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I know best: Scepticism about the Knowledge of Experts and Peers on Economics Predictions*

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Abstract

Are individuals willing to change their minds when experts or their peers disagree with them? In an incentivized experiment on a representative sample, we collect binary predictions on unemployment and inflation. Then, we ask whether participants would like to change their predictions if the (vast) majority of experts (or peers) made the other choice. Very few participants are willing to change their predictions indicating a profound lack of trust in experts and the collective wisdom of peers. Nevertheless, there is variation by demographics. Further, scepticism in experts in this domain helps explain participants intention to vaccinate, providing some external validity.

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"Experts are just people who make mistakes like everyone else."
Spider-Man: Into the Spider-Verse (2018)

1 Introduction

Do people trust economists to predict economic trends? Do they trust their peers, collectively? Modern societies and democracies rely on the specialization of knowledge and expertise, which individuals must recognize to follow recommendations and accept institutional decisions. To trust the interest rate decisions of central banks, individuals must recognize they have at least *some* competence in predicting inflation. Anecdotal evidence hints at an erosion of trust in experts, but it is unclear if this derives from concerns about incentives (experts lying) or their expertise, and little is known about the recognition of expertise in the economic realm. In addition, do individuals believe that society, as a collective, has useful information on economic topics? Little is known about this. Economic models of social learning typically assume there is common knowledge that society as a whole has useful information and studies when markets or political systems can aggregate it—but this only makes sense when individuals believe society has some diffused information to aggregate in the first place.

In this paper, we study whether people are willing to follow the economic predictions of experts or peers in an incentivized survey on a representative sample of the U.S. population ($N = 3,000$). We eliminate the concerns about others' incentives to lie by allowing people to base their decisions on the choices experts or peers made for themselves when facing identical decisions and incentives. This helps us understand how competent people believe these groups are. We find that most people see little information in the economic predictions of experts or peers. Folk wisdom has long held that economists can't agree. It is reputed that Whinston Churchill once said that if you put two economists in a room, you get two opinions unless one of them is Lord Keynes, in which case you get three opinions. That is not the problem here. Even when experts or peers are nearly unanimous, people see little information in their predictions.

Our survey. Participants first make incentivized binary predictions on unemployment and inflation; at the time of the survey (November 2020), the former was a hotly debated political issue connected to the performance of the Trump administration, while inflation was mainly a technical matter with limited discussion (our survey was conducted before the subsequent inflation surge). We then investigate whether participants are open to changing their predictions based on the choice of others, where the reference group varies with the treatment. In our primary treatment, participants are asked if they are willing to make a different prediction if *90% or more* of professional economists made a different

prediction when asked the same question (at the same time); economists are defined as employees of the Federal Reserve, IMF, World Bank, or the Bank of England, trained to predict unemployment and inflation. Notably, experts' views are not given in the context of advice to others: experts, like participants, are making the best prediction for themselves while facing the same incentives. Across treatments, we vary the agreement rate among members of the reference group (at least 90% or at least 60%) and whether the reference group is made of experts or by peers—other survey participants in the same age group (within 10 yrs).

Results. Our results leave little room for interpretation: Participants seem to disregard the choices of others, regardless of whether these others are experts or peers, nearly unanimous or not, and on topics with or without political valence. Even when over 90% of experts agree on a binary prediction for unemployment, only 24% of participants chose to align with this consensus. Results are higher, but the key message stays, with inflation—only 34% follow expert opinion. This pattern persists when expert agreement drops to at least 60%. With peers, adherence is even lower, ranging between 14-16% across different scenarios. As we also elicit subjective confidence in their choice, we can test whether this derives from confidence in one's knowledge or low trust in that of others. Confidence plays a minor role; participants with low confidence are also reluctant to follow experts or peers. (We also measure different forms of overconfidence, which also seem to play no role.) This suggests that our results are due to the belief that experts and peers have little information. The overall message is clear: the far prevalent belief in our representative US sample is that both experts and peers offer limited useful information in economic predictions, a belief that holds even in cases of near unanimity, non-political topics, or even when the respondents themselves have little confidence.

At the same, we observe significant variations in these trends based on political and demographic factors. While perhaps intuitive, the extent of this discrepancy is less obvious and quite stark. Almost half of the young, Democrat-leaning, highly educated participants follow experts on inflation, and 40% do so for unemployment. However, for older, Republican-leaning, less-educated participants, the figures are markedly lower: only 18% follow expert advice on inflation, and a mere 12% do so for unemployment. These are not just low percentages; they are alarmingly close to the proportion that follows peer choices. As a participant's peer group is broadly defined and comprises just of other participants of a similar age, this represents an alarming lack of trust in experts. A substantial segment of the population, which also represents a significant portion of the electorate, places as much trust in the expertise of peers as in that of recognized experts—and minimal confidence in both.

Implications and Limitations. Our results suggest most people see little expertise in experts. This matters. Modern societies are built around the specialization of knowledge and governments often rely on experts to choose policy and to coordinate actions or justify choices to the public. Without trust in experts, opinion-based narratives can misinform and mislead people (Bursztyn et al., 2022), and efforts on how to best convey experts' opinions, such as those undertaken during the Covid-19 pandemic, may be of limited use. The heterogeneity we have documented suggests it may be more cost-effective to have targeted information campaigns: while it may not be particularly useful to involve experts in campaigns for older, less-educated individuals, it could prove to be considerably more effective for younger, more-educated audiences.

