Questionnaires:
Panel survey on the impact of trading apps on investment and risk behavior

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Abstract

This document contains the respective questionnaire of three panel survey waves on the impact of trading apps on the investment and risk behavior of Neobroker users.

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Survey questionnaires

A Questionnaire - Panel survey wave 1

The following questionnaire is a translation of the original questionnaire of the first panel survey wave, which was asked in German. This section contains questions of the questionnaire posed to Neobroker users. As it was first necessary to differentiate whether a participant currently uses a Neobroker, there were classification questions, which are also shown. As not all participants were Neobroker users, there were also questions for the groups of former Neobroker users and Neobroker usage planners.

Project: Neobroker - Wave 1

- **Target Group:** German-speaking online users residing in Germany aged between 16 and 69 years, with the following additional characteristics:

  - Have invested with Neobrokers before or plan to use them (approximately 50% are current users, about 25% are former users, and the remaining 25% are planners).

- **Sample Size:** 500

- **Interview Duration:** Approximately 10 minutes

Overview:

- Module S – Sociodemographics and Investment Behavior

- Module A – App / Investment Behavior

- Module W – Neobroker / Broker Selection

- Module F – Financial Knowledge and Information Behavior

- Module E – Ex-Neobroker Users

Module S – Sociodemographics and Investment Behavior

Question S1 – Age
How old are you?
PROG: Screen out under 16-year-olds. Minimum: 1, Maximum: 110.
    Input Field — ___— __—

Question S2 – Gender
Your gender - you are:
PROG: Ordinal.

1. Male

2. Female

3. Diverse

Question S3a – School Graduation
Please state your highest school qualification.
PROG: Ordinal.

1. No school graduation

2. Secondary school certificate / Realschulabschluss

3. Abitur or equivalent

Question S3b – Professional Qualification
Please state your highest professional qualification.
PROG: Ordinal.

1. No professional qualification

2. Vocational training

3. Master Craftsman / Business Administrator

4. Bachelor's degree

5. Master's degree or equivalent (e.g., Diploma)

6. Doctorate

Question S5a – Current Broker Usage
Which of the following brokers do you currently use?
Note: Multiple responses possible.
Note: A Neobroker is a broker primarily designed as a smartphone application. Neobrokers often allow trading securities with no or very low fees (e.g., stock trading for one euro). Examples in Germany include Trade Republic, Scalable, Etoro, Smartbroker, Zero, vivid, and justTRADE. In this survey, the term 'traditional broker' is also used alongside 'Neobroker'. Traditional brokers also allow securities trading but are not primarily designed for smartphone use. Examples include Consorsbank and Comdirect.

1. Neobroker

2. Traditional Broker

3. Neither (I do not invest in the stock market.)

Question S5b – Past Broker Usage
Which of the following brokers have you used in the past?
Note: Multiple responses possible.

1. Neobroker

2. Traditional Broker

3. Neither (I have not invested in the stock market in the past.)

Question S5c – Broker Usage II
Which of the following apps have you used before?
Note: The following apps are a selection of Neobrokers in Germany. If you are currently using one of these apps, you are using a Neobroker. If you have used any of these apps in the past, you have used a Neobroker before.
PROG: Randomize.

1. Trade Republic

2. Scalable

3. Etoro

4. Smartbroker

5. Zero

6. vivid

7. justTRADE

Usage Options for Each App:

- currently used

- used in the past

- no use

Question S5d – Broker Usage Planning
Do you plan to invest in the stock market via a Neobroker in the future?
Note: Only one response possible.
Note: Only for non-Neobroker users. PROG: Screenout with item 2. PROG: Ordinal.

1. yes

2. no

Question S5_A – User Auto-Question
Auto-question for users.
PROG: Ordinal.

1. not applicable

2. Investors [(S5a = 1/2) OR (S5c (1-7) = 1)]

3. Ex-Investors [(S5b = 1/2 OR S5c (1-7) = 2) AND (S5a NOT = 1/2) AND (S5c (1-7) NOT = 1)]

4. Ex-Neobroker-Users [(S5b = 1 OR S5c (1-7) = 2) AND (S5a NOT = 1) AND (S5c (1-7) NOT = 1)]

5. Neobroker-Users [(S5a = 1) OR (S5c (1-7) = 1)]

6. Neobroker-Usage-Planners [S5d = 1]

Question S6a – Investment Behavior Non-Investors
Filter: Planners
How long do you plan to invest in the stock market? That is, how long after purchasing an investment do you expect to hold the assets?

1. 1 month – 6 months

2. 7 months – 1 year

3. 1 year – 2 years

4. 2 years – 3 years

5. 3 years – 4 years

6. 4 years – 5 years

7. 5 years – 10 years

8. 10 – 20 years

9. > 20 years

10. don't know / no response

Question S6b – Investment Behavior Investors
Filter: Investors
How long have you been investing in the stock market?

1. 1 month – 6 months

2. 7 months – 1 year

3. 1 year – 2 years

4. 2 years – 3 years

5. 3 years – 4 years

6. 4 years – 5 years

7. 5 years – 10 years

8. 10 – 20 years

9. > 20 years

Question S6c – Investment Behavior Ex-Investors
Filter: Ex-Investors
For how long did you invest in the stock market before you stopped?

1. 1 month – 6 months

2. 7 months – 1 year

3. 1 year – 2 years

4. 2 years – 3 years

5. 3 years – 4 years

6. 4 years – 5 years

7. 5 years – 10 years

8. 10 – 20 years

9. > 20 years

Question S7a – First Used Broker
Filter: Ex-Neobroker users or Neobroker users
Was your first broker a Neobroker?
PROG: Ordinal.

1. Yes

2. No

Question S7c – Start of Neobroker Usage
Filter: First broker has not been a Neobroker [(S7a = 2)].
When did you start using a Neobroker?

- Year: _____

- Month: ___

Question S7d – End of Neobroker Usage for Ex-Users
When did you stop using a Neobroker?
Filter: Ex-Neobroker users

- Year: _____

- Month: ___

Question S8a – Ownership of Financial Products - Investors
Filter: Investors
Which of the following financial products do you own? Please indicate the products you trade with the respective broker.
PROG: Randomize. Filter items.

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives (e.g., swaps, warrants)

6. Cryptocurrencies

7. ETCs

Ownership Options for Each Product:

- Neobroker

- Traditional Broker

- do not own

Question S8b – Ownership of Financial Products – Non-Investors
Filter: Planners
Which of the following financial products do you plan to purchase? Please specify the products you plan to trade with the respective broker.
PROG: Randomize.

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives (e.g., swaps, warrants)

6. Cryptocurrencies

7. ETCs

Options for Each Product:

- Neobroker

- Traditional Broker

- do not plan to trade

- don't know / no response

Question S8c – Ownership of Financial Products – Ex-Investors
Filter: Ex-Investors
Which of the following financial products have you purchased in the past? Please indicate the products you traded with the respective broker.
PROG: Randomize.

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives (e.g., swaps, warrants)

6. Cryptocurrencies

7. ETCs

Options for Each Product:

- Neobroker

- Traditional Broker

- did not trade

Question S8d – Reason for Purchase at Neobroker
Filter: [((S8a (1-7) = 1) AND (S8a (1-7) = 2)) OR ((S8b (1-7) = 1) AND (S8b (1-7) = 2)) OR ((S8c (1-7) = 1) AND (S8c (1-7) = 2))]
Why do you purchase the financial products you specified at "Neobrokers" with your Neobroker?
Note: Multiple responses possible.
PROG: Randomize.

1. free savings plans

2. lower order fee compared to my traditional broker

3. easier purchase process and settlement

4. better product offering

5. Other, namely: _____

Question S8e – Goal with Individual Stocks
Filter: [(S8a (1) = 1 OR S8a (1) = 2) OR (S8b (1) = 1 OR S8b (1) = 2) OR (S8c (1) = 1 OR S8c (1) = 2)].
What is your goal with investing in individual stocks?
Note: Multiple responses possible.
PROG: Randomize.

1. I want to build a market portfolio consisting of individual stocks that achieves a better return than the broad market.

2. I own individual stocks / plan to buy individual stocks because I am convinced of the individual companies.

3. I own individual stocks / plan to buy individual stocks because I was recommended the stock by someone.

4. I own individual stocks / plan to buy individual stocks to receive dividends.

5. none of these

Question S9a – Reason for Investment via Neobroker – Non-Investors
Filter: Planners
I am considering investing with a Neobroker because...
Note: Multiple responses possible.
PROG: Randomize.

1. my family/friends also invest with a Neobroker.

2. fees are lower compared to traditional brokers, or they are completely waived.

3. a finance influencer (posting finance-related content on social media) uses and recommended this service.

4. registration and operation are playful and easy.

5. I receive a stock or cash bonus upon registration.

6. buying/saving the product I want with my Neobroker is free.

7. the minimum investment amount is lower than with traditional brokers.

8. none of these

Question S9b – Reason for Investment via Neobroker – Investors
Filter: Investors
I invest with a Neobroker because...
Note: Multiple responses possible.
PROG: Randomize.

1. my family/friends also invest with a Neobroker.

2. fees are lower compared to traditional brokers, or they are completely waived.

3. a finance influencer (posting finance-related content on social media) uses and recommended this service.

4. registration and operation were playful and easy.

5. I received a stock or cash bonus upon registration.

6. buying/saving the product I want with my Neobroker is free.

7. the minimum investment amount is lower than with traditional brokers.

