05	2	.	0
Costa Rica 2008-2013	0.05	2	.	0
El Salvador 2008-2013	0.04	2	.	0
Guatemala 2008-2013	0.08	2	.	0
Honduras 2008-2013	0.06	2	.	0
Mexico 2008-2013	0.05	2	.	0
Nicaragua 2008-2013	0.09	2	.	0
Panama 2008-2013	0.04	2	.	0
Latin America and the Caribbean: South America				
Brazil 2008-2013	0.05	2	.	0
Colombia 2008-2013	0.08	2	.	0
Ecuador 2008-2013	0.07	2	.	0
Guyana 2008-2013	0.09	1	.	0
Paraguay 2008-2013	0.12	2	.	0
Peru 2008-2013	0.13	2	.	0
Uruguay 2002-2007	0.06	1	.	0
Uruguay 2008-2013	0.10	2	.	0
Northern America				
Oceania: Australia and New Zealand				
No observations	.	.	.	.

9.3. LIFETIME PARTICIPATION IN DEMONSTRATIONS AND SIGNING PETITIONS

Table 9.3.1 is constructed in the same way as Table 9.2.1. Since Table 9.3.1 deals with protest behavior during respondents' lifetimes, the coverage of country-periods is greater and the numbers for each protest form are, as a rule, larger than in Table 9.2.1. Exceptions deal

with the fact that in some countries the data for demonstrations and signing petitions have the value 0, as for surveys conducted in Kazakhstan and Uzbekistan in 2001–2007. The maximum value for each of the variables is: 0.46 for demonstrations (France 2001–2007) and 0.91 for signing petitions (New Zealand 1961–2000). In the case of demonstrations, high values (above 0.40) can be found in Cyprus (2001–2007), Andorra (2001–2007), Spain (2001–2007 and 2008–2013), and France (2008–2013). In the case of signing petitions there is a number of countries-periods with values above 0.70, such as Norway (2008–2013), Sweden (1961–2007, and 2008–2013), the United Kingdom (1961–2000 and 2001–2007), France (2001–2008), Canada (1961–2000, 2001–2007, and 2008–2013), the United States (1961–2000 and 2001–2007), Australia (1961–2000 and 2001–2007), and New Zealand (2001–2007).

Table 9.3.1 Lifetime Participation in Demonstrations and Signing Petitions, Around the World in Different Periods, 1961–2013

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Africa: Eastern Africa				
Ethiopia 2001-2007	0.26	1	0.21	1
Malawi 1961-2000	0.06	1	.	0
Rwanda 2001-2007	0.14	1	0.09	1
Tanzania 2001-2007	0.29	1	0.10	1
Uganda 2001-2007	0.15	1	0.21	1
Zambia 1961-2000	0.09	1	.	0
Zambia 2001-2007	0.21	1	0.12	1
Zimbabwe 1961-2000	0.24	1	.	0
Zimbabwe 2001-2007	0.05	1	0.05	1
Africa: Northern Africa				
Algeria 2001-2007	0.20	1	0.15	1
Egypt 1961-2000	0.03	1	0.20	1
Egypt 2008-2013	0.01	1	0.06	1

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Morocco 2001-2007	0.14	3	0.14	3
Africa: Southern Africa				
Botswana 1961-2000	0.10	1	.	0
Lesotho 1961-2000	0.04	1	.	0
Namibia 1961-2000	0.22	1	.	0
South Africa 1961-2000	0.14	4	0.24	3
South Africa 2001-2007	0.15	3	0.18	3
Africa: Western Africa				
Burkina Faso 2001-2007	0.22	1	0.15	1
Ghana 2001-2007	0.08	1	0.04	1
Mali 2001-2007	0.24	1	0.19	1
Nigeria 1961-2000	0.18	3	0.07	3
Asia: Central Asia				
Kazakhstan 2001-2007	0.00	1	0.00	1
Kazakhstan 2008-2013	0.01	1	0.01	1
Kyrgyzstan 2001-2007	0.06	2	0.04	2
Kyrgyzstan 2008-2013	0.03	1	0.06	1
Tajikistan 2008-2013	0.02	1	0.00	1
Uzbekistan 2001-2007	0.00	1	0.00	1
Uzbekistan 2008-2013	0.02	1	0.01	1
Asia: Eastern Asia				
Japan 1961-2000	0.13	6	0.57	6
Japan 2001-2007	0.09	2	0.58	2
Korea, Republic 1961-2000	0.13	3	0.35	3
Korea, Republic 2001-2007	0.17	3	0.45	3
Mongolia 2001-2007	0.04	1	0.09	1
Mongolia 2008-2013	0.05	1	0.04	1
Taiwan 1961-2000	0.04	2	0.11	2
Taiwan 2001-2007	0.07	2	0.14	2
Asia: South-Eastern Asia				
Indonesia 1961-2000	0.04	1	0.02	1
Indonesia 2001-2007	0.13	2	0.06	2

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Malaysia 1961-2000	0.05	1	0.12	1
Malaysia 2001-2007	0.03	1	0.06	1
Philippines 1961-2000	0.09	2	0.14	2
Philippines 2001-2007	0.08	2	0.10	2
Singapore 1961-2000	0.01	1	0.04	1
Singapore 2001-2007	0.02	1	0.09	1
Thailand 1961-2000	0.07	1	0.06	1
Thailand 2001-2007	0.02	1	0.03	1
Vietnam 2001-2007	0.01	2	0.06	2
Asia: Southern Asia				
Bangladesh 1961-2000	0.23	1	0.25	1
India 1961-2000	0.17	3	0.26	2
India 2001-2007	0.23	1	0.29	1
Pakistan 2001-2007	0.07	1	0.05	1
Asia: Western Asia				
Armenia 1961-2000	0.28	1	0.18	1
Armenia 2001-2007	0.09	1	0.07	1
Armenia 2008-2013	0.09	2	0.08	2
Azerbaijan 1961-2000	0.20	1	0.10	1
Azerbaijan 2001-2007	0.03	1	0.04	1
Azerbaijan 2008-2013	0.07	2	0.07	2
Cyprus 2001-2007	0.44	2	0.18	2
Cyprus 2008-2013	0.19	2	0.20	2
Georgia 1961-2000	0.19	1	0.14	1
Georgia 2001-2007	0.04	1	0.01	1
Georgia 2008-2013	0.18	3	0.08	3
Iraq 2001-2007	0.19	1	0.10	1
Israel 2001-2007	0.25	2	0.41	2
Jordan 2001-2007	0.04	2	0.06	2
Turkey 1961-2000	0.09	1	0.20	1
Turkey 2001-2007	0.06	4	0.11	4
Turkey 2008-2013	0.05	2	0.09	2

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Europe: Eastern Europe				
Belarus 1961-2000	0.18	3	0.15	3
Belarus 2008-2013	0.06	2	0.04	2
Bulgaria 1961-2000	0.15	5	0.14	5
Bulgaria 2001-2007	0.11	3	0.10	3
Bulgaria 2008-2013	0.08	2	0.10	2
Czech Republic 1961-2000	0.27	5	0.43	4
Czech Republic 2001-2007	0.17	2	0.31	2
Czech Republic 2008-2013	0.10	2	0.30	2
Hungary 1961-2000	0.06	5	0.16	5
Hungary 2001-2007	0.05	2	0.13	2
Hungary 2008-2013	0.05	2	0.14	2
Moldova 1961-2000	0.08	1	0.10	1
Moldova 2001-2007	0.15	3	0.10	3
Moldova 2008-2013	0.06	2	0.07	2
Poland 1961-2000	0.12	5	0.18	5
Poland 2001-2007	0.06	3	0.14	3
Poland 2008-2013	0.06	2	0.14	2
Romania 1961-2000	0.17	2	0.14	2
Romania 2001-2007	0.07	2	0.04	2
Romania 2008-2013	0.06	2	0.09	2
Russia 1961-2000	0.22	3	0.19	3
Russia 2001-2007	0.14	2	0.08	2
Russia 2008-2013	0.06	2	0.05	2
Slovakia 1961-2000	0.18	5	0.45	4
Slovakia 2001-2007	0.17	2	0.48	2
Slovakia 2008-2013	0.07	2	0.37	2
Ukraine 1961-2000	0.18	2	0.14	2
Ukraine 2001-2007	0.12	2	0.06	2
Ukraine 2008-2013	0.11	2	0.08	2
Europe: Northern Europe				
Denmark 1961-2000	0.22	5	0.46	4
Denmark 2001-2007	0.30	1	0.69	1

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Denmark 2008-2013	0.34	1	0.67	1
Estonia 1961-2000	0.15	5	0.21	5
Estonia 2001-2007	0.04	1	0.06	1
Estonia 2008-2013	0.07	2	0.19	2
Finland 1961-2000	0.12	5	0.36	5
Finland 2001-2007	0.12	2	0.50	2
Finland 2008-2013	0.16	1	0.55	1
Iceland 1961-2000	0.19	3	0.46	3
Iceland 2008-2013	0.27	1	0.54	1
Ireland 1961-2000	0.17	6	0.44	5
Ireland 2001-2007	0.25	1	0.55	1
Ireland 2008-2013	0.16	1	0.54	1
Latvia 1961-2000	0.27	3	0.38	3
Latvia 2001-2007	0.20	2	0.12	2
Latvia 2008-2013	0.13	2	0.14	2
Lithuania 1961-2000	0.21	3	0.40	3
Lithuania 2001-2007	0.06	1	0.06	1
Lithuania 2008-2013	0.08	2	0.16	2
Norway 1961-2000	0.21	3	0.60	3
Norway 2001-2007	0.26	1	0.67	1
Norway 2008-2013	0.30	2	0.72	2
Sweden 1961-2000	0.26	5	0.71	5
Sweden 2001-2007	0.27	1	0.77	1
Sweden 2008-2013	0.26	2	0.76	2
United Kingdom 1961-2000	0.14	13	0.60	11
United Kingdom 2001-2007	0.15	2	0.71	2
United Kingdom 2008-2013	0.13	3	0.57	3
Europe: Southern Europe				
Albania 1961-2000	0.19	1	0.27	1
Albania 2001-2007	0.16	2	0.13	2
Albania 2008-2013	0.09	2	0.15	2
Andorra 2001-2007	0.41	1	0.58	1
Bosnia/Herzegovina 1961-2000	0.10	2	0.21	2

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Bosnia/Herzegovina 2001-2007	0.08	3	0.18	3
Bosnia/ Herzegovina 2008-2013	0.07	2	0.20	2
Croatia 1961-2000	0.07	2	0.40	2
Croatia 2001-2007	0.03	1	0.23	1
Croatia 2008-2013	0.08	2	0.43	2
Greece 1961-2000	0.36	4	0.43	3
Greece 2008-2013	0.23	1	0.19	1
Italy 1961-2000	0.29	6	0.45	5
Italy 2001-2007	0.36	1	0.54	1
Italy 2008-2013	0.26	2	0.41	2
Kosovo 2008-2013	0.23	2	0.28	2
Macedonia 1961-2000	0.11	1	0.15	1
Macedonia 2001-2007	0.13	2	0.17	2
Macedonia 2008-2013	0.20	2	0.29	2
Malta 1961-2000	0.19	3	0.28	3
Malta 2008-2013	0.18	1	0.36	1
Montenegro 1961-2000	0.12	1	0.15	1
Montenegro 2001-2007	0.14	2	0.18	2
Montenegro 2008-2013	0.08	2	0.16	2
Portugal 1961-2000	0.21	4	0.27	4
Portugal 2001-2007	0.17	2	0.31	1
Portugal 2008-2013	0.12	1	0.21	1
Serbia 1961-2000	0.08	1	0.19	1
Serbia 2001-2007	0.18	2	0.22	2
Serbia 2008-2013	0.14	2	0.20	2
Slovenia 1961-2000	0.11	4	0.24	4
Slovenia 2001-2007	0.13	3	0.28	3
Slovenia 2008-2013	0.11	2	0.29	2
Spain 1961-2000	0.27	7	0.28	6
Spain 2001-2007	0.45	4	0.40	4
Spain 2008-2013	0.45	2	0.49	2
Europe: Western Europe				
Austria 1961-2000	0.12	2	0.47	2

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Austria 2001-2007	0.22	1	0.69	1
Austria 2008-2013	0.17	1	0.50	1
Belgium 1961-2000	0.21	5	0.48	4
Belgium 2001-2007	0.29	1	0.69	1
Belgium 2008-2013	0.30	1	0.61	1
France 1961-2000	0.33	6	0.59	5
France 2001-2007	0.46	2	0.71	2
France 2008-2013	0.43	2	0.66	2
Germany 1961-2000	0.25	15	0.49	14
Germany 2001-2007	0.32	4	0.52	4
Germany 2008-2013	0.27	3	0.46	3
Luxembourg 1961-2000	0.26	2	0.53	1
Luxembourg 2008-2013	0.36	1	0.59	1
Netherlands 1961-2000	0.17	8	0.42	7
Netherlands 2001-2007	0.24	2	0.57	2
Netherlands 2008-2013	0.22	1	0.50	1
Switzerland 1961-2000	0.14	3	0.59	3
Switzerland 2001-2007	0.23	2	0.70	2
Switzerland 2008-2013	0.25	1	0.66	1
Latin America and the Caribbean: Caribbean				
Dominican Republic 1961-2000	0.26	1	0.15	1
Dominican Republic 2001-2007	0.15	4	0.20	3
Dominican Republic 2008-2013	0.05	1	0.12	1
Haiti 2001-2007	0.25	1	.	0
Jamaica 2001-2007	0.14	1	.	0
Puerto Rico 1961-2000	0.11	1	0.28	1
Puerto Rico 2001-2007	0.13	1	0.20	1
Trinidad and Tobago 2001-2007	0.15	1	0.21	1
Latin America and the Caribbean: Central America				
Belize 2008-2013	0.18	1	.	0
Costa Rica 1961-2000	0.33	3	.	0
Costa Rica 2001-2007	0.14	8	0.19	5
Costa Rica 2008-2013	0.18	2	0.14	1

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
El Salvador 1961-2000	0.18	3	.	0
El Salvador 2001-2007	0.05	8	0.09	5
El Salvador 2008-2013	0.05	1	0.13	1
Guatemala 1961-2000	0.18	3	.	0
Guatemala 2001-2007	0.08	9	0.12	6
Guatemala 2008-2013	0.12	2	0.17	1
Honduras 1961-2000	0.19	3	.	0
Honduras 2001-2007	0.11	7	0.12	4
Honduras 2008-2013	0.11	1	0.17	1
Mexico 1961-2000	0.16	8	0.24	4
Mexico 2001-2007	0.16	11	0.25	7
Mexico 2008-2013	0.14	2	0.25	1
Nicaragua 1961-2000	0.26	3	.	0
Nicaragua 2001-2007	0.14	8	0.10	5
Nicaragua 2008-2013	0.10	1	0.14	1
Panama 1961-2000	0.23	3	.	0
Panama 2001-2007	0.13	8	0.12	5
Panama 2008-2013	0.10	1	0.18	1
Latin America and the Caribbean: South America				
Argentina 1961-2000	0.17	8	0.28	4
Argentina 2001-2007	0.16	7	0.26	6
Argentina 2008-2013	0.17	1	0.32	1
Bolivia 1961-2000	0.27	3	.	0
Bolivia 2001-2007	0.22	8	0.15	5
Brazil 1961-2000	0.25	6	0.49	2
Brazil 2001-2007	0.17	9	0.25	7
Brazil 2008-2013	0.19	2	0.13	1
Chile 1961-2000	0.21	7	0.20	3
Chile 2001-2007	0.14	9	0.15	7
Chile 2008-2013	0.12	1	0.15	1
Colombia 1961-2000	0.20	5	0.19	2
Colombia 2001-2007	0.16	8	0.17	5
Colombia 2008-2013	0.22	2	0.25	1

Country – period	Proportion of persons who demonstrated	N surveys	Proportion of persons who signed petitions	N surveys
Ecuador 1961-2000	0.29	3	.	0
Ecuador 2001-2007	0.13	7	0.11	5
Ecuador 2008-2013	0.08	1	0.12	1
Guyana 2001-2007	0.14	1	.	0
Paraguay 1961-2000	0.21	4	.	0
Paraguay 2001-2007	0.14	6	0.15	5
Paraguay 2008-2013	0.11	1	0.14	1
Peru 1961-2000	0.19	5	0.21	1
Peru 2001-2007	0.18	8	0.19	6
Peru 2008-2013	0.23	3	0.22	2
Uruguay 1961-2000	0.25	5	0.36	1
Uruguay 2001-2007	0.24	9	0.34	7
Uruguay 2008-2013	0.22	1	0.36	1
Venezuela 1961-2000	0.18	5	0.15	1
Venezuela 2001-2007	0.21	6	0.21	4
Venezuela 2008-2013	0.16	1	0.22	1
Northern America				
Canada 1961-2000	0.18	3	0.71	3
Canada 2001-2007	0.28	3	0.76	2
Canada 2008-2013	0.37	1	.	0
United States 1961-2000	0.16	6	0.71	6
United States 2001-2007	0.21	3	0.70	2
Oceania: Australia and New Zealand				
Australia 1961-2000	0.15	2	0.74	2
Australia 2001-2007	0.21	2	0.82	2
New Zealand 1961-2000	0.21	1	0.91	1
New Zealand 2001-2007	0.23	2	0.88	2

9.4. CORRELATIONS OF PROTESTS IN “THE PAST YEAR” AND “EVER”

For some countries we have information about protest behavior in two time horizons, “the past year” and “ever,” collected within the same year. The results of analyses for these two time perspectives are as follows:

(a) Correlation between proportions of persons participating in demonstrations in “the past year” and “ever,” $r = 0.597$ ($N = 303$);

(b) Correlation between proportions of persons signing a petition in “the past year” and “ever,” $r = 0.776$ ($N = 185$).

Although the correlations are relatively high ($r > 0.5$), they demonstrate that the time frame matters. Our interpretation is that respondents’ reports for “the past year” pertain to their behavior, while reports for “ever” likely involve a combination of behavior and potential for behavior. Answering *yes* to “Have you ever participated in demonstrations?” may indicate respondents’ positive attitude toward this form of protest, and possibly a desirability bias, more than recording the actual experience of “joining the crowd.” A similar interpretation could apply for signing a petition. At the same time, we should keep in mind that differences could also be of a methodological nature, that is, driven by differences in instruments, sampling, or fieldwork procedures.

CHAPTER 10

Socio-Demographic Variables

*Based on the report prepared by
Marta Kołczyńska
and other members of the team*

10.1. INTRODUCTION

In this chapter we present general data on socio-demographic variables across all 1,721 analyzed national surveys. The difference between the total N (1,721) and N provided for figures and tables is equal to the number of surveys with missing data. For details of harmonizing gender and age, rural locality and metropolitan area, and education, see Chapter 5.

10.2. GENDER AND AGE

A large majority of national surveys used in our project are well balanced with respect to gender, with the proportion of women being between 0.45 to 0.55; see Figure 10.2.1. However, in a few surveys women are underrepresented, and in over 200 surveys they are overrepresented. In most cases, the issue of gender imbalance is taken care of by the post-stratification weights the data distributors provide.¹

¹ It is advisable to use sample weights (design and post-stratification) provided by the data with caution since in a sizable proportion of surveys they are formally deficient (with sums exceeding 1 and large standard deviations): see Zieliński, Powalko & Kołczyńska 2016.

Figure 10.2.1 Distribution of the Proportion of Females by Survey.
N = 1,716.

