Online Appendix

Appendix 1: Surveys and Treatments

First wave of the survey: May-June 2018

This survey is about your household's finances and opinions about the economy. As with any of our surveys, the information you provide is confidential and is only shared in an aggregate (not individual) level.
 Please tell us about yourself…
1. What is your date of birth?
2. What is your gender?
() Male   () Female
3. Do you have any credit cards?
() Yes   () No   () Prefer to not answer
ASK IF: Q3=YES
4. Suppose that you had to make an unexpected payment equal to one month of your income, would you have sufficient credit on your credit card(s) to charge the entire amount?
() Yes () No () Don't know/prefer to not answer
5. How much money did you have in your checking and savings accounts and in cash the day **before** your last *regular* paycheck arrived? Please do not include fixed term deposits, stocks, bonds, mutual funds, or retirement accounts, etc. (Please enter dollars and cents)
       $_____   [] Don't know/prefer to not answer
6. Approximately how many times per month do you go to a gas station to buy gasoline or for other reasons? (Please enter a number)   _____ times   [RANGE: 0-999]
7. Who typically does the grocery shopping in your household? (Select one)
        () I do all of the grocery shopping in the household
        () I share the grocery shopping with others in the household
        () Someone else does the grocery shopping in the household
8. Over the last three months on average, how much did your household spend (per month) on goods and services in total and for each of the individual components listed below?
Please enter a number between 0 and 99,999 for each category. The sum of the expenditures for the individual categories should add up to the total amount. (Enter a "0" if you did not purchase anything in a given category)
Total monthly spending TOTAL [AUTOSUM] [RANGE: 0-99,999]
 [HAVE THIS AUTOMATICALLY SUM] $_____
Debt payments (mortgages, auto loans, student loans,…) $_____
Housing (including rent, maintenance and home owner/renter insurance but *not* including mortgage payments) $_____
Utilities (including water, sewer, electricity, gas, heating oil, phone, internet) $_____
Food (including groceries, dining out, and beverages) $_____
Clothing, footwear, and personal care $_____
Gasoline $_____
Other regular transportation costs (including public transportation fares and car maintenance) $_____
Medical care (including health insurance, medical bills, prescription drugs) $_____
Travel, Recreation, and entertainment $_____
Education and child care $_____
Furniture, jewelry, small appliances and other small durable goods $_____
Other (including gifts, child support or alimony, charitable giving, and other miscellaneous) $ _____
Prefer not to answer

9. Saving is income that is neither spent nor used to make payments on debt. Methods of saving include putting money aside in, for example, a deposit account, a pension account, an investment fund, or as cash.
What percentage of your monthly income, on average, did you save during the last 12 months? (Please enter a number. The number you enter should be greater than or equal to 0. If you did not save any money, please enter a "0". If you went into debt, enter a negative value)
        _____ (Please enter a percent) [RANGE: -100-100]   Prefer not to answer
10. What percent of your financial wealth (excluding housing) do you invest in the following categories? (enter a "0" if you do not invest in a given category)

Checking and Savings Account	………… percent
Cash	………… percent
US Bonds	………… percent
US Stocks	………… percent
Foreign Stocks and Bonds	………… percent
Gold and precious metals	………… percent
Bitcoin and other cryptocurrencies	………… percent
Other	………… percent

% Total   __100____ PN: TOTAL FOR RESPONDENT

[] I have no financial investments >EXCLUSIVE

11. Do you plan to buy a new home in the next 6 months?

() Yes   () No

ASK IF: Q12=YES

12. What price do you expect/plan to pay for a new house?

$_____   [] Don't know/Won't answer

13. Do you plan to purchase a car in the next 6 months?

() Yes   () No

ASK IF: Q13=YES

14. What price do you expect/plan to pay for this car?

$_____   [] Don't know/Won't answer

15. Do you plan to purchase any other big-ticket household items (TV, fridge, furniture, and similar items) over the next 6 months?

() Yes   () No

ASK IF: Q15=YES

16. How much do you expect to spend on these big-ticket household items over the next 6 months?

$_____   [] Don't know/Won't answer

17. How much higher or lower do you think your household's total after-tax income will be over the next six months compared to the last twelve months?

Please provide an answer in percents. If you think that your household's total after-tax income will decrease, please fill in a negative percent (insert a minus sign for the number). If you think that your household's total after-tax income will increase, please fill in a positive percent. If you think that your household's total net income will not change, please fill in 0 (zero).

_____%

18. In THIS question, you will be asked about the PERCENT CHANCE of something happening. The percent chance must be a number between 0 and 100 and the sum of your answers must add up to 100.

Nondurable goods and services include for instance food, tobacco, alcohol, gasoline, clothing, haircuts, transportation, and other small services and nondurable goods that do not last in time. What do you think is the percent chance that, over the next six months, your spending on non-durable goods and services will… (assign probabilities to each outcome; probabilities should sum to 100)

Increase by 10% or more	_____
Increase between 5% and 10%	_____
Increase between 2% and 5%	_____
Increase by 2% or less	_____
Stay the same	_____
Decrease 2% or less	_____
Decrease between 2% and 5%	_____
Decrease between 5% and 10%	_____
Decrease by 10% or more	_____

% Total   __100____ PN: TOTAL FOR RESPONDENT

19. How many total hours per week do you and other members of your household work in a typical week? Please do not include volunteer hours or hours that are unpaid.

You: _____ hours per week

All others in household: _____ hours per week

20. Do you expect the hours for you or other people in your household will be the same over the next 6 months or not? Please do not include volunteer hours or hours that are unpaid.

() Yes, the same over the next 6 months

() No, not the same over the next 6 months

ASK IF: Q20=NO

23. How many hours per week do you expect to be working in 6 months and how many hours do you expect all other members of your household to be working in 6 months? Please do not include volunteer hours or hours that are unpaid.

You: _____ hours per week

All others in household: _____ hours per week

[Everyone who did not answer [] I have no financial investments in Q10 should get this question]

24. What do you think the rate of return will be on your financial investments over the next twelve months? Please provide a quantitative answer in percentage terms.

_____ %   [] I have no financial investments

25. We would like to ask you about the rate of inflation/deflation (Note: inflation is the percentage rise in overall prices in the economy, most commonly measured by the Consumer Price Index and deflation corresponds to when prices are falling).

Please enter a number in the box below. If you do not think there was any inflation/deflation in the last 12 months, please enter a "0". If you think there was deflation, enter a negative value. If you think there was inflation, enter a positive value. Over the **last** 12 months, the rate of inflation/deflation was

_____percent

26. In THIS question, you will be asked about the PERCENT CHANCE of something happening. The percent chance must be a number between 0 and 100 and the sum of your answers must add up to 100.

What do you think is the percent chance that, **over the next 12 months**…

the rate of inflation will be 12% or more _____

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

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

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

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

the rate of deflation (opposite of inflation) will be between 0% and 2% _____

the rate of deflation (opposite of inflation) will be between 2% and 4% _____

the rate of deflation (opposite of inflation) will be between 4% and 8% _____

the rate of deflation (opposite of inflation) will be between 8% and 12% _____

the rate of deflation (opposite of inflation) will be 12% or more _____

% Total _____ [PN: TOTAL ANSWERS FROM ABOVE]

[Half of respondents get this question]

27. In THIS question, you will be asked about the probability (PERCENT CHANCE) of something being true. The percent chance must be a number between 0 and 100 and the sum of your answers must add up to 100.

What is the probability that the *average American* believes inflation or deflation over the next 12 months will be…

The average American expects the rate of inflation will be 12% or more _____

The average American expects the rate of inflation will be between 8% and 12% _____

The average American expects the rate of inflation will be between 4% and 8 _____

The average American expects the rate of inflation will be between 2% and 4 _____

The average American expects the rate of inflation will be between 0% and 2% _____

The average American expects the rate of deflation (opposite of inflation) will be between 0% and 2% _____

The average American expects the rate of deflation (opposite of inflation) will be between 2% and 4% _____

The average American expects the rate of deflation (opposite of inflation) will be between 4% and 8% _____

The average American expects the rate of deflation (opposite of inflation) will be between 8% and 12% _____

The average American expects the rate of deflation (opposite of inflation) will be 12% or more _____

% Total _____ [PN: TOTAL ANSWERS FROM ABOVE]

[Other half of respondents get the next two question]

28. What do you think the current overall level of prices in the economy (as measured by the Consumer Price Index) relative to the level of prices 5 years ago?

Please provide an answer in percentage terms. If you think there was deflation (that is, prices fell), enter a negative value. If you think there was inflation (that is, prices rose), enter a positive value. If you do not think there was any inflation/deflation in the last 5 years, please enter a "0".

_____overall percent change for last 5 years   [RANGE: -100-100 Whole numbers only]

29. In THIS question, you will be asked about the probability (PERCENT CHANCE) of something happening. The percent chance must be a number between 0 and 100 and the sum of your answers must add up to 100.

What do you think is the probability that, **over the next 5 years**, the overall level of prices in the economy (as measured by the Consumer Price Index) relative to the current level of prices will…

rise by 50% or more	_____
rise from 25% to 50%	_____
rise from 15% to 25%	_____
rise from 5% to 15%	_____
rise less than 5%	_____
stay about the same	_____
fall by less than 5%	_____
fall from 5% to 15%	_____
fall from 15% to 25%	_____
fall from 25% to 50%	_____
fall by 50% or more	_____

% Total _____ [PN: TOTAL ANSWERS FROM ABOVE]

[75% of respondents get this question]

30. What is your best guess about the annual inflation rate that the Federal Reserve tries to achieve on average over long periods of time? Please use a percent between -100 and 100)

_____   % per year

[25% of respondents get this question instead]

30. What is your best guess about the annual inflation rate that the Federal Reserve tries to achieve on average over long periods of time? Please use a percent between -100 and 100)

_____   % per year   [] Prefer to not answer

31. What is your best guess about the current unemployment rate in the U.S.? (Please use a percent between 0 and 100)

_____   %

32. What is your best guess at the current unleaded gas price in your area? (Please enter dollars and cents)

$_____

33. What is your best guess about the dollar change in gas prices over the next six months? (Please enter dollars and cents)

$_____

34. In THIS question, you will be asked about the PERCENT CHANCE of something happening. The percent chance must be a number between 0 and 100 and the sum of your answers must add up to 100.

