Documentation of the Bundesbank Online Panel – Firms (BOP-F)

Questionnaire 19

Waves 45, 46, 47

October, November, December 2024

Deutsche Bundesbank Research Centre

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1 Notes

a General coding

For all questions, the following codes apply.

Code	Output			
-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			
-5550	question.			
-6666	Does not apply: The question or response option was not shown to the respondent due to filters or			
-0000	prior item non-response.			
-5555	Recoded by BBk: A coding or data error that was recoded 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).

Leg	end	Question name	Question source	Topic	Variable name
Example 1		003	Core	Perceived problems	percprob_[a-j]
Exa	mple 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.

X01 | Core | Perceptions qualitative | percmacro_[a-i]

QUESTION: Please consider the period from **end-June 2022** to **end-June 2023**. 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):
- h = Sales <i>:
- i = Expenditure on energy and fuels:

2 List of questions

Variable name	Topic	Question number	Origin
percmacro_[a-g]	Perceptions qualitative	X01	Core
expmacro_[a-g]	Expectations qualitative	X02	Core
keyrateprob_[f-r]	Development key rate probabilistic	X04A	Core
inflexpoint	Inflation expectations quantitative	X04B	Core
inflexpoint_3y	Inflation expectations quantitative – 3 years	811A	Pro 6
inflexpoint_5y	Inflation expectations quantitative – 5 years	811B	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
financingfuture_[a-g]	Financing sources future	X08B	Core
weather_factor_[a1-k3]	Weather-related factors	1901	Pro Vo 30
impact_summer_[a1-k6]	Impact of weather in summer	1902A	Pro Vo 30
impact_winter_[a1-k6]	Impact of weather in winter	1902B	Pro Vo 30
CO2_price5y	Change carbon price in 5Y	1903	Pro 63
invest_CO2	Investment in measures to reduce CO ₂	1904	Pro 63
instpay_use	Instant payments usage	1905	Pro Z 10
instpay_obst_[a-e]	Instant payments obstacles	1906	Pro Z 10
invest_digi_[a-c]	Investment digitalisation	1910	Pro F, N 1
fin_digi_[a-d]	Financing digitalisation	1911	Pro F, Vo 40, N 1
use_ai	Use of AI	1907A	Pro F 43
changes_ai_[a-d]	Firm-level changes due to AI	1907B	Pro F 43
gdp_growth_[a-c]	Expectations about GDP growth	1908	Pro F 43
dax_growth_[a-c]	Expectations about stock market	1909	Pro F 43
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
ident	Identification repeat respondent	D08	Pro F
feedback_[a-b]	Feedback questions	F01	Core
feedbackopen	Open feedback question	F02	Core
panel	Panel participation	P01	Core
contact	Contact	P02	Core

3 Introduction

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 **not** 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 unternehmensbefragung@bundesbank.de.
- 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 bundesbank-unternehmensbefragung@forsa.de. If you have any questions or comments on the content of the survey, please contact the Bundesbank's (0)69project team by telephone on +49 9566 32080 by email unternehmensbefragung@bundesbank.de.

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 could 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 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/survey-on-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: newcomer =

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.

4 Questions

X01 | Core | Perceptions qualitative | percmacro [a-i]

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

Info box <i> after the term "Access to intermediate inputs": "If access to intermediate inputs has deteriorated, please state "decreased" or "decreased significantly"."

Info box <i> after the term "Access to financing sources": "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"."

Info box <i> after the term "Sales": "Please consider your sales in the third quarter of 2024 (July to September 2024) and compare them with your sales in the third quarter of 2023 (July to September 2023). In place of sales growth, banks/credit institutions should consider the development of their gross interest and commission income and their net trading income. Insurers should consider the development of their gross premiums written."

QUESTION: Please consider the period from **end-September 2023** to **end-September 2024**. 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):
- h = Sales <i>:
- i = Expenditure on energy and fuels:

X02 | Core | Expectations qualitative | expmacro [a-i]

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

Info box <i> after the term "Access to intermediate inputs": "If you expect access to intermediate inputs to deteriorate, please state "decrease" or "decrease significantly"."

