

# **Experimental Instructions: Subjective Models of the Macroeconomy: Evidence from Experts and Representative Samples**

Peter Andre\*      Carlo Pizzinelli†

Christopher Roth‡      Johannes Wohlfart§

---

\*Peter Andre, University of Bonn, p.andre@uni-bonn.de

†Carlo Pizzinelli, IMF, cpizzinelli@imf.org

‡Christopher Roth, Department of Economics, University of Warwick, briq, CESifo, CAGE,  
email: Christopher.Roth@warwick.ac.uk

§Johannes Wohlfart, Department of Economics, University of Copenhagen, e-mail: johannes.wohlfart@gmx.de

## A Experimental instructions: Wave 1 (February/March 2019) - Experts and households

### Introductory explanations

#### About this study

This study is about your **beliefs about the future development of the US economy**, in particular the **unemployment rate** and the **inflation rate**.

Your first task will be to estimate the future development of both of these rates in hypothetical scenarios.



## Incentive explanation

### About this study

**You can earn additional panel points based on the accuracy of your responses in this first task.**

We have asked economic experts the same questions you will be asked. They were also invited to assess the future development of the unemployment and inflation rate under the same scenarios that you will encounter. They have provided us with their best predictions of the most likely development of both variables in the different scenarios.

To encourage accuracy, you may earn additional panel points if your responses are close to the experts' responses.

Specifically, your response to one randomly selected question will be compared to the experts' responses. If your response is at most 0.2 percentage points away from the average response of the experts, you will earn additional panel points equivalent to the value of \$0.50.

Thus, throughout the survey please keep in mind that **the more accurate your responses, the higher the chance is that you earn additional panel points.**

(Possible rewards will be calculated and transferred a few weeks after the survey is completed.)



## Definitions

### Definitions

The **unemployment rate** is a measure of the amount of unemployment in a country. It is defined as the fraction of people who are unemployed out of all people that are willing to work, or, put differently, the percentage of people who are willing to work that do not have a job. The current unemployment rate in the United States is 4.0%. This means that 4.0% of Americans who are willing to work are unemployed. In other words, out of 1000 Americans who want to work, 40 do not have a job.

The **inflation rate** measures how much prices in the economy rise from year to year. It is defined as the yearly growth of the general price level of goods and services. The current inflation rate in the United States is 1.6%. This means that, on average, prices for goods and services rose by 1.6% in the last 12 months which is to say that a typical bundle of goods and services that cost \$1000 last year costs \$1016 today. If the inflation rate is negative, it is referred to as deflation. This means that goods and services become less expensive from one year to the next.



## Explanation on how to respond

### How to respond

In the following, we will often ask you how high you think the unemployment and inflation rates will be in the future. You will respond on scales that look as follows:



The default positions of the sliders correspond to the current level of the respective rates. The unemployment rate is currently at 4.0%. The inflation rate is currently at 1.6%.

To answer a question, move the slider to the desired value. If you think that the rate will stay at its current value, simply click on the slider so that your response is registered. Your response will also be displayed in numbers on the right side of the slider.

Finally, please note that the scale for the unemployment rate ranges from 0% to 10%, while the scale for the inflation rate ranges from -2% to 8% to account for the possibility of deflation.



The main part of the survey begins when you press on the next button. Please try to **make your responses as accurate as possible**.

**It is very important for the success of our research that you answer to the best of your knowledge and read the questions very carefully before answering.**



## Oil price vignette

### Oil price: introduction

#### **The price of crude oil**

The following scenarios deal with the price of crude oil. In the last week, the price of one barrel of crude oil averaged \$54.



## Oil price: baseline scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Oil price stays constant

Imagine that the average **price of crude oil** stays **constant** over the next 12 months. That is, on average, the price of oil over the next 12 months will be the same as the current price.

---

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 4.0%*

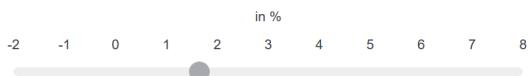


---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.6%*



## Oil price: fall scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Oil price falls

Imagine the average **price of crude oil** unexpectedly **falls** due to improvements in the local production technology in the Middle East. On average, the price will be \$30 lower **for the next 12 months** than the current price. That is, the price will be on average \$24 for the next 12 months.

---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.6%*



---

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 4.0%*



## Oil price: rise scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Oil price rises

Imagine the average **price of crude oil** unexpectedly **rises** due to a problem with the local production technology in the Middle East. On average, the price will be \$30 higher **for the next 12 months** than the current price. That is, the price will be on average \$84 for the next 12 months.

---

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 4.0%



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.6%



## Oil price: confidence

### Your confidence in your responses

We would like to ask you about your confidence in your responses to the preceding scenarios that dealt with the **oil price**.

How confident are you in your predictions for the **unemployment rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |

How confident are you in your predictions for the **inflation rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |



## Government spending vignette

### Government spending vignette: introduction

#### Federal government spending

The following scenarios deal with yearly federal government spending. In the 2018 financial year, the federal government spent roughly \$4.2 trillion on diverse issues such as social security, health, military, or education. This amounts to roughly 1/3 of the value of all final goods and services produced by the US economy in one year (known as the gross domestic product).

Government spending typically increases every year, reflecting the general growth of the economy. For the last 50 years, for instance, it increased by an average of 2.9% each year.



## Government spending: baseline scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Government spending grows as usual

Imagine **federal government spending grows as usual** over the next 12 months. That is, it grows at a rate that equals the usual growth that took place in the previous years.

---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.6%*



---

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 4.0%*



## Government spending: fall scenario

We would like you to think about the following hypothetical scenario.

### Scenario: Government spending grows less

Imagine **federal government spending** unexpectedly **grows to a smaller extent** than usual over the next 12 months due to **cuts in spending** on defense. In particular, it grows by 2.4 percentage points less than the usual growth that took place in the previous years.

The government announces: The change is temporary and occurs despite no changes in the government's assessment of national security or economic conditions. Moreover, federal taxes do not change in response to the spending cut.

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 4.0%*



### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.6%*



## Government spending: rise scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Government spending grows more

Imagine **federal government spending** unexpectedly **grows to a larger extent** than usual over the next 12 months due to a newly announced **spending program** on defense. In particular, it grows by 2.4 percentage points more than the usual growth that took place in the previous years.

The government announces: The change is temporary and occurs despite no changes in the government's assessment of national security or economic conditions. Moreover, federal taxes do not change in response to the spending program.

---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.6%

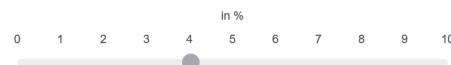


---

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 4.0%



## Government spending: confidence

### Your confidence in your responses

We would like to ask you about your confidence in your responses to the preceding scenarios that dealt with **total government spending**.

How confident are you in your predictions for the **unemployment rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |

How confident are you in your predictions for the **inflation rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |



## Interest rate vignette

### Interest rate vignette: introduction

#### **The federal funds target rate**

The following scenarios deal with the federal funds target rate. This is the most **important interest rate in the economy**. The value of the rate influences how "costly" it is for banks to acquire money, thereby influencing interest rates on other important financial products such as savings accounts, consumer loans, mortgages, or loans to firms.

The federal funds target rate is the interest rate frequently discussed in the news. It is set by the Federal Open Market Committee (FOMC), which normally meets eight times a year. Currently, the rate is 2.5%.



## Interest rate: baseline scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Federal funds target rate stays constant

Imagine the **federal funds target rate stays constant**. That is, in its next meeting, the Federal Open Market Committee announces that it will keep the rate constant.

Imagine the committee announces it does so with no changes in their assessment of the economic conditions.

---

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 4.0%*



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.6%*



## Interest rate: fall scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Federal funds target rate falls

Imagine the **federal funds target rate** is unexpectedly **0.5 percentage points lower**. That is, in its next meeting, the Federal Open Market Committee announces that it is reducing the rate from 2.5% to 2%.

Imagine the committee announces it does so with no changes in their assessment of the economic conditions.

---

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 4.0%*



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.6%*



## Interest rate: rise scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Federal funds target rate rises

Imagine the **federal funds target rate** is unexpectedly **0.5 percentage points higher**. That is, in its next meeting, the Federal Open Market Committee announces that it is raising the rate from 2.5% to 3%.

Imagine the committee announces it does so with no changes in their assessment of the economic conditions.

---

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 4.0%*



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.6%*



## Interest rate: confidence

### Your confidence in your responses

We would like to ask you about your confidence in your responses to the preceding scenarios that dealt with the **federal funds target rate**.

How confident are you in your predictions for the **unemployment rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |

How confident are you in your predictions for the **inflation rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |

## Taxation vignette

### Taxation vignette: introduction

#### The federal income tax rates

The following scenarios deal with the income tax rates in the US. The tax rates specify the percentage of their income that households need to pay to the federal government. At present, a typical household pays 21.1 percent of its income to the federal government in taxes.



## Taxation: baseline scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Income tax rates stay constant

Imagine that **income tax rates stay constant** for all US citizens over the next 12 months.