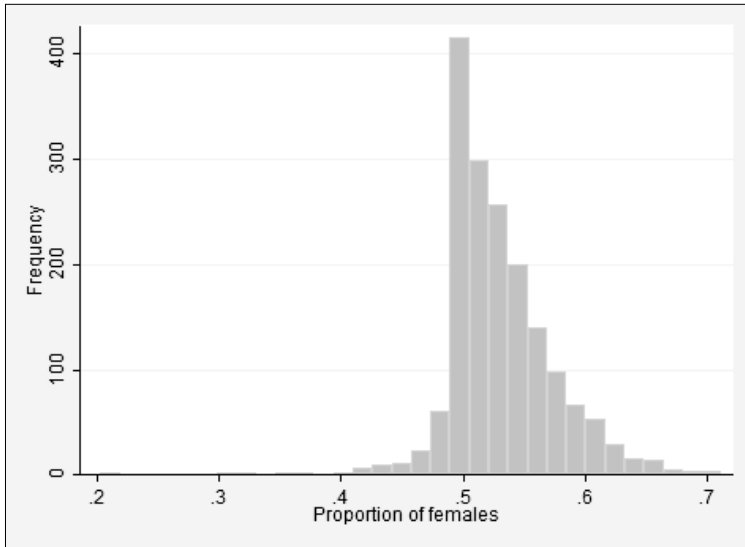
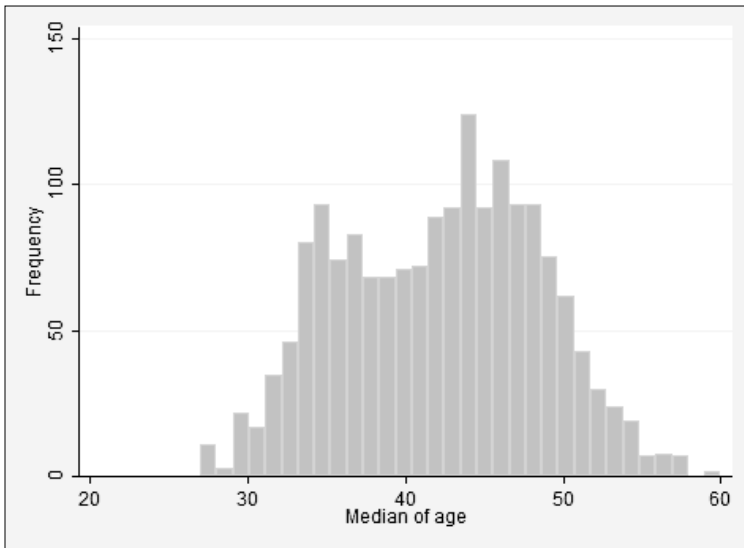


Figure 10.2.2 provides information on the distribution of respondents' median age across the national surveys included in our project. Overall, for about 90% of surveys, the median age ranges between 30 (Mexico) and 55 (Japan). In analyses, the imbalance in age structure could be corrected by post-stratification weights (but see footnote 1). For analyses where age is particularly important, we suggest comparing the age structure in the sample of the national survey and the population of the respective country at the given time.

Figure 10.2.2 Distribution of Median Age by Survey. N = 1,711

10.3. RURAL-URBAN LOCATION AND METROPOLITAN AREA

As shown in Figure 10.3.1, over 150 national surveys in the 22 international projects we analyze were conducted in urban areas (proportion of the rural population = 0). Moreover, a few surveys were conducted only in metropolitan areas (see Figure 10.3.2).² Singapore is a clear example of a city-state, but microstates with high population densities, such as Qatar or Kuwait, are also places which as a whole will be counted as metropolitan areas.

Some surveys were conducted in countries with a very high proportion of rural population, higher than 65%. Afghanistan, Bangladesh,

²Cf. Chapter 5. We define a metropolitan area as an urban settlement $\geq 500,000$ inhabitants (OECD), or $\geq 100,000$ inhabitants (UNICEF 2012) for countries that lack cities of 500,000 inhabitants, or the most populated city for countries that lack cities of 100,000 inhabitants.

Figure 10.3.1 Distribution of the Proportions of Individuals Residing in Rural Areas by Survey, N = 1,591

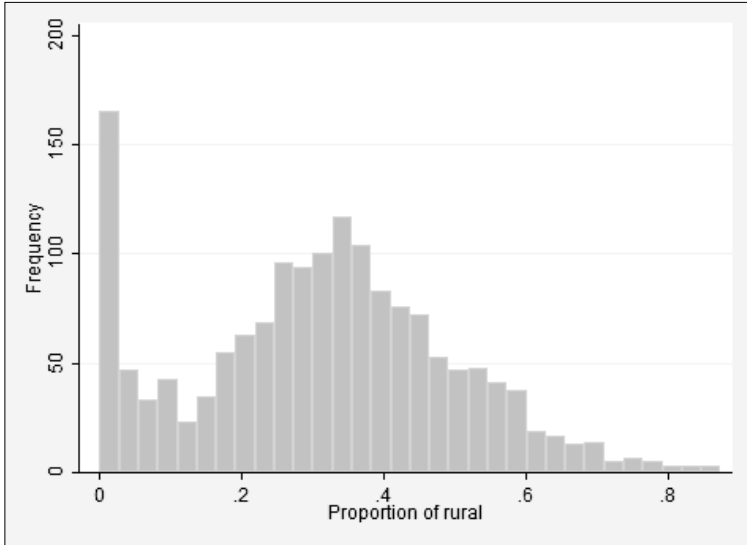
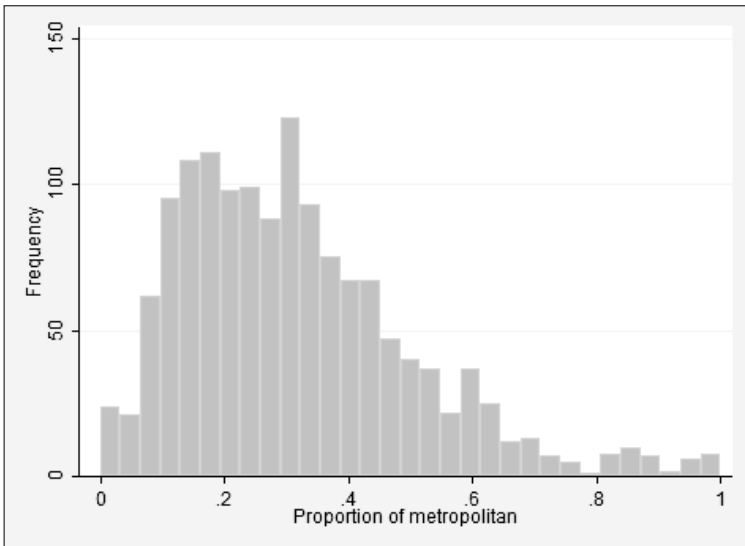


Figure 10.3.2 Distribution of the Proportion of Individuals Residing in Metropolitan Areas by Survey, N = 1,418



Cambodia, and Ethiopia are examples for the last decade. It is worthwhile to note that our data set contains surveys conducted in the 1960s and 1970s, when the proportion of rural population in the entire world exceeded 60%.

10.4. EDUCATION

Our harmonized codes for education are based on the International Standard Classification of Education (ISCED-13). For various types of analyses it would be useful to express the educational attainment of all respondents in terms of years of schooling. In this section we present distributional characteristics of a preliminary version of this new variable, which is common across the national surveys included in our project.

In recent years UNESCO has begun to develop the linkage between ISCED-13 and years of schooling. The main UNESCO document, *UIS Methodology for Estimation of Mean Years of Schooling* (2013), provides a short description of the method applied for the estimates of countries' Mean Years of Schooling (MYS). The one parameter that is needed in the proposed method is the official duration of an individual's education. For all countries, persons with no schooling, that is, less than an incomplete primary education, are considered to have 0 years of schooling. For tertiary education, a duration of 4 years is used. However, other levels of education that UIS takes into account are country dependent. In this project, we apply the simplified schema of the relationship between ISCED-13 and years of schooling, identically for all countries. This relationship takes into account the duration of a particular level and the cumulative number of years. For example, it is assumed that a complete primary education lasts 7 years but to finish secondary education someone needs this level and a completed lower secondary education (2 years) and completed upper secondary level (3 years) – altogether 12 years. Here are the numbers:

No schooling (ISCED 01 or 02) = 0	[0]
Some primary education (ISCED 03) = 4	[4]
Completed primary education (ISCED 1) = 7	[7]
Completed lower secondary education (ISCED 2) = 2	[9]
Completed upper secondary education (ISCED 3) = 3	[12]
Completed post-secondary non-tertiary education (ISCED 4) = 1	[13]
Completed short-cycle tertiary education (ISCED 5) = 2	[14]
Completed bachelor's degree or equivalent (ISCED 6) = 4	[16]
Completed master's degree or equivalent (ISCED 7) = 2	[18]
Completed doctoral degree or equivalent (ISCED 8) = 4	[22]

Table 10.3.1 provides distribution characteristics of the average number of school years attended by respondents in examples of countries. The estimates overrate the educational level in the past, and in less developed countries. This is our first attempt to convert ISCED-levels into school years. Researchers are advised to use the products prepared by Ortmanns & Schneider (2015) within the project “Synergies for Europe’s Research Infrastructures in the Social Sciences” (SERIS). This work, which is still in progress, is based on analyses of country-specific educational structures within Europe.

Our measure of years of schooling correlates with GDP per capita at the level $r = 0.416$ (for 1,347 surveys) and with Gini (Solt) on the level of $r = -0.400$ (for 1,348 surveys). The positive relationship of education with economic performance has been elaborated theoretically and documented empirically (Temple 1999; Benhabib & Spiegel 1994; Barro 1996, 2001). Our finding that in countries with a relatively higher level of education less inequality can be expected is not surprising. Indeed, as is evident in Chapter 11, income inequality is particularly high in poor countries, with little resources, and therefore a low level of education.

Table 10.3.1 Examples of Countries/Periods with Low, Medium, and High Values of Education, Measured in Years of Schooling

Country – period	Mean education (years)	SD education (years)	N surveys
Examples of countries/periods with low values			
Mali 2001-2007	5.63	0.89	4
Malawi 2001-2007	6.32	0.15	2
Mozambique 2001-2007	6.37	0.42	3
Senegal 2001-2007	6.50	0.40	2
Guatemala 2008-2013	6.68	0.13	3
Morocco 2001-2007	6.90	0.32	4
Examples of countries/periods with medium values			
India 2001-2007	8.97	0.05	2
Turkey 2008-2013	8.96	0.24	8
Portugal 2001-2007	8.93	0.60	8
China 2008-2013	8.79	1.08	2
Serbia 1966-2000	8.95	2.22	2
El Salvador 2001-2007	8.44	0.60	7
Brazil 2008-2013	8.33	0.10	3
Examples of countries/periods with high values			
Norway 2008-2013	13.14	0.30	9
United States 2008-2013	13.08	0.31	5
Russia 2008-2013	13.00	0.80	9
Denmark 2008-2013	12.91	0.67	10
Korea, Republic 2008-2013	12.51	0.34	5
Estonia 2008-2013	12.55	0.51	7
Finland 2008-2013	12.37	0.75	9
Iceland 2008-2013	12.33	0.93	4
Israel 2008-2013	12.29	0.88	9
Latvia 2008-2013	12.24	0.37	6
Lithuania 2008-2013	12.21	0.78	5
Japan 2008-2013	12.17	0.38	4
Switzerland 2008-2013	11.84	1.08	8
Netherlands 2008-2013	11.81	0.65	7
Slovenia 2008-2013	11.56	0.64	10
Germany 2008-2013	11.26	1.64	17
United Kingdom 2008-2013	11.00	0.97	12

CHAPTER 11

Contextual Variables

*Based on the report prepared by
Marta Kołczyńska
and other members of the team*

11.1. INTRODUCTION

This chapter provides distribution characteristics of three variables: the Freedom House Index of Democracy, GDP per capita, and the Gini index (SWID). As we mentioned in previous chapters, we selected these variables because of their relevance for understanding protest behavior, and the possibility of using them together with individual-level determinants – trust in public institutions, in particular. None of the country-level measures are built using survey data. In contrast to the Economist Intelligence Unit measure of democracy and the quality of governance indexes, the Freedom House Index of Democracy does not contain trust in institutions or other survey-based variables. GDP per capita is measured in purchasing power parity units and adequately reflects countries' economic performance. We use the Gini index (Solt 2015) due to its extensive country-year coverage.

In the last section of this chapter we discuss correlations between the Freedom House Index of Democracy, GDP per capita, and the Gini index (SWID). Assessing the strength of the relationship between these three variables is essential for further analyses of protest behavior. In our analyses of protest behavior, the Freedom House Index of Democracy, GDP per capita, and Gini index are treated as exogenous

variables and we do not try to establish their internal causal relationships.

11.2. HOW TO READ THE TABLES FOR THE BASIC CONTEXTUAL VARIABLES

The Freedom House Index of Democracy (FH) contains added and reversed values for political rights (abbreviated “pr”) and civil liberties (abbreviated “cl”); the scale ranges from 0 to 12. We provide minimum and maximum values of this index as well as the average, for all regions of the world, for three periods: (a) 1972–2000, (b) 2001–2007), and (c) 2008–2013. For each of the regions and periods, the number of units (country-years,) is given together with the number of countries covered.

Tables for GDP per capita and Gini index are constructed analogously to the table for the Freedom House Index of Democracy. For each of the tables, the main concerns pertaining to cross-national research should be regional and period variability. Three observations are in order:

In the case of Table 11.2.1, the differences between regions are striking, with an accompanying within-region stability of scores for different periods. In particular, high ranks are present in all parts of Europe for all three periods, with the exception of Southern and Eastern Europe prior to 2001. In other parts of the world inter-period differences are larger than in Europe.

Table 11.2.2 shows an increase in GDP per capita in all regions of the world but with varying degrees. For example, the inter-period growth in some parts of Asia exceeds 2.5 times the initial state, while in another part it is below 2. The large inter-regional differences within continents can be illustrated by data for Africa. Before 2000, GDP per capita in southern Africa was over 4 times higher than in western Africa; this ratio did not change for the 2008–2013 period.

The most frequent pattern of the distribution of the average Gini index within a region is a significant increase in time. However there are noticeable exceptions: Latin America and the Caribbean and parts of Africa. The greatest inter-regional differentiation within a continent occurs in Africa in the period 2008–2013, from 60.32 in southern Africa to 34.9 in northern Africa.

Table 11.2.1 Distribution Characteristics of the Democracy Index (Freedom House: Political rights + Civil liberties, Reversed) for Regions of the World

	Min FH pr+cl	Max FH pr+cl	Mean FH pr+cl	Number of units (country-years)	Number of countries
Africa					
Eastern Africa 1972-2000	0	9	3.23	287	10
Eastern Africa 2001-2007	1	8	5.36	70	10
Eastern Africa 2008-2013	1	8	5.23	60	10
Northern Africa 1972-2000	0	7	3.25	145	5
Northern Africa 2001-2007	0	5	2.6	35	5
Northern Africa 2008-2013	0	8	3.17	30	5
Southern Africa 1972-2000	2	11	6.67	102	4
Southern Africa 2001-2007	6	11	9.68	28	4
Southern Africa 2008-2013	8	10	9.42	24	4
Western Africa 1972-2000	0	11	4.24	229	8
Western Africa 2001-2007	2	12	8.23	56	8
Western Africa 2008-2013	2	12	8.37	48	8
Asia					
Central Asia 1972-2000	0	8	2.82	40	4
Central Asia 2001-2007	0	5	2.57	28	4
Central Asia 2008-2013	0	5	2.42	24	4
Eastern Asia 1972-2000	0	12	5.61	145	5
Eastern Asia 2001-2007	1	12	8.66	35	5
Eastern Asia 2008-2013	1	12	8.87	30	5
South-Eastern Asia 1972-2000	0	10	4.19	199	7
South-Eastern Asia 2001-2007	1	9	5.45	49	7

	Min FH pr+cl	Max FH pr+cl	Mean FH pr+cl	Number of units (country-years)	Number of countries
South-Eastern Asia 2008-2013	2	9	5.5	42	7
Southern Asia 1972-2000	1	10	5.34	116	4
Southern Asia 2001-2007	2	9	5	28	4
Southern Asia 2008-2013	2	9	5.71	24	4
Western Asia 1972-2000	0	12	6.03	302	13
Western Asia 2001-2007	0	12	6.12	91	13
Western Asia 2008-2013	0	12	6.24	78	13
Europe					
Eastern Europe 1972-2000	0	11	4.4	262	11
Eastern Europe 2001-2007	1	12	8.17	77	11
Eastern Europe 2008-2013	1	12	8.17	66	11
Northern Europe 1972-2000	8	12	11.55	291	12
Northern Europe 2001-2007	10	12	11.81	84	12
Northern Europe 2008-2013	10	12	11.86	72	12
Southern Europe 1972-2000	0	12	7.53	281	16
Southern Europe 2001-2007	5	12	9.68	105	15
Southern Europe 2008-2013	5	12	9.69	95	16
Western Europe 1972-2000	11	12	11.69	265	11
Western Europe 2001-2007	11	12	11.91	77	11
Western Europe 2008-2013	12	12	12	66	11
Latin America and the Caribbean					
Caribbean 1972-2000	0	12	7.95	116	4
Caribbean 2001-2007	1	10	7.54	28	4
Caribbean 2008-2013	5	10	8.46	24	4
Central America 1972-2000	1	12	7.56	223	8
Central America 2001-2007	6	12	9.32	56	8
Central America 2008-2013	5	12	8.77	48	8
South America 1972-2000	0	12	7.25	319	11
South America 2001-2007	6	12	8.94	77	11
South America 2008-2013	4	12	8.86	66	11
Northern America					
Northern America 1972-2000	12	12	12	58	2
Northern America 2001-2008	12	12	12	14	2
Northern America 2008-2013	12	12	12	12	2

	Min FH pr+cl	Max FH pr+cl	Mean FH pr+cl	Number of units (country-years)	Number of countries
Oceania					
Australia and New Zealand 1972-2000	12	12	12	58	2
Australia and New Zealand 2001-2007	12	12	12	14	2
Australia and New Zealand 2008-2013	12	12	12	12	2

Table 11.2.2 Distribution Characteristics of GDP Per Capita for Regions of the World

	Min GDP per capita	Max GDP per capita	Mean GDP per capita	Number of units (coun- try-years)	Number of countries
Africa					
Eastern Africa 1980-2000	173	1217	572.53	190	10
Eastern Africa 2001-2007	294	1593	836.2	70	10
Eastern Africa 2008-2013	373	1885	1170.42	60	10
Northern Africa 1980-2000	564	5273	2460.82	105	5
Northern Africa 2001-2007	1374	8401	4432.71	35	5
Northern Africa 2008-2013	2164	10091	6083.37	30	5
Southern Africa 1980-2000	366	8840	3644.31	74	4
Southern Africa 2001-2007	1067	14344	6626.89	28	4
Southern Africa 2008-2013	1681	17391	8924.46	24	4
Western Africa 1980-2000	343	2029	846.64	148	8
Western Africa 2001-2007	311	3212	1391.98	56	8
Western Africa 2008-2013	423	4299	1955.73	48	8
Asia					
Central Asia 1980-2000	750	4823	1880.67	36	4
Central Asia 2001-2007	975	10840	3192.86	28	4
Central Asia 2008-2013	1773	14970	5069.29	24	4
Eastern Asia 1980-2000	251	26180	10075.63	116	6
Eastern Asia 2001-2007	2116	42218	19307.4	42	6
Eastern Asia 2008-2013	3799	53317	27077.89	36	6
South-Eastern Asia 1980-2000	299	32262	4658.4	141	7