What do you think the average unemployment rate will be **over the next 12 months**:

The average unemployment rate will be 10% or more	_____
The average unemployment rate will be between 8.0% and 9.9%	_____
The average unemployment rate will be between 7.0% and 7.9%	_____
The average unemployment rate will be between 6.0% and 6.9%	_____
The average unemployment rate will be between 5.0% and 5.9%	_____
The average unemployment rate will be between 4.0% and 4.9%	_____
The average unemployment rate will be 4.0% or less	_____

% Total _____ [PN: TOTAL ANSWERS FROM ABOVE]

[INFORMATION TREATMENTS]

[PN: RANDOMLY ASSIGN EACH RESPONDENT INTO EITHER THE "CONTROL GROUP" OR GROUPS 1 – 8 BASED ON LOWEST READS.]
CONTROL
GROUP 1
GROUP 2
GROUP 3
GROUP 4
GROUP 5
GROUP 6
GROUP 7
GROUP 8
IF Control group: [SKIP TO Q35]
SHOW IF: GROUPS 1-8
You are almost done with the survey. We have just a few more questions. But before you give us your responses, we would like you to know the following.

SHOW IF Group 1: Over the last twelve months, the inflation rate in the U.S. (as measured by the Consumer Price Index) was 2.3%.
SHOW IF Group 2: The inflation target of the Federal Reserve is 2% per year.
SHOW IF Group 3: The price of gasoline (national average) rose by 6.4% over the last three months.
SHOW IF Group 4: The U.S. population grew 2% over the last three years.
SHOW IF Group 5: The current rate of unemployment in the U.S. is 4.1%.
SHOW IF Group 6: The U.S. Federal Open Market Committee (which sets short-term interest rates) forecasts 1.9% inflation rate in 2018.
SHOW IF Group 7 [May 2018 version]: Please read the most recent policy statement by the U.S. Federal Open Market Committee.
Information received since the Federal Open Market Committee met in January indicates that the labor market has continued to strengthen and that economic activity has been rising at a moderate rate. Job gains have been strong in recent months, and the unemployment rate has stayed low. Recent data suggest that growth rates of household spending and business fixed investment have moderated from their strong fourth-quarter readings. On a 12-month basis, both overall inflation and inflation for items other than food and energy have continued to run below 2 percent. Market-based measures of inflation compensation have increased in recent months but remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.
Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The economic outlook has strengthened in recent months. The Committee expects that, with further gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace in the medium term and labor market conditions will remain strong. Inflation on a 12-month basis is expected to move up in coming months and to stabilize around the Committee's 2 percent objective over the medium term. Near-term risks to the economic outlook appear roughly balanced, but the Committee is monitoring inflation developments closely.
In view of realized and expected labor market conditions and inflation, the Committee decided to raise the target range for the federal funds rate to 1-1/2 to 1-3/4 percent. The stance of monetary policy remains accommodative, thereby supporting strong labor market conditions and a sustained return to 2 percent inflation.
In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. The Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant further gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.
SHOW IF Group 7 [June 2018 version]: Please read the most recent policy statement by the U.S. Federal Open Market Committee.

Information received since the Federal Open Market Committee met in March indicates that the labor market has continued to strengthen and that economic activity has been rising at a moderate rate. Job gains have been strong, on average, in recent months, and the unemployment rate has stayed low. Recent data suggest that growth of household spending moderated from its strong fourth-quarter pace, while business fixed investment continued to grow strongly. On a 12-month basis, both overall inflation and inflation for items other than food and energy have moved close to 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with further gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace in the medium term and labor market conditions will remain strong. Inflation on a 12-month basis is expected to run near the Committee's symmetric 2 percent objective over the medium term. Risks to the economic outlook appear roughly balanced.

In view of realized and expected labor market conditions and inflation, the Committee decided to maintain the target range for the federal funds rate at 1-1/2 to 1-3/4 percent. The stance of monetary policy remains accommodative, thereby supporting strong labor market conditions and a sustained return to 2 percent inflation.

In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. The Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant further gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.

SHOW IF Group 8 [May 2018 version]: On March 21, 2018, USA Today summarized the most recent decision of the U.S. Federal Open Market Committee (which sets short-term interest rates) as follows:

"Citing a brighter economic outlook, the Federal Reserve raised its key short-term interest rate Wednesday but maintained its forecast for a total of three hikes this year amid still-modest inflation.

The move is expected to ripple through the economy, nudging consumer and business borrowing costs higher, especially for variable-rate loans such as adjustable-rate mortgages and credit cards.

Investors cheered the unchanged rate forecast for 2018, pushing up the Dow Jones industrial average about 250 points initially before stocks pared their gains.

The Fed's policymaking committee, as widely anticipated, lifted the federal funds rate — what banks charge each other for overnight loans — by a quarter percentage point to a range of 1½% to 1¾%.

That's still low by historical standards but it marks the central bank's fourth rate increase in the past 12 months and another vote of confidence in an economy that's picking up steam nearly nine years after the Great Recession ended.

"We're trying to take that middle ground" on rate hikes, boosting rates enough to head off an eventual spike in inflation without derailing the economic expansion, Fed Chairman Jerome Powell said at a news conference. The meeting was the first led by Powell, a Republican and Trump appointee, who took the reins from Democrat Janet Yellen last month."
SHOW IF Group 8 [June 2018 version]: On May 2, 2018, USA Today summarized the most recent decision of the U.S. Federal Open Market Committee (which sets short-term interest rates) as follows:

WASHINGTON — Inflation is creeping higher, and that's making the Federal Reserve more confident about raising interest rates.

The Fed held its key interest rate steady Wednesday but noted that inflation has climbed close to its 2% goal, paving the way for another rate hike in June.

As expected, the Fed kept its benchmark short-term interest rate at a range of 1½% to 1¾%. The central bank's policymaking committee lifted the rate by a quarter percentage point in March for the sixth time since late 2015 after holding it near zero for years following the 2008 financial crisis and recession.

In a statement after a two-day meeting, the Fed reiterated that it plans to continue to raise rates gradually, a pace that economists have interpreted as roughly every other meeting.
Fed policymakers have forecast two more rate increases this year, according to their median estimate, but faster inflation could trigger three additional moves. Before the statement release, Fed fund futures indicated a 90% chance of a hike in June, according to CME Group.

35. By how much do you expect prices in the economy (as measured by the Consumer Price Index) to change over the next 12 months? Please provide an answer as a percentage change from current prices. Please use a percent between -100 and 100, if no change please enter a "0". You may enter a percent)
_____   %
[PN: ONLY THOSE THAT ANSWERED Q28 AND Q29 SHOULD ANSWER Q36]
36. By how much do you expect prices in the economy (as measured by the Consumer Price Index) to change over the next five years? Please provide an answer as a cumulative percentage change from the current level of prices. Please use a percent between -100 and 100, if no change please enter a "0".)
_____   %
[PN: ONLY THOSE THAT ANSWERED Q27 SHOULD ANSWER Q37]
37. What inflation rate do you think the average American would predict for the next twelve months? (Please enter a number in one of the boxes below. If you think that the average American predicts no inflation or deflation, please enter a "0". If you think the average American expects deflation, enter a negative value. If you expect, inflation, enter a positive value)
_____   %
38. What do you think the unemployment rate in the U.S. economy will be in twelve months? Please provide a quantitative answer in percentage terms. (Please use a percent between 0 and 100)
_____   %
39. What do you think the rate of return will be on your financial investments over the next twelve months? Please provide a quantitative answer in percentage terms.
_____   %   [] I have no financial investments
40. How much higher or lower do you think your household's total after-tax income will be over the next six months compared to the last twelve months?
    Please provide an answer in percents. If you think that your household's total after-tax income will decrease, please fill in a negative percent (insert a minus sign for the number). If you think that your household's total after-tax income will increase, please fill in a positive percent. If you think that your household's total net income will not change, please fill in 0 (zero).
        _____%

41. How much higher or lower do you think your household's spending on non-durable goods and services will be over the next six months compared to the last six months?
    Please provide an answer in percentage terms. If you think that your household's spending on non-durable goods and services will decrease, please fill in a negative percentage (insert a minus sign for the number). If you think that your household's spending on non-durable goods and services will increase, please fill in a positive percentage. If you think that your household's spending on non-durable goods and services will not change, please fill in 0 (zero). (You are able to enter a percent up to two decimal places)
        _____%

Second wave of the survey: September 2018

This survey is about your household's finances and opinions about the economy. As with any of our surveys, the information you provide is confidential and is only shared in an aggregate (not individual) level.
 Please tell us about yourself…

1. What is your date of birth? (Please select the month, day and year)
Month: January, February… December
Day: 1, 2, 3… 31
Year: 1916, 1917… 2000

2. Over the last three months on average, how much did your household spend (per month) on goods and services in total and for each of the individual components listed below?
Please enter a number between 0 and 99,999 for each category. The sum of the expenditures for the individual categories should add up to the total amount. (Enter a "0" if you did not purchase anything in a given category)

Total monthly spending TOTAL [AUTOSUM] [RANGE: 0-99,999]
 [PN: HAVE THIS AUTOMATICALLY SUM] $_____
Debt payments (mortgages, auto loans, student loans,…) $_____
Housing (including rent, maintenance and home owner/renter insurance but *not* including mortgage payments)
                                                                                                 $_____
Utilities (including water, sewer, electricity, gas, heating oil, phone, internet) $_____
Food (including groceries, dining out, and beverages) $_____
Clothing, footwear, and personal care $_____
Gasoline $_____
Other regular transportation costs (including public transportation fares and car maintenance)
                                                                                                 $_____
Medical care (including health insurance, medical bills, prescription drugs) $_____
Travel, Recreation, and entertainment $_____
Education and child care $_____
Furniture, jewelry, small appliances and other small durable goods $_____
Other (including gifts, child support or alimony, charitable giving, and other miscellaneous)
                                                                                                 $_____

Prefer not to answer

3. What percent of your financial wealth (excluding housing) do you invest in the following categories? (Please enter a whole number if you invest in a given category. Percents should total 100%.)

