# Online Appendix: Risk Exposure and Acquisition of Macroeconomic Information

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## Summary of the online appendix

Section A provides details on the variation between group-level unemployment rates based on the ACS or the CPS, which we exploit for our information treatment. In Section B we discuss additional results. Sections C and D provide additional figures and tables, respectively. Section E presents the experimental instructions.

## A    Details on treatment variation

The respondents in our experiment are randomly assigned to receive information on the actual change in the unemployment rate in their demographic group between 2007 and 2010 calculated either based on data from the American Community Survey (ACS) or from the Current Population Survey (CPS). This appendix section provides details on the variation in the information calculated from ACS or CPS.

When calculating group-level unemployment rates in 2007 and in 2010 from the ACS and the CPS, we start with the full samples of individuals that are at least 18 years old, are either full-time employed, part-time employed or unemployed (dropping those out of the labor force), and do not work in the armed forces. We define demographic cells based on three groups of highest educational attainment (below highschool, highschool degree, college degree), ten age groups based on age in 2007 (18-24, 25-39, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65 and older), gender (male, female), nine census divisions (New England, Middle Atlantic, South Atlantic, East South Central, West South Central, East North Central, West North Central, Mountain, Pacific) and 92 3-digit occupation groups based on the 2000 Census occupation definition (see `https://www.cdc.gov/niosh/topics/coding/pdfs/2000_Census_Occupation.pdf` for an overview). The occupation is based on the job that an

individual earns most money from, and unemployed individuals indicate the occupation they had in their most recent job.

We next drop all demographic cells with less than 10 individuals in order to still have a meaningful number of respondents to calculate group-level unemployment rates. In the case of the ACS, this removes 37,012 out of 75,508 groups, but the remaining sample still accounts for 95.4 percent of the population (for the CPS this removes 28,021 out of 59,212 groups and leaves us with a sample that accounts for 93 percent of the population). Subsequently, we drop from both datasets demographic cells which are either missing in the ACS or in the CPS in the year 2007 or in the year 2010. The remaining dataset still accounts for about 86 percent of the population. In the beginning of our survey we screen out potential respondents that belong to demographic groups which are missing in the Census data after this procedure. This enables us to use the same level of granularity to calculate group-level changes in unemployment rates for all participants in the actual experiment.

Weighted by the numbers of individuals in the ACS data of the relevant year in the different demographic groups, the ACS gives slightly higher average unemployment rates than the CPS (3.57 percent vs 2.39 percent in 2007 and 7.27 percent vs 6.16 percent in 2010). Our numbers are somewhat smaller than the official BLS numbers (4.6 percent in 2007 and 9.6 percent in 2010) as a consequence of dropping smaller demographic cells, which faced higher unemployment rates. Figure A.7 displays binned scatter plots of group-level unemployment rates in 2007 and in 2010 calculated based on ACS data against unemployment rates based on CPS data using a group-level dataset containing information from both the ACS and the CPS. The figure uses the numbers of individuals in the ACS data of the relevant year in the different demographic groups as weights. There is a strong linear relationship between group-level unemployment rates calculated based on the ACS and rates calculated from the CPS. The slopes are 0.4679 (standard error of 0.0147) in 2007 and 0.4251 (standard error of 0.0105) in 2010 when regressing ACS rates on CPS rates and a constant. However, the R-squared is 0.2393 in 2007 and 0.3079 in 2010, indicating that sampling variation and procedural differences between the surveys provide a substantial degree of variation

that we exploit in the information provision in our experiment.

# B  Additional results

## B.1  Coefficient estimates on other included variables

Table A.4 displays the first stage estimates of the effect of the information treatment on perceived personal exposure to recessions. The coefficient estimates on $\Delta$ Unempl. Incr. capture the effect of the exogenous component of the information discussed in the main text (Section 3.2). As explained in Section 3.2, the coefficient on the potentially endogenous component of the information, *Unempl. Incr.*$^{alt}$, captures i) effects of information, ii) effects of actual risk exposure not working through the displayed information, and iii) omitted variables that are correlated with actual risk exposure. The exogenous and the endogenous components of the information have very similar effects on respondents' posterior beliefs about their own risk exposure. This implies that effects of actual risk exposure not working through the displayed information and effects of omitted variables are either small (conditional on the included demographic controls) or cancel each other out. In addition, the exogenous component of the provided information on the baseline unemployment rate before the recession, $\Delta$*Unempl. 2007*, increases people's perceived risk of becoming unemployed during the next recession, while the potentially endogenous component, *Unempl. 2007*$^{alt}$, has no significant effect. One explanation for the positive effects of the anchor is that respondents might infer from a higher provided baseline unemployment rate to a higher rate of labor market turnover, including a higher job loss rate, in their group.

Table A.5 displays the reduced form effects of the information treatment on the demand for the different macroeconomic forecasts. Again, the endogenous and the exogenous components of the provided information have similar effects: information on a higher group-level unemployment rate increases the demand for the recession forecast, and decreases the demand for the interest rate forecast. A higher exogenous component of the provided anchor is also associated with a lower demand for the interest rate forecast, but has no effect on demand for other macroeconomic forecasts.

The potentially endogenous component of the anchor has no effect. Throughout our main analysis, our focus is on the perceived *increase* in unemployment rates during recessions and we control for baseline unemployment rates in all main regressions.

## B.2 Robustness and alternative explanations

In this section we present various robustness checks and discuss alternative explanations of our findings.

### B.2.1 Different sets of control variables

As explained in section 3.2, our identification strategy relies on decomposing the treatment information into an exogenous and a potentially endogenous component. The exogenous component relies on the difference in noise between the provided and the alternative signal, and should be uncorrelated with omitted variables. To rule out any concerns that our findings are driven by omitted variables, e.g. due to potential imbalances in the treatment assignment, we demonstrate robustness to using different sets of control variables in Tables A.8 and A.9. Panel A shows our baseline specifications. In Panel B we drop all demographic control variables. In Panel C we include all baseline controls and in addition control for respondents' prior beliefs about their group's exposure to macroeconomic risk. In Panels D and E we control for fixed effects for more or less fine-grained cells based on interactions of gender, age, occupation group and education – the variables that are used to calculate the treatment information. In Panel F we also add respondents' household income to the construction of cells for which we include dummies. Although our results naturally become more noisily measured when we control for a higher share of the treatment variation through fine-grained cell fixed effects, they remain similar in magnitude and statistically significant, indicating that omitted variable bias is unlikely.

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### B.2.2 Experimenter demand effects

It could be possible that treatment effects are confounded by experimenter demand effects, i.e. by respondents guessing the purpose of the study and trying to conform with it depending on the signal they received. We believe that demand effects are unlikely for three reasons. First, recent evidence suggests that participants in online experiments respond only very moderately to explicit signals of experimenter expectations (de Quidt et al., 2018). Second, our use of an active control group design, where every participant is exposed to information, makes differences across respondents receiving different information very subtle. Third, virtually no respondent guessed the actual purpose of our study when asked in a mandatory open text entry question at the end of the survey.

### B.2.3 Numerical anchoring

Our estimates of the effects of information on people's perceived probability of becoming unemployed during the next recession could, in principle, be affected by unconscious numerical anchoring (Tversky and Kahneman, 1974). We think that this is unlikely for two reasons: First, we deliberately used a different scale for the quantitative post-treatment beliefs as compared to the information treatment (percent chance of becoming unemployed vs. number of unemployed out of 1,000 individuals). Second, we find very similar patterns using qualitative measures of perceived exposure to macroeconomic risk.

## B.3 Heterogeneity across demographic groups

How do changes in perceived risk exposure in response to information vary across demographic groups? Changes in perceived risk exposure are stronger for individuals without a college degree (Panel A of Table A.6) and those with lower incomes (Panel C), although not significantly so. These patterns are consistent with individuals in these groups being less confident in their prior beliefs. There are no major differences in first stage effects between men and women (Panels E and F), or between younger

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and older individuals (Panels G and H).

Which demographic subgroups are driving our main results on information demand? The treatment effect on demand for the recession forecast is driven by individuals with less than a college degree, in line with a stronger first stage among these individuals (Panel A of Table A.7). Moreover, the reduced form effect is significant only among younger individuals (Panel G). Differences according to income (Panels C and D) or gender (Panels E and F) are less pronounced.

# C   Additional figures

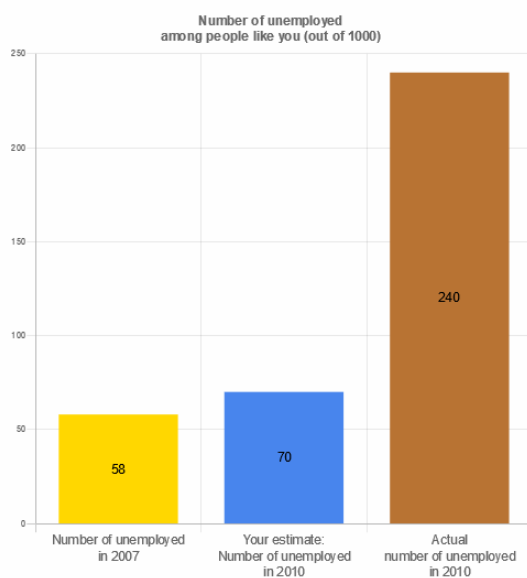Figure A.1: Example Screen of the information treatment: ACS

**Information about unemployment after the Great Recession**

You said that you think that among 1000 people **with your characteristics 70 were unemployed in 2010**, when the unemployment rate peaked.