	Min GDP per capita	Max GDP per capita	Mean GDP per capita	Number of units (coun- try-years)	Number of countries
South-Eastern Asia 2001-2007	988	50302	9666.37	49	7
South-Eastern Asia 2008-2013	1946	63285	13643.5	42	7
Southern Asia 1980-2000	302	6855	1855.02	84	4
Southern Asia 2001-2007	879	11489	3614.39	28	4
Southern Asia 2008-2013	1414	13238	5150.79	24	4
Western Asia 1980-2000	1030	21242	8889.66	204	12
Western Asia 2001-2007	2077	27632	12263.49	87	13
Western Asia 2008-2013	2249	32505	15809.95	78	13
Europe					
Eastern Europe 1980-2000	1298	15453	6395.34	143	11
Eastern Europe 2001-2007	1613	25294	10861.49	77	11
Eastern Europe 2008-2013	2862	28309	15739.86	66	11
Northern Europe 1980-2000	4653	39090	16592.04	208	12
Northern Europe 2001-2007	8546	52427	28559.39	84	12
Northern Europe 2008-2013	14221	55815	33964.39	72	12
Southern Europe 1980-2000	1847	24669	10605.29	144	14
Southern Europe 2001-2007	4233	30646	14361.71	98	14
Southern Europe 2008-2013	6901	30863	17591.01	84	14
Western Europe 1980-2000	6249	55590	19442.05	231	11
Western Europe 2001-2007	26846	81357	34811.53	77	11
Western Europe 2008-2013	33238	82364	42100.58	66	11
Latin America and the Caribbean					
Caribbean 1980-2000	832	10308	3293.28	64	4
Caribbean 2001-2007	1029	19464	7558.39	28	4
Caribbean 2008-2013	1163	21287	9919.04	24	4
Central America 1980-2000	1448	10873	4021.1	127	7
Central America 2001-2007	2557	13971	6810.92	52	8
Central America 2008-2013	2910	16027	8498.65	48	8
South America 1980-2000	1867	9855	4625.33	231	11
South America 2001-2007	3152	14742	7376.61	77	11
South America 2008-2013	4299	19160	10665.82	66	11
Northern America					
Northern America 1980-2000	11115	35252	21129.43	42	2

	Min GDP per capita	Max GDP per capita	Mean GDP per capita	Number of units (coun- try-years)	Number of countries
Northern America 2001-2008	29862	46467	37293.57	14	2
Northern America 2008-2013	37946	51058	44044.75	12	2
Oceania					
Australia and New Zealand 1980-2000	8247	27250	15869.17	42	2
Australia and New Zealand 2001-2007	20491	37069	27989.5	14	2
Australia and New Zealand 2008-2013	26658	43030	33866.33	12	2

Table 11.2.3 Distribution Characteristics of the Gini Index (SWIID) for Regions of the World

	Min Gini	Max Gini	Mean Gini	Number of units (country- years)	Number of countries
Africa					
Eastern Africa 1960-2000	23.64	67.82	45.38	151	10
Eastern Africa 2001-2007	29.4	57.35	43.4	70	10
Eastern Africa 2008-2013	32.12	54.68	43.6	30	9
Northern Africa 1960-2000	31.6	52.87	39.26	98	5
Northern Africa 2001-2007	32.08	41.04	37.05	26	4
Northern Africa 2008-2013	31.56	37	34.9	6	3
Southern Africa 1960-2000	51.19	69.35	58.97	71	4
Southern Africa 2001-2007	49.93	68.16	59.45	22	4
Southern Africa 2008-2013	58.85	63.28	60.32	7	2
Western Africa 1960-2000	33.23	55.29	43.69	74	6
Western Africa 2001-2007	36.06	55.75	41.77	44	8
Western Africa 2008-2013	33.5	45.93	40.01	13	4
Asia					
Central Asia 1960-2000	22.39	52.05	31.58	64	4
Central Asia 2001-2007	30.99	36.72	33.9	26	4
Central Asia 2008-2013	29.62	35.13	32.19	11	3
Eastern Asia 1960-2000	22.27	48.89	31.08	180	6

	Min Gini	Max Gini	Mean Gini	Number of units (country-years)	Number of countries
Eastern Asia 2001-2007	29.25	54.13	37.23	42	6
Eastern Asia 2008-2013	30.22	53.56	38.37	27	6
South-Eastern Asia 1960-2000	31.44	47.2	40.6	186	7
South-Eastern Asia 2001-2007	34.5	45.92	40.6	49	7
South-Eastern Asia 2008-2013	36.49	43.24	40.52	32	7
Southern Asia 1960-2000	29.86	47.54	39.47	145	4
Southern Asia 2001-2007	29.83	49.9	40.7	28	4
Southern Asia 2008-2013	33.05	51.36	40.99	14	4
Western Asia 1960-2000	19.99	56.75	34.46	200	11
Western Asia 2001-2007	19.23	42.1	35.65	73	11
Western Asia 2008-2013	28.94	42.06	36.31	38	9
Europe					
Eastern Europe 1960-2000	15.68	44.67	25.99	282	11
Eastern Europe 2001-2007	23.65	40.8	31.12	77	11
Eastern Europe 2008-2013	23.94	41.25	31.07	56	11
Northern Europe 1960-2000	17.96	36.08	26.59	373	12
Northern Europe 2001-2007	20.65	36.38	29.95	84	12
Northern Europe 2008-2013	23.23	35.81	30.32	69	12
Southern Europe 1960-2000	16.49	38.52	30.53	263	15
Southern Europe 2001-2007	21.23	40.17	31.69	101	15
Southern Europe 2008-2013	23.77	41.63	31.24	49	11
Western Europe 1960-2000	22.18	40.37	26.59	339	11
Western Europe 2001-2007	25.28	31.48	27.25	77	11
Western Europe 2008-2013	25.06	31.08	27.6	56	11
Latin America and the Caribbean					
Caribbean 1960-2000	29.6	59.27	45.2	88	5
Caribbean 2001-2007	37.48	54.68	44	24	5
Caribbean 2008-2013	37.85	45.2	41.19	8	2
Central America 1960-2000	38.59	55.65	48.17	152	8
Central America 2001-2007	42.11	53.43	47.92	49	7
Central America 2008-2013	39.03	50.5	45.57	31	7
South America 1960-2000	31.42	63.51	46.54	264	11
South America 2001-2007	33.81	55.44	47.42	76	11
South America 2008-2013	35.98	50.85	44.4	49	10

	Min Gini	Max Gini	Mean Gini	Number of units (country-years)	Number of countries
Northern America					
Northern America 1960-2000	20.32	37.21	30.37	82	2
Northern America 2001-2008	31.5	37.82	34.47	14	2
Northern America 2008-2013	31.38	37.53	34.8	9	2
Oceania					
Australia and New Zealand 1960-2000	24.81	33.81	28.12	81	2
Australia and New Zealand 2001-2007	30.42	33.67	32.06	14	2
Australia and New Zealand 2008-2013	32.67	33.63	33.13	11	2

11.3. CORRELATION BETWEEN CONTEXTUAL VARIABLES

The correlation between the Freedom House Index of Democracy (added and reversed values for political freedom and civil rights) and GDP per capita is relatively strong and similar over the continental regions, $0.65 < r < 0.75$, with the exception of Africa, where it is significantly lower, $r < 0.5$. These correlations are relatively stable in time, a finding in agreement with that in the literature (Acemoglu, Naidu, Restrepo & Robinson 2014).

The linear relationship between GDP and Gini index is $r = 0.534$. Our data do not reveal the inverse U-shape relationship between level of economic performance and income inequality found on various occasions in testing Kuznets' hypothesis (for a review, see Heshmati 2004). Finally, the correlation of democracy and inequality ranges from $-0.46 < r < -0.23$, depending on the continent and period. In considering this relationship, reference should be made to the empirical literature, which has reported quite mixed results: for a recent review, see Knusten 2016.

PART FIVE

MODELING PROTEST
BEHAVIOR

CHAPTER 12

Individual and Contextual Variables: From Correlations to Multilevel Modeling

*Based on reports by
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Joshua Kjerulf Dubrow and Marta Kołczyńska*

12.1. INTRODUCTION

The purpose of this chapter is to show how the data from the Harmonization Project can be analyzed to answer the questions about determinants of protest behavior. While we do not do a comprehensive testing of substantive hypotheses, the analyses we report provide basic empirical illustrations of the relationships that Chapter 1 sketched out. The dependent variables are, respectively, participation in demonstrations (yes=1; no=0) and signing petitions (yes=1; no =0), in two time frames of the event respondents were asked about: “last year” or “ever.” At the individual level, the model includes: respondents’ socio-demographic characteristics – gender, age, rural locality, metropolitan area, and education – and attitudes that should matter for likelihood of protest: trust in political institutions as a factor of trust in parliament, legal system and political parties (cf. Chapter 8), and interest in politics.

At the macro-level, we include countries’ level of democracy and of economic development (GDP per capita). In addition, a basic theoretical assumption we made in Chapter 1 is that the cross-level interaction of peoples’ trust in political institutions and their country’s degree of democracy influences protest behavior, independently

of the effects of other variables. In our analyses, we also take into account countries' level of income inequality (Gini index).

Below we present various analyses pertaining to these relations. We start with correlations of micro- and macro variables with protest behavior. Next, we provide results from multi-level logistic regression models carried out in STATA, and signal methodological problems that we encountered.

12.2. GROSS EFFECTS OF INDIVIDUAL-LEVEL VARIABLES ON PROTEST BEHAVIOR

In Table 12.2.1 we present correlations of participation in demonstrations with gender, age, rural locality, metropolitan area, education, interest in politics, and trust in institutions. The table is constructed for continental regions and three periods: until 2000, 2001–2007, and 2008–2013. Data for participation in demonstrations during the last year are sparse in comparison with those for having participated “ever.”

The results presented in Table 12.2.1 can be summarized as follows:

1. With exception of Northern America (2008–2013), the relationship of gender with participation in demonstrations, “last year” or “ever,” is uniform for all regions and periods: the chances for women to participate in demonstrations are smaller than for men.
2. Generally, age is negatively related to, or is irrelevant for, participation in demonstrations independently of how respondents were asked about the timing of the event. The only exception is Asia (2008–2013), with very weak positive correlation, when the respondents were asked about taking part in demonstrations “ever.”
3. The correlation of rural place of living with participation in demonstrations is either negative or is absent in all regions and periods. Living in metropolitan area correlates positively with taking part in demonstrations.

4. Education and interest in politics are relatively strongly related to participation in demonstrations: the probability of taking part in this activity increases with higher levels of education and greater interest in politics. With exception of Northern America, interest in politics has a more visible gross effect on taking part in demonstrations than education.
5. The gross impact of trust in political institutions is relatively weak and changing with respect to direction. In most regions and periods, the relation is negative. However, it is positive in Europe and Northern America. We will further examine the impact of trust, controlling for the other variables, and also accounting for its interaction with democracy.

Table 12.2.1 Correlations of Individual-Level Variables with Participation in Demonstrations

	Participation in demonstrations: Last year		Participation in demonstrations: "Ever"	
	r	N	r	N
Africa until 2000				
Female (F = 1, M = 0)	.	-	-0.094	22099
Age (years)	.	-	-0.074	21956
Rural locality	.	-	-0.027	20638
Metropolitan area	.	-	0.042	10505
Education (levels)	.	-	0.138	22122
Interest in politics (scale 0-4)	.	-	0.172	14112
Trust in institutions (scale 0-10)	.	-	-0.008	7108
Africa 2001-2007				
Female (F = 1, M = 0)	-0.078	50968	-0.090	23400
Age (years)	-0.052	50041	0.009	23277
Rural locality	-0.043	50954	-0.061	21152
Metropolitan area	0.038	1161	0.021	16784
Education (levels)	0.113	50814	0.117	23231
Interest in politics (scale 0-4)	0.108	50254	0.183	22825
Trust in institutions (scale 0-10)	.	-	-0.011	10642

	Participation in demonstrations: Last year		Participation in demonstrations: "Ever"	
	r	N	r	N
Africa 2008-2013				
Female (F = 1, M = 0)	-0.054	26780	-0.037	3049
Age (years)	-0.036	26465	-0.034	3049
Rural locality	-0.051	26780	0.003	1943
Metropolitan area	.	-	0.005	1943
Education (levels)	0.094	26739	0.110	3049
Interest in politics (scale 0-4)	0.105	26551	0.118	3045
Trust in institutions (scale 0-10)	.	-	.	-
Asia until 2000				
Female (F = 1, M = 0)	.	-	-0.122	33105
Age (years)	.	-	0.007	31435
Rural locality	.	-	-0.015	27084
Metropolitan area	.	-	0.010	21575
Education (levels)	.	-	0.123	29777
Interest in politics (scale 0-4)	.	-	0.195	32011
Trust in institutions (scale 0-10)	.	-	-0.058	21772
Asia 2001-2007				
Female (F = 1, M = 0)	-0.074	10031	-0.108	50851
Age (years)	-0.085	9982	0.000	50792
Rural locality	-0.003	8729	-0.070	37819
Metropolitan area	0.019	8230	0.091	37825
Education (levels)	0.131	9403	0.140	50456
Interest in politics (scale 0-4)	0.137	6488	0.153	41206
Trust in institutions (scale 0-10)	-0.103	5223	-0.064	20234
Asia 2008-2013				
Female (F = 1, M = 0)	-0.041	16017	-0.058	18783
Age (years)	-0.063	15915	0.056	18718
Rural locality	-0.037	15903	-0.104	18031
Metropolitan area	0.016	15903	0.112	16011
Education (levels)	0.139	15919	0.086	18783
Interest in politics (scale 0-4)	0.148	12889	0.175	9136
Trust in institutions (scale 0-10)	-0.021	12086	-0.102	15983

	Participation in demonstrations: Last year		Participation in demonstrations: "Ever"	
	r	N	r	N
Europe until 2000				
Female (F = 1, M = 0)	.	-	-0.088	188627
Age (years)	.	-	-0.090	188303
Rural locality	.	-	-0.089	163925
Metropolitan area	.	-	0.079	146180
Education (levels)	.	-	0.180	113765
Interest in politics (scale 0-4)	.	-	0.205	143448
Trust in institutions (scale 0-10)	.	-	0.028	41827
Europe 2001-2007				
Female (F = 1, M = 0)	-0.021	187863	-0.064	81271
Age (years)	-0.094	187289	-0.061	81151
Rural locality	-0.034	184586	-0.101	79806
Metropolitan area	0.054	182421	0.085	78797
Education (levels)	0.119	160877	0.161	80926
Interest in politics (scale 0-4)	0.126	130359	0.193	59320
Trust in institutions (scale 0-10)	0.052	111998	0.064	39662
Europe 2008-2013				
Female (F = 1, M = 0)	-0.031	175249	-0.077	88270
Age (years)	-0.077	175025	-0.024	88109
Rural locality	-0.052	174874	-0.101	84767
Metropolitan area	0.060	174874	0.072	74848
Education (levels)	0.086	174456	0.126	85384
Interest in politics (scale 0-4)	0.115	133729	0.226	56199
Trust in institutions (scale 0-10)	0.008	128068	0.049	80473
Latin America and the Caribbean until 2000				
Female (F = 1, M = 0)	.	-	-0.067	88776
Age (years)	.	-	-0.007	87761
Rural locality	.	-	-0.018	41114
Metropolitan area	.	-	0.038	38113
Education (levels)	.	-	0.134	81351
Interest in politics (scale 0-4)	.	-	0.214	86203
Trust in institutions (scale 0-10)	.	-	0.029	75282

	Participation in demonstrations: Last year		Participation in demonstrations: "Ever"	
	r	N	r	N
Latin America and the Caribbean 2001-2007				
Female (F = 1, M = 0)	-0.029	915	-0.066	181458
Age (years)	-0.027	915	0.001	181425
Rural locality	.	-	-0.025	175751
Metropolitan area	.	-	0.047	162128
Education (levels)	0.192	908	0.119	135138
Interest in politics (scale 0-4)	0.200	905	0.198	108667
Trust in institutions (scale 0-10)	0.147	833	0.040	158692
Latin America and the Caribbean 2008-2013				
Female (F = 1, M = 0)	-0.050	57758	-0.061	31039
Age (years)	-0.026	57482	0.011	30995
Rural locality	-0.020	57758	-0.006	29573
Metropolitan area	0.030	57758	0.030	29573
Education (levels)	.	-	0.113	20615
Interest in politics (scale 0-4)	0.132	57194	0.197	11785
Trust in institutions (scale 0-10)	-0.0164	54248	0.009	28785
Northern America until 2000				
Female (F = 1, M = 0)	.	-	-0.090	15455
Age (years)	.	-	-0.075	15450
Rural locality	.	-	-0.008	11601
Metropolitan area	.	-	0.057	11656
Education (levels)	.	-	0.221	8637
Interest in politics (scale 0-4)	.	-	0.176	10644
Trust in institutions (scale 0-10)	.	-	-0.021	1381
Northern America 2001-2007				
Female (F = 1, M = 0)	.	-	-0.044	7126
Age (years)	.	-	-0.015	6990
Rural locality	.	-	-0.058	5789
Metropolitan area	.	-	0.086	5770
Education (levels)	.	-	0.199	5900
Interest in politics (scale 0-4)	.	-	0.178	5915
Trust in institutions (scale 0-10)	.	-	0.040	4266

	Participation in demonstrations: Last year		Participation in demonstrations: "Ever"	
	r	N	r	N
Northern America 2008-2013				
Female (F = 1, M = 0)	.	-	0.023	2017
Age (years)	.	-	-0.058	1971
Rural locality	.	-	.	-
Metropolitan area	.	-	.	-
Education (levels)	.	-	.	-
Interest in politics (scale 0-4)	.	-	.	-
Trust in institutions (scale 0-10)	.	-	-0.025	1970
Oceania until 2000				
Female (F = 1, M = 0)	.	-	-0.035	4263
Age (years)	.	-	-0.053	4243
Rural locality	.	-	-0.043	4230
Metropolitan area	.	-	0.079	3025
Education (levels)	.	-	0.241	2990
Interest in politics (scale 0-4)	.	-	0.242	3060
Trust in institutions (scale 0-10)	.	-	0.058	2918
Oceania 2001-2007				
Female (F = 1, M = 0)	.	-	-0.012	5352
Age (years)	.	-	-0.042	5341
Rural locality	.	-	-0.023	5267
Metropolitan area	.	-	0.045	5267
Education (levels)	.	-	0.178	5312
Interest in politics (scale 0-4)	.	-	0.191	5350
Trust in institutions (scale 0-10)	.	-	0.050	2137

Table 12.2.2 pertains to signing petitions. Unfortunately, in the international survey projects which we examine, the question on signing petitions last year was asked only in Europe and Asia. Thus, inter-continental and period differentiation can be assessed only for signing petitions "ever." Generally, the results for the relationship between individual-level variables and signing petitions "ever" are

similar to those for taking part in demonstrations “ever.” For women the chances to sign a petition are smaller than for men. In most instances age and rural locality correlate negatively with signing petitions, while living in metropolitan area, positively. Education and interest in politics are, again, relatively strongly related to the discussed form of protest. And, again, the gross impact of trust in political institutions is relatively weak and mixed with respect to direction.