Checking and Savings Account	………… percent
Cash	………… percent
US Bonds	………… percent
US Stocks	………… percent
Foreign Stocks and Bonds	………… percent
Gold and precious metals	………… percent
Bitcoin and other cryptocurrencies	………… percent
Other	………… percent
% Total	__100____

[] I have no financial investments

4. Did you buy a new home in the last 3 months?
        () Yes
        () No
ASK IF: Q4=YES
4a. What price did you pay for the new house?
        $_____

[] Don't know/Won't answer

ASK IF: Q4=NO
4b. Do you plan to buy a new home in the next 3 months?
() Yes   () No

ASK IF: Q4b=YES
4c. What price do you expect/plan to pay for a new house?
$_____   [] Don't know/Won't answer

5. Did you buy a new car in the last 3 months?
() Yes   () No

ASK IF: Q5=YES
5a. What price did you pay for this car?
$_____   [] Don't know/Won't answer

ASK IF: Q5=NO
5b. Do you plan to purchase a car in the next 3 months?
() Yes   () No

ASK IF: Q5b=YES
5c. What price do you expect/plan to pay for this car?
$_____   [] Don't know/Won't answer

6. Did you purchase any other big-ticket household items (TV, fridge, furniture, and similar items) in the last 3 months?
() Yes   () No

ASK IF: Q6=YES
6a. How much did you spend on these big-ticket household items over the last 3 months?
$_____   [] Don't know/Won't answer

6b. Do you plan to purchase any other big-ticket household items (TV, fridge, furniture, and similar items) over the next 3 months?
() Yes   () No

ASK IF: Q6b=YES
6c. How much do you expect to spend on these big-ticket household items over the next 3 months?
$_____   [] Don't know/Won't answer

7. How much higher or lower do you think your household's total after-tax income will be over the next three months compared to the last three months?
Please provide an answer in percent. If you think that your household's total after-tax income will decrease, please fill in a negative percent (insert a minus sign for the number). If you think that your household's total after-tax income will increase, please fill in a positive percent. If you think that your household's total net income will not change, please fill in 0 (zero).
_____%

8. How many total hours per week do you and other members of your household work in a typical week? Please do not include volunteer hours or hours that are unpaid.
You: _____ hours per week
All others in household: _____ hours per week

9. Do you expect the hours for you or other people in your household will be the same over the next 3 months or not? Please do not include volunteer hours or hours that are unpaid.
() Yes, the same over the next 3 months
() No, not the same over the next 3 months

ASK IF: Q9=NO
10. How many hours per week do you expect to be working in 3 months and how many hours do you expect all other members of your household to be working in 3 months? Please do not include volunteer hours or hours that are unpaid.
You: _____ hours per week
All others in household: _____ hours per week

11. We would like to ask you about the rate of inflation/deflation (Note: inflation is the percentage rise in overall prices in the economy, most commonly measured by the Consumer Price Index and deflation corresponds to when prices are falling).

    Please enter a number in the box below. If you do not think there was any inflation/deflation in the last 12 months, please enter a "0". If you think there was deflation, enter a negative value. If you think there was inflation, enter a positive value.

Over the **last** 12 months, the rate of inflation/deflation was
          _____percent

12. In THIS question, you will be asked about the PERCENT CHANCE of something happening. The percent chance must be a number between 0 and 100 and the sum of your answers must add up to 100.
What do you think is the percent chance that, **over the next 12 months**…
    the rate of inflation will be 12% or more   _____
    the rate of inflation will be between 8% and 12%   _____
    the rate of inflation will be between 4% and 8   _____
    the rate of inflation will be between 2% and 4   _____
    the rate of inflation will be between 0% and 2%   _____
    the rate of deflation (opposite of inflation) will be between 0% and 2%   _____
    the rate of deflation (opposite of inflation) will be between 2% and 4%   _____
    the rate of deflation (opposite of inflation) will be between 4% and 8%   _____
    the rate of deflation (opposite of inflation) will be between 8% and 12%   _____
    the rate of deflation (opposite of inflation) will be 12% or more   _____
    % Total   _____

13. What is your best guess about the annual inflation rate that the Federal Reserve tries to achieve on average over long periods of time? Please use a percent between -100 and 100)
_____   % per year

14. What is your best guess about the current unemployment rate in the U.S.? (Please use a percent between 0 and 100)
    _____   %

15. What is your best guess at the current unleaded gas price in your area? (Please enter dollars and cents)
    $_____

16. Are you? (Select one)
    ()Male   ()Female

17. What is your first name?
_____

18. Are there any members of your household aged 18 or older who have not yet taken this survey?
    () Yes   () No

Third wave of the survey: December 2018

This survey is about your household's finances and opinions about the economy. As with any of our surveys, the information you provide is confidential and is only shared in an aggregate (not individual) level.

Please tell us about yourself…

1. What is your date of birth? (Please select the month, day and year)

2. Which political party do you lean towards?

() Democrats
() Republication party
() Green party
() Libertarian party
() Other
() Prefer not to answer

3. Over the last three months on average, how much did your household spend (per month) on goods and services in total and for each of the individual components listed below?

Please enter a number between 0 and 99,999 for each category. The sum of the expenditures for the individual categories should add up to the total amount. (Enter a "0" if you did not purchase anything in a given category)

Total monthly spending TOTAL [AUTOSUM] [RANGE: 0-99,999]
 [PN: HAVE THIS AUTOMATICALLY SUM] $_____

Debt payments (mortgages, auto loans, student loans,…) $_____
Housing (including rent, maintenance and home owner/renter insurance but *not* including mortgage payments)
                                                                          $_____
Utilities (including water, sewer, electricity, gas, heating oil, phone, internet) $_____
Food (including groceries, dining out, and beverages) $_____
Clothing, footwear, and personal care $_____
Gasoline $_____
Other regular transportation costs (including public transportation fares and car maintenance)
                                                                          $_____
Medical care (including health insurance, medical bills, prescription drugs) $_____
Travel, Recreation, and entertainment $_____
Education and child care $_____
Furniture, jewelry, small appliances and other small durable goods $_____
Other (including gifts, child support or alimony, charitable giving, and other miscellaneous)
                                                                          $ _____

Prefer not to answer

4. What percent of your financial wealth (excluding housing) do you invest in the following categories? (Please enter a whole number if you invest in a given category. Percents should total 100%.)

Checking and Savings Account   ………… percent
Cash   ………… percent
US Bonds   ………… percent
US Stocks   ………… percent
Foreign Stocks and Bonds   ………… percent
Gold and precious metals   ………… percent

Bitcoin and other cryptocurrencies   ………… percent
Other   ………… percent
    % Total   __100____

[] I have no financial investments

Consumption Plans:
5. Did you buy a new home in the last 6 months?
    () Yes
    () No

ASK IF: Q5=YES
5a. What price did you pay for the new house?
    $_____ [PN: MAX=10,000,000]
    [] Don't know/Prefer not to answer

6. Did you buy a new car in the last 6 months?
    () Yes
    () No

ASK IF: Q6=YES
6a. What price did you pay for this car?
    $_____ [PN: MAX=100,000]
    [] Don't know/Prefer not to answer

7. Did you purchase any other big-ticket household items (TV, fridge, furniture, and similar items) in the last 6 months?
    () Yes
    () No

ASK IF: Q7=YES
7a. How much did you spend on these big-ticket household items over the last 6 months?
    $_____
    [] Don't know/Prefer not to answer

8. How much higher or lower do you think your household's total after-tax income will be over the next six months compared to the last six months?

Please provide an answer with a percent. If you think that your household's total after-tax income will decrease, please fill in a negative percent (insert a minus sign before the number). If you think that your household's total after-tax income will increase, please fill in a positive percent. If you think that your household's total net income will not change, please fill in 0 (zero).

_____% [RANGE: (-100) to 100]

9. How many total hours per week do you and other members of your household work in a typical week? Please do not include volunteer hours or hours that are unpaid. (Please enter a zero if you or others do not work)
    You: _____ hours per week
    All others in household: _____ hours per week

;Inflation and Aggregate Expectations - DON'T SHOW
10. We would like to ask you about the rate of inflation/deflation (Note: Deflation is the opposite of inflation).

Over the **last** 12 months…

(Please enter a number in one of the boxes below. The number you enter should be greater than 0 or equal to 0. If you do not think there was any inflation/deflation in the last 12 months, please enter a "0" in one of the boxes.)

The rate of inflation was ...... percent   [RANGE: 0-100]
The rate of deflation (the opposite of inflation) was ...... percent   [RANGE: 0-100]

11. In THIS question, you will be asked about the PERCENT CHANCE of something happening. The percent chance must be a number between 0 and 100. Numbers like 2% or 5% indicate "almost no chance," 19% or so may mean "not much chance," a 47% or 55% chance may be a "pretty even chance," 82% indicates a "very good chance," and 95% or 98% mean "almost certain."

What do you think is the percent chance that, **over the next 12 months**…
[RANGE OF EACH OPTION BELOW: 0-100]
        the rate of inflation will be 12% or more   _____
        the rate of inflation will be between 8% and 12%   _____
        the rate of inflation will be between 4% and 8   _____
        the rate of inflation will be between 2% and 4   _____
        the rate of inflation will be between 0% and 2%   _____
        the rate of deflation (opposite of inflation) will be between 0% and 2%   _____
        the rate of deflation(opposite of inflation) will be between 2% and 4%   _____
        the rate of deflation(opposite of inflation) will be between 4% and 8%   _____
        the rate of deflation(opposite of inflation) will be between 8% and 12%   _____
        the rate of deflation(opposite of inflation) will be 12% or more   _____
    % Total   _____

12. What do you think is the probability that, in **10 years from now**, the overall level of prices in the economy (as measured by the Consumer Price Index) will…
[RANGE OF EACH OPTION BELOW: 0-100 ALLOW FOR UP TO 2 DECIMAL POINTS]
    fall by 50% or more   _____
    fall by 25% to 50%   _____
    fall by 15% to 25%   _____
    fall by 5% to 15%   _____
    fall but by less than 5%   _____
    stay about the same   _____
    grow but at less than 5%   _____
    grow by 5% to 15%   _____
    grow by 15% to 25%   _____
    grow by 25% to 50%   _____
    grow by 50% to 100%   _____
    grow by 100% or more   _____
    % Total   _____ [PN: TOTAL ANSWERS FROM ABOVE]

13. What is your best guess about the annual inflation rate that the Federal Reserve tries to achieve on average over long periods of time? Please use a percent between -100 to 100)
            _____ % per year [RANGE: -100 to 100 Whole numbers]

14. What is your best guess about the current unemployment rate in the U.S.? (Please use a percent between 0 and 100, may enter up to 2 decimal points)
            _____ % [RANGE: 0-100]

15. What is your best guess at the current unleaded gas price in your area? (Please enter dollars and cents)
        $_____ [PN: ADD two DECIMAL FOR DOLLARS AND CENTS]

Appendix 2: Additional Results

Appendix Table 1: Heterogeneous Contemporaneous Effects of Treatments on Inflation Expectation

