

Bundesbank Online Panel Firms Data Report 2022-16

Data available from 2020-06 to 2022-03
Metadata ID: document or metadata version
DOI: 10.12757/BBk.BOPF.2022Q1.01

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Abstract

The Bundesbank Online Panel - Firms ("BOP-F") is a dataset with responses from a firm-level survey of the same name. The Research Centre and the Research Data and Service Centre of the Deutsche Bundesbank have conducted the survey since June 2020 in cooperation with an external survey firm, forsa. Since July 2021, the survey has been carried out at a monthly frequency. The survey data for each month represent a cross-sectional data set. The cross-sectional data from three consecutive months are combined into a quarterly unbalanced panel. Due to the underlying rolling survey procedure with survey of the panel firms every quarter as well as unchanged questionnaires within a quarter, BOP-F contains quarterly survey data with an unbalanced panel structure. Quarterly weights are provided accordingly. Every quarter, around 9,000 firms from all economic sectors, regions and size classes are surveyed. The survey consists of recurring core questions about the economic situation of firms and their expectations (e.g. price development or inflation rate expectations) and special questions that usually differ from quarter to quarter. The latter often relate to current topics, for instance, climate change, digitalisation, Covid-19. The results do not allow researchers to draw any conclusions about firm's identity (absolute anonymity).

Keywords: first keyword, second keyword

Metadata ID: document or metadata version

DOI: 10.12757/BBk.BOPF.2022Q1.01

Citation: Boddin, D., Köhler, M., and Smietanka, P. (2022). Bundesbank Online Panel - Firms (BOP-F), Data Report 2022-16. Deutsche Bundesbank, Research Data and Service Centre.

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1 Dataset description

1.1 Overview and identification

The Bundesbank Online Panel – Firms (“BOP-F”) is a dataset based on a representative online survey of firms conducted by the Research Centre and the Research Data and Service Centre (RDSC) of the Deutsche Bundesbank. The BOP-F contains quarterly survey data collected monthly over three-month cycles from July 2021 onwards.¹⁾ Prior to that the survey was conducted at lower frequency.

The survey consists of recurring core questions as well as special questions. The former are mainly about the economic situation of firms and their expectations. The topics of the latter usually vary from quarter to quarter but they often aim at collecting data that would help to address current economic issues. The survey data for each month represent a cross-sectional data set. The monthly data sets from a single quarter are combined into a quarterly unbalanced panel dataset. We differentiate between firms that participate in the survey for the first time (“newcomer firms”) and those who have participated before (“panel firms”). Panel firms are invited to participate only once every three months. The panel is refreshed every month with newcomer firms. The first contact with firms is established by mail. At the end of the first survey, firms are asked if they would like to participate in further surveys. If they agree, they are sent the next survey three months after responding to the first one. On average, around 9,000 firms from all sectors, regions, and sizes participate in the survey every quarter²⁾. Participation in the survey is voluntary and the collection serves fulfilling Deutsche Bundesbank’s objectives, which firms are informed about prior to filling out the first survey.

The sample for the survey is drawn from the universe of firms based in Germany with a taxable turnover of more than €22,000 or at least one employer subject to social security contributions which includes roughly 1 million firms. The drawing is a proportional random sample according to industry (6 classes), region (4 classes) and size (3 classes), so that the selection probability is equal for all firms. However, all “large” firms were contacted in the first pilot wave, resulting in them being overrepresented in the sample. The dataset contains quarterly weights so that the disproportionate sample can be taken into account.

In addition to this data report, the questionnaires for the individual waves are available for download from the project website:

<https://www.bundesbank.de/en/bundesbank/research/survey-on-firms>.

1.2 Data scope and coverage

Unit of analysis

Each row in the dataset corresponds to a response of a single firm from one survey wave. Each firm is assigned a unique 13-digit identifier, which is made up of the following elements:

¹ Data collected between July-September 2021 are part of the 2021 Q3 dataset. Data collected between October-December 2021 are part of the 2021 Q4 dataset etc.

² Datasets based on surveys conducted prior to July 2021 usually contain more observations.