Table 12.2.2 Correlations of Individual-level Variables with Signing Petitions

Petition	Signing petitions: Last year		Signing petitions: “Ever”	
	r	N	r	N
Africa until 2000				
Female (F = 1, M = 0)	.	-	-0.020	12657
Age (years)	.	-	0.090	12612
Rural locality	.	-	-0.056	11472
Metropolitan area	.	-	0.033	10264
Education (levels)	.	-	0.164	12613
Interest in politics (scale 0-4)	.	-	0.163	13672
Trust in institutions (scale 0-10)	.	-	-0.002	6900
Africa 2001-2007				
Female (F = 1, M = 0)	.	-	-0.064	22339
Age (years)	.	-	0.067	22228
Rural locality	.	-	-0.088	20195
Metropolitan area	.	-	0.092	15984
Education (levels)	.	-	0.187	22181
Interest in politics (scale 0-4)	.	-	0.140	21831
Trust in institutions (scale 0-10)	.	-	-0.025	10190
Africa 2008-2013				
Female (F = 1, M = 0)	.	-	-0.069	3049
Age (years)	.	-	0.026	3049
Rural locality	.	-	-0.038	1943
Metropolitan area	.	-	-0.015	1943
Education (levels)	.	-	0.066	3049

Petition	Signing petitions: Last year		Signing petitions: “Ever”	
	r	N	r	N
Interest in politics (scale 0-4)	.	-	0.094	3045
Trust in institutions (scale 0-10)	.	-	.	0
Asia until 2000				
Female (F = 1, M = 0)	.	-	-0.057	29214
Age (years)	.	-	0.072	27697
Rural locality	.	-	-0.035	23313
Metropolitan area	.	-	0.011	19764
Education (levels)	.	-	0.162	26123
Interest in politics (scale 0-4)	.	-	0.217	28301
Trust in institutions (scale 0-10)	.	-	-0.060	21006
Asia 2001-2007				
Female (F = 1, M = 0)	-0.060	5774	-0.058	49888
Age (years)	-0.047	5725	0.025	49830
Rural locality	-0.041	5749	-0.096	37089
Metropolitan area	0.016	525-	0.127	37095
Education (levels)	0.206	5238	0.166	49500
Interest in politics (scale 0-4)	0.205	5254	0.173	40305
Trust in institutions (scale 0-10)	-0.073	2584	-0.065	20045
Asia 2008-2013				
Female (F = 1, M = 0)	-0.004	15969	-0.067	18556
Age (years)	-0.041	15867	0.008	18495
Rural locality	-0.063	15855	-0.010	17809
Metropolitan area	0.040	15855	0.089	15789
Education (levels)	0.196	15871	0.040	18556
Interest in politics (scale 0-4)	0.156	12847	0.142	8917
Trust in institutions (scale 0-10)	-0.010	12-47	-0.033	15801
Europe until 2000				
Female (F = 1, M = 0)	.	-	-0.042	169557
Age (years)	.	-	-0.094	169250
Rural locality	.	-	-0.087	147623
Metropolitan area	.	-	0.051	130539
Education (levels)	.	-	0.166	108093
Interest in politics (scale 0-4)	.	-	0.220	125366
Trust in institutions (scale 0-10)	.	-	0.036	37108

Petition	Signing petitions: Last year		Signing petitions: "Ever"	
	r	N	r	N
Europe 2001-2007				
Female (F = 1, M = 0)	0.000	153423	-0.028	77201
Age (years)	-0.090	152467	-0.069	77078
Rural locality	-0.037	152691	-0.079	75818
Metropolitan area	0.043	152526	0.039	74812
Education (levels)	0.179	126587	0.162	76850
Interest in politics (scale 0-4)	0.198	126541	0.230	55324
Trust in institutions (scale 0-10)	0.113	82414	0.117	39252
Europe 2008-2013				
Female (F = 1, M = 0)	-0.001	173771	-0.045	86856
Age (years)	-0.090	173547	-0.038	86705
Rural locality	-0.049	173399	-0.106	83462
Metropolitan area	0.035	173399	0.018	73543
Education (levels)	0.178	172989	0.159	84007
Interest in politics (scale 0-4)	0.201	133393	0.237	54822
Trust in institutions (scale 0-10)	0.137	126847	0.086	79349
Latin America and the Caribbean until 2000				
Female (F = 1, M = 0)	.	-	-0.066	27392
Age (years)	.	-	0.032	26615
Rural locality	.	-	-0.011	22364
Metropolitan area	.	-	0.042	20633
Education (levels)	.	-	0.162	22827
Interest in politics (scale 0-4)	.	-	0.238	25976
Trust in institutions (scale 0-10)	.	-	0.031	18587
Latin America and the Caribbean 2001-2007				
Female (F = 1, M = 0)	.	-	-0.040	112804
Age (years)	.	-	0.029	112779
Rural locality	.	-	-0.036	107134
Metropolitan area	.	-	0.048	101655
Education (levels)	.	-	0.144	112726
Interest in politics (scale 0-4)	.	-	0.205	56785
Trust in institutions (scale 0-10)	.	-	0.055	96592

Petition	Signing petitions: Last year		Signing petitions: "Ever"	
	r	N	r	N
Latin America and the Caribbean 2008-2013				
Female (F = 1, M = 0)	.	-	-0.025	19861
Age (years)	.	-	0.052	19861
Rural locality	.	-	-0.008	18423
Metropolitan area	.	-	0.050	18423
Education (levels)	.	-	0.142	19861
Interest in politics (scale 0-4)	.	-	0.213	1434
Trust in institutions (scale 0-10)	.	-	0.040	18861
Northern America until 2000				
Female (F = 1, M = 0)	.	-	-0.020	15298
Age (years)	.	-	-0.043	15296
Rural locality	.	-	0.008	11486
Metropolitan area	.	-	0.007	11540
Education (levels)	.	-	0.244	8581
Interest in politics (scale 0-4)	.	-	0.205	10577
Trust in institutions (scale 0-10)	.	-	-0.065	1377
Northern America 2001-2007				
Female (F = 1, M = 0)	.	-	0.032	5861
Age (years)	.	-	0.034	5745
Rural locality	.	-	-0.018	5731
Metropolitan area	.	-	-0.016	5713
Education (levels)	.	-	0.171	5840
Interest in politics (scale 0-4)	.	-	0.187	5856
Trust in institutions (scale 0-10)	.	-	-0.013	3087
Oceania until 2000				
Female (F = 1, M = 0)	.	-	0.027	4243
Age (years)	.	-	0.011	4224
Rural locality	.	-	-0.021	4212
Metropolitan area	.	-	-0.014	3017
Education (levels)	.	-	0.153	2982
Interest in politics (scale 0-4)	.	-	0.200	3050
Trust in institutions (scale 0-10)	.	-	-0.015	2911

Petition	Signing petitions: Last year		Signing petitions: “Ever”	
	r	N	r	N
Oceania 2001-2007				
Female (F = 1, M = 0)	.	-	0.078	5308
Age (years)	.	-	-0.024	5298
Rural locality	.	-	0.038	5222
Metropolitan area	.	-	-0.019	5222
Education (levels)	.	-	0.079	5271
Interest in politics (scale 0-4)	.	-	0.159	5309
Trust in institutions (scale 0-10)	.	-	-0.010	2130

12.3. THE IMPACT OF DEMOCRACY, ECONOMIC PERFORMANCE AND INEQUALITY ON PROTEST BEHAVIOR

We begin this section with a summary of the original ideas and research questions of Dubrow, Slomczynski and Tomescu-Dubrow (2008). They were interested in the extent to which democracy, economic development and economic inequality aid or inhibit political protest. On the country-level, they studied “soft protest” defined as the proportion of persons who participated in demonstrations, and/or signed petitions, and/or called politicians in Europe. Analyses of the 3rd wave of the European Social Survey (2006) revealed that the proportion of protesters varied from 0.09 (in Bulgaria) to 0.51 (in Sweden), with a mean value of 0.31, and standard deviation of 0.46. To explain this large cross-national variability, Dubrow et al. classified France, United Kingdom, Belgium, Austria, Germany, Ireland, Switzerland, Finland, Denmark, Norway, Netherlands, Sweden, Spain, and Portugal as “old” democracies (all on the highest level of the Freedom House Index) and Bulgaria, Poland, Slovakia, Hungary, Cyprus, Estonia, Slovenia, Russia and Ukraine as “new” democracies. They also used an additional measure of democracy, the EIU Democracy Index. GDP per capita and the Gini index (CIA 2008)

reflected the level of economic performance and income inequality of the countries included in the study.

Old democracies had a higher mean proportion of soft protestors (0.395) than new democracies (0.176). This difference was statistically significant ($F = 35.02$, $p < 0.01$; $\eta^2 = 0.625$). The old/new democracy-divide was a substantial factor in explaining soft political protest. In addition, in wealthier countries protest was more likely to occur than in poorer countries. Economic inequality had a strong, predominantly linear negative relationship to soft political protest, although the growth model provided a somewhat better fit. As economic inequality rose, the proportion of soft political protestors declined.

Table 12.3.1 Correlation of Proportion of People Taking Part in Demonstrations at the Country-Year Level with the Degree of Democracy (Freedom House Index), GDP per Capita and Income Inequality (Gini Index, SWIID), for Continental Regions of the World

	Freedom House Index	GDP per Capita	Gini Index (SWIID)
Taking Part in Demonstrations in Last Year			
Africa	0.105 (N = 56)	0.296 (N = 56)	0.120 (N = 48)
Asia	0.109 (N = 16)	0.244 (N = 16)	0.099 (N = 15)
Europe	0.050 (N = 226)	0.364 (N = 224)	-0.062 (N = 217)
Latin America and Caribbean	-0.455 (N = 37)	-0.474 (N = 37)	0.259 (N = 27)
Taking Part in Demonstrations "Ever"			
Africa	0.010 (N = 31)	-0.138 (N = 30)	-0.120 (N = 30)
Asia	0.446 (N = 80)	0.198 (N = 80)	-0.084 (N = 76)
Europe	0.257 (N = 280)	0.446 (N = 280)	-0.124 (N = 297)
Latin America and Caribbean	0.053 (N = 255)	0.000 (N = 246)	0.054 (N = 252)

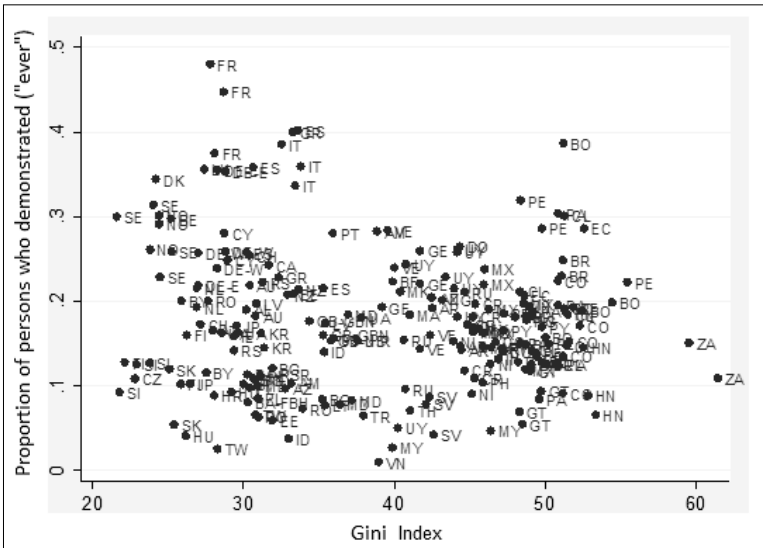
Following this line of work, as well as other relevant research (e.g., Dalton, Van Sickle & Weldon 2010; Solt 2015), in the Harmonization Project we paid special attention to the effects of democracy, economic development and inequality on participation in demonstrations and on signing petitions. The description of the macro variables is available

in Chapters 6 and 7. Table 12.3.1 provides correlations of proportion of people taking part in demonstrations with the three country characteristics. All variables are measured at the country-year level, that is, for a given country in the year of a specific national survey.

Clearly, the relationships of Freedom House Index, GDP per capita and Gini Index with proportion of people taking part in demonstrations depends on continental regions. For example, in Europe the correlation between GDP per capita and proportion of people taking part in demonstrations in the last year is positive and above 0.3, while in Latin America and the Caribbean it is stronger but negative ($r = -0.474$).

Large differences, including changes in the sign of the correlation, appear depending on the time frame for participation in demonstrations - "in the last year" versus "ever." In Latin America, the correlation for the Freedom House index is relatively high and negative for having demonstrated within the last year, but weak and positive for "demonstrated ever." GDP for Africa also changes sign depending on the version of the question about demonstrations.

Figure 12.3.1 Relationship between Income Inequality (Gini Index) and Proportion of Persons who Demonstrated ("Ever")



Lumping all continental regions together blurs the relationships between variables. This can be illustrated using the Gini Index. Figure 12.3.1 depicts the relationship between Gini Index and the proportion of people who “ever” demonstrated. The overall negative relationship for a large number of countries and time periods is distorted by a group of Latin American and Caribbean countries with opposite tendencies.

12.4. EXAMPLES OF MULTILEVEL REGRESSION MODELS

Let us return to the theoretical model described in Chapter 1 and summarized at the beginning of this chapter. In Table 12.4.1 we present the results of regressing the stipulated individual- and macro-variables, as well as a cross-level interaction, on the probability of participating in demonstrations during the last year. The data consist of information on 197,675 respondents from 28 countries in Europe, and span the period 2004–2013. We stress from the beginning that the data are not randomly selected – neither do individuals included in the analysis constitute a random sample of the population of Europe, nor do the 28 countries represent a random sample of all countries of Europe. Thus, our analyses belong to descriptive rather than inferential statistics. We provide the standard errors to show the variability of coefficients; p-values illustrate what one *could* expect if the data would be representative in a statistical sense.

Analyses in Table 12.4.1 are based on the assumption that respondents are nested in *national surveys* and national surveys are nested in *countries*. Since individuals are nested in national surveys conducted in specific countries and specific years, Table 12.4.1 presents a conservative test of, and provides accurate estimates for, the impact of individual determinants. From statistical point of view it is correct; the standard errors are not only robust but also interpretable. However, there are problems with contextual variables. Note that degree of democracy (Freedom House Index, FH), GDP per capita, and Gini index are assigned to country-years (national surveys). Within countries the variation of these variables is limited by the small number of

surveys within a given country ($N < 10$), sometimes not exceeding one or two per country. Thus, for the estimates of effects of the degree of democracy (Freedom House Index, FH), GDP per capita, and Gini index a more relaxed model is appropriate. In such a model people are nested only in countries and time is controlled via dummies for the years in which surveys were conducted (with one year taken as reference). We present this model in Table 12.4.2.

Table 12.4.1 Multilevel Logistic Regression of Participation in Demonstrations in Last Year on Individual and Country-Level Variables, with Respondents Nested in National Surveys and Countries, for Europe, 2004–2013

Independent variables	Log (p / 1 - p)		Odds ratios	p <
	B	SE		
Individual level variables				
Gender (Female = 1)	0.011	0.019	1.012	0.548
Age (years)	-0.022	0.001	0.978	0.000
Rural locality (yes = 1, otherwise = 0)	-0.365	0.022	0.694	0.000
Education (levels)	0.107	0.006	1.113	0.000
Interest in politics (scale, 0-4)	0.625	0.012	1.869	0.000
Trust in institutions (z-scores)	-0.048	0.014	0.953	0.000
Country-level variables				
FH (highest degree = 1, otherwise = 0)*	-0.064	0.089	0.937	0.463
GDP per capita in thousands	0.007	0.009	1.007	0.475
Gini index (SWIID)	-0.008	0.028	0.992	0.781
Cross-level interaction				
FH * Trust in institutions	-0.034	0.007	0.967	0.000
Intercept				
Constant	-3.334	0.949		0.000
SD (country)	0.704	0.108		
SD (country-year)	0.304	0.028		

Wald $\chi^2 = 5,097.02$, LL = -41,472.87, N(observations) = 197,675
 N(country-years) = 110, N(countries) = 28

* Highest degree = 12 on the scale from 0 to 12

Table 12.4.2 Multilevel Logistic Regression of Participation in Demonstrations in Last Year on Individual and Country-Level Variables, with Respondents Nested in Countries, for Europe, 2004–2013

Independent variables	Log (p / 1 - p)		Odds ratios	p <
	B	SE		
Individual level variables				
Gender (Female = 1)	0.010	0.019	1.011	0.589
Age (years)	-0.022	0.001	0.978	0.000
Rural locality (yes = 1, otherwise = 0)	-0.358	0.022	0.699	0.000
Education (levels)	0.107	0.006	1.113	0.000
Interest in politics (scale, 0–4)	0.630	0.012	1.878	0.000
Trust in institutions (z-scores)	-0.038	0.014	0.962	0,006
Country-level variables				
FH (highest degree = 1, otherwise = 0)*	-1.073	0.100	0.342	0.000
GDP per capita in thousands	0.025	0.009	1.025	0.005
Gini index (SWIID)	-0.026	0.012	0.975	0.035
Cross-level interaction				
FH * Trust in institutions	-0.267	0.036	0.765	0.000
Time controls				
Year (reference 2004)				
2005	-0.207	0.061	0.813	0.001
2006	-0.328	0.049	0.720	0.000
2007	-0.615	0.097	0.541	0.000
2008	-0.424	0.066	0.654	0.000
2009	-0.515	0.070	0.598	0.000
2010	-0.382	0.070	0.683	0.000
2011	-0.557	0.071	0.573	0.000
2012	-0.353	0.085	0.703	0.000
2013	-0.190	0.082	0.827	0.020
Intercept				
Constant	-2.124	0.468		0.000
SD (country)	0.699	0.097		

Wald $\chi^2 = 5,369.23$, LL = -41,318.48

N(observations) = 197,675, N(countries) = 27

* Highest degree = 12 on the scale from 0 to 12

In Tables 12.4.1 and 12.4.2 the estimates for the effects of individuals' characteristics are almost identical. The coefficient for gender is not significant: in Europe there is no statistical difference between the probability of participating in demonstrations for women and men, other things equal. As expected, age and rural locality have negative effects, while education and interest in politics have positive effects on participation in demonstrations. The impact of trust in political institutions is negative, and it interacts with degree of democracy. If the degree of democracy is below the highest score on the FH index (FH < 12 is coded 0) and trust in political institutions is high (z value above the mean of 0), the tendency to demonstrate increases, *ceteris paribus*. For FH = 1 (corresponding to the highest score of 12 on the added indexes of civil liberties and political rights) the tendency is opposite: decreasing trust increases the probability to demonstrate. This is exactly what we predicted.

We summarize the results regarding the effects of country-level variables focusing primarily on Table 12.4.2:

For Europe, the gross correlation between degree of democracy and probability to protest within the last year is positive. If we control for individual-level variables, especially for interest in politics and education, and include GDP per capita and the Gini Index, in countries in which democracy functions well (12 points on the Freedom House Index that we use) people tend to demonstrate only if the mean trust in political institutions is very low; otherwise the net effect remains negative.

1. GDP per capita has a positive effect on participation in demonstrations, *ceteris paribus*. This result is consistent with previous findings dealing with political protest (Dalton, Van Sickle & Weldon 2010; Quaranta 2015). Theoretically, there might be an inverted U curve for the probability of demonstrating: the rise at low values occurs because people protest due to the unfavorable conditions they live in, the stability at the middle values is expected due to diminishing marginal gains, and the decrease in the wealthiest countries seems

- likely because there are less reasons for protesting, at least in the economic sphere. However, we did not detect this type of relationship.
2. In European countries with higher economic inequality, as measured by the Gini Index (SWIID), chances for participation in demonstrations are lower than in countries with lower inequality. This negative effect for Europe is in agreement with findings in Dubrow, Slomczynski & Tomescu-Dubrow (2008) and subsequent reports (including Solt 2015).
 3. In Table 12.4.2 time controls show that the tendency to protest in consecutive years, from 2005 to 2013, changes irregularly but it is below the reference point (2004). In 2004 respondents reported about their protest behavior in the last 12 month. In 2003 large-scale protests against the Iraq War were held in many cities in Europe, often coordinated to occur simultaneously. Thus the comparison is with the biggest mobilization of protesters.