---

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 4.0%*



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.6%*



## Taxation: fall scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Income tax rates decrease

Imagine that **income tax rates** are **1 percentage point lower** for all US citizens over the next 12 months. This means that the typical US household would **pay about \$400 less in taxes**.

The government announces: The tax change is temporary and occurs despite no changes in the government's assessment of the economic conditions. Moreover, government spending does not change in response to the tax cut.

---

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 4.0%*



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.6%*



## Taxation: rise scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Income tax rates increase

Imagine that **income tax rates** are **1 percentage point higher** for all US citizens over the next 12 months. This means that the typical US household would **pay about \$400 more in taxes**.

The government announces: The tax change is temporary and occurs despite no changes in the government's assessment of the economic conditions. Moreover, government spending does not change in response to the tax increase.

---

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 4.0%*



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.6%*



## Taxation: confidence

### Your confidence in your responses

We would like to ask you about your confidence in your responses to the preceding scenarios that dealt with **income tax rates**.

How confident are you in your predictions for the **unemployment rate**?

|                                  |                       |                       |                       |                       |
|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all             | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

How confident are you in your predictions for the **inflation rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |



## Example vignette with incentives (households only)

### Government spending: baseline scenario - with incentives

We would like you to think about the following hypothetical scenario.

---

#### Scenario: Government spending grows as usual

Imagine **federal government spending grows as usual** over the next 12 months. That is, it grows at a rate that equals the usual growth that took place in the previous years.

---

***Reminder:** If your answer to the following questions is at most 0.2 percentage points away from the average responses of the experts, you can earn additional panel points.*

#### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.6%*



---

#### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 4.0%*



## Government spending: fall scenario - with incentives

We would like you to think about the following hypothetical scenario.

---

### Scenario: Government spending grows less

Imagine **federal government spending** unexpectedly **grows to a smaller extent** than usual over the next 12 months due to **cuts in spending** on defense. In particular, it grows by 2.4 percentage points less than the usual growth that took place in the previous years.

The government announces: The change is temporary and occurs despite no changes in the government's assessment of national security or economic conditions. Moreover, federal taxes do not change in response to the spending cut.

---

*Reminder:* If your answer to the following questions is at most 0.2 percentage points away from the average responses of the experts, you can earn additional panel points.

#### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.6%



---

#### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 4.0%



## Government spending: rise scenario - with incentives

We would like you to think about the following hypothetical scenario.

### Scenario: Government spending grows more

Imagine **federal government spending** unexpectedly **grows to a larger extent** than usual over the next 12 months due to a newly announced **spending program** on defense. In particular, it grows by 2.4 percentage points more than the usual growth that took place in the previous years.

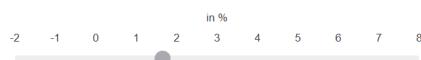
The government announces: The change is temporary and occurs despite no changes in the government's assessment of national security or economic conditions. Moreover, federal taxes do not change in response to the spending program.

*Reminder:* If your answer to the following questions is at most 0.2 percentage points away from the average responses of the experts, you can earn additional panel points.

#### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

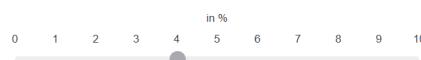
*Note:* The default position of the slider is the current level of the inflation rate: 1.6%



#### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note:* The default position of the slider is the current level of the unemployment rate: 4.0%



## Beliefs about propagation mechanisms (households only)

How does the minimum wage level usually react if house prices increase?

- It increases.
- It decreases.
- Neither of the above.

How does households' overall demand for products in the economy usually react if households' capacity to purchase products (purchasing power) increases?

- Households are willing to buy **more** products and/or also willing to buy at **higher** prices.
- Households are willing to buy **fewer** products and/or only willing to buy at **lower** prices.
- Neither of the above.

How does households' capacity to purchase products (purchasing power) usually react if income tax rates increase?

- It decreases.
- It increases.
- Neither of the above.

How does firms' overall supply of products in the economy usually react if production costs increase?

- Firms are willing to supply **more** products and/or also willing to sell at **lower** prices.
- Firms are willing to supply **fewer** products and/or only willing to sell at **higher** prices.
- Neither of the above.

How does households' capacity to purchase products (purchasing power) usually react if the oil price increases?

- It increases.
- It decreases.
- Neither of the above.

How do the interest rates that households earn on savings or pay on loans usually react if the federal funds target rate increases?

- They increase.
- They decrease.
- Neither of the above.

How does the inflation rate usually react if households, firms, or the government are willing to buy more products and/or also willing to buy at higher prices?

- It decreases.
- It increases.
- Neither of the above.

How do tariffs (duties levied on imported or exported goods) usually react if the population size increases?

- They decrease.
- They increase.
- Neither of the above.

How does the inflation rate usually react if firms are willing to supply more products and/or also willing to sell at lower prices?

- It increases.
- It decreases.
- Neither of the above.

How does firms' overall demand for products in the economy usually react if the financing costs of firms (i.e. the costs of borrowing money) rise?

- Firms are willing to buy **more** investment goods and/or also willing to buy at **higher** prices.
- Firms are willing to buy **fewer** investment goods and/or only willing to buy at **lower** prices.
- Neither of the above.

How do firms' production costs usually react if the oil price increases?

- They increase.
- They decrease.
- Neither of the above.

How does the unemployment rate usually react if households, firms, or the government are willing to buy more products and/or also willing to buy at higher prices?

- It increases.
- It decreases.
- Neither of the above.

How does firms' overall supply of products in the economy usually react if the financing costs of firms (i.e. the costs of borrowing money) increase?

- Firms are willing to supply **fewer** products and/or only willing to sell at **higher** prices.
- Firms are willing to supply **more** products and/or also willing to sell at **lower** prices.
- Neither of the above.

How do the financing costs of firms (i.e. the costs of borrowing money) usually react if the federal funds target rate increases?

- They decrease.
- They increase.
- Neither of the above.

How does the unemployment rate usually react if firms are willing to supply more products and/or also willing to sell at lower prices?

- It decreases.
- It increases.
- Neither of the above.

How does households' overall demand for products in the economy usually react if the interest rates that households earn on savings and pay on loans rise?

- Households are willing to buy **more** products and/or also willing to buy at **higher** prices.
- Households are willing to buy **fewer** products and/or only willing to buy at **lower** prices.
- Neither of the above.

## Financial literacy (households only)

**We now would like to ask you some questions on financial topics.**

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?

- More than \$102
- Exactly \$102
- Less than \$102
- Do not know

Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?

- More than today
- Exactly the same
- Less than today
- Do not know

Please tell me whether this statement is true or false: "Buying a single company's stock usually provides a safer return than a stock mutual fund."

- True
- False
- Do not know



## B Experimental instructions: Wave 2 (July 2019)

### - Experts and households

#### Introductory explanations

##### About this study

This study is about your **beliefs about the future development of the US economy**, in particular the **unemployment rate** and the **inflation rate**.

Your first task will be to estimate the future development of both of these rates in hypothetical scenarios.



## Definitions

### Definitions

The **unemployment rate** is a measure of the amount of unemployment in a country. It is defined as the fraction of people who are unemployed out of all people that are willing to work, or, put differently, the percentage of people who are willing to work that do not have a job. The current unemployment rate in the United States is 3.6%. This means that 3.6% of Americans who are willing to work are unemployed. In other words, out of 1000 Americans who want to work, 36 do not have a job.

The **inflation rate** measures how much prices in the economy rise from year to year. It is defined as the yearly growth of the general price level of goods and services. The current inflation rate in the United States is 1.8% (according to the Consumer Price Index). This means that, on average, prices for goods and services rose by 1.8% in the last 12 months which is to say that a typical bundle of goods and services that cost \$1000 last year costs \$1018 today. If the inflation rate is negative, it is referred to as deflation. This means that goods and services become less expensive from one year to the next.

*Note: All data on the US economy that are reported in this survey are from the 20th of June this year -- the editorial deadline for this survey.*



## Important remarks

### Important remarks

**The following three remarks are important for this study.**

**Remark I:** In all of the following questions, please give us your best guess about how the unemployment rate and the inflation rate in the US economy would actually develop under the scenarios considered. This may or may not be in line with theoretical findings and evidence from economics. We are **only interested in your own views and opinions** on the US economy.

**Remark II:** In all your responses to the following questions, please think about what policymakers (the government and the central bank) would do under the different scenarios. Please **account for the actions of policymakers that you would expect under the different scenarios** and include them in your predictions.

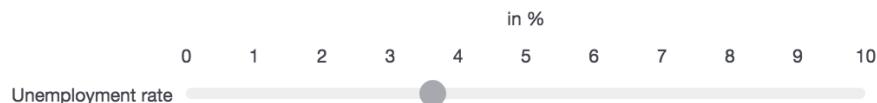
**Remark III:** All of the hypothetical scenarios and all of your predictions deal with the **US economy**.



## Explanation on how to respond

### How to respond

In the following, we will often ask you how high you think the unemployment and inflation rates will be in the future. You will respond on scales that look as follows:



The default positions of the sliders correspond to the current levels of the respective rates. The unemployment rate is currently at 3.6%. The inflation rate is currently at 1.8%.

