ONBound-Harmonization User Guide (Stata/SPSS), Version 1.2

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Table of Content

This Document

This document provides information on how to work with the data of the ONBound - Old and New Boundaries: National Identities and Religion project[1]. It outlines the project's starting point, the data harmonization procedures, the harmonization repository, the ONBound Harmonization Wizard, and most importantly, guides through the steps and procedures needed to compile a customized ONBound dataset. Chapter One of this user guide informs about citations for ONBound data and metadata. Chapter Two gives an overview of the available variables and the original datasets that were included. It also introduces our harmonization strategies. Chapter Three introduces the ONBound Harmonization Wizard. Finally, chapter four provides a step-by-step guide for the application of the ONBound harmonization routines. Before running our ONBound Syntax Package, please read Chapter Four carefully.

Introduction

In times of increasing institutional activities at the supra-national level and growing diversities in e.g. wealth and life chances at the individual level, national and religious identities seem to re-gain salience as markers between "us" and "them". Potential consequences are changes in the patterns of social cohesion and societal solidarity. The ONBound project contributes to existing research in this area regarding two core questions: The first concerns the relationship between religious and national identities at the individual level. How strongly do these two important cognitive frames for the social world overlap, or conversely, create cross-pressures? How consistent are the patterns of overlap or independence across countries, and how stable over time? The second question extends the first one, in that it asks about the effect of institutional characteristics and historical events at the country level on the relationship between religious and national identities. For this, a vast array of existing individual level and contextual data were merged and enriched. The result is a publicly available 'virtual' multi-level database that is designed to facilitate advanced statistical analyses by e.g. multi-level regression. This data infrastructure enables researchers to address not only the above research questions but also a wide variety of related issues, such as populism, anti-migration attitudes or trust in institutions in a comparative perspective. In

[1] https://www.gesis.org/en/services/processing-and-analyzing-data/data-harmonization/onbound

terms of methodological research, the ONBound data compilation enables researchers to compare different measurement instruments for the same constructs. Researchers may concentrate on the currently included data sources, but also have the possibility to add more data individually.

Beyond including numerous existing micro-level and macro-level data sources, the ONBound final data embeds data from the ONBound subproject *Religion and Nation in Constitutions Worldwide* which extracts information from national constitutions on our core elements, national identity and religion.

The database is most conveniently accessed by the ONBound Harmonization Wizard. The Harmonization Wizard is an online tool that enables users to select variables from the database by topics and scope of research. The Wizard then provides the user with a bespoke set of syntax files that can create a data set with the customized version of the ONBound harmonized data on the user's personal computer.

In total, the ONBound database contains 750 harmonized target variables based upon 1500 source variables from about 280 survey waves stemming from 18 studies for the micro-level variables, as well as 1650 variables from 17 macro-level repositories. Data on the micro-level reach from 1970 to 2018. For the macro-level we included all data points from 1945 to 2019, if possible. The country composition for both levels is entirely based on data availability. In other words, we included all countries in the world for which data were available in our source surveys. All sources were selected based on their conceptual fit. For the micro-level, all publicly available, comparative surveys were selected, while on the macro-level, coverage and conceptual fit was considered for supplementing and enhancing the micro-level.

We are grateful to Emma Ischinsky, Jaanika Juntson, Isabell Lülf, Laurenz Schöffler and Michaela Richter for superb research assistance. With their engagement, accuracy and dedication they made great contributions, especially to improving our coding schemes for countries, religious denominations and parties, but also to translating data and syntax files between SPSS and Stata. We are also very thankful for the highly professional contribution of Matthäus Zloch and Brigitte Mathiak, who brought our vision of user-friendly harmonization automation to life. For this project, not only did the department *Knowledge Technologies for the Social Sciences* enrich our project, but also the exchange with other colleagues from our department *Data Archive for the Social Sciences* helped during the development. We are

especially happy to have shared the process with the HaSpaD project and its staff Sebastian Sterl and Sonja Schulz. We are grateful for the fruitful meetings in which both harmonization projects shared ideas, discussed and enriched each other. Our gratitude also extends to our workshop participants, who pointed towards merits and remaining demerits during the process, added value through their substantial and technical advice and motivated us to continue our path. Special thanks go to our collaborators from the University of Milan, Ferruccio Biolcati Rinaldi and Cristiano Vezzoni, and Mikael Hjerm from Umeå University. All users of pre-versions of our database are thanked for their active participation. Their feedback is much appreciated, as it helped to improve the project's output. Finally, we are especially grateful to have worked with our collaborators and their colleagues at the Heinrich-Heine University Düsseldorf. Annette Schnabel and Kathrin Behrens accompanied our journey with regular feedback and theoretical expertise. The data they compiled in the ONBound subproject *Religion and Nation in Constitutions Worldwide* can now be used as a stand-alone product but are also integrated in the ONBound database.

The ONBound project has been funded by the German Research Foundation (DFG). This enabled us to compile a large-scale harmonization database that will foster a deeper understanding of the mechanisms of national identity and religion. We hope that the roads we took will inspire future harmonization projects and provide starting points for their journeys.

1. Citation(s)

Below the official citations for all ONBound related data and documentation are listed:

For this *User Guide*:

> May, Antonia, Werhan, Katharina, Bechert, Insa and Quandt, Markus (2020): ONBound User Guide. Retrieved from https://onbound.gesis.org/wizard [date of download].

For the *ONBound Micro-Level-Data_Overview (v4.0):*

> ONBound (2020): 'ONBound Micro-Level-Data_Overview_v4.0'. Retrieved from https://onbound.gesis.org/wizard [date of download].

For the *ONBound Micro-Level-Data_Documentation (v4.0):*

> ONBound (2020): 'ONBound_Documentation_Micro_v4.0'. Retrieved from https://onbound.gesis.org/wizard [date of download].

For the *ONBound Macro-Level-Data_Documentation (v4.0):*

ONBound (2020): 'ONBound_Documentation_Macro_v4.0'. Retrieved https://onbound.gesis.org/wizard [date of download].

For the *ONBound_APPENDIX I_Country Codes* (v4.0):

May, Antonia and Werhan, Katharina (2020): ONBound_APPENDIX I_Country Codes_v4.0. Retrieved from https://onbound.gesis.org/wizard [date of download].

For *ONBound_APPENDIX II.a Concept Classification Religions:*

Bechert, Insa and Ischinsky, Emma (2020): ONBound_APPENDIX II.a Concept_Classification Religions. Retrieved from https://onbound.gesis.org/wizard [date of download].

For *ONBound_APPENDIX II.b Coding Scheme Classification Religions*:

Ischinsky, Emma and Bechert, Insa (2020): ONBound_APPENDIX II.b CodingScheme_Classification Religions. Retrieved from https://onbound.gesis.org/wizard [date of download].

For *ONBound_APPENDIX III_Subnational Regions:*

Werhan, Katharina, Stecker, Sebastian, and Ischinsky, Emma (2020): ONBound_APPENDIXIII_Subnational Regions. Retrieved from https://onbound.gesis.org/wizard [date of download].

For *ONBound_APPENDIX IV_Micro-Level-Data_Weights (v4.0)*:

Werhan, Katharina (2020): ONBound_Micro-Level-Data_Weights_v4.0. Retrieved from https://onbound.gesis.org/wizard [date of download].

For *ONBound_APPENDIX V._Political Parties Coding Scheme*:

May, Antonia (2020): ONBound_APPENDIX V.a Political_Parties Coding Scheme. Retrieved from https://onbound.gesis.org/wizard [date of download].

The customized ONBound dataset should be cited as follows:

Bechert, Insa, May, Antonia, Quandt, Markus and Werhan, Katharina.2020. ONBound - Old and new boundaries: National Identities and Religion. Customized dataset. GESIS Data Archive, Cologne. https://onbound.gesis.org/wizard. [Date of dataset compilation].

Please make sure to also cite the original data sources you downloaded to create the harmonized ONBound data set. The correct citations are available on the single survey programs' websites or on the ONBound Wizard website "https://onbound.gesis.org/wizard" where the data download starts, as well as on our ONBound_List_of_source_datasets.html.

To avoid copyright infringement with the source survey programs and macro data providers, please, do not distribute your compiled data set to any third parties. If you must deliver datasets to journals for replication reasons, please reduce such datasets to the minimum of relevant variables.

2. ONBound Data

For the ONBound project we first had to identify possible data sources, common variables and potential pitfalls of the harmonization process. This chapter presents our approaches, the steps taken, introduces core information and explains decisions before the next chapter introduces the actual harmonization procedure.

2.1 Additional Files

In addition to the actual harmonization files and this user guide, ONBound provides further documents that can be consulted to address specific questions:

- ONBound_Documentation_Micro_v4.0.xlsx
- ONBound_Documentation_Macro_v4.0.xlsx
- ONBound_Micro-Level-Data_Overview_v4.0.xlsx
- ONBound_List_of_source_datasets.xlsx
- ONBound_List_of_source_datasets_customized.html
- ONBound_Appendix_I_Country_Codes_v4.0.pdf
- ONBound_Appendix_II.a_Concept_Classification Religions.pdf
- ONBound_Appendix_II.b_Coding Scheme_Classification Religions.xlsx
- ONBound_Appendix_III_Subnational Regions.pdf
- ONBound_Appendix_IV_Micro-Level-Data_Weightsv4.0.xlsx
- ONBound_Appendix_V._Political Parties Coding Scheme.xlsx

The first two documents, **ONBound_Documentation_Micro (v4.0)** and **ONBound_Documentation_Macro (v4.0)**, serve as the ONBound codebook. They include the information on harmonized target variable names, labels and coding. Additionally, **ONBound_Micro-Level-Data Overview (v4.0)** includes information on the origin of micro-level variables. Thus, these three sources build the core of ONBound documentation. Since

they comprise a great number of variables across two research fields and two levels of analysis, our documentation for the individual level variables cannot be as comprehensive as in the original documentations. For in-depth analyses of specific variables, we therefore recommend to also consult the original documentation sources.