In the Appendixes to this chapter we report the estimates for the country-year variables – Freedom House Index, GDP per capita and Gini Index – for both time frames of attending demonstrations: within last year and “ever” (i.e. within the last 8 years or more). These analyses, performed for Europe and other parts of the world, yield different results depending on (a) the time span for reported participation, and (b) geographic considerations.

To reveal the non-European pattern, in Tables 12.4.3 and 12.4.4 we present the results for combined data for Latin America, Africa, and Asia. Because of substantial amount of missing information on rural locality and education, we estimated the models without these two individual-level variables. This means that we consider the impact of the Freedom House Index, GDP per capita and the Gini Index in a different context of personal characteristics than those included in Tables 12.4.1 and 12.4.2. Under this specification the impact of income inequality is *positive*, even when the dependent variable is participation within last year (Table 12.4.2). When the dependent

variable is participation in demonstrations within the last eight years or more (Table 12.4.4), the effect of Gini is significant.

Table 12.4.4 indicates that in non-European countries protests are more likely to occur in more democratic countries, confirming opportunity structure arguments (Tilly 2004). However, this effect must be considered together with the impact of trust in political institutions, since the interaction of the measure of democracy and trust is included in the analysis. We observe that the impact of democracy on attending demonstrations diminishes if trust in political institutions deviates largely from its mean.

The results reported in Table 12.4.4 show that in richer countries the tendency to attend demonstrations is weaker than in poorer countries, at least if economic development is measured by GDP per capita. It is likely that after reaching a certain level of economic development grievances are easier met and the need for protest to secure economic relief diminishes. In this context it is important to note that for non-European countries for any level of economic development the inequality of income increases protest behavior. The impact of income inequality is *positive and significant*.

Timing of protest matters. In Table 12.4.4, which covers national surveys to 2009, the time reference (1990) is the period of opening channels for nonviolent challenge to government in Latin America (Schatzman 2005), turbulent “spring” in Africa (Bratton van de Walle 1992), and reaction to the Gulf war in some Asian (Middle East) countries (Hale 1992). In comparison with this time, only in 1997 and 2008 the probability of protest was higher, although for 2008 the significance level is far above the usual standards. In other years, the propensity for attending demonstrations varies but it stays below that of the threshold (reference category).

Table 12.4.3 Multilevel Logistic Regression of Participation in Demonstrations in Last Year on Individual and Country-Level Variables, with Respondents Nested in Countries, for Latin America, Africa, and Asia Combined, 2004–2013

Independent variables	Log (p / 1 - p)		Odds ratios	p <
	B	SE		
Individual level variables				
Gender (Female = 1)	-0.221	0.044	0.802	0.000
Age (years)	-0.008	0.001	0.992	0.000
Interest in politics (scale, 0-4)	0.579	0.022	1.784	0.000
Trust in institutions (z-scores)	-0.149	0.028	0.861	0.000
Country-level variables				
FH (scale 0-12, centered)*	-0.031	0.056	0.970	0.588
GDP per capita	-0.055	0.009	0.956	0.000
Gini index (SWIID)	0.039	0.034	1.040	0.253
Cross-level interaction				
FH * Trust in institutions	0.049	0.015	1.050	0.001
Time controls (not shown)				
Intercept				
Constant	-5.711	1.678		0.001
SD (country)	0.340	0.070		

Wald $\chi^2 = 793.40$, LL = -8,229.74

N(observations) = 34,030, N(countries) = 13

* Highest degree = 12 on the scale from 0 to 12

Table 12.4.4 Multilevel Logistic Regression of Participation in Demonstrations “Ever” on Individual and Country-Level Variables, with Respondents Nested in Countries, for Latin America, Africa, and Asia Combined, 1990–2009

Independent variables	Log (p / 1 – p)		Odds ratios	p <
	B	SE		
Individual level variables				
Gender (Female = 1)	-0.318	0.014	0.728	0.000
Age (yaers)	-0.001	0.000	0.999	0.064
Interest in politics (scale, 0-4)	0.535	0.008	1.708	0.000
Trust in institutions (scale N(0,1))	-0.077	0.010	0.926	0.000
Country-level variables				
FH (scale 0-12, centered)*	0.048	0.011	1.049	0.000
GDP per capita	-0.019	0.007	0.981	0.009
Gini index (SWIID)	0.033	0.006	1.034	0.000
Cross-level interaction				
FH * Trust in institutions	0.012	0.004	1.012	0.002
Time controls				
Year (reference 1990)				
1994	-1.227	0.278	0.293	0.000
1995	-0.552	0.061	0.576	0.000
1996	-0.584	0.065	0.558	0.000
1997	0.486	0.084	1.625	0.000
1998	-0.140	0.062	0.869	0.023
2000	-0.397	0.078	0.672	0.000
2003	-0.633	0.067	0.531	0.000
2004	-0.002	0.153	0.998	0.991
2005	-0.529	0.070	0.589	0.000
2006	-0.055	0.069	0.946	0.424
2007	-0.200	0.075	0.818	0.008
2008	0.065	0.079	1.067	0.415
2009	-0.952	0.721	0.386	0.187

Independent variables	Log (p / 1 - p)		Odds ratios	p <
	B	SE		
	Intercept			
Constant	-3.553	0.303		0.000
SD (country)	0.701	0.910		

Wald $\chi^2 = 6,746.3$, LL = -6,4011.28

N(observations) = 149,980, N(countries) = 41

* Highest degree = 12 on the scale from 0 to 12

In the last table of this chapter (Table 12.4.5) we present results from multilevel regression analysis on signing a petition. The time frame for the dependent variable is “ever.” The purpose is to illustrate how the impacts of micro and macro determinants on this form of protest differ from the same variables’ effects on attending demonstrations.

Among individual-level variables two differences are striking. The first deals with the effect of gender: In Europe, women are more likely to sign a petition than men. This result is contrary to that found in other parts of the world (second part of Table 12.4.5). It also differs from the impact of gender on having “ever” demonstrated, for Europe (results available upon request). Regarding Europe, a second difference is that for signing petitions the effect of education is negative, while for participating in demonstrations it is positive. We do not have comparable data for the effect of education on signing petitions for non-European countries.

As far as country-level variables are concerned, we note the following: Income inequality, measured by the Gini index, has an opposite effect on signing petitions than on attending demonstrations. In Europe, the effect of Gini is negative in the case of attending demonstrations (Tables 12.4.1 & 12.4.2) and positive in the case of signing petitions (Table 12.4.5). In countries other than Europe, the effect of the Gini index is positive on attending demonstrations and negative on signing petitions. Such results need further inquiry and substantive explanations that are beyond the scope of this technical report.

Table 12.4.5 Multilevel Logistic Regression of Signing Petitions “Ever” on Individual and Country-Level Variables, with Respondents Nested in Countries and Controls for Time, for countries in Europe and outside of Europe, 1981–2013

Independent variables	Log (p / 1 - p)		Odds ratios	p <
	B	SE		
Europe				
Individual level variables				
Gender (Female = 1)	0.112	0.017	1.118	0.000
Age (years)	-0.006	0.001	0.994	0.000
Education	-0,113	0.019	0.893	0.000
Interest in politics (scale, 0-4)	0.202	0.006	1.224	0.000
Trust in institutions (scale N(0,1))	0.541	0.010	1.717	0.000
Country-level variables				
FH (highest degree = 1, otherwise = 0)*	0.156	0.048	1.169	0.001
GDP per capita	0.028	0.005	1.029	0.000
Gini index (SWIID)	0.034	0.007	1.035	0.000
Cross-level interaction				
FH * Trust in institutions	-0072	0.025	0.931	0.004
Time controls (not shown)				
Intercept				
Constant	-4333	0.256		0.000
SD (country)	0.819	0.096		
Wald $\chi^2 = 5,478.6$, LL = -4,4449.7				
N(observations) = 86,271, N(countries) = 42				
Africa, Asia, Latin America and the Caribbean				
Individual level variables				
Gender (Female = 1)	-0.131	0.016	0.878	0.000
Age (years)	0.005	0.001	1.005	0.000
Interest in politics (scale, 0-4)	0.511	0.009	1.666	0.000
Trust in institutions (scale N(0,1))	-0.134	0.011	0.875	0.000
Country-level variables				
FH (scale 0-12, centered)*	-0.116	0.012	0.891	0.000

Independent variables	Log (p / 1 - p)		Odds ratios	p <
	B	SE		
GDP per capita	0.003	0.007	1.003	0.686
Gini index (SWIID)	-0.041	0.008	0.960	0.000
Cross-level interaction				
FH * Trust in institutions	-0.010	0.004	0.990	0.016
Time controls (not shown)				
Intercept				
Constant	-0.659	0.402		0.101
SD (country)	1.381	0.151		

Wald $\chi^2 = 4,358.5$, LL = -48,888.4

N(observations) = 111,508 N(countries) = 47

* Highest degree = 12 on the scale from 0 to 12

12.5. SUMMARY OF MAIN FINDINGS

1. For individual-level determinants, such as gender, age, rural locality, education, and interest in politics, it does not matter whether we take as dependent variable demonstrations in last year or “ever” – the results are similar. Gender, age and rural locality have negative or no effect, while education and interest in politics have positive effects. This part is in agreement with theorizing since the 1970s (Barnes & Kaase 1979). However, in the case of signing petitions there are some notable differences, at least in Europe: the effect of gender is positive and the effect of education is negative.
2. Our model presented in Chapter 1 postulated that the impact of the interaction between trust in political institutions and the degree of democracy will be significant, indicating the effect of the discrepancy between the extent of peoples’ trust and the functioning of democracy. Indeed, in most regressions we find the interaction to be statistically significant, although its interpretation is

not always straightforward. For example, in Europe for attending demonstrations last year the effect of the interaction is negative, suggesting that a larger discrepancy between trust in political institutions and the degree of democracy would lessen the probability of this type of protest. However, we should look at the signs and values of the effects of trust in political institutions and of the democracy index. Overall, in full democracies, the lack of trust in political institutions (values lower than the mean) results in increased probability of demonstrating.

3. In the case of country characteristics – the Freedom House Index, GDP per capita, and the Gini index, results vary depending on (a) the time frame of the question on demonstration, and (b) whether we take into consideration attending demonstrations or signing petitions. In particular, the effect of economic development and income inequality differs with respect to its sign and significance.
4. There is noticeable variation in the effects of macro-variables across regions of the world. Most of the research on protest is on Europe, but the European patterns do not hold elsewhere.

Appendix 12 A-C Regression Coefficients for the Effects of Country-year Variables for Attending Demonstrations

Table 12-A Multilevel Regression Coefficients for the Effect of Democracy on Attending Demonstrations, controlling for Other Variables. Different Parts of the World^a

	Dependent Variable			
	Demonstrated within last year (yes=1, else=0)		Demonstrated "ever" (yes=1, else=0)	
	Coefficient (SE)	Odds Ratio	Coefficient (SE)	Odds Ratio
Independent Variable: Freedom House Index (scale 0-12)				
Europe	-0.381 (0.600)	0.683	0.092** (0.013)	1.096
N-subjects	247,189		163,680	
N-countries	27		44	
Latin America	0.011 (0.077)	1,011	0.025+ (0.013)	1.025
N-subjects	35,305		84,852	
N-countries	13		18	
Africa	-0.057* (0.023)	0.944	0.142** (0.037)	1.153
N-subjects	65,245		30,470	
N-countries	19		12	
Asia	--	--	0.269** (0.050)	1.309
N-subjects	15330		54625	
N-countries	3		19	

* $p < 0.05$, ** $p < 0.01$

^a In different parts of the world the data are available for different periods within limits 1981–2013. The same applies to Table 12–13 and Table 12-C.

Table 12-B Multilevel Regression Coefficients for the Effects of GDP on Attending Demonstrations, controlling for Other Variables. Different Parts of the World

	Dependent Variable			
	Demonstrated within last year (yes=1, else=0)		Demonstrated "ever" (yes=1, else=0)	
	Coefficient (SE)	Odds Ratio	Coefficient (SE)	Odds Ratio
GDP per capita (in thousands)				
Europe	-0.018* (0.01)	0.982	0.016** (0.003)	1.016
N-subjects	247,189		163,680	
N-countries	27		44	
Latin America	-0.032 (0.042)	0.968	-0.005 (0.016)	0.995
N-subjects	35,305		84,852	
N-countries	13		18	
Africa	0.046* (0.021)	1.047	-0.120** (0.039)	0.887
N-subjects	65,245		30,470	
N-countries	19		12	
Asia	--	--	-0.129** (0.011)	0.879
N-subjects	15,330		54,625	
N-countries	3		19	

* p < 0.05, ** p < 0.01

Table 12-C Multilevel Regression Coefficients for the Effects of Income Inequality on Attending Demonstrations, controlling for Other Variables. Different Parts of the World

	Dependent Variable			
	Demonstrated within last year (yes=1, else=0)		Demonstrated "ever" (yes=1, else=0)	
	Coefficient (SE)	Odds Ratio	Coefficient (SE)	Odds Ratio
Independent Variable: Gini Index (SWIID)				
Europe	-0.035** (0.011)	0.966	0.007 (0.007)	1.007
N-subjects	247,189		163,680	
N-countries	27		44	
Latin America	0.042 (0.035)	1.042	0.003 (0.009)	1.003
N-subjects	35,305		84,852	
N-countries	13		18	
Africa	-0.011 (0.008)	0.989	-0.008 (0.014)	0.992
N-subjects	65,245		30,470	
N-countries	19		12	
Asia	--	--	0.026 (0.020)	1.027
N-subjects	15,330		54,625	
N-countries	3		19	

* p < 0.05, ** p < 0.01

Conclusion

This volume documents the methodological approach we took to answer the question about the determinants of political protest, given both the richness and the limitations in extant international survey projects dealing with political participation. We pulled together three strands of survey methodology – on data quality, ex-post harmonization, and multilevel modeling – and developed an extensive database and dataset with individual and country characteristics, and with control indicators of various harmonization procedures. Ours is a technical report concerning both the selection and harmonization of survey information and the manner in which the emerging multilevel structured data can be used in substantive analyses. Next, we discuss the implications for future research. We start with methodological matters and then raise various theoretical issues.

Working with 22 international survey projects whose documentation and data records exhibit substantial methodological variability led us to develop the analytic framework of Survey Data Recycling, SDR (Slomczynski & Tomescu-Dubrow 2014 and 2015; Tomescu-Dubrow & Slomczynski 2016). The underlying principle, which we propose under the analytic framework of SDR, is that errors and biases in survey data can be dealt with explicitly via different types of quality control variables. As we mentioned in the first part of this

volume, we developed a schema of quality control variables on the level of the national surveys, waves of particular international survey projects, and the computer data files. SDR builds on the Total Survey Error and Total Survey Quality Paradigms (for a summary, see Groves & Lyberg 2010), together with control variables for the harmonization process (Tomescu-Dubrow & Slomczynski 2016).

Formalizing the solutions of the SDR framework is ongoing. While we will not dwell here on details, it is worth mentioning that constructing quality control indicators such as those presented in Part Two, and including them in the integrated dataset, is a key aspect of the SDR framework. According to the SDR logic, control variables for the quality of the source data provide means for reprocessing existing cross-national projects in ways that minimize the “messiness” of data built into total survey error. Harmonization controls, which record and reveal the decisions of ex-post harmonization, facilitate validity and reliability assessments of the target variables. SDR, as a broad approach that can be used in various research contexts of data recycling, originated in the Harmonization Project.

Although it focuses on methodology, this volume also provides initial empirical evidence for the critical linkages discussed in Chapter 1. On the theory level, we draw on the accumulated knowledge about the mainsprings of political action to identify the systemic and individual determinants of protest behavior. In his recent book, Quaranta (2016) noted that “Political protest is part of contemporary democracies and it has often worked as a vehicle of change. Until the 1960s protest activities were considered irrational, dangerous, disruptive (...) Nowadays, the activities related to protest politics are spread in democracies” (Quaranta 2016: 2).

Conventional protest also occurs in non-democracies of different types, and often elicits repressive responses by the state. This can lead to violence and conflict escalation. Does it eventually lead to democratization? Future research could examine whether democratization begins through a bottom-up process (Udfelder 2005; Udfelder & Lustik 2010; Kadivar & Caren 2015), or a top-down dynamic (Higley

& Gunther 1992; Higley & Burton 2006), or some combination of the two. One of the challenging options would be to combine the harmonized survey data set with event data for the category “engage in unconventional mass violence” from the GDELP Project. Under what conditions are violent events correlated with peaceful demonstrations and signing petitions? Using our data and data from other sources, researchers could answer these types of questions.

Substantively, political protest should be considered within the broader repertoire of *political participation*. In an ideal contemporary democracy, citizens should have confidence in their ability to influence policy through a variety of mechanisms – attending election rallies, giving time and money to electoral campaigns, voting, signing petitions, joining social-movement groups, using social media and the Internet, and undertaking other actions to advocate their opinions and concerns. In the literature, the distinction between conventional protest (such as attending demonstrations and signing petitions) and unconventional protest (such as strikes and occupying buildings) is made on the basis of differing levels of risk, demands, and political legitimacy (DiGarzia 2014). Conventional protest, on which the Harmonization Project focuses, is just one of the types of action that individuals can use to communicate with others, including authorities.

Van Deth’s (2014) comprehensive “conceptual map of political participation” not only reinstated a lively debate about the meaning of individual political engagement, but also called for extending the concept to specific types of activities, including online politicking or lifestyle politics. To include the increased complexity of expanding political-participation repertoires is a new challenge for empirical work based on surveys. While international survey projects include questions on electoral behavior, contacting politicians, and membership in conventional political parties, data on other forms of political participation is scarce. For example, from the 22 major international survey projects we used in the Harmonization Project, researchers could extract and harmonize variables dealing only with voting in national elections and belonging to political organizations.

Ideally, in contemporary democracies people should have sufficient social capital (in terms of bridging and bonding capital) to mobilize, articulate, and promote their views. Because of the diversity of competing interests and views, as well as the cost in emotions and values required to reconcile multiple and often rival interests, a modest level of dissatisfaction with policy and frustration with the political process may exist, accompanied by pro-democratic stances. Extending the Harmonization Project will require taking into account a broader range of political attitudes and behaviors.