- 1st digit: code for the sampling year (internal use)
- 2nd – 3rd digit: code for the sampling year i.e. 20 for the year 2020
- 4th – 6th digit: code for the number of the wave, when firm participated first, e.g. 001 for firms that participated for the first time in wave 1
- 7th – 13th digit: code for the firm unique identifier, i.e. 000 000 1

Data collection

Deutsche Bundesbank, Research Centre and Research Data and Service Centre; the survey company forsa has been commissioned to collect data from firms.

Frequency

Since July 2021, the survey has been conducted monthly. The survey usually starts on the first business day of a month and ends approximately 22 days later. During the one-year pilot phase (June 2020 – May 2021) five surveys were conducted with a longer field phase ³⁾.

Geographic coverage

The BOP-F survey aims at collecting firm-level data that would help to obtain an accurate picture of the economic situation of firms in Germany and the German economy as a whole. Therefore, firms in all 16 federal states are invited to participate in the survey.

1.3 Survey design

Data base

The sample for the BOP-F survey is drawn from the universe of firms located in Germany with a taxable turnover of more than €22,000⁴⁾ or at least one employee paying social security contributions. The data base is frequently updated, but the cut-off reporting date on which the data is based on is around two years before the actual survey. Firms which are not classified as natural persons or for which information such as address, sales, or employment is missing are excluded from the sample ⁵⁾. Around 12% of the original database could not be used due to missing information. The population contains only enterprises that are registered in Germany. The total available population contains around one million firms.

³ Early waves were conducted at the following times:

- Wave 1: between June 18 and July 27 2020,
- Wave 2: between August 26 and September 30 2020,
- Wave 3: between October 9 and November 13 2020,
- Wave 4: between January 29 and March 2 2021,
- Wave 5: between May 6 and May 26 2021.

⁴ In the first waves the boundary for taxable turnover was slightly lower at €17,500

⁵ The necessary information includes the name of the firm, the complete address (street, house number, postal code, city) as well as information on turnover and employment, which are required to form size classes and information on the economic sector. The addresses are validated before use, standardized to the spelling of the addresses in the address index of the Federal Agency for Cartography and Geodesy and georeferenced using this reference stock.

Rotating Panel Design						
Rotating panel (full questionnaire & 1/3 sample size)						
Only 1/3 of all firms are sent the entire questionnaire in a single month. Firms are split into 3 groups, each of which receives the questionnaire in a different month						
Questionnaire Number	Questionnaire Release	Date	Wave	Firms groups		
				1	2	3
6	A	Jul 21	6	x		
	B	Aug 21	7		x	
	C	Sep 21	8			x
7	A	Okt 21	9	x		
	B	Nov 21	10		x	
	C	Dez 21	11			x

Figure 1: Rotating Panel Design

Rotating design

Since July 2021, the survey structure is based on a rotating panel principle, as shown in Figure 1. This structure allows us to compile representative data for the population of firms based in Germany on a monthly basis and to reduce survey fatigue for firms. While the BOP-F survey is conducted every month, the questionnaires only change after the end of a quarter. The sample - consisting of both panel and newcomer firms, is drawn for an entire quarter and is then divided evenly over the three months. However, once a firm has participated in the survey in the first month of the quarter, it is always invited to participate in the first month of every quarter going forward. In Figure 1, for instance, firms in group 1 will always receive the questionnaire in the first month of every quarter, i.e. January, April, July and October. With this rotating panel design, we keep the burden on firms as low as possible by contacting a given firm only four times a year. However, by conducting the survey monthly high-frequency monthly data is generated.

Sampling frame

The sample for every quarter is drawn proportionally to the distribution of the population of firms along three dimensions: i) a firm size indicator measured in terms of employment and turnover (3 classes), ii) region (4 classes), and iii) economic sector (6 classes). Thus, the sample is drawn from 72 strata (3x4x6). Afterwards, the quarterly sample is distributed equally over three months.

The sectoral classification corresponds to the IAB's Establishment Panel classification and is similar to NACE Rev. 2 classification as shown in Table 1. The German federal states are grouped into four

regions (North, South, East and West⁶). The indicator for the firm size class is made up of three employment and turnover classes (see Figure 2).

