Documentation of
the Bundesbank Online Panel

Firms (BOP-F)

Questionnaire 7
Waves 9, 10, 11
Q4 2021

Deutsche Bundesbank
Research Centre

Notes

a   General coding

For all questions, the following codes apply.

-9999	Dropout: The respondent did not answer the question due to dropout.
-9998	No answer: The respondent clicked "No answer" instead of answering the question.
-9997	Don't know: The respondent clicked "Don't know" instead of answering the question.
-9996	Does not apply: The respondent clicked "Does not apply to my enterprise" instead of answering the question.
-6666	Does not apply: The question or response option was not shown to the respondent due to filters or prior item non-response.
-5555	Recoded by BBk: A coding or data error that was recorded by the Bundesbank

b   Legend for question header

Each question header includes information on the name of the question, whether it was part of the core questionnaire ("Core"), included for a specific project ("Pro"), or part of descriptive statistics ("Descript"), the broad topic and the variable name(s).

Legend	Question name	Question source	Topic	Variable name
Example 1	003	Core	Perceived problems	percprob_[a-j]
Example 2	103	Pro	Supply chains qualitative	suppchains_[a-b]

c   Question filtering and coding

Coding details, filters and conditional redirects are highlighted using `Courier.` If questions are posed to all respondents, this is not explicitly stated. For filtered questions, the filter is listed at the top and refers to the question name, e.g.:

103	Pro	Supply chain problems domestic or foreign	suppchain_[a-b]
`Input filter: 001_d = 6	7	8	9	10`			

d   Variable names

Variable names are indicated in the top right corner. If the question has multiple items, the items are indicated by underscores and a letter. Enumeration letters correspond to variable names. The coding of the variables is numeric and indicates the scale.

A001	Core	Perceptions qualitative	percmacroquali_[a-i]

QUESTION: How did the following metrics develop in your enterprise in April 2021 compared with the previous month, i.e. March 2021?

1 = Decreased significantly
2 = Decreased slightly
3 = Stayed roughly the same
4 = Increased slightly
5 = Increased significantly
-9996 = Does not apply to my enterprise

a   Turnover
b   Employment (measured in hours worked)
c   Access to intermediate inputs
d   Current trade receivables
e   Current trade payables
f   Short-term liquidity
g   Need for credit financing
h   Access to financing sources
i   Inventories (stock of intermediate products and finished goods)

List of questions

Variable name	Topic	Questionnaire 7	Origin
yearest	Year established	703A	Pro F
percmacro_[a-g]	Perceptions qualitative	X01	Core
expmacro_[a-g]	Expectations qualitative	X02	Core
keyrateprob_[a-j]	Development key rate probabilistic	X04A	Core
inflexpoint	Inflation expectations quantitative	X04B	Core
infexprob_[a-j]	Inflation expectations probabilistic	711	Core HH
secondinfexquant	Second-order inflation expectations quantitative	701	Pro 6
secondinfexprob_[a-j]	Second-order inflation expectations probabilistic	702	Pro 6
salespast	Sales past quarter quantitative	X05A	Core
salesfuture_[a-e]	Sales comparable quarter prediction	X05B	Core
salesprob_[a-e]	Sales comparable quarter probabilistic	X05C	Core
pricepast	Price change past year quantitative	X06A	Core
pricefuture	Price change next year quantitative	X06B	Core
priceunc	Price change uncertainty	X06C	Core
emplpast_[a, b]	Employment past quarter	X09A	BiQ Core
emplfuture	Employment comparable quarter prediction	X09B	BiQ Core
emplunc	Employment uncertainty	X09C	BiQ Core
creduse1	Microfinance credit negotiations	X07A	Core
creduse2_[a-f]	Microfinance negotiations result	X07B	Core
financingpast_[a-g]	Financing sources past	X08A	Core
approvalloan	Approval bank loan during financial crisis	704	Pro F
financing2008_[a1-f4]	Financing instruments during financial crisis	703B	Pro F
financingfuture_[a-g]	Financing sources future	X08B	Core
wfhpastcorona_[a, b]	Home office after pandemic	705	Pro 6
decwfh	Decision process home office	706	Pro 6
hourorgcorona_[a, b]	Organisational effort to handle coronavirus	707	Pro 6
paymentclient_[1a-2n]	Payment instruments clients	708	Pro H
percblockchain	Perception of blockchain in firms	709	Pro Z
useblockchain_[a-i]	Concrete use cases of blockchain in firms	710	Pro Z
consent	Firm characteristics implicit	D01	Descript
firmemploy_[a-b]	Firm characteristics explicit employment	D02	Descript
firmturnover_[a-b]	Firm characteristics explicit turnover	D03	Descript
firmsector	Firm characteristics explicit economic sector	D04	Descript
firmtype	Firm characteristics explicit ownership	D05	Descript
firmregion	Firm characteristics explicit region	D06	Descript
respondenttype_[a-k]	Characteristics of respondent	D07	Descript
feedback_[a-b]	Feedback questions	F01	Core
feedbackopen	Open feedback question	F02	Core
panel	Panel participation	P01	Core
contact	Contact	P02	Core

000	Core	Opening 1

Welcome to the survey of firms conducted on behalf of the Deutsche Bundesbank.

Important information concerning the survey:

- To navigate through the survey, please only use the "Continue" button at the bottom of the screen. Please do <u>not</u> use the buttons in your browser or the back button on your phone or tablet.
- To ensure that the individual questions are displayed correctly, use an up-to-date browser such as Google Chrome, Mozilla Firefox (version 12 or later), Apple Safari (version 6 or later), Opera (version 20 or later) or Microsoft Edge. Using older browsers, particularly Internet Explorer 8 or earlier, can result in limited functionality in terms of design and ease of use.
- During the survey, there is **no** option to go back to questions previously answered. If you would like an overview of the full questionnaire, please send a request to <u>unternehmensbefragung@bundesbank.de</u>.
- If you have any questions, problems or comments about navigating this questionnaire, you can contact the forsa support team from Monday to Friday between 09:00 and 18:00 on the free telephone number 0800 3677202 or by email at <u>bundesbank-unternehmensbefragung@forsa.de</u>. If you have any questions or comments on the content of the survey, please contact the Bundesbank's project team by telephone at +49 (0)69 9566 2080 or by email at <u>unternehmensbefragung@bundesbank.de</u>.

