

# ReadMe for Data Usage of the ifo Education Survey

## 1. General Information

The ifo Education Survey (in German: "ifo Bildungsbarometer") is an annual representative opinion survey of the German population and was first conducted in 2014. It provides rich data concerning public opinion on various education topics in Germany. Amongst the wide range of topics are early childhood education, schools, vocational training, university education, life-long learning, and education policy. The use of several survey experiments allows testing how information provision and the framing or wording of questions can affect public opinion. This ReadMe gives helpful information for data users of the ifo Education Survey. For more detailed information on the ifo Education survey, see an article in the Data Observer of the Journal of Economics and Statistics<sup>1</sup>, or visit the website [www.ifo.de/ifo-bildungsbarometer](http://www.ifo.de/ifo-bildungsbarometer).

There is one ifo Education Survey wave per year. The data of the ifo Education Survey is accompanied by one codebook per wave. These codebooks contain the questions asked in the framework of the ifo Education Survey in both German (original version) and English (translation by ifo researchers). Short texts in the original questionnaires are not included if they only serve as a connecting passage to guide respondents from one part of the questionnaire to the next. The translations contained in the codebooks are not verified, but are intended to help non-German speaking users in understanding the contents of the questionnaire. The authors of the codebooks cannot be held responsible for any use which may be made of the information contained therein. For an approved translation, please consult a translator. In case of ambiguities, please refer to the original question in German.

## 2. Structure of the Data

### 2.1 Variable and Question Types

In each wave, a range of background questions is asked. Alongside standard background variables such as sex, age, education, occupation, and monthly net income, more specific questions related to public opinion are asked in some of the survey waves, such as party preference or media usage. Furthermore, respondents are asked to report whether they work in education and, if this is the case, to indicate which type of occupation they pursue in the education sector. Background questions are

---

<sup>1</sup> Freundl, Vera, Elisabeth Grewenig, Franziska Kugler, Philipp Lergetporer, Ruth Schüler, Katharina Wedel, Katharina Werner, Olivia Wirth, and Ludger Woessmann (forthcoming). *The ifo Education Survey 2014-2021: A New Dataset on Public Preferences for Education Policy in Germany*. Journal of Economics and Statistics.

indicated in the variable names by *s*, followed by the number of the background question.<sup>2</sup> The names of the variables derived from the main survey questions follow the same logic and are composed as follows: *q*, followed by the number of the question in the questionnaire. Generally, the order of the variables in the codebook follows the order of the questionnaire. In some cases, however, the sequence of the number is not consistent as some questions were dropped after the pre-tests to save survey time or will be published at a later stage.<sup>3</sup>

The codebooks also indicate the types of questions. "Scale" indicates answer categories on a (usually five-point Likert) scale. "Single choice" indicates that only one answer was possible among a range of items not displayed on an actual scale. "Multiple choice" indicates that several answers were possible. "Dichotomous" indicates that only one answer was possible among two given answer categories. "Open-ended" means that respondents could insert numbers into text boxes (i.e., if they had to guess a certain amount of money). "Matrix" means that the answer categories were displayed in a matrix with several items on the same screen.

During the survey, respondents sometimes had the possibility to write down their answer in a text box. These open-ended answers are not included in this codebook and data set to protect the identity of the respondents. To avoid information loss, the relevant answers were coded and grouped manually by ifo researchers into distinct categories. The ending "n" of a variable name indicates such coded answers (e.g., *q39n\_other* in wave 2014, which was coded from the text box in *q39\_17*). If a variable was coded during the data preparation, you can find the information in the column "Type" in the codebooks.

The column "Refers to previous question" (included in codebooks from wave 2015 onwards) indicates whether a question had been asked in a previous wave.