Table 1: Economic sectors (WZ2008 codes in parantheses)

01	Agriculture; Mining and quarrying, electricity, gas and water supply; Sewerage and waste management (01-03,05-09,35-39); Construction (41-43)
02	Food products, beverages and tobacco (10-12); Consumer products (excluding manufacture of timber products) (13-18); Industrial goods (including manufacture of timber products) (19-24); Capital and consumer goods (25-33)
03	Wholesale, sale and repair of motor vehicles (45-46); Retail (47)
04	Transport and warehousing (49-53); Hotels and restaurants (55-56)
05	Financial and insurance services (64-66); Economic, scientific and freelance services (68-82)
06	Education (85); Health and social services (86-88); Other services (90-93,95,96); Representations of interests (94)

The sampling design was slightly different prior to July 2021 (first five waves). The number of classes was much higher (17 sectoral, 5 employment, 5 turnover, and 16 regional classes) resulting in 6,800 strata used for drawing a sample.⁷ In addition, the sample for the first wave contained all large firms⁸ while the remainder of firms was drawn representatively according to economic sector, region and firm size. In wave two to five, the gross samples contained a mix of panel firms and newcomers.

1.4 Weighting

Due to the disproportional sampling design of the BOP-F survey, if unweighted, data analysis would lead to non-representative results. In order to make the results representative of the universe of German firms weights are created along the three dimensions mentioned above.⁹

⁶ North (Schleswig-Holstein, Bremen, Hamburg, Lower Saxony), South (Baden-Württemberg, Bavaria) East (Berlin, Brandenburg, Mecklenburg-Vorpommern, Saxony, Saxony-Anhalt, Thuringia), West (Hesse, North Rhine-Westphalia, Rhineland-Palatinate, Saarland)

⁷ In the end only 4,337 strata were filled.

⁸ A "large firm" was defined by either having more than 200 employees or more than 34,000 thousand € of turnover.

⁹ In the first step, design weights were created by using the inverse of the inclusion probabilities. Then, sampling weights for each stratum are iteratively adjusted by using an iterative proportional fitting procedure. The aim of this procedure is to adjust the sum of weights for each marginal dimension of the target variables to the distribution of the population until a predefined convergence criterion is achieved. The target structure is based on three dimensions: region economic sector and firm size class.

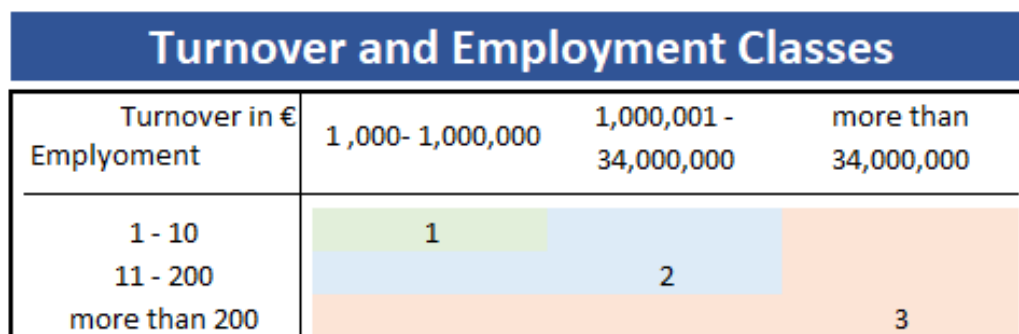


Figure 2: Turnover and employment classes

1.5 Questionnaire design

The questionnaires in the BOP-F study comprise a set of core and special questions. Core questions are included in every survey wave and change little from one quarter to another. The core questions are supplemented by special questions, which are designed for more in-depth investigation of certain topics and are often about important current issues. The main focus of the special questions prior to July 2021 (first five survey waves) was the measurement of the impact of the Covid-19 pandemic on firms. These include, for example, the impact of the temporary VAT reduction, the analysis of potential liquidity bottlenecks, and the pandemic-induced digitalisation.