APPENDIX I

List of Target (T) and Control (C)
Variables and their Values in the Master
File of the Harmonization Project

*** *****
*** MASTERFILE ver. 20160630
*** *****

For all variables, as needed, the negative values are as follows:

- 9 = MISSING DATA
- 8 = QUESTION NOT ASKED IN NATIONAL SURVEY
- 7 = INSUFFICIENT INFORMATION FOR ALL RESPONSE CATEGORIES
- 6 = INSUFFICIENT INFORMATION FOR SINGLE RESPONSE CATEGORY
- 5 = VARIABLE NOT IDENTIFIED IN DATA FILE
- 4 = VALUE NOT ACCEPTABLE
- 2 = NOT APPLICABLE
- 1 = DON'T KNOW

I. TECHNICAL VARIABLES

**T_SOURCE_TABLE = SOURCE TABLE NAME
(CORRESPONDS TO SOURCE DATA FILE)**

**T_CASE_ID = UNIQUE CASE IDENTIFIER IN SOURCE
TABLE/DATA FILE**

T_SURVEY_NAME = SURVEY PROJECT NAME

ABS = Asian Barometer

AFB = Afrobarometer

AMB = Americas Barometer

ARB = Arab Barometer

ASES = Asia Europe Survey

CB = Caucasus Barometer

CDCEE = Consolidation of Democracy in Central and Eastern Europe

CNEP = Comparative National Elections Project

EB = Eurobarometer

EQLS = European Quality of Life Survey

ESS = European Social Survey

EVS = European Values Study

ISJP = International Social Justice Project

ISSP = International Social Survey Programme

LB = Latinobarometro

LITS = Life in Transition Survey

NBB = New Baltic Barometer

PA2 = Political Action II

PA8NS = Political Action - An Eight Nations Study

PPE7N = Political Participation and Equality in Seven Nations

VPCPCE = Values and Political Change in Postcommunist Europe

WVS = World Values Survey

**T_SURVEY_EDITION = SURVEY PROJECT EDITION
(WAVE/ROUND)**

T_INTERVIEW_YEAR = INTERVIEW YEAR

T_COUNTRY_YEAR = YEAR IN WHICH NATIONAL
SURVEY WAS CONDUCTED

T_COUNTRY_L1U = COUNTRY/TERRITORY CODE,
LEVEL 1 UNIT

AD = Andorra

AE = United Arab Emirates

AF = Afghanistan

AG = Antigua and Barbuda

AI = Anguilla

AL = Albania

AM = Armenia

AO = Angola

AQ = Antarctica

AR = Argentina

AS = American Samoa

AT = Austria

AU = Australia

AW = Aruba

AX = Åland Islands

AZ = Azerbaijan

BA = Bosnia and Herzegovina

BA-FBH = Federation of Bosnia and Herzegovina

BA-RSR = Republika Srpska

BB = Barbados

BD = Bangladesh

BE = Belgium

BE-FLA = Belgium-Flanders

BE-WAL = Belgium-Wallonia

BF = Burkina Faso

BG = Bulgaria

BH = Bahrain

BI = Burundi
BJ = Benin
BL = Saint Barthélemy
BM = Bermuda
BN = Brunei Darussalam
BO = Bolivia, Plurinational State of
BQ = Bonaire, Sint Eustatius and Saba
BR = Brazil
BS = Bahamas
BT = Bhutan
BV = Bouvet Island
BW = Botswana
BY = Belarus
BZ = Belize
CA = Canada
CC = Cocos (Keeling) Islands
CD = Congo, the Democratic Republic of the
CF = Central African Republic
CG = Congo
CH = Switzerland
CI = Côte d'Ivoire
CK = Cook Islands
CL = Chile
CM = Cameroon
CN = China
CO = Colombia
CR = Costa Rica
CS = Serbia and Montenegro
CSK = Czechoslovakia
CU = Cuba
CV = Cape Verde
CW = Curaçao
CX = Christmas Island
CY = Cyprus

CY-TCC = Turkish Cypriote Community

CZ = Czech Republic

DE = Germany

DE-E = East Germany

DE-W = West Germany

DJ = Djibouti

DK = Denmark

DM = Dominica

DO = Dominican Republic

DZ = Algeria

EC = Ecuador

EE = Estonia

EG = Egypt

EH = Western Sahara

ER = Eritrea

ES = Spain

ET = Ethiopia

FI = Finland

FJ = Fiji

FK = Falkland Islands (Malvinas)

FM = Micronesia, Federated States of

FO = Faroe Islands

FR = France

GA = Gabon

GB = United Kingdom

GB-GBN = Great Britain

GB-NIR = Northern Ireland

GD = Grenada

GE = Georgia

GF = French Guiana

GG = Guernsey

GH = Ghana

GI = Gibraltar

GL = Greenland

GM = Gambia
GN = Guinea
GP = Guadeloupe
GQ = Equatorial Guinea
GR = Greece
GS = South Georgia and the South Sandwich Islands
GT = Guatemala
GU = Guam
GW = Guinea-Bissau
GY = Guyana
HK = Hong Kong
HM = Heard Island and McDonald Islands
HN = Honduras
HR = Croatia
HT = Haiti
HU = Hungary
ID = Indonesia
IE = Ireland
IL = Israel
IL-ARB = Israel-Arabs
IL-JEW = Israel-Jews
IM = Isle of Man
IN = India
IO = British Indian Ocean Territory
IQ = Iraq
IR = Iran, Islamic Republic of
IS = Iceland
IT = Italy
JE = Jersey
JM = Jamaica
JO = Jordan
JP = Japan
KE = Kenya
KG = Kyrgyzstan

KH = Cambodia
KI = Kiribati
KM = Comoros
KN = Saint Kitts and Nevis
KP = Korea, Democratic People's Republic of
KR = Korea, Republic of
KS = Kosovo
KW = Kuwait
KY = Cayman Islands
KZ = Kazakhstan
LA = Lao People's Democratic Republic
LB = Lebanon
LC = Saint Lucia
LI = Liechtenstein
LK = Sri Lanka
LR = Liberia
LS = Lesotho
LT = Lithuania
LU = Luxembourg
LV = Latvia
LY = Libya
MA = Morocco
MC = Monaco
MD = Moldova, Republic of
ME = Montenegro
MF = Saint Martin (French part)
MG = Madagascar
MH = Marshall Islands
MK = Macedonia, the former Yugoslav Republic of
ML = Mali
MM = Myanmar
MN = Mongolia
MO = Macao
MP = Northern Mariana Islands

MQ = Martinique
MR = Mauritania
MS = Montserrat
MT = Malta
MU = Mauritius
MV = Maldives
MW = Malawi
MX = Mexico
MY = Malaysia
MZ = Mozambique
NA = Namibia
NC = New Caledonia
NE = Niger
NF = Norfolk Island
NG = Nigeria
NG-NOR = Northern Nigeria
NI = Nicaragua
NL = Netherlands
NO = Norway
NP = Nepal
NR = Nauru
NU = Niue
NZ = New Zealand
OM = Oman
PA = Panama
PE = Peru
PF = French Polynesia
PG = Papua New Guinea
PH = Philippines
PK = Pakistan
PL = Poland
PM = Saint Pierre and Miquelon
PN = Pitcairn
PR = Puerto Rico

PS = Palestine, State of
PT = Portugal
PW = Palau
PY = Paraguay
QA = Qatar
RE = Réunion
RO = Romania
RS = Serbia
RU = Russian Federation
RU-KRA = Krasnoyarsk
RW = Rwanda
SA = Saudi Arabia
SB = Solomon Islands
SC = Seychelles
SD = Sudan
SE = Sweden
SG = Singapore
SH = Saint Helena, Ascension and Tristan da Cunha
SI = Slovenia
SJ = Svalbard and Jan Mayen
SK = Slovakia
SL = Sierra Leone
SM = San Marino
SN = Senegal
SO = Somalia
SR = Suriname
SS = South Sudan
ST = Sao Tome and Principe
SU = USSR
SV = El Salvador
SX = Sint Maarten (Dutch part)
SY = Syrian Arab Republic
SZ = Swaziland
TC = Turks and Caicos Islands

TD = Chad
TF = French Southern Territories
TG = Togo
TH = Thailand
TJ = Tajikistan
TK = Tokelau
TL = Timor-Leste
TM = Turkmenistan
TN = Tunisia
TO = Tonga
TR = Turkey
TT = Trinidad and Tobago
TV = Tuvalu
TW = Taiwan, Province of China
TZ = Tanzania, United Republic of
UA = Ukraine
UG = Uganda
UM = United States Minor Outlying Islands
US = United States
UY = Uruguay
UZ = Uzbekistan
VA = Holy See (Vatican City State)
VC = Saint Vincent and the Grenadines
VE = Venezuela, Bolivarian Republic of
VG = Virgin Islands, British
VI = Virgin Islands, U.S.
VN = Viet Nam
VN-NOR = Vietnam North
VN-SOU = Vietnam South
VU = Vanuatu
WF = Wallis and Futuna
WS = Samoa
YE = Yemen
YE-NOR = Yemen North

YE-SOU = Yemen South

YT = Mayotte

YU = Yugoslavia

ZA = South Africa

ZM = Zambia

ZW = Zimbabwe

**T_COUNTRY_L2U = COUNTRY/TERRITORY CODE,
LEVEL 2 UNIT**

[Two digit code]

T_COUNTRY_SET = DATASET VERSION WITHIN WAVE

1 = DATASET 1

2 = DATASET 2

T_WEIGHT = WEIGHT

II. TRUST IN STATE INSTITUTIONS AND OTHER POLITICAL ATTITUDES

**T_TR_PARLI_11 = TRUST IN PARLIAMENT (11-POINT
SCALE)**

[From]

0 = COMPLETELY DISTRUST

[To]

10 = COMPLETELY TRUST

**T_TR_PARLI_N = TRUST IN PARLIAMENT
(CONTINUOUS 0-1 SCALE)**

[From]

0 = COMPLETELY DISTRUST

[To]

1 = COMPLETELY TRUST

T_TR_PARLI_DISTRIB = TRUST IN PARLIAMENT (DISTRIBUTION-PRESERVING SCALE)

[In %]

C_TR_PARLI_SRC_SCALE_LENGTH = SOURCE TRUST IN PARLIAMENT SCALE LENGTH

2 = 2-POINT SCALE

3 = 3-POINT SCALE

4 = 4-POINT SCALE

5 = 5-POINT SCALE

7 = 7-POINT SCALE

10 = 10-POINT SCALE

11 = 11-POINT SCALE

C_TR_PARLI_SRC_ASCEND = SOURCE TRUST IN PARLIAMENT SCALE DIRECTION

0 = DESCENDING

1 = ASCENDING

C_TR_PARLI_SRC_UNIPOLAR = SOURCE TRUST IN PARLIAMENT SCALE POLARITY

0 = OTHER THAN UNIPOLAR

1 = UNIPOLAR

T_TR_LEG_11 = TRUST IN LEGAL SYSTEM (11-POINT SCALE)

[From]

0 = COMPLETELY DISTRUST

[To]

10 = COMPLETELY TRUST

T_TR_LEG_N = TRUST IN LEGAL SYSTEM (CONTINUOUS 0-1 SCALE)

[From]

0 = COMPLETELY DISTRUST

[To]

1 = COMPLETELY TRUST

**T_TR_LEG_DISTRIB = TRUST IN LEGAL SYSTEM
(DISTRIBUTION-PRESERVING SCALE)**

[In %]

**C_TR_LEG_COURTS = OBJECT OF TRUST IN QUESTION
INCLUDES COURTS, COURT SYSTEM, JUDICIARY**

0 = NO

1 = YES

**C_TR_LEG_EXTENDED = QUESTION EXTENDS OBJECT
OF TRUST BEYOND LEGAL SYSTEM**

0 = NO

1 = YES

**C_TR_LEG_SRC_SCALE_LENGTH = SOURCE TRUST IN
LEGAL SYSTEM SCALE LENGTH**

2 = 2-POINT SCALE

3 = 3-POINT SCALE

4 = 4-POINT SCALE

5 = 5-POINT SCALE

7 = 7-POINT SCALE

10 = 10-POINT SCALE

11 = 11-POINT SCALE

**C_TR_LEG_SRC_ASCEND = SOURCE TRUST IN LEGAL
SYSTEM SCALE DIRECTION**

0 = DESCENDING

1 = ASCENDING

**C_TR_LEG_SRC_UNIPOLAR = SOURCE TRUST IN LEGAL
SYSTEM SCALE POLARITY**

0 = OTHER THAN UNIPOLAR

1 = UNIPOLAR

**T_TR_PARTY_11 = TRUST IN POLITICAL PARTIES
(11-POINT SCALE)**

[From]

0 = COMPLETELY DISTRUST

[To]

10 = COMPLETELY TRUST

**T_TR_PARTY_N = TRUST IN POLITICAL PARTIES
(CONTINUOUS 0-1 SCALE)**

[From]

0 = COMPLETELY DISTRUST

[To]

1 = COMPLETELY TRUST

**T_TR_PARTY_DISTRIB = TRUST IN POLITICAL PARTIES
(DISTRIBUTION-PRESERVING SCALE)**

[In %]

**C_TR_PARTY_SRC_SCALE_LENGTH = SOURCE TRUST IN
POLITICAL PARTIES SCALE LENGTH**

2 = 2-POINT SCALE

3 = 3-POINT SCALE

4 = 4-POINT SCALE

5 = 5-POINT SCALE

7 = 7-POINT SCALE

10 = 10-POINT SCALE

11 = 11-POINT SCALE

**C_TR_PARTY_SRC_ASCEND = SOURCE TRUST IN
POLITICAL PARTIES SCALE DIRECTION**

0 = DESCENDING

1 = ASCENDING

**C_TR_PARTY_SRC_UNIPOLAR = SOURCE TRUST IN
POLITICAL PARTIES SCALE POLARITY**

0 = OTHER THAN UNIPOLAR

1 = UNIPOLAR

**T_INT_POLIT_5 = INTEREST IN POLITICS (5-POINT
SCALE)**

[From]

0 = COMPLETELY DISTRUST

[To]

4 = COMPLETELY TRUST

**T_INT_POLIT_N = INTEREST IN POLITICS
(CONTINUOUS 0-1 SCALE)**

[From]

0 = COMPLETELY DISTRUST

[To]

1 = COMPLETELY TRUST

**T_INT_POLIT_DISTRIB = INTEREST IN POLITICS
(DISTRIBUTION-PRESERVING SCALE)**

[In %]

**C_INT_POLIT_NONSTANDARD = SOURCE INTEREST IN
POLITICS NON-STANDARD WORDING**

0 = NO

1 = YES

**C_INT_POLIT_SRC_SCALE_LENGTH = SOURCE
INTEREST IN POLITICS SCALE LENGTH**

2 = 2-POINT SCALE

3 = 3-POINT SCALE

4 = 4-POINT SCALE

5 = 5-POINT SCALE

7 = 7-POINT SCALE

10 = 10-POINT SCALE

11 = 11-POINT SCALE

**C_INT_POLIT_SET_OF_QUESTIONS = MORE THAN ONE
QUESTION ABOUT R'S INTEREST IN POLITICS**

0 = FALSE

1 = TRUE

**C_INT_POLIT_SRC_ASCEND = SOURCE INTEREST IN
POLITICS SCALE DIRECTION**

0 = DESCENDING

1 = ASCENDING

**T_TR_GOV_11 = TRUST IN GOVERNMENT (11-POINT
SCALE)**

[From]

0 = COMPLETELY DISTRUST

[To]

10 = COMPLETELY TRUST

**T_TR_GOV_N = TRUST IN GOVERNMENT (CONTINU-
OUS 0-1 SCALE)**

[From]

0 = COMPLETELY DISTRUST

[To]

1 = COMPLETELY TRUST

T_TR_GOV_DISTRIB = TRUST IN GOVERNMENT
(DISTRIBUTION-PRESERVING SCALE)

[In %]

C_TR_GOV_DOWHATSRIGHT = TRUST IN
GOVERNMENT TO DO WHAT'S RIGHT

0 = NO

1 = YES

C_TR_GOV_SRC_SCALE_LENGTH = SOURCE TRUST IN
GOVERNMENT SCALE LENGTH

2 = 2-POINT SCALE

3 = 3-POINT SCALE

4 = 4-POINT SCALE

5 = 5-POINT SCALE

7 = 7-POINT SCALE

10 = 10-POINT SCALE

11 = 11-POINT SCALE

C_TR_GOV_SRC_ASCEND = SOURCE TRUST IN
GOVERNMENT SCALE DIRECTION

0 = DESCENDING

1 = ASCENDING

C_TR_GOV_SRC_UNIPOLAR = SOURCE TRUST IN
GOVERNMENT SCALE POLARITY

0 = OTHER THAN UNIPOLAR

1 = UNIPOLAR

T_TR_PERSONAL = TRUST IN PEOPLE (2-POINT SCALE)

0 = DISTRUST

1 = TRUST

**T_TR_PERSONAL_DISTRIB = TRUST IN PEOPLE
(DISTRIBUTION-PRESERVING SCALE)**

[In %]

**C_TR_PERSONAL_NONSTANDARD = TRUST IN PEOPLE
NON-STANDARD WORDING**

0 = NO

1 = YES

**C_TR_PERSONAL_SRC_SCALE_LENGTH = SOURCE
TRUST IN PEOPLE SCALE LENGTH**

2 = 2-POINT SCALE

3 = 3-POINT SCALE

4 = 4-POINT SCALE

5 = 5-POINT SCALE

7 = 7-POINT SCALE

10 = 10-POINT SCALE

11 = 11-POINT SCALE

**C_TR_PERSONAL_SRC_ASCEND = SOURCE TRUST IN
PEOPLE SCALE DIRECTION**

0 = DESCENDING

1 = ASCENDING

III. PROTEST BEHAVIOR

**T_PR_DEMONST_FACT = QUESTION ABOUT R'S
PARTICIPATION IN DEMONSTRATION DEALS WITH
FACTS**

0 = FALSE

1 = TRUE

T_PR_DEMONST_OPINION = QUESTION ABOUT R'S PARTICIPATION IN DEMONSTRATION DEALS WITH OPINION

0 = FALSE

1 = TRUE

C_PR_DEMONST_YEARS = R'S PARTICIPATION IN DEMONSTRATION TIME SPAN

1 = LAST YEAR

2 = 2 YEARS

3 = 3 YEARS

4 = 4 YEARS

5 = 5 YEARS

8 = 8 YEARS

10 = 10 YEARS

11 = EVER

C_PR_DEMONST_EXTENDED = QUESTION ABOUT R'S PARTICIPATION IN DEMONSTRATION DEALS WITH OTHER FORMS OF PROTEST

0 = FALSE

1 = TRUE

C_PR_DEMONST_ILLEGAL = ILLEGAL DEMONSTRATION

0 = FALSE

1 = TRUE

C_PR_DEMONST_SET_OF_QUESTIONS = MORE THAN ONE QUESTION ABOUT R'S PARTICIPATION IN DEMONSTRATION

0 = FALSE

1 = TRUE

**T_PR_PETITION_FACT = QUESTION ABOUT R'S SIGNING
PETITION DEALS WITH FACTS**

0 = FALSE

1 = TRUE

**C_PR_PETITION_ISSUE = QUESTION ABOUT R'S SIGNING
PETITION DEALS WITH SPECIFIC ISSUE**

0 = FALSE

1 = TRUE

**C_PR_PETITION_YEARS = R'S SIGNING PETITION TIME
SPAN**

1 = LAST YEAR

2 = 2 YEARS

3 = 3 YEARS

5 = 5 YEARS

8 = 8 YEARS

10 = 10 YEARS

11 = EVER

**C_PR_PETITION_EXTENDED = QUESTION ABOUT R'S
SIGNING PETITION DEALS WITH OTHER FORMS OF
PROTEST**

0 = FALSE

1 = TRUE

IV. SOCIO_DEMOGRAPHIC VARIABLES

T_GENDER = R'S GENDER

0 = MALE

1 = FEMALE

T_AGE = R'S AGE

[In years]

T_BIRTH_YEAR = R'S YEAR OF BIRTH

[In calendar years]