To answer a question, move the slider to the desired value. If you think that the rate will stay at its current value, simply click on the slider so that your response is registered. Your response will also be displayed in numbers on the right side of the slider.

Finally, please note that the scale for the unemployment rate ranges from 0% to 10%, while the scale for the inflation rate ranges from -2% to 8% to account for the possibility of deflation.



The main part of the survey begins when you press on the next button. Please try to make your responses as accurate as possible.

**It is very important for the success of our research that you answer to the best of your knowledge and read the questions very carefully before answering.**



# Oil price vignette

## Oil price: introduction

### The price of crude oil

The following scenarios deal with the price of crude oil. In the two weeks before the editorial deadline of the survey (20th of June), the price of one barrel of crude oil averaged \$53.

## Oil price: baseline scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Oil price stays constant

Imagine that the average **price of crude oil stays constant** over the next 12 months. That is, on average, the price of oil over the next 12 months will be the same as the current price.

*Reminder: Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.*

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 3.6%



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.8%



## Oil price: rise scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Oil price rises

Imagine the average **price of crude oil** unexpectedly **rises** due to a problem with the local production technology in the Middle East. On average, the price will be \$30 higher **for the next 12 months** than the current price.

---

***Reminder:** Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.*

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 3.6%



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.8%



## Oil price: fall scenario

We would like you to think about the following hypothetical scenario.

### Scenario: Oil price falls

Imagine the average **price of crude oil** unexpectedly **falls** due to improvements in the local production technology in the Middle East. On average, the price will be \$30 lower **for the next 12 months** than the current price.

*Reminder:* Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.

#### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 3.6%



#### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.8%



## Oil price: confidence

### Your confidence in your responses

We would like to ask you about your confidence in your responses to the preceding scenarios that dealt with the **oil price**.

How confident are you in your predictions for the **unemployment rate**?

Not confident at all      Not confident      Somewhat confident      Confident      Very Confident

How confident are you in your predictions for the **inflation rate**?

Not confident at all      Not confident      Somewhat confident      Confident      Very Confident



# Government spending vignette

## Government spending vignette: introduction

### Federal government spending

The following scenarios deal with yearly federal government spending. In the 2018 fiscal year, the federal government spent roughly \$4.1 trillion on diverse issues such as social security, health, military, or education. This amounts to roughly 1/3 of the value of all final goods and services produced by the US economy in one year (known as the gross domestic product).

Government spending typically increases every year, reflecting the general growth of the economy. For the last 50 years, for instance, it increased by an average of 2.9% each year.



## Government spending: baseline scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Government spending grows as usual

Imagine **federal government spending grows as usual** over the next 12 months. That is, total government spending grows at a rate that equals the usual growth that took place in the previous years.

---

*Reminder: Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.*

#### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 3.6%



---

#### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.8%



## Government spending: fall scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Government spending grows less

Imagine **federal government spending** unexpectedly **grows to a smaller extent** than usual over the next 12 months due to **cuts in spending** on defense. In particular, total government spending grows by 2.4 percentage points less than the usual growth that took place in the previous years.

The government announces: The change is temporary and occurs despite no changes in the government's assessment of national security or economic conditions. Moreover, federal taxes do not change in response to the spending cut.

---

**Reminder:** Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 3.6%



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.8%



## Government spending: rise scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Government spending grows more

Imagine **federal government spending** unexpectedly **grows to a larger extent** than usual over the next 12 months due to a newly announced **spending program** on defense. In particular, total government spending grows by 2.4 percentage points more than the usual growth that took place in the previous years.

The government announces: The change is temporary and occurs despite no changes in the government's assessment of national security or economic conditions. Moreover, federal taxes do not change in response to the spending program.

---

*Reminder: Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.*

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 3.6%



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.8%



## Government spending: confidence

### Your confidence in your responses

We would like to ask you about your confidence in your responses to the preceding scenarios that dealt with **total government spending**.

How confident are you in your predictions for the **unemployment rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |

How confident are you in your predictions for the **inflation rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |



# Interest rate vignette

## Interest rate vignette: introduction

### The federal funds target rate

The following scenarios deal with the federal funds target rate. This is the most **important interest rate in the economy**. The value of the rate influences how "costly" it is for banks to acquire money, thereby influencing interest rates on other important financial products such as savings accounts, consumer loans, mortgages, or loans to firms.

The federal funds target rate is the interest rate frequently discussed in the news. It is set by the Federal Open Market Committee (FOMC), which normally meets eight times a year. Currently, the rate is 2.5%.



## Interest rate: baseline scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Federal funds target rate stays constant

Imagine the **federal funds target rate stays constant**. That is, in its next meeting, the Federal Open Market Committee announces that it will keep the rate constant at 2.5%.

Imagine the committee announces it does so with no changes in their assessment of the economic conditions.

---

*Reminder: Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.*

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 3.6%



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.8%



## Interest rate: fall scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Federal funds target rate falls

Imagine the **federal funds target rate** is unexpectedly **0.5 percentage points lower**. That is, in its next meeting, the Federal Open Market Committee announces that it is reducing the rate from 2.5% to 2%.

Imagine the committee announces it does so with no changes in their assessment of the economic conditions.

---

*Reminder:* Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.

#### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 3.6%



---

#### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.8%



## Interest rate: rise scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Federal funds target rate rises

Imagine the **federal funds target rate** is unexpectedly **0.5 percentage points higher**. That is, in its next meeting, the Federal Open Market Committee announces that it is raising the rate from 2.5% to 3%.

Imagine the committee announces it does so with no changes in their assessment of the economic conditions.

---

*Reminder: Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.*

#### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 3.6%



---

#### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.8%



## Interest rate: confidence

### Your confidence in your responses

We would like to ask you about your confidence in your responses to the preceding scenarios that dealt with the **federal funds target rate**.

How confident are you in your predictions for the **unemployment rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |

How confident are you in your predictions for the **inflation rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |

# Taxation vignette

## Taxation vignette: introduction

### The federal income tax rates

The following scenarios deal with the income tax rates in the US. The tax rates specify the percentage of their income that households need to pay to the federal government. At present, a typical household pays 21.1 percent of its income to the federal government in taxes.



## Taxation: baseline scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Income tax rates stay constant

Imagine that **income tax rates** stay **constant** for all households in the US over the next 12 months.

---

*Reminder: Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.*

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

*Note: The default position of the slider is the current level of the unemployment rate: 3.6%*



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

*Note: The default position of the slider is the current level of the inflation rate: 1.8%*



## Taxation: fall scenario

We would like you to think about the following hypothetical scenario.

---

### Scenario: Income tax rates decrease

Imagine that **income tax rates** are unexpectedly **1 percentage point lower** for all households in the US over the next 12 months. This means that the typical US household would **pay about \$400 less in taxes**.

The government announces: The tax change is temporary and occurs despite no changes in the government's assessment of the economic conditions. Moreover, government spending does not change in response to the tax cut.

---

*Reminder:* Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 3.6%



---

### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.8%



## Taxation: rise scenario

We would like you to think about the following hypothetical scenario.

### Scenario: Income tax rates decrease

Imagine that **income tax rates** are unexpectedly **1 percentage point lower** for all households in the US over the next 12 months. This means that the typical US household would **pay about \$400 less in taxes**.

The government announces: The tax change is temporary and occurs despite no changes in the government's assessment of the economic conditions. Moreover, government spending does not change in response to the tax cut.

*Reminder: Please account for the actions of policymakers that you would expect in this scenario and include them in your predictions.*

### Unemployment rate

Under this scenario, what do you think the US **unemployment rate** will be 12 months from now?

Note: The default position of the slider is the current level of the unemployment rate: 3.6%



### Inflation rate

Under this scenario, what do you think the US **inflation rate** will be over the next 12 months?

Note: The default position of the slider is the current level of the inflation rate: 1.8%



## Taxation: confidence

### Your confidence in your responses

We would like to ask you about your confidence in your responses to the preceding scenarios that dealt with **income tax rates**.

How confident are you in your predictions for the **unemployment rate**?

|                                  |                       |                       |                       |                       |
|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all             | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

How confident are you in your predictions for the **inflation rate**?