We now would like to give you information on the effect of the Great Recession in 2008/2009 on people that before the recession started

- had the same occupation (Vehicle and Mobile Equipment Mechanics, Installers, and Repairers) as you have now.
- lived in the same census division (Mountain) as you now.
- had the same education level (12th grade or less (no high school degree)) as you have now.
- had the same age (18 - 24) as you have now.
- and have the same gender (Male).

According to official US census data, **240 out of 1000** people **with your characteristics** were **unemployed in 2010**, when the unemployment rate peaked.

Number of unemployed
among people like you (out of 1000)



**Source:** American Community Survey

*Notes:* This figure displays an example of the information provision in the ACS treatment arm.

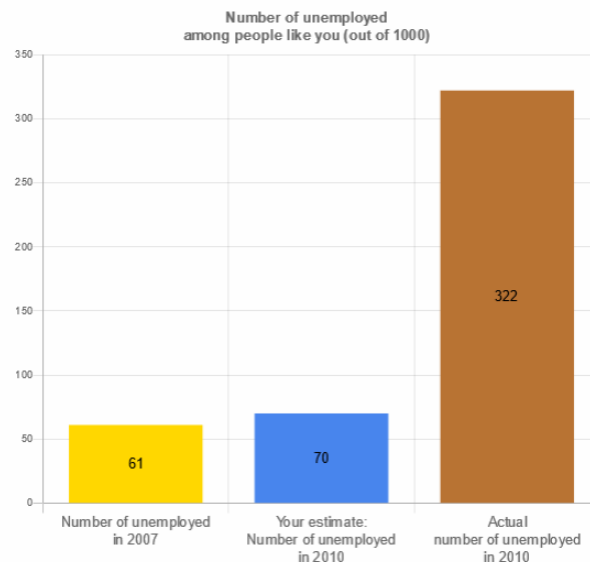Figure A.2: Example Screen of the information treatment: CPS

**Information about unemployment after the Great Recession**

You said that you think that among 1000 people **with your characteristics 70 were unemployed in 2010**, when the unemployment rate peaked.

We now would like to give you information on the effect of the Great Recession in 2008/2009 on people that before the recession started

- had the same occupation (Vehicle and Mobile Equipment Mechanics, Installers, and Repairers) as you have now.
- lived in the same census division (Mountain) as you now.
- had the same education level (12th grade or less (no high school degree)) as you have now.
- had the same age (18 - 24) as you have now.
- and have the same gender (Male).

According to official US census data, **322 out of 1000** people **with your characteristics** were **unemployed in 2010**, when the unemployment rate peaked.

Number of unemployed
among people like you (out of 1000)

| | |
|---|---|
| Number of unemployed in 2007 | 61 |
| Your estimate: Number of unemployed in 2010 | 70 |
| Actual number of unemployed in 2010 | 322 |

**Source**: Current Population Survey

*Notes:* This figure displays an example of the information provision in the CPS treatment arm.

Figure A.3: Histogram: Prior beliefs about group-level unemployment rate change between 2007 and 2010

Panel A: Full sample        Panel B: ACS info shown        Panel B: CPS info shown
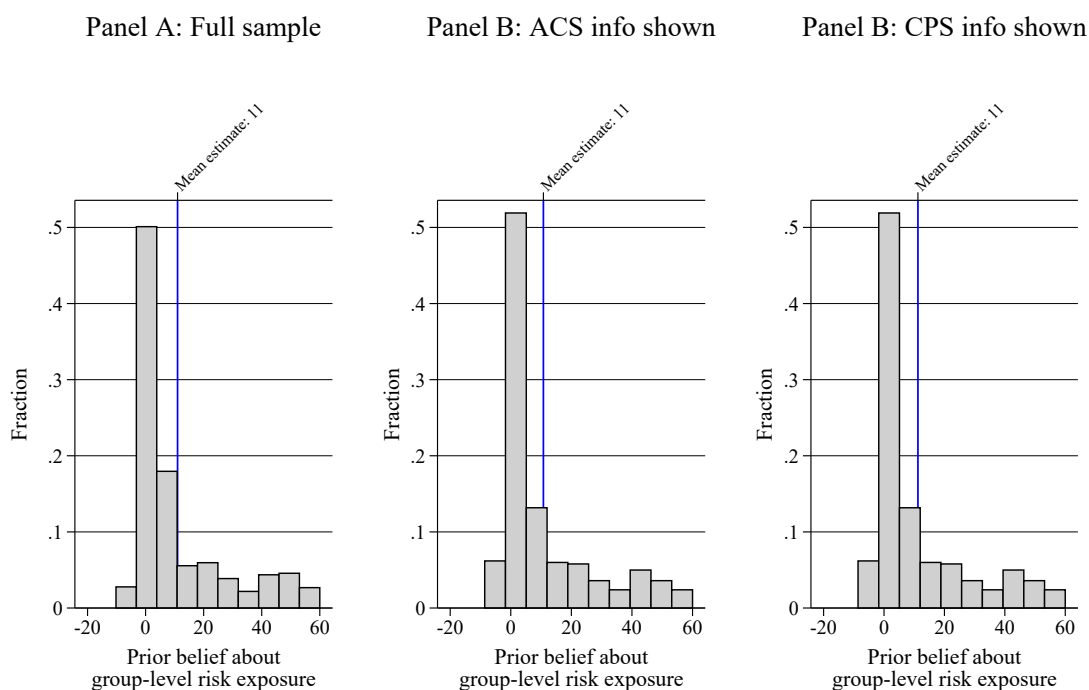


*Notes:* This figure displays histograms of respondents' prior beliefs about the percentage point change in the unemployment rate among individuals with similar characteristics as themselves (in terms of age, education, gender, occupation and census division of residence) between 2007 and 2010, for the full sample (Panel A) and separately for those 501 respondents who received anchor and information from the ACS (Panel B) and those 507 respondents who received anchor and information from the CPS (Panel C).

Figure A.4: Binscatter: Prior belief and actual group-level unemployment rate change between 2007 and 2010
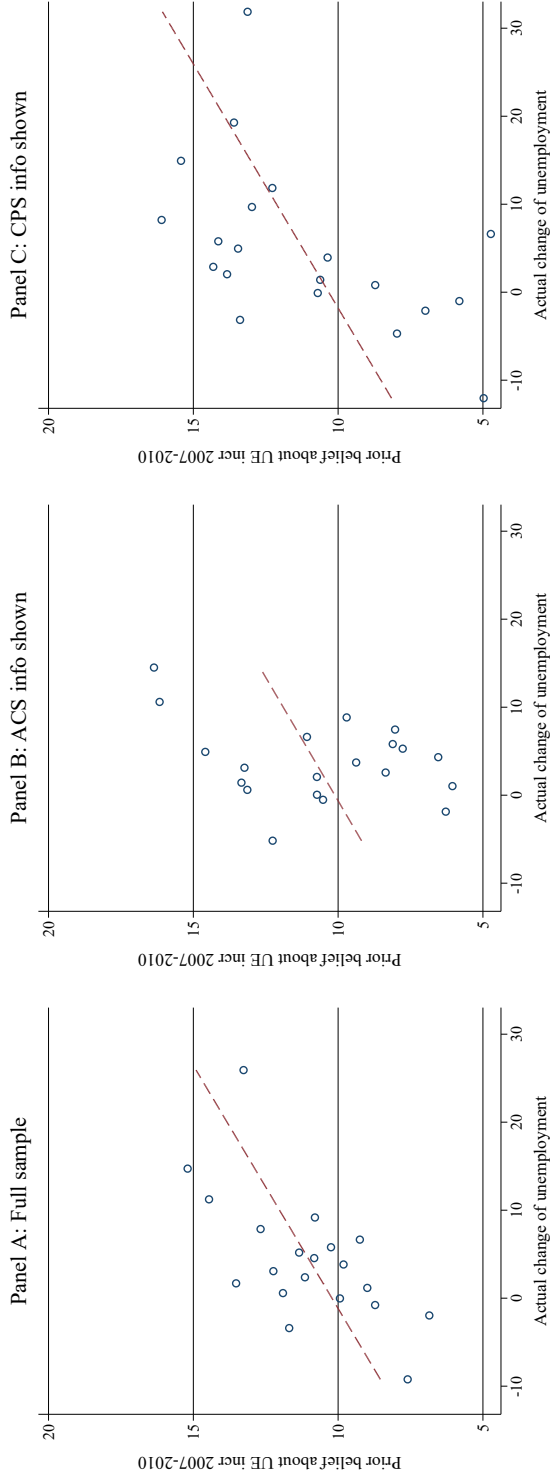