	Enough credit	Not enough credit	Less than 1 month in savings	1-6 months in savings	6+ months in savings	Plan to buy durable	No plan to buy durable	No financial wealth	Positive financial wealth	Saving rate: 0	Saving rate: 0-10	Saving rate: 10+
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
T5 (pop growth)	-0.179	-0.226	-0.260	-0.162	-0.082	-0.380	-0.174	-0.094	-0.277**	-0.045	-0.343*	-0.269
	(0.124)	(0.279)	(0.195)	(0.254)	(0.274)	(0.231)	(0.118)	(0.194)	(0.125)	(0.243)	(0.178)	(0.203)
T6 (UE)	-0.308**	-0.361	-0.586***	-0.603**	0.084	-0.260	-0.357***	-0.018	-0.475***	-0.511**	-0.298	-0.421**
	(0.124)	(0.286)	(0.192)	(0.248)	(0.266)	(0.228)	(0.117)	(0.195)	(0.123)	(0.241)	(0.181)	(0.194)
T4 (gas prices)	1.483***	1.674***	1.335***	1.380***	1.469***	1.327***	1.521***	1.578***	1.430***	1.659***	1.402***	1.548***
	(0.135)	(0.315)	(0.209)	(0.268)	(0.287)	(0.252)	(0.128)	(0.211)	(0.135)	(0.254)	(0.201)	(0.217)
T2 (past inflation)	-0.978***	-1.137***	-1.141***	-1.176***	-0.616**	-0.970***	-1.048***	-0.913***	-1.087***	-1.247***	-1.097***	-0.922***
	(0.124)	(0.268)	(0.189)	(0.254)	(0.253)	(0.230)	(0.116)	(0.189)	(0.124)	(0.228)	(0.182)	(0.198)
T3 (inflation target)	-0.926***	-1.390***	-1.295***	-1.075***	-0.888***	-0.913***	-1.013***	-0.729***	-1.118***	-1.087***	-1.129***	-1.051***
	(0.121)	(0.278)	(0.187)	(0.249)	(0.262)	(0.228)	(0.115)	(0.191)	(0.121)	(0.224)	(0.181)	(0.193)
T7 (Fed inflation forecast)	-0.941***	-1.374***	-1.329***	-1.073***	-0.601**	-0.881***	-1.120***	-1.080***	-1.078***	-1.585***	-1.187***	-0.592***
	(0.121)	(0.270)	(0.186)	(0.243)	(0.253)	(0.230)	(0.114)	(0.197)	(0.119)	(0.224)	(0.176)	(0.193)
T8 (FOMC statement)	-1.244***	-1.119***	-1.365***	-1.414***	-0.806***	-1.248***	-1.178***	-0.821***	-1.373***	-1.248***	-1.525***	-1.090***
	(0.123)	(0.273)	(0.189)	(0.242)	(0.260)	(0.233)	(0.114)	(0.187)	(0.123)	(0.219)	(0.179)	(0.202)
T9 (*USA Today* coverage)	-0.482***	-0.586**	-0.508***	-0.481*	-0.371	-0.624***	-0.393***	-0.265	-0.528***	-0.446*	-0.603***	-0.375*
	(0.123)	(0.285)	(0.188)	(0.261)	(0.265)	(0.224)	(0.119)	(0.195)	(0.124)	(0.243)	(0.177)	(0.202)
Observations	13,122	2,841	6,022	3,080	2,366	3,848	15,374	6,010	13,212	4,213	6,463	4,404
R-squared	0.051	0.053	0.050	0.062	0.049	0.042	0.049	0.038	0.054	0.058	0.056	0.051

Notes: The table reports the average change in inflation expectations of individuals in each treatment group relative to those in the control group, broken down along observable characteristics of individuals. Columns (1) and (2) differentiate respondents by whether they report having enough credit on their credit cards to make an emergency payment equal to one month of their salary. Columns (3)-(5) differentiate respondents by the amount of their total liquid savings (checking plus savings accounts) relative to their monthly income. Columns (6) and (7) differentiate respondents by whether they plan to buy a car, house or other big ticket item over the next six months. Columns (8) and (9) differentiate between households depending on whether they report having any positive financial wealth. Columns (10) to (12) differentiate between respondents depending on what fraction of their monthly income they report having saved each of the last 12 months on average. In each case, revisions in beliefs are measured using the inflation forecasts at the end of the first wave of the survey relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. Results are from Huber robust regressions to control for outliers. Robust standard errors are reported in parentheses.

Appendix Table 1 (continued): Heterogeneous Contemporaneous Effects of Treatments on Inflation Expectation

	Race		Who does groceries:		Number of bins used in inflation expectations distribution question			Time spent answering inflation expectations distribution question		
	White	Non-White	Just me	Shared	1 bin	2 bins	3+ bins	<20 sec.	20-120 sec.	120+ sec.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
T5 (pop growth)	-0.191*	-0.327	-0.348*	-0.193	-0.218	-0.218	-0.188	-0.014	-0.099	0.376
	(0.116)	(0.246)	(0.209)	(0.123)	(0.134)	(0.257)	(0.225)	(0.285)	(0.171)	(0.615)
T6 (UE)	-0.287**	-0.490**	-0.160	-0.439***	-0.265**	-0.269	-0.544**	-0.100	-0.256	0.008
	(0.115)	(0.244)	(0.201)	(0.124)	(0.134)	(0.247)	(0.223)	(0.275)	(0.175)	(0.658)
T4 (gas prices)	1.508***	1.349***	1.531***	1.439***	1.414***	1.686***	1.568***	1.658***	1.928***	2.570***
	(0.125)	(0.274)	(0.228)	(0.134)	(0.146)	(0.264)	(0.252)	(0.327)	(0.193)	(0.658)
T2 (past inflation)	-0.977***	-1.236***	-0.852***	-1.105***	-0.937***	-1.094***	-1.239***	-0.929***	-1.095***	-0.726
	(0.115)	(0.242)	(0.201)	(0.123)	(0.135)	(0.236)	(0.222)	(0.282)	(0.169)	(0.610)
T3 (inflation target)	-1.034***	-0.851***	-1.181***	-0.953***	-0.902***	-1.046***	-1.209***	-0.985***	-1.002***	-0.792
	(0.112)	(0.241)	(0.200)	(0.120)	(0.134)	(0.234)	(0.212)	(0.280)	(0.169)	(0.556)
T7 (Fed inflation forecast)	-1.102***	-0.956***	-1.208***	-1.050***	-1.013***	-0.857***	-1.385***	-0.772***	-1.085***	-0.811
	(0.112)	(0.246)	(0.200)	(0.120)	(0.133)	(0.228)	(0.223)	(0.286)	(0.167)	(0.551)
T8 (FOMC statement)	-1.186***	-1.213***	-1.268***	-1.197***	-1.109***	-1.121***	-1.475***	-1.093***	-1.381***	-1.194**
	(0.114)	(0.232)	(0.200)	(0.121)	(0.133)	(0.230)	(0.226)	(0.278)	(0.171)	(0.557)
T9 (*USA Today* coverage)	-0.437***	-0.477*	-0.410**	-0.477***	-0.354***	-0.683***	-0.535**	-0.525*	-0.298*	0.311
	(0.115)	(0.249)	(0.202)	(0.124)	(0.134)	(0.252)	(0.226)	(0.280)	(0.176)	(0.643)
Observations	16,285	2,937	5,614	13,285	12,163	2,977	4,081	2,525	6,937	792
R-squared	0.049	0.044	0.049	0.047	0.041	0.066	0.060	0.047	0.064	0.068

Notes: The table reports the average change in inflation expectations of individuals in each treatment group relative to those in the control group, broken down along observable characteristics of individuals. Columns (1) and (2) differentiate respondents by their race. Columns (3) and (4) differentiate respondents by whether they report being the sole shopper for their household or share the shopping with others. Columns (5) to (7) differentiate respondents by the number of bins on which they assign positive probabilities when completing the distributional inflation expectations question. Columns (8) to (10) differentiate respondents based on the amount of seconds it took them to complete the distributional inflation expectations question. In each case, revisions in beliefs are measured using the inflation forecasts at the end of the first wave of the survey relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. Results are from Huber robust regressions to control endogenously for outliers. Robust standard errors are reported in parentheses.

Appendix Table 1 (continued): Heterogeneous Contemporaneous Effects of Treatments on Inflation Expectation

	Age		
	40 or less	[41,60]	61 or more
	(1)	(2)	(3)
T5 (pop growth)	-0.100	-0.360**	-0.139
	(0.213)	(0.168)	(0.173)
T6 (UE)	-0.514**	-0.277	-0.256
	(0.206)	(0.169)	(0.174)
T4 (gas prices)	1.465***	1.437***	1.542***
	(0.241)	(0.186)	(0.180)
T2 (past inflation)	-0.852***	-1.145***	-1.028***
	(0.209)	(0.166)	(0.174)
T3 (inflation target)	-1.052***	-1.012***	-0.927***
	(0.202)	(0.169)	(0.166)
T7 (Fed inflation forecast)	-0.950***	-1.161***	-1.059***
	(0.203)	(0.168)	(0.167)
T8 (FOMC statement)	-1.307***	-1.103***	-1.211***
	(0.203)	(0.166)	(0.170)
T9 (*USA Today* coverage)	-0.526***	-0.540***	-0.263
	(0.201)	(0.173)	(0.174)
Observations	3,634	7,024	8,564
R-squared	0.053	0.048	0.045

Notes: The table reports the average change in inflation expectations of individuals in each treatment group relative to those in the control group, broken down by age of the respondent. Column (1) uses individuals aged 40 or less, column (2) uses individuals with ages from 41 to 60, and column (3) uses individuals aged 61 or more. In each case, revisions in beliefs are measured using the inflation forecasts at the end of the first wave of the survey relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. Results are from Huber robust regressions to control endogenously for outliers. Robust standard errors are reported in parentheses.

