Personalized Response Scales in Inflation Expectations Surveys

Instructions

Comments in red are annotations that do not appear in the instructions shown to participants.

Introduction

Welcome!

You will take part in an academic survey conducted by the University of Heidelberg, Germany. We are interested in your personal views regarding the future inflation rate in the United States: it is therefore important that you answer honestly and read the questions very carefully before answering. This survey should take (on average) less than **7 minutes** to complete. For completing this survey, you will receive a fixed **payment of £1.00 (approximately $[current value in US dollar]).**

Participation in this survey is entirely voluntary and you will remain anonymous throughout the survey. Results may include summary data, but you will never be identified. By continuing, you consent to the publication of survey results. Note that you cannot save and come back later to answer the survey. If you have any questions regarding this survey, you may contact us at **survey@awi.uni-heidelberg.de**.

If you understand and agree to the above information, please check "I consent, begin survey" below and click **Next** to begin. Otherwise, check "I do not consent" below and click **Next** to not take part in the survey.

[input checkbox True] I consent, begin survey

[input checkbox False] I do not consent

Instructions

We want to learn about your current outlook for future inflation in the United States. To do so, we will ask you a couple of questions. We are interested in your views and opinions. Your responses are confidential, and it helps us a great deal if you respond as carefully as possible. If you should come to any question that you can't or don't want to answer, just leave it empty and click on **Next** until the next question appears.

In some of the following questions, we will ask you to think about the percent chance of something happening in the future. Your answers can range from 0 to 100, where 0 means there is absolutely no chance, and 100 means that it is absolutely certain.

Thank you for your participation!

Question 1

Over the next 12 months, do you think that there will be inflation or deflation?

Note: Deflation is the opposite of inflation. Inflation implies an overall increase in prices, while deflation suggests an overall decrease.

Please choose one.

[input checkbox True] Inflation

[input checkbox False] Deflation (the opposite of inflation)

Error message:

If no response: "Your answers are important to us. Please provide an answer even if you are not sure. Otherwise click NEXT to continue."

Question 2

What do you expect the rate of inflation to be **over the next 12 months**? Please give your best guess. You can enter a number with up to one decimal.

Note: Deflation is the opposite of inflation. Inflation implies an overall increase in prices, while deflation suggests an overall decrease. Please enter your estimate as a positive number for inflation and as a negative number for deflation.

Over the next 12 months, I expect the rate of inflation to be [input decimal] %

Error message:

If no response: "Your answers are important to us. Please provide an answer even if you are not sure. Otherwise click **Next** to continue."

Question 3

This question asks for a minimum and maximum inflation rate. The exact wording of this question depends on the treatment. There are the following combinations:

CenterPersonalized8 (CP-8) CenterPersonalized4 (CP-4) CenterPersonalized2 (CP-2) CenterPersonalized1 (CP-1) CenterPersonalized05 (CP-05)	Random method, to elicit the minimum and maximum including the question not being shown. The methods are the same used for the FullyPersonalized treatments.
FullyPersonalizedBoxA (FPB-A)	Asking for minimum/maximum using standard input fields.
FullyPersonalizedBoxB (FPB-B)	Asking for a 90% confidence interval using standard input fields.

FullyPersonalizedSliderA (FPS-A)	Asking for minimum/maximum using a slider where both ends can be manipulated independently from each other.
FullyPersonalizedSliderB (FPS-B)	Asking for a 90% confidence interval using a slider where both ends can be manipulated independently from each other.
FullyPersonalizedSliderC (FPS-C)	Asking for minimum/maximum using a slider with the previous point forecast in the middle. The slider allows to symmetrically select an area around the point forecast.
FullyPersonalizedSliderD (FPS-D)	Asking for a 90% confidence interval using a slider with the previous point forecast in the middle. The slider allows to symmetrically select an area around the point forecast.

FullyPersonalizedBoxA (FPB-A)

Below, you'll find two boxes. Please use these to indicate your estimated minimum and maximum **inflation** rates over the next 12 months. You can enter a number with up to one decimal.

Note: Deflation is the opposite of inflation. Inflation implies an overall increase in prices, while deflation suggests an overall decrease. Please enter your estimate as a positive number for inflation and as a negative number for deflation.