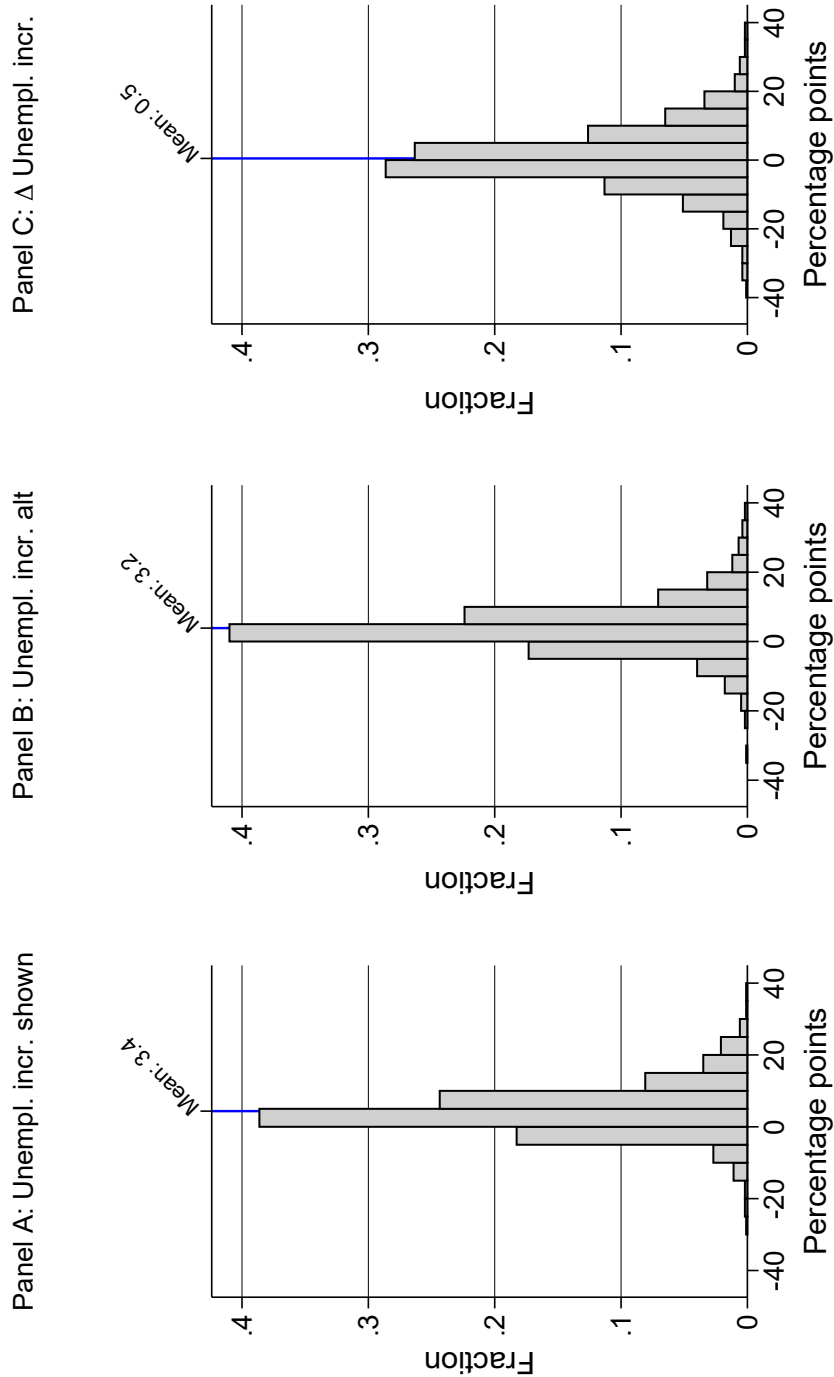*Notes*: This figure displays binned scatterplots of respondents' perceived percentage point changes in the unemployment rate among individuals with similar characteristics as themselves (in terms of age, education, gender, occupation and census division of residence) between 2007 and 2010 on the y-axis against the actual percentage point change in the unemployment rate on the x-axis. Panel A is based on the full sample (N=1,008), Panel B is restricted to the respondents who receive the unemployment rate of their demographic group in 2007 based on the ACS as an anchor (N=501), Panel C is restricted to those exposed to the CPS-based anchor (N=507). The outcome on the y-axis is the difference between the respondent's belief about the unemployment rate in her demographic group in 2010 and the anchor she saw about the unemployment rate in the same group in 2007. The x-axis corresponds to the difference between the treatment signal about the unemployment rate in 2010 and the 2007 anchor the respondent receives. All plots partial out the anchor that was shown, i.e. the group-level unemployment rate in 2007. The estimated linear coefficient depicted by the dashed line corresponds to 0.18 (p=0.07) for the full sample (Panel A), 0.18 (p=0.26) for the ACS group (Panel B) and 0.18 (p=0.02) for the CPS group (Panel C).

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Figure A.5: Histogram: Shown signal, alternative signal and the difference in signals about change in group-level unemployment rate between 2007 and 2010

Panel A: Unempl. incr. shown          Panel B: Unempl. incr. alt          Panel C: Δ Unempl. incr.



*Notes*: This figure displays histograms on the sample distributions of the shown signal (Panel A), the alternative, non-shown signal (Panel B) and the difference in the two signals (Panel C) about the percentage point change in the unemployment rate among individuals with similar characteristics as the respondents (in terms of age, education, gender, occupation and census division of residence) over the Great Recession.

Figure A.6: Histogram: Posterior perceived probability of becoming personally unemployed during the next recession
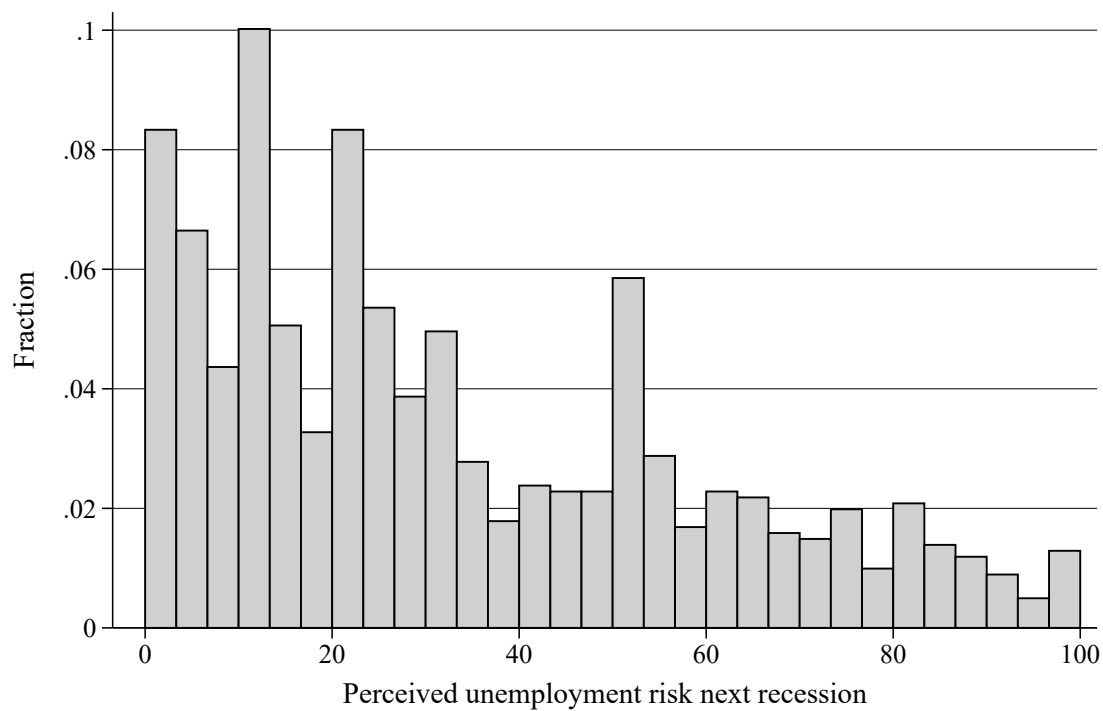


*Notes:* This figure displays a histogram of respondents' posterior beliefs about their percent chance of personally becoming involuntarily unemployed during the next recession in the US if they still work in the same job.

## Figure A.7: Group-level unemployment rates from ACS vs CPS
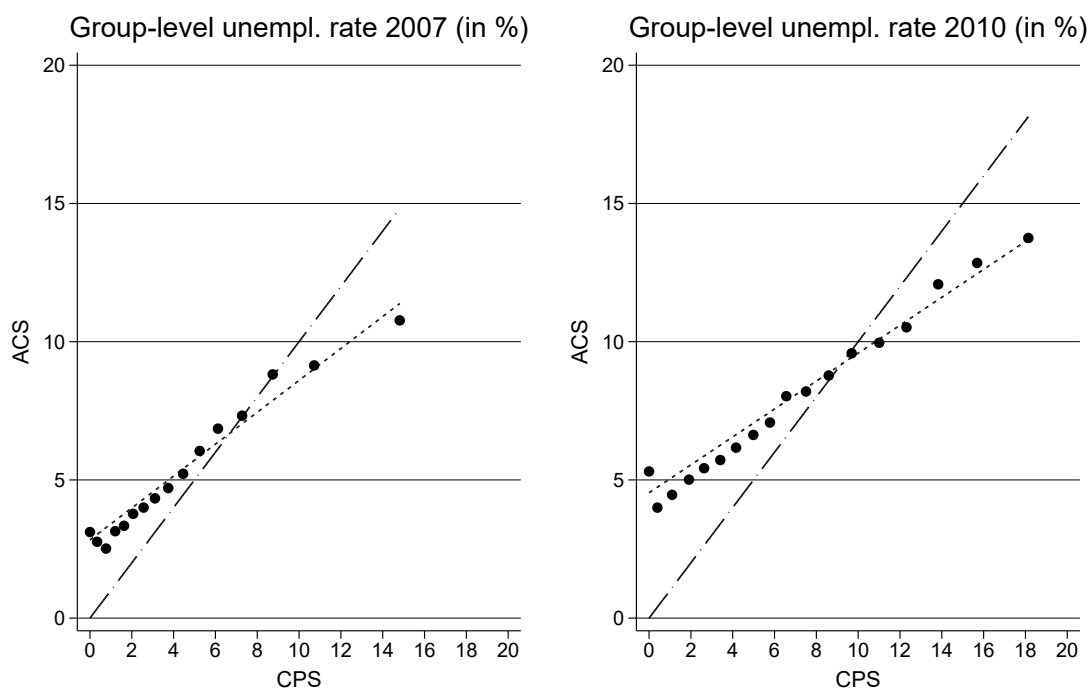


*Notes:* This figure displays binned scatter plots and linear fits of group-level unemployment rates calculated based on data from the ACS against rates based on data from the CPS, as well as 45 degree reference lines. The figures are based on group-level datasets containing information on unemployment rates from both surveys. Scatter plots and linear fits are calculated using the numbers of respondents in the demographic cells of the ACS as weights. The figure on the left plots unemployment rates in 2007, while the figure on the right plots unemployment rates in 2010. In 2007, the linear fit has a slope of 0.4679 (robust standard error of 0.0147) and an R-squared of 0.2393. In 2010, the linear fit has a slope of 0.4251 (robust standard error of 0.0105) and an R-squared of 0.3079. Groups with unemployment rates higher than 20 are dropped from the figure to improve readability.