000	Core	Opening 2

Thank you for taking the time to complete this survey. The Deutsche Bundesbank would like to know how the economic situation in your firm has changed over time and what you are currently expecting for the future.

The survey will take roughly 15 to 20 minutes to complete. Your answers will be treated confidentially. It would be a great help to us if you answer the questions as carefully as possible.

000	Core	Opening 3

The Deutsche Bundesbank attaches particular importance to protecting your data. All of the information you provide will be treated confidentially in accordance with legal provisions. Only a few employees at a Bundesbank data trustee will see your survey data after pseudonymisation. Bundesbank employees will receive your data only after they have been further anonymised. Published results are completely anonymous and therefore cannot be traced back to your enterprise. Your answers will help the Deutsche Bundesbank to fulfil its statutory tasks (to learn more about the Bundesbank's tasks, please click here).

Only effectively anonymised data can be passed on to research institutions for research purposes that are related to the Bundesbank's tasks. You will find more information, details of how to contact the project team, and selected results of the survey on the Bundesbank's website:
https://www.bundesbank.de/en/bundesbank/research/pilot-survey-on-the-expectations-of-firms

Your participation in our survey is of course voluntary. By participating in this survey, you give your consent for your data to be stored, processed and shared for the purposes of the Deutsche Bundesbank fulfilling its tasks. You may withdraw your consent at any time. However, withdrawal of your consent shall not affect the lawfulness of any processing that took place on the basis of this declaration of consent before it was withdrawn.

Input filter: if *newcomer* = 1
During the survey, there will be two further requests for consent to link the survey data to business statistics and for another survey (if you would like to know more about this, please click here). Of course, you can choose not to consent to the above, though we would ask you to take part in the survey and fill in the other information. Your data will help the Deutsche Bundesbank fulfil its statutory tasks.

---	SPLIT SAMPLE 1 – OVERVIEW	RANDOMISATION 1	

Randomisation dummy: *draterandom1*

The dummy *draterandom1* splits the sample into three groups of roughly equal size (B1, B2, B3). This split is linked to the randomisation in Wave 5 (May 21). Firms that were assigned to one of the three randomisation groups in Wave 5 (irrespective of whether they responded or not in the end) should be assigned to the same group again this time.

draterandom1 = 1 (firms that were in group B1 in Wave 5 + 1/3 of newcomers + 1/3 of remaining repeaters)
draterandom1 = 2 (firms that were in group B2 in Wave 5 + 1/3 of newcomers + 1/3 of remaining repeaters)
draterandom1 = 3 (firms that were in group B3 in Wave 5 + 1/3 of newcomers + 1/3 of remaining repeaters)

	draterandom1 = 1	*draterandom1* = 2	*draterandom1* = 3
Year established			X
Key policy rate	X	X	X
First order exp.	X		
Second order exp.	X		
Financial crisis			X
Payments		X	
Blockchain		X	

703A	Pro F	Year established	yearest

Input filter: *draterandom1* = 3

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

Values between 1000 and 2021 are supported.

If invalid values are entered the following message will be displayed:
"Please enter the year the enterprise was established by entering four digits (e.g. 1986) in the field or select one of the possible responses below (valid years from 1000 to 2021)."

QUESTION: In what year was your enterprise established?

Note: Please enter the year the enterprise was established in the input field.

Year the enterprise was established (YYYY): [Input field]

X01	Core	Perceptions qualitative	percmacro_[a-g]

After the term "Access to intermediate inputs" an info box <i> with the following text is shown:
"If access to intermediate inputs has deteriorated, please state "decreased" or "decreased significantly"."

After the term "Access to financing sources" an info box <i> with the following text is shown:
"Access to financing sources describes the possibility of using various forms of external financing to finance your business activities, e.g. bank loans, trade credits, equity, debt securities or other financing instruments. If the possibilities of using these financing sources have deteriorated, please state "decreased" or "decreased significantly"."

QUESTION: Please consider the period from **end-September 2020** to **end-September 2021**. How did the following metrics develop in your enterprise during this period?

Note: *Please select one answer for each row.*

1 = Decreased significantly
2 = Decreased
3 = Stayed roughly the same
4 = Increased
5 = Increased significantly
-9996 = Does not apply to my enterprise

a = Access to intermediate inputs <i>:
b = Current trade receivables:
c = Current trade payables:
d = Short-term liquidity:
e = Need for credit financing:
f = Access to financing sources <i>:
g = Inventories (stock of intermediate products and finished goods):

X02	Core	Expectations qualitative	expmacro_[a-g]

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

After the term "Access to intermediate inputs" an info box <i> with the following text is shown:
"If you expect access to intermediate inputs to deteriorate, please state "decrease" or "decrease significantly"."

After the term "Access to financing sources", an info box <i> with the following text is shown:
"Access to financing sources describes the possibility of using various forms of external financing to finance your business activities, e.g. bank loans, trade credits, equity, debt securities or other financing instruments. If you expect the possibilities of using these financing sources to deteriorate, please state "decrease" or "decrease significantly"."

QUESTION: How do you expect the following metrics to develop in your enterprise from **end-September 2021** to **end-September 2022**?

Note: Please select one answer for each row.