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Not confident at all  | Not confident         | Somewhat confident    | Confident             | Very Confident        |
| <input type="radio"/> |



## Good-bad-heuristic (GBH) (households only)

In your view, are **high rates of inflation** good or bad for ...?

|                     | Very<br>good | Good | Somewhat<br>good | Neither<br>good nor<br>bad | Somewhat<br>bad | Bad | Very bad |
|---------------------|--------------|------|------------------|----------------------------|-----------------|-----|----------|
| ... your household. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |
| ... the US economy. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |

In your view, are **high rates of unemployment** good or bad for ...?

|                     | Very<br>good | Good | Somewhat<br>good | Neither<br>good nor<br>bad | Somewhat<br>bad | Bad | Very bad |
|---------------------|--------------|------|------------------|----------------------------|-----------------|-----|----------|
| ... your household. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |
| ... the US economy. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |

In your view, is a **high oil price** good or bad for ...?

|                     | Very<br>good | Good | Somewhat<br>good | Neither<br>good nor<br>bad | Somewhat<br>bad | Bad | Very bad |
|---------------------|--------------|------|------------------|----------------------------|-----------------|-----|----------|
| ... your household. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |
| ... the US economy. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |

In your view, is **high government spending** good or bad for ...?

|                     | Very<br>good | Good | Somewhat<br>good | Neither<br>good nor<br>bad | Somewhat<br>bad | Bad | Very bad |
|---------------------|--------------|------|------------------|----------------------------|-----------------|-----|----------|
| ... your household. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |
| ... the US economy. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |

In your view, are **high interest rates** good or bad for ...?

|                     | Very<br>good | Good | Somewhat<br>good | Neither<br>good nor<br>bad | Somewhat<br>bad | Bad | Very bad |
|---------------------|--------------|------|------------------|----------------------------|-----------------|-----|----------|
| ... your household. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |
| ... the US economy. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |

In your view, are **high income taxes** good or bad for ...?

|                     | Very<br>good | Good | Somewhat<br>good | Neither<br>good nor<br>bad | Somewhat<br>bad | Bad | Very bad |
|---------------------|--------------|------|------------------|----------------------------|-----------------|-----|----------|
| ... your household. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |
| ... the US economy. | ○            | ○    | ○                | ○                          | ○               | ○   | ○        |

## Numeracy (households only)

Next we would like to ask you seven questions to see how people use numbers in everyday life. Please answer the following questions by filling in the blank.

In a sale, a shop is selling all items at half price. Before the sale, a sofa costs \$300. How much will it cost in the sale?

Let's say you have \$200 in a savings account. The account earns ten per cent interest per year. Interest accrues at each anniversary of the account. If you never withdraw money or interest payments, how much will you have in the account at the end of two years?

In the BIG BUCKS LOTTERY, the chances of winning a \$10.00 prize are 1%. What is your best guess about how many people would win a \$10.00 prize if 1,000 people each buy a single ticket from BIG BUCKS?

If the chance of getting a disease is 10 percent, how many people out of 1,000 would be expected to get the disease?

The chance of getting a viral infection is 0.0005. Out of 10,000 people, about how many of them are expected to get infected?

Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After one year, how much would you be able to buy with the money in this account?

- More than today
- Exactly the same
- Less than today

Please tell me whether this statement is true or false: Buying a single company's stock usually provides a safer return than a stock mutual fund.

- True
- False

## Rational inattention (households only)

To what extent do you agree with the following statements?

---

The US inflation rate is relevant for my own economic situation.

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Fully disagree        | Disagree              | Rather disagree       | Rather agree          | Agree                 | Fully agree           |
| <input type="radio"/> |

The US unemployment rate is relevant for my own economic situation.

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Fully disagree        | Disagree              | Rather disagree       | Rather agree          | Agree                 | Fully agree           |
| <input type="radio"/> |

## Supply-side view (households only)

To what extent do you agree with the following statements?

---

Increases in income taxes tend to increase firms' production costs.

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Fully disagree        | Disagree              | Rather disagree       | Rather agree          | Agree                 | Fully agree           |
| <input type="radio"/> |

Increases in interest rates tend to increase firms' production costs.

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Fully disagree        | Disagree              | Rather disagree       | Rather agree          | Agree                 | Fully agree           |
| <input type="radio"/> |

Firms tend to pass on increases in production costs to consumers in the form of higher prices.

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Fully disagree        | Disagree              | Rather disagree       | Rather agree          | Agree                 | Fully agree           |
| <input type="radio"/> |

## Subjective Interest Rate Rule (households only)

Recall that the **Federal Open Market Committee (FOMC)** determines the level of the federal funds target rate -- the most important interest rate in the economy.

Imagine that the **FOMC changes their outlook for unemployment** over the next 12 months due to data revisions, while there is no change in the outlook for inflation. Specifically, the Fed believes that the unemployment rate will be **0.25 percentage points higher** than their initial estimate.

What do you think is the percent chance that the FOMC will decide to ...

*Note: Your responses must add up to 100%.*

|   |                                |   |
|---|--------------------------------|---|
| increase the federal funds target rate by 0.75 percentage points. | <input type="text" value="0"/> | % |
| increase the federal funds target rate by 0.5 percentage points.  | <input type="text" value="0"/> | % |
| increase the federal funds target rate by 0.25 percentage points. | <input type="text" value="0"/> | % |
| not change the federal funds target rate.                         | <input type="text" value="0"/> | % |
| decrease the federal funds target rate by 0.25 percentage points. | <input type="text" value="0"/> | % |
| decrease the federal funds target rate by 0.5 percentage points.  | <input type="text" value="0"/> | % |
| decrease the federal funds target rate by 0.75 percentage points. | <input type="text" value="0"/> | % |
| Total   | <input type="text" value="0"/> | % |

Imagine that the **FOMC changes their outlook for inflation** over the next 12 months due to data revisions, while there is no change in the outlook for unemployment. Specifically, the Fed believes that the inflation rate will be **0.25 percentage points higher** than their initial estimate.

What do you think is the percent chance that the FOMC will decide to ...

*Note: Your responses must add up to 100%.*

|   |                                |   |
|---|--------------------------------|---|
| increase the federal funds target rate by 0.75 percentage points. | <input type="text" value="0"/> | % |
| increase the federal funds target rate by 0.5 percentage points.  | <input type="text" value="0"/> | % |
| increase the federal funds target rate by 0.25 percentage points. | <input type="text" value="0"/> | % |
| not change the federal funds target rate.                         | <input type="text" value="0"/> | % |
| decrease the federal funds target rate by 0.25 percentage points. | <input type="text" value="0"/> | % |
| decrease the federal funds target rate by 0.5 percentage points.  | <input type="text" value="0"/> | % |
| decrease the federal funds target rate by 0.75 percentage points. | <input type="text" value="0"/> | % |
| Total   | <input type="text" value="0"/> | % |

## C Experimental instructions: Wave 3 (February/March 2021) - Experts and households

### Introduction

#### Welcome

Thanks a lot for participating in this study!

This study is conducted by researchers from the University of Warwick and the briq Institute on Behavior and Inequality.

Participants will be asked to answer a few questions about their opinions as well as a set of demographic questions. Participation in the study typically takes 10 minutes and is strictly anonymous.

Please consent to the processing of your data and our privacy policy.

► Click on the triangle to display the full privacy policy.

Your data will be stored and analyzed in full compliance with the highest standards of the data protection laws of the European Union. In particular, no conclusions about your person can be drawn. You can withdraw your consent at any time.

- I consent
- I do not consent

On which device are you taking this survey?

- Mobile phone
- Tablet
- Computer (desktop or laptop)

The next question is about the following problem. In questionnaires like ours, sometimes there are participants who do not carefully read the questions and just quickly click through the survey. This means that there are a lot of random answers which compromise the results of research studies. **To show that you read our questions carefully, please choose both "Very strongly interested" and "Not at all interested" as your answer in the next question**

Given the above, how interested are you in politics?

- Very strongly interested
- Very interested
- A little bit interested
- Almost not interested
- Not at all interested

Please explain: What is your opinion about the yearly switch to daylight saving time? Do you like or dislike it? Please use about 15-30 words.

Which of these describes you more accurately?

- Male
- Female

What is your age?

- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 or older

In which region do you currently reside?

- Northeast (CT, ME, MA, NH, RI, VT, NJ, NY, PA),
- Midwest (IL, IN, MI, OH, WI, IA, KS, MN, MO, NE, ND, SD)
- South (DE, DC, FL, GA, MD, NC, SC, VA, WV, AL, KY, MS, TN, AR, LA, OK, TX)
- West (AZ, CO, ID, NM, MT, UT, NV, WY, AK, CA, HI, OR, WA)

What was your household income in 2020 in US dollars before taxes and deductions?

- Less than 15,000
- Between 15,000 and 25,000
- Between 25,000 and 50,000
- Between 50,000 and 75,000
- Between 75,000 and 100,000
- Between 100,000 and 150,000
- Between 150,000 and 200,000
- More than 200,000
- Prefer not to say

What is the highest level of education you have completed?

- 12th grade or less
- Graduated high school or equivalent
- Some college, no degree
- Associate degree
- Bachelor's degree
- Post-graduate degree

## About this study

This study is about your **beliefs about the future development of the US economy**, in particular the **unemployment rate** and the **inflation rate**. Your first task will be to estimate the development of both rates in hypothetical scenarios.

Please give us your best guess about how the unemployment rate and the inflation rate in the US economy would actually develop under the scenarios considered. This may or may not be in line with theoretical findings and evidence from economics. We are **only interested in your own views and opinions** on the US economy.

On the next page, brief definitions of the unemployment rate and the inflation rate are provided to help you solve this task. Please read them carefully!

## Definitions

The **unemployment rate** is a measure of the amount of unemployment in a country. It is defined as the fraction of people who are unemployed out of all people that are willing to work, or, put differently, the percentage of people who are willing to work that do not have a job. For instance, an unemployment rate of % means that % of Americans who are willing to work are unemployed. In other words, out of 1000 Americans who want to work, do not have a job.