Info box <i> after the term "Access to financing sources": "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"."

Info box <i> after the term "Sales": "Please consider your expected sales in the third quarter of 2025 (July to September 2025) and compare them with your sales in the third quarter of 2024 (July to September 2024). In place of sales growth, banks/credit institutions should consider the development of their gross interest and commission income and their net trading income. Insurers should consider the development of their gross premiums written."

QUESTION: How do you expect the following metrics to develop in your enterprise from **end-September 2024** to **end-September 2025**?

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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):
h = Sales <i>:
i = Expenditure on energy and fuels:
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--- | SPLIT SAMPLE 1 - OVERVIEW | RANDOMISATION 1 Randomisation dummy: draterandom1 The dummy draterandom1 splits the sample into three groups of roughly equal size (1, 2, 3). This split is linked to the randomisation in waves 42-44. Firms that were assigned to one of the three randomisation groups in waves 42-44 (irrespective of whether they responded or not in the end) should be assigned to the same group in waves 45-47. draterandom1 = (firms that were in group in waves 42-44 + one-third of newcomers) draterandom1 = (firms that were in group in waves 42-44 + one-third of newcomers) draterandom1 = (firms that were in group in waves 42-44 + one-third of newcomers)

The programming of the question requires the sum of the ten variables to be 100. The current sum of all entered points is shown to the respondent when answering the question. If the sum is not equal to 100, the following error message is shown: "Please note that your answers to all scenarios have to add up to 100."

Fields that were left empty should be assigned 0 after moving to the next question. Info box <i> after the term "key interest rate of the European Central Bank": "The European Central Bank sets three different key interest rates. The one currently referred to is the deposit facility rate at which commercial banks can deposit their money with the ECB in the short term."

QUESTION: We would now like to ask you some questions about macroeconomic developments. In your opinion, how likely is it that the <u>key interest rate</u> of the European Central Bank (ECB) <i> will be within the following ranges at the **end of September 2025**?

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 you are certain that an event will not happen 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.

r = Below 0.00%: [Input field]

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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 = Between 2.01% and 2.50%:
                                       [Input field]
k = Between 2.51% and 3.00%:
                                       [Input field]
m = Between 3.01% and 3.50%:
                                       [Input field]
n = Between 3.51% and 4.00%:
                                       [Input field]
o = Between 4.01% and 4.50%:
                                       [Input field]
p = Between 4.51% and 5.00%:
                                       [Input field]
q = Above 5.00%:
                                       [Input field]
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X04B | Core | Inflation expectations quantitative | inflexpoint

"Don't know" and "No answer" shown as soft prompts if no value is entered and the participant clicked "Continue".

Values between -100.0 and 999.0 are supported. 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."

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

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] percent

811A | Pro 6 | Inflation expectations quantitative – 3 years | inflexpoint_3y

Input filter: dsalesrandom1 =

"Don't know" and "No answer" shown as soft prompts if no value is entered and the participant clicked "Continue".

Values between -100.0 and 999.0 are supported. 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."

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

QUESTION: What do you expect the rate of inflation <i> to be on average over the next **three years**?

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

[Input field] percent

811B | Pro 6 | Inflation expectations quantitative – 5 years | inflexpoint_5y

Input filter: dsalesrandom1 =

"Don't know" and "No answer" shown as soft prompts if no value is entered and the participant clicked "Continue".

Values between -100.0 and 999.0 are supported. 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."

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

QUESTION: What do you expect the <u>rate of inflation</u> <i> to be on average over the next **five years**?

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

[Input field] percent

X05A | Core | Sales past quarter quantitative | salespast

Input filter: dsalesrandom1 =

"Don't know" and "No answer" shown as soft prompts if no response is selected and the participant clicked "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 999999999)."

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, whilst insurers should enter their gross premiums written."

QUESTION: We would now like to ask you some more questions about your enterprise. What were your enterprise's <u>sales</u> <i> in the **third quarter of 2024** (July to September 2024)?