## 2.2 Treatment and Control Groups

The ifo Education Survey makes use of survey experiments. Respondents are assigned to a new treatment group or the control group ("splits") for each experiment. A split question is indicated by *qxxab* (if two splits are contained), *qxxabc* (if three splits are contained), *qxxabcd* (if four splits are contained) (*xx* stands for question number). The column "Treatment" in the codebooks indicates the splits (e.g., *a*, *b*, *c*, and *d*). Split *a* usually contains the respondents in the control group. A second

---

<sup>2</sup> The questions concerning the second youngest child were dropped after wave 2015. This is why *s13\_3* and *s14\_3* are not included in later waves. Attention: *s13\_2* and *s14\_2*, therefore, indicate questions concerning the second youngest child in wave 2014 and 2015, but questions concerning the youngest child in waves 2016 and 2017.

<sup>3</sup> In 2014, question 23 was dropped after the pre-test. In 2016, questions 9 and 22 were dropped after the pre-test. In 2017, questions 4, 15, 19, 22 and 29 were dropped after the pre-test. Furthermore, background questions about the respondents' children (e.g., *s13*, *s14*) were asked in blocks per child during the survey. I.e., first, all questions concerning the oldest child were asked (*s13\_1*, *s14\_1*), and subsequently, all questions concerning the younger children (*s13\_2*, *s14\_2*; *s13\_3*, *s14\_3*) in case a respondent had more than one child. For more clarity, the variables are reported in the codebook in the following way: *s13\_1*, *s13\_2*, *s13\_3* etc.

variable *zzqxx* indicates which respondents are included in which split, whereby "1" means that the respondent is included in split *a*, i.e., receiving question *qxxa*, "2" means that the respondent is included in split *b*, "3" means that the respondent is included in split *c*, "4" means that the respondent is included in split *d*, and so on. Examples are *zzq03* and *q03abcd* in wave 2014. In order to display the answers of split *a* only, the STATA command to be used is: *browse qxxabcd if zzqxx == 1*. Note that some experiments are linked and require respondents to be assigned to the same treatment group for several questions. An example is *q33* in wave 2015, which has a linked randomization with the split assignment of *q27*. This is mentioned in the codebook column "Note" with "linked randomization". For detailed information about the linkage of the splits use the STATA command *tabulate* (e.g., *tabulate zzq27 zzq33*) to get a two-way table of the frequencies of the split assignment in the two corresponding questions.

The codebooks also contain split questions that do not contain different treatments but were used to cover several questions at once and thereby reduce the overall length of the survey. In this case, each split is contained in an independent variable *qxxa*, *qxxb*, *qxxc*, and *qxxd*, e.g., *q14a*, *q14b*, *q14c*, and *q14d* in wave 2014. Unless noted otherwise, the assignment of respondents to the split questions was done in a randomized fashion. For each split question, there was a new randomization.

### 2.3 Wave-Specific Comments

Between 2014 and 2017, the online survey was complemented by an offline survey for people who did not use the internet to obtain representative coverage of the national population. This led to two target populations: An online respondent (short: "onliner") is a person who regularly participates in surveys of the surveying provider and receives a small reimbursement for his or her participation. The onliners answered the questions on their personal computing device. Through quotation, a representative sample of the German population was obtained. The second target population consists of so-called "offliners", i.e., people not using the internet. These respondents were retrieved through standard random sampling in-person and were asked to fill in the survey on a technological device provided by the interviewer. However, many of the respondents needed assistance of an interviewer, which resulted in traditional computer-assisted personal interviews (CAPI) for these respondents. As the proportion of people who do not use the internet has become smaller over time, the ifo Education Survey has moved to an online-only survey since 2018. This approach is justified by an onliner vs. offliner study by Grewenig et al. (2018)<sup>4</sup>, which shows that re-weighted online samples can produce response patterns that are statistically and quantitatively indistinguishable from those of mixed online-offline surveys. Whether the respondent filled in the questionnaire him- or herself or needed assistance is captured in the variable *mode*.

There are two variables indicating the federal state (in German: "Bundesland") in which the respondent lived, namely *s06f* and *bula*. In all the waves, the answer categories of *bula* start with "1

---

<sup>4</sup> Grewenig, Elisabeth, Philipp Lergetporer, Lisa Simon, Katharina Werner, and Ludger Woessmann (2018). *Can Online Surveys Represent the Entire Population?* CESifo Working Paper 7222.