The **inflation rate** measures how much prices in the economy rise from year to year. It is defined as the yearly growth of the general price level of goods and services (Consumer Price Index). For instance, an inflation rate of % means that, on average, prices for goods and services rise by % over 12 months. That is, a typical bundle of goods and services that costs \$1000 at the beginning of a year costs \$ at the end of that year. If the inflation rate is negative, it is referred to as deflation. This means that goods and services become less expensive from one year to the next.

## Imagine it's 2025

We are interested in your thoughts and perceptions about how the **US economy typically reacts to external influences**. With "typically", we mean "under normal circumstances". Unfortunately, the US economy is currently in a very unusual situation because of the COVID-19 pandemic.

Therefore, we ask you to imagine that it is the 1st of January 2025: **The COVID-19 pandemic is over. The US economy has fully recovered and is in a similar situation to 2019, before the pandemic.** In other words, it's back to "business as usual".

### How to respond

In the following, we will ask you how high you think the unemployment and inflation rates will be in the future. You will respond on scales that look as follows:



The default positions of the sliders correspond to the levels of the respective rates at the beginning of a scenario.

To answer a question, move the slider to the desired value. If you think that the rate will stay at its default position, simply click on the slider so that your response is registered. Your response will also be displayed in numbers on the right side of the slider.

Finally, please note that the scale for the unemployment rate ranges from 0% to 10%, while the scale for the inflation rate ranges from -2% to 8% to account for the possibility of deflation.

The main part of the survey begins when you press on the next button. Please try to **make your responses as accurate as possible**.

**It is very important for the success of our research that you answer to the best of your knowledge and read the questions very carefully before answering.**

# Oil vignette

## The price of crude oil

The following scenarios deal with the **price of crude oil**. Assume that, in December 2024, the price of one barrel of crude oil averages \$53.

### Baseline scenario: Oil price stays constant

We would like you to think about the following hypothetical scenario.

*Reminder: Please assume it is the 1st of January 2025. The COVID-19 pandemic is over. The US economy has fully recovered and is back to “business as usual”.*

Please assume that, in December 2024, the unemployment rate was at 3.6% and the inflation rate was at 1.8%.

---

### Baseline scenario: Oil price stays constant

Imagine the average **price of crude oil** stays **constant** throughout 2025. That is, on average, the price of oil over 2025 will be the same as the price in December 2024.

---

## Your predictions

### Unemployment rate

Under this scenario, what do you think will be the US **unemployment rate** 12 months later, in December 2025?

*Note: The default position of the slider is the level of the unemployment rate in December 2024: 3.6%.*



### Inflation rate

Under this scenario, what do you think will be the US **inflation rate** over the 12 months from January to December 2025?

*Note: The default position of the slider is the level of the inflation rate over the year 2024: 1.8%.*



### **Important!**

On the next page, you will read a scenario that describes a change to the economy. Your task is to predict how this change affects the US economy and to write down **what considerations you have on your mind** while you make your predictions.

Therefore, while you read the scenario description and think about its consequences for the US economy, please **pay special attention to what comes to your mind**. Of course, there are no right or wrong answers. Just write down your thoughts. Your response is very valuable for this research project.

From our experience, it can take 2-3 minutes to complete the next page. Please take your time to respond carefully.

### **Alternative scenario: Oil price rises**

In the previous scenario, the price of crude oil stays constant in 2025. Now, we would like you to think about an alternative scenario.

**Compare the alternative scenario to the baseline scenario where the oil price stays constant.**

*Reminder: Please assume it is the 1st of January 2025. The COVID-19 pandemic is over. The US economy has fully recovered and is back to "business as usual".*

---

### **Alternative scenario: Oil price rises**

Imagine the average **price of crude oil** unexpectedly **rises** due to a problem with the local production technology in the Middle East. On average, the price will be \$30 higher in 2025 than the price in December 2024.

---

### **Your predictions**

#### **Unemployment rate**

Think about the US unemployment rate in December 2025. Please complete the following sentence.

**In the alternative scenario (oil price rises), the unemployment rate will be approximately \_\_\_\_\_ than in the baseline scenario (oil price constant).**

#### **Inflation rate**

Think about the US inflation rate over the 12 months from January to December 2025. Please complete the following sentence.

**In the alternative scenario (oil price rises), the inflation rate will be approximately \_\_\_\_\_ than in the baseline scenario (oil price constant).**

### Your thoughts

Above, you predict how the change in the alternative scenario affects the US economy.  
Please tell us how you come up with your predictions.

**What are your main considerations in making those predictions?**

*Please respond in 2-3 sentences.*



### How did you come up with your predictions?

The following statements describe different thoughts you might have had on your mind while making your predictions for the alternative scenario. **Did you have any of these thoughts on your mind?** Please tick all that you had on your mind.

- Due to lower incomes or job loss, households cut back on their spending.
- Businesses face lower demand for their products, so they increase their product prices to keep profits at the same level.
- The higher cost of oil makes it more attractive to use alternative energy sources and energy-saving technologies, which leads to job creation.
- To make up for the higher cost of production, businesses reduce their workforce.
- Because higher product prices lower their purchasing power, households cut back on their spending.
- To make up for the higher cost of production, businesses increase product prices.
- The US oil extraction industry profits from the higher oil price, which leads to job creation.
- None of the above.*

# Tax vignette

## The federal income taxes

The following scenarios deal with the **income tax rates** in the US. The tax rates specify the percentage of their income that households need to pay to the federal government. Imagine that, in 2024, a typical household pays 21.1 percent of its income to the federal government in taxes.



### Baseline scenario: Income tax rates stay constant

We would like you to think about the following hypothetical scenario.

*Reminder: Please assume it is the 1st of January 2025. The COVID-19 pandemic is over. The US economy has fully recovered and is back to "business as usual".*

Please assume that, in December 2024, the unemployment rate was at 3.6% and the inflation rate was at 1.8%.

---

### Baseline scenario: Income tax rates stay constant

Imagine the **income tax rates stay constant** for all households in the US over the 12 months in 2025. All other tax rates, including tax rates for businesses, stay constant as well.

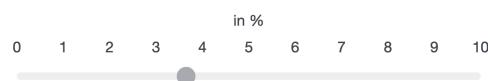
---

## Your predictions

### Unemployment rate

Under this scenario, what do you think will be the US **unemployment rate** 12 months later, in December 2025?

*Note: The default position of the slider is the level of the unemployment rate in December 2024: 3.6%.*



### Inflation rate

Under this scenario, what do you think will be the US **inflation rate** over the 12 months from January to December 2025?

*Note: The default position of the slider is the level of the inflation rate over the year 2024: 1.8%.*



### Important!

On the next page, you will read a scenario that describes a change to the economy. Your task is to predict how this change affects the US economy and to write down **what considerations you have on your mind** while you make your predictions.

Therefore, while you read the scenario description and think about its consequences for the US economy, please **pay special attention to what comes to your mind**. Of course, there are no right or wrong answers. Just write down your thoughts. Your response is very valuable for this research project.

From our experience, it can take 2-3 minutes to complete the next page. Please take your time to respond carefully.

### **Alternative scenario: Income tax rates increase**

In the previous scenario, the income tax rates stay constant in 2025. Now, we would like you to think about an alternative scenario.

**Compare the alternative scenario to the baseline scenario where the income tax rates stay constant.**

*Reminder: Please assume it is the 1st of January 2025. The COVID-19 pandemic is over. The US economy has fully recovered and is back to "business as usual".*

---

### **Alternative scenario: Income tax rates increase**

Imagine the **income tax rates** are unexpectedly **1 percentage point higher** for all households in the US over the 12 months in 2025. This means that the typical US household would **pay about \$400 more in taxes**. All other tax rates, including tax rates for businesses, stay constant.

The government announces: The tax change is temporary and occurs despite no changes in the government's assessment of the economic conditions. Moreover, government spending does not change in response to the tax increase.

---

---

### **Your predictions**

#### **Unemployment rate**

Think about the US unemployment rate in December 2025. Please complete the following sentence.

**In the alternative scenario (income tax rates rise), the unemployment rate will be approximately \_\_\_\_\_ than in the baseline scenario (income tax rates constant).**

#### **Inflation rate**

Think about the US inflation rate over the 12 months from January to December 2025. Please complete the following sentence.

**In the alternative scenario (income tax rates rise), the inflation rate will be approximately \_\_\_\_\_ than in the baseline scenario (income tax rates constant).**

### Your thoughts

Above, you predict how the change in the alternative scenario affects the US economy.  
Please tell us how you come up with your predictions.

**What are your main considerations in making those predictions?**

*Please respond in 2-3 sentences.*



### How did you come up with your predictions?

The following statements describe different thoughts you might have had on your mind while making your predictions for the alternative scenario. **Did you have any of these thoughts on your mind?** Please tick all that you had on your mind.