Over the next 12 months, I expect the rate of **inflation** to be **at minimum** [input decimal] %

Over the next 12 months, I expect the rate of **inflation** to be **at maximum** [input decimal] %

FullyPersonalizedBoxB (FPB-B)

Below, you'll find two boxes. Please use the boxes to mark the range where you're certain (90% certain), that **inflation** will fall into over the next 12 months. You can enter numbers with up to one decimal.

Note: Deflation is the opposite of inflation. Inflation implies an overall increase in prices, while deflation suggests an overall decrease. Please enter your estimate as a positive number for inflation or a negative number for deflation.

Over the next 12 months, I am certain that the rate of **inflation** will fall between at least [input decimal] % and at most [input decimal] %.

FullyPersonalizedSliderA (FPS-A)

Below you see a scale of possible inflation rates and two sliders. Please use these sliders to indicate your estimated minimum and maximum **inflation** rates over the next 12 months.

Note: Deflation is the opposite of inflation. Inflation implies an overall increase in prices, while deflation suggests an overall decrease. Please enter your estimate as a positive number for inflation or a negative number for deflation.

Minimum   Maximum

0   0

FullyPersonalizedSliderB (FPS-B)

Below you see a scale of possible inflation rates and two sliders. Please use these sliders to indicate a range such that you are certain (90% certain) that **inflation** will fall into over the next 12 months
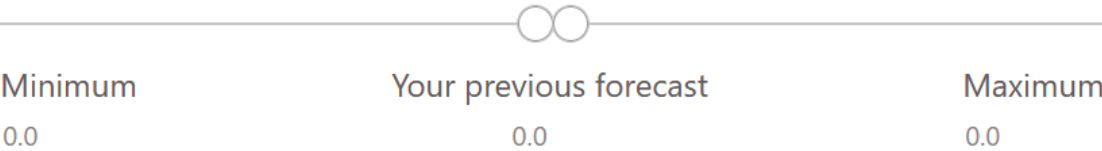
Note: Deflation is the opposite of inflation. Inflation implies an overall increase in prices, while deflation suggests an overall decrease. Please enter your estimate as a positive number for inflation or a negative number for deflation.

Minimum   Maximum

0   0

FullyPersonalizedSliderC (FPS-C)

Below you see a scale of possible inflation rates and two sliders. The value you stated is presented in the middle of the scale. Please use these sliders to indicate your estimated minimum and maximum **inflation** rates over the next 12 months.

Note: Deflation is the opposite of inflation. Inflation implies an overall increase in prices, while deflation suggests an overall decrease. Please enter your estimate as a positive number for inflation or a negative number for deflation.

Minimum   Your previous forecast   Maximum

0.0   0.0   0.0

Treatment 12

Below you see a scale of possible inflation rates and two sliders. The value you stated is presented in the middle of the scale. Please use these sliders to indicate a range such that you are certain (90% certain) that **inflation** will fall into over the next 12 months.

Note: Deflation is the opposite of inflation. Inflation implies an overall increase in prices, while deflation suggests an overall decrease. Please enter your estimate as a positive number for inflation or a negative number for deflation.

Minimum	Your previous forecast	Maximum
0.0	0.0	0.0
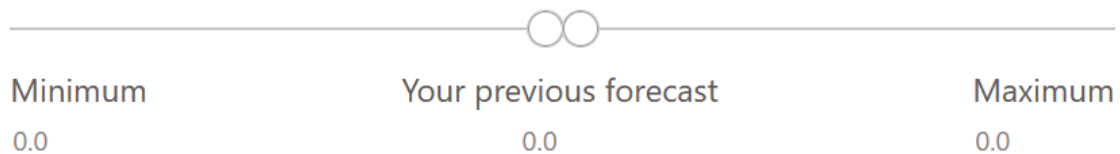
Question 3: Difficulty

How difficult do you think the previous question was to answer?

[input checkbox 5] Very Difficult
[input checkbox 4] Difficult
[input checkbox 3] Somewhat Difficult
[input checkbox 2] Somewhat Easy
[input checkbox 1] Easy
[input checkbox 0] Very Easy

Question 4

The labels of the bins depend on the treatment, see **Treatment labels**. The version below depicts the Static treatment.