8. none of these

Question S9c – Reason for Ending Investment via Neobroker – Ex-Users
Filter: Ex-Neobroker users
Why did you stop using a Neobroker?
Note: Multiple responses possible.
PROG: Randomize.

1. I mostly suffered losses and stopped investing.

2. I needed the invested capital for something else and currently have no capital left to invest.

3. The Neobroker's offering did not meet my initial expectations.

4. The financial products I use cannot be traded with Neobrokers.

5. I am not knowledgeable enough about the stock market.

6. I think investments in the stock market are a form of gambling.

7. none of these

Question S10a – Amount of Invested Capital - Investors
Filter: Investors
What is the amount of capital you have invested in the stock market?
PROG: Minimum: 0, Maximum: 100,000,000. Postfix: Euro.

- Input Field: — __ __ __ __ __ __ __ —

Question S10b – Amount of Invested Capital – Ex-Users
Filter: Ex-Investors
What was the amount of capital you had invested in the stock market?
PROG: Minimum: 0, Maximum: 100,000,000. Postfix: Euro.

- Input Field: — __ __ __ __ __ __ __ —

Question S10c – Amount of Invested Capital – Non-Investors
Filter: Planners
What will be the amount of capital you plan to invest in the stock market?
PROG: Minimum: 0, Maximum: 100,000,000. Postfix: Euro.

- Input Field: — __ __ __ __ __ __ __ —

- no response

Module A – App / Investment Behavior

Question A11a – Portfolio Return - Investors
Filter: Investors
What is your average annual portfolio return?
Note: If you have been investing for less than a year, please provide your current achieved return. Indicate in percentage.
PROG: Minimum: -100, Maximum: 100. Postfix: %.

- Input Field: — __ __ __ —

- no response

Question A11b – Portfolio Return - Ex-Neobroker Users
Filter: Ex-Investors
What was your average annual portfolio return?
Note: If you invested for less than a year, please provide your achieved return. Indicate in percentage.
PROG: Minimum: -100, Maximum: 100. Postfix: %.

- Input Field: — __ __ __ —

- no response

Question A11c – Reasons for Not Using Neobroker
Filter: Planners
Why do you (still) not use a Neobroker?
Note: Multiple responses possible.
PROG: Randomize.

1. The sole smartphone application of Neobrokers deters me.

2. I am not (yet) convinced by the concept of Neobrokers.

3. I am still in the research phase, deciding which type of broker (Neobroker or traditional) I want to use.

4. I fear hidden costs in using Neobrokers.

5. I am concerned that the playful user interface might lure me to speculate in the stock market.

6. Other, namely: _____

Question A12a – Investment in Stock Market - Investors
Filter: Investors
Why do you invest in the stock market?
Note: Multiple responses possible.
PROG: Randomize.

1. There are no lucrative alternatives to profitably invest my capital.

2. My friends/family also invest in the stock market.

3. To enhance my personal retirement savings.

4. Investing in the stock market is an exciting, interesting experience, like a game.

5. Other, namely: _____

Question A12b – Investment in Stock Market - Ex-Neobroker Users
Filter: Ex-Neobroker users
Why did you invest in the stock market?
Note: Multiple responses possible.
PROG: Randomize.

1. There are no lucrative alternatives to profitably invest my capital.

2. My friends/family also invest in the stock market.

3. To enhance my personal retirement savings.

4. Investing in the stock market was an exciting, interesting experience, like a game.

5. Other, namely: _____

Question A12c – Investment in Stock Market - Non-Investors
Filter: Planners
Why are you considering starting or starting again with stock market investments?
Note: Multiple responses possible.
PROG: Randomize.

1. There are no lucrative alternatives to profitably invest my capital.

2. My friends/family also invest in the stock market.

3. To enhance my personal retirement savings.

4. Investing in the stock market seems an exciting, interesting experience and a kind of game.

5. don't know / no response

Question A13a – Transaction Frequency - Investors
Filter: Investors
How often do you trade on average per month (excluding the automatic execution of savings plans)?

1. 0 transactions

2. 1 transaction

3. 2-3 transactions

4. 4-5 transactions

5. 6-10 transactions

6. 11-20 transactions

7. 21-30 transactions

8. 31-50 transactions

9. 51-100 transactions

10. > 100 transactions

Question A13b – Transaction Frequency - Ex-Neobroker Users
Filter: Ex-Investors
How often did you trade on average per month? (excluding the automatic execution of savings plans)

1. 0 transactions

2. 1 transaction

3. 2-3 transactions

4. 4-5 transactions

5. 6-10 transactions

6. 11-20 transactions

7. 21-30 transactions

8. 31-50 transactions

9. 51-100 transactions

10. > 100 transactions

Question A14a – Frequency of Using Trading App / Account - Investors
Filter: Investors
How often do you open your trading app/log into your account?
PROG: Ordinal.

1. several times a day

2. once a day

3. several times a week

4. once a week

5. once a month

6. rarely or not at all

Question A14b – Frequency of Using Trading App / Account - Ex-Neobroker Users
Filter: Ex-Investors
How often did you log into your trading app/account?
PROG: Ordinal.

1. several times a day

2. once a day

3. several times a week

4. once a week

5. once a month

6. rarely or not at all

Question A15 – Sources of Information about Investment Opportunities
How do you usually become aware of an investment opportunity?
Note: Multiple responses possible.
Note: An investment opportunity refers, for example, to the purchase of a specific ETF or stock.
PROG: Randomize.

1. Own research

2. Environment (friends/family)

3. Financial news in daily press (e.g., FAZ, Welt, etc.)

4. Stockmarket magazines (e.g., Handelsblatt, Börsen Zeitung, etc.)

5. Financial internet platforms (e.g., On Vista Finanzen, Yahoo Finance, etc.)

6. Social Media (e.g., Instagram posts, YouTube videos, podcasts, Reddit forums)

7. Trading App (e.g., suggestions)

8. Other

Question A16 – Risk Tolerance in Capital Investments

Are you a risk-taking person regarding your capital investments, or do you try to avoid risks?

Note: Please answer using the following scale, where a value of 0 means not at all risk-taking and a value of 10 means very risk-taking. You can grade your assessment with the values between.

1. 0 – not at all risk-taking

2. 1

3. 2

4. 3

5. 4

6. 5

7. 6

8. 7

9. 8

10. 9

11. 10 – very risk-taking

Question S4a – Financial Assets

What is your current financial wealth (including invested capital)? Please specify the value for your financial assets first (e.g., cash assets, (firmly) invested capital, business interests, etc.) - excluding your real estate assets.

Note: If you do not know the amount exactly, please estimate. Indicate in Euro.
PROG: Ordinal.

1. 0 – 2,500

2. 2,501 – 5,000

3. 5,001 – 7,500

4. 7,501 − 10,000

5. 10,001 − 25,000

6. 25,001 − 50,000

7. 50,001 − 100,000

8. 100,001 − 250,000

9. 250,001 − 500,000

10. 500,001 − 1,000,000

11. 1,000,001 − 10,000,000

12. > 10,000,000

13. don't know / no response

Question S4b − Real Estate Assets
And what is the amount of your real estate assets (excluding debts)?
Note: If you do not know the amount exactly, please estimate. Indicate in Euro.
PROG: Ordinal.

1. 0 − 50,000

2. 50,001 − 100,000

3. 100,001 − 200,000

4. 200,001 − 400,000

5. 400,001 − 600,000

6. 600,001 − 2,000,000

7. 2,000,001 − 10,000,000

8. > 10,000,000

9. don't know / no response

Module W − Neobroker / Broker Selection

Question W17 − Sources of Information about Neobrokers
How did you become aware of a Neobroker?
Note: Multiple responses possible.
PROG: Randomize.

1. Independent research for a suitable broker

2. Advertising (newspapers, public areas)

3. Advertising (social media)

4. Through friends/family (e.g., referral program)

5. Recommendation (e.g., by influencers)

6. Other

Question W18 – Importance of Low Fees at the Broker
How important are low fees for trading financial products when choosing your broker?

1. unimportant

2. less important

3. rather important

4. very important

Question W19 – Frequency of Use of Broker's Information Offers
Filter: Investors
How often do you use the information offerings provided by a broker (e.g., stock market knowledge, stock market news, recommendations, analyses, list of popular securities)?
PROG: Ordinal.

1. not at all

2. once a day

3. once a week

4. once a month

5. several times a day

6. several times a week

Question W20 – Accepting Poor Purchase Price for Free Trading
Would you accept a worse purchase price of a respective product for trading and saving financial products for free?
PROG: Ordinal.

1. yes

2. no

Question W21a – Defined Investment Goal – Not Yet Neobroker Users
Filter: Planners
Do you have a clearly defined investment goal for beginning your Neobroker usage? (e.g., which products you want to buy, your risk tolerance)
PROG: Ordinal.

1. yes

2. no

Question W21b – Defined Investment Goal – (Ex-)Neobroker Users
Filter: Neobroker users and Ex-Neobroker users
Did you have a clearly defined investment goal for beginning your Neobroker usage? (e.g., which products you wanted to buy, your risk tolerance)
PROG: Ordinal.

1. yes

2. no

Question W22a – Change in Investment Behavior
Filter: Neobroker users
Has your investment behavior changed through the use of a Neobroker? (in relation to your behavior before, or regarding your original goal at the start of using a Neobroker, e.g., saving ETFs without order fees)
Note: Multiple responses possible.