Note: Please enter an amount in full <u>thousands</u> of euro. If your sales were $\[\le \]$ 123,500, please enter only 123 in the field. If your sales were $\[\le \]$ 1,234,500, please enter only 1234 in the field.

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

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

Input filter: dsalesrandom1 =

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

Values between -100.0 and 999.9 are supported. If an 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."

Firms are expected to provide at least one number. Firms may $\underline{\text{not}}$ be forced to provide all five values.

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, 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, whilst insurers should enter their gross premiums written."

QUESTION: What changes in your sales <i> do you consider possible from the **third quarter of 2024** (July to September 2024) to the **third quarter of 2025** (July to September 2025)? Please indicate what <u>percentage change in your sales</u> 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.

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

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

Input filter: dsalesrandom1 =

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

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

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

Only those fields should be active for which a value has been provided in sales_future_[a-e]. If only one value has been provided, this question should not be shown.

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, whilst insurers should enter their gross premiums written."

QUESTION: How likely do you think it is that the individual scenarios for the <u>change in your sales</u> <i> from the **third quarter of 2024** (July to September 2024) to the **third quarter of 2025** (July to September 2025) 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 you are certain that an event will not happen 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 all 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

Input filter: dsalesrandom1 = OR

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

Values between -100.0 and 999.9 are supported. Only one decimal place is permitted. If an 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."

Input filter: dsalesrandom1 =

QUESTION: We would now like to ask you some more questions about your enterprise. Please consider the period from **end-September 2023** to **end-September 2024**. Please enter the average percentage change in the <u>prices charged</u> for your products and services in this period.

Input filter: dsalesrandom1 =

QUESTION: Please consider the period from **end-September 2023** to **end-September 2024**. Please enter the average percentage change in the <u>prices charged</u> 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] percent

X06B | Core | Price change next year quantitative | pricefuture

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

Values between -100.0 and 999.9 are supported. Only one decimal place is permitted. If an 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 2024** to **end-September 2025**. What average percentage change in the <u>prices charged</u> 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] percent

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 is selected and the participant clicked "Continue".

Input filter: pricefuture > 0

QUESTION: How certain are you that the <u>prices charged</u> for your products and services will increase by around **{pricefuture}**% on average in the period from **end-September 2024** to **end-September 2025**?

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

Input filter: pricefuture < 0</pre>

QUESTION: How certain are you that the <u>prices charged</u> for your products and services will decrease by around **{pricefuture}**% on average in the period from **end-September 2024** to **end-September 2025**?

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

Input filter: 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 2024** to **end-September 2025**?

- a = Very uncertain
- b = Rather uncertain
- c = Neither certain nor uncertain
- d = Rather certain
- e = Very certain

X09A | BiQ Core | Employment past quarter | emploast_[a, b]

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

No negative values are permitted. No decimals are allowed. If an invalid number is entered, the following error message is shown: "Please enter a value between 0 and 999999."

QUESTION: How many <u>employees</u> did your enterprise have at the end of the **third quarter of 2023** (end-September 2023) and at the end of the **third quarter of 2024** (end-September 2024)?

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

- a = Number of employees at end-September 2023: [Input field]
- b = Number of employees at end-September 2024: [Input field]

X09B | BiQ Core | Employment comparable quarter prediction | emplfuture

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

No negative values are permitted. No decimals are allowed. If an invalid number is entered, the following error message is shown: "Please enter a value between 0 and 999999."

QUESTION: How many <u>employees</u> do you expect your enterprise to have at the end of the **third quarter of 2025** (end-September 2025)?

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

Number of employees at end-September 2025: [Input field]

X09C | BiQ Core | Employment uncertainty | emplunc

"Don't know" and "No answer" shown as soft prompts if no response is selected and the participant clicked "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 2025** (end-September 2025)?

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 is selected and the participant clicked "Continue".

Info box <i> after the term "credit line": "A credit line is a credit facility with a specified maximum amount. Similar to an overdraft facility for households, a firm can use a credit line at any time without notifying the counterparty (bank)."

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 2024** (July to September 2024), 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> <i>?