The **ONBound_List_of_source_datasets** lists all included datasets with information on the versions used during the project phase and offers links to their repositories. The ONBound_List_of_source_datasets_customized.html represents the reduced list of the latter and includes information on those data sources necessary to compile the customized ONBound dataset.

> *Please note:* Since our harmonization procedures are developed for the exact source dataset versions available at the time, in order to use our database, users may not be able to use the latest data versions. Including updated versions of datasets requires advanced coding skills in either Stata or SPSS. How to handle changes like this in the ONBound repository will be explained in the last chapter.

In addition to previous documents providing detailed information on substantial harmonization, the appendices inform users about our coding strategies for categorical core and merge key variables. They offer attempts of standardized coding schemes. We advise users to carefully consider these documents. Especially Appendix I, listing the country codes, should be consulted for all cross-national analyses. Since all ONBound datasets are based on a country_year structure, standardization is a technical necessity. To include all micro- and macro-level datasets from 1945 to 2018, we had to introduce a coding scheme that captures unifications, splits, name changes and territorial changes of countries. As a result, we introduced one variable (ctry_ISO3onb) that accounts for historical political changes and one variable (ctry_ISOnumonb) that follows territorial entities as of today despite political changes. When analyzing data from countries that experienced such changes, country codes and names differ across time according to these changes. Please consult the ONBound_Appendix_I_Country_Codes_v4.0. Appendix II to Appendix V inform about coding strategies of categorical variables (Religious Denominations, Subnational Regions, Parties) and composition of technical variables (Weights).

2.2 Basic Structure

The comprehensive database consists of two main components. The first component comprises all micro-level variables, which are based on observations by respondents nested in their countries and years of the interview. The second component consists of all country- (or macro-) level variables, which are based on observations by countries and years. In order to facilitate merging of macro- to micro-data, some macro-data have been duplicated to fill systematically missing year observations. Please refer to ONBound_Documentation_Macro (v4.0) or chapter 2.5.4. Both databases are structured in order to be linked. However, it is of course also possible to generate a purely micro-level or purely macro level dataset to work with.

Please note: Compiling a complete ONBound dataset including all linked sources is **not recommended**. Such a dataset includes 5 million observations on 2400 variables and therefore overloads the capacity of most devices. The final size including subfolders can reach up to 86GB for Stata users and up to 58GB for SPSS users when all variables are selected. Thus, it is highly recommended to select variables and/or countries before downloading the data from the ONBound Harmonization Wizard. For narrowing the time-scope of the dataset before harmonizing, please refer to Chapter 4.6.1.

2.3 Scope, Variable Selection and Coverage

The decisions made for the variable selection were preceded by an intense literature review on existing research concerning religious identities, national identities and their interface. The project team carefully identified the independent and dependent variables used for research in this field or interlinked topic areas. Beyond, we constructed further possible research questions within the project's scope and made sure to include the variables necessary for analyzing them.

2.4 Included Topics

For a better usability, we sorted variables into topics. These topics help users to navigate through the variety of variables included on both levels. Moreover, these topics serve as main selection key on the level of individual data when compiling harmonized data files. Users do not select individual variables for their target files, but topical blocks of variables, and our

syntax-packages perform the dataset compilation at the topic level. In contrast to the micro-level data, macro-level topics are based on the original macro-level sources which must be selected completely.

2.4.1 **Micro-Level Topics**

The micro-level section includes various subdimensions of national identity and religion. Additionally, ONBound offers many more topics that are related to those two core elements. Moreover, variables of respondents' socio-demographic background, as well as protocol variables are available for every observation on the micro-level.

Micro-level data offer variables on the following topics:

Background and Protocol Variables

- (6100) Background Variables
- (6200) Protocol Variables

Additional Background Variables

- (6100_2) Subnational Regions

National Identity

- (1000) Formal Membership / Citizenship
- (1100) Origin Respondent and Family
- (1200) Feeling of Belonging / Self-Identification
- (1300) Membership Boundaries
- (1400) National Pride

Religious Identity

- (2000) Formal Membership: Denominations
- (2100) Practices
- (2200) Belief
- (2300) Religiosity / Centrality of Religion in Life
- (2400) Attitudes Towards Religion
- (2800) Religion and Nation

Interrelation of Groups

- (3100) Tolerance Towards Different Groups of Community
- (3200) Discrimination
- (3400) Racism

Legitimacy

- (4100) Civic Attitudes
- (4200) Support for Regime Principles
- (4300) Regime Performance
- (4400) Regime Institutions

Miscellaneous

- (5400) Politics
- (5700) Immigration

2.4.2 **Macro-Level Topics**

For the macro-level data, we included the source datasets, without prior pruning down. Here, some variables or variable groups may be assigned to more than one topic. Therefore, we had to make decisions for "major topics" in order to assign them. Besides substantial variables, administrative variables were added for every entry.

Macro-level data offer variables on the following topics:

Administrative Variables

- ONBound-Variables
- Harmonized Administrative Variables
- Study Specific Administrative Variables

Policies

- Constitutions: Religions, National Identity, Context
- Policy Settings: Religion, Integration, Immigration

State Indicators

- Economy
- Standard of Living
- Politics & Polity
- Special Topics: Human Rights, Globalization

Civil Society

- Population: Basic Population Figures, Migration, Education
- Religion: Religious Relevance
- Diversity: Religious Diversity, Ethnic Diversity

2.5 Included Datasets

The following paragraphs offer an overview on the datasets included. For more information, please refer to the documentation (ONBound_Documentation_Macro_v4.0.xlsx) and the master matrix (ONBound_Datamatrix_Micro_v4.0.xlsx).

2.5.1 **Micro-Level Datasets**

The selection of surveys and variables was based on their thematic fit, a comparative scope and their coverage. We extracted relevant variables for our research area, recoded and rearranged them for completely new perspectives and new insights. Please refer to the ONBound List_of_source_datasets for citations.

These are the datasets included:

- **Afrobarometer (AfroB)**
    - Merged Round 1 Data (12 countries) (1999-2001), Merged Round 2 Data (16 countries) (2004), Merged Round 3 Data (18 countries) (2005), Merged Round 4 Data (20 countries) (2008), Merged Round 5 data (34 countries) (2011-2013), Merged Round 6 data (36 countries) (2016)
- **Americas Barometer 2004-2018 Grand Merge File - FREE (AmericasB_2004_2014)** (reduced to 2004-2014)[2]
- **Arab Barometer (ArabB)**
    - Arab Barometer Wave I (2006-2009), Arab Barometer Wave II (2010-2011), Arab Barometer Wave III (2012-2014), Arab Barometer Wave III (2016-2017)
- **AsiaBarometer (AsiaB)**
    - AsiaBarometer 2001, AsiaBarometer 2003, AsiaBarometer 2004, AsiaBarometer 2005, AsiaBarometer 2006, AsiaBarometer 2007
- **Asia Europe Survey (ASES): A Multinational Comparative Study in 18 Countries, 2001**

[2] Even though we include the latest dataset version, we only include data until 2014, since the new version has been released shortly before our project's end.

- **Asian Barometer**
    - WAVE 1: 8 Countries in East Asia 2001-2003, WAVE 2: 13 Countries in East Asia, 5 Countries in South Asia 2005-2008, WAVE 3: 13 Countries in East Asia 2010-2012, WAVE 4: 14 Countries in East Asia 2014-2016
- **EU Neighborhood Barometer**
    - EU Neighbourhood Barometer Wave 1, EU Neighbourhood Barometer Wave 2, EU Neighbourhood Barometer Wave 3, EU Neighbourhood Barometer Wave 4, EU Neighbourhood Barometer Wave 5, EU Neighbourhood Barometer Wave 6
- **Eurobarometer**
    - **Applicant Countries Eurobarometer (AECB) / Candidate Countries Eurobarometer (CCEB)**
        - Applicant Countries Eurobarometer 2000, Applicant Countries Eurobarometer 2001.1, Candidate Countries Eurobarometer 2002.1, Candidate Countries Eurobarometer 2002.2, Candidate Countries Eurobarometer 2002.3, Candidate Countries Eurobarometer 2003.2, Candidate Countries Eurobarometer 2003.3, Candidate Countries Eurobarometer 2003.4, Candidate Countries Eurobarometer 2003.5, Candidate Countries Eurobarometer 2004.1
    - **Central and Eastern Eurobarometer 1990-1997: Trends CEEB 1-8 (CEEB)**
    - **Standard and Special Eurobarometer (EB)**
        - Mannheim Eurobarometer Trend File 1970-2002, Eurobarometer 58.1, Eurobarometer 59.1, Eurobarometer 59.2, Eurobarometer 60.1, Eurobarometer 61, Eurobarometer 62.0, Eurobarometer 62.2, Eurobarometer 63.1, Eurobarometer 63.4, Eurobarometer 64.2, Eurobarometer 65.1, Eurobarometer 65.2, Eurobarometer 66.1, Eurobarometer 66.3, Eurobarometer 67.2, Eurobarometer 68.1, Eurobarometer 69.1, Eurobarometer 69.2, Eurobarometer 70.1, Eurobarometer 71.1, Eurobarometer 71.3, Eurobarometer 72.4, Eurobarometer 73.1, Eurobarometer 73.3, Eurobarometer 73.4, Eurobarometer 74.2, Eurobarometer 75.3, Eurobarometer 76.3, Eurobarometer 76.4, Eurobarometer 77.3, Eurobarometer 77.4,

Eurobarometer 78.1, Eurobarometer 78.2, Eurobarometer 79.3, Eurobarometer 79.5, Eurobarometer 80.1, Eurobarometer 81.2, Eurobarometer 81.4, Eurobarometer 82.3, Eurobarometer 83.1, Eurobarometer 83.3, Eurobarometer 83.4, Eurobarometer 84.1, Eurobarometer 84.3, Eurobarometer 85.2, Eurobarometer 86.1, Eurobarometer 86.2, Eurobarometer 86.3