The BOP-F dataset also includes paradata, for instance, on the number of interview interruptions and the length of the interview.

Most of the questions in almost every questionnaire were programmed to use „soft prompts“. When „soft prompts“ are in use, respondents are initially not shown the options „Do not know“ or „No answer“. Only after clicking on „Proceed“ without having answered the question, these two options are displayed to respondents. It is generally not possible in the BOP-F survey to proceed to the next question without answering the question. Therefore, when „soft prompt“ is activated respondents have to either select one of the options „Do not know“ or „No answer“ or provide an answer to the question. Going back to the previous question is generally not possible. Before firms start to complete a questionnaire, they can request to be sent questions by the BOP-F team.

Four negative numbers are used for coding missing values in the BOP-F:

- „-9998“ means „No answer“
- „-9997“ means „Do not know“
- „-9996“ means „Does not apply to the firm/not asked“
- „-6666“ means „Filtered out/not asked“.

1.6 Field work and reminders

The field work of each wave usually starts on the first business day of a month and ends around 22 days later. After about half that time, firms are reminded to participate in the survey. Only firms that have not responded by then are sent reminders. One day before the field phase ends firms are sent the final reminder. The second reminder is sent via email only and is, therefore, sent only to panel firms who provided their e-mail-address.¹⁰⁾

To ensure that highly ranked executives fill out the questionnaire, the phrase „for the attention of the firm’s management“ (GER: „zu Händen der Geschäftsführung“) is printed on every envelope with survey invitations.

Before each survey, respondents are informed that the survey would take around 15 to 20 minutes to complete. The actual median interview duration for uninterrupted interviews lies within this time

¹⁰ The first five rounds of online pilot surveys were conducted approximately two to three months apart and a field phase lasted for about 20 to 40 days.

interval.

Out of the firms who participated in the survey for the first time (newcomer firms) around 60% are willing to take part in the future surveys.

1.7 Data matching

In order to enhance its analytical potential, the BOP-F can be linked to other microdata available at the Bundesbank and managed by the RDSC. Only firms who agreed to data matching can have their survey responses matched to other datasets¹¹⁾.

1.8 Data quality checks

Several measures have been put in place to ensure that the data collected as part of the BOP-F survey are of the highest quality. For some questions, instant validity checks have been added to the online version of the questionnaire. For instance, for some questions upper and/or lower limits on the values that respondents enter have been imposed. For probabilistic questions we check whether answers sum up to 100%. A list of all validity checks can be found in the survey documentation on the BOP-F website. When a validity check is violated, the survey participant receives an error message and is prevented from moving on to the next question, until she/he has provided an answer that satisfies the validity check.

After the survey is completed, survey responses are compared to past values collected on earlier occasions and screened by the Bundesbank team in search for any deviations that would suggest implausible responses. In case of substantial deviations, additional quality assurance checks are carried out.

As part of another exercise, we started to compare firms' responses about the sector and the region they operate in as well as their annual turnover and employment to official administrative data. Survey responses about region, sales, and employment are broadly in line with the information included in the alternative data source. When it comes to the sectoral classification, the differences between survey responses and the administrative data were larger.¹²⁾ While it is widely known that survey data are subject to some measurement errors, one possible reason for the differences could also be the fact that our sampling framework is lagging two years behind the survey data. Besides, definitions used by public institutions to construct administrative datasets – even definitions of presumably simple concepts such as employment or location – do not always correspond to business reality that is often very rich and complex. Discrepancies can arise, e.g. if respondents filling out the questionnaire have a different business unit in mind than the one captured by the administrative data. This may happen if two or even more business units are officially regarded as separate entities, but in practice they operate as one company. Now and again, survey respondents may also have limited knowledge about the issues we try to address in

¹¹ The matching tables were created on the basis of the RDSC Record Linkage (for more information see Gabor-Toth and Schild (2021))

¹² Please note that even with any two administrative data, a discrepancy in the economic sector information, e.g. due to different measurement concepts, is not unusual.

the BOP-F survey. While we inform participants that they can respond to questions to the best of their knowledge, we also allow participants to interrupt the survey and come back to it at their convenience. This measure was introduced with a view to facilitate providing correct answers, e.g. by requesting information from other parts of the business or teams. In general, however, we target senior managers of the companies and monitor closely who answers the survey. This helps to ensure that people with the best knowledge about the company fill out the questionnaire. Both information about the interruptions and the position of respondents in the company are included in the BOP-F dataset.