# D   Additional tables

Table A.1: Correlates of prior beliefs about recession exposure and confidence in priors

| | Prior UEincr 2010-07 (perc.points) | | Prior unempl 2010 (abs. bias pp.) | | Confidence Prior (z-scored) | | High confidence Prior (Dummy) | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Female | -0.391 | 0.209 | 0.688 | 1.095 | -0.326*** | -0.213*** | -0.103*** | -0.067** |
| | (1.026) | (1.102) | (0.872) | (0.924) | (0.062) | (0.063) | (0.028) | (0.029) |
| Age <40 | 0.835 | 0.974 | 1.353 | 1.212 | 0.067 | 0.138** | 0.042 | 0.067** |
| | (1.027) | (1.069) | (0.870) | (0.917) | (0.063) | (0.062) | (0.028) | (0.029) |
| College Degree + | 0.209 | 0.342 | -0.209 | 0.087 | 0.155** | 0.050 | 0.086*** | 0.053* |
| | (1.039) | (1.143) | (0.895) | (0.977) | (0.064) | (0.066) | (0.029) | (0.031) |
| Inc. < USD75,000 | 0.408 | 0.471 | 0.887 | 0.533 | -0.098 | -0.014 | -0.037 | 0.006 |
| | (1.039) | (1.172) | (0.892) | (0.988) | (0.063) | (0.067) | (0.029) | (0.031) |
| Unempl. Great Rec. | 4.961*** | 4.994*** | 3.338** | 3.500*** | 0.221*** | 0.176** | 0.032 | 0.020 |
| | (1.598) | (1.621) | (1.325) | (1.345) | (0.079) | (0.080) | (0.040) | (0.040) |
| Tenure less 3 years | 0.003 | -0.287 | 0.878 | 0.425 | -0.077 | -0.018 | -0.035 | -0.019 |
| | (1.098) | (1.164) | (0.924) | (0.990) | (0.068) | (0.070) | (0.030) | (0.032) |
| Follow news (z) | 0.401 | 0.406 | 0.321 | 0.570 | 0.204*** | 0.173*** | 0.069*** | 0.056*** |
| | (0.519) | (0.543) | (0.423) | (0.437) | (0.035) | (0.035) | (0.014) | (0.015) |
| Observations | 1008 | 1008 | 1008 | 1008 | 1008 | 1008 | 1008 | 1008 |
| $R^2$ | | 0.01 | | 0.01 | | 0.06 | | 0.04 |
| Specification | Bivariate | Multivariate | Bivariate | Multivariate | Bivariate | Multivariate | Bivariate | Multivariate |
| Mean Outcome | 11.00 | 11.00 | 12.45 | 12.45 | 0.00 | 0.00 | 0.28 | 0.28 |
| St.dev. outcome | 16.27 | 16.27 | 13.82 | 13.82 | 1.00 | 1.00 | 0.45 | 0.45 |

*Notes:* This table shows correlates of respondents' prior beliefs about their group's exposure to the Great Recession, and their confidence in these priors. Columns 1, 3, 5 and 7 show estimated coefficients from bivariate regressions, while columns 2, 4, 6 and 8 show coefficient estimates from multivariate regressions, controlling for all displayed covariates simultaneously. The outcomes are respondents' prior beliefs about the increase in the unemployment rate among people similar to them from 2007 to 2010 (columns 1-2), the absolute difference between their prior about the group-level unemployment rate in 2010 and the actual unemployment rate according to the information shown to the respondent later on based either on ACS or CPS (column 3-4), standardized confidence in the prior based on a 5-point categorical survey question (columns 5-6), and a dummy indicating whether the respondent was sure or very sure in his or her prior (columns 7-8). Inc < USD75,000 refers to the yearly total household income before taxes and deductions in 2018, Unempl. Great Rec. is a dummy that takes value one for those who became unemployed during the Great Recession in 2008-9 and zero otherwise. Tenure less 3 years is a dummy that takes the value one for those who report to have at most three years of tenure at their current job. Follow news is a standardized measure based on agreement with the statement "I usually follow news on the national economy" on a 5-point-scale ranging from "strongly disagree" to "strongly agree". Robust standard errors are in parentheses. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

Table A.2: Correlates of info acquisition

| | Forecast: Recession | | Forecast: Government spending | | Forecast: Interest rate | | Forecast: Inflation rate | | Forecast: None | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Female | -0.090*** | -0.050* | 0.017 | 0.024 | -0.095*** | -0.087*** | 0.059** | 0.056* | 0.110*** | 0.057** |
| | (0.027) | (0.029) | (0.024) | (0.025) | (0.022) | (0.024) | (0.027) | (0.029) | (0.024) | (0.025) |
| Age <40 | -0.029 | -0.026 | 0.028 | 0.035 | 0.102*** | 0.125*** | -0.051* | -0.057** | -0.050** | -0.077*** |
| | (0.027) | (0.028) | (0.024) | (0.025) | (0.022) | (0.024) | (0.027) | (0.029) | (0.024) | (0.024) |
| College Degree + | 0.081*** | 0.071** | -0.022 | -0.026 | 0.038 | 0.003 | -0.033 | -0.007 | -0.064*** | -0.041 |
| | (0.028) | (0.031) | (0.024) | (0.024) | (0.023) | (0.026) | (0.027) | (0.030) | (0.024) | (0.026) |
| Inc. < USD75,000 | -0.010 | 0.029 | 0.010 | -0.001 | -0.050** | -0.038 | 0.072*** | 0.074** | -0.021 | -0.063** |
| | (0.028) | (0.031) | (0.024) | (0.025) | (0.023) | (0.027) | (0.027) | (0.030) | (0.025) | (0.026) |
| Unempl. Great Rec. | 0.076* | 0.065 | 0.043 | 0.046 | 0.050 | 0.036 | -0.041 | -0.035 | -0.127*** | -0.112*** |
| | (0.039) | (0.040) | (0.034) | (0.035) | (0.033) | (0.033) | (0.036) | (0.036) | (0.025) | (0.025) |
| Tenure less 3 years | 0.004 | 0.044 | -0.006 | -0.019 | -0.008 | -0.022 | -0.017 | -0.021 | 0.026 | 0.018 |
| | (0.029) | (0.032) | (0.025) | (0.027) | (0.024) | (0.027) | (0.029) | (0.031) | (0.027) | (0.028) |
| Follow news (z) | 0.065*** | 0.054*** | 0.008 | 0.014 | 0.024** | 0.014 | 0.005 | 0.013 | -0.102*** | -0.095*** |
| | (0.012) | (0.013) | (0.012) | (0.013) | (0.010) | (0.011) | (0.013) | (0.014) | (0.013) | (0.014) |
| Observations | 1008 | 1008 | 1008 | 1008 | 1008 | 1008 | 1008 | 1008 | 1008 | 1008 |
| R² | | 0.04 | | 0.01 | | 0.05 | | 0.02 | | 0.10 |
| Specification | Bivariate | Multivariate | Bivariate | Multivariate | Bivariate | Multivariate | Bivariate | Multivariate | Bivariate | Multivariate |
| Mean outcome | 0.25 | 0.25 | 0.17 | 0.17 | 0.15 | 0.15 | 0.25 | 0.25 | 0.18 | 0.18 |
| St.dev. outcome | 0.43 | 0.43 | 0.37 | 0.37 | 0.36 | 0.36 | 0.43 | 0.43 | 0.39 | 0.39 |

*Notes*: This table shows correlates of demand for different macroeconomic forecasts. Columns 1, 3, 5 and 7 show estimated coefficients from bivariate regressions, while columns 2, 4, 6 and 8 show coefficient estimates from multivariate regressions, controlling for all displayed covariates simultaneously. The outcomes are dummy variables taking value one if the respondent chose a particular forecast (columns 1-8), or if the respondent chose no forecast (columns 9-10). Inc < USD75,000 refers to the yearly total household income before taxes and deductions in 2018, Unempl. Great Rec. is a dummy that takes value one for those who became unemployed during the Great Recession in 2008-9 and zero otherwise. Tenure less 3 years is a dummy that takes the value one for those who report to have at most three years of tenure at their current job. Follow news is a standardized measure based on agreement with the statement "I usually follow news on the national economy" on a 5-point-scale ranging from "strongly disagree" to "strongly agree". Robust standard errors are in parentheses. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