- **European Social Survey (ESS) Cumulation Waves 1-8**
- **European Values Study (EVS) & World Values Survey (WVS)**
    - EVS Longitudinal Data File 1981-2016, European Values Study 2017: Integrated Dataset (EVS 2017) (without Bosnia and Herzegovina, Montenegro, North Macedonia and Portugal)
    - WVS_Longitudinal_1981-2016
- **International Social Survey Programme (ISSP)**
    - ISSP 1985/1990/1996/2006 Cumulation "Role of Government I-IV", ISSP 1985/1990/1996/2006 Cumulation Add-On "Role of Government I-IV", ISSP 2016 "Role of Government V", ISSP 1991 "Religion", ISSP 1998 "Religion II", ISSP 2008 "Religion III", ISSP 1995 "National Identity", ISSP 2003 "National Identity II", ISSP 2013 "National Identity III", ISSP 2004 "Citizenship", ISSP 2014 "Citizenship II"
- **IntUne - Integrated and United: A quest for Citizenship in an "ever closer Europe"**
    - IntUne 2007, wave 1, IntUne 2009, wave 2
- **Latinobarometer**
    - Latinobarómetro 1995, Latinobarómetro 1996, Latinobarómetro 1997, Latinobarómetro 1998, Latinobarómetro 2000, Latinobarómetro 2001, Latinobarómetro 2002, Latinobarómetro 2003, Latinobarómetro 2004, Latinobarómetro 2005, Latinobarómetro 2006, Latinobarómetro 2007, Latinobarómetro 2008, Latinobarómetro 2009, Latinobarómetro 2010, Latinobarómetro 2011, Latinobarómetro 2012-2013, Latinobarómetro 2015, Latinobarómetro 2016, Latinobarómetro 2017
- **New Europe Barometer I-XI Trend Dataset, 1991-2007 (NHEB)**
- **PewGAP**

- 2002_1, 2005_1, 2005_2, 2006, 2007, 2008, 2009_1, 2009_2, 2010, 2011, 2012, 2013, 2014_1, 2014_2, 2015, 2016

2.5.2 **Macro-Level Datasets**

Macro-level datasets are included completely. Changes to the macro-level datasets are limited to restructuring, limiting the time-coverage and expanding the entries to structurally missing years. The procedure is explained in chapter 2.6.4. Please refer to the ONBound List_of_source_datasets.html for citations.

These are the datasets included:

- **KOG Globalization Index (KOF)**
- **Religious Characteristics of States Dataset Project, Demographics (RCS)**
- **Church Attendance and Religious Change, Pooled European Dataset (CARPE)**
- **United Nations: Demographic Statistics Database (Religious Affiliations) (UNSD2) ***
- **World Religion Project – National Religion Dataset (WRP)**
- **Religious Diversity Index (RDI)**
- **The Ethnic Power Relations (EPR) Core Dataset 2018 (EPR) ***
- **Religion and State Project, Round 3 (RAS)**
- **Religion and Nation in Constitutions Worldwide (RNCw)**
- **Migration Integration Policy Index 2015 (MIPEX)**
- **Indicators of Citizenship Rights for Immigrants (ICRI)**
- **The IMPIC Project: Immigration Policies in Comparison (IMPIC)****
- **World Development Indicators (WDI)**
- **UNHCR's populations of concern (UNHCR) ***
- **Polity IV Annual Time-Series, 1800-2018 (POLITY)**
- **Democratic Electoral Systems around the world, 1946-2016 (DES)**
- **CIRI Human Rights Data Project (CIRI)**

** Unfortunately, the Harmonization Syntax is only available in Stata*
*** Unfortunately, the Dataset is only available in Stata*

2.6 Detailed Structures

In this section we introduce our main harmonization steps and decisions. This includes consistent labeling and naming of variables across topics and data levels, an elaborated re-scaling that offers various coding schemes for each included variable, necessary systematic coding of variables used for matching across studies and country-level data as well as further coding schemes for categorical variables.

2.6.1 **Variable Names**

Both components of the ONBound database follow standardized rules when naming and labeling variables.

ONBound variable names contain a great deal of information:

First, variable names on the micro-level are written in lower case and variables on the macro-level are written in upper case, except for variables used for matching both levels. Due to case sensitivity of Stata, variable names of those variables are identical for both levels. This applies for *ctry_year*, *ctry*, *ctry_ISOnumonb*, *ctry_ISO3onb*.

Second, the first part of micro-level variable names refers to the main topic, the variable is assigned to. The second element includes information on the measured concepts. The third is a number indicating different versions of the concept's measuring approaches. Variable names with lowercase letters denote different scaling versions of the variables included. For further information on scale harmonization, please see chapter 2.6.2.

For example, the variable *pol_interest1b* refers to the main topic of politics (*pol*) and the concept of political interest (*interest*). This is the first political interest measurement (*1*) with the scaling version *b.* Micro-level data variable labels roughly follow this strategy. They also contain information on the character of the variable at hand. In the example above the variable is labeled "*Politics: Political interest1: How interested in politics, 5-p. interest*". It contains the topic (*"Politics"*), the measured concept (*„Political interest")*, the measurement version (*"1: How interested in politics"*) and scaling information of this version ("*5-p. interest"*)

Third, in analogy to the micro-level data, the first element of macro-level variable names refers to the main topic the variable was assigned to. The second element includes information on

the sub-dimension of a topic. The middle parts refer to the original variable name and the last part is the acronym used to identify the data source.

For example, the variable *POL_MIG_AVGS_E01_IMPIC* is part of the main topic of *Policies* (POL) and the sub-topic *Migration* (MIG). The original variable name is AvgS_e01 (AVGS_E01) and stems from the IMPIC dataset (The Immigration Policies in Comparison (IMPIC) Dataset, Bjerre et al. 2016).

Here, the variable labels also contain a reference to the elicitation mode and year coverage of the original dataset. In this example the variable label is "*COI: Illegal residence (av) [annually; 1980-2010]"* The label refers to the content ("*COI: Illegal residence"* = Control of immigration: Illegal residence), to the character of the variable ("*(av)"* = Average). Continuity and time-coverage of the included macro-level dataset are represented in brackets (here: annual data from 1980-2010).

2.6.2 **Harmonization of Scales (Micro-Level)**

This chapter explains our general harmonization principles and gives an example of concrete harmonization decisions taken. In the beginning of the harmonization processes we thought about general harmonization rules ideally applicable to every single harmonization task. However, we quickly realized that given the vast amount and variety of data, there are no 'catch-all' rules. Our aim was to harmonize as comprehensively as possible, but at the same time maintain as much information as possible. Therefore, we decided on the principle of creating different levels of harmonized variables and keeping the original variable versions in the data set. This enables researchers to decide for themselves which levels of harmonization to use according to the nature of their analyses.

> *Please note:* Recode decisions for the harmonization procedure of a variable are available in the respective line of the ONBound_Documentation_Micro_v4.0.

Table 1 shows the example of variable natid_pride1 (Proud to be [COUNTRY NATIONALITY]) which was asked on a 4-, 5- and 7-point scale across different surveys. The fully harmonized variable is natid_pride1. For this measure we chose a 4-point scale, because this scale was used most widely and, thus, most of the data was already available on a 4-point scale. Versions a, b and c provide the data in their original scales, but also cumulated across surveys (and adapting the missing values to the ONBound logic). For creating the fully harmonized

measure, we used “Semantic Judgement of Response Options” and “Random Split” and on variables b and c.

Table 1. Harmonization Example (National pride)

ONBound Varname	ONBound Varlabel	Target Coding
natid_pride1	National Identity: Pride1: How proud are you being [COUNTRY NATIONAL]**, harmonized 4-point pride**	(1) Very proud (2) Somewhat proud (3) Not very proud (4) Not proud at all
natid_pride1a	National Identity: Pride1: How proud are you being [COUNTRY NATIONAL]**,** **4-point pride**	(1) Very proud (2) Somewhat proud (3) Not very proud (4) Not proud at all
natid_pride1b	National Identity: Pride1: How proud are you being [COUNTRY NATIONAL]**,** **7-point pride**	(1) Not at all (2) (3) (4) (5) (6) (7) A Lot
natid_pride1c	National Identity: Pride1: How proud are you being [COUNTRY NATIONAL]**,** **5-point agree**	(1) Strongly disagree (2) Disagree (3) Neither agree nor disagree (4) Agree (5) Strongly agree

natid_pride1b: (1=4) (2 thru 3 =3) (4 = [random 2 or 3]) (5 thru 6=2) (7=1).

natid_pride1c: (1=1) (2=2) (3 = [random 2 or 3]) (4=3) (5=4).

Table 2 gives another example on the procedure:

Table 2. Harmonization Example (Degree of religiousness)

ONBound Varname	ONBound Variable	Target Coding
religid_centr3	Religious Identity: Centrality3: Religiousness respondent self-description**, harmonized 4-point scale**	(1) Very religious (2) Somewhat religious (3) Somewhat not religious (4) Not religious at all
religid_centr3a	Religious Identity: Centrality3: Religiousness respondent self-description**, 4-point scale**	(1) Very much practicing / Very religious (2) Practicing / Moderately religious (3) Not very much practicing / Lightly religious (4) Not practicing / Not religious at all
religid_centr3b	Religious Identity: Centrality3: Religiousness respondent self-description**, 7-point scale**	(1) Extremely religious (2) Very religious (3) Somewhat religious (4) Neither religious nor non-religious (5) Somewhat non-religious (6) Very non-religious (7) Extremely non-religious
religid_centr3c	Religious Identity: Centrality3: Religiousness respondent self-description, 3-point scale	(1) Religious (2) Somewhat religious (3) Not religious

religid_centr3b: (0 thru 2 =1) (3 thru 4 =2) (5 =[random 2 or 3]) (6 thru 7=3) (8 thru 10=4)

religid_centr3c: (1=1) (2=1) (3=2) (4=[random 2 or 3]) (5=3) (6=4) (7=4)

Another good example for our application of harmonization methods is the trust in institutions item battery, because it has been asked in many studies and waves (see Table 3). Most studies use a 4-point scale, others use 5-point, 7-point, 11-point or 2-point scales. Since we wanted to avoid creating too many versions of the variables, we decided to code the different scales into three partly harmonized variable versions and have one completely harmonized variable on an 11-point scale.