1 = Decrease significantly
2 = Decrease
3 = Stay roughly the same
4 = Increase
5 = Increase significantly
-9996 = Does not apply to my enterprise

a = Access to intermediate inputs <i>:
b = Current trade receivables:
c = Current trade payables:
d = Short-term liquidity:
e = Need for credit financing:
f = Access to financing sources <i>:
g = Inventories (stock of intermediate products and finished goods):

X04A	Core	Development key rate probabilistic	keyrateprob_[a-j]

Input filter: if *draterandom1* = 1

QUESTION: We would now like to ask you some questions about macroeconomic developments. In your opinion, how likely is it that the policy rate of the European Central Bank (ECB) <i> will fluctuate within the following bands at the **end of September 2022**?

Input filter: if *draterandom1* = 2

QUESTION: We would now like to ask you some questions about macroeconomic developments. In your opinion, how likely is it that the policy rate of the European Central Bank (ECB) will fluctuate within the following bands at the **end of September 2022**? The ECB's policy rate currently stands at -0.5%.

Input filter: if *draterandom1* = 3

QUESTION: We would now like to ask you some questions about macroeconomic developments. In your opinion, how likely is it that the policy rate of the European Central Bank (ECB) <i> will fluctuate within the following bands at the end of **September 2022**? The ECB's policy rate currently stands at -0.5% and the financial markets are expecting a policy rate of -0.5% at the end of September 2022.

Note: The aim of this question is to determine how likely you think it is that something specific will happen in the future. You can rate the likelihood on a scale from 0 to 100, with 0 meaning that an event is completely unlikely and 100 meaning that you are absolutely certain it will happen. Use values between the two extremes to moderate the strength of your opinion. Please note that your answers to the categories have to add up to 100. You can also leave fields empty; these will be saved as a 0.

a	Below -2.00%:	[Input field]
b	Between -2.00% and -1.51%:	[Input field]
c	Between -1,50% and -1.01%:	[Input field]
d	Between -1.00% and -0.51%:	[Input field]
e	Between -0.50% and -0.01%:	[Input field]
f	Between 0.00% and 0.50%:	[Input field]
g	Between 0.51% and 1.00%:	[Input field]
h	Between 1.01% and 1.50%:	[Input field]
i	Between 1.51% and 2.00%:	[Input field]
j	Above 2.00%:	[Input field]

X04B	Core	Inflation expectations quantitative	inflexpoint

Values between -100.0 and 999.0 are supported.

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

After the term "rate of inflation", an info box (i) with the following text is shown:
"Inflation is the percentage increase in the general price level. It is mostly measured using the consumer price index. A decrease in the price level is generally described as "deflation"."

If an invalid number is entered the following error message is shown:
"Please enter a value between -100.0 and 999.0. Only one decimal place is permitted."

QUESTION: What do you expect the <u>rate of inflation</u> <i> to be over the **next twelve months**?

Note: If you expect the price level to increase, please enter a positive percentage value. If you expect the price level to decrease, please enter a negative percentage value. Please enter a value with a maximum of one decimal place.

[Input field]%

711	Core HH	Inflation expectations probabilistic	infexprob_[a-j]

Input filter: if *draterandom1* = 1

Supported values are between 0 and 100. No decimals are allowed.

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

The programming of the question requires the sum of the 10 variables to be 100. The current sum of all entered points is shown to the respondent when answering the question. Respondents are asked to correct their responses if the sum does not equal 100.

After the term "rate of inflation" an info box <i> with the following text is shown:
"Inflation is the percentage increase in the general price level. It is mostly measured using the consumer price index. A decrease in the price level is generally described as "deflation"."

If an invalid number is entered the following error message is shown:
"Please enter a value between 0 and 100."

QUESTION: In your opinion, how likely is it that the <u>rate of inflation</u> <i> will change as follows over the **next twelve months**?

Note: The aim of this question is to determine how likely you think it is that something specific will happen in the future. You can rate the likelihood on a scale from 0 to 100, with 0 meaning that an event is completely unlikely and 100 meaning that you are absolutely certain it will happen. Use values between the two extremes to moderate the strength of your opinion. Please note that your answers to the categories have to add up to 100. You can also leave fields empty; these will be saved as a 0.

a = The rate of deflation (opposite of inflation) will be 12% or higher: [Input field]
b = The rate of deflation (opposite of inflation) will be between 8% and less than 12%: [Input field]
c = The rate of deflation (opposite of inflation) will be between 4% and less than 8%: [Input field]
d = The rate of deflation (opposite of inflation) will be between 2% and less than 4%: [Input field]
e = The rate of deflation (opposite of inflation) will be between 0% and less than 2%: [Input field]
f = The rate of inflation will be between 0% and less than 2%: [Input field]
g = The rate of inflation will be between 2% and less than 4%: [Input field]
h = The rate of inflation will be between 4% and less than 8%: [Input field]
i = The rate of inflation will be between 8% and less than 12%: [Input field]
j = The rate of inflation will be 12% or higher: [Input field]

701	Pro 6	Second-order inflation expectations quantitative	secondinfexquant

Input filter: if *draterandom1* = 1

Values between -100.0 and 999.9 are supported. No more than one decimal place allowed.

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

Info box <i> after the term "rate of inflation":

QUESTION: What rate of inflation <i> do you think other enterprises in Germany are expecting on average over **the next twelve months**?

Note: If you think other enterprises expect the price level to increase, please enter a positive percentage value. If you think other enterprises expect the price level to decrease, please enter a negative percentage value. Please enter a value with a maximum of one decimal place.

[Input field]%

702	Pro 6	Second-order inflation expectations probabilistic	secondinfexprob_[a-j]

Input filter: if *draterandom1* = 1

Values between 0 and 100 are supported.

"Don't know" and "No answer" shown as soft prompts if no response selected and the
participant clicked on "Continue".

The programming of the question requires the sum of the 10 variables to be 100. The
current sum of all entered points is shown to the respondent when answering the
question. Respondents are asked to correct their responses if the sum does not
equal 100.

After the term "rate of inflation" an info box <i> with the following text is
shown:
"Inflation is the percentage increase in the general price level. It is mostly
measured using the consumer price index. A decrease in the price level is generally
described as "deflation"."