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## Table A.3: Other outcomes

| | Prob. personal unempl. | Log(Planned saving) | Planned saving rate | Prob. job search other occ. | Prob. job search other ind. |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| **Panel A: Reduced form** | | | | | |
| Δ Unempl. Incr. | 0.231* | 0.009 | 0.004 | 0.261** | 0.213* |
| | (0.118) | (0.008) | (0.018) | (0.129) | (0.126) |
| Log(Past saving) | | 0.604*** | | | |
| | | (0.025) | | | |
| Past saving rate | | | 0.565*** | | |
| | | | (0.057) | | |
| Observations | 1008 | 1008 | 1000 | 1007 | 1008 |
| R² | 0.09 | 0.50 | 0.55 | 0.11 | 0.10 |
| **Panel B: IV** | | | | | |
| Perceived unemployment risk next recession | 0.472*** | 0.018 | 0.008 | 0.533** | 0.435** |
| | (0.180) | (0.017) | (0.036) | (0.236) | (0.220) |
| Log(Past saving) | | 0.600*** | | | |
| | | (0.025) | | | |
| Past saving rate | | | 0.565*** | | |
| | | | (0.056) | | |
| Observations | 1008 | 1008 | 1000 | 1007 | 1008 |
| First stage F-stat | 13.28 | 12.86 | 12.65 | 13.30 | 13.28 |
| Mean dep. var. | 20.69 | 3.65 | 3.27 | 27.71 | 28.39 |
| SD dep. var. | 23.66 | 2.47 | 4.88 | 29.18 | 29.06 |

*Notes:* This table shows estimates of the reduced form specification (equation 2, Panel A) and the IV specification (equation 3, Panel B) measuring the effect of perceived recession exposure on other outcomes. The outcomes are the respondent's perceived probability of becoming personally unemployed over the next 12 months (column 1), the log of the planned amount saved for precautionary reasons over the four weeks after the survey (column 2), the ratio of the planned amount saved for precautionary reasons to household income over the next four weeks (column 3), and perceived probabilities of looking for a new job in a different occupation (column 4) or different industry (column 5) over the next 12 months. "Perceived unemployment risk next recession" denotes the respondent's perceived percent chance of job loss during the next recession conditional on working in the same job as now. "Δ Unempl. Incr." indicates the difference between the 2007-2010 change in the group-level unemployment rate according to the information shown to the respondent and the change according to the alternative, non-shown information source, i.e. the exogenous component of the provided information. The specifications also control for the increase in the unemployment rate as calculated from the alternative source (the potentially endogenous component of the information), as well as the difference in the baseline unemployment rates in 2007 between shown source and alternative source, and the baseline rate according to the alternative source. All specifications additionally control for a polynomial in age, a dummy for college education, dummies for census region of residence, dummies for 1-digit occupation classification, as well as a dummy indicating high confidence in prior beliefs about group-level exposure to the Great Recession. Robust standard errors are in parentheses. The specifications in column 2 and 3 additionally control for log household income, and the log amount saved for precautionary reasons (column 2) and the ratio of precautionary saving to income (column 3) over the past four weeks. Robust standard errors are in parentheses. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

## Table A.4: Perceived risk exposure: Coefficients on other variables

| | Perceived unemployment risk next recession | Agree: Recession affects job security (z) | Agree: Recession affects household situation (z) | Agree: Exposed to macroeconomy (z) | Index (1)-(4) (z) |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Δ Unempl. Incr. | 0.489*** | 0.012** | 0.007 | 0.013*** | 0.016*** |
| | (0.134) | (0.005) | (0.005) | (0.004) | (0.005) |
| Unempl. Incr.$^{alt}$ | 0.506*** | 0.008 | 0.003 | 0.014** | 0.014** |
| | (0.176) | (0.007) | (0.007) | (0.006) | (0.007) |
| Δ Unempl. 2007 | 0.474* | 0.008 | 0.013 | 0.019** | 0.018* |
| | (0.275) | (0.011) | (0.010) | (0.010) | (0.010) |
| Unempl. 2007$^{alt}$ | 0.445 | -0.012 | -0.003 | 0.004 | 0.002 |
| | (0.339) | (0.012) | (0.012) | (0.012) | (0.012) |
| Observations | 1008 | 1008 | 1008 | 1008 | 1008 |
| $R^2$ | 0.06 | 0.07 | 0.04 | 0.08 | 0.07 |

*Notes:* This table shows estimates of the first-stage specification (equation 1) displaying coefficient estimates on other variables. The outcome in column 1, "Perceived unemployment risk next recession", denotes the respondent's perceived percent chance of job loss during the next recession conditional on working in the same job as now. The outcomes in columns 2-4 are respondents' agreement on categorical scales to verbal statements describing their exposure to macroeconomic risk, and are z-scored using the mean and the standard deviation in the sample. The outcome in column 5 is the z-scored unweighted average of the outcomes from columns 1-4 (also standardizing the outcome from column 1). The table displays coefficient estimates on: the difference between the 2007-2010 change in the group-level unemployment rate according to the information shown to the respondent and the change according to the alternative, non-shown information source, i.e. the exogenous component of the provided information ("Δ Unempl. Incr."); the increase in the unemployment rate as calculated from the alternative source (the potentially endogenous component of the information, "Unempl. Incr.$^{alt}$"); the difference in the baseline unemployment rates in 2007 between shown source and alternative source ("Δ Unempl. 2007"); and the baseline rate according to the alternative source ("Unempl. 2007$^{alt}$"). All specifications additionally control for a polynomial in age, a dummy for college education, dummies for census region of residence, dummies for 1-digit occupation classification, as well as a dummy indicating high confidence in prior beliefs about group-level exposure to the Great Recession. Robust standard errors are in parentheses. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

Table A.5: Demand for macroeconomic forecasts: Coefficients on other variables

| | Forecast: Recession | Forecast: Government spending | Forecast: Interest rate | Forecast: Inflation rate | Forecast: any other (2)-(4) |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| Δ Unempl. Incr. | 0.006*** | -0.002 | -0.003** | 0.001 | -0.002 |
| | (0.002) | (0.002) | (0.001) | (0.002) | (0.002) |
| Unempl. Incr.$^{alt}$ | 0.008** | -0.003 | -0.004* | 0.001 | -0.002 |
| | (0.003) | (0.002) | (0.002) | (0.003) | (0.003) |
| Δ Unempl. 2007 | 0.002 | 0.005 | -0.009*** | 0.005 | -0.003 |
| | (0.004) | (0.004) | (0.003) | (0.004) | (0.004) |
| Unempl. 2007$^{alt}$ | -0.001 | 0.007 | -0.010** | 0.006 | -0.002 |
| | (0.005) | (0.005) | (0.004) | (0.005) | (0.005) |
| Observations | 1008 | 1008 | 1008 | 1008 | 1008 |
| $R^2$ | 0.07 | 0.04 | 0.08 | 0.04 | 0.06 |

*Notes:* This table shows estimates of the reduced form specification (equation 2) displaying the coefficient estimates on other variables. The outcomes are dummy variables taking value one if the respondent chose a particular forecast (columns 1-4), if the respondent chose any other (non-recession) forecast (column 5), or if the respondent chose no forecast (column 6). The table displays coefficient estimates on: the difference between the 2007-2010 change in the group-level unemployment rate according to the information shown to the respondent and the change according to the alternative, non-shown information source, i.e. the exogenous component of the provided information ("Δ Unempl. Incr."); the increase in the unemployment rate as calculated from the alternative source (the potentially endogenous component of the information, "Unempl. Incr.$^{alt}$"); the difference in the baseline unemployment rates in 2007 between shown source and alternative source ("Δ Unempl. 2007"); and the baseline rate according to the alternative source ("Unempl. 2007$^{alt}$"). All specifications additionally control for a polynomial in age, a dummy for college education, dummies for census region of residence, dummies for 1-digit occupation classification, as well as a dummy indicating high confidence in prior beliefs about group-level exposure to the Great Recession. Robust standard errors are in parentheses. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

## Table A.6: Heterogeneous effects of information on perceived risk exposure

| | Perceived unemployment risk next recession | Agree: Recession affects job security (z) | Agree: Recession affects household situation (z) | Agree: Exposed to macroeconomy (z) | Index (1)-(4) (z) |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| **Panel A: Below college** | | | | | |
| Δ Unempl. Incr. (a) | 0.574*** | 0.015** | 0.007 | 0.015** | 0.018*** |
| | (0.175) | (0.007) | (0.007) | (0.006) | (0.007) |
| Observations | 579 | 579 | 579 | 579 | 579 |
| **Panel B: College** | | | | | |
| Δ Unempl. Incr. (b) | 0.384** | 0.011 | 0.005 | 0.012* | 0.013 |
| | (0.195) | (0.008) | (0.007) | (0.007) | (0.008) |
| Observations | 429 | 429 | 429 | 429 | 429 |
| p-value (a=b) | 0.469 | 0.696 | 0.835 | 0.745 | 0.624 |
| **Panel C: Income < USD75,000** | | | | | |
| Δ Unempl. Incr. (c) | 0.727*** | 0.015** | 0.009 | 0.016*** | 0.021*** |
| | (0.165) | (0.006) | (0.006) | (0.006) | (0.006) |
| Observations | 585 | 585 | 585 | 585 | 585 |
| **Panel D: Income ≥ USD75,000** | | | | | |
| Δ Unempl. Incr. (d) | 0.244 | 0.010 | 0.002 | 0.009 | 0.010 |
| | (0.201) | (0.009) | (0.007) | (0.008) | (0.009) |
| Observations | 415 | 415 | 415 | 415 | 415 |
| p-value (c=d) | 0.064 | 0.675 | 0.451 | 0.455 | 0.270 |
| **Panel E: Female** | | | | | |
| Δ Unempl. Incr. (e) | 0.427** | 0.007 | 0.001 | 0.006 | 0.010 |
| | (0.193) | (0.007) | (0.006) | (0.005) | (0.006) |
| Observations | 497 | 497 | 497 | 497 | 497 |
| **Panel F: Male** | | | | | |
| Δ Unempl. Incr. (f) | 0.560*** | 0.016** | 0.013* | 0.020*** | 0.022*** |
| | (0.194) | (0.008) | (0.008) | (0.007) | (0.008) |
| Observations | 511 | 511 | 511 | 511 | 511 |
| p-value (e=f) | 0.627 | 0.378 | 0.215 | 0.112 | 0.212 |
| **Panel G: Age≤37** | | | | | |
| Δ Unempl. Incr. (g) | 0.491*** | 0.016** | 0.010* | 0.015*** | 0.019*** |
| | (0.177) | (0.007) | (0.006) | (0.006) | (0.007) |
| Observations | 527 | 527 | 527 | 527 | 527 |
| **Panel H: Age>37** | | | | | |
| Δ Unempl. Incr. (h) | 0.507** | 0.006 | 0.005 | 0.009 | 0.012 |
| | (0.231) | (0.008) | (0.009) | (0.007) | (0.009) |
| Observations | 481 | 481 | 481 | 481 | 481 |
| p-value (g=h) | 0.957 | 0.340 | 0.627 | 0.470 | 0.544 |