For the fully harmonized measure (trust_instnat1) all variables were "stretched" into the 11-point scale. Concretely, response options were stretched to the larger scale range, by assigning the lowest response option to 0 and the highest to 10, while all intermediate options are given equally distanced numbers in between[3]. The dichotomous variables do not ask for extreme categories "No trust at all" or "Complete trust". Instead, the categories are "tend to trust" and "tend not to trust". We therefore decided to place these categories between the extreme points and the center of the scale, i.e. on 2.5 for "tend not to trust" and 7.5 for "tend to trust". Variable version a covers all original 4-point scales and version b combines all scales with a natural mid-point (5-, 7- and 11-point scales), using the semantic judgement method. Finally, version c contains all dichotomous data.

Table 3. Harmonization Example (Trust in national institutions)

ONBound Varname	ONBound Varlabel	Target Coding
trust_instnat1	Trust in institutions: National Institutions1: National parliament**, harmonized 11-point scale**	(0) No trust at all ... (10) Complete trust
trust_instnat1a	Trust in institutions: National Institutions1: National parliament**,** **partly harmonized 4-point scale**	(1) A great deal / Trust a lot (2) Quite a lot (3) Not very much (4) None at all / Don't trust at all
trust_instnat1b	Trust in institutions: National Institutions1: National parliament**,** **partly harmonized 5-point scale**	(1) Complete confidence (2) A great deal of confidence (3) Some confidence (4) Very little confidence (5) No confidence at all
trust_instnat1c	Trust in institutions: National Institutions1: National parliament**, dichotomous**	(1) Tend to trust (2) Tend not to trust

For the complex recode procedure, please see the respective lines in the ONBound_Documentation_Micro_v4.0.

[3] $r1 \rightarrow r2 = l2 + \frac{h2-l2}{h1-l1} . (r1 - l1)$ r=rating; h=highest value; l=lowest level; 1=original scale; 2=target scale

2.6.3 **Respondent IDs**

The micro-level data include two respondent IDs: *caseid* and *caseid_onbound*. The first is the original Respondent ID coded into a string variable. This original caseid combined with the onbound_wave allows users to add variables not included in the ONBound datasets to their harmonized files. The second variable is a numeric ID that is unique through the whole ONBound micro-level data comprising about 5.8 million respondents. In order to create this ID, we first sorted the source dataset by ctry_year, onbound_wave and caseid and assigned a consecutive number from 1 to N to each case in the dataset. In a second step we composed the caseid_onbound from the onbound_wave (1-280) and the consecutive number assigned in step 1.

2.6.4 **Preparation and Expansion of Macro-Level Data**

Matching macro-level data to individual-level data in our setting always means matching by common country-keys on both the individual-level and the macro-level side. For this to be feasible, two modifications of the macro-level resources were necessary. First, we needed to rearrange the macro-datasets to a country_year structure. Sometimes this forced us to create rather large wide-format macro datasets.

Second, when harmonizing macro-level data, we included datasets with different time-coverages and regularity. In order to have a large and consistent structure, we expanded the data in order to fit an annual structure, if possible. This enabled us to increase the chance of matching both parts with the micro-level data being surveyed at specific time-points.

There are four different types of time-coverages:

1. Annual Data

Datasets providing annual data are kept as in the original. Their variable labels are followed by [annually; XXXX-XXXX], while XXXX-XXXX represent the total timespan, e.g. 1960-2017.

2. Regularly repeated data

Some datasets provide data in regular intervals. Their variable labels are followed by “[every Y years; XXXX-XXXX]”, with Y indicating the interval and XXXX-XXXX the total timespan, e.g. every 5 years; 1965-2000]. In this case, we expanded the data to an annual structure. The

entries for the year of data collection were repeated for the two years before and two years after the recorded year. Therefore, data from 1970 were copied to 1968, 1969, 1971 and 1972 and so on. While other modes of imputation might have been methodologically superior, this approach makes the 'data extension' very visible to users.

3. Single Year Data

For purely cross-sectional macro datasets, providing data for only a certain year, we deployed two methods. Depending on whether the cross-sectional observations must be assumed to be invalid for wider time spans or not, we either included the one time point only, or, if possible, we extended the existing data. For example, the *Religion and Nation in Constitutions Worldwide (RNCw)* dataset offered the variable "most recent constitution" (CON_CONTEXT_C2B_RNCw). The entries of 2017 were repeated accordingly, here: until the last change of the constitution. In the case of USA, the data could be repeated for the years 1992-2017, since the last change took place in 1992. For the first case, with no expansion, the variable labels are followed by [single year data; XXXX], where XXXX represents the time of the data collection. For the second case, where expansion is feasible, the variable labels are followed by [single year data; XXXX-XXXX] representing the maximal timespan, e.g. 1953-2017.

4. Periodic Data

The last type of data collection is mostly found in election-related datasets. Here, the datasets provide e.g. seats won in an election. In those cases, the data was repeated for the country specific legislature periods. Variable labels are followed by [periodic data; XXXX-XXXX]. Again, XXXX-XXXX represents the total timespan of the dataset, even if not all countries offer data for every time point.

2.6.5 Harmonization of Country Codes

For our matching structure that is bound to a country by year structure, we encountered several problems connected to the historical stability of states. In order to overcome these, we introduced a coding scheme for country codes accounting for territorial changes, changes of constitutive people, separations and unifications since 1945. The coding scheme is based on ISO 3166-1 alpha-3 and numeric country codes. In contrast to the strategies deployed by the International Organization for Standardization (ISO 2020), we introduced different coding logics which are represented by *ctry_ISO3onb* (ONBound historized alpha numeric codes

(based on ISO 3166 ALPHA-3), 'political' coding) which accounts for historical political changes across time, and ctry_ISOnumonb (ONBound numeric country codes (based on ISO 3166), 'territorial' coding) which follows geographical territories and national populations of today. For example, Czech Republic was assigned the alphanumeric codes of CSK_CZE before separation from Slovakia and CZE after this separation. The numeric code for this case is "203", regardless of political changes. However, data for CSK (Czechoslovakia as a whole) are coded with a different numeric code "200".

Please note: In this section we introduce the main coding rules. Since countries change surprisingly often, we documented our decisions in detail in the ONBound_Appendix_I_Country_Codes_v4.0. Please refer to this appendix when looking for specific country code decisions.

These are the main coding rules:

1. Country coding roughly follows ISO 3166-1 alpha-3 and numeric country codes. If possible, current ISO3166-1 codes were assigned.
2. For countries that changed their name but not their territory or national population, latest ISO 3166-1 codes were assigned retrospectively, e.g. Congo changed its name from Zaire (ZR, ZAR, 180) to the Democratic Republic of the Congo. All entries are coded COD (CD, 180).
3. Alphanumeric codes (*ctry_ISO3onb*) were assigned in order to identify and flag changes in a country territory or national population, using the following logic:
    - For countries that separated during the time series and got assigned new ISO 3166-1 codes separately, old ISO3166-1 codes were assigned to the formerly unified countries before the separation. The subsequent countries were coded according to their current status. E.g. Czechoslovakia was coded CSK until 1992. From 1993 on, Czech Republic and Slovakia are coded CZE and SVK. However, some datasets include separated data for CZE and SVK between 1945 and 1992. These are assigned the codes CSK_CZE and CSK_SVK for the time period before 1993.
    - Countries that *separated* during the time series and retained official ISO 3166-1 codes during the process are assigned different codes for the former and the subsequent countries. E.g. SUN is assigned to Soviet Union while RUS only contains data for contemporary Russia – contrary to sometimes retrospectively applied codes of successor states to the former entities.

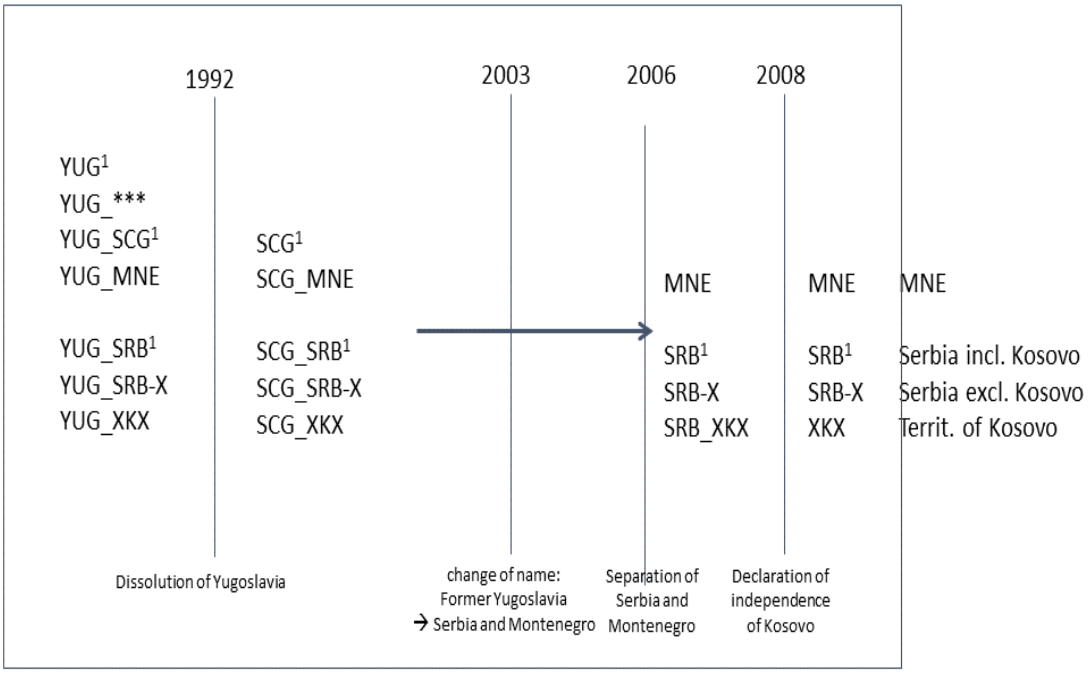
- Countries that *unified* during the time series and retained official ISO 3166-1 codes during the separation are assigned different codes for the former and the subsequent countries. E.g. DEU_W was assigned for the Federal Republic of Germany before 1990, while DEU implies data for the unified Germany.