Schleswig-Holstein" to ensure consistency with wave 2014, in which both bula and s06f are reported starting with "1 Schleswig-Holstein". In wave 2014, s06f was the follow-up question in case no valid answer was given before, which results in a low number of observations in s06f. From wave 2015 onwards, s06f includes the same amount of observations as bula but contains the answer categories in alphabetical order, starting with "1 Baden-Württemberg".

In the ifo Education Surveys of 2017 and 2019, a follow-up survey was sent out to the respondents after they had filled in the original questionnaire. Follow-up questions for questions of the main survey are usually indicated with the letter *p* at the end of the variable name. In 2018, over 1,000 adolescents aged 14-17 years were surveyed in addition to the adult population. Both questionnaires/data sets are found in codebook/data set 2018. The variables for the adolescents are indicated with the prefix *J\_*.

Table 1 contains an overview of the different variable types and the common abbreviations used in the survey.

Table 1: Variable Types

<i>Variable name</i>	<i>Example<sup>5</sup></i>	<i>Description: Type of question</i>
qxx	q01	<u>Question</u> xx
qxxf	q01f	<u>Follow-up question</u> to question xx (often with filter)
zzqxx	zzq02	Variable indicating the <u>random split</u> the respondent was assigned to when answering question xx
qxxabcd	q03abcd	<u>Treatment question</u> (containing all treatments)
qxxa	Q14a	<u>Split question (without treatments)</u>
qxxi1	q04i1	<u>Matrix question</u> : Item 1 of question xx
qxxai1	q05ai1	<u>Treatment matrix question</u> : Item 1 of treatment question qxxa
qxx_1	q25_1	Question xx with <u>multiple choice</u> answer categories: 1 indicates answer category 1
qxx_kA	q39_kA	Question xx with <u>multiple choice</u> answer categories: no response
qxxc_1	q24c_1	<u>Treatment question</u> xx with <u>multiple choice</u> answer categories: 1 indicating answer category 1
dxx_1	d35_1	Indicates the position that a category takes in a multiple answer category question with <u>rotating answer categories</u> . In this example, the category takes the first place.
sxx	s01	<u>Background question</u> xx
sxxn	q39n_other	<u>Coded variable from open-ended question</u>
qxxs	q06s	Rated <u>confidence</u> with given answer (after guess question)
qxxp	q06p	Question xx in the follow-up survey

<sup>5</sup> In all cases but the last two, the examples refer to the ifo Education Survey of 2014.

## 2.4 Missing Values

There are various types of missing values as shown in Table 2. ".a" refers to the case in which the respondent chose to skip a question and thereby refused the answer, so-called item-nonresponses; ".b" refers to the case in which the respondent did not see the question because he/she was allocated to a different split in the survey (i.e., respondent in split c did not see splits a, b, or d, and therefore has missing values in these splits). This is often the case in the survey experiments but also in the split questions that were used to cover several questions at once and thereby reduce the overall length of the survey. ".c" refers to the case in which a respondent did not see the question due to a preceding filter question (i.e., a respondent with two children is not asked about a third child and therefore has a missing value in this split). In a handful of cases, information given by the respondents was changed to missing, also indicated by ".a" if e.g., a respondent later-on mentioned in an open-ended field that the information given for his or her monthly net income was wrong.

Table 2. Missings

<i>Code</i>	<i>Meaning</i>
.a	No answer / don't know: item-nonresponse
.b	Not in survey split
.c	Not in filter

## 2.5 Order of the Answer Categories

From wave 2015 onward, for the "approval questions" ("Zustimmungsfragen"), the response categories are listed in the following order in the codebook: 1 "strongly favor", 2 "somewhat favor", 3 "neither favor nor oppose", 4 "somewhat oppose", 5 "strongly oppose", with the neutral category in the middle. In the survey, however, the neutral category "neither in favor nor oppose" was usually listed as the last answer option in order to counteract a possible tendency of the participants towards the middle category. In wave 2014, the neutral category was usually listed as the last answer option in both the questionnaire and the codebook. Exceptions are indicated in the comment sections of the codebooks.