The reluctance to follow peers, even when 90% of them make a different choice, implies that most participants do *not* believe that society possesses substantial 'diffuse,' unbiased information—otherwise, unless they hold extreme beliefs, they should 'follow the crowd' when 90% or more express a coherent choice. This is in contrast to the central assumptions of countless papers that examine information aggregation in financial markets, political processes, or general networks (e.g., de Condorcet 1785, Fama 1970, Glosten and Milgrom 1985, Golub and Jackson 2010), which postulate at least *some* diffuse information.

Our analysis has several limitations. We focus exclusively on economic issues, and it is plausible that different outcomes could be expected in other domains. For instance, in areas like medicine or even restaurant or wine choices, both experts (e.g., Michelin or Wine Spectator) and peers (Yelp, Vivino) play pivotal roles.

Towards External Validity. To assess external validity, we examine whether elicited beliefs about experts' knowledge in the economic domain have repercussions in an entirely distinct context: We test if it predicts the willingness to get vaccinated against Covid-19; at the time of our survey, the vaccines had not yet become available, and the intense discourse on vaccination had yet to commence. Our findings reveal a consistent lack of trust across these disparate domains, with scepticism towards economic experts corresponding to lower intentions to vaccinate. This underscores that the general lack of trust we highlight in the economic sphere has direct implications in other critical dimensions.

Related Literature. A large literature studies public trust in experts. People might not trust experts because they worry experts' preferences do not align with their own or because they don't believe experts to be competent. We turn off the first channel and study exclusively the second one. In contrast, most of the literature focuses on the first channel or conflates the two. Funk (2017) studies public opinion on whether different groups act in the best interests of the public. She reports that 76% of people have relatively high confidence in scientists, while the corresponding number for elected officials is just 27%. This

varies across sciences: the number is 90% for medicine and only 68% and 65% for climate and nutrition scientists. A discrepancy between trust in scientists and elected officials is also consistent with results from Funk et al. (2019) and Algan et al. (2021).

Stantcheva (2020, 2021) finds systematic differences by political ideology in how people update their beliefs when presented with informed arguments from varying perspectives. There is similar variation in the trust people have in scientists. In particular, conservatives and low education individuals trust less in scientists (Hamilton et al. 2015, Gauchat 2012, Funk et al. 2019). Cofnas et al. (2018) reason that conservatives are less trustful of scientists because most scientists identify as liberal and hence have conflicting preferences. This is consistent with the variation in which scientists conservatives trust relatively more. For example, McCright et al. (2013) find that conservatives are relatively less trustful of impact scientists (such as environmental science).

Sapienza and Zingales (2013) find that a representative sample of Americans interpret policy questions in a systematically different way from economists, who are much more liberal and willing to take implicit assumptions as given.[1]

Alysandratos et al. (2023) experimentally study people's ability to identify economic experts where the experts are known to have the correct answers, and document how individuals have a strong tendency to select the populist answers.

Casual empiricism suggest that trust in experts, and in particular economists, has been eroding. However, the picture in the academic literature is more mixed. For example, Gauchat (2012), Krause et al. (2019) and Li and Qian (2022) find that overall trust in scientists in the US has been relatively stable over time. However, these works also find that conservatives have become less trusting of scientists over time. At the same time, the recent wave of populism has often been attributed to the breakdown of trust between elites and voting masses (Algan et al., 2017; Dustmann et al., 2017; Guriev and Papaiannou, 2021). Inglehart and Norris (2016) consider the 2016 Brexit vote as a rejection of the informed elite's advise. In Eichengreen (2018), the breakdown of trust results from a combination of economic insecurity and the inability of the political system to address the demand for change. Guiso et al. (2018) show that populist policies that disregard long-term economic harm emerge when voters 'lose faith' in the institutions and elites. In a classic study, Dornbusch and Edwards (1991) emphasized that populist policy "have almost unavoidably resulted in major macroeconomic crises that have ended up hurting the poorer segments of society."

[1] Like us, Andre et al. (2022) focuses on the perceived competence of experts. It studies the drivers underlying persistent disagreement in inflation and unemployment forecasts between economic experts and households. Part of this disagreement is found to be explained by the salience of different propagation mechanisms for individuals, with associative memory playing an important role. This is consistent with our findings. There is also evidence that peoples' beliefs and support for policy often depend on their own experiences rather than government statistics (Blendon et al., 1997).

Finally, several papers study the role of overconfidence and its implications for voting and politics (e.g., Ortoleva and Snowberg 2015); in line with our results, individuals overrely on their own individual signals and fail to learn from others. At the same time, as we discussed our analysis shows that overconfidence does not appear to explain our results, as they hold also for subjects with low confidence.

2 Design

3,000 respondents participated in an incentivized experiment on a quasi-representative sample of the US population, with 750 participants in each of the four treatments described below.[2]

The main part of the study consists of two blocks administered in a random order across subjects: the *Unemployment* block and the *Inflation* block. In both blocks, if the subject and corresponding question were selected for additional payment, the subject would receive $10 for a correct prediction. In the *Unemployment* block, participants were asked to predict if the unemployment rate in the U.S. in November 2020 was going to be 1) bigger or 2) smaller than the one reported in October (as measured by the U.S. Bureau of Labor Statistics). The study was conducted two weeks before the official numbers were released. Participants were also asked to indicate their confidence in their answer on a scale 0-100.[3]

The following question varied with our four treatments: Experts90, Experts60, Peers90, Peers60. In all cases, they would again receive $10 for a correct prediction. In Experts90, if the subject and corresponding question were selected for additional payment, they would be able to base their choice on the answers given by a group of experts who would be answering the same question at approximately the same time. Specifically, participants were asked if they wanted to follow the experts' choice in the event that *90% or more* of them made a different prediction from theirs; otherwise, their answer would remain unchanged.[4] Experts were defined as professional economists currently employed at the

[2]The sample was stratified by age, gender, education, and income, with quotas corresponding to the 2018 American Community Survey. Participants were recruited by the company *Qualtrics*, which administered the survey and payments. The experiment took, on average, 9 minutes. All participants received a participation fee, and a randomly selected 10% of them received an additional payment if they made a correct prediction in a randomly selected question (the selected question was the prediction on unemployment). The Qualtrics platform included (proprietary) attention screens and automatically eliminated subjects who failed them.