If invalid number is entered the following error message is shown:
"Please enter a value between 0 and 100."

QUESTION: In your opinion, how likely do other enterprises in Germany think it is that the rate of inflation <i> will change as follows over **the next twelve months**?

Note: The aim of this question is to determine how likely you think it is that something specific will happen in the future. You can rate the likelihood on a scale from 0 to 100, with 0 meaning that an event is completely unlikely and 100 meaning that you are absolutely certain it will happen. Use values between the two extremes to moderate the strength of your opinion. Please note that your answers to the categories have to add up to 100. You can also leave fields empty; these will be saved as a 0.

a =	The rate of deflation (opposite of inflation) will be 12% or higher:	[Input field]
b =	The rate of deflation (opposite of inflation) will be between 8% and less than 12%:	[Input field]
c =	The rate of deflation (opposite of inflation) will be between 4% and less than 8%:	[Input field]
d =	The rate of deflation (opposite of inflation) will be between 2% and less than 4%:	[Input field]
e =	The rate of deflation (opposite of inflation) will be between 0% and less than 2%:	[Input field]
f =	The rate of inflation will be between 0% and less than 2%:	[Input field]
g =	The rate of inflation will be between 2% and less than 4%:	[Input field]
h =	The rate of inflation will be between 4% and less than 8%:	[Input field]
i =	The rate of inflation will be between 8% and less than 12%:	[Input field]
j =	The rate of inflation will be 12% or higher:	[Input field]

Randomisation dummy: *dsalesrandom1*

The dummy *dsalesrandom1* splits the sample into two groups of roughly equal size. This split is linked to the randomisation in Waves 6-8 (July 21 to September 21). Firms that were assigned to one of the two randomisation groups in those waves (irrespective of whether they responded or not in the end) should be assigned to the same group again this time.

Dsalesrandom1 = 1 (firms that were in group 1 in wave 6, 7, or 8 + 1/2 of newcomers)
Dsalesrandom1 = 2 (firms that were in group 2 in wave 6, 7, or 8 + 1/2 of newcomers)

	dsalesrandom1 = 1	*dsalesrandom1* = 2
Sales		X
Prices Past	X	X

X05A	Core	Sales past quarter quantitative	salespast

Input filter: if *dsalesrandom1* = 2

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

Info box <i> after the term "sales":
"In place of sales, banks/credit institutions should state their gross interest and commission income and their net trading income, while insurers should enter their gross premiums written."

If an invalid number (negative or including a comma or period) is entered the following error message is shown:
"Please enter a positive value, without a comma or period (possible input values are 0 to 999999999)."

QUESTION: We would now like to ask you some more questions about your enterprise. What were your enterprise's sales <i> in the **third quarter of 2021** (July to September 2021)?

Note: Please enter an amount in full thousands of euro.

Sales (excluding VAT): [Input field],000 euro

X05B	Core	Sales comparable quarter prediction	salesfuture_[a-e]

Input filter: if *dsalesrandom1* = 2

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

Values between -100.0 and 999.9 are supported.

Firms are expected to provide at least one number.

Firms must not be forced to provide all five values.

Supported values should be monotonically non-decreasing, e.g. a<=b<=c<=d<=e when all five values are non-missing.

When programming the questionnaire, please be mindful of scenarios in which firms provide, for instance, only three values (e.g. 1, 2, 4, NA, NA; or 1, NA, 2, NA, 3) or only two values (e.g. 1, NA, NA, NA, 2; or NA, 1, 2, NA, NA).

Info box <i> after the term "sales":
"In place of sales, banks/credit institutions should state their gross interest and commission income and their net trading income, while insurers should enter their gross premiums written."

When values are NOT monotonically non-decreasing, then the following message should be shown:
"Please make sure your answers are ordered from the lowest value to the highest."

If invalid number is entered the following error message is shown: "Please enter a value between -100.0 and 999.9. Only one decimal place is permitted."

QUESTION: What changes in your sales <i> do you consider possible from the **third quarter of 2021** (July to September 2021) to the **third quarter of 2022** (July to September 2022)? Please indicate what percentage change in your sales you would expect in the following scenarios.

Note: If you expect sales to increase, please enter a positive percentage value. If you expect sales to decrease, please enter a negative percentage value. Please make sure your answers are ordered from the lowest value to the highest.

a	The **lowest** potential percentage change would be:	[Input field]%
b	A **low** potential percentage change would be:	[Input field]%
c	A **medium** potential percentage change would be:	[Input field]%
d	A **high** potential percentage change would be:	[Input field]%
e	The **highest** potential percentage change would be:	[Input field]%

X05C	Core	Sales comparable quarter probabilistic	salesprob_[a-e]

Input filter: if *dsalesrandom1* = 2

Values between 0 and 100 are supported. No decimals are allowed.

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

The programming of the question requires the sum of the five variables to be 100. The current sum of all entered points is shown to the respondent when answering the question. Respondents are asked to correct their responses if the sum does not equal 100. If possible, only those fields should be active for which a value has been provided in the previous question.

Info box <i> after the term "sales":
"In place of sales, banks/credit institutions should state their gross interest and commission income and their net trading income, while insurers should enter their gross premiums written."

If the sum is not equal to 100, the following error message will be displayed:
"Please note that your answers to all scenarios have to add up to 100."

QUESTION: How likely do you think it is that the individual scenarios for the change in your sales <i> from the **third quarter of 2021** (July to September 2021) to the **third quarter of 2022** (July to September 2022) will materialise?