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 is selected and the participant clicked "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 (interest, collateral, etc.).
- c = Loan/credit line was approved for a smaller amount but at the desired conditions (interest, collateral, etc.).
- d = Loan/credit line was approved for a smaller amount and at less favourable conditions (interest, collateral, etc.).
- 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 is selected and the participant clicked "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):

X08B | Core | Financing sources future | financingfuture_[a-g]

Input filter: only show items if $financingpast_{a-g} = 2 \text{ OR } 3$

"Don't know" and "No answer" shown as soft prompts if no response is selected and the participant clicked "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, but 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 = Fauity:
- g = Other instruments (debt securities, other loans (including to affiliated enterprises), leases/hire purchase and factoring):

--- | SPLIT SAMPLE 3 - OVERVIEW | RANDOMISATION 3

```
Randomisation dummy: dq19random1
```

The dummy dq19random1 randomly splits the sample into three groups of roughly equal size.

```
dq19random1 = -> one-third of the sample dq19random1 = -> one-third of the sample dq19random1 = -> one-third of the sample
```

1901 | Pro Vo 30 | Weather-related factors | weather_factor_[a1-k3]

Input filter: dq19random1 =

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

Info box <i> after the term "weather-related factors": These do **not** include extreme weather events such as tornados or floods.

Question length: 66

QUESTION: Which weather-related factors <i> within Germany affect your enterprise's <u>production</u> and/or <u>business activity</u> in the **summer months** (April to September) and/or the **winter months** (October to March)?

Note: Please select all answers that apply.

- 0 = Category not selected
- 1 = Category selected
- 1 = In the summer months (April to September)
- 2 = In the winter months (October to March)
- 3 = Neither in the summer nor the winter months
- a = Temperature:
- b = Rainfall:
- c = Soil moisture:
- d = Wind force:
- e = Sunlight:
- f = Hours of sunshine:
- g = Humidity:
- h = Air pressure:
- i = Air quality:
- j = River levels:
- k = Other weather-related factors:

1902A | Pro Vo 30 | Impact of weather in summer | impact_summer_[a1-k6]

Input filter: dq19random1 = AND only show items with $weather_factor_[a1-a11] = AND$

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

Info box <i> after the term "weather-related factors": "These are deviations from weather conditions typically observed in a given season. The usual climatological reference period generally spans a period of 30 years. Seasonal deviations can be determined using this period to represent the climate. These do **not** include extreme weather events such as tornados or floods." Source: Deutscher Wetterdienst (DWD)

Question length: 122

QUESTION: How do exceptionally high or low occurrences of the following weather-related factors <i> affect your enterprise's <u>production</u> and/or <u>business activity</u> in the **summer months** (April to September)?

Note: Please select all answers that apply.

- 0 = Category not selected
- 1 = Category selected
- 1 = High occurrence has a negative effect
- 2 = High occurrence has a positive effect
- 3 = Low occurrence has a negative effect
- 4 = Low occurrence has a positive effect
- 5 = Unpredictability has a negative effect
- 6 = Unpredictability has a positive effect
- a = Temperature:
- b = Rainfall:
- c = Soil moisture:
- d = Wind force:
- e = Sunlight:
- f = Hours of sunshine:
- g = Humidity:
- h = Air pressure:
- i = Air quality:
- j = River levels:
- k = Other weather-related factors:

1902B | Pro Vo 30 | Impact of weather in winter | impact_winter_[a1-k6]

Input filter: dq19random1 = AND only show items with weather_factor_[b1-b11] = 1
"Don't know" and "No answer" shown as soft prompts if no response is selected and the participant clicked "Continue".

Info box <i> after the term "weather-related factors": "These are deviations from weather conditions typically observed in a given season. The usual climatological reference period generally spans a period of 30 years. Seasonal deviations can be determined using this period to represent the climate. These do **not** include extreme weather events such as tornados or floods." Source: Deutscher Wetterdienst (DWD)

Question length: 122

QUESTION: How do exceptionally high or low occurrences of the following weather-related factors <i> affect your enterprise's <u>production</u> and/or <u>business activity</u> in the <u>winter months</u> (October to March)?