[3]Subjects were instructed that this number indicated the likelihood they assigned to their answer being correct. As common, this measure was not incentivized (Enke and Graeber, 2023).

[4]The exact wording was: "At the same time as you are answering our survey, we are also asking the same question to a group of experts, economists who currently work at the World Bank, the Bank of England, the Federal Reserve Bank or the International Monetary Fund and who have been trained to study unemployment. You said that you think that the unemployment rate in November is more likely to be equal to or higher than it was in October. If it turns out that 90% or more of the experts we survey think the opposite, would you change your mind? In other words, would you like to change your answer about the unemployment rate in November if 90% or more of the experts think the unemployment rate in November will be lower than it was

World Bank, the Bank of England, the Federal Reserve Bank, or the International Monetary Fund trained to study unemployment and inflation.

The other three treatments varied the reference group. In Experts60, subjects were asked if they wanted to follow the experts if 60% or more of them made a different prediction. In Peers90 (resp. Peers60), participants were asked if they wanted to change their prediction if at least 90% (resp. 60%) or more of the other participants in the survey of similar age (within 10 years) made a different choice.

The *Inflation block* was identical except that predictions were about whether the inflation rate between October and November in 2020 was going to be 1) higher or 2) lower than it was between September and October of the same year.[5]

To summarize, for each participant we recorded whether they believe that each of two variables of interest (inflation and unemployment) is increasing or decreasing relative to the previous month and whether they would be willing to change their answer if a (large or small) majority of a comparison group (experts or peers) reported a different answer.

At the end of the experiment, participants answered a few questions about the COVID-19 vaccine: if they intended to take the vaccine if available; if they would change their mind if medical experts or peers said they would take the vaccine; their beliefs about others' choices to take the vaccine if available and to take the vaccine if medical experts or peers say they would. For example, in the Experts90 treatment subjects were asked whether they and others would choose to take the vaccine if 90% or more of medical experts (doctors) said they would personally get vaccinated. We discuss these answers at the end of the paper and separately in Agranov et al. (2021).

Finally, we collected various demographics and measures of risk attitudes, overconfidence, and political preferences. Online Appendix includes a detailed description of all questions and relevant screenshots.

Discussion of the Design. Four features of our design are worth discussing. First, we focused on predictions about unemployment and inflation because i) they are directly related to economics, ii) are routinely predicted by experts with clear expertise, iii) are officially measured, iv) are a prime example of information aggregation in markets, and, v) had very different political valence at the time of the survey. Unemployment is often a politically divisive issue used to measure the performance of the administration, and in November 2020, it was an active point of political discussion, with the presidential

in October?"

[5]The exact wording was "We are now going to ask you what you think will happen to inflation in the United States between October and November 2020. Inflation measures how much prices are increasing, where a monthly increase of 1% means that, on average, prices increased by 1% that month. The US Bureau of Labor Statistics measures inflation over time and will report the new level of inflation in mid-December, 2020. Do you think inflation between October and November in 2020 is more likely to be higher or lower than it was between September and October in 2020?"

elections in full swing and the world still in the early stages of the COVID-19 pandemic; political preferences may thus affect predictions and trust in experts or peers. On the contrary, inflation in the United States has been very low and stable in the two decades before November 2020: as a consequence, at the time of the experiment, inflation was not a topic of discussion—it was hardly mentioned on in the media. (Of course, this changed dramatically in the following months.) By comparing results in the two blocks, we can document the variation in trust in two similar domains that refer to the same experts but with very different political valence.

Second, sensitivity to experts and peers comes on two margins. An extensive margin—how many people will follow experts— and an intensive margin—how many experts need to agree to convince someone. We aimed to explore both by using two thresholds of agreement, 90% or 60%: the former represents near unanimity, while the latter represents a majority but is also compatible with substantial disagreement.

Third, comparing experts and peers allows us to estimate the impact of expertise when contrasted with generic learning from others. Individuals may be willing to follow experts simply because they believe that if many people agree, it may be a signal even if they have no particular expertise. The treatments with peers give us the benchmark about participants' willingness to follow generic others. Because people tend to interact more with others of a similar age, we focused on peers in similar age groups to best estimate how persuasive such a group is in comparison to experts.

Finally, we allowed participants to condition on the choices that experts or peers made for themselves in the same situation, as opposed to asking experts to give advice to others; like the participants, experts and peers are incentivized to make the best prediction they can. This eliminates the worry that experts could have ulterior motives or make unexpected choices to show expertise. By turning off this channel, we can focus instead on the perceived competence of the experts and peers.

3 Results

Initial beliefs. As a baseline, we see substantial variation in predictions. 71% of subjects think unemployment will rise, while 75% think inflation will. These are essentially uncorrelated ($corr = 0.06$). As expected, beliefs about unemployment are related to political preferences: Republicans are much more likely to believe that unemployment will decrease ($p = 0.001$), a sign of the good performance of the Trump administration. On the other hand, there is no association between political affiliation and beliefs about inflation.[6]

[6]Table A.1 in Online Appendix shows that this also holds controlling for demographic characteristics (gender, age, education, income, living in a city or rural area), individual characteristics (risk and overconfidence), and local conditions (% of democratic votes in 2020, being in a swing state, and the current local unemployment rate). Beliefs about unemployment respond to political preferences, socio-demographics, and local

This is consistent with unemployment, but not inflation, being a politically sensitive topic at the time.