## 2.6 Weighting Factors

In order to weight the sample to match observable characteristics of the population, the weighting factor *gewfakt* is provided. This weighting factor is constructed considering age, gender, educational attainment, region of residence, municipality size, and interview mode (i.e., whether the interview was conducted online or computer-assisted; this only applies for waves 2014-2017). In some waves, two weighting factors are provided, which take into account different combinations of the dimensions above (crossed weights). Note that the survey results throughout the years do not differ much once one or the other weighting factor is applied as the structure of the sample is already selected to provide good representativeness of the German population.

### 3. Research Using the ifo Education Survey

The research so far based on data from the ifo Education Survey is presented in this section, sorted by date of publication.

#### 3.1 Published Papers

- Lergetporer, Philipp, Guido Schwerdt, Katharina Werner, Martin R. West, and Ludger Woessmann, (2018). *How Information Affects Support for Education Spending: Evidence from Survey Experiments in Germany and the United States*. *Journal of Public Economics* 167, 138-157.
- Lergetporer, Philipp, Katharina Werner, and Ludger Woessmann (2020). *Educational Inequality and Public Policy Preferences: Evidence from Representative Survey Experiments*. *Journal of Public Economics*, 188, 104226.
- Grewenig, Elisabeth, Philipp Lergetporer, Katharina Werner, and Ludger Woessmann (2020). *Do Party Positions Affect the Public's Policy Preferences? Experimental Evidence on Support for Family Policies*. *Journal of Economic Behavior & Organization* 179, 523-543.
- Cattaneo, Maria, Philipp Lergetporer, Guido Schwerdt, Katharina Werner, Ludger Woessmann, and Stefan C. Wolter (2020). *Information Provision and Preferences for Education Spending: Evidence from Representative Survey Experiments in Three Countries*. *European Journal of Political Economy* 63, 101876.
- Grewenig, Elisabeth, Philipp Lergetporer, Katharina Werner, Ludger Woessmann, and Larissa Zierow (2021). *COVID-19 and Educational Inequality: How School Closures Affect Low- and High-Achieving Students*. *European Economic Review* 140, 103920.
- Lergetporer, Philipp, Marc Piopiunik, and Lisa Simon (2021). *Does the Education Level of Refugees Affect Natives' Attitudes?* *European Economic Review* 134: 103710.
- Lergetporer, Philipp, Katharina Werner, and Ludger Woessmann (2021). *Does Ignorance of Economic Returns and Costs Explain the Educational Aspiration Gap? Representative Evidence from Adults and Adolescents*. *Economica* 88(351), 624–670.
- Henderson, Michael B., Philipp Lergetporer, Paul E. Peterson, Katharina Werner, Martin R. West, and Ludger Woessmann (2021). *Is Seeing Believing? How Americans and Germans Think about their Schools*. In: M.R. West, L. Woessmann (eds.), *Public Opinion and the Political Economy of Education Policy around the World*, MA: MIT Press, 55-96, 2021
- Grewenig, Elisabeth, Philipp Lergetporer, Katharina Werner, and Ludger Woessmann (forthcoming). *Incentives, Search Engines, and the Elicitation of Subjective Beliefs: Evidence from Representative Online Survey Experiments*. *Journal of Econometrics*.