Note: Please select all answers that apply.

- 0 = Category not selected
- 1 = Category selected
- 1 = High occurrence has a negative effect
- 2 = High occurrence has a positive effect
- 3 = Low occurrence has a negative effect
- 4 = Low occurrence has a positive effect
- 5 = Unpredictability has a negative effect
- 6 = Unpredictability has a positive effect
- a = Temperature:
- b = Rainfall:
- c = Soil moisture:
- d = Wind force:
- e = Sunlight:
- f = Hours of sunshine:
- g = Humidity:
- h = Air pressure:

```
i = Air quality:
```

j = River levels:

k = Other weather-related factors:

1903 | Pro 63 | Change carbon price in 5Y | CO2_price5y

Input filter: dqu15random1 =

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

Info box <i> after the term "carbon price": "You can use the price of emission allowances traded under the European Union's Emissions Trading Scheme (EU-ETS) as a guideline. The scheme primarily covers large industry installations and electricity generation using fossil fuels."

Question length: 90

QUESTION: To what extent do you expect the <u>carbon price</u> <i> in Germany to change in the next **five** years?

Note: Please select one answer.

- 1 = Decrease by 10% or more
- 2 = No change or minimal change
- 3 = Increase by between 10% and less than 30%
- 4 = Increase by between 30% and less than 50%
- 5 = Increase by between 50% and less than 100%
- 6 = Increase by 100% or more

1904 | Pro 63 | Investment in measures to reduce CO₂ | invest_CO2

Input filter: dqu15random1 =

"Don't \bar{k} now" and "No answer" shown as soft prompts if no response is selected and the participant clicked "Continue".

Info box <i> after the term "long-term investments": "Long-term investments include, for example, investments in property, plant and equipment, machinery, vehicles and other tangible long-term assets, as well as research and development spending."

Info box <i> after the term $^{\circ}CO_2$ emissions": $^{\circ}For$ example, investment expenditure on energy-efficient property, plant or equipment or machinery, electric vehicles, installations for the generation of renewable energy, green patents."

Info box <i> after the term "services": "For example, investment expenditure on the production of low-carbon goods and services such as electric cars or e-bikes, installations for the generation of renewable energy, energy-efficient appliances and equipment."

Question length: 149

QUESTION: Please consider the long-term investments <i> planned by your enterprise for the next **five years**. How much do you expect to be invested in measures to <u>reduce your CO₂ emissions</u> <i> or to produce <u>environmentally friendly goods and services</u> <i>?

Note: Please select one answer.

- 1 = No long-term investment planned in the next five years
- 2 = 0%
- 3 = Below 10%
- 4 = 10% to less than 30%
- 5 = 30% to less than 50%
- 6 = 50% to less than 80%
- 7 = 80% to less than 100%
- 8 = 100%

1905 | Pro Z 10 | Instant payments usage | instpay_use

Input filter: dq19random1 =

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

Values between 0 and 100 are supported.

Info box after the term "SEPA instant credit transfers": "Instant payments, or SEPA instant credit transfers, allow for the final settlement of transfers to take place within seconds."

Question length: 89

QUESTION: Now please consider your enterprise's outgoing payments. What percentage of outgoing payments made in the **last year** were <u>instant payments</u> <i> or SEPA instant credit transfers?

Note: Please consider the number of payments rather than the value of payments here. If you do not currently make any instant payments or SEPA instant credit transfers, please enter 0. If you are unable to give an exact percentage, please provide your best estimate.

[Input field] percent

1906 | Pro Z 10 | Instant payments obstacles | instpay_obst_[a-e]

Input filter: dq19random1 = and instpay_use < 100</pre>

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

Info box <i> after the term "IBAN name check": "In future, this will be mandatory for all SEPA transfers to protect against erroneous transfers and fraud. Before the payer authorises a transfer, the name of the payee entered is compared with that of the account holder and the payer is notified when a mismatch is detected. Also known as "verification of payee"."