4. The string variable *ctry* follows the historized logic of *ctry_ISO3onb* and includes standardized country names.
5. However, numeric codes (*ctry_ISOnumonb*) were assigned according to recent borders. Data referring to the Czech Republic before 1993 and after 1993 are assigned the same numeric code (203), since CSK_CZE and CZE would describe the same territory.
    - Territory that officially belongs to another greater entity got assigned the code of the greater entity + 0X, e.g. Germany-West got assigned 26701 (267 indicating Germany) and the German Democratic Republic got assigned 26702.
6. Since countries are mostly unified or separated during a year or over a process of separation that may take more than one year, we apply the codes from the first observation following the year in which the change took place. Nevertheless, some source data forced us to code countries slightly differently. Especially within transitional phases, codes might not follow this rule. If possible, for the macro-level data, the assignment has been verified based on country codings used in other datasets, e.g. the coding of the Correlates of War datasets. Otherwise population figures have been used in order to identify whether codes should be assigned to former or current political entities.
7. If needed, we introduced special codes for certain regions (e.g. Gaza vs. West Bank, Kurdistan).
8. We did not include any changes after 2017.

Figure 1 illustrates the coding rules on the example of Yugoslavia and its successor states Serbia-Montenegro, Serbia and Montenegro. Former parts of Yugoslavia are coded YUG_*** while *** indicate the current country codes. One successor state (Federal Republic of Yugoslavia) changed its name in 2003 to Serbia-Montenegro. ONBound only uses the latest name of this state (SCG). Serbia-Montenegro then separated in 2006 to Montenegro and Serbia, hence ONBound uses SCG_SRB, SCG_MNE for both separated regions between 1992 and 2006 and MNE and SRB after that. Moreover, since some included datasets distinguished between Serbia with/without Kosovo, we introduced two special cases. SRB_X refers to Serbia

without Kosovo, while XKX always refers to the territory of Kosovo. On the horizontal axis, all entries keep their numeric codes according their territory.

Figure 1. Country Code Example



[1] If not distinguishable

2.6.6 **Harmonization of Further Categorical Variables**

In addition to country codes, we harmonized further categorical variables across all surveys and macro-level resources. These are: subnational regions, religious denominations, and political parties. The various sources are characterized by a substantial heterogeneity of coding schemes for the relevant data, which forbade that we employed unified systematic standardization approaches to all these variables. Rather, we identified internationally applicable code resources and followed the existing coding schemes as closely as possible. If necessary, to account for different levels of complexity, we introduced hierarchical coding schemes that facilitate using data despite of the level of complexity used by original sources. Existing codes have been pooled and assigned to their respective level of complexity and to the respective codes and names. Below, we introduce the different coding schemes shortly. For more information please refer to the respective appendices.

Subnational Regions

In order to harmonize the subnational regions in the micro-level data we first had to get an overview on all existing coding schemes in the source data. The result of this is Appendix III. When developing the target codings, we conducted literature and online searches in order to find the best coding for the respective country. The online source according to which we ultimately developed the target codings can also be found in Appendix III. Whenever possible, we used official coding classifications such as NUTS-2. The variable label includes the level that has been coded (e.g. NUTS-2 or Province). For some countries we had to introduce different versions of the region variable due to the variety of coding schemes in the source data. Here, version a represents the most harmonized classification, while versions b and c classifications are more detailed. In Sweden we coded for example:

bv_region_SWEa: Background variables: Geographical Variables: Region SWE, 3 categ.

bv_region_SWEb: Background variables: Geographical Variables: Region SWE, NUTS-2

bv_region_SWEc: Background variables: Geographical Variables: Region SWE, NUTS-3

We coded a source variable into the most detailed version possible. If we had enough information and the categories were clearly assignable, we coded the more detailed versions into the less detailed versions. In the case of Sweden this means that for respondents who have information on NUTS-3 level we also have information on the less detailed levels. For some countries however, the categories of different study-programs could not be harmonized. In Appendix III users can see whether we harmonized the different versions of the variable or not.

Religious Denominations

The ONBound coding scheme of religions and denominations does not aim at providing a universally valid classification scheme. It was designed to serve the needs of the data on religious affiliation, which appear in any data set (micro or macro) used by the ONBound project. The four-level classification scheme lists all present entries and assigns denominations, subgroups and individual churches to major religious (or unreligious) groups as precisely as possible.

The categories are ordered by their size, i.e. the number of members, of the respective religious groups (source: Appendix E of the Pew Research Center's report “The Changing Global Religious Landscape” (2017)). The four levels unfold the diverse religious affiliations: the first level indicates nine major groups, (1) Christianity, (2) Islam, (3) Those who are not

religious, (4) Hinduism, (5) Buddhism, (6) Folk Religions (7) “Other” / “New Religions”, (8) Believers without specific religious affiliation and (9) Judaism. On the second level, the largest subgroups of these major groups are recognized and sorted by membership size (as of 2017 and as far as possible). The third level divides the subgroups further, while the fourth level is the most specific. In many cases it covers individual churches. For more information, please, see ONBound Appendix II a and b on the concept and coding scheme of religious denominations.

Political Parties

Even though, questions on political parties are asked frequently and consistently in surveys, across studies there is little agreement on party codes and party names. The ONBound project includes questions on vote choice (hypothetical and actual prospective and retrospective vote choice) and party affiliation (closeness to any party). Because party vote and party affiliation can be used as fruitful short-cuts to political positions and they can also be viewed as relevant dependent variables, we decided to take on the challenge of harmonizing political parties. Luckily, researchers have offered well-recognized harmonized coding schemes for political parties previously. Mainly, we follow the coding scheme by ParlGov (Döring and Manow 2019) and Party Facts (Bederke et al. 2020). The former includes all parties winning more than 1.0% of votes or at least two seats in parliaments. The latter, furthermore, includes party codes for countries not contained in the ParlGov dataset. Both account for historical changes of the parties. To adopt the coding schemes, we created a Stata-ado that refers to various spellings of each party to detect parties within the datasets. The results of this ado are saved in the ONBound_Appendx_V._Coding Scheme_Party Codes, which is later used to perform the recodes within the topic file of 5400 as well as labeling of parties. Unfortunately, this mechanism only works for labeled data. Numeric codes had to be extracted from codebooks and placed into the ONBound_Appendx_V._Coding Scheme_Party Codes manually. However, the table can be used as repository for party harmonization. It includes all spellings by included datasets and links our data with ParlGov and Party Facts. In that way, our data can be easily linked to further party related information, e.g. party families, ideological orientation and vote shares. Furthermore, the gathered spellings help to link further micro-level datasets on parties with our repository.

2.7 Missing Data

The micro-level data includes eight different missing codes:

(-1) Variable not available for this country in this survey-wave
(-2) Country specific variable not applicable for this country
(-3) Not asked in this survey-wave

(-4) Not applicable
(-5) Missing; Various / unspecified
(-6) Study specific missings / unable to code into scheme

(-7) Other
(-8) Don't know, can't choose
(-9) No answer, refused

(-10) No party preference / Did not vote / invalid ballot
(-11) Independent candidate

Codes (-1) to (-3) account for the different kinds of missing values that occur, because variables are not available in all study-waves and in some studies not available for all countries. Code (-1) means that a variable is included in the study_wave at stake but was not asked in the country. (-2) applies for country-specific variables (e.g. *bv_region*) and has been assigned to all cases not belonging to the relevant country. For example, all countries which are not Austria are coded to -2 in *bv_region_AUT*. Code (-3) indicates that a variable is not available for the whole study_wave.

Codes (-4) to (-9) stem from the original data. (-4) refers to questions that were not asked to certain respondents (irrespective of their country). In most cases this is due to filters in questionnaires and the value label gives further information on the excluded respondents. (-5) is the code for all missing cases that could not be further specified, e.g. system missing cases in some studies. Like code (-4), code (-6) can mean different things in different variables. It accounts for study specific missing codes (e.g. “Do not understand the question” or “None of these”) or indicates that we were not able to code a certain category into the given scheme (e.g. regions, religious denominations). This missing code is always labelled so that it becomes

clear, what it means for the current variable. Values (-7) indicates an undefined “Other” category, while (-8) represents the classical “Don’t know” and (-9) a “No answer, refused” category.

For variables related to party choices or vote choices, we had to introduce further missing codes and expand the meaning of others. (-10) indicates answers by respondents without party preferences (*pol_party2*) or respondents who did or would cast an invalid ballot (*pol_vote1* and *pol_vote2*). (-11) refers to independent candidates and (-7) here includes all other party mentions that were not coded or which we could not sort to an existing party code.

3. ONBound Harmonization in Practice

This chapter introduces the technical implementation of our harmonization strategies described in chapter 1 and 2. It introduces the ONBound Harmonization Wizard (https://onbound.gesis.org/wizard) and gives an overview of the implementation. The following Chapter 4 explains the technical realization, enables users to apply changes to their ONBound dataset, and to update dataset versions.