*Notes:* This table shows estimates of the first-stage specification (equation 1) separately on subsamples of respondents without a college degree or with a college degree (Panels A-B), with low or high household income (Panels C-D), who are female or male (Panels E-F), and who are younger or older (Panels G-H). The outcome in column 1, "Perceived unemployment risk next recession", denotes the respondent's perceived percent chance of job loss during the next recession conditional on working in the same job as now. The outcomes in columns 2-4 are respondents' agreement on categorical scales to verbal statements describing their exposure to macroeconomic risk, and are z-scored using the mean and the standard deviation in the sample. The outcome in column 5 is the z-scored unweighted average of the outcomes from columns 1-4 (also standardizing the outcome from column 1). "Δ Unempl. Incr." indicates the difference between the 2007-2010 change in the group-level unemployment rate according to the information shown to the respondent and the change according to the alternative, non-shown information source, i.e. the exogenous component of the provided information. The specifications also control for the increase in the unemployment rate as calculated from the alternative source (the potentially endogenous component of the information), as well as the difference in the baseline unemployment rates in 2007 between shown source and alternative source, and the baseline rate according to the alternative source. All specifications additionally control for a polynomial in age, a dummy for college education, dummies for census region of residence, dummies for 1-digit occupation classification, as well as a dummy indicating high confidence in prior beliefs. Robust standard errors are in parentheses. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

Table A.7: Heterogeneous effects of information on demand for macroeconomic forecasts

| | Forecast: Recession | Forecast: Government spending | Forecast: Interest rate | Forecast: Inflation rate | Forecast: any other (2)-(4) | Forecast: None |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| **Panel A: Below college** | | | | | | |
| Δ Unempl. Incr. (a) | 0.008*** | -0.002 | -0.003 | 0.001 | -0.005 | -0.004 |
| | (0.003) | (0.003) | (0.002) | (0.003) | (0.003) | (0.003) |
| Observations | 579 | 579 | 579 | 579 | 579 | 579 |
| **Panel B: College** | | | | | | |
| Δ Unempl. Incr. (b) | 0.001 | -0.002 | -0.002 | 0.002 | -0.002 | 0.001 |
| | (0.004) | (0.002) | (0.002) | (0.003) | (0.004) | (0.004) |
| Observations | 429 | 429 | 429 | 429 | 429 | 429 |
| p-value (a=b) | 0.084 | 0.889 | 0.563 | 0.883 | 0.570 | 0.323 |
| **Panel C: Income < USD75,000** | | | | | | |
| Δ Unempl. Incr. (c) | 0.005* | -0.001 | -0.001 | 0.001 | -0.001 | -0.004 |
| | (0.003) | (0.002) | (0.002) | (0.003) | (0.003) | (0.003) |
| Observations | 585 | 585 | 585 | 585 | 585 | 585 |
| **Panel D: Income ≥ USD75,000** | | | | | | |
| Δ Unempl. Incr. (d) | 0.006 | -0.002 | -0.005** | 0.001 | -0.006* | 0.001 |
| | (0.004) | (0.002) | (0.002) | (0.003) | (0.003) | (0.004) |
| Observations | 415 | 415 | 415 | 415 | 415 | 415 |
| p-value (c=d) | 0.948 | 0.803 | 0.191 | 0.895 | 0.263 | 0.323 |
| **Panel E: Female** | | | | | | |
| Δ Unempl. Incr. (e) | 0.007** | -0.001 | -0.000 | 0.002 | 0.001 | -0.007** |
| | (0.003) | (0.002) | (0.002) | (0.003) | (0.003) | (0.003) |
| Observations | 497 | 497 | 497 | 497 | 497 | 497 |
| **Panel F: Male** | | | | | | |
| Δ Unempl. Incr. (f) | 0.006* | -0.005* | -0.006** | 0.002 | -0.009*** | 0.003 |
| | (0.003) | (0.003) | (0.002) | (0.003) | (0.003) | (0.003) |
| Observations | 511 | 511 | 511 | 511 | 511 | 511 |
| p-value (e=f) | 0.912 | 0.224 | 0.057 | 0.966 | 0.036 | 0.023 |
| **Panel G: Age≤37** | | | | | | |
| Δ Unempl. Incr. (g) | 0.007*** | -0.002 | -0.003 | 0.001 | -0.005* | -0.003 |
| | (0.003) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) |
| Observations | 527 | 527 | 527 | 527 | 527 | 527 |
| **Panel H: Age>37** | | | | | | |
| Δ Unempl. Incr. (h) | 0.004 | -0.001 | -0.001 | 0.002 | -0.001 | -0.003 |
| | (0.004) | (0.003) | (0.002) | (0.004) | (0.004) | (0.005) |
| Observations | 481 | 481 | 481 | 481 | 481 | 481 |
| p-value (g=h) | 0.477 | 0.830 | 0.555 | 0.822 | 0.481 | 0.976 |

*Notes:* This table shows estimates of the reduced-form specification (equation 2) separately on subsamples of respondents without a college degree or with a college degree (Panels A-B), with low or high household income (Panels C-D), who are female or male (Panels E-F), and who are younger or older (Panels G-H). The outcomes are dummy variables taking value one if the respondent chose a particular forecast (columns 1-4), if the respondent chose any other (non-recession) forecast (column 5), or if the respondent chose no forecast (column 6). "Δ Unempl. Incr." indicates the difference between the 2007-2010 change in the group-level unemployment rate according to the information shown to the respondent and the change according to the alternative, non-shown information source, i.e. the exogenous component of the provided information. The specifications also control for the increase in the unemployment rate as calculated from the alternative source (the potentially endogenous component of the information), as well as the difference in the baseline unemployment rates in 2007 between shown source and alternative source, and the baseline rate according to the alternative source. All specifications additionally control for a polynomial in age, a dummy for college education, dummies for census region of residence, dummies for 1-digit occupation classification, as well as a dummy indicating high confidence in prior beliefs. Robust standard errors are in parentheses. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

## Table A.8: Perceived risk exposure: Robustness to controls

| | Perceived unemployment risk next recession (1) | Agree: Recession affects job security (z) (2) | Agree: Recession affects household situation (z) (3) | Agree: Exposed to macroeconomy (z) (4) | Index (1)-(4) (z) (5) |
|---|---|---|---|---|---|
| **Panel A: Main specification** | | | | | |
| Δ Unempl. Incr. | 0.489*** | 0.012** | 0.007 | 0.013*** | 0.016*** |
| | (0.134) | (0.005) | (0.005) | (0.004) | (0.005) |
| $R^2$ | 0.06 | 0.07 | 0.04 | 0.08 | 0.07 |
| **Panel B: No controls** | | | | | |
| Δ Unempl. Incr. | 0.528*** | 0.015*** | 0.008* | 0.013*** | 0.017*** |
| | (0.131) | (0.005) | (0.004) | (0.004) | (0.005) |
| $R^2$ | 0.03 | 0.01 | 0.00 | 0.01 | 0.02 |
| **Panel C: A plus prior belief** | | | | | |
| Δ Unempl. Incr. | 0.485*** | 0.012** | 0.007 | 0.013*** | 0.016*** |
| | (0.135) | (0.005) | (0.005) | (0.004) | (0.005) |
| $R^2$ | 0.06 | 0.07 | 0.04 | 0.08 | 0.07 |
| **Panel D: sex-age-educ-occu-cells** | | | | | |
| Δ Unempl. Incr. | 0.461*** | 0.011** | 0.006 | 0.012*** | 0.014*** |
| | (0.135) | (0.005) | (0.005) | (0.004) | (0.005) |
| $R^2$ | 0.12 | 0.13 | 0.10 | 0.15 | 0.14 |
| Cell count | 55 | 55 | 55 | 55 | 55 |
| Cell count (N ≥ 10) | 33 | 33 | 33 | 33 | 33 |
| **Panel E: sex-age-educ-detailed occu-cells** | | | | | |
| Δ Unempl. Incr. | 0.450*** | 0.011** | 0.007 | 0.011** | 0.015*** |
| | (0.140) | (0.005) | (0.005) | (0.005) | (0.005) |
| $R^2$ | 0.16 | 0.17 | 0.14 | 0.19 | 0.18 |
| Cell count | 110 | 110 | 110 | 110 | 110 |
| Cell count (N ≥ 10) | 32 | 32 | 32 | 32 | 32 |
| **Panel F: sex-age-inc-occu-cells** | | | | | |
| Δ Unempl. Incr. | 0.494*** | 0.013** | 0.007 | 0.013*** | 0.016*** |
| | (0.143) | (0.005) | (0.005) | (0.005) | (0.005) |
| $R^2$ | 0.09 | 0.11 | 0.09 | 0.13 | 0.11 |
| Cell count | 56 | 56 | 56 | 56 | 56 |
| Cell count (N ≥ 10) | 37 | 37 | 37 | 37 | 37 |