1. I buy more products than initially planned.

2. I buy fewer products than initially planned.

3. I buy different products than initially planned.

4. I take more risk in capital investment.

5. I take less risk in capital investment.

6. My risk behavior has not changed.

7. The investment products I buy/save have not changed.

Question W22b – Change in Investment Behavior
Filter: Ex-Neobroker users
Has your investment behavior changed through the use of a Neobroker? (in relation to your behavior before, or regarding your original goal at the start of using a Neobroker, e.g., saving ETFs without order fees)
Note: Multiple responses possible.

1. I bought more products than initially planned.

2. I bought fewer products than initially planned.

3. I bought different products than initially planned.

4. I took more risk in capital investment.

5. I took less risk in capital investment.

6. My risk behavior has not changed.

7. The investment products I bought/saved have not changed.

Question W22c – Reason for Change in Investment Behavior
Filter: [W22a = 1-5 OR W22b = 1-5]
Why has your investment behavior changed?
Note: Multiple responses possible.
PROG: Randomize.

1. low/no fees

2. playful buying/selling of financial products via the Neobroker's trading app

3. based on recommendations (family/friends/influencers)

4. Because I have expanded my financial knowledge since starting Neobroker use and can better assess the risk of individual financial products.

5. Other

Question W23a – Neobroker Referral Program – (Ex-)Neobroker Users
Filter: Neobroker users and Ex-Neobroker users
Have you used a Neobroker's referral program? (e.g., cash and/or stock bonus)
PROG: Ordinal.

1. yes

2. no

Question W23b – Neobroker Referral Program – Not Yet Neobroker Users
Filter: Planners
Will you use a Neobroker's referral program? (e.g., cash and/or stock bonus)
PROG: Ordinal.

1. yes

2. no

Question W24a – Neobroker Referral Program – Ex-Neobroker Users
Filter: Ex-Neobroker users
Have you made a majority of gains or losses with your investments through a Neobroker?
PROG: Ordinal.

1. Gains

2. Losses

Question W24b – Neobroker Referral Program – Neobroker Users
Filter: Neobroker users
Have you made a majority of gains or losses with your investments through a Neobroker so far?
PROG: Ordinal.

1. Gains

2. Losses

Module F – Financial Knowledge and Information Behavior

Question F25 – Frequency of Being Informed about Financial/Capital Markets

How much time do you spend per week informing yourself about the financial/capital markets?

1. none at all

2. less than 30 minutes

3. 30 minutes – 1 hour

4. 1 hour – 2 hours

5. 2 hours – 3 hours

6. More than 3 hours

7. don't know / no response

Question F26 – Risk Assessment of Investment Products

Please indicate your risk assessment for the following investment products:
PROG: Randomize.

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives

6. Cryptocurrencies

7. ETCs

Options for Each Product:

- low risk

- rather low risk

- rather high risk

- high risk

Question F27 – Definition of "Bid-Ask Spread"

Please indicate which of the following definitions you believe correctly describes the term "Bid-Ask Spread."
Note: Only one response possible.
PROG: Randomize.

1. The term "Bid-Ask Spread" describes the difference between the purchase price and the selling price offered on the stock exchange.

2. The term "Bid-Ask Spread" describes the difference between a stock's purchase price and its value at the beginning of the next trading day.

3. The term "Bid-Ask Spread" describes the trading fee that must be paid for purchasing a security with some brokers.

4. The term "Bid-Ask Spread" describes the gain or loss that an investor achieves when selling a security.

Question F28 – Neobroker Revenue Source
How do Neobrokers make money?
Note: Multiple responses possible.
PROG: Randomize.

1. Through a commission/kickback from the executing trading venue

2. With the low order fees

3. In the case of a dividend distribution, the Neobroker receives a certain share of the dividend.

4. If a stock is sold through a Neobroker and a profit is made, the Neobroker receives a certain share of the profit.

5. With advertising displayed in the app

Question F29 – Value Change of Fixed-Interest Bond
How does the value of a fixed-interest bond change if interest rates rise?
PROG: Ordinal.

1. The value of the bond increases.

2. The value of the bond decreases.

3. The value of the bond does not change.

   "

Module E – Ex-Neobroker Users

Question E30a – Investment via Another Broker – Ex-Neobroker Users
Filter: Ex-Neobroker users
Have you continued to invest in the stock market since the end of using a Neobroker through another broker?
PROG: Ordinal.

1. Yes

2. No

Question E30b – Active Financial Products – Ex-Users
Filter: [E30a = 1]
Please indicate the financial products you still trade or own.
Note: Multiple responses possible.
PROG: Randomize.

1. Individual stocks

2. ETFs

3. Funds

4. Derivatives (e.g., swaps, warrants)

5. Cryptocurrencies

6. ETCs

Question E31 – Considering Another Try at Using a Neobroker – Ex-Neobroker Users
Filter: Ex-Neobroker users
Are you considering another attempt to use a Neobroker to invest in the stock market?
PROG: Ordinal.

1. yes

2. no

3. don't know / no response

B Questionnaire - Panel survey wave 2

Project: Neobroker - Wave 2

- **Target Group:** German-speaking online users residing in Germany aged between 16 and 100 years, with the following additional characteristics:

  - Have ever invested with Neobrokers or plan to use them (approximately 50% are current users, about 25% are planners, and 25% are general investors).

- **Sample Size:** 500

- **Interview Duration:** Approximately 10 minutes

Overview:

- Module S – Sociodemographics and Investment Behavior

- Module A – App / Investment Behavior

- Module W – Neobroker / Broker Selection

- Module F – Financial Knowledge and Information Behavior

- Module E – Ex-Neobroker Users

Module S – Sociodemographics and Investment Behavior

Question S1 – Age
How old are you?
PROG: Screen out under 16-year-olds. Minimum: 1, Maximum: 110.
    Input Field — ___— __—

Question S2 – Gender
Your gender - you are:
PROG: Ordinal.

1. Male

2. Female

3. Diverse

Question S3a – School Graduation
Please state your highest school qualification.
PROG: Ordinal.

1. No school graduation

2. Secondary school certificate / Realschulabschluss

3. Abitur or equivalent

Question S3b – Professional Qualification
Please state your highest professional qualification.
PROG: Ordinal.

1. No professional qualification

2. Vocational training

3. Master Craftsman / Business Administrator

4. Bachelor's degree

5. Master's degree or equivalent (e.g., Diploma)

6. Doctorate

Question S5a – Current Broker Usage
Which of the following brokers do you currently use?
Note: Multiple responses possible.
Note: A Neobroker is primarily designed as a smartphone application. Neobrokers often allow trading securities with no or very low fees (e.g., stock trading for one euro). Examples in Germany include Trade Republic, Scalable, Etoro, Smartbroker, Zero, vivid, and justTRADE. Besides the term 'Neobroker', the term 'traditional broker' is also used in this survey. Traditional brokers also allow securities trading but are not primarily designed for smartphone use. Examples include Consorsbank and Comdirect. If you invest through your bank, please select 'Traditional Broker'.

1. Neobroker

2. Traditional Broker

3. Neither (I do not invest in the stock market.)

Question S5b – Past Broker Usage
Which of the following brokers have you used in the past?
Note: Multiple responses possible.

1. Neobroker

2. Traditional Broker

3. Neither (I have not invested in the stock market in the past.)

Question S5c – Broker Usage II
Which of the following apps have you ever used?
Note: The following apps are a selection of Neobrokers in Germany. If you are currently using one of these apps, you are using a Neobroker. If you have used any of these apps in the past, you have used a Neobroker before.
PROG: Randomize.

1. Trade Republic

2. Scalable

3. eToro

4. Smartbroker

5. Zero

6. vivid

7. justTRADE

Usage Options for Each App:

- currently used

- used in the past

- no use

Question S5d – Broker Usage Planning
Filter: [S5a NOT = 1 AND S5b NOT = 1 AND S5c (1) = 3 AND S5c (2) = 3 AND S5c (3) = 3 AND S5c (4) = 3 AND S5c (5) = 3 AND S5c (6) = 3 AND S5c (7) = 3].
Do you plan to invest in the stock market via a Neobroker in the future?
Note: Only one response possible.
PROG: Screen out at item 2. Ordinal.

1. yes

2. no

Question S5_A – User Auto-Question
Auto-question for users.
PROG: Ordinal.

1. not applicable

2. Investors [(S5a = 1/2) OR (S5c (1-7) = 1)]

3. Ex-Investors [(S5b = 1/2 OR S5c (1-7) = 2) AND (S5a NOT = 1/2) AND (S5c (1-7) NOT = 1)]

4. General Investors [(S5a = 2) AND (S5c (1-7) NOT = 1)]

5. Neobroker-Users [(S5a = 1) OR (S5c (1-7) = 1)]

6. Neobroker-Usage-Planners [S5d = 1]

7. Ex-Neobroker Users [(S5b = 1 OR S5c (1-7) = 2) AND (S5a NOT = 1) AND (S5c (1-7) NOT = 1)]

Question S6a – Investment Behavior Non-Investors
Filter: [(S5a = 96 AND S5b NOT = 1 AND S5d = 1) AND (S5_A NOT = 2/3)].
How long do you plan to invest in the stock market? That is, how long after purchasing an investment do you expect to hold the assets?

1. 1 month – 6 months

2. 7 months – 1 year

3. 1 year – 2 years

4. 2 years – 3 years

5. 3 years – 4 years

6. 4 years – 5 years

7. 5 years – 10 years

8. 10 – 20 years

9. > 20 years

10. don't know / no response

Question S6b – Investment Behavior Investors
Filter: Investors [S5_A = 2].
How long have you been investing in the stock market?