- Because workers demand higher wages to make up for the higher income taxes, businesses reduce their workforce.
- Because workers demand higher wages to make up for the higher income taxes, businesses increase their product prices.
- Because there is less demand for their products, businesses reduce their product prices.
- Because of lower disposable incomes, households cut back on their spending.
- Because higher taxes make it less attractive to work, households work less.
- Because there is less demand for their products, businesses reduce their workforce.
- Businesses face lower demand for their products, so they increase their product prices to keep profits at the same level.
- To make up for their reduced disposable incomes, households work more.
- None of the above.

# Government vignette

## Federal government spending

The following scenarios deal with yearly **federal government spending**. Imagine that, in 2024, the federal government spent roughly \$4.1 trillion on diverse issues such as social security, health, military, or education. This amounts to roughly 1/5 of the value of all final goods and services produced by the US economy in one year (known as the gross domestic product).

Government spending typically increases every year, reflecting the general growth of the economy. For the last 50 years, for instance, it increased by an average of 2.9% each year (after adjusting for the general increase in prices).



### Baseline scenario: Government spending grows as usual

We would like you to think about the following hypothetical scenario.

*Reminder: Please assume it is the 1st of January 2025. The COVID-19 pandemic is over. The US economy has fully recovered and is back to "business as usual".*

Please assume that, in December 2024, the unemployment rate was at 3.6% and the inflation rate was at 1.8%.

---

### Baseline scenario: Government spending grows as usual

Imagine **federal government spending grows as usual** over the 12 months in 2025. That is, total government spending grows at a rate that equals the usual growth that took place in the past.

---

## Your predictions

### Inflation rate

Under this scenario, what do you think will be the US **inflation rate** over the 12 months from January to December 2025?

*Note: The default position of the slider is the level of the inflation rate over the year 2024: 1.8%.*



### Unemployment rate

Under this scenario, what do you think will be the US **unemployment rate** 12 months later, in December 2025?

*Note: The default position of the slider is the level of the unemployment rate in December 2024: 3.6%.*



### Important!

On the next page, you will read a scenario that describes a change to the economy. Your task is to predict how this change affects the US economy and to write down **what considerations you have on your mind** while you make your predictions.

Therefore, while you read the scenario description and think about its consequences for the US economy, please **pay special attention to what comes to your mind**. Of course, there are no right or wrong answers. Just write down your thoughts. Your response is very valuable for this research project.

From our experience, it can take 2-3 minutes to complete the next page. Please take your time to respond carefully.

### **Alternative scenario: Government spending grows more strongly**

In the previous scenario, government spending grows as usual in 2025. Now, we would like you to think about an alternative scenario.

**Compare the alternative scenario to the baseline scenario where government spending grows as usual.**

*Reminder: Please assume it is the 1st of January 2025. The COVID-19 pandemic is over. The US economy has fully recovered and is back to "business as usual".*

---

### **Alternative scenario: Government spending grows more strongly**

Imagine **federal government spending** unexpectedly **grows to a larger extent** than usual over the 12 months in 2025 due to a newly announced **spending program** on defense. In particular, total government spending grows by 2.4 percentage points more than the usual growth that took place in the past.

The government announces: The change is temporary and occurs despite no changes in the government's assessment of national security or economic conditions. Moreover, federal taxes do not change in response to the spending program.

---

### **Your predictions**

#### **Inflation rate**

Think about the US inflation rate over the 12 months from January to December 2025. Please complete the following sentence.

**In the alternative scenario (government spending grows more strongly) the inflation rate will be approximately \_\_\_\_\_ than in the baseline scenario (government spending grows as usual).**

#### **Unemployment rate**

Think about the US unemployment rate in December 2025. Please complete the following sentence.

**In the alternative scenario (government spending grows more strongly), the unemployment rate will be approximately \_\_\_\_\_ than in the baseline scenario (government spending grows as usual).**

### Your thoughts

Above, you predict how the change in the alternative scenario affects the US economy.  
Please tell us how you come up with your predictions.

**What are your main considerations in making those predictions?**

*Please respond in 2-3 sentences.*



### How did you come up with your predictions?

The following statements describe different thoughts you might have had on your mind while making your predictions for the alternative scenario. **Did you have any of these thoughts on your mind?** Please tick all that you had on your mind.

- Because of higher incomes, households increase their spending.
- Because there is more demand for their products, businesses increase their product prices.
- Businesses face lower demand for their products, so they increase their product prices to keep profits at the same level.
- Households expect to pay higher taxes in the future, which may be needed to pay back the new government debt. Therefore, households work more.
- Households expect to pay higher taxes in the future, which may be needed to pay back the new government debt. Therefore, households cut back on their spending.
- Because there is more demand for their products, businesses increase their workforce.
- To help the government finance the additional spending, the central bank prints money.
- None of the above.

# Interest rate vignette

## The federal funds target rate

The following scenarios deal with the **federal funds target rate**. This is the most important interest rate in the economy.

The federal funds target rate is the interest rate frequently discussed in the news. It is set by the Federal Open Market Committee (FOMC), which normally meets eight times a year. Imagine that, in December 2024, the rate is 2.5%.



### Baseline scenario: Federal funds target rate stays constant

We would like you to think about the following hypothetical scenario.

*Reminder: Please assume it is the 1st of January 2025. The COVID-19 pandemic is over. The US economy has fully recovered and is back to "business as usual".*

Please assume that, in December 2024, the unemployment rate was at 3.6% and the inflation rate was at 1.8%.

---

### Baseline scenario: Federal funds target rate stays constant

Imagine the **federal funds target rate stays constant**. That is, in its first meeting in 2025, the Federal Open Market Committee announces that it will keep the rate constant at 2.5%.

The committee announces it does so with no changes in their assessment of the economic conditions.

---

### Your predictions

#### Inflation rate

Under this scenario, what do you think will be the US **inflation rate** over the 12 months from January to December 2025?

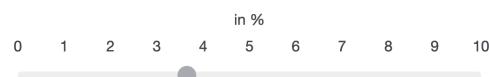
*Note: The default position of the slider is the level of the inflation rate over the year 2024: 1.8%.*



#### Unemployment rate

Under this scenario, what do you think will be the US **unemployment rate** 12 months later, in December 2025?

*Note: The default position of the slider is the level of the unemployment rate in December 2024: 3.6%.*



### **Important!**

On the next page, you will read a scenario that describes a change to the economy. Your task is to predict how this change affects the US economy and to write down **what considerations you have on your mind** while you make your predictions.

Therefore, while you read the scenario description and think about its consequences for the US economy, please **pay special attention to what comes to your mind**. Of course, there are no right or wrong answers. Just write down your thoughts. Your response is very valuable for this research project.

From our experience, it can take 2-3 minutes to complete the next page. Please take your time to respond carefully.

### **Alternative scenario: Federal funds target rate rises**

In the previous scenario, the federal funds target rate stays constant. Now, we would like you to think about an alternative scenario.

**Compare the alternative scenario to the baseline scenario where the federal funds rate stays constant.**

*Reminder: Please assume it is the 1st of January 2025. The COVID-19 pandemic is over. The US economy has fully recovered and is back to "business as usual".*

---

### **Alternative scenario: Federal funds target rate rises**

Imagine the **federal funds target rate** is unexpectedly **0.5 percentage points higher**. That is, in its first meeting in 2025, the Federal Open Market Committee announces that it is raising the interest rate from 2.5% to 3%.

The committee announces it does so with no changes in their assessment of the economic conditions.

---

### **Your predictions**

#### **Inflation rate**

Think about the US inflation rate over the 12 months from January to December 2025. Please complete the following sentence.

**In the alternative scenario (federal funds rate rises), the inflation rate will be approximately \_\_\_\_\_ than in the baseline scenario (federal funds rate constant).**

#### **Unemployment rate**

Think about the US unemployment rate in December 2025. Please complete the following sentence.

**In the alternative scenario (federal funds rate rises), the unemployment rate will be approximately \_\_\_\_\_ than in the baseline scenario (federal funds rate constant).**

### Your thoughts

Above, you predict how the change in the alternative scenario affects the US economy.

Please tell us how you come up with your predictions.

**What are your main considerations in making those predictions?**

*Please respond in 2-3 sentences.*



### How did you come up with your predictions?

The following statements describe different thoughts you might have had on your mind while making your predictions for the alternative scenario. **Did you have any of these thoughts on your mind?** Please tick all that you had on your mind.

- Because there is less demand for their products, businesses reduce their workforce.
- Businesses face lower demand for their products, so they increase their product prices to keep profits at the same level.
- To make up for the higher cost of borrowing, businesses reduce their workforce.
- Because there is less demand for their products, businesses reduce their product prices.
- Because higher interest rates make it more attractive to save and less attractive to borrow, households cut back on their spending.
- Due to the higher cost of borrowing, businesses pursue fewer investment projects.
- To make up for the higher cost of borrowing, businesses increase product prices.
- Because of lower incomes or job loss, households cut back on their spending.
- None of the above.*

# Approach

## How did you come up with your predictions?

Please think once more about the predictions you made in the preceding scenarios.

**Please tell us which of the following factors you thought about most when you made your predictions in the alternative scenario?**

Select all answers that apply.