1.9 Further remarks

Prior to May 2021 (first four waves), data on turnover and employment were broken down into five size categories. From July 2021 (wave 5) onwards, firms were asked to provide exact value. In order to reduce errors when combining the survey waves, the categorical variables of the first four waves were renamed to `firmturnover_cat` and `firmemploy_cat`. The values, however, remained unchanged.

Not all questions are asked to all firms. For many questions filters are in place. Survey documentation on the BOP-F website provides precise information about filters used.

Some questions, such as sales, number of employees, economic sector and the firm location, are not regularly asked. In general, these questions are only asked, when a firm participates in the survey for the first time. In the case of repeated participation, the value of these variables is set to -6666 ("Does not apply/not asked"). However, some of these questions were asked again, e.g. all firms were asked questions about turnover and employment at the beginning of 2022 again. The reference period for these questions changes, if asked again.

In response to several requests from researchers, we have added information about firms' sector, location, turnover and employment to every dataset. These data are stored in the following variables: `firmsector_l`, `firmemploy_l`, `firmturnover_l`, and `firmregion_l`. The information stored in those variables corresponds the most recent values reported by the firm. For employment and turnover, the values are divided into five size classes. For a few firms, which joined the panel not through the usual way or have refused to provide information about sector, location, turnover or employment, this information is not available.

1.10 Data accessibility

Access to BOP-F microdata is provided at the RDSC's guest researcher workstations in a secure environment at one of the RDSC's locations. This form of access is necessary in order to meet the statutory provisions concerned with safeguarding the confidentiality of statistical reports and, at the same time, to enable access to individual data for independent academic research purposes. To get access to the data, researchers are asked to submit a research data request including a research proposal. A research proposal is checked for feasibility of the research project given the research data, i.e. the suitability of the data to answer the research questions raised by the proposal. The research project must be of public interest. Commercial projects will not be accepted.

Research proposal conditions

A research proposal is checked for feasibility of the research project given the research data, i.e. the suitability of the data to answer the research questions raised by the proposal. The research project must be of public interest, that is without commercial goals.

Institutional access conditions

The researcher must be affiliated with a research institution that clearly has a scientific and non-commercial agenda.

Contact

Deutsche Bundesbank, Research Data and Service Centre (RDSC)
E-mail: fdsz-data@bundesbank.de
Homepage: <https://www.bundesbank.de/rdsc>

Deposit requirements

The researcher must sign a confidentiality agreement and a special contract between Deutsche Bundesbank and the research institution has to be set up. The RDSC must be informed about every document that is made available to the public that contains information derived from the provided data.

Citation requirements

For any study or other document which is made available to the public and contains information derived from the provided data, the researcher is obliged to properly cite the data source as:

Boddin, D., Köhler, M., and Smietanka, P. (2022). Bundesbank Online Panel - Firms (BOP-F), Data Report 2022-16. Deutsche Bundesbank, Research Data and Service Centre.

2 Description of variables

2.1 Overview of variables

Name	Label
BBk_Sample_Key	Entity Identification
wave	Wave
year	Year of interview
month	Month of interview
day	Day of interview
quarter	Quarter
completed	Interview completed
interr	Interview interruption
interrnr	Number of interview interrupts
sample	Panel Firm or Newcomer
consent	Dummy for data matching
firmemploy_cat	Number of employees
firmemploy	Number of employees
firmturnover_cat	Turnover in euros
firmturnover	Turnover in euros
firmsector	Economic sector
firmtype_(a-e)	Type of firm
firmregion	Region - headquarter
respondenttype_area_(a-d)	Respondent characteristic: Area
resondenttype_position_(f-j)	Respondent characteristic: Position
feedback_a	Feedback question - questionnaire ease
feedback_b	Feedback question - questionnaire length
panel	Dummy for panel participation
starttime_first	First interview start time
starttime_last	Last interview start time
endtime	Interview end time
duration	Interview duration, in seconds