Question length: 104

QUESTION: What <u>factors</u> do you believe could contribute to your enterprise making greater use of instant payments or SEPA instant credit transfers?

Note: Please select all answers that apply.

- 0 = Category not selected
- 1 = Category selected
- a = Lower fees, e.g. fees comparable with those for standard transfers
- b = All our payees being able to receive instant payments
- c = Higher transfer limit
- d = Steps to make it easier to perform the IBAN name check <i>, e.g. by making centralised databases available
- e = Gearing internal processes to the real-time processing of incoming payments

--- | SAMPLE SPLIT 3 - End | ---

1910 | Pro F, N 1 | Investment digitalisation | invest_digi [a-c]

"Don't know" and "No answer" shown as soft prompts if no value is entered and the participant clicked "Continue".

If an invalid number is entered, the following error message is shown: "Please enter a valid value, without a comma or period (possible input values are 0 to 9999999)."

Info box <i> after the term "digitalisation": "Digitalisation is the application or increased use of digital technologies in enterprises/organisations. Investment in information and communication technologies can be related, for example, to social media, big data, cloud services, smart devices, online communication services, ecommerce, the internet of things, artificial intelligence or blockchain."

Info box <i> after the term "2019 to 2023": "If your enterprise was established after 2019, please consider the period from when it was established to 2023."

Question length: 200

QUESTION: We would like to ask you about your enterprise's <u>investments</u>. How much has your enterprise <u>previously</u> invested in <u>digitalisation</u> <i> and how much does it plan to invest in the coming years?

Note: Please enter an amount in full thousands of euro. If your investment expenditure was \leq 123,500, please enter only 123 in the field. If your investment expenditure was \leq 1,234,500, please enter only 1234 in the field.

- a = Total investment in digitalisation from 2019 to 2023 <i>: [Input field],000 euro
- b = Total planned investment in digitalisation from 2024 to 2028: [Input field],000 euro
- c = Total planned investment in digitalisation from 2029 to 2033: [Input field],000 euro

1911 | Pro F, Vo 40, N 1 | Financing digitalisation | fin_digi_[a-d]

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

The programming of the question requires the sum of the 4 variables to be 100. The current sum of all entered points is shown to the respondent when answering the question. If the sum is not equal to 100, the following error message is shown: "Please note that your answers to all scenarios have to add up to 100."

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."

Info box <i> after the term "digitalisation": "Digitalisation is the application or increased use of digital technologies in enterprises/organisations. Investment in information and communication technologies can be related, for example, to social media, big data, cloud services, smart devices, online communication services, ecommerce, the internet of things, artificial intelligence or blockchain.

```
Input filter: invest\_digi\_b > 0 OR invest\_digi\_c > 0 Question length: 165
```

QUESTION: How does your enterprise expect to <u>finance</u> the planned capital expenditure in the area of digitalisation <i> in the coming years?

Note: Please enter a percentage value between 0 and 100 for each financing source. Please note that the numbers you enter for the above-mentioned financing sources have to add up to 100. You can also leave fields empty; these will be saved as a 0.

```
a = Retained earnings: [Input field]
```

- b = Bank loans including government-sponsored loans <i>: [Input field]
- c = Bond finance or short-term debt securities: [Input field]
- d = Other financing sources:[Input field]

--- | SPLIT SAMPLE 4 – OVERVIEW | RANDOMISATION 4

```
Randomisation dummy: dairandom1
```

The dummy dairandom1 randomly splits the sample into three groups of roughly equal size.

```
dairandom1 =    -> one-third of the sample
dairandom1 =    -> one-third of the sample
dairandom1 =    -> one-third of the sample
```

Text | Pro F 43 | Al treatment text

Info box after the term "(AI)": Artificial intelligence is the ability of a machine to imitate human abilities such as logical thinking, learning, planning and creativity. Artificial intelligence includes, amongst other things, machine learning, text mining, voice and image recognition, tools for the autonomous creation of original text, code, images and audio and video content as well as virtual assistants and chatbots (text-based dialogue systems for communicating with a computer program).

Info box after the term "levels.": Source: European Parliament, Opportunities of Artificial Intelligence (europa.eu), (see pp. 35-45).