3.1 Overview and Technical Requirements

The Syntax Package offers harmonization- and merge-syntax for all micro- and macro-level datasets the ONBound project team decided to include. The Syntax Package has been developed for 64-bit Stata/SE for Windows (version 14.0 or higher) and SPSS for Windows (version 17 or higher). We strongly recommend using those versions and operating systems. For MAC we strongly recommend using Stata/SE. Stata/IC might not run properly. Due to specific syntax commands not being available in older versions of the statistics systems, the syntax cannot be expected to run properly with older versions. Please, make sure your device does not switch into ‘sleep mode’. This might cause the process to abort.

Please note: Before running the main.do/main.sps-files users must perform some steps manually (as described in Chapter 4).

3.2 The ONBound Harmonization Wizard

The ONBound Harmonization Wizard is an online tool that enables users to select source datasets and the appropriate syntax elements. The first choice is that of blocks of variables nested in topics for the micro-level data. The second choice to make is on topics clustered in

datasets on the macro-level. Finally follows the selection of countries. In an intermediate step, the Wizard shows users the availability of their data selections. Based on the selection users make, the wizard creates a customized ONBound Syntax Package – both, for SPSS and Stata users. The packages can be downloaded as .zip-folders. In addition to this download, the ONBound Harmonization Wizard creates a table of links to the original datasets based on the selection. These original datasets contain variables/topics and countries according to the researcher's choice.

To use the ONBound Harmonization Wizard, users need to download the .zip-folder *and* follow the links to the original datasets as indicated on the website, (possibly) register and agree to the terms of use, download the original datasets and save them in the folder "2_source" of the unzipped ONBound-folder (please, also see descriptions in chapter 3.3 and instructions at chapter 4). After applying minor necessary changes in the respective main syntax file (see chapter 4.3), the ONBound Syntax Package is ready to use. After running the main files, a customized dataset with all variables, datasets and countries selected on the webpage is compiled on the users' computer and ready to be analyzed.

> *Please note:* We do not automatically include an *a priori* year selection. Surveys are sometimes fielded in two subsequent years. Allowing for preselection of time-points would imply that surveys may be ripped apart which would cause severe bias of the harmonized dataset. However, besides the possibility to reduce the dataset retrospectively, chapter 4.6.1 introduces strategies to reduce the time-scope before running the harmonization procedure.

If users wish to include further data from the ONBound Repository beyond those initially selected, the ONBound Harmonization Wizard is the first address to do so. By simply selecting a new combination of variables/topics, datasets and countries is created and can be downloaded. With the additional source datasets also downloaded into the previous folder structure, executing of the new, extended syntax package will recreate the extended merged file.

3.3 Structure (zip.-Folder)

All necessary documents are included in the .zip-file that can be downloaded from our website (https://onbound.gesis.org/wizard). This .zip-Folder contains four main folders and one main.do/main.sps-file. It is available for Stata and SPSS.

These are the main folders and our main-files:

1_documentation
2_source
3_harmonization
4_target
main.do (do-file for Stata-Users)
main.sps (Syntaxfile for SPSS-Users)

1_documentation contains all additional documents as described in chapter 2.1.

- ONBound_Documentation_Micro_v4.0.xlsx
- ONBound_Documentation_Macro_v4.0.xlsx
- ONBound_Micro-Level-Data_Overview_v4.0.xlsx
- ONBound_List_of_source_datasets.xlsx
- ONBound_List_of_source_datasets_customized.html
- ONBound_Appendix_I_Country_Codes_v4.0.pdf
- ONBound_Appendix_II.a_Concept_Classification Religions.pdf
- ONBound_Appendix_II.b_Coding Scheme_Classification Religions.xlsx
- ONBound_Appendix_III_Subnational Regions.pdf
- ONBound_Appendix_IV_Micro-Level-Data_Weightsv4.0.xlsx
- ONBound_Appendix_V._Political Parties Coding Scheme.xlsx

2_source is an empty folder. Here, users save all original source datasets previously downloaded.

3_harmonization contains all syntax files compiled and provided by ONBound. Here, all files necessary to perform the harmonization are stored. During the harmonization process, also mini-datasets representing intermediate steps of the harmonization are stored in this folder. At the end of the process some of them are deleted, while others are kept to increase transparency of the process.

do_files (contains all dofiles related to harmonizational work on single datasets)
    dofiles_macro
    dofiles_micro
help_files (additional files for ONBound harmonization)
    adofiles
    labels

sav_to_dta_with_R (for Stata-Users only)
translationuni_files (for Stata-Users only)
… and additional specific help-files

prepared_datasets starts as an empty folder. After running the main.do/main.sps this folder contains all dataset fragments before the final merge/append routine.

4_target also starts as an empty folder. After running the main.do or main.sps, this folder contains the customized final dataset, based on the selection made by users using the ONBound Harmonization Wizard. Additionally, it contains separate datasets for micro-level data and macro-level data.

4. How to use ONBound Harmonization Syntax

Chapter 4 guides through the necessary steps to use the ONBound Package. We advise users to carefully follow our instructions and apply the changes suggested here. In some cases, users need to observe further steps, e.g. installing further packages and software and renaming of files. The steps are described under 4.3.

Please note: The syntax package is "expecting" the relevant source datasets according to the selections made on the Wizard Website. Problems may be caused if the wrong version is downloaded, or if users have selected any micro- *or* macro-level data without downloading any of the respective either micro-level or macro-level source datasets. At least one micro-level and macro-level dataset must be downloaded and saved in the "2_source"-folder.

4.1 BEFORE using the ONBound Syntax Package (Stata-Users)

Some steps are required before using the ONBound Package.

I. Unzip the folder downloaded from https://onbound.gesis.org/wizard and place the unzipped folder in the desired folder on your computer.

II. Download all datasets you intend to harmonize from the ONBound_List_of_source_datasets.xlsx or as indicated by the https://onbound.gesis.org/wizard and ONBound_List_of_source_datasets.html.

III. Please save the downloaded files in the empty folder "[…] ONBound/2_source".

Please make sure to use original filenames as provided by the original data providers. In case you downloaded the original data files for the second or third time, please make sure your system did not add "(2)" or "(3)" at the end of the files as this will exclude those files from the harmonization.

IV. Apply changes to the original filenames if necessary and only if indicated here. The cases and special steps that need to be taken are described under 4.3.

There are three occasions that require the application of changes:

A) Unpacking of files (Asian Barometer)

B) Name changes due to date-tags (UN Demographics Database).

C) Translation of files for datasets that are only available in the .sav-dataset format (PewGAP, Asiabarometer and Afrobarometer)

V. Alter the folder path in the "main.do" file:

a. Open the file "main.do"

b. In the 56th line of code, modify the path "...\ONBound" to match the folder path where you placed the unzipped folder

This line has a comment, `/***CHANGE THIS PATH TO MATCH THE LOCATION OF THE ONBOUND-FOLDER ON YOUR MACHINE! ***/`

It should look like this now:

`cd "[path to the ONBound-folder]/ONBound"`

If you placed the unzipped folder on your local disk (C:) in a folder called "ONBound" the line of code should look like this:

`cd "C:/Onbound"`

VI. Save changes.

The ONBound Syntax Package for Stata is now ready to use.

4.2 BEFORE using the ONBound Syntax Package (SPSS-Users)

Some steps are required before using the ONBound Package.

0. Prerequisites: Essentials for Python package that comes with SPSS must be installed. (further information can be found here: https://www.spss-tutorials.com/python-for-spss-installing-and-testing/). ONBound uses Python 2 which is pre-installed in SPSS 22-26. In later versions only Python 3 might be pre-installed. In that case you'll need to either install Python 2 manually or change all ONBound syntax jobs to "Begin Program with Python3".

I. Unzip the folder downloaded from https://onbound.gesis.org/wizard and place the unzipped folder in the desired folder on your computer.

II. Download all datasets you intend to harmonize from the ONBound_List_of_source_datasets.xlsx or as indicated by the https://onbound.gesis.org/wizard and ONBound_List_of_source_datasets.html.

III. Please save the downloaded files in the empty folder "[…]ONBound/2_source".

Please make sure to use original filenames as provided by the original data providers. In case you downloaded the original data files for the second or third time, please make sure your system did not add "(2)" or "(3)" at the end of the files as this will exclude those files from the harmonization.

IV. Apply necessary changes to the original data-file names if necessary. The cases and special steps that need to be taken are described under 4.3.

A) Unpacking of files (Asian Barometer)

V. Alter the folder path in the "main.sps" file:

a. Open the file "main.sps"

b. In the 55th line of code, modify the path ".../ONBound" to match the folder path where you placed the unzipped folder
It should look like this now:
`spss.Submit('''cd "[path to the ONBound-folder]/ONBound".''')`

c. In the 57th line of code, modify the path ".../ONBound" to match the folder path where you placed the unzipped folder
It should look like this now:
`wd = "[path to the ONBound-folder]/ONBound/"`
If you placed the unzipped folder on your local disk (C:) in a folder called "ONBound" the line of code should look like this:
`spss.Submit('''cd "C:/ONBound".''')`
`wd = "C:\ONBound/"`
for line 55 and 57 respectively.

Please note: **The path in line 55 should not end with "/" whereas the path in line 57 has to end with "/"!**

VI. Save changes.

The ONBound Syntax Package for SPSS is now ready to use.

4.3 Special Remarks

The following changes are only needed for few datasets. These datasets are UN Demographics Database, Asian Barometer, PewGAP, Asiabarometer and Afrobarometer. If none of those

mentioned above are included in the user customized ONBound dataset, this chapter can be skipped.

4.3.1 **(A) Unpacking files (Stata and SPSS users)**

Special Steps before running the main.do and main.sps (unpacking files)

Refers to: **Asian Barometer** (micro-level)

In case you decided to include waves of the Asian Barometer, please unpack the .rar-folders and save the .dta/.sav-files to the folder "2_source".