Appendix Table 2: Heterogeneous Three-Month Effects of Treatments on Inflation Expectation

	Enough credit	Not enough credit	Less than 1 month in savings	1-6 months in savings	6+ months in savings	Plan to buy durable	No plan to buy durable	No financial wealth	Positive financial wealth	Saving rate: 0	Saving rate: 0-10	Saving rate: 10+
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
T5 (pop growth)	-0.014	-0.072	-0.078	-0.020	0.044	-0.271	-0.060	-0.304*	-0.012	0.026	0.086	-0.353**
	(0.109)	(0.244)	(0.175)	(0.210)	(0.231)	(0.210)	(0.101)	(0.174)	(0.106)	(0.203)	(0.160)	(0.170)
T6 (UE)	-0.228**	-0.490*	-0.442**	-0.274	-0.142	-0.110	-0.343***	-0.501***	-0.209*	-0.797***	0.006	-0.348**
	(0.110)	(0.272)	(0.181)	(0.227)	(0.233)	(0.211)	(0.104)	(0.181)	(0.109)	(0.203)	(0.173)	(0.174)
T4 (gas prices)	-0.192*	-0.093	-0.239	-0.062	-0.150	-0.045	-0.214**	-0.323*	-0.123	-0.381*	0.085	-0.310*
	(0.110)	(0.257)	(0.178)	(0.221)	(0.216)	(0.212)	(0.104)	(0.182)	(0.107)	(0.200)	(0.167)	(0.173)
T2 (past inflation)	0.032	-0.109	-0.118	-0.010	-0.093	-0.198	0.006	-0.112	-0.005	-0.135	0.177	-0.225
	(0.107)	(0.267)	(0.176)	(0.220)	(0.226)	(0.205)	(0.103)	(0.177)	(0.107)	(0.203)	(0.161)	(0.177)
T3 (inflation target)	-0.282**	-0.177	-0.303*	-0.207	-0.458*	-0.406*	-0.312***	-0.688***	-0.178*	-0.388*	0.001	-0.470***
	(0.111)	(0.253)	(0.173)	(0.232)	(0.241)	(0.210)	(0.103)	(0.175)	(0.108)	(0.200)	(0.166)	(0.175)
T7 (Fed inflation forecast)	-0.169	-0.201	-0.144	-0.178	-0.050	-0.054	-0.278***	-0.567***	-0.100	-0.493**	-0.033	-0.238
	(0.112)	(0.252)	(0.177)	(0.229)	(0.231)	(0.221)	(0.103)	(0.180)	(0.109)	(0.215)	(0.162)	(0.173)
T8 (FOMC statement)	-0.131	-0.020	-0.106	-0.237	0.120	-0.190	-0.087	-0.265	-0.043	0.064	-0.280*	-0.032
	(0.108)	(0.272)	(0.174)	(0.216)	(0.228)	(0.210)	(0.101)	(0.173)	(0.107)	(0.205)	(0.162)	(0.172)
T9 (*USA Today* coverage)	-0.148	0.006	-0.117	-0.117	0.139	0.053	-0.161	-0.299*	-0.047	0.001	-0.118	-0.219
	(0.109)	(0.269)	(0.177)	(0.227)	(0.227)	(0.208)	(0.103)	(0.176)	(0.108)	(0.214)	(0.165)	(0.170)
Observations	8,782	1,853	3,963	2,100	1,696	2,434	10,448	4,070	8,812	2,885	4,179	3,013
R-squared	0.002	0.003	0.002	0.002	0.006	0.003	0.002	0.005	0.001	0.011	0.003	0.004

Notes: The table reports the average change in inflation expectations of individuals in each treatment group relative to those in the control group, broken down along observable characteristics of individuals. Columns (1) and (2) differentiate respondents by whether they report having enough credit on their credit cards to make an emergency payment equal to one month of their salary. Columns (3) to (5) differentiate respondents by the amount of their total liquid savings (checking plus savings accounts) relative to their monthly income. Columns (6) and (7) differentiate respondents by whether they plan to buy a car, house or other big ticket item over the next six months. Columns (8) and (9) differentiate between households depending on whether they report having any positive financial wealth. Columns (10) to (12) differentiate between respondents depending on what fraction of their monthly income they report having saved each of the last 12 months on average. In each case, revisions in beliefs are measured using the inflation forecasts from the second wave of the survey relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. Results are from Huber robust regressions to control endogenously for outliers. Robust standard errors are reported in parentheses.

Appendix Table 2 (continued): Heterogeneous Three-Month Effects of Treatments on Inflation Expectation

	Race		Who does groceries:		Number of bins used in inflation expectations distribution question			Time spent answering inflation expectations distribution question		
	White	Non-White	Just me	Shared	1 bin	2 bins	3+ bins	<20 sec.	20-120 sec.	120+ sec.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
T5 (pop growth)	-0.154	0.137	0.063	-0.137	-0.080	-0.129	-0.113	-0.023	-0.030	-0.425
	(0.100)	(0.214)	(0.185)	(0.106)	(0.117)	(0.213)	(0.194)	(0.272)	(0.156)	(0.472)
T6 (UE)	-0.370***	0.014	-0.107	-0.356***	-0.430***	-0.171	0.025	-0.465*	-0.419***	-0.393
	(0.104)	(0.217)	(0.182)	(0.110)	(0.121)	(0.220)	(0.200)	(0.273)	(0.153)	(0.496)
T4 (gas prices)	-0.170*	-0.292	0.130	-0.256**	-0.174	-0.308	-0.111	-0.118	-0.177	-0.750
	(0.103)	(0.226)	(0.182)	(0.109)	(0.122)	(0.218)	(0.192)	(0.287)	(0.154)	(0.480)
T2 (past inflation)	-0.088	0.183	0.285	-0.129	-0.072	-0.066	0.104	-0.167	-0.064	-0.667
	(0.102)	(0.210)	(0.181)	(0.107)	(0.119)	(0.220)	(0.192)	(0.264)	(0.154)	(0.510)
T3 (inflation target)	-0.300***	-0.451**	-0.165	-0.360***	-0.414***	-0.268	-0.137	-0.549*	-0.306**	0.272
	(0.103)	(0.207)	(0.182)	(0.108)	(0.120)	(0.200)	(0.202)	(0.280)	(0.151)	(0.514)
T7 (Fed inflation forecast)	-0.315***	0.094	-0.292	-0.204*	-0.309**	-0.284	0.008	-0.293	-0.242	-0.427
	(0.105)	(0.204)	(0.188)	(0.109)	(0.123)	(0.213)	(0.193)	(0.295)	(0.157)	(0.473)
T8 (FOMC statement)	-0.171*	0.148	0.151	-0.192*	-0.049	-0.125	-0.260	-0.325	-0.184	-0.541
	(0.102)	(0.203)	(0.182)	(0.107)	(0.118)	(0.222)	(0.189)	(0.265)	(0.156)	(0.481)
T9 (*USA Today* coverage)	-0.175*	0.100	-0.188	-0.066	-0.136	-0.334	0.075	-0.164	-0.149	0.062
	(0.103)	(0.209)	(0.181)	(0.109)	(0.122)	(0.216)	(0.185)	(0.268)	(0.150)	(0.496)
Observations	10,920	1,962	3,612	9,048	8,158	1,984	2,739	1,558	4,356	509
R-squared	0.002	0.007	0.005	0.002	0.003	0.002	0.002	0.005	0.002	0.015

Notes: The table reports the average change in inflation expectations of individuals in each treatment group relative to those in the control group, broken down along observable characteristics of individuals. Columns (1) and (2) differentiate respondents by their race. Columns (3) and (4) differentiate respondents by whether they report being the sole shopper for their household or share the shopping with others. Columns (5) to (7) differentiate respondents by the number of bins on which they assign positive probabilities when completing the distributional inflation expectations question. Columns (8) to (10) differentiate respondents based on the amount of seconds it took them to complete the distributional inflation expectations question. In each case, revisions in beliefs are measured using the inflation forecasts from the second wave of the survey relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. Results are from Huber robust regressions to control endogenously for outliers. Robust standard errors are reported in parentheses.

Appendix Table 2 (continued): Heterogeneous Three-Month Effects of Treatments on Inflation Expectation

Breakdown of Sample:	By Gender		By Income			By Education		
	Female	Male	Bottom Tercile	Middle Tercile	Highest Tercile	High school of less	Assoc. degree or some college	College or more
Treatment Group:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
T5 (pop growth)	-0.091	-0.104	-0.164	-0.081	-0.060	-0.173	-0.088	-0.063
	(0.116)	(0.147)	(0.170)	(0.191)	(0.129)	(0.196)	(0.170)	(0.127)
T6 (UE)	-0.311***	-0.256*	-0.442***	-0.108	-0.283**	-0.562***	-0.324*	-0.126
	(0.118)	(0.154)	(0.171)	(0.203)	(0.134)	(0.205)	(0.169)	(0.133)
T4 (gas prices)	-0.122	-0.272*	-0.294*	-0.018	-0.189	-0.252	0.109	-0.304**
	(0.122)	(0.143)	(0.169)	(0.193)	(0.137)	(0.208)	(0.176)	(0.127)
T2 (past inflation)	-0.040	-0.021	-0.156	0.082	-0.008	-0.310	0.005	0.077
	(0.119)	(0.145)	(0.176)	(0.195)	(0.128)	(0.214)	(0.172)	(0.124)
T3 (inflation target)	-0.339***	-0.308**	-0.476***	-0.347*	-0.224*	-0.307	-0.349**	-0.329***
	(0.118)	(0.148)	(0.166)	(0.198)	(0.134)	(0.201)	(0.173)	(0.128)
T7 (Fed inflation forecast)	-0.275**	-0.168	-0.479***	-0.153	-0.106	-0.724***	-0.247	-0.004
	(0.120)	(0.149)	(0.176)	(0.197)	(0.132)	(0.218)	(0.177)	(0.126)
T8 (FOMC statement)	-0.106	-0.108	-0.209	-0.050	-0.066	-0.340*	-0.114	0.018
	(0.118)	(0.143)	(0.171)	(0.192)	(0.131)	(0.198)	(0.173)	(0.127)
T9 (*USA Today* coverage)	-0.135	-0.090	-0.280	-0.132	-0.010	-0.128	-0.152	-0.098
	(0.117)	(0.152)	(0.172)	(0.194)	(0.133)	(0.198)	(0.174)	(0.130)
Observations	9,608	3,274	4,160	3,859	4,863	1,953	3,496	7,433
R-squared	0.002	0.003	0.003	0.002	0.002	0.007	0.003	0.003

Notes: The table reports the average change in inflation expectations of individuals in each treatment group relative to those in the control group, broken down along observable characteristics of individuals. Columns (1) and (2) separate households by gender, columns (3) to (5) consider where individuals rank in the income distribution of all respondents by tercile, columns (6) to (8) classify respondents using the highest level of education in the household. In each case, revisions in beliefs are measured using the inflation forecasts from the second wave of the survey relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. Results are from Huber robust regressions to control endogenously for outliers. Robust standard errors are reported in parentheses.

Appendix Table 3: Treatment effects by initial inflation expectations.