Do people trust experts and peers? The top left panel of Figure 1 depicts, for each of our four treatments, the fraction of subjects willing to follow the choice of experts or peers when a majority of them make a different prediction.

In general, very few people are willing to follow experts or peers, even when a 90% or more agree on a different choice. Subjects are a bit more willing to follow experts than peers and more willing to follow experts on inflation than unemployment. But numbers remain strikingly low in all treatments. On inflation, a technical topic at the time, only 34% of participants are willing to follow experts, even against near unanimity. When the threshold is lowered to 60% or more, the percentage drops to 28%. As we move to unemployment, a non-neutral topic, these numbers drop further, to 24% and 21%. With peers, the corresponding percentages are between 14% and 16% for both unemployment and inflation in both treatments.

Moreover, behaviors are very similar in Experts90 and Experts60 and in Peers90 and Peers60, showing how the intensive margin of expertise has remarkably little effect.[7] The willingness to follow others is also reasonably correlated for inflation and unemployment ($corr = 0.52$, $p < 0.001$, for Experts; $corr = 0.45$, $p < 0.001$, for Peers). The right graph on Panel A of Figure 1 depicts the fraction of subjects we classify as *Trusting*—subjects who are willing to follow experts (peers) for at least one of the questions: these are, on average 37% (22%) of participants.[8]

The overall message is clear: Even in the best-case scenario of politically neutral topics with near consensus among experts, *at best* a third of the subjects are willing to follow them. As we move to non-neutral topics, even fewer do. Moreover, the strong similarity between the treatments with 60% or 90% agreements and the high correlation between questions suggest that individuals tend to be of two 'types:' those that trust experts and do so even with mild majorities and across the board; and those that do not and won't change their mind on either topic, even when experts are nearly unanimous and even on 'technical' topics. The latter group seems to include about 60% of our population—a large majority.

The very low numbers of willingness to follow peers, even when nearly unanimous, show that the vast majority of subjects do *not* believe that the society possesses meaningful

conditions. Beliefs about inflation are unrelated to any of these measures. In all cases, effects are small: correlates explain less than 2% of the variation.

[7] Three comparisons show no statistical difference ($p = 0.195$ for unemployment in Experts90 vs. Experts60, $p = 0.278$ for unemployment in Peers90 vs. Peers60, and $p = 0.730$ for inflation in Peers90 vs. Peers60). The only difference is for inflation in Experts90 vs. Experts60 (34% vs. 28%, $p = 0.022$).

[8] The Trusting indicator pools together Experts90 and Experts60 treatments into one group and Peers90 and Peers60 into another group.

FIGURE 1: Fraction of people who follow experts or peers

Notes: Fraction of subjects willing to change their answers following experts or peers. Whiskers correspond to the 95% confidence intervals. Panel (A) looks separately at each question in each treatment (left graph) and then combines the two questions together into a "Trusting" index if subjects are willing to follow others at least for one of the questions (right graph). Panels (B) and (C) replicate the left graph of Panel (A) separately for less- and more-confident participants, where confidence is measured at the question level. Median confidence is 75 and 70 for unemployment and inflation, respectively.

diffuse information on economic topics—some of them should change their mind in case of near unanimity of others.

Self-confidence or Distrust? The tendency not to follow others, even when nearly unanimous, can be due to individuals' high confidence in their own information or low confidence in the information of others, including experts. Because we measure confidence, we can identify the dominating force.

While confidence naturally matters, it is only part of the explanation. As we should expect, confidence is related to the willingness to follow others—subjects with low confidence are more prone to following others than subjects with high confidence. But this explains only some of the variation: the correlation between following others and confidence is -0.11 ($p < 0.01$) and -0.15 ($p < 0.01$) for unemployment and inflation in the Experts treatments, respectively; for peers, these are -0.15 ($p < 0.01$) and -0.07 ($p < 0.01$). All these numbers are significant but also relatively small. Another way to examine this is to look at Panel (B) of Figure 1, which replicates our main figure for subjects with high (above median) and low confidence separately. Results are clear: while subjects with low confidence do follow experts more, even for them, only 30% and 41% follow experts even in the Experts90 treatment for unemployment and inflation, respectively. Proportions are similar even if we focus on subjects with the lowest confidence (between 50 and 60, recalling that confidence shouldn't go below 50; see Figure A.1 in the Online Appendix).

Maybe it is not just confidence, but *over*confidence that determines whether individuals follow others? As we have seen, recent literature relates overconfidence to various forms of political preference. Since we measure the overconfidence in auxiliary tasks at the end of the experiment, we can test if it plays a role; in particular, we measure what the literature refers to as "overprecision."[9] We find no robust relationship between any of our measures of overconfidence and the willingness to trust others.[10]

These results imply that the reason why most participants do not follow experts or peers is not high confidence in their own knowledge or overconfidence in general but rather a very low opinion of the knowledge of others, including experts. Connecting this to

[9] Overprecision denotes the individual's overconfidence in their knowledge—the most relevant form here of overconfidence for our tasks (Moore and Healy, 2008), and the one that has been connected to political preferences (Ortoleva and Snowberg, 2015). Following the literature, we ask participants one factual question—the year the landline telephone was invented—as well as two assessments of the accuracy of their answers, one qualitative and another numerical (the probability they believe their answer is within 25 years of the correct answer). As standard, none of these measures are incentivized. For each assessment of accuracy, we define overprecision as the residual of the assessed accuracy on a fourth-order polynomial of the participant's true accuracy. We thus have two measures of overconfidence, which are highly correlated (as noted in other papers).