4.3.2 **(B) Necessary name changes (Stata users only)**

Special Steps before running the main.do (renaming of datasets)

Refers to: **UN Demographics Database** (Religious Affiliation, macro-level)

In case you decided to include any of the datasets provided by the UN Demographics Database / United Nations Statistics Division you have to:

1. unzip the ZIP-folder you downloaded.
2. save the .csv-file into the "[…]/2_source" folder
3. rename the .csv-file as follows:

   Religious Affiliation: UNdata_Export_Religion.csv

4.3.3 **(C) Translation of files (Stata users only)**

Special Steps before running the main.do (datasets only available in .sav)

Refers to: **PewGAP, Asiabarometer** and **Afrobarometer**-datasets (micro-level)

These datasets are only available in .sav-format. We included an R-script to our harmonization routine which converts the respective .sav-files to .csv-files. To run the script, users need to take these additional steps:

1. R needs to be installed on your device. Please download and install R on your device. You can download it for free here: https://cran.r-project.org/.
2. Alter the path in the „main.do" folder to guide to the R program path:
   i. Open the file „main.do"

ii. In the 57th line of code, modify the path global Rterm_path

`"...\R.exe"' to match the folder path where you stored R

This line has a comment: `/***CHANGE THIS PATH TO MATCH THE LOCATION OF R ON YOUR MACHINE - IF NECESSARY! (refer to USERS GUIDE)***/`

It should look like this now:

`global Rterm_path '"[path to program-folder]/Program Files/R/R-4.0.0/bin/R.exe"'`

3. Please erase the * in line 58, 83, 84 and 85

Notes for Stata/SE 15 for Windows or earlier: Please check whether Stata is using the server's resources or your client machine's resources. In case you have installed Stata on your local device and Stata is using your client machine's resources, please save the ONBound-Harmonization locally. In case you are using a server's resources, you need to save and run the ONBound-Harmonization on your network server.

Alternatively, you can manually install the required R-Script. Therefore, please go to: "3_harmonization\help_files\sav_to_dta_with_R" and open InstallHaven.R using RStudio. Now run the script manually, close RStudio. R is now ready to translate the SPSS-files. Please also follow step 1,2,3.

Please note that either way, the script will install the latest 'R haven library'. Thereby, it may overwrite previous 'haven' versions!

Notes for Stata/SE 16 for Windows: As far as we know, it should make no difference which resources Stata is using and where you save the ONBound harmonization files. However, in order to avoid complications, we recommend using and saving both either on your network or locally.

A bug in STATA 16 prevents the program from correctly running the "*unzipfile*" command. The bug does not appear in STATA 15 and, according to STATA should be fixed in STATA 17. Please, either use the -version- command to get the old behavior that takes a path: version 14: unzipfile "<filepath>/<zipfilename>.zip" or unzip all data source files manually before running the main.do file.

In any case, vpn-connections should be avoided when running the ONBound harmonization.

Please Note: In case you need to use the R-process, do not fear blue windows that will pop up rapidly on your computer. They are simply telling you that Stata and R are doing their job.

4.4 Minor Changes with large impacts

The following three sections give a brief introduction to minor changes to the coding that facilitate the work with the ONBound Harmonization routine and save space and CPU on users' devices.

4.4.1 Selection of Timeframes prior to the Harmonization

The ONBound-Wizard does not allow for an *a priori* selection of time points to reduce the target dataset. However, the ONBound syntax does allow for such manipulation. ONBound matches respondent data with their respective country-level data through the variable ctry_year. This variable is constructed from the surveyed country and the exact year of the interview. Consequently, respondents from the same survey waves could have different values in the ctry_year variable. As this could lead to serious problems with the representativeness of the data, we decided not to allow the selection of a time frame with the Harmonization Wizard. Yet, we allow for the selection of years via the ONBound Syntax prior to the harmonization.

To select years prior to the harmonization, users need to manipulate only one line of code in the main.do/.sps. Stata-Users need to go to the line of code that determines the local selectedyears. In Stata the default is empty – all years are selected. To reduce the selection, years that should be selected need to be typed without any further punctuation. SPSS-Users need to go to the line of code `selectedyears = [“1945”, […], “2017”]`. In SPSS all years are included by default. To reduce the selection, delete the years that should be excluded.

```
                local selectedyears year1 year2 year3
selectedyears
                selectedyears = [“year1”,“year2”,“year3”]
```

4.4.2 Saving Storage and Keeping track of all Harmonization Steps

During the process of harmonization, several datasets and other files are going to be created. To not occupy too much space, at the end of the main.do/.sps all unnecessary files are deleted. This section erases all temporary files within the macro-level dataset preparation

(1), temporary Unicode translation files (2), all fragments created of topic sections of micro-level datasets without any data manipulation (3), and all prepared fragments including recoding decisions carried out (4). If users are not satisfied with our definition of "necessary files", they may want to comment out the respective lines of code using * (Stata) or # (SPSS) for every line or use /* at the beginning and */ at the end of the code users do not want to execute (Stata only).

Furthermore, we included code that deletes all prepared macro-level datasets (5) and compiled micro-level topic datasets (6). These lines of code are commented out. If users wish to delete these datasets to save more space on their device, erase * (Stata) or # (SPSS) in the respective lines of codes. Numbers 1-6 mark the parts responding to these procedures in the main.do/.sps.

4.4.3 **Include Subnational Regions (topic 6100_2) more effectively (Stata users)**

The additional background variable "Subnational Regions (6100_2)" is causing problems for Stata users especially. Including this topic is rather demanding for Stata due to a variety of reasons and causes high levels of CPU usage. In some cases, this leads for Stata to abort. To avoid aborting, users can take a different route. First, 6100_2 should not be included in the preparation of the ONBound harmonization with other topics. Therefore, in the line of local selectedtopics the topic 6100_2 needs to be erased from the list (in case the topic has been on our Wizard website). In order to include the topic, please erase "/*" and "*/" in line 321 and 332 to include this topic. The exact lines may vary based on the topic choice the user made, but the changes always concern the 10 lines of code in the section "ADDING TOPIC 6100_2 MANUALLY". In the "4_target"-folder two version of the final datasets will be saved – with and without the subnational regions (topic 6100_2).

4.5 USING the ONBound Syntax Package for Harmonization

After applying the changes as described in 4.1 or 4.2 and 4.3, and possibly applied additional changes described in 4.4 users can run the main.do – or main.sps, respectively. This main file creates the harmonized dataset with the users set presets applied on our website https://onbound.gesis.org/wizard. Just press "run" or "do".

The final customized dataset will be saved in the "4_target" folder.

Please note: Since ONBound intends to harmonize a vast array of datasets into a single dataset, the actual process might take some minutes – or rather hours or even a whole day and night. Depending on the selection of variables, this might even produce a dataset too large to handle. Especially Stata-Users should be careful when running the ONBound files. They put a significant strain on the CPU of their device. In some cases, Stata will abort. Please reconsider the initial selection made at the ONBound Harmonization Wizard and narrow down the variable selection.

4.6 A deeper insight into the ONBound Universe

With the initial download of the ONBound .zip-folder users gain access to the whole ONBound universe. This includes the customized main file, but also a complete documentation and further resources to harmonize other resources or to modify the personal ONBound harmonized dataset. This section offers tips and tricks as well as a deeper insight into the structure. Please be advised that the ONBound universe entails black holes if coders are not careful.

In this chapter, we are giving a glimpse at the internal ONBound structure. The following section shows the steps that are taken within the web of Syntax Files and how the various Files communicate with each other. Additionally, it shows the position of *locals* that are initially written by the Wizard in accordance with the selections made by the user. Manipulating these *locals* is the simplest modification possible. If users wish to modify the syntax further, and add more variables, topics or original datasets, we advise to carefully retrace the files and their commands and how they relate to each other. Chapter 2 explained the folder structure; this chapter digs deeper into the ONBound code. A first insight in the function of the network is shown here.

In ONBound, the main.do/main.sps is the centerpiece of the ONBound Syntax Package. But the actual work is done within the syntax-files. Together with special task files and documents, they are hidden in the folder “3_harmonization”. Let’s recall the main structure for a moment:

Level 1 of ONBound:

1_documentation

2_source
3_harmonization
4_target
main.do (do-file for Stata-Users)
main.sps (Syntaxfile for SPSS-Users)

Below this level, within the chapter 3_harmonization the work is done:

Level 2, 3, 4 (*below 3_harmonization*)

Level 2	Level 3	Level4
do_files		
	dofiles_macro	
		dofile_d_DES.do.do /.sps
		dofile_d_RNCw.do /.sps
		dofile_d_`datasets_macro'.do /.sps
	dofiles_micro	
		dofile_d_1000.do /.sps
		dofile_d_3400.do /.sps
		dofile_d_`selectedtopics'.do /.sps
		dofile_d_ACEB_2000.do /.sps
		dofile_d_ISSP_2013.do /.sps
		dofile_d_`datasets_micro'.do /.sps*help_files*
	adofiles (contains files for country code harmonization via labels.xlsx)	
	labels (contains all files with label-information)	
	sav_to_dta_with_R (contains special files for R-routine)	
	tranlationuni_files (contains Unicode-translation for Stata datasets)	
	[other specific .do /.sps-files for special topics / special needs]	
prepared_datasets		
	prepared_files_macro (contains all produced macro-level datasets before final merges/append)	
	prepared_files_micro ([contains all produced micro-level datasets before final merges/append)	

The following table guides through the important syntax files and how they relate to each other:

Main.do/main.sps

GENERAL SECTION

- Sets working paths
- Runs other general preparations (e.g. R-routine, ados etc.)