	Outcome: forecast revision immediately after treatment			
	Pre-treatment expected inflation <2%		Pre-treatment expected inflation ≥ 2%	
	(1)	(2)	(3)	(4)
T5 (pop growth)	0.195	0.099	-0.584***	-0.584***
	(0.143)	(0.143)	(0.139)	(0.139)
T6 (UE)	0.022	0.030	-0.615***	-0.640***
	(0.144)	(0.144)	(0.139)	(0.141)
T4 (gas prices)	1.959***	1.864***	1.263***	1.278***
	(0.167)	(0.165)	(0.147)	(0.148)
T2 (past inflation)	0.238*	0.175	-2.039***	-2.078***
	(0.141)	(0.140)	(0.135)	(0.136)
T3 (inflation target)	0.141	0.064	-1.774***	-1.743***
	(0.139)	(0.139)	(0.133)	(0.134)
T7 (Fed inflation forecast)	-0.110	-0.135	-1.863***	-1.872***
	(0.135)	(0.134)	(0.135)	(0.136)
T8 (FOMC statement)	-0.098	-0.164	-1.978***	-1.965***
	(0.137)	(0.138)	(0.134)	(0.135)
T9 (*USA Today* coverage)	0.052	-0.029	-0.872***	-0.904***
	(0.143)	(0.143)	(0.139)	(0.140)
Remove outliers	Yes	Yes	Yes	Yes
Using sampling weights	Yes	Yes	Yes	Yes
Controls for demographics	No	Yes	No	Yes
Observations	7,136	7,133	11,993	11,998
R^2	0.040	0.072	0.081	0.102

Notes: the table reports estimated treatment effects for respondents who report pre-treatment expected inflation above 2% (columns 3 and 4) and 2% or below (columns 1 and 2). See notes to Table 2 for more details.

Appendix Table 4: Descriptive Statistics of the Survey, Unfiltered Data

	Pre-treatment expected inflation			Pre-treatment perceived inflation			Pre-treatment perceived inflation target of the Fed		
	Mean	Median	St.Dev.	Mean	Median	St.Dev.	Mean	Median	St.Dev.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
All	3.62	3.00	5.12	7.77	3.00	15.56	16.95	5.00	29.48
Male	3.20	3.00	4.34	5.36	3.00	11.24	10.31	3.00	23.94
Female	3.79	3.00	5.41	8.77	3.00	16.93	19.55	5.00	31.00
White	3.55	3.00	4.94	7.16	3.00	14.07	15.10	4.00	27.69
Non-white	3.83	3.00	5.64	9.60	3.00	19.22	22.77	8.00	33.85
Income: tercile 1 (low)	3.87	3.00	5.92	10.06	3.00	18.95	23.29	8.00	35.31
Income: tercile 2	3.73	3.00	4.98	8.05	3.00	16.04	18.40	5.00	30.04
Income: tercile 3	3.37	3.00	4.48	5.88	3.00	11.71	11.70	3.00	22.90
Enough credit	3.44	3.00	4.49	6.26	3.00	12.46	12.66	3.00	25.02
Not enough credit	4.19	3.00	5.59	9.55	4.00	17.76	20.11	6.00	31.00
HTM: less than 1 month in savings	4.03	3.00	5.29	8.57	3.00	16.10	17.97	5.00	29.48
HTM: 1-6 months in savings	3.53	3.00	4.13	5.30	3.00	10.09	9.30	3.00	20.91
HTM: 6+ months in savings	3.11	3.00	3.52	4.17	3.00	6.90	7.78	3.00	17.27
Plan to buy durable	3.63	3.00	4.82	8.29	3.00	16.37	15.66	5.00	27.29
No plan to buy durable	3.61	3.00	5.21	7.63	3.00	15.32	17.37	5.00	30.14
No financial wealth	3.60	3.00	5.97	10.22	3.00	19.43	23.95	10.00	34.90
Positive financial wealth	3.63	3.00	4.55	6.33	3.00	12.52	12.39	3.00	24.27
Saving rate: 0	4.30	3.00	5.72	9.67	3.00	18.00	20.35	6.00	31.28
Saving rate: 0-10	3.69	3.00	4.39	6.19	3.00	11.56	11.63	3.75	23.33
Saving rate: 10+	3.40	3.00	4.30	6.43	3.00	12.46	12.47	3.00	23.91
Do grocery: me/self	3.57	3.00	4.95	7.03	3.00	14.16	15.46	5.00	27.35
Do grocery: share	3.65	3.00	5.17	8.01	3.00	15.94	17.43	5.00	30.04
Education: high school or less	3.67	3.00	5.83	10.00	3.00	19.13	26.22	10.00	36.83
Education: some college	3.76	3.00	5.31	8.16	3.00	15.93	17.22	5.00	28.95
Education: college or more	3.48	3.00	4.46	6.08	3.00	12.22	11.44	3.00	23.09

Notes: The table reports average values and cross-sectional deviations of expected inflation over the next twelve months (columns 1-3), perceived inflation over the previous twelve months (columns 4-6) and beliefs about the Federal Reserve's inflation target (columns 7-9). Data are not restricted/filtered in any way. Rows indicate which subset of the sample is used. Each row captures an observable characteristic of the respondent on which we condition.

Appendix Table 5: Treatment Effects over Time using only Repeat Participants

| Treatments | Outcome: forecast revision | | | | | |
| | Immediate revision | | Revision after 3 months | | Revision after 6 months | |
	(1)	(2)	(3)	(4)	(5)	(6)
T5 (pop growth)	-0.415***	-0.464***	-0.138	-0.134	0.126	0.153
	(0.150)	(0.149)	(0.104)	(0.104)	(0.111)	(0.113)
T6 (UE)	-0.629***	-0.649***	-0.375***	-0.374***	-0.019	-0.014
	(0.148)	(0.148)	(0.108)	(0.108)	(0.109)	(0.110)
T4 (gas prices)	1.066***	1.037***	-0.187*	-0.191*	0.057	0.061
	(0.159)	(0.157)	(0.107)	(0.108)	(0.110)	(0.112)
T2 (past inflation)	-1.199***	-1.299***	-0.030	-0.032	0.193*	0.219*
	(0.148)	(0.148)	(0.106)	(0.106)	(0.111)	(0.112)
T3 (inflation target)	-0.967***	-0.990***	-0.300***	-0.329***	0.109	0.155
	(0.143)	(0.144)	(0.107)	(0.106)	(0.109)	(0.110)
T7 (Fed inflation forecast)	-1.156***	-1.258***	-0.254**	-0.220**	0.165	0.244**
	(0.146)	(0.147)	(0.108)	(0.108)	(0.110)	(0.112)
T8 (FOMC statement)	-1.240***	-1.341***	-0.135	-0.139	0.087	0.113
	(0.144)	(0.144)	(0.104)	(0.104)	(0.111)	(0.113)
T9 (USA Today coverage)	-0.644***	-0.648***	-0.182*	-0.169	0.120	0.123
	(0.146)	(0.147)	(0.106)	(0.106)	(0.110)	(0.111)
Remove outliers	Yes	Yes	Yes	Yes	Yes	Yes
Using sampling weights	Yes	Yes	Yes	Yes	Yes	Yes
Controls for demographics	No	Yes	No	Yes	No	Yes
Observations	8,921	8,927	9,681	9,669	9,763	9,592
R^2	0.043	0.072	0.002	0.020	0.001	0.018

Notes: The table reports the average change in inflation expectations of individuals in each treatment group relative to those in the control group. Columns (1) and (2) consider the immediate change in expectations after the treatment, columns (3) and (4) consider the changes in beliefs after three months, columns (5) and (6) report changes in beliefs over a six month horizon. In each case, differences in beliefs are measured relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. For each time horizon, the second column uses the same specification as in the first column but augmented with respondent-specific controls. Results are from Huber robust regressions to control for outliers and influential observations. Robust standard errors are reported in parentheses. Only respondents who participate in all waves are included.

Appendix Table 6: Balancedness across Treatment Arms

	Treatment								
	T1 (control)	T2 (past inflation)	T3 (inflation target)	T4 (gas prices)	T5 (pop growth)	T6 (UE)	T7 (Fed inflation forecast)	T8 (FOMC statement)	T9 (USA Today coverage)
Age	51.08 (15.02)	51.57 (14.87)	51.95 (14.97)	52.54 (15.29)	51.42 (15.07)	51.08 (14.82)	51.26 (14.89)	51.86 (14.55)	50.96 (14.99)
Male share	0.30 (0.46)	0.28 (0.45)	0.29 (0.45)	0.31 (0.46)	0.30 (0.46)	0.28 (0.45)	0.29 (0.45)	0.29 (0.45)	0.29 (0.45)
White share	0.74 (0.44)	0.74 (0.44)	0.75 (0.43)	0.76 (0.43)	0.76 (0.42)	0.74 (0.44)	0.77 (0.42)	0.73 (0.45)	0.75 (0.43)
Household size	2.55 (1.35)	2.51 (1.29)	2.49 (1.34)	2.50 (1.31)	2.44 (1.29)	2.55 (1.31)	2.47 (1.31)	2.48 (1.30)	2.52 (1.34)
Employed share	0.57 (0.50)	0.56 (0.50)	0.54 (0.50)	0.52 (0.50)	0.57 (0.49)	0.56 (0.50)	0.54 (0.50)	0.53 (0.50)	0.57 (0.50)
Income ('000)	64.10 (37.41)	67.48 (36.92)	63.91 (37.63)	63.53 (37.54)	64.38 (37.43)	65.84 (37.65)	64.24 (36.99)	64.52 (37.29)	65.21 (36.98)
Saving rate	10.39 (14.88)	10.39 (14.08)	10.13 (14.32)	10.46 (15.19)	10.04 (14.77)	10.84 (15.20)	10.09 (13.91)	9.36 (13.19)	10.94 (15.19)
Pre-treatment inflation expectations	3.53 (5.17)	3.63 (5.27)	3.59 (5.19)	3.55 (5.12)	3.77 (4.99)	3.70 (5.06)	3.47 (5.23)	3.86 (4.97)	3.47 (5.11)

Notes: The table reports means and standard deviations (in parentheses) for different observable characteristics of respondents in each treatment arm, using sampling weights. The first row of the table indicates treatment arms for which moments are reported.