1. 1 month – 6 months

2. 7 months – 1 year

3. 1 year – 2 years

4. 2 years – 3 years

5. 3 years – 4 years

6. 4 years – 5 years

7. 5 years – 10 years

8. 10 – 20 years

9. > 20 years

Question S6c – Investment Behavior Ex-Investors
Filter: Ex-Investors [S5_A = 3].
For how long did you invest in the stock market before you stopped?

1. 1 month – 6 months

2. 7 months – 1 year

3. 1 year – 2 years

4. 2 years – 3 years

5. 3 years – 4 years

6. 4 years – 5 years

7. 5 years – 10 years

8. 10 – 20 years

9. > 20 years

Question S7a – First Used Broker
Filter: Neobroker users and Ex-Neobroker users [(S5_A = 5) OR (S5_A = 7)].
Was your first broker a Neobroker?
PROG: Ordinal.

1. Yes

2. No

Question S7b – Knowledge of Neobroker?
Filter: General investors [S5_A = 4 AND S5_A NOT = 6 AND S5_A NOT = 7].
Were you aware of Neobrokers like Trade Republic or eToro before this survey?
Note: Question only for general investors.
PROG: Ordinal.

1. Yes

2. No

Question S7c – Start of Neobroker Usage
Filter: [S7a = 2].
When did you start using a Neobroker?
Note: Multiple responses possible.

- Year: _____

- Month: ___

Question S7cb – Further Inquiry on Start Date of Neobroker Usage
Filter: If usage before 2017 was reported [S7c (1) < 2018]
When did you start using a Neobroker?
    Please note that this question is about the first use of a Neobroker, not your first investment.
Note: Multiple responses possible.
Minimum for "Year" should be set to 2017.

- Year: _____

- Month: ___

Question S7d – End of Neobroker Usage for Ex-Users
Filter: Ex-Neobroker users [S5_A = 7].
When did you stop using a Neobroker?
Note: Multiple responses possible.

- Year: _____

- Month: ___

Question S8a – Ownership of Financial Products - Investors
Filter: Investors [S5_A = 2].
Which of the following financial products do you currently own? Please indicate the products you trade with the respective broker you currently use. *PROG: Randomize. Filter items.*

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives (e.g., swaps, warrants)

6. Cryptocurrencies

7. ETCs

Ownership Options for Each Product:

- Neobroker [S5_A NOT = 4]

- Traditional Broker

- do not own

Question S8b – Ownership of Financial Products – Non-Investors
Filter: Planners [S5_A = 6 AND (S5_A NOT = 2/3/4)].
Which of the following financial products do you plan to purchase? Please specify the products you plan to trade with the respective broker. *PROG: Randomize.*

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives (e.g., swaps, warrants)

6. Cryptocurrencies

7. ETCs

Options for Each Product:

- Neobroker

- Traditional Broker

- do not plan to trade

- don't know / no response

Question S8c – Ownership of Financial Products – Ex-Investors
Filter: Ex-Investors [S5_A = 3].
Which of the following financial products have you purchased in the past at the Neobroker/broker you used? Please indicate the products you traded with the respective broker. *PROG: Randomize.*

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives (e.g., swaps, warrants)

6. Cryptocurrencies

7. ETCs

Options for Each Product:

- Neobroker

- Traditional Broker

- did not trade

Question S8d – Reason for Purchase at Neobroker
Filter: [((S8a (1-7) = 1) AND (S8a (1-7) = 2)) OR ((S8b (1-7) = 1) AND (S8b (1-7) = 2)) OR ((S8c (1-7) = 1) AND (S8c (1-7) = 2))].
Why do/did you purchase the financial products you specified at "Neobrokers" with your Neobroker?
Note: Multiple responses possible.
PROG: Randomize.

1. free savings plans

2. lower order fee compared to my traditional broker

3. easier purchase process and settlement

4. better product offering

5. Other, namely: _____

Question S8e – Goal with Individual Stocks
Filter: [(S8a (1) = 1 OR S8a (1) = 2) OR (S8b (1) = 1 OR S8b (1) = 2) OR (S8c (1) = 1 OR S8c (1) = 2)].
What is your goal with investing in individual stocks?
Note: Multiple responses possible.
PROG: Randomize.

1. I want to build a market portfolio consisting of individual stocks that achieves a better return than the broad market.

2. I own individual stocks / plan to buy individual stocks because I am convinced of the individual companies.

3. I own individual stocks / plan to buy individual stocks because I was recommended the stock by someone.

4. I own individual stocks / plan to buy individual stocks to receive dividends.

5. none of these

Question S9a – Reason for Investment via Neobroker – Non-Investors
Filter: Planners [S5_A = 6].
I am considering investing with a Neobroker because...
Note: Multiple responses possible.
PROG: Randomize.

1. my family/friends also invest with a Neobroker.

2. fees are lower compared to traditional brokers, or they are completely waived.

3. a finance influencer uses and recommended this service on social media platforms.

4. registration and operation can be playful and easy.

5. I receive a stock or cash bonus upon registration.

6. buying/saving the product I want with my Neobroker is free.

7. the minimum investment amount is lower than with traditional brokers.

8. none of these

Question S9b – Reason for Investment via Neobroker – Investors
Filter: Neobroker users [S5_A = 5].
I invest with a Neobroker because...
Note: Multiple responses possible.
PROG: Randomize.

1. my family/friends also invest with a Neobroker.

2. fees are lower compared to traditional brokers, or they are completely waived.

3. a finance influencer uses and recommended this service on social media platforms.

4. registration and operation were playful and easy.

5. I received a stock or cash bonus upon registration.

6. buying/saving the product I want with my Neobroker is free.

7. the minimum investment amount is lower than with traditional brokers.

8. none of these

Question S9c – Reason for Ending Investment via Neobroker – Ex-Users
Filter: Ex-Neobroker users [S5_A = 7].
Why did you stop using a Neobroker?
Note: Multiple responses possible.
PROG: Randomize.

1. I mostly suffered losses and stopped investing.

2. I needed the invested capital for something else and currently have no capital left to invest.

3. The Neobroker's offering did not meet my initial expectations.

4. The financial products I use cannot be traded with Neobrokers.

5. I am not knowledgeable enough about the stock market.

6. I think investments in the stock market are a form of gambling.

7. none of these

Question S10a – Amount of Invested Capital - Investors
Filter: Investors [S5_A = 2].
What is the amount of capital you have invested in the stock market?
PROG: Minimum: 0, Maximum: 100,000,000. Postfix: Euro.

- Input Field: — __ __ __ __ __ __ __ —

Question S10b – Amount of Invested Capital – Ex-Investors
Filter: Ex-Investors [S5_A = 3].
What was the amount of capital you had invested in the stock market?
PROG: Minimum: 0, Maximum: 100,000,000. Postfix: Euro.

- Input Field: — __ __ __ __ __ __ __ —

Question S10c – Amount of Planned Investment – Non-Investors
Filter: Planners [S5_A = 6 AND (S5_A NOT = 2/3/4)].
What will be the amount of capital you plan to invest in the stock market?
PROG: Minimum: 0, Maximum: 100,000,000. Postfix: Euro.

- Input Field: — __ __ __ __ __ __ __ —

- no response

Module A – App / Investment Behavior

Question A11a – Portfolio Return - Investors
Filter: Investors and Neobroker users [S5_A = 2/5].
What is your average annual portfolio return?
Note: If you have been investing for less than a year, please provide your current achieved return. Indicate in percentage.
PROG: Minimum: -100, Maximum: 100. Postfix: %. This is a mandatory question.

- Input Field: — __ __ __ —

Question A11b – Portfolio Return - Ex-Investors
Filter: Ex-Investors [S5_A = 3].
What was your average annual portfolio return?
Note: If you invested for less than a year, please provide your achieved return for that period. Indicate in percentage.
PROG: Minimum: -100, Maximum: 100. Postfix: %. This is a mandatory question.

- Input Field: — __ __ __ —

Question A11c – Reasons for Not Using Neobroker
Filter: Planners [S5_A = 6 OR (S5_A = 4 AND S7b NOT = 2)].
Why do you (still) not use a Neobroker?
Note: Multiple responses possible.
PROG: Randomize.

1. The sole smartphone application of Neobrokers deters me.

2. I am not (yet) convinced by the concept of Neobrokers.

3. I am still in the research phase, deciding which type of broker (Neobroker or traditional) I want to use.

4. I fear hidden costs in using Neobrokers.

5. I am concerned that the playful user interface might lure me to speculate in the stock market.

6. Other

Question A12a – Investment in Stock Market - Investors
Filter: Investors [S5_A = 2].
Why do you invest in the stock market?
Note: Multiple responses possible.
PROG: Randomize.

1. There are no lucrative alternatives to profitably invest my capital.

2. My friends/family also invest in the stock market.

3. To enhance my personal retirement savings.

4. Investing in the stock market is an exciting, interesting experience, like a game.

5. Other, namely: _____

Question A12b – Investment in Stock Market - Ex-Investors
Filter: Ex-Investors [S5_A = 3].
Why did you invest in the stock market?
Note: Multiple responses possible.
PROG: Randomize.

1. There are no lucrative alternatives to profitably invest my capital.

2. My friends/family also invest in the stock market.

3. To enhance my personal retirement savings.

4. Investing in the stock market was an exciting, interesting experience, like a game.

5. Other, namely: _____

Question A12c – Investment in Stock Market - Non-Investors
Filter: Planners [S5_A = 6 AND (S5_A NOT = 2/3/4)].
Why are you considering starting with stock market investment?
Note: Multiple responses possible.
PROG: Randomize.