* FILTER SECTION *

- defines all filters (as written by ONBound Harmonization Wizard)

Locals	Code	Examples
dataset_micro	Stata: local **dataset_micro** dataset1 dataset2 dataset3 SPSS: **datasets_micro** = [“dataset1”,“dataset2”,“dataset3”]	ISSP_2013 EB_84_1_2015 LatinoB_2010
dataset_macro	Stata: local **dataset_macro** dataset1 dataset2 dataset3 SPSS: **datasets_macro** = [“dataset1”,“dataset2”,“dataset3”]	RNCw WDI IMPIC
selectedtopics	Stata: local **selectedtopics** topic1 topic2 topic3 SPSS: **selectedtopics** = [“topic1”,“topic2”,“topic3”]	1000 1200 5700
selectedcountries	Stata: local **selectedcountries** country1 country2 country3 SPSS: **selectedcountries** = [“country1”,“country2”,“country3”]	DEU FRA DNK
obltopics	Stata: local obltopics 6100 6200 SPSS: obltopics =[“6100”,“6200”]	Notes: refers to protocol and background variables
selectedyears	local **selectedyears** year1 year2 year3 **selectedyears** = [“year1”,“year2”,“year3”]	1945-2019

* PREPARATION SECTION *

- creates empty folders on your device within the ONBound structure
- runs syntax files by **dataset_micro**
  [folder: 3_harmonization/do_files/dofiles_micro/dofile_d_dataset_micro.do/.sps]

dofile_dataset_`dataset_micro'.do/.sps

- checks if dataset has been downloaded by users

if yes:

- runs general preparations and defines anchor variables (version, download, onbound_wave, study_wave, caseid, etc.)
- partitioning of dataset to fit topics
- saves fragmented datasets with obligatory variables, administrative variables and substantial variables sorted by topics

[saved: "**help_`selectedtopic'_`dataset_micro'.dta/.sav**"
in folder: 3_harmonization/prepared_datasets/prepared_files_micro/fragments]
e.g.: help_1300_ISSP_2013.dta/.sav

- runs syntax files by **selectedtopics**
  [folder: 3_harmonization/do_files/dofiles_micro/dofile_d_dataset_micro.do/.sps]

dofile_d_`selectedtopics'.do/.sps

- defines variables of this topic
- BY dataset_micro:
- checks if help_`selectedtopics'_`dataset_micro' exists

if yes:

- creates all variables that belong to the topic
- replaces target variables with original variables
- performs recodes
- saves topic-fragment dataset with obligatory variables, administrative variables and substantial variables, sorted by topics and recoded to target variable codes

[saved: "**dataset_`selectedtopic'_`dataset_micro'.dta/.sav**"
in folder: 3_harmonization/prepared_datasets/prepared_files_micro/`selectedtopic']
e.g.: "dataset_1300_ISSP_2013.dta/.sav"

- appends all **datasets_micro**
- runs syntax files to label the appended data
  [folder: 3_harmonization/help_files/labels/LABEL_`selectedtopic'.do/.sps]

LABEL_`selectedtopic'.do/.sps

- labels target dataset

LABEL_oblvars.do/.sps

- labels obligatory variables in target dataset

- applies filter: **selectedcountries** and **selectedyears** [drops all data not wanted]

[saved: "**dataset_`selectedtopic'_all.dta/.sav**"
in folder: 3_harmonization/prepared_datasets/prepared_files_micro/all]

e.g.: “dataset_1300_all.dta/.sav”

- runs syntax files by **obltopics**
  [folder: 3_harmonization/do_files/dofiles_micro/dofile_d_`dataset_micro’.do/.sps]

  dofile_d_6100.do/.sps
  dofile_d_6200.do/.sps

  - analog to dofile_d_`selectedtopics’.do/.sps

- runs syntax files by **dataset_macro**
  [folder: 3_harmonization/do_files/dofiles_macro/dofile_d_`dataset_macro’.do/.sp
  s

  dofile_d_`dataset_macro’.do/.sps

  - checks if dataset has been downloaded by users

  if yes:

  - (Stata only) translates dataset to Unicode
    [runs syntax file 3_harmonization/help_files/dofile_translateuni.do]
  - (Stata only) runs automatic country code recodings using the
    countriesonbound_macro.ado
  - (SPSS only) harmonization of country codes
  - generates anchor variable (ctry_year)
  - performs recodes, expansions and reshaping
  - applies filter: selectedcountries and selectedyears [drops all data not wanted]

  [saved: “dataset_`selectedtopic’_all.dta/.sav”
  in folder: 3_harmonization/prepared_datasets/prepared_files_macro]
  e.g.: “dataset_RNCw.dta/.sav”

* MERGE / APPEND SECTION *

- merges all micro-level datasets, respectively micro-level topic datasets
  [“dataset_`selectedtopic’_all.dta/.sav”
  in folder: 3_harmonization/prepared_datasets/prepared_files_micro/all]
- saves micro-level dataset “dataset_merged_micro.dta/.sav”
  [“3_harmonization/prepared_datasets/prepared_files_micro”]

- merges all macro-level datasets
  [“dataset_`selectedtopic’_all.dta/.sav”
  in folder: 3_harmonization/prepared_datasets/prepared_files_macro]
- saves macro-level dataset “dataset_merged_macro.dta/.sav”
  [“3_harmonization/prepared_datasets/prepared_files_macro”]

- merges final micro-level and macro-level dataset
  [dataset_merged_micro.dta/.sav + dataset_merged_macro.dta/.sav]

* CLEANING WITHIN FINAL DATASET*

- cleaning of final dataset, ordering of variables

* SAFE *

- saves final dataset onbound_final_dataset.dta/onbound_final_dataset.sps [folder: “4_target”]

```
* ADDING TOPIC 6100_2 MANUALLY * (Stata only)
```

- adding of topic 6100_2 without large CPU requirements
- runs dofile_d_6100_2.do
- appends topic 6100_2 to dataset_merged_micro.dta, dataset_merged_macro.dta and onbound_final_dataset.dta

```
* CLEANING OF REPOSITORY *
```

- (1) deletes temporary files of macro-level datasets
- (2) deletes temporary files of Unicode translation (macro-level, Stata only)
- (3) deletes temporary help-files consisting of fragments of original micro-level datasets
- (4) deletes temporary prepared help-files consisting of fragments of original micro-level datasets
- (5) deletes single prepared macro-level datasets (optional)
- (6) deletes single prepared topic files on the micro-level (optional)

4.7 Updating ONBound to newer versions

Generally, if the original datasets that were used when we created the ONBound universe are updated in their source repositories, users should employ the possibility to request these earlier versions of these datasets. The ONBound_List_of_source_datasets.xlsx indicates the versions used by ONBound. Alternatively, users can try to update datasets to the newer versions within the ONBound Syntax Package. To update the ONBound Syntax Package requires only few, but vigilant coding routines.

To update datasets versions, two things are important:

1. Did the name of the new version change when downloading the updated dataset?
2. What did change internally in the new versions of the datasets, i.e. regarding variable names and contents? Deviant codings might corrupt the harmonization processes and make the harmonized variables useless.

While both questions are important to both levels of datasets, they require different procedures for micro- and macro-level data. This section therefore offers two different approaches.

4.7.1 **Micro-Level Datasets**

1. Save the updated version in the “2_source”-folder

2. Open the dataset file of the updated dataset:
   dofile_dataset_`micro_datasets'.do/.sps
   [Folder: "3_harmonization/do_files/dofiles_micro/]
3. Update the name of the updated and downloaded version:
   a. Stata:
      - Check for existence of file:
        `capture confirm file "2_source/[…]"`
        (Data format is not relevant here. If the original data comes in a zip-folder, the name of the zip-folder needs to be in this line
      - *if* the original dataset is downloaded with a zip-folder:
        `unzipfile "2_source/[…].zip"`
      - Load dataset
        `insheet using "2_source/[…] .xlsx"`
        or `import excel "2_source/[…] .xlsx" , firstrow clear`
        or `use "2_source/[…] .dta" , clear`
        or `import delimited "2_source/[…] .csv" , clear`
   b. SPSS
      - Load dataset
        `file=wd+"2_source/BBBB.csv"`
      - *if* the original dataset is downloaded with a zip-folder:
        `file=wd+"2_source/[…].zip"`
        insert the zip-file name
        `file2=wd+"2_source/[…].sav"`
        insert the dataset-file name (if different)
4. Change variable names according to version updates by original datasets, if necessary. Check which topic files are affected by the changes of original variables.
5. Save changes
6. Open the topic file were variables have been changed:
   dofile_d_`selectedtopics'.do/.sps
   [Folder: "3_harmonization/do_files/dofiles_micro/]
7. Find the section referring to the original dataset that changed
8. Change variable recodes according the updated made
9. Save changes
10. Re-run main.do/main.sps (If you wish to save a new version of the final dataset, change the dataset name in the very last line of code within the main.do/.sps)

4.7.2 **Macro-Level Datasets**

1. Save the updated version in the "2_source"-folder

2. Open the dataset file of the updated dataset:
   dofile_d_`macro_datasets'.do/.sps
   [Folder: "3_harmonization/do_files/dofiles_macro/]
3. Update the name of the updated and downloaded version:
   a. Stata:
      - Check for existence of file:
        `capture confirm file "2_source/[…]"`
        (Data format is not relevant here. If the original data comes in a zip-folder, the name of the zip-folder needs to be in this line
      - *if* the original dataset is downloaded with a zip-folder:
        `unzipfile "2_source/[…].zip"`
      - Load dataset
        `insheet using "2_source/[…] .xlsx"`
        or `import excel "2_source/[…] .xlsx" , firstrow clear`
        or `use "2_source/[…] .dta" , clear`
        or `import delimited "2_source/[…] .csv" , clear`
   b. SPSS
      - Load dataset
        `file=wd+"2_source/BBBB.csv"`
      - *if* the original dataset is downloaded with a zip-folder:
        `file=wd+"2_source/[…].zip"`
        insert the zip-file name
        `file2=wd+"2_source/[…].sav"`
        insert the dataset-file name (if different)

4. Change the do-/syntax-file according to the changes indicated by the original datasets throughout the files
5. Save changes
6. Re-run main.do/main.sps (If you wish to save a new version of the final dataset, change the dataset name in the very last line of code within the main.do/.sps)

Have fun with the data, don't forget to cite us and don't ask inconvenient questions 😉

References

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