*Notes:* This table shows estimates of the first-stage specification (equation 1) varying the set of control variables. The outcome in column 1, "Perceived unemployment risk next recession", denotes the respondent's perceived percent chance of job loss during the next recession conditional on working in the same job as now. The outcomes in columns 2-4 are respondents' agreement on categorical scales to verbal statements describing their exposure to macroeconomic risk, and are z-scored using the mean and the standard deviation in the sample. The outcome in column 5 is the z-scored unweighted average of the outcomes from columns 1-4 (also standardizing the outcome from column 1). "Δ Unempl. Incr." indicates the difference between the 2007-2010 change in the group-level unemployment rate according to the information shown to the respondent and the change according to the alternative, non-shown information source, i.e. the exogenous component of the provided information. The specifications also control for the increase in the unemployment rate as calculated from the alternative source (the potentially endogenous component of the information), as well as the difference in the baseline unemployment rates in 2007 between shown source and alternative source, and the baseline rate according to the alternative source. Panel A includes the baseline set of controls, namely a polynomial in age, a dummy for college education, dummies for census region of residence, dummies for 1-digit occupation classification, as well as a dummy indicating high confidence in prior beliefs. Panel B excludes these controls. Panel C includes the baseline controls and the respondent's prior belief about the change in the unemployment rate in her group during the Great Recession. In addition to the baseline controls, Panels D-F include fixed effects for different sets of interactions of demographic characteristics: Panel D includes cell fixed effects based on interactions of sex, two age groups, two education groups, and seven occupation groups. Panel E includes cell fixed effects based on interactions of sex, two age groups, two education groups and 22 occupation groups. Panel F includes cell fixed effects based on interactions of sex, two age groups, two income groups and seven occupation groups. In Panels D, E and F, we report the number of demographic cells as well as the number of cells in which we have at least 10 respondents in our sample. Robust standard errors are in parentheses. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

Table A.9: Demand for macroeconomic forecasts: Robustness to controls

| | Forecast: Recession | Forecast: Government spending | Forecast: Interest rate | Forecast: Inflation rate | Forecast: any other (2)-(4) | Forecast: None |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| **Panel A: Main specification** | | | | | | |
| Δ Unempl. Incr. | 0.006*** | -0.002 | -0.003** | 0.001 | -0.004* | -0.002 |
| | (0.002) | (0.002) | (0.001) | (0.002) | (0.002) | (0.002) |
| $R^2$ | 0.07 | 0.04 | 0.08 | 0.04 | 0.08 | 0.06 |
| **Panel B: No controls** | | | | | | |
| Δ Unempl. Incr. | 0.005** | -0.002 | -0.002 | 0.000 | -0.004* | -0.002 |
| | (0.002) | (0.002) | (0.001) | (0.002) | (0.002) | (0.002) |
| $R^2$ | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |
| **Panel C: A plus prior belief** | | | | | | |
| Δ Unempl. Incr. | 0.006*** | -0.002 | -0.003** | 0.001 | -0.004* | -0.002 |
| | (0.002) | (0.002) | (0.001) | (0.002) | (0.002) | (0.002) |
| $R^2$ | 0.08 | 0.06 | 0.08 | 0.04 | 0.08 | 0.06 |
| **Panel D: sex-age-educ-occu-cells** | | | | | | |
| Δ Unempl. Incr. | 0.005** | -0.002 | -0.002 | 0.002 | -0.003 | -0.002 |
| | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) |
| $R^2$ | 0.11 | 0.09 | 0.14 | 0.09 | 0.13 | 0.11 |
| Cell count | 55 | 55 | 55 | 55 | 55 | 55 |
| Cell count (N ≥ 10) | 33 | 33 | 33 | 33 | 33 | 33 |
| **Panel E: sex-age-educ-detailed occu-cells** | | | | | | |
| Δ Unempl. Incr. | 0.006** | -0.003 | -0.003* | 0.002 | -0.003 | -0.003 |
| | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.003) |
| $R^2$ | 0.17 | 0.12 | 0.18 | 0.13 | 0.18 | 0.16 |
| Cell count | 110 | 110 | 110 | 110 | 110 | 110 |
| Cell count (N ≥ 10) | 32 | 32 | 32 | 32 | 32 | 32 |
| **Panel F: sex-age-inc-occu-cells** | | | | | | |
| Δ Unempl. Incr. | 0.006** | -0.002 | -0.003* | 0.002 | -0.003 | -0.003 |
| | (0.002) | (0.002) | (0.001) | (0.002) | (0.002) | (0.002) |
| $R^2$ | 0.11 | 0.09 | 0.13 | 0.09 | 0.14 | 0.12 |
| Cell count | 56 | 56 | 56 | 56 | 56 | 56 |
| Cell count (N ≥ 10) | 37 | 37 | 37 | 37 | 37 | 37 |

*Notes:* This table shows estimates of the reduced-form specification (equation 2) varying the set of control variables. The outcomes are dummy variables taking value one if the respondent chose a particular forecast (columns 1-4), if the respondent chose any other (non-recession) forecast (column 5), or if the respondent chose no forecast (column 6). "Δ Unempl. Incr." indicates the difference between the 2007-2010 change in the group-level unemployment rate according to the information shown to the respondent and the change according to the alternative, non-shown information source, i.e. the exogenous component of the provided information. The specifications also control for the increase in the unemployment rate as calculated from the alternative source (the potentially endogenous component of the information), as well as the difference in the baseline unemployment rates in 2007 between shown source and alternative source, and the baseline rate according to the alternative source. Panel A includes the baseline set of controls, namely a polynomial in age, a dummy for college education, dummies for census region of residence, dummies for 1-digit occupation classification, as well as a dummy indicating high confidence in prior beliefs. Panel B excludes these controls. Panel C includes the baseline controls and the respondent's prior belief about the change in the unemployment rate in her group during the Great Recession. In addition to the baseline controls, Panels D-F include fixed effects for different sets of interactions of demographic characteristics: Panel D includes cell fixed effects based on interactions of sex, two age groups, two education groups, and seven occupation groups. Panel E includes cell fixed effects based on interactions of sex, two age groups, two education groups and 22 occupation groups. Panel F includes cell fixed effects based on interactions of sex, two age groups, two income groups and seven occupation groups. In Panels D, E and F, we report the number of demographic cells as well as the number of cells in which we have at least 10 respondents in our sample. Robust standard errors are in parentheses. * denotes significance at 10 pct., ** at 5 pct., and *** at 1 pct. level.

# E   Experimental Instructions

## Demographics

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:

[Next >>]

**Background information**

Which of these describes you more accurately?

○ Male
○ Female

What is your age?

○ 18 - 24
○ 25 - 29
○ 30 - 34
○ 35 - 39
○ 40 - 44
○ 45 - 49
○ 50 - 54
○ 55 - 59
○ 60 - 64
○ 65 or older

In which state do you currently reside?

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

[Next >>]

We will now ask you some questions about your occupation. By occupation we refer to the content of your work and the tasks you perform in your job. For people who are unemployed, we refer to the occupation in the most recent job.

What is your occupation? Please choose the category that best describes your current occupation.

Major group    Management Occupations
Minor group    ✓ Advertising, Marketing, Promotions, Public Relations, and Sales Manager
               Operations Specialties Managers
               Top Executives
               Other Management Occupations

[Next >>]

What was your family's household income in 2018 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

Next >>

# Prior beliefs about own group's exposure to Great Recession

We will now provide you with a definition of the term recession.

A recession entails a **fall of real GDP**, which means that in a given quarter the economy produces less final goods and services than in the preceding quarter.

Next >>

**Unemployment rate after the Great Recession**

We now would like you to think about the effect of the Great Recession in 2008/2009 in the US on people **with similar characteristics as you**. Specifically, please think about the unemployment rate among people who, before the recession started, ...

- had the same occupation (Advertising, Marketing, Promotions, Public Relations, and Sales Manager) as you have now.
- lived in the same census division (Pacific) as you now.
- had the same education level (At least bachelor's degree) as you have now.
- had the same age (35 - 39) as you have now.
- and have the same gender (Male).

In 2007, before the Great Recession started, among people with your characteristics, **36 out of 1000 people were unemployed**. What do you think: Among 1000 people with your characteristics, how many were unemployed in 2010, when the unemployment rate peaked?

The number of unemployed people (out of 1000) in 2010 was: [＿＿＿＿]

How sure are you about your answer to the previous question?

○ Very sure
○ Sure
○ Somewhat unsure
○ Unsure
○ Very unsure

Next >>

# Information provision (transition)

Next, we will provide you with information on the number of unemployed **among people like you** after the last recession.

We would like to ask you to take a moment to review the information carefully.

Note: This information is only shown once and you will not be able to come back to it.
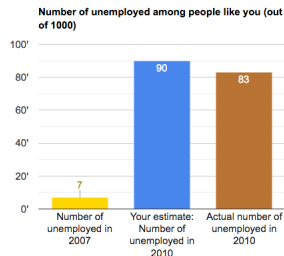
Next >>

# Information provision (ACS)

**Information about unemployment after the Great Recession**

You said that you think that among 1000 people **with your characteristics** **90 were unemployed in 2010**, when the unemployment rate peaked.