1. There are no lucrative alternatives to profitably invest my capital.

2. My friends/family also invest in the stock market.

3. To enhance my personal retirement savings.

4. Investing in the stock market seems an exciting, interesting experience and a kind of game.

5. don't know / no response

Question A13a – Transaction Frequency - Investors
Filter: Investors [S5_A = 2].
How often do you trade on average per month (excluding the automatic execution of savings plans)?

1. 0 transactions

2. 1 transaction

3. 2-3 transactions

4. 4-5 transactions

5. 6-10 transactions

6. 11-20 transactions

7. 21-30 transactions

8. 31-50 transactions

9. 51-100 transactions

10. > 100 transactions

Question A13b – Transaction Frequency - Ex-Investors
Filter: Ex-Investors [S5_A = 3].
How often did you trade on average per month? (excluding the automatic execution of savings plans)

1. 0 transactions

2. 1 transaction

3. 2-3 transactions

4. 4-5 transactions

5. 6-10 transactions

6. 11-20 transactions

7. 21-30 transactions

8. 31-50 transactions

9. 51-100 transactions

10. > 100 transactions

Question A14a – Frequency of Using Trading App / Account - Investors
Filter: Investors [S5_A = 2].
How often do you open your trading app/log into your account?
PROG: Ordinal.

1. several times a day

2. once a day

3. several times a week

4. once a week

5. once a month

6. rarely or not at all

Question A14b – Frequency of Using Trading App / Account - Ex-Investors
Filter: Ex-Investors [S5_A = 3].
How often did you log into your trading app/account?
PROG: Ordinal.

1. several times a day

2. once a day

3. several times a week

4. once a week

5. once a month

6. rarely or not at all

Question A15 – Sources of Information about Investment Opportunities
How do you usually become aware of an investment opportunity?
Note: Multiple responses possible.
Note: An investment opportunity refers, for example, to the purchase of a specific ETF or stock.
PROG: Randomize.

1. Own research (e.g., researching information from business reports, own evaluation criteria, etc., NOT researching information from media reports such as in a stock market magazine or on social media)

2. Environment (friends/family)

3. Financial news in daily press (e.g., FAZ, Welt, etc.)

4. Stock market magazines (e.g., Handelsblatt, Börsen Zeitung, etc.)

5. Financial internet platforms (e.g., On Vista Finanzen, Yahoo Finance, etc.)

6. Social Media (e.g., Instagram posts, YouTube videos, podcasts, Reddit forums)

7. Trading App (e.g., suggestions)

8. Other

Question A16 – Risk Tolerance in Capital Investments
Are you generally a risk-taking person, or do you try to avoid risks?
Note: Please answer with the following scale, where 0 means not risk-taking at all and 10 means very risk-taking. You can grade your assessment with the values in between.

1. 0 – not at all risk-taking

2. 1

3. 2

4. 3

5. 4

6. 5

7. 6

8. 7

9. 8

10. 9

11. 10 – very risk-taking

Question S4a – Financial Assets

What is your current financial wealth (including invested capital)? Please specify the value for your financial assets first (e.g., cash assets, (firmly) invested capital, business interests, etc.) - excluding your real estate assets.
Note: If you do not know the amount exactly, please estimate. Indicate in Euro.
PROG: Ordinal.

1. 0 – 2,500

2. 2,501 – 5,000

3. 5,001 – 7,500

4. 7,501 – 10,000

5. 10,001 – 25,000

6. 25,001 – 50,000

7. 50,001 – 100,000

8. 100,001 – 250,000

9. 250,001 – 500,000

10. 500,001 – 1,000,000

11. 1,000,001 – 10,000,000

12. > 10,000,000

13. don't know / no response

Question S4b – Real Estate Assets

And what is the amount of your real estate assets (excluding debts)?
Note: If you do not know the amount exactly, please estimate. Indicate in Euro.
PROG: Ordinal.

1. 0

2. 1 – 50,000

3. 50,001 – 100,000

4. 100,001 – 200,000

5. 200,001 – 400,000

6. 400,001 – 600,000

7. 600,001 – 2,000,000

8. 2,000,001 – 10,000,000

9. > 10,000,000

10. don't know / no response

Question S4c – Net Income
What is your net income per month (e.g., salary, pension, capital income, rental/lease income, etc.)?
Note: Indicate in Euro. (Net income = income after taxes).
Minimum: 0.

- Input Field: — __ __ __—

- no response

Module W – Neobroker / Broker Selection

Question W17 – Sources of Information about Neobrokers
Filter: Knowledge of Neobrokers [(S5_A = 5/6) OR (S5_A = 7) OR (S5_A = 4 AND S7b NOT = 2)].
How did you become aware of a Neobroker?
Note: Multiple responses possible.
PROG: Randomize.

1. Independent research for a suitable broker

2. Advertising (newspapers, public areas)

3. Advertising (social media)

4. Through friends/family (e.g., referral program)

5. Recommendation (e.g., by influencers)

6. Other

Question W18 – Importance of Low Fees at the Broker
How important are low fees for trading financial products when choosing your broker?

1. unimportant

2. less important

3. rather important

4. very important

Question W19 – Frequency of Use of Broker's Information Offers
Filter: Investors [S5_A = 2].
How often do you use the information offerings provided by a broker (e.g., stock market knowledge, stock market news, recommendations, analyses, list of popular securities)?
PROG: Ordinal.

1. not at all

2. once a day

3. once a week

4. once a month

5. several times a day

6. several times a week

Question W20 – Accepting Poor Purchase Price for Free Trading
Would you accept a worse purchase price of a respective product for trading and saving financial products for free?
PROG: Ordinal.

1. yes

2. no

Question W21a – Defined Investment Goal – Not Yet Neobroker Users
Filter: Planners [S5_A = 6].
Do you have a clearly defined investment goal for beginning your Neobroker usage? (e.g., which products you want to buy, your risk tolerance)
PROG: Ordinal.

1. yes

2. no

Question W21b – Defined Investment Goal – (Ex-)Neobroker Users
Filter: Neobroker users and Ex-Neobroker users [(S5_A = 5) OR (S5_A = 7)].
Did you have a clearly defined investment goal for beginning your Neobroker usage? (e.g., which products you wanted to buy, your risk tolerance)
PROG: Ordinal.

1. yes

2. no

Question W22aa – Change in Investment Behavior

Filter: Neobroker users [S5_A = 5].

Has your investment behavior changed through the use of a Neobroker? (in relation to your behavior before, or regarding your original goal at the start of using a Neobroker, e.g., saving ETFs without order fees)

Note: Multiple responses possible.

PROG: In repeated surveys, add the note: The question refers to changes in your investment behavior within the past 7 months.

1. I buy more products than initially planned.

2. I buy fewer products than initially planned.

3. I buy different products than initially planned.

4. The investment products I buy/save have not changed.

Question W22ab – Change in Risk Behavior

Filter: Neobroker users [S5_A = 5].

Has your risk tolerance changed through the use of a Neobroker? (in relation to your previous risk tolerance)

Note: Multiple responses possible.

PROG: In repeated surveys, add the note: The question refers to changes in your risk tolerance within the past 7 months.

1. I take more risk in capital investment.

2. I take less risk in capital investment.

3. My risk behavior has not changed.

Question W22ba – Change in Investment Behavior

Filter: Ex-Neobroker users [(S5_A = 7) AND (S5_A NOT = 6)].

Has your investment behavior changed through the use of a Neobroker? (in relation to your behavior before, or regarding your original goal at the start of using a Neobroker, e.g., saving ETFs without order fees)

Note: Multiple responses possible.

PROG: In repeated surveys, add the note: The question refers to changes in your investment behavior within the past 7 months.

1. I bought more products than initially planned.

2. I bought fewer products than initially planned.

3. I bought different products than initially planned.

4. The investment products I bought/saved have not changed.

Question W22bb – Change in Risk Behavior

Filter: Ex-Neobroker users [(S5_A = 7) AND (S5_A NOT = 6)].

Has your risk tolerance changed through the use of a Neobroker? (in relation to your previous risk tolerance)

PROG: In repeated surveys, add the note: The question refers to changes in your risk tolerance within the past 7 months.

1. I took more risk in capital investment.

2. I took less risk in capital investment.

3. My risk behavior has not changed.

Question W22c – Reason for Change in Investment Behavior
Filter: at least one change indicated [W22aa = 1-3 OR W22ab = 1/2 OR W22ba = 1-3 OR W22bb = 1/2].
Why has your investment behavior / risk tolerance changed?
Note: Multiple responses possible.
PROG: Randomize.

1. low/no fees

2. playful buying/selling of financial products via the Neobroker's trading app

3. based on recommendations (family/friends/influencers)

4. Because I have expanded my financial knowledge since starting Neobroker use and can better assess the risk of individual financial products.

5. Other

Question W23a – Neobroker Referral Program – (Ex-)Neobroker Users
Filter: Neobroker users and Ex-Neobroker users [(S5_A = 5) OR (S5_A = 7)].
Have you used a Neobroker's referral program? (e.g., cash and/or stock bonus)
PROG: Ordinal.

1. yes

2. no

Question W23b – Neobroker Referral Program – Not Yet Neobroker Users
Filter: Planners [S5_A = 6].
Will you use a Neobroker's referral program? (e.g., cash and/or stock bonus)
PROG: Ordinal.