Note: The aim of this question is to determine how likely you think it is that something specific will happen in the future. You can rate the likelihood on a scale from 0 to 100, with 0 meaning that an event is completely unlikely and 100 meaning that you are absolutely certain it will happen. Use values between the two extremes to moderate the strength of your opinion. Please note that your answers to the scenarios have to add up to 100.

a	The likelihood of a change of around **{salesfuture[a]}**% is:	[Input field]
b	The likelihood of a change of around **{salesfuture[b]}**% is:	[Input field]
c	The likelihood of a change of around **{salesfuture[c]}**% is:	[Input field]
d	The likelihood of a change of around **{salesfuture[d]}**% is:	[Input field]
e	The likelihood of a change of around **{salesfuture[e]}**% is:	[Input field]

X06A	Core	Price change past year quantitative	pricepast

Values between -100.0 and 999.9 are supported. No more than one decimal place allowed.

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

If invalid number is entered the following error message is shown:
"Please enter a value between -100.0 and 999.0. Only one decimal place is permitted."

Input filter: if *dsalesrandom1* = 1

QUESTION: We would now like to ask you some more questions about your enterprise. Please consider the period from **end-September 2020** to **end-September 2021**. Please enter the average percentage change in the prices charged for your products and services in this period.

Input filter: if *dsalesrandom1* = 2

QUESTION: Please consider the period from **end-September 2020** to **end-September 2021**. Please enter the average percentage change in the prices charged for your products and services in this period.

Note: If prices increased, please enter a positive percentage value. If prices decreased, please enter a negative percentage value. Please enter a value with a maximum of one decimal place.

[Input field]%

---	SAMPLE SPLIT 2 – END	---

X06B	Core	Price change next year quantitative	pricefuture

Values between -100.0 and 999.9 are supported. No more than one decimal place allowed.

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

If invalid number is entered the following error message is shown:
"Please enter a value between -100.0 and 999.9. Only one decimal place is permitted."

QUESTION: Please consider the period from **end-September 2021** to **end-September 2022**. What average percentage change in the prices charged for your products and services do you expect in this period?

Note: If you expect prices to increase, please enter a positive percentage value. If you expect prices to decrease, please enter a negative percentage value. Please enter a value with a maximum of one decimal place.

[Input field]%

X06C	Core	Price change uncertainty	priceunc

Input filter: a number provided in pricefuture (Question X06B)

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

Input filter: if *pricefuture* > 0

QUESTION: How certain are you that the prices charged for your products and services will increase by around **{pricefuture}**% on average in the period from **end-September 2021** to **end-September 2022**?

1 = Very uncertain
2 = Rather uncertain
3 = Neither certain nor uncertain
4 = Rather certain
5 = Very certain

Input filter: if *pricefuture* < 0

QUESTION: How certain are you that the prices charged for your products and services will decrease by around **{pricefuture}**% on average in the period from **end-September 2021** to **end-September**

2022?

1 = Very uncertain
2 = Rather uncertain
3 = Neither certain nor uncertain
4 = Rather certain
5 = Very certain

Input filter: if *pricefuture* = 0

QUESTION: How certain are you that the <u>prices charged</u> for your products and services will remain roughly the same on average in the period from **end-September 2021** to **end-September 2022**?

1 = Very uncertain
2 = Rather uncertain
3 = Neither certain nor uncertain
4 = Rather certain
5 = Very certain

X09A	BiQ Core	Employment past quarter	emplpast_[a, b]
If an invalid number (negative or including a comma or period) is entered the following error message is shown: "Please enter a valid value, without a comma or period (possible input values are 0 to 999999)."			
"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".			

QUESTION: How many <u>employees</u> did your enterprise have at the end of the **third quarter of 2020** (end-September 2020) and at the end of the **third quarter of 2021** (end-September 2021)?

Note: Please consider all employees, including those working part-time.

a   Number of employees at end-September 2020:   [Input field]
b   Number of employees at end-September 2021:   [Input field]

X09B	BiQ Core	Employment comparable quarter prediction	emplfuture
No negative values are allowed. No decimals are allowed. Maximum value allowed 999999.			
If an invalid number (negative or including a comma or period) is entered the following error message is shown: "Please enter a valid value, without a comma or period (possible input values are 0 to 999999)."			
"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".			

QUESTION: How many <u>employees</u> do you expect your enterprise to have at the end of the **third quarter of 2022** (end-September 2022)?

Note: Please consider all employees, including those working part-time.

a   Number of employees at end-September 2022:   [Input field]

X09C	BiQ Core	Employment uncertainty	emplunc
"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".			

QUESTION: How certain are you that the number of <u>employees</u> at your enterprise will be around **{emplfuture}** at the end of the **third quarter of 2022** (end-September 2022)?

Note: Please select one answer.

1 = Very uncertain
2 = Rather uncertain
3 = Neither certain nor uncertain
4 = Rather certain

5 =	Very certain

X07A	Core	Microfinance credit negotiations	creduse1

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

Info box <i> after the term "government-sponsored loans":
"Government-sponsored loans include, for example, public sector support in the form of guarantees, reduced interest rates or funding grants."

QUESTION: In the **third quarter of 2021** (July to September 2021), did your enterprise negotiate with one or more banks with a view to taking out a <u>loan</u> or establishing a <u>credit line</u>?

Note: This does not include any government-sponsored loans <i>.

1 = Yes
2 = No

X07B	Core	Microfinance negotiations result	creduse2_[a-f]

Input filter: *creduse1* = 1

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

QUESTION: What was the outcome of these negotiations?

Note: Please select all answers that apply.

0 = Category not selected
1 = Category selected

a   Loan/credit line was approved for the desired amount at the desired conditions (interest, collateral, etc.)
b   Loan/credit line was approved for the desired amount but at less favourable conditions
c   Loan/credit line was approved for a smaller amount, but at the desired conditions
d   Loan/credit line was approved for a smaller amount and at less favourable conditions
e   No decision has yet been made regarding the loan application
f   Loan negotiations were concluded without a deal

X08A	Core	Financing sources past	financingpast_[a-g]

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

Info box <i> after the term "government-sponsored loans":
"Government-sponsored loans include, for example, public sector support in the form of guarantees, reduced interest rates or funding grants."