#### 3.2 Working Papers

- Werner, Katharina (2018). *Obstacles to Efficient Allocations of Public Education Spending: Evidence from a Representative Survey Experiment*. *Rationality & Competition* CRC Discussion Paper No. 128.
- Fischer, Mira, Elisabeth Grewenig, Philipp Lergetporer, and Katharina Werner (2019). *The E-Word – On the Public Acceptance of Experiments*. *Rationality & Competition* Discussion Paper No. 219.
- Grewenig, Elisabeth, Philipp Lergetporer, Lisa Simon, Katharina Werner, and Ludger Woessmann (2020). *Can Internet Surveys Represent the Entire Population? A Practitioners' Analysis*. IZA Discussion Paper No. 1179. Revised version of CESifo Working Paper No. 7222 (2018).

- Grewenig, Elisabeth, Philipp Lergetporer, and Katharina Werner (2020). *Gender Norms and Labor-Supply Expectations: Experimental Evidence from Adolescents*. CESifo Working Paper No. 8611.
- Lergetporer, Philipp, and Ludger Woessmann (2021). *Earnings Information and Public Preferences for University Tuition: Evidence from Representative Experiments*. CESifo Working Paper 9102.
- Lergetporer, Philipp, and Ludger Woessmann (2022). *Income Contingency and the Electorate's Support for Tuition*. CESifo Working Paper No. 9520.

### 3.3 Monographs

- West, Martin R., and Ludger Woessmann (eds.) (2021). *Public Opinion and the Political Economy of Education Policy around the World*. Cambridge (MA): MIT Press.

### 3.4 Overview Articles

- Busemeyer, Marius R., Philipp Lergetporer, and Ludger Woessmann (2018). *Public Opinion and the Political Economy of Educational Reforms: A Survey*. *European Journal of Political Economy* 53, 161-185.
- Lergetporer, Philipp, Katharina Werner, and Ludger Woessmann (2021). *Public Opinion on Education Policy in Germany*. In: M.R. West, L. Woessmann (eds.), *Public Opinion and the Political Economy of Education Policy around the World*, MA: MIT Press, 205-243, 2021.

### 3.5 Non-Technical Summaries

Once a year, the results of the latest ifo Education Survey are published as non-technical summaries in the *ifo Schnelldienst*:

- Woessmann, Ludger, Philipp Lergetporer, Franziska Kugler, and Katharina Werner (2014). *Was die Deutschen über die Bildungspolitik denken – Ergebnisse des ersten ifo Bildungsbarometers*. *ifo Schnelldienst* 67(18), 16–33.
- Woessmann, Ludger, Philipp Lergetporer, Franziska Kugler, Laura Oestreich, and Katharina Werner (2015). *Deutsche sind zu grundlegenden Bildungsreformen bereit – Ergebnisse des ifo Bildungsbarometers 2015*. *ifo Schnelldienst* 68(17), 29–50.
- Woessmann, Ludger, Philipp Lergetporer, Franziska Kugler, and Katharina Werner (2016a). *Denken Lehrkräfte anders über die Bildungspolitik als die Gesamtbevölkerung? – Ergebnisse des ifo Bildungsbarometers 2016*. *ifo Schnelldienst* 69(17), 19–34.
- Woessmann, Ludger, Philipp Lergetporer, Franziska Kugler, and Katharina Werner (2016b). *Bildungsmaßnahmen zur Integration der Flüchtlinge – Was die Deutschen befürworten*. *ifo Schnelldienst* 69(17), 35–43.
- Woessmann, Ludger, Philipp Lergetporer, Elisabeth Grewenig, Franziska Kugler, and Katharina Werner (2017). *Fürchten sich die Deutschen vor der Digitalisierung? – Ergebnisse des ifo Bildungsbarometers 2017*. *ifo Schnelldienst* 70(17), 17–38.
- Woessmann, Ludger, Philipp Lergetporer, Elisabeth Grewenig, Sarah Kersten, and Katharina Werner (2018a). *Was denken die Deutschen zu Geschlechterthemen und Gleichstellung in der Bildung? – Ergebnisse des ifo Bildungsbarometers 2018*. *ifo Schnelldienst* 71(17), 15-30.