2.2 Details of variables

BBk_Sample_Key: Entity Identification

Notes	Stable Firm ID
Available from – to	Wave 1 – recent
Type of variable	string - 13 digits

wave: Wave

Notes	Shows the wave in which the data was collected.
Available from – to	Wave 1 – recent
Type of variable	numeric

year: Year of interview

Notes	Shows the year in which the data was collected.
Available from – to	Wave 1 – recent
Type of variable	numeric

month: Month of interview

Notes	Shows the month in which the data was collected.
Available from – to	Wave 1 – recent
Type of variable	numeric

day: Day of interview

Notes	Shows the day on which the data was collected.
Available from – to	Wave 1 – recent
Type of variable	numeric

quarter: Quarter

Notes	Shows the quarter in which the data was collected.
Available from – to	Wave 6 – recent
Type of variable	String - 7 digits

completed: Interview completed

Notes	Indicates if the interview was completed (=1) or not (=2)
Available from – to	Wave 1 – recent
Type of variable	numeric

interr: Interview interruption

Notes	Indicates if the interview was conducted without interruption (=1) or not (=2)
Available from – to	Wave 1 – recent
Type of variable	numeric

interrnr: Number of interview interrupts

Notes	Indicates how often the interview was interrupted.
Available from – to	Wave 7 – recent
Type of variable	numeric

sample: Panel Firm or Newcomer

Notes	Displays if a firm is a panel firm (=2; repeater) or participates for the first time (=1; newcomer)
Available from – to	Wave 5 – recent
Type of variable	

consent: Dummy for data matching

Notes	Indicates if the observation can be matched to additional data (=1) or not
Available from – to	Wave 1 – recent
Type of variable	numeric

firmemploy_cat: Number of employees

Notes	Displays the categorical number of employees of a firm.
Available from – to	Wave 1 – Wave 4
Type of variable	numeric

firmemploy: Number of employees

Notes	Displays the continuous number of employees of a firm.
Available from – to	Wave 5 – recent
Type of variable	numeric

firmturnover_cat: Turnover in euros

Notes	Displays the categorical firm turnover.
Available from – to	Wave 1 – Wave 4
Type of variable	numeric

firmturnover: Turnover in euros

Notes	Displays the continuous firm turnover.
Available from – to	Wave 5 – recent
Type of variable	numeric

firmsector: Economic sector

Notes	Displays the 2-digit economic sector.
Available from – to	Wave 1 – recent
Type of variable	numeric

firmtype_(a-e): Type of firm

Notes	Binary variable that shows if a firm identifies herself as a given type. a independent, profit-oriented b branch c subsidiary d non-profit organization e family business
Available from – to	Wave 4 – recent
Type of variable	numeric

firmregion: Region - headquarter

Notes	Displays the state a firm’s headquarter is located in.
Available from – to	Wave 1 – recent
Type of variable	numeric

respondenttype_area_(a-d): Respondent characteristic: Area

Notes	Binary variable that shows if the respondent works in a given area. a management b finance/controlling/accounting c distribution/marketing/communication d another area
Available from – to	Wave 1 – recent
Type of variable	numeric

respondenttype_position_(f-j): Respondent characteristic: Position

Notes	Binary variable that shows if the respondent holds a certain position. f CEO g department manager h team manager i administrator j other
Available from – to	Wave 1 – recent
Type of variable	numeric

feedback_a: Feedback question - questionnaire ease

Notes	Assesses how difficult the respondent perceived the questionnaire.
Available from – to	Wave 1 – recent
Type of variable	numeric

feedback_b: Feedback question - questionnaire length

Notes	Assesses how the respondent perceived the length of the questionnaire.
Available from – to	Wave 1 – recent
Type of variable	numeric