QUESTION: Has your enterprise used the following <u>financing sources</u> over the past **three months**?

Note: Please select one answer for each row. Please consider the last three full calendar months when answering this question.

1 = Yes
2 = No, but used prior to this period
3 = No, never used to date

a =   Retained earnings:
b =   Bank loans (excluding overdrafts):
c =   Overdrafts:
d =   Government-sponsored loans <i>:
e =   Trade credits (including advances and trade payables):
f =   Equity:
g =   Other instruments (debt securities, other loans (including to affiliated enterprises), leases/hire purchase and factoring):

704	Pro F	Approval bank loan during financial crisis	approvalloan

Input filter: *draterandom1* = 3 AND *yearest* <= 2010

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

QUESTION: Please think back to the time of the global **financial crisis of 2008-09**. During that time, did your enterprise have difficulties accessing <u>bank loans</u> or <u>credit lines</u>?

Note: Please select one answer.

1 = Yes, the enterprise had difficulties accessing bank loans/credit lines at the time.
2 = No, bank loans/credit lines were approved without difficulty at the time.
3 = No, the enterprise did not apply for bank loans/credit lines at the time.

703B	Pro F	Financing instruments during financial crisis	financing2008_[a1-f4]

Input filter: *draterandom1* = 3 AND (*financingpast*_[a-c; e-g]= 1|2 AND yearest <= 2013.

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

Input filter: if *yearest* <= 2007

QUESTION: During the years of the global **financial crisis of 2008-09** or **shortly thereafter** (2010-13), did your enterprise use the following <u>financing sources</u>?

Note: For each row, you may select multiple responses from options 1 to 3.

0 = Category not selected
1 = Category selected

1 = Yes, **immediately prior to** the financial crisis (2008)
2 = Yes, **during** the financial crisis (2008-09)
3 = Yes, **shortly after** the financial crisis (2010-13)
4 = No, not used between 2008 and 2013

a = Retained earnings:
b = Bank loans (excluding overdrafts):
c = Overdrafts:
d = Trade credits (including advances and trade payables):
e = Equity:
f = Other instruments (debt securities, other loans (including to affiliated enterprises), leases/hire purchase and factoring):

Input filter: if *yearest* = 2008|2009

QUESTION: During the global **financial crisis of 2008-09** or **shortly thereafter** (2010-13), did your enterprise use the following <u>financing sources</u>?

Note: For each row, you may select multiple responses from options 1 and 2.

0 = Category not selected
1 = Category selected

2 = Yes, **during** the financial crisis (2008-09)
3 = Yes, **shortly after** the financial crisis (2010-13)
4 = No, not used between 2008 and 2013

a = Retained earnings:
b = Bank loans (excluding overdrafts):
c = Overdrafts:
d = Trade credits (including advances and trade payables):
e = Equity:
f = Other instruments (debt securities, other loans (including to affiliated enterprises), leases/hire purchase and factoring):

QUESTION: Shortly **after the global financial crisis of 2008-09**, i.e. in the period between **2010** and **2013**, did your enterprise use the following <u>financing sources</u>?

Note: Please select one answer for each row.

0 = Category not selected
1 = Category selected

3 = Yes, **shortly after** the financial crisis (2010-13)
4 = No, not used between 2010 and 2013

a = Retained earnings:
b = Bank loans (excluding overdrafts):
c = Overdrafts:
d = Trade credits (including advances and trade payables):
e = Equity:
f = Other instruments (debt securities, other loans (including to affiliated enterprises), leases/hire purchase and factor-
    ing):

X08B	Core	Financing sources future	financingfuture_[a-g]

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

Info box <i> after the term "government-sponsored loans":
"Government-sponsored loans include, for example, public sector support in the form of guarantees, reduced interest rates or funding grants."

QUESTION: Is your enterprise planning to use the following <u>financing sources</u> over the next **three months**?

Note: Please select one answer for each row. Please consider the next three calendar months when answering this question.

1 = Yes
2 = No, however, there are plans to use them at a later point in time
3 = No, no use at all planned

a   Retained earnings:
b   Bank loans (excluding overdrafts):
c   Overdrafts:
d   Government-sponsored loans <i>:
e   Trade credits (including advances and trade payables):
f   Equity:
g   Other instruments (debt securities, other loans (including to affiliated enterprises), leases/hire purchase and factor-
     ing):

705	Pro 6	Home office after pandemic	wfhpastcorona_[a, b]

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

QUESTION: Employees are working from home more frequently on account of the coronavirus pandemic. On average, how many days per week do you think employees at your enterprise will work <u>from home</u> **in future**?

Note: Please select one answer for each column. In your answer, please take this question as referring to full-time employees.

a = In the short to medium term, or as long as the pandemic continues:
b = In the long term, after the end of the pandemic:

1 = 5 days per week
2 = 4 days per week

3 =	3 days per week
4 =	2 days per week
5 =	1 day per week
6 =	Not at all, or less than 1 day per week
7 =	Only in exceptional cases

706	Pro 6	Decision process home office	decwfh

Input filter: if *wfhpastcorona [a]* = 2|3|4|5 OR *wfhpastcorona [b]* = 2|3|4|5
"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

QUESTION: How will it be decided at your enterprise who works from home on specific days and who works at the office?

Note: Please select one answer.

1 = Employees will have the flexibility to decide the days on which they work from home or at the office.
2 = Employees will have the flexibility to decide the days on which they work from home or at the office. They will, how-ever, have to inform their superiors in advance.
3 = The head of the enterprise or the team leader will specify the days on which employees can work from home or at the office.
4 = A decision has not yet been made on this.
5 = Our enterprise plans to use a different decision-making process to the options listed here.

707	Pro 6	Organisational effort to handle coronavirus	hourorgcorona_[a, b]

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

QUESTION: Roughly how many hours has the head of your enterprise spent managing the impact of COVID-19 on your enterprise **over the last six months**? And roughly how many hours per week do you think they will spend doing this over the **next six months**?