- Woessmann, Ludger, Philipp Lergetporer, Elisabeth Grewenig, Sarah Kersten, Franziska Kugler, and Katharina Werner (2018b). *Denken Jugendliche anders über Bildungspolitik als Erwachsene?* ifo Schnelldienst 71(17), 31-45.
- Woessmann, Ludger, Philipp Lergetporer, Elisabeth Grewenig, Sarah Kersten, Franziska Kugler, and Katharina Werner (2019). *Was die Deutschen über Bildungsungleichheit denken – Ergebnisse des ifo Bildungsbarometers 2019.* ifo Schnelldienst 72(17), 03-17.
- Woessmann, Ludger, Vera Freundl, Elisabeth Grewenig, Philipp Lergetporer, Katharina Werner, and Larissa Zierow (2020a). *Bildung in der Coronakrise: Wie haben die Schulkinder die Zeit der Schulschließungen verbracht, und welche Bildungsmaßnahmen befürworten die Deutschen?* ifo Schnelldienst 73(9), 25-39.
- Woessmann, Ludger, Vera Freundl, Elisabeth Grewenig, Philipp Lergetporer, and Katharina Werner (2020b). *Deutsche sind für mehr Einheitlichkeit und Vergleichbarkeit im Bildungssystem – Ergebnisse des ifo Bildungsbarometers 2020.* ifo Schnelldienst 73(9), 40-48.
- Woessmann, Ludger, Vera Freundl, Elisabeth Grewenig, Philipp Lergetporer, and Katharina Werner (2021). *Bildungspolitik zur Bewältigung gesellschaftlicher Herausforderungen während und nach Corona – Ergebnisse des ifo Bildungsbarometers 2021.* ifo Schnelldienst 74(9), 27-40.

## 4. Data Access, Citation, and Contact

### 4.1 Access to the Scientific Use Files

The data can be requested via the LMU-ifo Economic & Business Data Center (EBDC). Details are provided on the following website: <https://www.ifo.de/ebdc>. The research project must serve exclusively scientific purposes and must not pursue commercial goals. To ensure data security and protect the privacy of the respondents, anonymized scientific use files are provided. The scientific use files do not contain in-depth local information of the respondents (only information on federal state level are available), nor do they include any other personal information that might serve to identify the respondents. No answers to open-ended questions are provided due to data protection. To avoid information loss, the relevant open-ended questions have been coded into new variables by the researchers.

The dataset is available in .dta (STATA) format. Each wave is provided in a separate data file. Detailed information on the data requesting process and the relevant documents can be obtained from the EBDC. Below, you can find the DOIs for the respective survey waves:

ifo Education Survey 2014	10.7805/ies-suf-2014-v1
ifo Education Survey 2015	10.7805/ies-suf-2015-v1
ifo Education Survey 2016	10.7805/ies-suf-2016-v1
ifo Education Survey 2017	10.7805/ies-suf-2017-v1
ifo Education Survey 2018	10.7805/ies-suf-2018-v1
ifo Education Survey 2019	10.7805/ies-suf-2019-v1
ifo Education Survey 2020	10.7805/ies-suf-2020-v1
ifo Education Survey 2021	10.7805/ies-suf-2021-v1



## 4.2 Terms of Use

The aim of making the ifo Education Survey available and documenting it is to provide researchers with uncomplicated access to the data. It is the responsibility of the researcher to check whether the data of the ifo Education Survey are suitable for his or her research project. Given the specific design of the ifo Education Survey, it is of particular importance to understand the design and intention of the survey experiments. Researchers using data from the ifo Education Survey are kindly requested to cite the paper *Freundl, Vera, Elisabeth Grewenig, Franziska Kugler, Philipp Lergetporer, Ruth Schüler, Katharina Wedel, Katharina Werner, Olivia Wirth, and Ludger Woessmann (forthcoming). The ifo Education Survey 2014-2021: A New Dataset on Public Preferences for Education Policy in Germany. Journal of Economics and Statistics* as a source. Please also send an electronic copy of any work that uses data from the ifo Education Survey to [ebdc@ifode.de](mailto:ebdc@ifode.de).