Appendix Table 7: Average Household Responses to Treatments, median regression.

| Treatments | Outcome: forecast revision | | | | | |
| | Immediate revision | | Revision after 3 months | | Revision after 6 months | |
	(1)	(2)	(3)	(4)	(5)	(6)
T5 (pop growth)	-0.350	-0.431	-0.150	-0.076	0.050	0.138
	(0.316)	(0.305)	(0.131)	(0.084)	(0.124)	(0.108)
T6 (UE)	-0.350	-0.575**	-0.150	-0.132	0.000	-0.013
	(0.331)	(0.262)	(0.119)	(0.086)	(0.068)	(0.081)
T4 (gas prices)	1.650***	1.615***	-0.050	0.037	0.000	0.076
	(0.333)	(0.320)	(0.152)	(0.107)	(0.107)	(0.089)
T2 (past inflation)	-1.350***	-1.445***	-0.100	-0.045	0.190*	0.112
	(0.277)	(0.218)	(0.136)	(0.087)	(0.109)	(0.094)
T3 (inflation target)	-1.350***	-1.498***	-0.150	-0.061	0.100	0.193*
	(0.270)	(0.218)	(0.136)	(0.093)	(0.176)	(0.109)
T7 (Fed inflation forecast)	-1.350***	-1.318***	-0.150	-0.043	0.150	0.250**
	(0.273)	(0.235)	(0.136)	(0.110)	(0.171)	(0.126)
T8 (FOMC statement)	-1.350	-1.506***	-0.150	-0.067	0.000	0.130
	(0.000)	(0.224)	(0.119)	(0.095)	(0.098)	(0.100)
T9 (*USA Today* coverage)	-0.350	-0.577**	0.050	0.029	0.240	0.233
	(0.397)	(0.294)	(0.167)	(0.102)	(0.153)	(0.153)
Remove outliers	Yes	Yes	Yes	Yes	Yes	Yes
Using sampling weights	Yes	Yes	Yes	Yes	Yes	Yes
Controls for demographics	No	Yes	No	Yes	No	Yes
Observations	22,582	22,582	14,003	14,001	13,580	13,369

Notes: The table reports the average change in inflation expectations of individuals in each treatment group relative to those in the control group. Columns (1) and (2) consider the immediate change in expectations after the treatment, columns (3) and (4) consider the changes in beliefs after three months, columns (5) and (6) report changes in beliefs over a six month horizon. In each case, differences in beliefs are measured relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. For each time horizon, the second column uses the same specification as in the first column but augmented with respondent-specific controls. Results are from median regressions. Robust standard errors are reported in parentheses.

Appendix Table 8: Average Household Responses to Treatments, OLS regression.

Treatments	Outcome: forecast revision					
	Immediate revision		Revision after 3 months		Revision after 6 months	
	(1)	(2)	(3)	(4)	(5)	(6)
T5 (pop growth)	-1.304	-1.220	-0.436	-0.466	0.029	0.041
	(0.886)	(0.857)	(0.308)	(0.307)	(0.320)	(0.322)
T6 (UE)	-2.742***	-2.748***	-0.458	-0.503	-0.201	-0.210
	(0.891)	(0.866)	(0.317)	(0.313)	(0.317)	(0.317)
T4 (gas prices)	0.084	0.214	-0.302	-0.314	-0.062	-0.028
	(0.919)	(0.892)	(0.315)	(0.315)	(0.329)	(0.332)
T2 (past inflation)	-3.632***	-3.376***	-0.124	-0.154	-0.046	-0.027
	(0.880)	(0.851)	(0.312)	(0.310)	(0.326)	(0.327)
T3 (inflation target)	-3.813***	-3.805***	0.005	0.007	0.400	0.472
	(0.898)	(0.870)	(0.308)	(0.306)	(0.318)	(0.320)
T7 (Fed inflation forecast)	-3.542***	-3.452***	-0.088	-0.109	0.374	0.459
	(0.861)	(0.835)	(0.306)	(0.304)	(0.313)	(0.317)
T8 (FOMC statement)	-2.645***	-2.622***	-0.083	-0.106	0.118	0.235
	(0.906)	(0.878)	(0.308)	(0.307)	(0.311)	(0.314)
T9 (*USA Today* coverage)	-0.148	0.005	0.212	0.229	0.301	0.354
	(0.933)	(0.896)	(0.312)	(0.310)	(0.327)	(0.327)
Remove outliers	Yes	Yes	Yes	Yes	Yes	Yes
Using sampling weights	Yes	Yes	Yes	Yes	Yes	Yes
Controls for demographics	No	Yes	No	Yes	No	Yes
Observations	22,582	22,582	14,003	14,001	13,580	13,369
R^2	0.005	0.052	0.001	0.013	0.001	0.013

Notes: The table reports the average change in inflation expectations of individuals in each treatment group relative to those in the control group. Columns (1) and (2) consider the immediate change in expectations after the treatment, columns (3) and (4) consider the changes in beliefs after three months, columns (5) and (6) report changes in beliefs over a six month horizon. In each case, differences in beliefs are measured relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. For each time horizon, the second column uses the same specification as in the first column but augmented with respondent-specific controls. Results are from median regressions. Robust standard errors are reported in parentheses.

Appendix Table 9: Average Household Responses to Treatments, OLS regression, revisions trimmed at bottom and top10%.

Treatments	Outcome: forecast revision					
	Immediate revision		Revision after 3 months		Revision after 6 months	
	(1)	(2)	(3)	(4)	(5)	(6)
T5 (pop growth)	-0.170	-0.208	-0.175	-0.177	0.052	0.088
	(0.263)	(0.257)	(0.144)	(0.144)	(0.162)	(0.163)
T6 (UE)	-0.299	-0.346	-0.122	-0.123	-0.080	-0.061
	(0.263)	(0.259)	(0.148)	(0.146)	(0.151)	(0.151)
T4 (gas prices)	1.124***	1.071***	-0.125	-0.124	0.007	0.003
	(0.267)	(0.260)	(0.150)	(0.148)	(0.159)	(0.159)
T2 (past inflation)	-1.087***	-1.052***	-0.052	-0.043	0.261*	0.300*
	(0.265)	(0.260)	(0.147)	(0.146)	(0.156)	(0.157)
T3 (inflation target)	-1.439***	-1.460***	-0.172	-0.163	0.215	0.239
	(0.252)	(0.247)	(0.147)	(0.147)	(0.158)	(0.158)
T7 (Fed inflation forecast)	-0.838***	-0.878***	-0.037	-0.022	0.256*	0.303**
	(0.276)	(0.270)	(0.150)	(0.149)	(0.154)	(0.154)
T8 (FOMC statement)	-1.153***	-1.197***	-0.078	-0.063	0.177	0.236
	(0.264)	(0.258)	(0.157)	(0.155)	(0.162)	(0.162)
T9 (*USA Today* coverage)	-0.221	-0.207	-0.124	-0.117	0.143	0.180
	(0.275)	(0.270)	(0.149)	(0.148)	(0.158)	(0.158)
Remove outliers	Yes	Yes	Yes	Yes	Yes	Yes
Using sampling weights	Yes	Yes	Yes	Yes	Yes	Yes
Controls for demographics	No	Yes	No	Yes	No	Yes
Observations	18,415	18,415	9,717	9,716	9,511	9,376
R^2	0.014	0.052	0.000	0.012	0.002	0.016

Notes: The table reports the average change in inflation expectations of individuals in each treatment group relative to those in the control group. Columns (1) and (2) consider the immediate change in expectations after the treatment, columns (3) and (4) consider the changes in beliefs after three months, columns (5) and (6) report changes in beliefs over a six month horizon. In each case, differences in beliefs are measured relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. For each time horizon, the second column uses the same specification as in the first column but augmented with respondent-specific controls. Results are from OLS regressions. The dependent variable is trimmed at bottom and top 10 percent. Robust standard errors are reported in parentheses.

Appendix Table 10: Posterior Beliefs by Treatments, control for demographics

Treatments	Immediate revision		Revision after 3 months		Revision after 6 months	
	Intercept (b)	Slope (γ)	Intercept (b)	Slope (γ)	Intercept (b)	Slope (γ)
	(1)	(2)	(3)	(4)	(5)	(6)
T1 (control)		0.627***		0.265***		0.305***
		(0.021)		(0.016)		(0.017)
Relative to control group						
T5 (pop growth)	0.203*	-0.200***	-0.687***	0.198***	-0.263**	0.135***
	(0.119)	(0.028)	(0.104)	(0.024)	(0.110)	(0.025)
T6 (UE)	0.380***	-0.262***	-0.210**	0.007	-0.351***	0.099***
	(0.118)	(0.027)	(0.105)	(0.023)	(0.110)	(0.026)
T4 (gas prices)	2.007***	-0.177***	-0.250**	0.072***	0.005	-0.046*
	(0.131)	(0.028)	(0.106)	(0.024)	(0.109)	(0.025)
T2 (past inflation)	0.330***	-0.480***	-0.064	-0.032	0.182*	-0.063***
	(0.109)	(0.024)	(0.101)	(0.022)	(0.107)	(0.024)
T3 (inflation target)	0.164	-0.420***	-0.500***	0.046**	-0.188*	0.088***
	(0.107)	(0.025)	(0.103)	(0.023)	(0.107)	(0.024)
T7 (Fed inflation forecast)	0.048	-0.443***	-0.191*	0.075***	0.167	0.055**
	(0.106)	(0.025)	(0.104)	(0.023)	(0.112)	(0.025)
T8 (FOMC statement)	-0.053	-0.457***	-0.297***	0.008	0.140	-0.040*
	(0.109)	(0.026)	(0.101)	(0.023)	(0.110)	(0.024)
T9 (*USA Today* coverage)	0.216*	-0.359***	-0.303***	0.091***	0.025	0.017
	(0.113)	(0.027)	(0.103)	(0.023)	(0.112)	(0.025)
Remove outliers	Yes		Yes		Yes	
Using sampling weights	Yes		Yes		Yes	
Controls for demographics	Yes		Yes		Yes	
Observations	18,869		13,148		12,587	
R^2	0.283		0.285		0.292	

Notes: The table reports the slope and intercept in the following regression: $E_i^{post}\pi = a + b * Treat_i + \gamma * Treat_i * E_i^{pre}\pi + \psi * E_i^{pre}\pi + Controls + error$. Columns (1) and (2) consider the immediate change in expectations after the treatment, columns (3) and (4) are for beliefs after three months, columns (5) and (6) are for beliefs after six months. Results are from Huber robust regressions to control for outliers and influential observations. Robust standard errors are reported in parentheses.

Appendix Table 11: Extensive margin for purchases of durable goods by type of good.

Dep. var. is indicated in the title of the panel	Actual spending, horizon, month	
	1st follow-up wave	2nd follow-up wave
	(1)	(2)
Panel A. Spending on housing, ×100		
Posterior inflation expectations	-0.040	-0.030
	(0.033)	(0.046)
Observations	10,471	10,428
R-squared	0.089	0.097
1st stage F-stat	105.6	107.5
Panel B. Spending on cars, ×100		
Posterior inflation expectations	-0.261**	-0.399***
	(0.101)	(0.154)
Observations	10,405	10,381
R-squared	0.071	0.083
1st stage F-stat	104.1	102.7
Panel C. Spending on appliances, electronics and similar items, ×100		
Posterior inflation expectations	-1.056***	-1.716***
	(0.209)	(0.304)
Observations	10,418	10,373
R-squared	0.039	0.046
1st stage F-stat	101.8	95.73

Notes: the table reports estimates of the causal effect of inflation expectation on the extensive margin for purchases of durable goods. See notes to Table 9 for more details.

Appendix Table 12: Average Household Responses of Unemployment Expectations to Treatments.