Now we would like you to think about the different things that may happen to inflation over the next 12 months. We realize that this question may take a little more effort.

In your view, what would you say is the percent chance that, over the next 12 months...

the rate of inflation will be 6% or higher   [input integer] percent chance

the rate of inflation will be between 4% and 6%   [input integer] percent chance

the rate of inflation will be between 2% and 4%   [input integer] percent chance

the rate of inflation will be between 0% and 2%   [input integer] percent chance

the rate of inflation will be between 0% and -2%   [input integer] percent chance

the rate of inflation will be between -2% and -4%   [input integer] percent chance

the rate of inflation will be between -4% and -6%   [input integer] percent chance

the rate of inflation will be -6% or higher   [input integer] percent chance

Total   **0 percent chance**

Error messages:

If no response: "Your answers are important to us. Please provide an answer even if you are not sure. Otherwise click **Next** to continue."

If sum not equal to 100: "Your total adds up to XX. Please change the numbers in the table so they add up to 100. Otherwise click **Next** to continue."

Question 4: Difficulty

How difficult do you think the previous question was to answer?

[input checkbox 5] Very Difficult
[input checkbox 4] Difficult
[input checkbox 3] Somewhat Difficult
[input checkbox 2] Somewhat Easy
[input checkbox 1] Easy
[input checkbox 0] Very Easy

Questionnaire

Age (leave blank if you prefer not to tell): open number field

Gender:
[input checkbox -1] Prefer not to answer
[input checkbox 1] Female
[input checkbox 2] Male
[input checkbox 3] Other

Highest educational degree:
[input checkbox -1] Prefer not to answer
[input checkbox 1] Less than high school diploma
[input checkbox 2] High school diploma
[input checkbox 3] Some college no degree
[input checkbox 4] Associate's degree occupational
[input checkbox 5] Associate's degree academic
[input checkbox 6] Bachelor's degree
[input checkbox 7] Master's degree
[input checkbox 8] Professional degree
[input checkbox 9] Doctoral degree

The US Federal Reserve System (Fed) tries to control the inflation rate by keeping it close to a specific target value. What do you think is this target for the inflation rate?

[input checkbox -1] Prefer not to answer
[input checkbox 1] Positive inflation that averages 2% over time
[input checkbox 2] Negative inflation that averages -2% over time
[input checkbox 3] Positive inflation that averages 1% over time

[input checkbox 4] On average zero inflation over time
[input checkbox 5] Don't know

Your political orientation:
[input checkbox -1] Prefer not to answer
[input checkbox 1] Republican
[input checkbox 2] Democrat
[input checkbox 3] Independent
[input checkbox 4] Other

State of residence: from dropdown list of US states

Please select 'Quark'. This question just helps us to screen out random clicking.
[input checkbox -1] Prefer not to answer
[input checkbox 1] Lepton
[input checkbox 2] Quark
[input checkbox 3] Boson
[input checkbox 4] Photon
[input checkbox 5] Neutrino

Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?
[input checkbox -1] Prefer not to answer
[input checkbox 1] More than $102
[input checkbox 2] Exactly $102
[input checkbox 3] Less than $102
[input checkbox 4] Don't know

Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, with the money in this account, would you be able to buy…
[input checkbox -1] Prefer not to answer
[input checkbox 1] More than today
[input checkbox 2] Exactly the same as today
[input checkbox 3] Less than today
[input checkbox 4] Don't know
[input checkbox 5] Refuse to answer

Do you think the following statement is true or false?
"Buying a single company stock usually provides a safer return than a stock mutual fund."
[input checkbox -1] True
[input checkbox 1] False
[input checkbox 2] Don't know
[input checkbox 3] Refuse to answer

Last page, no title

Thank you for your participation!

If you have any questions regarding this survey, you may contact us at **survey@awi.uni-heidelberg.de**.

Click here to confirm your participation and to return to Prolific. (contains hyperlink)

Last page, no title (only shown if no consent was given or if the participant had a timeout)

If timeout:

You did not complete the survey in time. Thus, you cannot finish this assignment.