panel: Dummy for panel participation

Notes	Displays if a firm agreed to participate in a panel.
Available from – to	Wave 1 – recent
Type of variable	numeric

starttime_first: First interview start time

Notes	Displays exact time and date of the first interview start.
Available from – to	Wave 1 – recent
Type of variable	string - "DD.MM.YYYY HH:mm:ss"

starttime_last: Last interview start time

Notes	Displays exact time and date of the last interview start in case of interruption.
Available from – to	Wave 1 – recent
Type of variable	string - "DD.MM.YYYY HH:mm:ss"

endtime: Interview end time

Notes	Displays exact time and date of the end of the interview.
Available from – to	Wave 1 – recent
Type of variable	string - "DD.MM.YYYY HH:mm:ss"

duration: Interview duration, in seconds

Notes	Displays the duration of the interview in seconds; i.e., time between starttime_first and endtime
Available from – to	Wave 1 – recent
Type of variable	numeric

References

Gabor-Toth, E., and Schild, C.-J. (2021). Company ID linktables - IDLINK, data report 2021-22–
Version2021-2-6. *Deutsche Bundesbank*.

A Codelists

A.1 completed

Code	Description
1	Yes
2	No

A.2 interr

Code	Description
1	without interrupt
2	with interrupt

A.3 sample

Code	Description
1	Newcomer
2	Repeater

A.4 consent

Code	Description
1	Yes, agreement to data matching
2	No agreement to data matching
3	Not authorised for giving agreement

A.5 firmemploy_cat

Code	Description
-9999	Dropout
-9998	Dropout
-9997	no answer
1	1 to 10
2	11 to 50
3	51 to 200
4	201 to 1.000
5	more than 1.0000

A.6 firmturnover_cat

Code	Description
-9999	Dropout
-9998	no answer
-9997	don't know
1	1 to 1 Mio
2	over 1 Mio to 7 Mio
3	over 7 Mio to 34 Mio
4	over 34 Mio to 229 Mio
5	over 229 Mio

A.7 firmsector

Code	Description
-9999	Dropout
-9998	no answer
-9997	don't know
1	Agriculture, hunting and forestry, fishing
2	Mining and quarrying, electricity and water supply
3	Sewerage and waste management; recycling
4	Food and beverages
5	Non-durable consumer goods
6	Producer goods
7	Capital and durable consumer goods
8	Construction
9	Wholesale trade; sales, maintenance and repair of motor vehicles
10	Retail trade
11	Transport and storage
12	Information and communication
13	Accommodation and food services
14	Financial and insurance services
15	Professional, scientific and technical activities
16	Education
17	Human health and social work
18	Other services
19	Activities of membership organisations
20	Public administration and defence; social security

A.8 firmtype_(a-e)

Code	Description
-9999	Dropout

...

-9998	no answer
-9997	don't know
0	category not selected
1	category selected

A.9 firmregion

Code	Description
-9999	Dropout
-9998	no answer
-9997	don't know
1	Baden-Württemberg
2	Bayern
3	Berlin
4	Brandenburg
5	Bremen
6	Hamburg
7	Hessen
8	Mecklenburg-Vorpommern
9	Niedersachsen
10	Nordrhein-Westfalen
11	Rheinland-Pfalz
12	Saarland
13	Sachsen
14	Sachsen-Anhalt
15	Schleswig-Holstein
16	Thüringen

A.10 respondenttype_area_(a-d)

Code	Description
-9999	Dropout
-9998	no answer
-9997	don't know
1	yes
2	no

A.11 respondenttype_position_(f-j)

Code	Description
-9999	Dropout
-9998	no answer
-9997	don't know
1	yes
2	no

A.12 feedback_a

Code	Description
-9999	Dropout
-9998	no answer
-9997	don't know
1	very difficult
2	rather difficult
3	partly difficult/partly easy
4	rather easy
5	very easy

A.13 feedback_b

Code	Description
-9999	Dropout
-9998	no answer
-9997	don't know
1	far too long
2	a little too long
3	just right
4	a little too short
5	far too short

A.14 panel

Code	Description
-9999	Dropout
1	yes
2	no