1. yes

2. no

Question W24a – Performance Neobroker – Ex-Neobroker Users
Filter: Ex-Neobroker users [S5_A = 7].
Have you made a majority of gains or losses with your investments through a Neobroker?
PROG: Ordinal.

1. Gains

2. Losses

Question W24b – Performance Neobroker– Neobroker Users
Filter: Neobroker users [S5_A = 5].
Have you made a majority of gains or losses with your investments through a Neobroker so far?
PROG: Ordinal.

1. Gains

2. Losses

Question W24c – Performance – General Investors
Filter: General investors [S5_A = 4].
Have you made a majority of gains or losses with your stock market investments so far?
PROG: Ordinal.

1. Gains

2. Losses

Module F – Financial Knowledge and Information Behavior

Question F25 – Frequency of Being Informed about Financial/Capital Markets
How much time do you spend per week informing yourself about the financial/capital markets?

1. none at all

2. less than 30 minutes

3. 30 minutes – 1 hour

4. 1 hour – 2 hours

5. 2 hours – 3 hours

6. More than 3 hours

7. don't know / no response

Question F26 – Risk Assessment of Investment Products
Please indicate your risk assessment for the following investment products:
PROG: Randomize.

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives

6. Cryptocurrencies

7. ETCs

Options for Each Product:

- low risk

- rather low risk

- rather high risk

- high risk

Question F27 – Definition of "Bid-Ask Spread"
Please indicate which of the following definitions you believe correctly describes the term "Bid-Ask Spread."
Note: Only one response possible.
PROG: Randomize.

1. The term "Bid-Ask Spread" describes the difference between the purchase price and the selling price offered on the stock exchange.

2. The term "Bid-Ask Spread" describes the difference between a stock's purchase price and its value at the beginning of the next trading day.

3. The term "Bid-Ask Spread" describes the trading fee that must be paid for purchasing a security with some brokers.

4. The term "Bid-Ask Spread" describes the gain or loss that an investor achieves when selling a security.

Question F28 – Neobroker Revenue Source
How do Neobrokers make money?
Note: Multiple responses possible.
PROG: Randomize.

1. Through a commission/kickback from the executing trading venue

2. With the low order fees

3. In the case of a dividend distribution, the Neobroker receives a certain share of the dividend.

4. If a stock is sold through a Neobroker and a profit is made, the Neobroker receives a certain share of the profit.

5. With advertising displayed in the app

Question F29 – Value Change of Fixed-Interest Bond
How does the price of a fixed-interest bond change if interest rates rise?
PROG: Ordinal.

1. The price of the bond increases.

2. The price of the bond falls.

3. The price of the bond does not change.

Module E – Ex-Neobroker Users

Question E30a – Investment via Another Broker – Ex-Neobroker Users
Filter: Ex-Neobroker users [S5_A = 7].
Have you continued to invest in the stock market since the end of using a Neobroker through another broker?
PROG: Ordinal.

1. Yes

2. No

Question E30b – Active Financial Products – Ex-Users
Filter: [E30a = 1].
Please indicate the financial products you still trade or own.
Note: Multiple responses possible.
PROG: Randomize.

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives (e.g., swaps, warrants)

6. Cryptocurrencies

7. ETCs

Question E31 – Considering Another Try at Using a Neobroker – Ex-Neobroker Users
Filter: Ex-Neobroker users [S5_A = 7].
Are you considering another attempt to use a Neobroker to invest in the stock market?
PROG: Ordinal.

1. yes

2. no

3. don't know / no response

C Questionnaire - Panel survey wave 3

Project: Neobroker - Wave 3

- **Target Group:** German-speaking online users residing in Germany aged between 16 and 100 years, with the following additional characteristics:

    - Currently investing via Neobrokers or other brokers (approximately 50% are current users, and about 50% are general investors).

- **Handling of Repeat Respondents:**

  - Repeat respondents from the second survey who were Neobroker users in the second sample but are now ex-users should still be surveyed.

  - Repeat respondents who were planners should only be re-surveyed if they are now Neobroker users.

  - Neobroker users and general investors should be re-surveyed.

- **Sample Size:** 500

- **Interview Duration:** Approximately 10 minutes

Overview:

- Module S – Sociodemographics and Investment Behavior

- Module A – App / Investment Behavior

- Module W – Neobroker / Broker Selection

- Module F – Financial Knowledge and Information Behavior

- Module E – Ex-Neobroker Users

Module S – Sociodemographics and Investment Behavior

Question S1 – Age
How old are you?
PROG: Screen out under 16-year-olds. Minimum: 1, Maximum: 110.
   Input Field — ___— __—

Question S2 – Gender
Your gender - you are:
PROG: Ordinal.

  1. Male

  2. Female

  3. Diverse

Question S3a – School Graduation
Please state your highest school qualification.
PROG: Ordinal.

  1. No school graduation

  2. Secondary school certificate / Realschulabschluss

  3. Abitur or equivalent

Question S3b – Professional Qualification
Please state your highest professional qualification.
PROG: Ordinal.

1. No professional qualification

2. Vocational training

3. Master Craftsman / Business Administrator

4. Bachelor's degree

5. Master's degree or equivalent (e.g., Diploma)

6. Doctorate

Question S5a – Current Broker Usage
Do you currently invest in the stock market?
Note: Multiple responses possible.
Note: Financial products (such as stocks, stock funds, ETFs, etc.) are traded (bought/sold) through a broker. Different types of brokers exist. Even when investing through your bank, a broker is used to trade financial products. Below are different brokers listed and described: A Neobroker is a broker primarily designed as a smartphone application. Neobrokers often allow trading securities with no or very low fees (e.g., stock trading for one euro). Examples in Germany include Trade Republic, Scalable, Etoro, Smartbroker, Zero, vivid, and justTRADE. In this survey, besides the term 'Neobroker', the term 'traditional broker' is also used. These also allow securities trading but are not primarily designed for smartphone use. Examples include Consorsbank and Comdirect.

1. I own financial products (e.g., stocks, stock funds, ETFs, etc.) and invest through a Neobroker.

2. I own financial products (e.g., stocks, stock funds, ETFs, etc.) and invest otherwise (e.g., bank, traditional broker).

3. Neither (I do not own financial products and do not invest in the stock market.)

Question S5b – Past Broker Usage
Have you previously invested in the stock market?
Note: Multiple responses possible.

1. I previously owned financial products (e.g., stocks, stock funds, ETFs, etc.) and invested through a Neobroker.

2. I previously owned financial products (e.g., stocks, stock funds, ETFs, etc.) and invested otherwise (e.g., bank, traditional broker).

3. Neither (I did not previously own financial products and did not invest in the stock market.)

Question S5c – Broker Usage II
Which of the following apps have you ever used?
Note: The following apps are a selection of Neobrokers in Germany. If you are currently using one of these apps, you are using a Neobroker. If you have used any of these apps in the past, you have used a Neobroker.
PROG: Randomize.

1. Trade Republic

2. Scalable

3. eToro

4. Smartbroker

5. Zero

6. vivid

7. justTRADE

Usage Options for Each App:

- currently used

- used in the past

- no use

Question S5_A – User Auto-Question
Auto-question for users.
PROG: Ordinal. General investors approx. 50%. Neobroker users approx. 50%.

1. Non-Investors [S5_a = 96 AND S5_b = 96 AND S5_c (1-7) = 3]

2. Investors [(S5a = 1/2) OR (S5c (1-7) = 1)]

3. Ex-Investors [(S5b = 1/2 OR S5c (1-7) = 2) AND (S5a NOT = 1/2) AND (S5c (1-7) NOT = 1)]

4. General investors [(S5a = 2) AND (S5c (1-7) NOT = 1) AND (S5a NOT = 1)]

5. Neobroker-Users [(S5a = 1) OR (S5c (1-7) = 1)]

6. Not applicable (formerly Neobroker-Usage Planners)

7. Ex-Neobroker Users [(S5b = 1 OR S5c (1-7) = 2) AND (S5a NOT = 1) AND (S5c (1-7) NOT = 1)]

Question S6b – Investment Behavior Investors
Filter: Investors [S5_A = 2]
How long have you been investing in the stock market?

1. 1 month – 6 months

2. 7 months – 1 year

3. 1 year – 2 years

4. 2 years – 3 years

5. 3 years – 4 years

6. 4 years – 5 years

7. 5 years – 10 years

8. 10 – 20 years

9. > 20 years

Question S6c – Investment Behavior Ex-Investors
Filter: Ex-investors [S5_A = 3]
For how long did you invest in the stock market before you stopped?

1. 1 month – 6 months

2. 7 months – 1 year

3. 1 year – 2 years

4. 2 years – 3 years

5. 3 years – 4 years

6. 4 years – 5 years

7. 5 years – 10 years

8. 10 – 20 years

9. > 20 years

Question S7a – First Used Broker
Filter: Neobroker users or Ex-Neobroker users [S5_A = 5 OR S5_A = 7]
Was your first broker a Neobroker?
PROG: Ordinal.

1. Yes

2. No

Question S7b – Knowledge of Neobroker?
Filter: General investors [S5_A = 4 AND S5_A NOT = 7 AND S7b NOT = 2]
Were you aware of Neobrokers like Trade Republic or eToro before this survey?
PROG: Ordinal.

1. Yes

2. No

Question S7c – Start of Neobroker Usage
Filter: Neobroker users or Ex-Neobroker users [S5_A = 5 OR S5_A = 7]
When did you start using a Neobroker?
Note: Multiple responses possible.
PROG: Dropdown.