If participant gave no consent:

As you do not wish to participate in this study, please return your submission on Prolific by selecting the "Stop without completing" button.

If you have any questions regarding this study, you may contact us at **survey@awi.uni-heidelberg.de**.

You can close this window now.

Treatment labels

Treatments change the labels in question 1. Below the full set of labels used in the different treatments. All other questions remain the same.

Static

As shown in the instructions above.

CenterPersonalized treatments

Center Personalized are always centered around the point forecast, but use otherwise fixed bin widths, The labels below show the labels for a participant with a point forecast of 0 as an example.

CenterPersonalized8 (CP-8) (bin width 8 percentage points)

the rate of inflation will be 24% or higher

the rate of inflation will be between 16% and 24%

the rate of inflation will be between 8% and 16%

the rate of inflation will be between 0% and 8%

the rate of inflation will be between 0% and -8%

the rate of inflation will be between -8% and -16%

the rate of inflation will be between -16% and -24%

the rate inflation will be -24% or higher

CenterPersonalized4 (CP-4) (bin width 4 percentage points)

the rate of inflation will be 12% or higher

the rate of inflation will be between 8% and 12%

the rate of inflation will be between 4% and 8%

the rate of inflation will be between 0% and 4%

the rate of inflation will be between 0% and 4%

the rate of inflation will be between -4% and -8%

the rate of inflation will be between -8% and -12%

the rate inflation will be -12% or higher

CenterPersonalized2 (CP-2) (bin width 2 percentage points)

the rate of inflation will be 6% or higher

the rate of inflation will be between 4% and 6%

the rate of inflation will be between 2% and 4%

the rate of inflation will be between 0% and 2%

the rate of inflation will be between 0% and -2%

the rate of inflation will be between -2% and -4%

the rate of inflation will be between -4% and -6%

the rate inflation will be -6% or higher

CenterPersonalized1 (CP-1) (bin width 1 percentage points)

the rate of inflation will be 3% or higher

the rate of inflation will be between 2% and 3%

the rate of inflation will be between 1% and 2%

the rate of inflation will be between 0% and 1%

the rate of inflation will be between 0% and -1%

the rate of inflation will be between -1% and -2%

the rate of inflation will be between -2% and -3%

the rate inflation will be -3% or higher

CenterPersonalized05 (CP-05) (bin width 0.5 percentage points)

the rate of inflation will be 1.5% or higher

the rate of inflation will be between 1% and 1.5%

the rate of inflation will be between 0.5% and 1%

the rate of inflation will be between 0% and 0.5%

the rate of inflation will be between 0% and -0.5%

the rate of inflation will be between -0.5% and -1%

the rate of inflation will be between -1% and -1.5%

the rate inflation will be -1.5% or higher

FullyPersonalized treatments

FullyPersonalizedBoxA (FPB-A) and FullyPersonalizedBoxB (FPB-B)

Fully personalized box treatments create a fully personalized scale where the lower bound of each open interval is the minimum/maximum (or the lower/upper bound of the 90% confidence interval, we use minimum/maximum from here forth on as a shorthand) elicited from each participant.

As in the treatments above, 8 bins are used.

The bins have qual width, the exact bin width is calculated based on the minimum/maximum.

FullyPersonalizedSliderA (FPS-A) and FullyPersonalizedSliderB (FPS-B)

FPS-A and FPS-B are asymmetric slider treatments. Here we create a fully personalized scale where the lower bound of each open interval is the minimum/maximum elicited from each participant (similar to the box treatments) using individually moveable sliders.

As in the treatments above, 8 bins are used.

The bins have qual width, the exact bin width is calculated based on the minimum/maximum.

FullyPersonalizedSliderC (FPS-C) and FullyPersonalizedSliderD (FPS-D)

FPS-C and FPS-D are symmetric slider treatments. In these treatments, we create a fully personalized scale where the lower bound of each open interval is the minimum/maximum elicited from each participant (similar to the box treatments). The sliders to elicit the minimum/maximum are symmetrical (moving one slider moves the other by the same amount) and are arranged around the point forecast elicited in Question 2.

As in the treatments above, 8 bins are used.

The bins have qual width, the exact bin width is calculated based on the minimum/maximum.