[10] We find $p > 0.10$ in all correlations except for a positive and significant but rather weak correlation between one measure of overprecision and willingness to follow the peers ($corr = 0.11$ ($p < 0.01$) for both inflation and unemployment). Figure A.2 in the Online Appendix replicates Figure 1 for subjects above and below median overprecision separately, confirming these results.

our previous findings, our data suggest that a sizable majority of our subjects are unwilling to follow experts even when they are nearly unanimous and even when subjects themselves are unsure of their own answers.

3.1 Determinants of trust in Experts and Peers

What separates those who follow experts and peers and those who do not? Figure 2 indicates the fraction that follows experts varying ideological views, political party affiliation, age (>40), education (college or higher), and place of living; since behaviors in Experts90 and Experts60 are very similar, we pool them here. We find very strong effects: Trust is much higher for subjects who are liberal, democrat or independent, young, and highly educated. Some of these may be expected, like the relationship between education and trusting experts on technical subjects like inflation; or the relationship between political preferences and trusting experts on a politically loaded topic like unemployment. Yet, we should highlight the strength of these relationships and how they extend: even for inflation, a technical topic, 43% of very liberals respondents follow experts against a mere 25% of very conservative one; that is 70% more. Figure A.6 in the Online Appendix shows the corresponding figure for Peers; effects are much milder, with the exception of young and very liberal people trusting more.

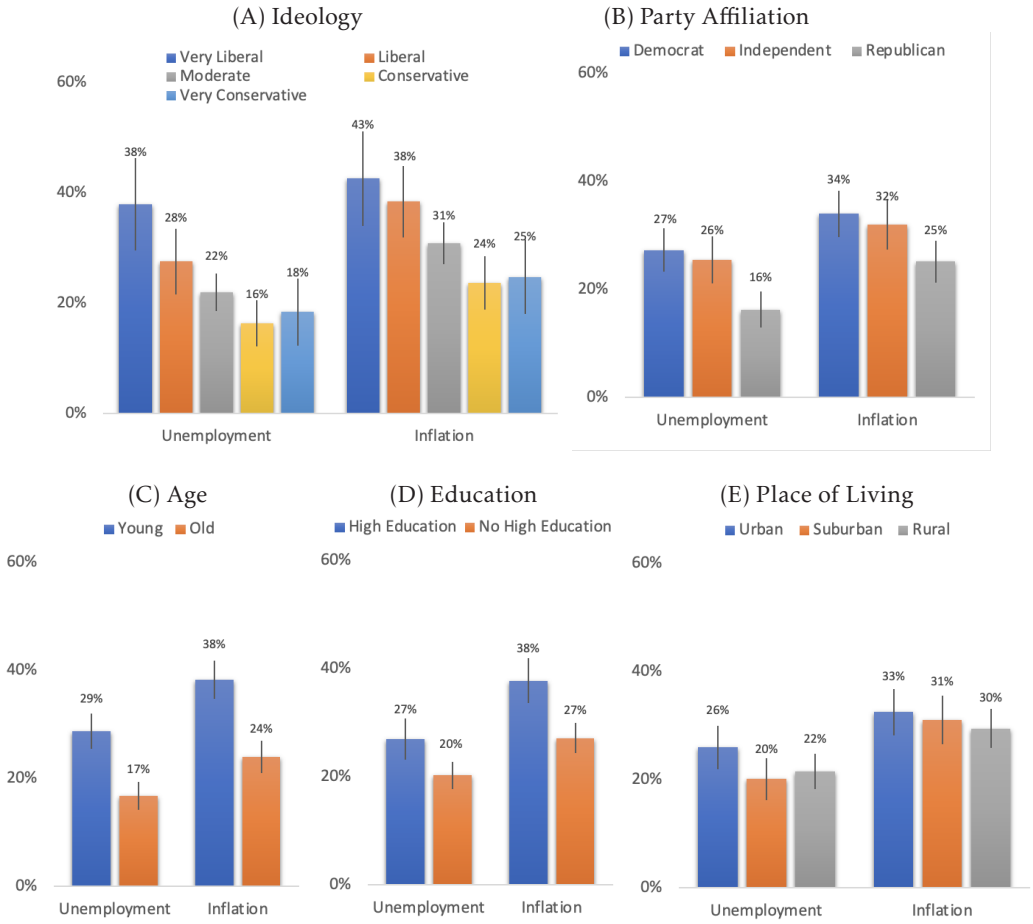
As several of these characteristics are correlated, to understand marginal effects, Figure 3 presents the results of a logistic regression where we also control for confidence as well as the answer and the order of blocks; again, we pool Experts90 and Experts60, as well as Peers90 and Peers60; moreover, since results on inflation and unemployment are similar (and correlated), we use the dependent variable Trusting. (Exact coefficients and standard errors appear in Table A.2 in the Online Appendix.) Figures A.3, A.4, and A.5 in the Online Appendix present the same regressions separately for unemployment and inflation, with party affiliation instead of the liberal-conservative scale, and without controls; results are similar.