Info box after the term "society": see World Economic Forum, WEF_Chief_Risk_Officers_Outlook_2023.pdf (weforum.org), (see pp. 14-15).

Question length: dairandom1=1: 0, dairandom1=2: 121, dairandom1=3: 125

Timestamp for this page

Input filter dairandom1 = 1

[No text shown]

Input filter dairandom1 = 2

Artificial intelligence (AI) <i> is anticipated to deliver a number of <u>positive impacts</u> both for individual enterprises and for the societal and macroeconomic levels <i>.

Al can increase production output and quality, improve customer service, lower maintenance costs and reduce energy consumption and waste.

Above and beyond that, AI can contribute to the development of new products, business models and even sectors.

Input filter dairandom1 = 3

Artificial intelligence (AI) <i> may entail heightened risks for enterprises and society <i>.

The way AI functions is sometimes opaque. If it comes across topics or questions that are not covered by its training data, it can produce imprecise or incorrect answers and thus have negative repercussions.

Al can be misused, for example for cyber attacks or the targeted dissemination of false information and disinformation.

1907A | Pro F 43 | Use of AI | use_ai

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

Info box after the term "(AI)": Artificial intelligence is the ability of a machine to imitate human abilities such as logical thinking, learning, planning and creativity. AI includes, amongst other things, machine learning, text mining, voice and image recognition, tools for the autonomous creation of original text, code, images and audio and video content as well as virtual assistants and chatbots (text-based dialogue systems for communicating with a computer program).

Question length: 75

QUESTION: Do you expect your enterprise to use <u>artificial intelligence (AI) <i></u> in the next **five years**?

1 = Yes

2 = No

1907B | Pro F 43 | Firm-level-changes due to AI | changes_ai_[a-d]

Input filter: use_ai = 1

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

Values between -100.0 and 999.9 are supported. One decimal place is permitted.

If an 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."

Info box after the term "(AI)": Artificial intelligence is the ability of a machine to imitate human abilities such as logical thinking, learning, planning and creativity. AI includes, amongst other things, machine learning, text mining, voice and image recognition, tools for the autonomous creation of original text, code, images and audio and video content as well as virtual assistants and chatbots (text-based dialogue systems for communicating with a computer program).

Info box after the term "Investment": "Investment includes tangible fixed assets (e.g. equipment such as vehicles, machines and devices; buildings; cultivated biological

resources) and intellectual property (e.g. research and development; software and databases; copyrights)."

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, whilst insurers should enter their gross premiums written."

Info box after the term "costs": Costs refer to the value of all goods and services that are used or availed of in a year to produce an enterprise's actual business output(primarily the enterprise's products and services).

Info box after the term "profits": The difference between an enterprise's income and expenditure arising from ordinary activities after tax.

Question length: 238

QUESTION: In percentage terms, how much higher or lower do you expect the following metrics to be in **five years' time**, i.e. in 2029, due to the use of Al <i>?

Note: Please compare the expected level of the following metrics with and without the use of AI. Please enter the difference. If you expect an increase, please enter a positive value. If you expect a decline, please enter a negative value. Please enter a value with a maximum of one decimal place.

1908 | Pro F 43 | Expectations about GDP growth | gdp growth [a-c]

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

Info box after the term "in Germany": Economic output is usually measured by gross domestic product (GDP). GDP is the total value of all goods and services produced or provided within Germany during a year.

Values between -100.0 and 999.9 are supported. Only one decimal place is permitted.

If an 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."

Supported values should increase monotonically. If values do NOT increase monotonically, the following message should be shown: "Please make sure that your answers are ordered from the lowest value to the highest."

Question length: 126

Question: We would now like to ask you two questions about your expectations regarding the development of the macroeconomic environment in Germany.

In percentage terms, how much higher or lower do you think <u>economic output</u> in Germany <i> will be in the year **2029**, i.e. in five years' time, compared with **2024**?