Note: Please select one answer for each column.

a = Over the past 6 months:
b = Over the next 6 months:

1 = No time at all
2 = Up to 1 hour per week
3 = More than 1 and up to 5 hours per week
4 = More than 5 and up to 10 hours per week
5 = More than 10 and up to 20 hours per week
6 = More than 20 hours per week

708	Pro H	Payment instruments clients	paymentclient_[1a-2n]

QUESTION: Now we have a question about the <u>payment options</u> your enterprise accepts for incoming payments. Which payment options can customers and other enterprises **currently** use and which payment options will they likely be able to use to pay your enterprise **in five years**?

Note: State the payment options regardless of whether they are actually used. Please select all answers that apply.

0 = Category not selected
1 = Category selected

a = At present
b = In five years

1 = Cash:
2 = Girocard or other debit card:
3 = Credit card:
4 = Mobile payment, e.g. with a smartphone or smartwatch
5 = Credit transfer:
6 = Instant payment <i>:
7 = Direct debit:
8 = Voucher/gift card:
9 = Retailer card with a payment function <i>:
10 = Bill of exchange <i>:
11 = Letter of credit <i>:
12 = Cheque:
13 = E-payment scheme <i>:
14 = Private crypto-assets <i>:

709	Pro Z	Perception of blockchain in firms	percblockchain

QUESTION: Next, we would like to ask you about the use of a new digital technology. Which statement on blockchain technology <i> best describes your enterprise **at present**?

Note: Please select one answer.

1 = Blockchain technology is used at our enterprise.
2 = Blockchain technology is being piloted at our enterprise.
3 = The use of blockchain technology is being tested in technical experiments.
4 = We are assessing whether blockchain technology can be implemented at our enterprise within the next few years.
5 = We are investigating the topic of blockchain technology within our enterprise (e.g. through research, opinion-forming processes or discussion).
6 = The use of blockchain technology is not required at our enterprise.
7 = We were/I was unfamiliar with the term "blockchain technology" until now.

710	Pro Z	Concrete use cases of blockchain in firms	useblockchain_[a-i]

QUESTION: For which purposes does your enterprise already use or is likely to start using blockchain technology <i>?

Note: Please select all answers that apply.

0 = Category not selected
1 = Category selected

a = Payments
b = Other financial services
c = Supply chain management (e.g. tracking)
d = Processing foreign trade business
e = (Audit-compliant) business documentation
f = Identity checking (e.g. in line with anti-money laundering requirements)
g = Internet of things, machine-to-machine services
h = Contract management
i = Other use cases

---	SAMPLE SPLIT 1 – END	---

D01	Descript	Firm characteristics implicit	firmid

Input filter *newcomer* = 1

QUESTION: The information collected needs to be categorised in order to complete it. When evaluating the survey data, the Bundesbank would therefore like to merge this information with data it has on record to fulfil its tasks and which are kept in a separate database of enterprises at its premises in Frankfurt am Main, Germany. If you do not consent to this, the Bundesbank will rely on you to categorise this information yourself by means of additional questions. As you can see there, these data relate to the size, balance sheet, legal form, economic sector and other structural details of your enterprise. Your consent is required to merge these data with the survey data.

The data records will be merged at a data trustee – the Deutsche Bundesbank's Research Data and Service Centre (RDSC). The security of your data is ensured when this information is subsequently processed at the RDSC. Your consent is of course voluntary. You may withdraw it at any time. However, withdrawing your consent shall not affect the lawfulness of any processing that has taken place on the basis of this declaration of consent before it was withdrawn.

1 = Yes, consent granted.
2 = No, consent not granted.
3 = I am not authorised to grant consent.

D02	Descript	Firm characteristics explicit employment	firmemploy

Input filter *newcomer* = 1

Supported values are >= 0.

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

If an invalid number (negative or including a comma or period) is entered the following error message is shown:
"Please enter a valid value, without a comma or period (possible input values are 0 to 999999)."

QUESTION: How many **employees** did your enterprise have on 31 December 2020?

[Input field]

D03	Descript	Firm characteristics explicit turnover	firmturnover

Input filter *newcomer* = 1

Supported values are >= 0.

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

Info box <i> after the term "turnover":
"In place of turnover, banks/credit institutions should state their gross interest and commission income and their net trading income, whilst insurers should enter their gross premiums written."

If an invalid number (negative or including a comma or period) is entered the following error message is shown:
"Please enter a valid value, without a comma or period (possible input values are 0 to 999999999)."

QUESTION: What was the **turnover** <i> of your enterprise in 2020?

Note: Please enter an amount in full thousands of euro.

Turnover (excluding VAT) in 2020: [Input field],000 euro

D04	Descript	Firm characteristics explicit economic sector	firmsector

Input filter *newcomer* = 1

Info box <i> after the term "economic sector":
"All economic sectors according to the IAB Establishment Panel classification are listed here."

Info box <i> after the term "Agriculture, hunting and forestry, fishing":
"Crop and animal production, hunting and related services; forestry and logging; fishing and aquaculture."

Info box <i> after the term "Mining and quarrying, electricity and water supply":
"Mining of coal and lignite; petroleum and natural gas extraction; mining of metal ores; other mining and quarrying; mining support service activities; electricity, gas, steam and air conditioning supply; water supply."

Info box <i> after the term "Manufacture of non-durable consumer products":
"Manufacture of textiles; apparel; leather, leather goods and shoes; wood and of products of wood and cork, except furniture; paper and paper products; printing; reproduction of recorded media."

Info box <i> after the term "Manufacture of industrial goods":
"Coke and refined petroleum products, manufacture of: chemical products; pharmaceutical products; rubber and plastic products; other non-metallic mineral products; metal production and processing."

Info box <i> after the term "Manufacture of capital and durable consumer goods":
"Machinery and equipment; manufacture of motor vehicles and motor vehicle parts, other transport equipment, other manufacturing, repair and installation of machinery and equipment; fabricated metal products; computers and electronic and optical products; electrical equipment; furniture."