Participants who are young and liberal are significantly more likely to trust experts by substantial margins: the probability increases by 15 points for young subjects and by 9 percentage points for liberal ones relative to the moderates. On the other hand, conservative participants are less likely to trust experts. Controlling for these measures, higher education is no longer significant. (The same is true if we used dummies for each education level.) Risk attitude, measured in a separate task, is also uncorrelated.

Young participants are also more likely to trust peers, while male and conservative participants agree to change their predictions less than female and moderates, respectively. In general, these effects are smaller for peers.

While individually strong, these demographic variations can lead to major differences when combined, with important implications. To illustrate them, Figure 4 shows the frac-

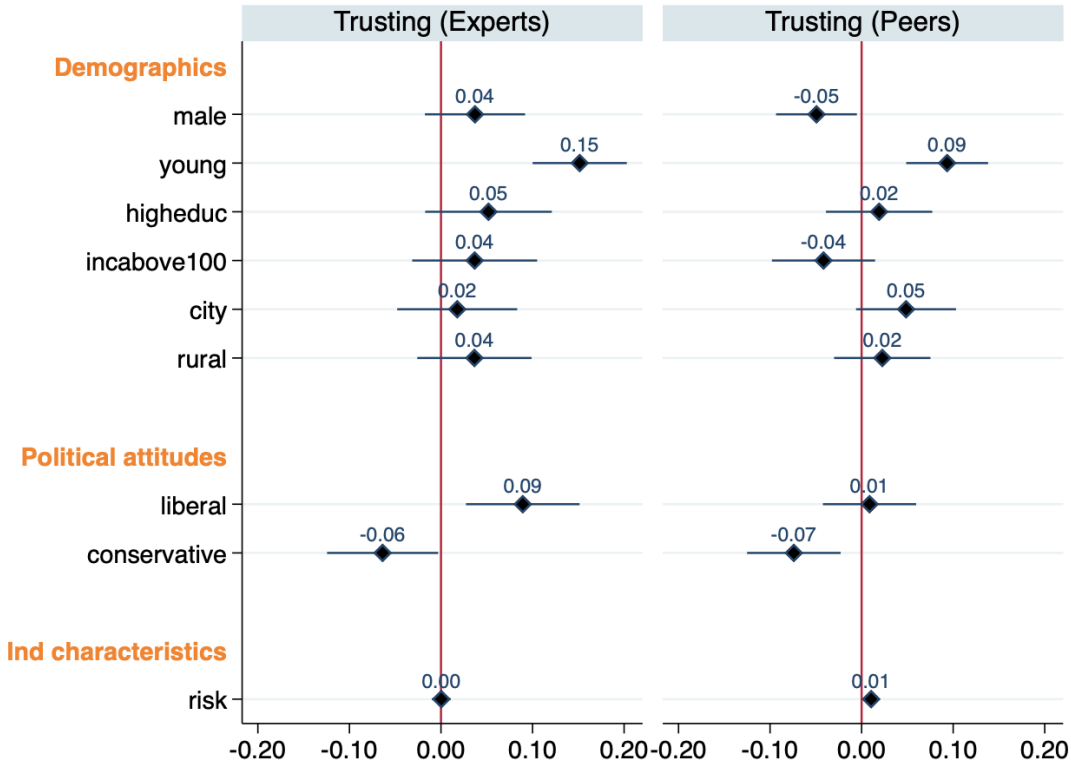
FIGURE 2: Fraction of people who follow Experts depending on their ideological views, party affiliation, age, and education



Notes: Fraction of subjects who are willing to change their mind if experts disagree with their estimate, pooling together Expert90 and Expert60. Panel (A) classifies subjects by their ideological views, excluding those who say they are not sure (9% of our participants). Panel (B) breaks the answers by party affiliation, excluding those who are not sure or report 'other' (11% of our participants). Panel (C) looks at the effect of age, where young is a participant who was born in 1980 or later. Panel (D) considers education, where high education is college graduates or higher degrees. Panel (E) looks at the effects of place of living.

tions willing to follow experts and peers for two groups: young democrat with high education vs. older Republicans with lower education. Behavior with peers is virtually identical, but with experts, we see substantial variation. While on average, only 23% of participants follow experts for unemployment, this number goes up to 40% for young educated Democrats and shrinks to only 12% for not-young, low-educated Republicans. Similarly, for inflation, against the average 31%, we have 48% of the first group and only 18% for the second. In general, the propensity to follow experts is about *three times higher* for young,

FIGURE 3: Who trusts experts and peers?

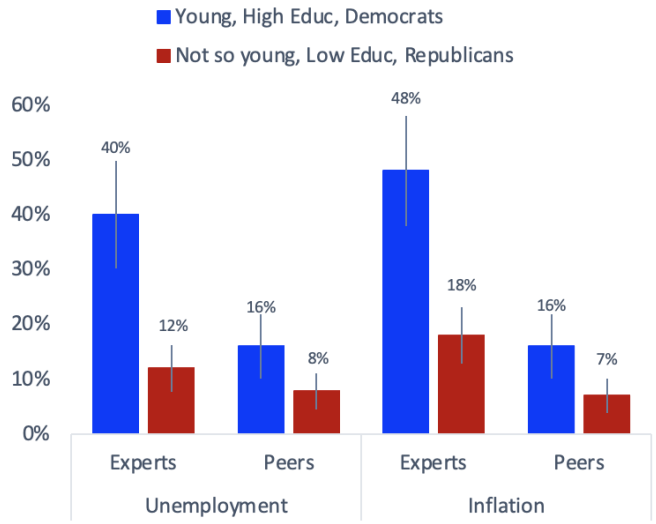


Notes: The marginal effects after the logistic regressions are reported. The dependent variable is an indicator that a participant will change her mind for at least one of the questions (unemployment or inflation) in Experts (the left regression) or Peers (the right regression) treatments. We pool together Experts90 and Experts60 treatments (the left regression) as well as Peers90 and Peers60 treatments (the right regression). A participant is called young if she was born in 1980 or later. A participant is called highly educated if she graduated from college. For the political attitudes, the omitted group is Moderates. We control for individual confidence in participants' own predictions for inflation and unemployment and the order of blocks within the experiment. The diamond is the average marginal effect and the whiskers are the 95% confidence intervals.

educated Democrats than for older, low-educated Republicans. Remarkably, for this latter group, there is no statistical difference between their propensity to follow experts on unemployment and their propensity to follow peers—random people in the population of their age ($p = 0.132$).