- Year: _____

- Month: ___

Question S7cb – Further Inquiry on Start Date of Neobroker Usage
Filter: If usage before 2017 was reported [S7c (1) < 2018]
When did you start using a Neobroker? Please note that this question is about the first use of a Neobroker, not your first investment.
Note: Multiple responses possible.
PROG: Dropdown. Minimum for "Year" should be set to 2017.

- Year: _____

- Month: ___

Question S7d – End of Neobroker Usage for Ex-Users
Filter: Ex-Neobroker users [S5_A = 7]
When did you stop using a Neobroker?
Note: Multiple responses possible.
PROG: Dropdown.

- Year: _____

- Month: ___

Question S8a – Ownership of Financial Products - Investors
Filter: Investors [S5_A = 2]
Which of the following financial products do you currently own? Please indicate the products you trade with the respective broker you currently use.
PROG: Randomize. Filter items.

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives (e.g., swaps, warrants)

6. Cryptocurrencies

7. ETCs

Ownership Options for Each Product:

- Neobroker [S5_A NOT = 4]

- Traditional Broker

- do not own

Question S8c – Ownership of Financial Products – Ex-Investors
Filter: Ex-Investors [S5_A = 3]
Which of the following financial products have you purchased in the past at the Neobroker/broker you used? Please indicate the products you traded with the respective broker.
PROG: Randomize.

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives (e.g., swaps, warrants)

6. Cryptocurrencies

7. ETCs

Options for Each Product:

- Neobroker

- Traditional Broker

- did not trade

Question S8d – Reason for Purchase at Neobroker
Filter: If something from both Neobroker and Traditional Broker selected [((S8a (1-7) = 1) AND (S8a (1-7) = 2)) OR ((S8b (1-7) = 1) AND (S8b (1-7) = 2)) OR ((S8c (1-7) = 1) AND (S8c (1-7) = 2))]
Why do/did you purchase the financial products you specified at "Neobrokers" with your Neobroker?
Note: Multiple responses possible.
PROG: Randomize.

1. free savings plans

2. lower order fee compared to my traditional broker

3. easier purchase process and settlement

4. better product offering

5. Other, namely: _____

Question S8e – Goal with Individual Stocks
Filter: If at least one individual stock selected [(S8a (1) = 1 OR S8a (1) = 2) OR (S8b (1) = 1 OR S8b (1) = 2) OR (S8c (1) = 1 OR S8c (1) = 2)]
What is your goal with investing in individual stocks?
Note: Multiple responses possible.
PROG: Randomize.

1. I want to build a market portfolio consisting of individual stocks that achieves a better return than the broad market.

2. I own individual stocks/plan to buy individual stocks because I am convinced of the individual companies.

3. I own individual stocks/plan to buy individual stocks because someone recommended the stock to me.

4. I own individual stocks/plan to buy individual stocks to receive dividends.

5. none of these

Question S9b – Reason for Investment via Neobroker – Investors
Filter: Neobroker users [S5_A = 5]
I invest with a Neobroker because...
Note: Multiple responses possible.
PROG: Randomize.

1. my family/friends also invest with a Neobroker.

2. fees are lower compared to traditional brokers, or they are completely waived.

3. a finance influencer uses and recommended this service on social media platforms.

4. registration and operation were playful and easy.

5. I received a stock or cash bonus upon registration.

6. buying/saving the product I want with my Neobroker is free.

7. the minimum investment amount is lower than with traditional brokers.

8. none of these

Question S9c – Reason for Ending Investment via Neobroker – Ex-Users
Filter: Ex-Neobroker users [S5_A = 7]
Why did you stop using a Neobroker?
Note: Multiple responses possible.
PROG: Randomize.

1. I mostly suffered losses and stopped investing.

2. I needed the invested capital for something else and currently have no capital left to invest.

3. The Neobroker's offering did not meet my initial expectations.

4. The financial products I use cannot be traded with Neobrokers.

5. I am not knowledgeable enough about the stock market.

6. I think investments in the stock market are a form of gambling.

7. none of these

Question S10a – Amount of Invested Capital - Investors
Filter: Investors [S5_A = 2]
What is the amount of capital you have invested in the stock market?
PROG: Minimum: 0, Maximum: 100,000,000. Postfix: Euro.

- Input Field: — __ __ __ __ __ __ __ —

Question S10b – Amount of Invested Capital – Ex-Investors
Filter: Ex-Investors [S5_A = 3]
What was the amount of capital you had invested in the stock market?
PROG: Minimum: 0, Maximum: 100,000,000. Postfix: Euro.

- Input Field: — __ __ __ __ __ __ __ —

Module A – App / Investment Behavior

Question A11a – Portfolio Return - Investors
Filter: Investors or Neobroker users [S5_A = 2/5]
What is your average annual portfolio return?
Note: If you have been investing for less than a year, please provide your current achieved return. Indicate in percentage.
PROG: Minimum: -100, Maximum: 100. Postfix: %. This is a mandatory question.

- Input Field: — __ __ __ —

Question A11b – Portfolio Return - Ex-Investors
Filter: Ex-Investors [S5_A = 3]
What was your average annual portfolio return?
Note: If you invested for less than a year, please provide your achieved return for that period. Indicate in percentage.
PROG: Minimum: -100, Maximum: 100. Postfix: %. This is a mandatory question.

- Input Field: — __ __ __ —

Question A11c – Reasons for Not Using a Neobroker
Filter: General investors, who know about Neobroker [S5_A = 4 AND S7b NOT = 2 AND S5_A NOT = 7]
Why do you (still) not use a Neobroker?
Note: Multiple responses possible.
PROG: Randomize.

1. I am deterred by the purely smartphone-based application of Neobrokers.

2. I am not (yet) convinced by the Neobroker concept.

3. I am still researching which type of broker (Neobroker or traditional broker) I want to use.

4. I am afraid of hidden costs when using Neobrokers.

5. I fear that the gamified interface of a trading app might encourage me to speculate on the stock market.

6. Other: _____

Question A12a – Investment in Stock Market - Investors
Filter: Investors [S5_A = 2]
Why do you invest in the stock market?
Note: Multiple responses possible.
PROG: Randomize.

1. There are no lucrative alternatives to profitably invest my capital.

2. My friends/family also invest in the stock market.

3. To enhance my personal retirement savings.

4. Investing in the stock market is an exciting, interesting experience, like a game.

5. Other, namely: _____

Question A12b – Investment in Stock Market - Ex-Investors
Filter: Ex-Investors [S5_A = 3]
Why did you invest in the stock market?
Note: Multiple responses possible.
PROG: Randomize.

1. There are no lucrative alternatives to profitably invest my capital.

2. My friends/family also invest in the stock market.

3. To enhance my personal retirement savings.

4. Investing in the stock market was an exciting, interesting experience, like a game.

5. Other, namely: _____

Question A13a – Transaction Frequency - Investors
Filter: Investors [S5_A = 2]
How often do you trade on average per month (excluding the automatic execution of savings plans)?

1. 0 transactions

2. 1 transaction

3. 2-3 transactions

4. 4-5 transactions

5. 6-10 transactions

6. 11-20 transactions

7. 21-30 transactions

8. 31-50 transactions

9. 51-100 transactions

10. > 100 transactions

Question A13b – Transaction Frequency - Ex-Investors
Filter: Ex-Investors [S5_A = 3]
How often did you trade on average per month? (excluding the automatic execution of savings plans)

1. 0 transactions

2. 1 transaction

3. 2-3 transactions

4. 4-5 transactions

5. 6-10 transactions

6. 11-20 transactions

7. 21-30 transactions

8. 31-50 transactions

9. 51-100 transactions

10. > 100 transactions

Question A14a – Frequency of Using Trading App / Account - Investors
Filter: Investors [S5_A = 2]
How often do you open your trading app/log into your account?
PROG: Ordinal.

1. several times a day

2. once a day

3. several times a week

4. once a week

5. once a month

6. rarely or not at all

Question A14b – Frequency of Using Trading App / Account - Ex-Investors
Filter: Ex-Investors [S5_A = 3]
How often did you log into your trading app/account?
PROG: Ordinal.

1. several times a day

2. once a day

3. several times a week

4. once a week

5. once a month

6. rarely or not at all

Question A15 – Sources of Information about Investment Opportunities
How do you usually become aware of an investment opportunity?
Note: Multiple responses possible.
Note: An investment opportunity refers, for example, to the purchase of a specific ETF or stock.
PROG: Randomize.

1. Own research (e.g., researching information from business reports, own evaluation criteria, etc., NOT researching information from media reports such as in a stock market magazine or on social media)

2. Environment (friends/family)

3. Financial news in daily press (e.g., FAZ, Welt, etc.)

4. Stock market magazines (e.g., Handelsblatt, Börsen Zeitung, etc.)

5. Financial internet platforms (e.g., On Vista Finanzen, Yahoo Finance, etc.)

6. Social Media (e.g., Instagram posts, YouTube videos, podcasts, Reddit forums)

7. Trading App (e.g., suggestions)

8. Other

Question A16 – Risk Tolerance in Capital Investments
Are you generally a risk-taking person, or do you try to avoid risks?
Note: Please answer with the following scale, where 0 means not risk-taking at all and 10 means very risk-taking. You can grade your assessment with the values in between.