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

a = in the most unfavourable scenario: [Input field] percent
b = in the most likely scenario: [Input field] percent
c = in the most favourable scenario: [Input field] percent

1909 | Pro F 43 | Expectations about stock market | dax growth [a-c]

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

Info box after "Germany": "The DAX is a total return index, taking both changes in share prices and dividend payments (profit distributions) into account. Changes in the DAX thus represent changes in the return that would be realised by an investor."

Values between -100.0 and 999.9 are supported. Only one decimal place is permitted.

If an 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."

Supported values should increase monotonically. If values do NOT increase monotonically, the following message should be shown: "Please make sure that your answers are ordered from the lowest value to the highest."

Question length: 117

Question: The German stock index (DAX) tracks the performance of the 40 largest listed companies in Germany <i>. In percentage terms, how much higher or lower do you think the DAX will be at the end of 2029 compared with the end of 2024?

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

a = in the most unfavourable scenario: [Input field] percent
b = in the most likely scenario: [Input field] percent
c = in the most favourable scenario: [Input field] percent

--- | SAMPLE SPLIT 4 - End | ---

5 Descriptive questions

D01 | Descript | Firm characteristics implicit | firmid

Input filter: newcomer =

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 Data Service Centre (DSC). The security of your data is ensured when this information is subsequently processed at the DSC. 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 took 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 = OR ask_again =

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

Values between 0 and 999999 are supported. No decimals are allowed. If an invalid number 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: Approximately how many employees did your enterprise have on 31 December 2023?

Note: Please indicate the number of persons employed, regardless of full-time or part-time employment. No decimals are allowed.

[Input field]

D03 | Descript | Firm characteristics explicit turnover | firmturnover

Input filter: newcomer = OR ask_again =

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

Values between 0 and 999999999 are supported. No decimals are allowed. If an invalid number 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)."

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, whilst insurers should enter their gross premiums written."

QUESTION: What were the <u>sales</u> <i> of your enterprise in **2023**?

Note: Please enter an amount in full thousands of euro. If your sales were \leq 123,500, please enter only 123 in the field. If your sales were \leq 1,234,500, please enter only 1234 in the field.

Sales (excluding VAT) in 2023: [Input field],000 euro

D04 | Descript | Firm characteristics explicit economic sector | firmsector

Input filter: newcomer =

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

Info box <i> after the term "economic sector": "All economic sectors are listed here as classified in the IAB Establishment Panel."

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."

QUESTION: To which economic sector <i> can your enterprise best be assigned?

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 =

QUESTION: How would you describe your enterprise?

Note: Please select all answers that apply.

- 1 = Yes
- 2 = No
- a = Independent profit-driven enterprise with financial autonomy
- 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 =

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]

No input filter

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.

- 1 = Yes
- 2 = No
- a = Management board
- b = Finance/controlling/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.

- 1 = Yes
- 2 = No
- f = Owner/managing director/executive board member/holder of general commercial power of attorney
- g = Head of department
- h = Team leader
- i = Administrator
- j = Other (please specify): [Input field] respondenttype_k

D08 | Pro F 41 | Identification multiple answering | Ident

Input filter: newcomer =

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

Question length: 23

QUESTION: Have you personally answered this survey in the past?

- 1 = Yes, one to five times
- 2 = Yes, six to nine times
- 3 = Yes, ten times or more
- 4 = No

6 Feedback

F01 | Core | Feedback questions | feedback_[a-b]

No input filter

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

QUESTION: How difficult did you find the survey overall?

- 1 = Very difficult
- 2 = Somewhat difficult
- 3 = Neither easy nor difficult
- 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: Thank you for taking part in the survey of firms. If you have any suggestions or criticism about the survey, please let us know here.

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

7 Willingness to participate

P01 | Core | Panel participation | panel

Input filter: newcomer =

QUESTION: In order to find out how your enterprise is dealing with the current economic challenges and to see 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 previously and your data will never be passed on to third parties. Once the final 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-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:

1 = Yes

2 = No

P02 | Core | Contact | contact

Input filter: newcomer =

QUESTION: To make it easier for us to contact you about new surveys, please provide us with 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]

-9998 No answer