- My memories of economic events in the past.
- My personal economic situation today.
- My knowledge of economics.
- I simply responded based on my gut feeling.
- Things I read or heard in the news.
- Other (please specify)

# Importance of knowledge about the structure of the economy (households only)

## Knowledge about the economy

Please think about your current and future economic decisions. This includes decisions about spending, saving and personal finances, about housing, and about your job and career.

What do you need to make good economic decisions? Would you say that you need to be informed about the US economy and understand how it works? Or would you say that you can make good economic decisions even without being informed about the US economy and without understanding how it works?

## How useful is knowledge about the following issues to you for making good economic decisions?

|   | Extremely useful      | Very useful           | Moderately useful     | Slightly useful       | Not useful at all     |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Knowledge about the overall development of the US economy   | <input type="radio"/> |
| Knowledge about the development of the US inflation rate    | <input type="radio"/> |
| Knowledge about the development of the US unemployment rate | <input type="radio"/> |
| Knowledge about how the US economy works                    | <input type="radio"/> |
| Knowledge about how income tax rates affect the US economy. | <input type="radio"/> |

## Perceived past correlation: levels (households only)

### What happened in the past?

Please think about the US economy in the last 50 years. Please let us know which option you think is correct.

Whenever , ...

- ... inflation tended to be high as well.
- ... inflation was equally likely to be high or low.
- ... inflation tended to be low.

Whenever , ...

- ... unemployment tended to be high as well.
- ... unemployment was equally likely to be high or low.
- ... unemployment tended to be low.

Whenever inflation was high, ...

- ... unemployment tended to be high as well.
- ... unemployment was equally likely to be high or low.
- ... unemployment tended to be low.

# Perceived past correlation: changes (households only)

## What happened in the past?

We have analyzed data about the development of the US economy in the last 50 years (1969–2019). We studied which economic outcomes tend to **move in the same direction**, which tend to **move in opposite directions**, and which move independently of each other.

Consider for example the average unemployment rate and the inflation rate. We calculated the share of years in which these outcomes have

- moved in the *same direction*, i.e. both rise or both fall
- moved in *opposite directions*, i.e. one rises, but the other one falls

The two variables moved independently of each other if they moved in the same direction 50% of the time and moved in opposite directions 50% of the time.

*Note: We ignore years in which at least one of the two outcomes did not change at all. This happens only rarely.*

**On the next page, we would like to know whether you think economic variables moved in the same directions or not.**

Consider the following two variables:

- Average unemployment rate
- Income tax rate for a typical US household

What do you think? In the last 50 years, in which percentage of years did these two variables ...

*Note: Your responses must add up to 100%.*

... move in the same direction

0 %

... move in opposite directions

0 %

Total

0 %

## What happened in the past?

Consider the following two variables:

- Inflation rate
- Income tax rate for a typical US household

What do you think? In the last 50 years, in which percentage of years did these two variables ...

*Note: Your responses must add up to 100%.*

... move in the same direction

... move in opposite directions

Total

Consider the following two variables:

- Inflation rate
- Average unemployment rate

What do you think? In the last 50 years, in which percentage of years did these two variables ...

*Note: Your responses must add up to 100%.*

... move in the same direction

... move in opposite directions

Total

# OPEC memory (households only)

Do you have personal memories relating to the 1973 OPEC oil embargo and its effect on the US economy?

- Yes
- No

## Knowledge about economic facts (households only)

Which response option describes best how frequently you followed news **unemployment rate** in the last three months?

- Never
- Once per month
- Twice per month
- Once per week
- Daily

What do you think is the **current level of the US unemployment rate**?

*Please respond in percentage points.*

What do you think was the average **US unemployment rate in 2019** (the year before the COVID pandemic)?

*Please respond in percentage points.*

Which response option describes best how frequently you followed news **inflation rate** in the last three months?

- Never
- Once per month
- Twice per month
- Once per week
- Daily

What do you think was the **rate of inflation** over the last 12 months?

*Please respond in percentage points.*

To what extent do you agree with the following statement?

I usually follow news on the national economy.

|                       |                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Fully disagree        | Somewhat disagree     | Rather disagree       | Rather agree          | Somewhat agree        | Fully agree           |
| <input type="radio"/> |

What category would best describe your political orientation?

- Republican
- Democrat
- Other

What was the highest level of any course in economics, finance or business you ever took?

- I never took a course in economics, finance or business
- High school level
- College level
- Graduate level

## Additional characteristics (households only)

What is your year of birth?



Do you or any family living with you **hold any debt**, such as housing debt (such as mortgage debt, and home equity loans and lines of credit), outstanding carried-over balances on credit cards (including retail cards), student loans, auto loans, or other personal loans?

- My family does not hold any debt
- My family holds debt
- Prefer not to say

Do you or any family living with you **hold any financial assets**, such as checking and savings accounts, money market funds, Certificates of Deposit, Government/Municipal Bonds or Treasury Bills, stocks and bonds in publicly held corporations, stock and bond mutual funds, or investment trusts?

- My family does not hold any financial assets
- My family holds financial assets
- Prefer not to say

Do you or any family living with you hold **any real estate**? This includes your primary residence, second homes, and any other real estate if they are owned by your family.

- My family does not hold any real estate
- My family holds real estate
- Prefer not to say

Which of these describes your current situation most accurately?

- Employed full-time
- Employed part-time
- Self-employed
- Unemployed and looking for a job
- Unemployed but not looking for a job
- Retired
- Student
- Other:

## Numeracy (households only)

We would like to ask you seven questions to see how people use numbers in everyday life. Please answer the following questions by filling in the blank.

In a sale, a shop is selling all items at half price. Before the sale, a sofa costs \$300. How much will it cost in the sale?

Let's say you have \$200 in a savings account. The account earns ten per cent interest per year. Interest accrues at each anniversary of the account. If you never withdraw money or interest payments, how much will you have in the account at the end of two years?

In the BIG BUCKS LOTTERY, the chances of winning a \$10.00 prize are 1%. What is your best guess about how many people would win a \$10.00 prize if 1,000 people each buy a single ticket from BIG BUCKS?

If the chance of getting a disease is 10 percent, how many people out of 1,000 would be expected to get the disease?

The chance of getting a viral infection is 0.0005. Out of 10,000 people, about how many of them are expected to get infected?

Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After one year, how much would you be able to buy with the money in this account?

- More than today
- Exactly the same
- Less than today

Please tell me whether this statement is true or false: Buying a single company's stock usually provides a safer return than a stock mutual fund.

- True
- False

## Good-bad-heuristic (households only)

Finally, please answer the following questions.

In your view, are **high rates of inflation** good or bad for ...?

|                     | Very<br>good          | Good                  | Somewhat<br>good      | Neither<br>good<br>nor bad | Somewhat<br>bad       | Bad                   | Very<br>bad           |
|---------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
| ... your household. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ... the US economy. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

In your view, are **high rates of unemployment** good or bad for ...?

|                     | Very<br>good          | Good                  | Somewhat<br>good      | Neither<br>good<br>nor bad | Somewhat<br>bad       | Bad                   | Very<br>bad           |
|---------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
| ... your household. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ... the US economy. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

In your view, are **high income tax rates** good or bad for ...?

|                     | Very<br>good          | Good                  | Somewhat<br>good      | Neither<br>good<br>nor bad | Somewhat<br>bad       | Bad                   | Very<br>bad           |
|---------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
| ... your household. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ... the US economy. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

# D Wave 4 (February 2021): Priming (households only)

## Welcome

Thanks a lot for participating in this study!

This study is conducted by researchers from the University of Warwick and the briq Institute on Behavior and Inequality.

Participants will be asked to answer a few questions about their opinions as well as a set of demographic questions. Participation in the study typically takes 10 minutes and is strictly anonymous.

Please consent to the processing of your data and our privacy policy.

► Click on the triangle to display the full privacy policy.

Your data will be stored and analyzed in full compliance with the highest standards of the data protection laws of the European Union. In particular, no conclusions about your person will be drawn. You can withdraw your consent at any time.

- I consent
- I do not consent

On which device are you taking this survey?

- Mobile phone
- Tablet
- Computer (desktop or laptop)



The next question is about the following problem. In questionnaires like ours, sometimes there are participants who do not carefully read the questions and just quickly click through the survey. This means that there are a lot of random answers which compromise the results of research studies. **To show that you read our questions carefully, please choose both "Very strongly interested" and "Not at all interested" as your answer in the next question**

Given the above, how interested are you in politics?

- Very strongly interested
- Very interested
- A little bit interested
- Almost not interested
- Not at all interested

Please explain: What is your opinion about the yearly switch to daylight saving time? Do you like or dislike it? Please use about 15-30 words.

Which of these describes you more accurately?

- Male
- Female

What is your age?

- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 or older

In which region do you currently reside?

- Northeast (CT, ME, MA, NH, RI, VT, NJ, NY, PA)
- Midwest (IL, IN, MI, OH, WI, IA, KS, MN, MO, NE, ND, SD)
- South (DE, DC, FL, GA, MD, NC, SC, VA, WV, AL, KY, MS, TN, AR, LA, OK, TX)
- West (AZ, CO, ID, NM, MT, UT, NV, WY, AK, CA, HI, OR, WA)

What was your household income in 2019 in US dollars before taxes and deductions?