Overall, these results shed further light on the distribution of trust of experts. Even in selected groups (young, educated, Democrat), even on more technical topics like inflation, the tendency to follow experts remains quite low, at most at 48%. However, as we move to the opposite group of older, less-educated Republicans, results are dismal: subjects in these groups react to experts' opinions about unemployment *as much as to that of random*

FIGURE 4: Illustration of Magnitudes of Trust



Notes: Bars represent the frequency of changing minds by treatment by topic and whiskers correspond to the 95% confidence intervals. A participant is called young if she was born in 1980 or later. A participant is called highly educated if she graduated from college. A participant is a Democrat (Republican) if she affiliates herself with the corresponding party or if she is leaning towards it.

people. That is, this sizable fraction of the population and of voters appear to recognize *no expertise*.

Finally, we should note that the willingness to follow others also depends on the predictions: in all treatments, subjects who predicted decreasing unemployment and inflation are more likely to follow experts or peers. Our subjects are more inclined to change their mind to follow 'bad' (unemployment/inflation grow) rather than 'good' news.[11]

4 Discussion, Implications, and Out-of-Sample Predictions

In a large incentivized survey on a representative sample of the U.S. population, we have shown that participants are reluctant to change their minds following the choices of experts or peers, even when they are nearly unanimous, when the topic is technical, and when individuals are unsure of their answers. This reluctance is stronger on politically non-neutral topics and weaker in some groups but also extremely high in others: older, less-educated Republicans are essentially unwilling to follow experts and follow experts essentially as much as they follow random other subjects in their age group.

[11] The correlation between believing that unemployment will rise and following experts or peers is -0.05^{**} and -0.06^{**}, respectively. For inflation, these are -0.08^{**} and -0.09^{**}. This effect may be due to selection (optimistic subjects are also more willing to listen to experts) or motivated beliefs (it may be harder to maintain motivated beliefs against experts' unanimity).

Our results have several implications. First, on a broad level, they bring further evidence to the widely-discussed "crisis of trust" about expertise. Second, they show how such a crisis appears particularly problematic on economic topics, both related and unrelated to the political debate. Third, they show how such a lack of confidence depends on socio-demographic and political characteristics, finding rather extreme instances of distrust in a sizable fraction of the population. This is relevant to study the origin of distrust: Why do these specific groups have so little trust? Finally, our results speak to the widespread presence of 'diffuse' information in society: contrary to the typical assumption in many economic models, our subjects do not appear to believe that their peers possess much information even collectively—for they are unwilling to follow them even when nearly unanimous and even when they are themselves quite unsure.

Implications Beyond Economics? Does the distrust of experts and peers we document in the economic realm have implications in other domains? We conclude the paper by showing that, indeed, it does, speaking toward the external validity. Our survey was run in November 2020, in the midst of the COVID pandemic; vaccines were in development, but none were approved. As mentioned above, at the end of the survey, we asked subjects about their plan to vaccinate and their willingness to listen to experts or peers.

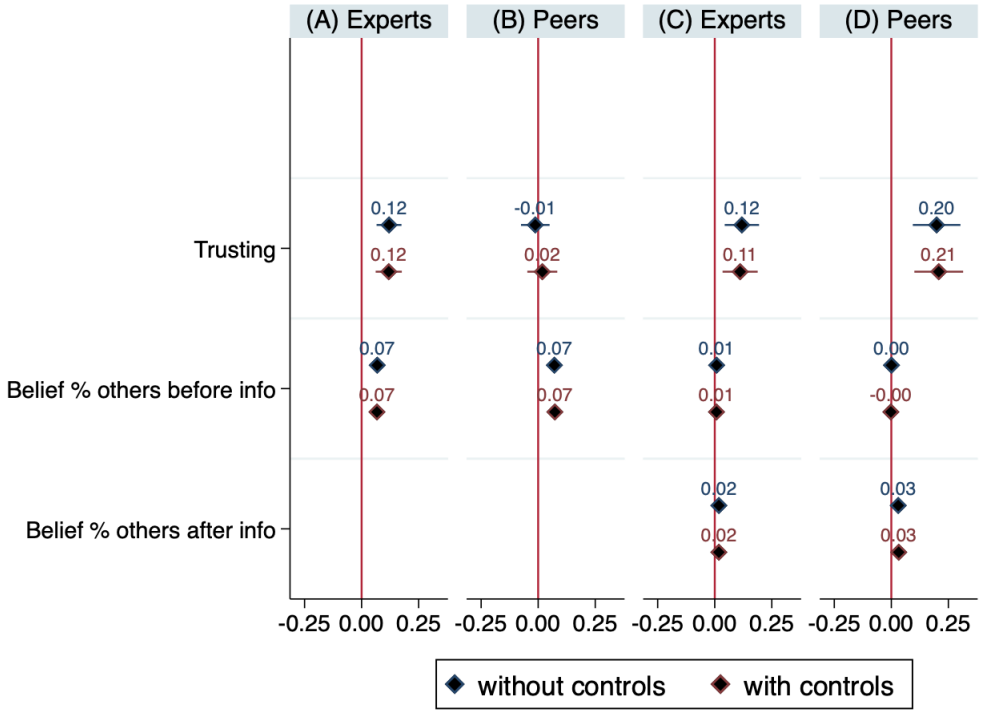
We focus on the intention to vaccinate and the willingness to change one's mind if others make a different choice (like in our main questions). (Agranov et al. (2021) studies the importance of the beliefs about the behavior of others and further discusses this data on intention to vaccinate.) The first two regressions in Figure 5 present the marginal effects of an indicator of Trusting on participants' intention to get vaccinated controlling for the beliefs about the choice of others and other controls.[12] Participants who trust experts on economic topics are 12% more likely to intend to get vaccinated, even controlling for both demographics and political attitudes. The effect is both significant and large. This does not extend to peers, which is reasonable if we believe experts provide assurance about the vaccine approval process (that participants may trust or not).