Treatments	Outcome: immediate forecast revision of unemployment forecast	
	(1)	(2)
T5 (pop growth)	-0.026	-0.027
	(0.046)	(0.046)
T6 (UE)	-1.041***	-1.052***
	(0.050)	(0.049)
T4 (gas prices)	0.173***	0.166***
	(0.046)	(0.047)
T2 (past inflation)	-0.185***	-0.195***
	(0.046)	(0.047)
T3 (inflation target)	-0.128***	-0.129***
	(0.046)	(0.046)
T7 (Fed inflation forecast)	-0.125***	-0.127***
	(0.045)	(0.046)
T8 (FOMC statement)	-0.375***	-0.384***
	(0.046)	(0.046)
T9 (*USA Today* coverage)	-0.109**	-0.109**
	(0.046)	(0.046)
Remove outliers	Yes	Yes
Using sampling weights	Yes	Yes
Controls for demographics	No	Yes
Observations	18,244	18,262
R^2	0.046	0.057

Notes: The table reports the average change in unemployment expectations of individuals in each treatment group relative to those in the control group. Columns (1) and (2) consider the immediate change in expectations after the treatment. In each case, differences in beliefs are measured relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. Results are from Huber robust regressions to control for outliers and influential observations. Robust standard errors are reported in parentheses.

Appendix Table 13: Treatment effects by gender.

| Breakdown of Sample:	Revision of inflation expectations (baseline)		Normalized revision of inflation expectations	
	Female	Male	Female	Male
Treatment Group:	(1)	(2)	(3)	(4)
T5 (pop growth)	-0.157	-0.179	-0.055	-0.050
	(0.223)	(0.255)	(0.121)	(0.121)
T6 (UE)	-0.576***	-0.166	-0.134	-0.052
	(0.217)	(0.252)	(0.118)	(0.126)
T4 (gas prices)	1.702***	1.481***	0.904***	0.876***
	(0.238)	(0.280)	(0.127)	(0.139)
T2 (past inflation)	-1.500***	-0.623**	-0.372***	-0.126
	(0.208)	(0.255)	(0.114)	(0.131)
T3 (inflation target)	-1.487***	-0.551**	-0.371***	-0.060
	(0.205)	(0.241)	(0.112)	(0.119)
T7 (Fed inflation forecast)	-1.429***	-0.695***	-0.413***	-0.209*
	(0.213)	(0.239)	(0.118)	(0.122)
T8 (FOMC statement)	-1.602***	-0.851***	-0.366***	-0.286**
	(0.212)	(0.250)	(0.118)	(0.127)
T9 (*USA Today* coverage)	-0.790***	-0.236	-0.260**	-0.045
	(0.214)	(0.274)	(0.116)	(0.131)
Observations	4,978	2,080	3,872	1,769
R-squared	0.069	0.053	0.058	0.059

Notes: The table reports treatment effects on inflation expectations by gender. Columns (1) and (2) reproduce results reported in Table 8 but the sample is restricted to respondents who report positive probabilities for at least two bins of inflation outcomes in the pre-treatment inflation expectation question. Columns (3) and (4) report treatment effects for revisions normalized by pre-treatment uncertainty about future inflation, that is, $\left(E_i^{Post}\pi - E_i^{Prior}\pi\right)/Estd_i^{Prior}\pi$, where $Estd_i^{Prior}\pi$ is the standard deviation of the distribution for inflation expectations reported by a respondent. All estimates are based on Huber robust regressions. Heteroscedasticity robust standard errors are reported in parentheses. ***, **, * denote statistical significance at 1, 5, and 10 percent levels.

Appendix Table 14: Average Household Responses to Treatments using Generalized Beta Distribution.

Treatments	Outcome: forecast revision					
	Immediate revision		Revision after 3 months		Revision after 6 months	
	(1)	(2)	(3)	(4)	(5)	(6)
T5 (pop growth)	-0.218**	-0.229**	-0.095	-0.106	0.067	0.076
	(0.105)	(0.104)	(0.093)	(0.094)	(0.100)	(0.101)
T6 (UE)	-0.339***	-0.332***	-0.393***	-0.412***	-0.134	-0.130
	(0.104)	(0.104)	(0.095)	(0.096)	(0.099)	(0.099)
T4 (gas prices)	1.447***	1.447***	-0.167*	-0.163*	-0.123	-0.155
	(0.114)	(0.113)	(0.095)	(0.097)	(0.100)	(0.100)
T2 (past inflation)	-1.031***	-1.062***	-0.066	-0.085	0.301***	0.304***
	(0.104)	(0.103)	(0.093)	(0.094)	(0.100)	(0.100)
T3 (inflation target)	-0.991***	-0.985***	-0.389***	-0.444***	0.003	0.008
	(0.102)	(0.102)	(0.095)	(0.095)	(0.098)	(0.099)
T7 (Fed inflation forecast)	-1.040***	-1.061***	-0.329***	-0.318***	0.148	0.183*
	(0.102)	(0.102)	(0.095)	(0.096)	(0.099)	(0.099)
T8 (FOMC statement)	-1.193***	-1.212***	-0.155	-0.167*	0.102	0.139
	(0.102)	(0.102)	(0.095)	(0.096)	(0.102)	(0.103)
T9 (*USA Today* coverage)	-0.451***	-0.477***	-0.174*	-0.222**	0.126	0.104
	(0.105)	(0.104)	(0.094)	(0.095)	(0.099)	(0.099)
Remove outliers	Yes	Yes	Yes	Yes	Yes	Yes
Using sampling weights	Yes	Yes	Yes	Yes	Yes	Yes
Controls for demographics	No	Yes	No	Yes	No	Yes
Observations	18,982	18,972	11,645	11,651	11,534	11,416
R^2	0.047	0.061	0.003	0.020	0.002	0.017

Notes: The table reports the average change in inflation expectations of individuals in each treatment group relative to those in the control group. Inflation expectations are measured as means of the generalized beta distribution estimated for each respondent separately, as in the Survey of Consumer Expectations. Columns (1) and (2) consider the immediate change in expectations after the treatment, columns (3) and (4) consider the changes in beliefs after three months, columns (5) and (6) report changes in beliefs over a six month horizon. In each case, differences in beliefs are measured relative to initial beliefs from the first wave measured before all treatments. Treatments are described in detail in the text. For each time horizon, the second column uses the same specification as in the first column but augmented with respondent-specific controls. Results are from Huber robust regressions to control for outliers and influential observations. Robust standard errors are reported in parentheses.

Appendix Figure 1. The joint distribution of posterior (immediately after the treatment) and prior beliefs about future inflation.
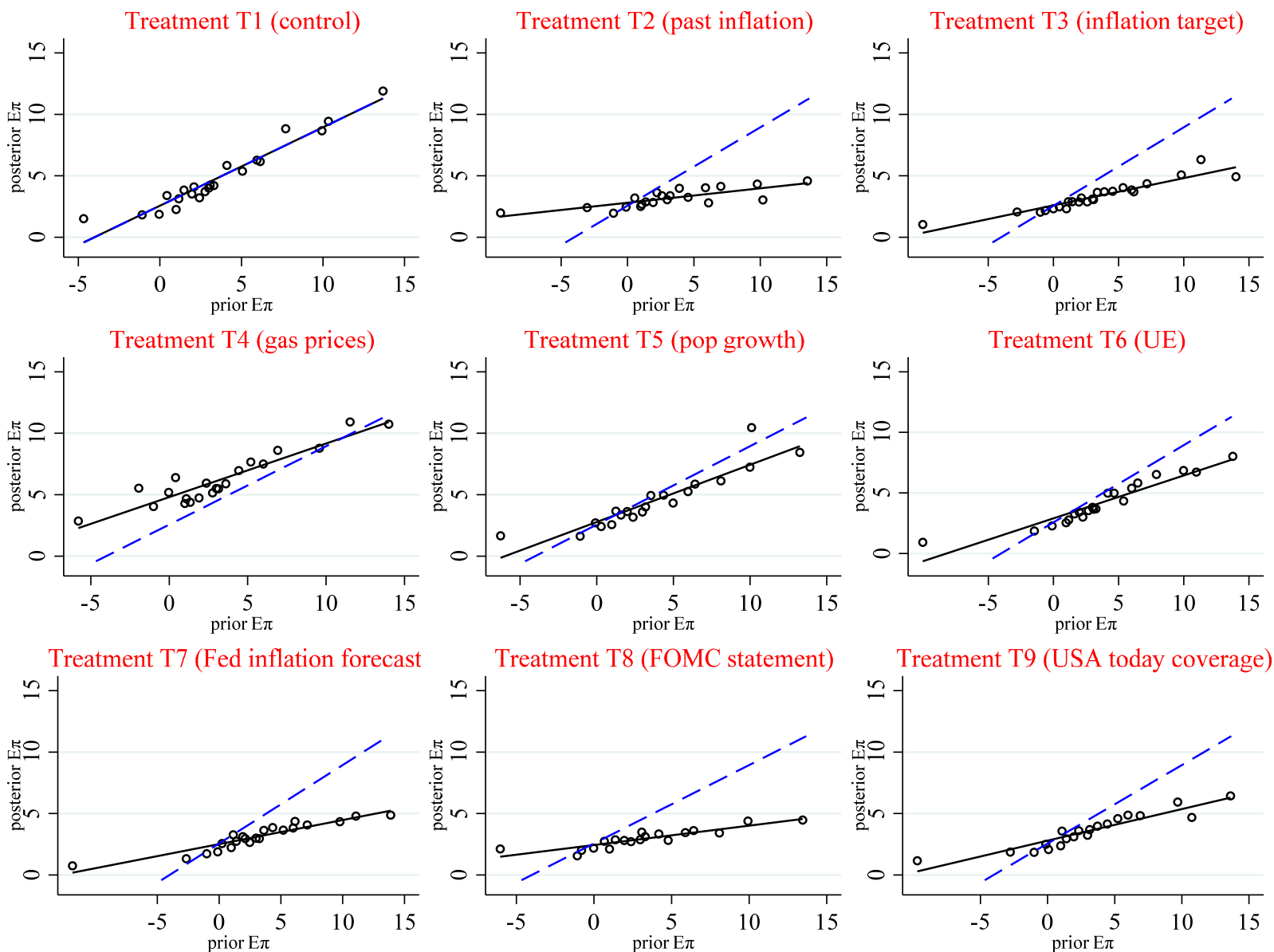
Notes: the figure reports a binscatter plot of 12-month-ahead inflation expectations before treatment and immediately after treatment. Each circle represents 2.5 percent of the sample. The black line shows fitted regression. The blue line shows fitted regression for the control group.

Appendix Figure 2. Distribution of revisions of inflation forecasts (immediately after treatment) by treatment arm.