T_RURALURB = R'S RURAL/URBAN PLACE OF LIVING

0 = URBAN

1 = RURAL

**C_RURALURB_UNCLEAR = UNCLEAR RURAL/URBAN
ASSIGNMENT**

0 = FALSE

1 = TRUE

**C_RURALURB_RESP = RURAL/URBAN INFORMATION
BASED ON R'S DECLARATION**

0 = FALSE

1 = TRUE

**T_METRO = R'S METROPOLITAN AREA PLACE OF
LIVING**

0 = OTHER THAN METROPOLITAN AREA

1 = METROPOLITAN AREA

**C_METRO_UNCLEAR = UNCLEAR METROPOLITAN AREA
ASSIGNMENT**

0 = FALSE

1 = TRUE

**C_METRO_RESP = METROPOLITAN AREA
INFORMATION BASED ON R'S DECLARATION**

0 = FALSE

1 = TRUE

T_EDU = R'S EDUCATION LEVEL

10 = PRIMARY

20 = LOWER SECONDARY

30 = UPPER SECONDARY

40 = POST-SECONDARY NON-TERTIARY

50 = SHORT-CYCLE TERTIARY

60 = BACHELOR'S OR EQUIVALENT LEVEL

70 = MASTER'S OR EQUIVALENT LEVEL

80 = DOCTORAL OR EQUIVALENT LEVEL

90 = NOT ELSEWHERE CLASSIFIED

**C_EDU_AND_HIGHER = EDUCATION LEVEL INCLUDES
HIGHER LEVELS**

0 = FALSE

1 = TRUE

**C_EDU_INCOMPLETE = EDUCATION LEVEL IS
INCOMPLETE**

0 = FALSE

1 = TRUE

**C_EDU_VOCATIONAL = EDUCATION LEVEL WITH
VOCATIONAL COMPONENT**

0 = FALSE

1 = TRUE

APPENDIX II

List of Variables in the Plugs of the Harmonization Project

I. PLUG-COUNTRY

*** *****

*** PLUG-CONTEXT-COUNTRY ver. 20160421

*** *****

T_COUNTRY_L1U = COUNTRY/TERRITORY CODE,
LEVEL 1 UNIT
COUNTRY_L1U_NAME = COUNTRY/TERRITORY NAME,
LEVEL 1 UNIT
COUNTRY_ALPHA2 = COUNTRY ALPHA-2 CODE
COUNTRY_ALPHA3 = COUNTRY ALPHA-3 CODE
COUNTRY_NUM_CODE = COUNTRY NUMERIC CODE
COUNTRY_NAME = COUNTRY NAME
MACRO_REGION_CODE = MACRO REGION NUMERIC
CODE
MACRO_REGION_NAME = MACRO REGION NAME
MICRO_REGION_CODE = MICRO REGION NUMERIC
CODE
MICRO_REGION_NAME = MICRO REGION NAME

II. PLUG-COUNTRY-YEAR

*** *****

*** PLUG-CONTEXT-COUNTRY-YEAR ver. 20160427

*** *****

T_COUNTRY_L1U = COUNTRY/TERRITORY CODE,
LEVEL 1 UNIT

T_COUNTRY_YEAR = YEAR IN WHICH NATIONAL
SURVEY WAS CONDUCTED

M_EIU_DEMOCRACY = EIU DEMOCRACY INDEX

M_WGI_VA_EST = WGI: VOICE AND ACCOUNTABILITY,
ESTIMATE

M_WGI_VA_RANK = WGI: VOICE AND ACCOUNTABILITY,
PCT RANK

M_WGI_PS_EST = WGI: POLITICAL STABILITY, ESTIMATE

M_WGI_PS_RANK = WGI: POLITICAL STABILITY, PCT
RANK

M_WGI_GE_EST = WGI: GOV EFFECTIVENESS, ESTIMATE

M_WGI_GE_RANK = WGI: GOV EFFECTIVENESS, PCT
RANK

M_WGI_RQ_EST = WGI: REGULATORY QUALITY,
ESTIMATE

M_WGI_RQ_RANK = WGI: REGULATORY QUALITY, PCT
RANK

M_WGI_RL_EST = WGI: RULE OF LAW, ESTIMATE

M_WGI_RL_RANK = WGI: RULE OF LAW, PCT RANK

M_WGI_CC_EST = WGI: CONTROL OF CORRUPTION,
ESTIMATE

M_WGI_CC_RANK = WGI: CONTROL OF CORRUPTION,
PCT RANK

M_FREEDOM_CL = FREEDOM HOUSE INDEX (CIVIL
LIBERTIES)

M_FREEDOM_PR = FREEDOM HOUSE INDEX

(POLITICAL RIGHTS)

M_GDP = GDP PER CAPITA PPP
M_GINI_MILANOVIC = GINI INDEX (MILANOVIC)
M_GINI_MILANOVIC_SOURCE = GINI INDEX
(MILANOVIC) SOURCE
M_GINI_NET_MEAN = GINI INDEX (SOLT): MEAN VALUE
OF NET COMPONENTS
M_1_GINI_NET = GINI INDEX (SOLT): NET COMPONENT
[M_2_GINI_NET TO M_99_GINI_NET]
M_100_GINI_NET = GINI INDEX (SOLT): NET COMPONENT
M_POPULATION = COUNTRY/TERRITORY POPULATION
SIZE
M_POPULATION_URBAN = URBAN POPULATION (% OF
TOTAL)
M_POPULATION_LARGEST_CITY = POPULATION IN
THE LARGEST CITY (% OF URBAN POPULATION)

III. PLUG-SURVEY

*** *****
*** PLUG-CONTEXT-SURVEY ver. 20160608
*** *****

T_SURVEY_NAME = SURVEY PROJECT NAME
T_SURVEY_EDITION = SURVEY PROJECT EDITION
(WAVE/ROUND)
T_COUNTRY_L1U = COUNTRY/TERRITORY CODE,
LEVEL 1 UNIT
T_COUNTRY_SET = DATASET VERSION WITHIN WAVE
QS_RSP_RATE_VALUE = RESPONSE RATE VALUE FOUND
IN DOC (SURVEY LEVEL)
QS_RSP_RATE = RESPONSE RATE IS PRESENT (SURVEY
LEVEL)

QS_TRANSL = INFORMATION ABOUT TRANSLATION
METHODS IS PRESENT (SURVEY LEVEL)

QS_PRETEST = INFORMATION ABOUT PRETESTING OR
PILOTING IS PRESENT (SURVEY LEVEL)

QS_FIELDW_CTRL = INFORMATION ABOUT FIELD-
WORK CONTROL IS PRESENT (SURVEY LEVEL)

IV. PLUG-WAVE

*** *****

*** PLUG-CONTEXT-WAVE ver. 20160608

*** *****

T_SURVEY_NAME = SURVEY PROJECT NAME

T_SURVEY_EDITION = SURVEY PROJECT EDITION
(WAVE/ROUND)

QW_IV = NUMBER OF ILLEGITIMATE VARIABLE VALUES
IN DOC/DATA (WAVE LEVEL)

QW_VD = NUMBER OF VARIABLE VALUE DISCREPANCIES
IN DOC/DATA (WAVE LEVEL)

QW_CV = NUMBER OF CONTRADICTORY VARIABLE
VALUES IN DOC/DATA (WAVE LEVEL)

QW_LL = NUMBER OF LACK OF VARIABLE VALUE LABELS
IN DOC/DATA (WAVE LEVEL)

QW_MV = NUMBER OF MISLEADING VARIABLE VALUES
IN DOC/DATA (WAVE LEVEL)

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References¹

- Acemoglu, Daron, Suresh Naidu, Pascual Restrepo, James A. Robinson. 2014. Democracy Does Cause Growth. *NBER Working Paper No. 20004* (Issued in March 2014). <http://www.nber.org/papers/w20004>
- Allison, Paul D. 1978. Measures of Inequality. *American Sociological Review* 43 (6): 865–880.
- Almond, Gabriel, and Sidney Verba. 1963. *The Civic Culture: Political Attitudes and Democracy in Five Nations*. Princeton, NJ: Princeton University Press.
- Anderson, Christopher J. and Christine A. Guillory. 1997. Political Institutions and Satisfaction with Democracy: A Cross-national Analysis of Consensus and Majoritarian Systems. *American Political Science Review* 91 (1): 66–81.
- Auvinen, Juha. 1997. Political Conflict in Less Developed Countries, 1981–1989. *Journal of Peace Research* 34 (2): 177–195.
- Bäck, Hanna and Bengü Dayican. 2008. Protest Behavior in European Societies. The Role of Individual Incentives and the Political Context. Paper presented at the Midwest Political Science Association Conference in Chicago, April 3–6.

¹ References are not restricted to cited items. They include all most important items used in the process of preparing this volume.

- Barnes, Samuel H. and Max Kaase, eds. 1979. *Political Action: Mass Participation in Five Western Democracies*. Beverley Hills and London: Sage Publications.
- Barro, Robert J. 1996. Determinants of Economic Growth: A Cross-Country Empirical Study. NBER Working Paper No. 5698. Cambridge: National Bureau of Economic Research (NBER). <http://www.nber.org/papers/w5698>.
- Barro, Robert J. 2001. Human Capital and Growth. *American Economic Review* 91 (2): 12–17.
- Barro, Robert J. and Jong-Wha Lee. 2010. *A New Data Set of Educational Attainment in the World, 1950–2010*. NBER working paper 15902. Cambridge: National Bureau of Economic Research (NBER). <http://www.nber.org/papers/w15902.pdf>.
- Beetham, David, ed. 1995. *Defining and Measuring Democracy*. New York, NY: Sage.
- Benhabib, Jess, and Spiegel Mark M. 1994. The Role of Human Capital in Economic Development: Evidence from Aggregate Cross-country Data. *Journal of Monetary Economics*, 34: 143–173.
- Benson, Michelle and Thomas R. Rochon, T. R 2004. Interpersonal Trust and the Magnitude of Protest: A Micro and Macro Level Approach. *Comparative Political Studies* 37 (4): 435–457.
- Biemer, Paul P. 2010. Total Survey Error. Design, Implementation, and Evaluation. *Public Opinion Quarterly* 74 (5): 817–848.
- Biemer, Paul P. and Lars E. Lyberg. 2003. *Introduction to Survey Quality*. New York: Wiley.
- Blasius, Jörg and Victor Thiessen. 2012. *Assessing the Quality of Survey Data*. London: SAGE Publications Ltd.
- Bollen, Keneth A. and Pamela Paxton. 2000. Subjective Measures of Liberal Democracy. *Comparative Political Studies* 33 (1): 58–86.
- Bollen, Keneth A. 1986. Political Rights and Political Liberties in Nations: An Evaluation of Human Rights Measures, 1950 to 1984. *Human Rights Quarterly* 8 (4): 567–591.
- Braun, M. and Müller, W. 1997. Measurement of Education in Comparative Research. *Comparative Social Research* 16: 163–201.

- Brehm, John and Wendy Rahn. 1997. Individual-level Evidence for the Causes and Consequences of Social Capital. *American Journal of Political Science* 41 (3): 999–1023.
- Breckner, Markus and Daniel Lederman. 2015. Effects of Income Inequality on Aggregate Output. Policy Research Working Paper 7317, World Bank Group.
- Byrne, Barbara M. and Fons J. R. de Vijver. 2010. Testing for Measurement and Structural Equivalence in Large-Scale Cross-Cultural Studies: Addressing the Issue of Nonequivalence. *International Journal of Testing* 10 (2): 107–132.
- Campano, Fred and Dominick Salvatore. 2006. *Income Distribution*. Oxford: Oxford University Press.
- Chen, Tao. 2011. *Measurement and Assessment of Survey Quality: The Development of a Holistic and Quantitative Tool*. Saarbrücken, DE: LAP Lambert Academic Publishing.
- Chenoweth, Erica and Maria J. Stephan. 2012. *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict*. New York, NY: Columbia University Press.
- Cheung, Gordon W. 2008. Testing Equivalence in the Structure, Means, and Variances of Higher-Order Constructs With Structural Equation Modeling. *Organizational Research Methods* 11 (3): 593–613.
- Crozat, Mathew. 1998. Are the Times A-Changing? Assessing the Acceptance of Protest in Western Democracies. PP. 59–81 in *A Social Movement Society*, edited by David S. Meyer and Sydney Tarrow. Lanham, MD: Rowman and Littlefield.
- Dahl, Robert. 1989 *Democracy and Its Critics*. New Haven: Yale University Press.
- Dalton, Russell J. and Alix van Sickle. 2005. “The Resource, Structural and Cultural Bases of Protest.” Working Paper, Center for the Study of Democracy. <http://repositories.cdlib.org/csd/05-11/>
- Dalton, Russell J., Alix Van Sickle and Steven Weldon. 2010. The Individual-Institutional Nexus of Protest Behaviour. *British Journal of Political Science* 40 (1): 51–73.

- Della Porta, Donatella and Alice Mattoni, eds. 2014. *Spreading Protest: Social Movements in Times of Crisis*. Colchester, UK: ECPR Press.
- DiGrazia, Joseph. 2014. Individual Protest Participation in the United States: Conventional and Unconventional Activism. *Social Science Quarterly* 95: 111–131.
- Dodson, Kyle. 2015. Economic Threat and Protest Behavior in Comparative Perspective. *Sociological Perspectives* 0731121415608508, first published on October 14, 2015.
- Dubrow, Joshua K. and Irina Tomescu-Dubrow. 2015. The Rise of Cross-National Survey Data Harmonization in the Social Sciences: Emergence of an Interdisciplinary Methodological Field. *Quality and Quantity* (May 9) DOI 10.1007/s11135-015-0215-z
- Dubrow, Joshua K., Kazimierz M. Slomczynski and Irina Tomescu-Dubrow. 2008. Effects of Democracy and Inequality on Soft Political-Protest in Europe: Exploring the European Social Survey Data. *International Journal of Sociology* 38 (3): 36–51.
- Easton, David. 1957. An Approach to the Analysis of Political Systems. *World Politics* 9 (3): 383–400.
- Ehling, Manfred and Thomas Körner, eds. 2007. *Handbook on Data Quality Assessment Methods and Tools*. Wiesbaden: Eurostat.
- Ehling, Manfred et al. 2006. Synopsis. Research Results of Chintex - Summary and Conclusions. www.destatis.de/DE/Methoden/Methodenpapiere/Chintex/ResearchResults/Downloads/Synopsis.html.
- Ekiert, Grzegorz and Jan Kubik. 1998. Contentious Politics in New Democracies: East Germany, Hungary, Poland, and Slovakia, 1989–93. *World Politics* 50: 547–581.
- Ferreira, Francisco H. G., Nora Lustig, and Daniel Teles. 2015. Appraising Cross-National Income Inequality Databases: An Introduction. IZA DP No. 9468, October. <http://ftp.iza.org/dp9468.pdf>.
- Finkel, Steven E. 1987. The Effects of Participation on Political Efficacy and Political Support: Evidence from a West German Panel. *Journal of Politics* 49 (2): 441–464.

- Gallego, Aina. 2007. Unequal Political Participation in Europe. *International Journal of Sociology* 37 (4): 10–25.
- Gastil, Raymond D. 1990. The Comparative Survey of Freedom: Experiences and Suggestion. *Studies in Comparative International Development* 25 (1): 25–50.
- Gelman, Andrew and Jennifer Hill. 2007. *Data Analysis Using Regression and Multilevel/Hierarchical Models*. New York: Cambridge University Press.
- Granda Peter, Christof Wolf, and Reto Hadorn, R. 2010. Harmonizing Survey Data. Pp. 315–332 in *Survey Methods in Multinational, Multicultural and Multiregional Contexts*, edited by Janet A. Harkness, Michael Braun, Brad Edwards, Timothy P. Johnson, Lars E. Lyberg, Peter Ph. Mohler, Beth-Ellen Pennell, Tom W. Smith. Hoboken, NJ: John Wiley & Sons.
- Granda, Peter and Emily Blasczyk 2010. Cross-Cultural Survey Guidelines. XIII. Data Harmonization. <http://ccsg.isr.umich.edu/harmonization.cfm>
- Groves, Robert M. and Lars Lyberg. 2010. Total Survey Error. Past, Present, and Future. *Public Opinion Quarterly* 74(5): 849–879.
- Gunther, Roland. 2003. Report on Compiled Information of the Change from Input Harmonization to Ex-post Harmonization in National Samples of the European Community Household Panel—Implications on Data Quality (Working Paper #19). https://www.destatis.de/DE/Methoden/Methodenpapiere/Chintex/ResearchResults/Downloads/WorkingPaper19.pdf?__blob=publicationFile.
- Gurr, Ted Robert. 1970. *Why Men Rebel*. Princeton, NJ: Princeton University Press.
- Gurr, Ted Robert, and Robert Duvall. 1973. Civil Conflict in the 1960s. *Comparative Political Studies* 6: 135–170.
- Hadler, Markus, Anja Eder, Max Haller, and Franz Höllinger. 2015. Guest Editors' Introduction: Methodological Problems of Quantitative Comparative Social Research. *International Journal of Sociology* 45: 1–9.

- Hale, William. 1992. Turkey, the Middle East and the Gulf Crisis. *International Affairs* 68 (4): 681–694.
- Harkness, Janet A., ed. 1998. *Cross-Cultural Survey Equivalence*. Mannheim: ZUMA.
- Harkness, Janet A., Michael Braun, Brad Edwards, Timothy P. Johnson, Lars E. Lyberg, Peter Ph. Mohler, Beth-Ellen Pennell, and Tom W. Smith, eds. 2010. *Survey Methods in Multinational, Multiregional, and Multicultural Contexts*. Hoboken, NJ: John Wiley & Sons, Inc.
- Harkness, Janet A., van de Vijver, Fons J. R., and Peter Ph. Mohler, eds. 2003. *Cross-Cultural Survey Methods*. Hoboken, NJ: John Wiley & Sons.
- Heath, Anthony, Jean Martin, and Thees Spreckelsen. 2009. Cross-national Comparability of Survey Attitude Measures. *International Journal of Public Opinion Research* 21(3): 293–315.
- Heath, Anthony, Stephen Fisher, and Shawna Smith. 2005. The Globalization of Public Opinion Research. *Annual Review of Political Science* 8: 297–333.
- Held, David. 1987. *Models of Democracy*. Stanford University Press, Stanford, CA.
- Herzog, Thomas N., Fritz J. Scheuren, and William E. Winkler. 2007. *Data Quality and Record Linkage Techniques*. New York: Springer.
- Heshmati, Almas. 2004. Growth, Inequality and Poverty Relationships. Discussion Paper No. 1338. Bonn Germany: The Institute for the Study of Labor (IZA).
- Higley, John and Michael Burton. 2006. *Elite Foundations of Liberal Democracy*. Lanham, N.J.: Rowman & Littlefield.
- Hoffmeyer-Zlotnik, Jürgen H.P. and Christof Wolf, eds. 2003. *Advances in Cross-National Comparison A European Working Book for Demographic and Socio-Economic Variables*. New York, NY: Kluwer Academic/Plenum Publishers.
- Hox, Joop J. 2010. *Multilevel Analysis. Techniques and Applications*. New York: Routledge.