- Less than 15,000
- Between 15,000 and 25,000
- Between 25,000 and 50,000
- Between 50,000 and 75,000
- Between 75,000 and 100,000
- Between 100,000 and 150,000
- Between 150,000 and 200,000
- More than 200,000
- Prefer not to say

What is the highest level of education you have completed?

- 12th grade or less
- Graduated high school or equivalent
- Some college, no degree
- Associate degree
- Bachelor's degree
- Post-graduate degree

## About this study

This study is about your **beliefs about the future development of the US economy**, in particular the **inflation rate**. Your task will be to estimate the development of the inflation rate in hypothetical scenarios.

Please give us your best guess about how the inflation rate in the US economy would actually develop under the scenarios considered. This may or may not be in line with theoretical findings and evidence from economics. We are **only interested in your own views and opinions** on the US economy.

On the next page, a brief definition of the inflation rate is provided to help you solve this task. Please read it carefully!

## Definition

The **inflation rate** measures how much prices in the economy rise from year to year. It is defined as the yearly growth of the general price level of goods and services (Consumer Price Index). For instance, an inflation rate of 1.8% means that, on average, prices for goods and services rise by 1.8% over 12 months. That is, a typical bundle of goods and services that costs \$1000 at the beginning of a year costs \$1018 at the end of that year. If the inflation rate is negative, it is referred to as deflation. This means that goods and services become less expensive from one year to the next.

## Imagine it's 2025

We are interested in your thoughts and perceptions about how the **US economy typically reacts to external influences**. With "typically", we mean "under normal circumstances". Unfortunately, the US economy is currently in a very unusual situation because of the COVID-19 pandemic.

Therefore, we ask you to imagine that it is the 1st of January 2025: **The COVID-19 pandemic is over. The US economy has fully recovered and is in a similar situation to 2019, before the pandemic.** In other words, it's back to "business as usual".

## How to respond

In the following, we will ask you how high you think the inflation rate will be in the future. You will respond on scales that look as follows:



The default position of the slider corresponds to the level of the inflation rate at the beginning of a scenario.

To answer a question, move the slider to the desired value. If you think that the rate will stay at its default position, simply click on the slider so that your response is registered. Your response will also be displayed in numbers on the right side of the slider.

Finally, please note that the scale for the inflation rate ranges from -2% to 8% to account for the possibility of deflation.

The main part of the survey begins when you press on the next button. Please try to **make your responses as accurate as possible**.

**It is very important for the success of our research that you answer to the best of your knowledge and read the questions very carefully before answering.**

### **The federal funds target rate**

The following scenarios deal with the **federal funds target rate**. This is the most **important interest rate in the economy**.

The federal funds target rate is the interest rate frequently discussed in the news. It is set by the Federal Open Market Committee (FOMC), which normally meets eight times a year. Imagine that, in December 2024, the rate is 2.5%.



#### **Baseline scenario: Federal funds target rate stays constant**

We would like you to think about the following hypothetical scenario.

*Reminder: Please assume it is the 1st of January 2025. The COVID-19 pandemic is over. The US economy has fully recovered and is back to "business as usual".*

Please assume that, in December 2024, the inflation rate was at 1.8%.

---

#### **Baseline scenario: Federal funds target rate stays constant**

Imagine the **federal funds target rate stays constant**. That is, in its first meeting in 2025, the Federal Open Market Committee announces that it will keep the interest rate constant at 2.5%.

The committee announces it does so with no changes in their assessment of the economic conditions.

---

## Your prediction

### Inflation rate

Under this scenario, what do you think will be the US **inflation rate** over the 12 months from January to December 2025?

*Note: The default position of the slider is the level of the inflation rate over the year 2024: 1.8%.*



### Important!

On the next page, you will read a scenario that describes a change to the economy. Your task is to predict how this change affects the US economy and to write down **what considerations you have on your mind** while you make your prediction.

Therefore, while you read the scenario description and think about its consequences for the US economy, please **pay special attention to what comes to your mind**. Of course, there are no right or wrong answers. Just write down your thoughts. Your response is very valuable for this research project.

From our experience, it can take 2-3 minutes to complete the next page. Please take your time to respond carefully.

### Alternative scenario: Federal funds target rate rises

In the previous scenario, the federal funds target rate stays constant. Now, we would like you to think about an alternative scenario.

**Compare the alternative scenario to the baseline scenario where the federal funds rate stays constant.**

*Reminder: Please assume it is the 1st of January 2025. The COVID-19 pandemic is over. The US economy has fully recovered and is back to "business as usual".*

---

### Alternative scenario: Federal funds target rate rises

Imagine the **federal funds target rate** is unexpectedly **0.5 percentage points higher**. That is, in its first meeting in 2025, the Federal Open Market Committee announces that it is raising the interest rate from 2.5% to 3%.

The committee announces it does so with no changes in their assessment of the economic conditions.

---

# Demand prime

## Step 1: Prediction of demand for firms' goods and services

Think about the demand for products and services that US firms face. Please complete the following sentence.

In the alternative scenario (federal funds rate rises), US firms face \_\_\_\_\_ than in the baseline scenario (federal funds rate constant).

### Your thoughts in step 1

What are your main considerations in making the above prediction?  
*Please respond in 2-3 sentences.*

## Step 2: Prediction of inflation

Think about the US inflation rate over the 12 months from January to December 2025.  
Please complete the following sentence.

In the alternative scenario (federal funds rate rises), the inflation rate will be approximately \_\_\_\_\_ than in the baseline scenario (federal funds rate constant).

### Your thoughts in step 2

Above, you predict how the change in the alternative scenario affects the US inflation.  
Please tell us how you come up with your predictions.

**What are your main considerations in making the predictions in step 2?**  
*Please respond in 2-3 sentences.*

# Cost prime

## Step 1: Prediction of firms' costs

Think about the costs of doing business that US firms face. Please complete the following sentence.

In the alternative scenario (federal funds rate rises), US firms face \_\_\_\_\_ than in the baseline scenario (federal funds rate constant).

### Your thoughts in step 1

What are your main considerations in making the above prediction?

Please respond in 2-3 sentences.

---

## Step 2: Prediction of inflation

Think about the US inflation rate over the 12 months from January to December 2025. Please complete the following sentence.

In the alternative scenario (federal funds rate rises), the inflation rate will be approximately \_\_\_\_\_ than in the baseline scenario (federal funds rate constant).

### Your thoughts in step 2

Above, you predict how the change in the alternative scenario affects the US inflation.

Please tell us how you come up with your predictions.

What are your main considerations in making the predictions in step 2?

Please respond in 2-3 sentences.

# Control

## Prediction of inflation

Think about the US inflation rate over the 12 months from January to December 2025.  
Please complete the following sentence.

In the alternative scenario (federal funds rate rises), the inflation rate will be approximately \_\_\_\_\_ than in the baseline scenario (federal funds rate constant).

### Your thoughts

Above, you predict how the change in the alternative scenario affects the US inflation rate.  
Please tell us how you come up with your prediction.

### What are your main considerations in making the prediction?

Please respond in 2-3 sentences.

### Important!

On the next page, your task is to predict how the change between the baseline and the alternative scenario affects another aspect of the US economy and to write down **what considerations you have on your mind** while you make your prediction.

Therefore, while you read the scenario description and think about its consequences for the US economy, please **pay special attention to what comes to your mind**. Of course, there are no right or wrong answers. Just write down your thoughts. Your response is very valuable for this research project.

Please take your time to respond carefully.

## Federal funds target rate

Please think about the following two hypothetical scenarios once more.

**Compare the alternative scenario to the baseline scenario where the federal funds rate stays constant.**

*Reminder: Please assume it is the 1st of January 2025. The COVID-19 pandemic is over. The US economy has fully recovered and is back to "business as usual".*

### **Baseline scenario: Federal funds target rate stays constant**

Imagine the **federal funds target rate stays constant**. That is, in its first meeting in 2025, the Federal Open Market Committee announces that it will keep the interest rate constant at 2.5%.

The committee announces it does so with no changes in their assessment of the economic conditions.

### **Alternative scenario: Federal funds target rate rises**

Imagine the **federal funds target rate** is unexpectedly **0.5 percentage points higher**. That is, in its first meeting in 2025, the Federal Open Market Committee announces that it is raising the interest rate from 2.5% to 3%.

The committee announces it does so with no changes in their assessment of the economic conditions.

---

## Demand: control

### **Prediction of demand for firms' goods and services**

Think about the demand for products and services that US firms face. Please complete the following sentence.

In the alternative scenario (federal funds rate rises), US firms face \_\_\_\_\_ than in the baseline scenario (federal funds rate constant).

### **Your thoughts**

What are your main considerations in making the above prediction?

*Please respond in 2-3 sentences.*

## Cost: control

### Prediction of firms' costs

Think about the costs of doing business that US firms face. Please complete the following sentence.

In the alternative scenario (federal funds rate rises), US firms face \_\_\_\_\_ than in the baseline scenario (federal funds rate constant).

### Your thoughts

What are your main considerations in making the above prediction?

*Please respond in 2-3 sentences.*