We now would like to give you information on the effect of the Great Recession in 2008/2009 on people that before the recession started

- had the same occupation (Advertising, Marketing, Promotions, Public Relations, and Sales Manager) as you have now.
- lived in the same census division (Pacific) as you now.
- had the same education level (At least bachelor's degree) as you have now.
- had the same age (35 - 39) as you have now.
- and have the same gender (Male).

According to official US census data, **83 out of 1000** people **with your characteristics** were **unemployed in 2010**, when the unemployment rate peaked.

**Number of unemployed among people like you (out of 1000)**

[Bar chart: Number of unemployed in 2007 = 7; Your estimate: Number of unemployed in 2010 = 90; Actual number of unemployed in 2010 = 83]

**Source**: American Community Survey
**Note**: You will be able to go to the next slide after you have spent 15 seconds on this slide.
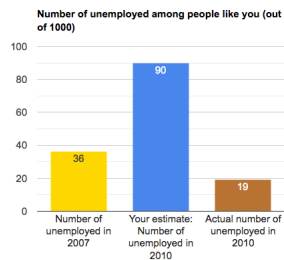
# Information provision (CPS)

**Information about unemployment after the Great Recession**

You said that you think that among 1000 people **with your characteristics** **90 were unemployed in 2010**, when the unemployment rate peaked.

We now would like to give you information on the effect of the Great Recession in 2008/2009 on people that before the recession started

- had the same occupation (Advertising, Marketing, Promotions, Public Relations, and Sales Manager) as you have now.
- lived in the same census division (Pacific) as you now.
- had the same education level (At least bachelor's degree) as you have now.
- had the same age (35 - 39) as you have now.
- and have the same gender (Male).

According to official US census data, **19 out of 1000** people **with your characteristics** were **unemployed in 2010**, when the unemployment rate peaked.

**Number of unemployed among people like you (out of 1000)**

[Bar chart: Number of unemployed in 2007 = 36; Your estimate: Number of unemployed in 2010 = 90; Actual number of unemployed in 2010 = 19]

**Source**: Current Population Survey
**Note**: You will be able to go to the next slide after you have spent 15 seconds on this slide.

# Probability explanation

**Probabilities**

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

For example, numbers like:

- 2 or 5 percent may indicate "almost no chance".
- 18 percent or so may mean "not much chance".
- 47 or 52 percent chance may be a "pretty even chance".
- 83 percent or so may mean a "very good chance".
- 95 or 98 percent chance may be "almost certain".

Next >>

# Manipulation checks

Assume that you work in the same job as now just before the **next recession** occurs in the US. What do you think would be the probability (in %) that you become **involuntarily unemployed** during that recession?

Probability of involuntary unemployment during next recession:

0                                                                                        100

Next >>

To what extent do you agree with the following statements?

| | Strongly disagree | Disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Agree | Strongly agree |
|---|---|---|---|---|---|---|---|
| A recession would adversely affect my job security. | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| A recession would adversely affect the financial situation of my household. | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| My job situation situation depends on the macroeconomic environment. | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

Next >>

# Demand for macroeconomic forecasts

The Survey of Professional Forecasters (SPF) is a quarterly survey of macroeconomic forecasts for the economy of the United States issued by the Federal Reserve Bank of Philadelphia. The participants in the survey report their estimate of:

- the real (inflation-adjusted) change in **total federal government spending** over the next 12 months.
- the **yearly rate** on 10-year **government bonds** averaged over the next 12 months.
- the **rate of inflation**, which measures changes in the general price level, over the next 12 months.
- the **probability of a decline in real GDP** in the first quarter of 2020 compared to the fourth quarter of 2019, which has been highly predictive of the occurrence of recessions in the past.

On the next page we will provide you with these average professional forecasts from the SPF.

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- the real (inflation-adjusted) change in **total federal government spending** over the next 12 months.
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- The **rate of inflation**, which measures changes in the general price level, over the next 12 months.
- the **probability of a decline in real GDP** in the first quarter of 2020 compared to the fourth quarter of 2019, which has been highly predictive of the occurrence of recessions in the past.

You can now choose which average professional forecast from the SPF you would like to receive.

---

Which forecast would you like to receive?

○ Forecast of the real change in total federal government spending over the next 12 months.

○ Forecast of the the yearly rate on 10-year government bonds averaged over the next 12 months.

○ Forecast of the rate of inflation over the next 12 months.

○ Forecast of the probability of a decline in real GDP.

○ I do not want to receive any forecast.

Next >>

# Forecasts

**Government spending forecast**

The average forecast from the professional forecasters on the real change in total federal government spending over the next 12 months is **2.5 percent**.

Next >>

**Inflation forecast**

The average forecast from the professional forecasters on the rate of inflation over the next 12 months is **1.9 percent.**

Next >>

**Returns on Government bonds forecast**

According to the average professional forecast, the yearly rate on 10-year government bonds will be **2.2 percent** on average over the next 12 months.

Next >>

**Recession forecast**

The average forecast from the professional forecasters on the probability of a decline in real GDP in the first quarter of 2020 compared to the fourth quarter of 2019 is **18 percent.**

Next >>

# Job market expectations

We now would like to ask you some questions about your expectations regarding your main **job.**

Next >>

What do you think is the probability (in %) that you will become involuntarily unemployed during the next 12 months?

(Please give your best guess.)

Probability of involuntary unemployment:

0 ▭―――――――――――――――――――――――――――― 100

Next >>

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What do you think is the probability (in %) that over the next 12 months you will look for a new job in a different industry?

The probability of looking for a new job in a different industry is _____ percent.

0 ▭―――――――――――――――――――――――――――― 100

Next >>

---

What do you think is the probability (in %) that over the next 12 months you will look for a new job in a different occupation?

The probability of looking for a new job in a different occupation is _____ percent.

0 ▭―――――――――――――――――――――――――――― 100

Next >>

# Savings behavior

**Over the last two weeks**, did your household put aside any money to save for the case that your household experiences an unexpected income reduction?

○ Yes
○ No

Next >>

---

How much money did your household put aside **over the last two weeks** to save for the case that your household experiences an unexpected income reduction? Please give your best guess.

[_____ ▾]

Next >>

---

**Over the next two weeks**, do you think that your household will put aside any money to save for the case that your household experiences an unexpected income reduction?

○ Yes
○ No

Next >>

How much money do you think your household will put aside **over the next two weeks** to save for the case that your household experiences an unexpected income reduction? Please give your best guess.

[ ▾ ]

Next >>

# Additional demographics

What is your marital status?

○ Single
○ Married
○ Divorced
○ Separated
○ Widowed
○ Other                                                                    [_____]

How long have you been working at the place you work at in your main job?

○ Less than 1 year
○ 1 to 2 years
○ 2 to 3 years
○ 3 to 4 years
○ 4 to 5 years
○ 5 to 10 years
○ 10 to 20 years
○ More than 20 years

On average, how many **hours per week** do you usually work in your main job?

○ Less than 10 hours
○ 10 to 20 hours
○ 20 to 30 hours
○ 30 to 40 hours
○ 40 to 50 hours
○ 50 to 60 hours
○ More than 60 hours

To what extent do you agree with the following statements?

|  | Strongly disagree | Somewhat disagree | Neither agree nor disagree | Somewhat agree | Strongly agree |
|---|---|---|---|---|---|
| I usually follow news on the national economy. | ○ | ○ | ○ | ○ | ○ |
| My household could easily borrow money if needed. | ○ | ○ | ○ | ○ | ○ |

Please tell us how many people usually live in your current primary residence, including yourself and those who are temporarily away, and excluding non-relatives like roommates or renters?

[ ▾ ]

What category would best describe your political orientation?

○ Republican
○ Democrat
○ Other
[_____]

Next >>

What is the zip code of your current residence?
[_____]

What is your year of birth?
[ ▾ ]

Have you ever been involuntarily unemployed and looking for a job **for at least 3 months?**

○ Yes
○ No

Did you become unemployed during the Great Recession in 2008/2009?

○ Yes
○ No

Please tell me, in general, how willing or unwilling you are to take risks. Please use a scale from 0 to 10, where 0 means "completely unwilling to take risks" and a 10 means you are "very willing to take risks". You can also use any numbers between 0 and 10 to indicate where you fall on the scale, like 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

| 0 - completely unwilling to take risks | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 - very willing to take risks |
|---|---|---|---|---|---|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

Next >>

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What is your **personal monthly** labor income before taxes (in dollars)? The personal monthly labor income refers to your personal monthly wage income.

- ○ Less than $500
- ○ Between $500 and $1000
- ○ Between $1000 and $1500
- ○ Between $1500 and $2000
- ○ Between $2000 and $2500
- ○ Between $2500 and $3000
- ○ Between $3000 and $4000
- ○ Between $4000 and $5000
- ○ Between $5000 and $6000
- ○ Between $6000 and $8000
- ○ Between $8000 and $10000
- ○ Between $10000 and $12000
- ○ Between $12000 and $15000
- ○ Between $15000 and $20000
- ○ More than $20000

---

Which industry/sector do you work in?

| 1st level | [ ▼ ] |
| 2nd level | [ ▼ ] |
| 3rd level | [ ▼ ] |
| 4th level | [ ▼ ] |

Next >>

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What do you think was the purpose of this survey? (1-2 sentences should be enough)

[                    ]

Next >>

# References

**de Quidt, Jonathan, Johannes Haushofer, and Christopher Roth**, "Measuring and Bounding Experimenter Demand," *American Economic Review*, 2018, *108* (11), 3266–3302.

**Tversky, Amos and Daniel Kahneman**, "Judgment Under Uncertainty: Heuristics and Biases," *Science*, 1974, *185* (4157), 1124–1131.