1. 0 – not at all risk-taking

2. 1

3. 2

4. 3

5. 4

6. 5

7. 6

8. 7

9. 8

10. 9

11. 10 – very risk-taking

Question S4a – Financial Assets
What is your current financial wealth (including invested capital)? Please specify the value for your financial assets first (e.g., cash assets, (firmly) invested capital, business interests, etc.) - excluding your real estate assets.
Note: If you do not know the amount exactly, please estimate. Indicate in Euro.
PROG: Ordinal.

1. 0 – 2,500

2. 2,501 – 5,000

3. 5,001 – 7,500

4. 7,501 – 10,000

5. 10,001 – 25,000

6. 25,001 – 50,000

7. 50,001 – 100,000

8. 100,001 – 250,000

9. 250,001 – 500,000

10. 500,001 – 1,000,000

11. 1,000,001 – 10,000,000

12. > 10,000,000

13. don't know / no response

Question S4b – Real Estate Assets
And what is the amount of your real estate assets (excluding debts)?
Note: If you do not know the amount exactly, please estimate. Indicate in Euro.
PROG: Ordinal.

1. 0

2. 1 – 50,000

3. 50,001 – 100,000

4. 100,001 – 200,000

5. 200,001 – 400,000

6. 400,001 – 600,000

7. 600,001 – 2,000,000

8. 2,000,001 – 10,000,000

9. > 10,000,000

10. don't know / no response

Question S4c – Net Income
What is your net income per month (e.g., salary, pension, capital income, rental/lease income, etc.)?
Note: Indicate in Euro. (Net income = income after taxes).
Minimum: 0.

- Input Field: — __ __ __—

- no response

Module W – Neobroker / Broker Selection

Question W17 – Awareness of Neobroker
Filter: Neobroker aware users [(S5_A = 5) OR (S5_A = 7) OR (S5_A = 4 AND S7b NOT = 2)]
How did you become aware of a Neobroker?
Note: Multiple answers possible.
PROG: Randomize.

1. Own research for a suitable broker

2. Advertising (Newspaper, Publicity)

3. Advertising (Social Media)

4. Friends / Family (e.g., referral programs)

5. Influencer recommendations

6. Other (please specify)

Question W18 – Importance of Low Fees
How important are low fees for trading financial products when choosing your broker?
PROG: Top-Two-Box.

1. Not important

2. Less important

3. Rather important

4. Very important

Question W19 – Frequency of Use of Broker's Information Offers
Filter: Investors [S5_A = 2]
How often do you use the information offerings provided by a broker (e.g., stock market knowledge, stock market news, recommendations, analyses, list of popular securities)?
PROG: Ordinal.

1. not at all

2. once a day

3. once a week

4. once a month

5. several times a day

6. several times a week

Question W20 – Accepting Poor Purchase Price for Free Trading
Would you accept a worse purchase price of a respective product for trading and saving
financial products for free?
PROG: Ordinal.

1. yes

2. no

Question W21b – Defined Investment Goal – (Ex-)Neobroker Users
Filter: Neobroker users and Ex-Neobroker users [(S5_A = 5) OR (S5_A = 7)]
Did you have a clearly defined investment goal for beginning your Neobroker usage? (e.g.,
which products you wanted to buy, your risk tolerance)
PROG: Ordinal.

1. yes

2. no

Question W22aa – Change in Investment Behavior
Filter: Neobroker users [S5_A = 5]
Has your investment behavior changed due to the use of a Neobroker? (Referring to your
investment behavior before, or your initial goal when starting to use a Neobroker, such
as investing in ETFs without order fees)
*PROG: If surveyed repeatedly, add a note: The question refers to changes in your invest-
ment behavior over the past 7 months.*

1. I now buy more products than originally planned.

2. I now buy fewer products than originally planned.

3. I now buy different products than originally planned.

4. The investment products I buy/invest in have not changed.

Question W22ab – Change in Risk Behavior
Filter: Neobroker users [S5_A = 5]
Has your risk tolerance changed due to the use of a Neobroker? (Referring to your risk
tolerance before)
*PROG: If surveyed repeatedly, add a note: The question refers to changes in your risk
tolerance over the past 7 months.*

1. I take more risks in my investments.

2. I take fewer risks in my investments.

3. My risk behavior has not changed.

Question W22ba – Change in Investment Behavior
Filter: Ex-Neobroker users (S5_A = 7)
Has your investment behavior changed due to the use of a Neobroker? (Referring to your investment behavior before, or your initial goal when starting to use a Neobroker, such as investing in ETFs without order fees)
PROG: If surveyed repeatedly, add a note: The question refers to changes in your investment behavior over the past 7 months.

1. I bought more products than originally planned.

2. I bought fewer products than originally planned.

3. I bought different products than originally planned.

4. The investment products I bought/invested in have not changed.

Question W22bb – Change in Risk Tolerance
Filter: Ex-Neobroker users (S5_A = 7)
Has your risk tolerance changed due to the use of a Neobroker? (Referring to your risk tolerance before)
PROG: If surveyed repeatedly, add a note: The question refers to changes in your risk tolerance over the past 7 months.

1. I took more risks in my investments.

2. I took fewer risks in my investments.

3. My risk behavior has not changed.

Question W22c – Reason for Change in Investment Behavior
Filter: If at least one change was indicated [W22aa = 1-3 OR W22ab = 1/2 OR W22ba = 1-3 OR W22bb = 1/2]
Why has your investment behavior/risk tolerance changed?
Note: Multiple answers possible.
PROG: Randomize options.

1. Low or no fees.

2. Playful buying/selling of financial products via the Neobroker's trading app.

3. Due to recommendations (family/friends/influencers).

4. Because I have expanded my financial knowledge since using a Neobroker and can now better assess the risks of individual financial products.

97 Other.

Question W23a – Referral Program Use – (Ex-)Neobroker Users
Filter: Neobroker users and Ex-Neobroker users [(S5_A = 5) OR (S5_A = 7)]
Have you used a Neobroker's referral program? (e.g., cash and/or stock rewards)
PROG: Ordinal.

1. Yes.

2. No.

Question W24a – Performance Neobroker – Ex-Neobroker Users
Filter: Ex-Neobroker users [S5_A = 7]
Have you made a majority of gains or losses with your investments through a Neobroker?
PROG: Ordinal.

1. Gains

2. Losses

Question W24b – Performance Neobroker– Neobroker Users
Filter: Neobroker users [S5_A = 5]
Have you made a majority of gains or losses with your investments through a Neobroker so far?
PROG: Ordinal.

1. Gains

2. Losses

Question W24c – Performance – General Investors
Filter: General investors [S5_A = 4]
Have you made a majority of gains or losses with your stock market investments so far?
PROG: Ordinal.

1. Gains

2. Losses

Module F – Financial Knowledge and Information Behavior

Question F25 – Frequency of Being Informed about Financial/Capital Markets
How much time do you spend per week informing yourself about the financial/capital markets?

1. none at all

2. less than 30 minutes

3. 30 minutes – 1 hour

4. 1 hour – 2 hours

5. 2 hours – 3 hours

6. More than 3 hours

7. don't know / no response

Question F26 – Risk Assessment of Investment Products
Please indicate your risk assessment for the following investment products:
PROG: Randomize.

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives

6. Cryptocurrencies

7. ETCs

Options for Each Product:

- low risk

- rather low risk

- rather high risk

- high risk

Question F27 – Definition of "Bid-Ask Spread"
Please indicate which of the following definitions you believe correctly describes the term "Bid-Ask Spread."
Note: Only one response possible.
PROG: Randomize.

1. The term "Bid-Ask Spread" describes the difference between the purchase price and the selling price offered on the stock exchange.

2. The term "Bid-Ask Spread" describes the difference between a stock's purchase price and its value at the beginning of the next trading day.

3. The term "Bid-Ask Spread" describes the trading fee that must be paid for purchasing a security with some brokers.

4. The term "Bid-Ask Spread" describes the gain or loss that an investor achieves when selling a security.

Question F28 – Neobroker Revenue Source
How do Neobrokers make money?
Note: Multiple responses possible.
PROG: Randomize.

1. Through a commission/kickback from the executing trading venue

2. With the low order fees

3. In the case of a dividend distribution, the Neobroker receives a certain share of the dividend.

4. If a stock is sold through a Neobroker and a profit is made, the Neobroker receives a certain share of the profit.

5. With advertising displayed in the app

Question F29 – Value Change of Fixed-Interest Bond
How does the price of a fixed-interest bond change if interest rates rise?
PROG: Ordinal.

1. The price of the bond increases.

2. The price of the bond falls.

3. The price of the bond does not change.

Module E – Ex-Neobroker Users

Question E30a – Investment via Another Broker – Ex-Neobroker Users
Filter: Ex-Neobroker users [S5_A = 7]
Have you continued to invest in the stock market since the end of using a Neobroker through another broker?
PROG: Ordinal.

1. Yes

2. No

Question E30b – Active Financial Products – Ex-Users
Filter: If invested over another broker in the stock market [E30a = 1]
Please indicate the financial products you still trade or own.
Note: Multiple responses possible.
PROG: Randomize.

1. Individual stocks

2. Broadly diversified ETFs (e.g., on the DAX or MSCI World)

3. Special ETFs (e.g., on specific investment themes or sectors)

4. Funds

5. Derivatives (e.g., swaps, warrants)

6. Cryptocurrencies

7. ETCs

Question E31 – Considering Another Try at Using a Neobroker – Ex-Neobroker Users
Filter: Ex-Neobroker users [S5_A = 7]
Are you considering another attempt to use a Neobroker to invest in the stock market?
PROG: Ordinal.

1. yes

2. no

3. don't know / no response