- Inglehart, Ronald and Gabriel Catterberg. 2002. Trends in Political Action: The Developmental Trend and the Post-Honeymoon Decline. *International Journal of Comparative Research* 43(3–5): 300–316.
- Inglehart, Ronald, and Christian Welzel. 2005. *The Human Development Model and Value Change*. New York: Cambridge University Press.
- Inglehart, Ronald. 1990. *Culture Shift in Advanced Industrial Society*. Princeton: Princeton University Press.
- Jenkins, J. Craig and Bert Klandermans, eds. 1995. *The Politics of Social Protest: Comparative Perspectives on States and Social Movements*. Minneapolis, MN: University of Minnesota Press.
- Jenkins, J. Craig and Kurt Schock. 1992. Global Structures and Political Processes in the Study of Domestic Political Conflict. *Annual Review of Sociology* 18: 161–85.
- Jenkins, J. Craig and William H. Form. 2005. Social Movements and Social Change. Pp. 331–349 in *Handbook of Political Sociology: States, Civil Society and Globalization*, edited by Thomas Janoski, Robert R. Alford, Alexander M. Hicks and Mildred A. Schwartz. Cambridge: Cambridge University Press.
- Jenkins, J. Craig, Michael Wallace, and A. S. Fullerton. 2008. A Social Movement Society? A Cross-National Analysis of Protest Potential. *International Journal of Sociology* 38 (3): 12–35.
- Jowell, Roger, Caroline Roberts, Rory Fitzgerald, and Eva Gillian, eds. 2007. *Measuring Attitudes Cross-Nationally: Lessons from the European Social Survey*. London: Sage.
- Jowell, Roger. 1998. How Comparative is Comparative Research? *American Behavioral Scientist* 42 (2): 168–177.
- Kadivar, Mohammad Ali and Neal Caren. 2015. “Disruptive Democratization: Contentious Events and Liberalizing Outcomes Globally, 1990–2004.” *Social Forces* 94 (3): 975–996.
- Kekic, Laza. 2007. The Economist Intelligence Unit’s Index of Democracy. www.economist.com/media/pdf/DEMOCRACY_INDEX_2007_v3.pdf

- Kennet, Patricia and Nicola Yeates. 2001. Defining and Constructing the Research Process. In: P. Kennet (ed.), *Comparative Social Policy*. Buckingham: Open University Press (pp 40–61).
- Kerckhoff, Alan C., Elizabeth Dietrich Ezell, J. Scott Brown. 2002. Toward an Improved Measure of Educational Attainment in Social Stratification Research. *Social Science Research* 31 (1): 99–123.
- Kitschelt, Herbert 1986. Political Opportunity Structures and Political Protest: Antinuclear Movements in Four Democracies. *British Journal of Political Science* 16: 57–85.
- Knutsen, Carl Henrik. 2015. Reinvestigating the Reciprocal Relationship between Democracy and Income Inequality. *Review of Economics and Institutions* 6 (2): Article 1. DOI 10.5202/rei.v6i2.173
- Kolczyńska, Marta and Matthew Schoene. 2014. Survey Data Harmonization: The Issue of Data and Documentation Quality in Cross-National Surveys. Presented at the Twelfth International Workshop on Comparative Survey Design & Implementation (CSDI), March 29, Bethesda, Maryland.
- Kolczyńska, Marta. 2015. The Importance of Data Documentation for Survey Data Harmonization. *Harmonization: Newsletter on Harmonization in the Social Sciences* 1(1): 11–15.
- Kolsrud, Kristine and Skjåk Kalgraff, K. (2005), Harmonizing Background Variables in International Surveys. Pp. 173–182 in *Methodological Aspects in Cross-National Research*, edited by J. H. P. Hoffmeyer-Zlotnik and J. A. Harkness. ZUMA. Nachrichten Band 11.
- Kousis, Maria and Charles Tilly., eds. 2005. *Economic and Political Contention in Comparative Perspective*. Boulder, CO: Paradigm Publishers.
- Kriesi, Hanspeter. 2004. Political Context and Opportunity. Pp. 67–90 in *Blackwell Companion to Social Movements*, edited by David A. Snow, Sarah A. Soule and Hanspeter Kries. Oxford Carlton: Blackwell.
- Kuenzi, Michelle T. 2008. Social Capital and Political Trust in West Africa. Afrobarometer Working Paper no. 96. <http://afrobarometer.org/publications/wp96-social-capital-and-political-trust-west-africa>

- Leighley, Jan E. and Arnold Vedlitz. 1999. Race, Ethnicity and Political Participation: Competing Models and Contrasting Explanations. *Journal of Politics* 61 (4): 1092–1114.
- Lichbach, Mark. 1989. Does Economic Inequality Breed Political Conflict? *World Politics* 41 (4): 431–470.
- Lipset, Seymour Martin. 1994. The Social Requisites of Democracy Revisited. *American Sociological Review* 59 (1): 1–22.
- Lipsky, Michael. 1968. Protest as a Political Resource. *American Political Science Review* 62 (4): 1144–1158.
- Loosveldt, Geert, Ann Carton, and Jaak Billiet. 2004. Assessment of Survey Data Quality: Pragmatic Approach Focused on Interviewer Tasks. *International Journal of Market Research* 46 (1): 65–82.
- Lyberg, Lars E. and Paul P. Biemer. 2008. Quality Assurance and Quality Control in Surveys. Pp. 421–441 in *International Handbook of Survey Methodology*, edited by E. D. de Leeuw, J. J. Hox, and D. A. Dillman. New York/London: Lawrence Erlbaum Associates/Taylor & Francis Group.
- Lynn, Peter. 2001. Developing Quality Standards for Cross-National Survey Research: Five Approaches. Working Papers of the Institute for Social and Economic Research, paper 2001–21. Colchester: University of Essex. Retrieved May 19, 2014 (<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.198.9357&rep=rep1&type=pdf>).
- Marien, Sofie, Marc Hooghe and E. Quintelier. 2010. Inequalities in Non-Institutionalized Forms of Political Participation: A Multi-level Analysis of 25 Countries. *Political Studies* 58 (1): 187–213.
- Marien, Sofie, Marc Hooghe, and Ellen Quintelier. 2010. Inequalities in Non-Institutionalized Forms of Political Participation: A Multi-level Analysis of 25 Countries. *Political Studies* 58 (1): 187–213.
- Marsh, Alan. 1977. *Protest and Political Consciousness*, Newbury Park, CA: Sage.
- Matsumoto, David and Fons J. R. van de Vijver (eds.). 2010. *Cross-Cultural Research Methods in Psychology*. New York, NY: Cambridge University Press.

- Mayer-Schonberger, Viktor and Kenneth Cukier. 2013. *Big Data: A Revolution that Will Transform How We Live, Work, and Think*. New York, NY: Mariner Books.
- Medina, Tait R., Shawna N. Smith, and J. Scott Long. 2009. Measurement Models Matter: Implicit Assumptions and Cross-National Research. *International Journal of Public Opinion Research* 21(3): 333–361.
- Meyer, David S. and Sidney Tarrow, eds. 1998. *The Social Movement Society: Contentious Politics for a New Century*. Lanham, Md.: Rowman & Littlefield.
- Meyer, David S. 2004. Protest and Political Opportunities. *Annual Review of Sociology* 30: 125–145.
- Milanović, Branko. 2014. Description of All the Ginis Dataset. World Bank, Research Department, November. <http://go.worldbank.org/9VCQW66LA0>
- Mishler, William and Richard Rose. 2005. What are the Political Consequences of Trust? A test of Cultural and Institutional Theories in Russia. *Comparative Political Studies* 38 (9): 1050–1078.
- Møller, Jorgen and Svend-Erik Skaaning. 2011. *Requisites of Democracy: Conceptualization, Measurement, and Explanation*. Abingdon, UK: Routledge.
- Muller, Edward N. and Thomas O. Jukam. 1983. Discontent and Aggressive Political Participation. *British Journal of Political Science* 13 (1): 159–179.
- Munck, Gerardo L. 2009. *Measuring Democracy: A Bridge between Scholarship and Politics*. Baltimore: Johns Hopkins University Press.
- Newton, Ken and Sonja Zmerli. 2011. Three Forms of Trust and their Association. *European Political Science Review* 3 (2): 16–200.
- Norris Pippa. 2002. *Democratic Phoenix. Reinventing Political Activism*. Cambridge: Cambridge University Press.
- Opp, Karl-Dieter. 1989. *The Rationality of Political Protest: A Comparative Analysis of Rational Choice Theory*. Boulder, CO: Westview Press.

- Opp, Karl-Dieter, and Bernhard Kittel. 2009. The Dynamics of Political Protest: Feedback Effects and Interdependence in the Explanation of Protest Participation. *European Sociological Review* 26 (1): 97–109.
- Ortmanns Verena and Silke L. Schneider. 2015. Harmonization of Educational Attainment Variables in Cross national Surveys: The CAMCES-Project. *Harmonization: Newsletter on Harmonization in the Social Sciences* 1 (2): 5–6.
- Ortmanns, Verena and Silke L. Schneider. 2015. Harmonization Still Failing? Inconsistency of Education Variables in Cross-National Public Opinion Surveys. *International Journal of Public Opinion Research*, online first publication. doi: 10.1093/ijpor/edv025.
- Pemstein, Daniel, Stephan Meserve, and James Melton. 2010. Democratic Compromise: A Latent Variable Analysis of Ten Measures of Regime Type. *Political Analysis* 18 (4): 426–449.
- Perotti, Roberto. 1996. Growth, Income Distribution, and Democracy: What the Data Say. *Journal of Economic Growth* 1 (2): 149–187.
- Phillips, Drystan, Chien Sandy, Angrisani Marco, Meijer Erik and Lee Jinkook. 2014. *Harmonized SHARE Documentation Version B, February 2014*. <http://gateway.usc.edu/codebooks/Harmonized%20SHARE%20B.pdf>.
- Powałko, Przemek. 2014. Working with Big Data: Experiences with the Cross-national Survey Data Harmonization Project. *CONSIRT Working Papers Series 2* at consirt.osu.edu.
- Powałko, Przemek. 2015. Working with Data in the Harmonization Project. *Harmonization: Newsletter on Harmonization in the Social Sciences* 1(1): 10–11.
- Powałko Przemek and Marta Kołczyńska. 2016. Working with Data in the Cross-National Survey Harmonization Project: Outline of Programming Decisions. *International Journal of Sociology. Special Issue: Political Behavior and Big Data* 46 (1): 73–80.
- Preacher, Kristopher J., Zhen Zhang and Michael J. Zyphur. 2011. Alternative Methods for Assessing Mediation in Multilevel Data: The Advantages of Multilevel SEM. *Structural Equation Modeling: A Multidisciplinary Journal* 18 (2): 161–182.

- Prothro James W. and Charles M. Grigg. 1960. Fundamental Principles of Democracy: Bases of Agreement and Disagreement. *Journal of Politics* 22 (2): 276–294.
- Przeworski, Adam and Henry Teune. 1972. *The Logic of Comparative Social Inquiry*. New York: Wiley.
- Przeworski, Adam. 1996. *Sustainable Democracy*. Cambridge: Cambridge University Press.
- Przeworski, Adam. 2003. Freedom to Choose and Democracy. *Economics and Philosophy* 19: 265–279.
- Quaranta, Mario. 2016. *Political Protest in Western Europe: Exploring the Role of Context in Political Action*. Berlin, DE: Springer.
- Raudenbush, Stephen W. and Anthony S. Bryk. 2002. *Hierarchical Linear Models Applications and Data Analysis Methods*. Newbury Park, CA: Sage. 2nd edition.
- Reenock, Christopher, Michael Bernhard and David Sobeck. 2007. “Regressive Socioeconomic Distribution and Democratic Survival.” *International Studies Quarterly* 51 (3): 677–99.
- Reuveni, Rafael and Li Quan. 2003. Economic Openness, Democracy, and Income Inequality. An Empirical Analysis. *Comparative Political Studies* 36 (5): 575–601.
- Rosenstone, Steven J. and John M. Hansen. 1993. *Mobilization, Participation and Democracy in America*. New York, NY: MacMillan.
- Salvia, Gabriel C. and Hernan Alberro. 2007. Global Ratings: Democracy, Markets and Transparency. *Democracy, Markets and Transparency* 1 (2): 1–8.
- Schatzman, Christina. 2005. Political Challenge in Latin America: Rebellion and Collective Protest in an Era of Democratization. *Journal of Peace Research* 42 (3): 291–310.
- Schneider Silke L. 2013. The International Standard Classification of Education 2011. Pp. 365–379 in *Class and Stratification Analysis*, edited by Gunn Elisabeth Birkelund. Somerville, MA: Emerald Group Publishing Limited.
- Schussman, Alan and Sarah A. Soule. 2005. Process and Protest: Accounting for Individual Protest Participation. *Social Forces* 84 (2): 1083–1108.

- Schoene, Matthew and Marta Kołczyńska. 2014. Survey Data Harmonization and the Quality of Data Documentation in Cross-National Surveys. *CONSIRT Working Papers Series 3* at consirt.osu.edu.
- Schofer, Evan and Marion Fourcade-Gourichas. 2001. Political and Cultural Bases of Civic Engagement in Comparative Perspective. *American Sociological Review* 66 (6): 806–828.
- Seawright, Jason, D. Collier. 2014. Rival Strategies of Validation Tools for Evaluating Measures of Democracy. *Comparative Political Studies* 47 (1): 111–138.
- Skidmore, Paul and Kirsten Bound. 2008. *Everyday Democracy Index*. London: Demos (also: www.demos.co.uk/events/edi).
- Slomczynski, Kazimierz M. and Irina Tomescu-Dubrow. 2006. Representation of Post-Communist European Countries in Cross-National Public Opinion Surveys. *Problems of Post-Communism* 53 (4): 42–52.
- Slomczynski, Kazimierz M. and Irina Tomescu-Dubrow. 2014. Harmonization of Cross-National Survey Data on Political Behavior. Paper presented at the conference Interdisciplinary Studies of Political Behavior: From Elections to Protests, Columbus, USA, May 6–9 2014.
- Slomczynski, Kazimierz M. and Irina Tomescu-Dubrow. 2015. Survey Data Recycling: Toward a Formalized Approach to Ex-Post Harmonization of International Projects. *Harmonization: Newsletter on Harmonization in the Social Sciences* 1(1): 11–13.
- Smith, Tom W. 2011. Refining the Total Survey Error Perspective. *International Journal of Public Opinion Research* 23 (4): 464–484.
- Solt, Frederick. 2008. Economic Inequality and Democratic Political Engagement. *American Journal of Political Science* 52 (1): 48–60.
- Solt, Frederick. 2014. The Standardized World Income Inequality Database. Working paper. SWIID Version 5.0, October 2014.
- Solt, Frederick. 2015. Economic Inequality and Nonviolent Protest. *Social Science Quarterly* 96 (5): 1314–1327.
- Sorensen, Georg. 1993. *Democracy and Democratization*. Boulder, CO: Vestview Press.

- Steenbergen, Marco R. and Bradford S. Jones. 2002. Modeling Multilevel Data Structures. *American Journal of Political Science* 46 (1): 218–237.
- Temple, Jonathan. 1999. The New Growth Evidence. *Journal of Economic Literature* 37 (1): 112–156.
- Teorell, Jan, Mariano Torcal and José Ramón Montero. 2007. Political Participation. Mapping the Terrain. Pp. 334–357 in *Citizenship and Involvement in European Democracies. A Comparative Analysis*, edited by Jan W. Van Deth, José Ramón Montero, and Anders Westholm. London, UK: Routledge.
- Tilly, Charles. 2004. *Social Movements, 1768–2004*. Boulder, CO.: Paradigm Publishers.
- Tilly, Charles and Sidney Tarrow. 2007. *Contentious Politics*. Boulder, CO: Paradigm Publishers.
- Tomescu-Dubrow Irina and Kazimierz M. Slomczynski. 2014. Democratic Values and Protest Behavior: Data Harmonization, Measurement Comparability, and Multi-Level Modeling in Cross-National Perspective. *Ask: Research and Methods*. Volume 23, Issue 1 (2014): 103–114.
- Tomescu-Dubrow Irina and Kazimierz M. Slomczynski. 2015. The Political Context of Ethno-Discrimination in Europe: Assessing Trends on the Basis of the European Social Survey: Pp. 124–148 in *Political Inequality in an Age of Democracy: Cross-national Perspectives*, edited by Joshua K. Dubrow. New York: Routledge.
- Tomescu-Dubrow, Irina and Joshua Kjerulf Dubrow, eds. 2015–2016. Harmonization: Newsletter on Survey Data Harmonization in the Social Sciences 1(1) and (2), 2(1). ISSN 2392-0858. <http://consirt.osu.edu/wp-content/uploads/2015/01/Harmonization-Newsletter-v1n1-winter-2015.pdf>.
- Tomescu-Dubrow, Irina and Kazimierz M. Slomczynski. 2016. Harmonization of Cross-National Survey Projects on Political Behavior: Developing the Analytic Framework of Survey Data Recycling. *International Journal of Sociology* 46 (1): 58–72.

- Ulfelder, Jay. 2005. Contentious Collective Action and the Breakdown of Authoritarian Regimes. *International Political Science Review* 26 (3): 311–334.
- Ulfelder, Jay and Michael Lustik. 2010. Modelling Transitions to and from Democracy. *Democratization* 14 (3): 351–387.
- UNESCO 2012. *International Standard Classification of Education ISCED 2011*. Montreal: UNESCO Institute of Statistics.
- Van Aelst, Peter and Stefaan Walgrave. 2001. Who is that (Wo)Man in the Street? From the Normalisation of Protest to the Normalisation of the Protester. *European Journal of Political Research* Volume 39 (4): 461–486.
- Van Deth, Jan W. 2014. A Conceptual Map of Political Participation. *Acta Politica* 49 (3): 349–367.
- Verba, Stanley, N.H. Nie and J. Kim. 1978. *Participation and Political Equality: A Seven-Nation Comparison*. Cambridge: Cambridge University Press.
- Vrablikova, Katerina. 2013. How Context Matters? Mobilization, Political Opportunity Structure and Nonelection Political Participation in Old and New Democracies. *Comparative Political Studies* 37 (3): 259–285.
- Weisberg, Herbert. 2005. *The Total Survey Error Approach: A Guide to the New Science of Survey Research*. Chicago, IL: University of Chicago Press.
- Winters, Kristi and Friedrichs Martin. 2015. *QuickCharmStats 1.1 for PC Installation Guide & Software Manual*. http://www.gesis.org/fileadmin/upload/dienstleistung/tools_standards/charmstats/1.1%20QCS%20Manual.pdf.
- Wolf, Christof, Dominique Joye, Tom W. Smith and Yang-chin Fu, eds. 2016. *The SAGE Handbook of Survey Methodology*. London, UK: SAGE Publications.
- Wysmułek, Ilona, Olena Oleksiyenko, and Anastas Vangeli. 2015. Processing Errors in Cross-national Surveys: Insights from the Harmonization Project. *Harmonization: Newsletter on Harmonization in the Social Sciences* 1 (1): 15–17.

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Across the world, mass political protest has shaped the course of modern history. Building on decades of theory, we hypothesize that the extent and intensity of political protest is a function of micro-level democratic values and socio-demographics, country-level economic development and democratic practices, and the discrepancy (i.e. cross-level interaction) between a country's democratic practices and peoples' trust in key democratic institutions – that is, political parties, the justice system, and parliament.

This book is a Technical Report on the logic of, and methodology for, creating a multi-year multi-country database needed for comparative research on political protest. It concerns both the selection and ex-post harmonization of survey information and the manner in which the multilevel structured data can be used in substantive analyses.

The database we created contains information on more than two million people from 142 countries or territories, interviewed between the 1960s and 2013. It stores individual-level variables from 1,721 national surveys stemming from 22 well-known international survey projects, including the European Social Survey, the International Social Survey Programme, and the World Values Survey. We constructed comparable measures of peoples' participation in demonstrations and signing petitions, their democratic values and socio-demographic characteristics. We complemented the harmonized individual-level data with macro-level measures of democracy, economic performance, and income inequality gathered from external sources. In the process, we pulled together three strands of survey methodology – on data quality, ex-post harmonization, and multilevel modeling.

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