Info box <i> after the term "Information and communication":
"Publishing activities; film, video and television programme production; cinemas; sound recording and music publishing activities; programming and broadcasting activities; telecommunication; computer programming, consultancy and related activities; information service activities."

Info box <i> after the term "Financial and insurance activities":
"Provision of financial services; insurance, reinsurance and pension funding (excluding compulsory social security); activities auxiliary to financial and insurance services."

Info box <i> after the term "Business support, scientific and other professional services":
"Real estate activities; legal and accounting activities; activities of head offices, management consultancy; architectural and engineering activities; technical testing and analysis; research and development; advertising and market research; other professional, scientific and technical activities; veterinary activities; rental and leasing activities; employment activities; travel agency, tour operator reservation service and related activities; security and investigation activities; services to buildings and landscape activities; office administrative, office support and other business support activities."

Info box <i> after the term "Other service activities":
"Creative, arts and entertainment activities; libraries, archives, museums and other cultural activities; gambling and betting activities; sports activities and amusement and recreation activities; repair of computers and personal and household goods; other personal service activities."

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

QUESTION: To which economic sector <i> does your enterprise best belong?

Note: Please select one answer.

1 = Agriculture, hunting and forestry, fishing <i>
2 = Mining and quarrying, electricity and water supply <i>
3 = Sewerage and waste management
4= Food products, beverages and tobacco

5 = Manufacture of non-durable consumer products \<i\>
6 = Manufacture of industrial goods \<i\>
7 = Manufacture of capital and durable consumer goods \<i\>
8 = Construction
9 = Wholesale, sale and repair of motor vehicles
10= Retail (except of motor vehicles and motorcycles)
11 = Transportation and warehousing
12 = Information and communication \<i\>
13 = Accommodation and food service activities
14 = Financial and insurance activities \<i\>
15 = Business support, scientific and other professional services \<i\>
16 = Education
17 = Health and social services
18 = Other service activities \<i\>
19 = Activities of membership, religious and other organisations (excluding social work activities and sport)
20 = Public administration, defence, social security

D05	Descript	Firm characteristics explicit ownership	firmtype

Input filter *newcomer* = 1

QUESTION: How would you describe your enterprise?

Note: Please select all answers that apply.

[a] Independent profit-driven enterprise that makes its own financial decisions
[b] Branch of another enterprise
[c] Subsidiary of another enterprise
[d] Non-profit institution
[e] Family business

D06	Descript	Firm characteristics explicit region	firmregion

Input filter *newcomer* = 1

QUESTION: In which federal state is your enterprise's head office in Germany based?

1 = Baden-Württemberg
2 = Bavaria
3 = Berlin
4 = Brandenburg
5 = Bremen
6 = Hamburg
7 = Hesse
8 = Mecklenburg-West Pomerania
9 = Lower Saxony
10 = North Rhine-Westphalia
11 = Rhineland-Palatinate
12 = Saarland
13 = Saxony
14 = Saxony-Anhalt
15 = Schleswig-Holstein
16 = Thuringia

D07	Descript	Characteristics of respondent	Respondenttype_[a-k]

Input filter *newcomer* = 1

QUESTION: We would now like to learn more about your role in your enterprise. In which area of your enterprise do you work?

Note: Please select all answers that apply.

[a] Management board
[b] Finance/control/accounting
[c] Sales/marketing/communication
[d] Another area (please specify): [Input field] **respondenttype_e**

QUESTION: Which job title best describes your role?

Note: Please select all answers that apply.

[f] Owner/Managing director/Executive board member/Holder of general commercial power of attorney
[g] Head of division
[h] Team leader
[i] Administrator
[j] Other (please specify): [Input field] **respondenttype_k**

F01	Core	Feedback questions	feedback_[a-b]

No input filter

"Don't know" and "No answer" shown as soft prompts if no response selected and the participant clicked on "Continue".

QUESTION: How difficult did you find the survey overall?

1 = Very difficult
2 = Somewhat difficult
3 = Partly difficult/partly easy
4 = Somewhat easy
5 = Very easy

QUESTION: How did you find the length of the survey?

1 = Far too long
2 = Somewhat too long
3 = Just right
4 = Somewhat too short
5 = Far too short

F02	Core	Open feedback question	feedbackopen

No input filter

QUESTION: If you have any suggestions or criticism about the survey, please let us know here.

1 = [Input field]
2 = No, nothing/no answer

P01	Core	Panel participation	panel

Input filter *newcomer* = 1

QUESTION: In order to find out how you continue to manage the crisis and how your enterprise develops over the next few years, we would, going forward, like to invite you to complete additional surveys at intervals of three months. We will need to keep your contact details on file so that we can get in touch with you about the new surveys. To do this, we require your consent under the German Data Protection Act (*Datenschutzgesetz*).

Your contact details will be kept separately from the questionnaire and solely for the purpose of this further survey. They will never be traced back to the answers you have provided. Your information will remain anonymous as described above and your data will never be passed on to third parties. Once the last survey has been completed, your contact details will be permanently deleted. The data protection statement on the processing of personal contact details, as well as contact details for the data protection officer and information about the rights of data subjects can be found in the general data protection notice at
https://www.bundesbank.de/en/bundesbank/research/survey-on-firms/survey-on-the-expectations-of-firms-855892

We would be very grateful if you decided to continue participating in our research project. Of course, this is also voluntary and you can withdraw your consent at any time.

I agree that my address may be kept on file for further surveys (please select):

1 = Yes
2 = No

P02	Core	Contact	contact

Input filter *newcomer* = 1

QUESTION: To make it easier for us to contact you about new surveys, please give us an email address that we can use to contact your enterprise. This email address will not be used for any other purpose and will be treated with the same level of confidentiality as your other contact details.

Note: Please type your email address in the text field.

[Input field]