The second two regressions in Figure 5 conduct the same analysis, taking as a dependent variable the willingness to vaccinate if others (experts or peers) did so.[13] Here, trust matters in both experts' and peers' treatments: participants' willingness to follow others in the economic domain extends to their decision to vaccinate.

Overall, these final results show that our documented mistrust of experts in the economic realm has direct implications in other important domains. This points, on the one hand, to the external validity of our findings but also, on the other hand, to a broader concern with the general lack of trust in expertise in large fractions of the population.

[12] Exact coefficient and standard errors appear in Table A.3 in the Online Appendix.
[13] Exact coefficient and standard errors appear in Table A.4 in the Online Appendix.

FIGURE 5: Implications for Vaccination Choices



Notes: In regressions (A) and (B), the dependent variable is the self-reported intention to vaccinate (yes/no). In regression (C), the dependent variable is the self-reported intention to change one's own mind and vaccinate if X% of Experts declare that they are planning to vaccinate, where $X = 90$ in Experts90 and $X = 60$ in Experts60. Regression (D) is similar to regression (C), except that, instead of Experts' opinions, we look at changes in intention to vaccinate after observing Peers' opinions. For regressions (A) and (C), we pool data from Experts90 and Experts60, while we pool data from Peers90 and Peers60 for regressions (B) and (D). The indicator "Trusting" takes value 1 if the participant is willing to change her mind regarding either inflation or unemployment (or both) following either peers or experts. The variables "Belief % other before info" and "(after info)" are the incentivized beliefs about the fraction of other participants who report that they intend to vaccinate before (after) observing information regarding the intentions of peers or experts. Beliefs are measured in deciles. In regressions (C) and (D) we control for the self-reported intention to vaccinate before any information is received. Regressions with controls include controls for political attitudes, gender, education, age, income, and whether a person lives in a city or rural area. Whiskers depict 95% confidence intervals.

Final remarks. An interesting question going forward is whether artificial intelligence might become a trusted source of information. A similar experiment could be run in the future, but with participants asked whether they would like to follow the predictions of, for example, a large language model like ChatGPT. It is possible that the void left by the distrust of experts might be filled by artificial intelligence, particularly as people become more familiar with it and begin to use it more regularly. This opens up questions about the relative information content that can be provided by artificial intelligence, as well as the trust people place in it and how this varies across different segments of the population. If it is the same people who are distrusting experts who distrust artificial intelligence, that will limit its potential impact.

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Online Appendix

A Additional Analysis

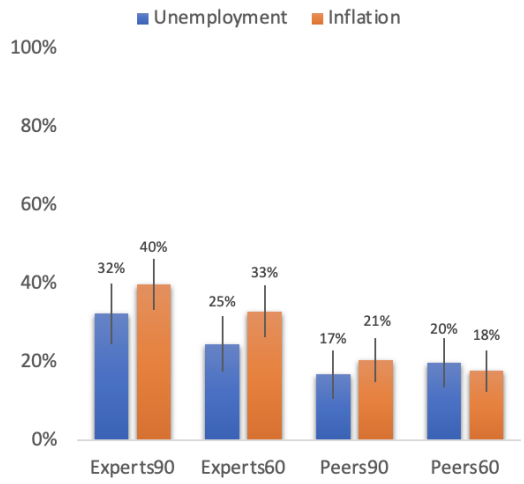
What determines your initial beliefs about unemployment and inflation? Table A.1 explores the correlates of beliefs including the socio-demographics, local conditions, political attitudes, and individual characteristics. The beliefs about unemployment respond both to political attitudes, socio-demographics, and local conditions. Beliefs about inflation are less so. In both cases, our correlates explain less than 2% of variation in the data. The effects are quite small.

TABLE A.1: Determinants of Beliefs about Unemployment and Inflation

	Dep. Variable: Indicator for Reporting that	
	Unemployment will Increase	Inflation will Increase
Socio-demographics		
male	-0.05**	-0.03**
young	-0.03*	0.02
high education	-0.03	-0.004
income above 100K	-0.02	-0.08**
city	0.03	-0.06**
rural	-0.021	-0.03
Political Attitudes		
Republican	-0.06**	-0.03*
liberal ideology	0.04*	-0.01
Local Conditions		
swing state	-0.06**	-0.03
local unemployment rate	1.52*	
% of voting Dem2020 (local)	-0.11*	-0.08
Personal Characteristics		
risk	-0.004	0.001
overconfidence1	0.01	-0.03**
overconfidence2	-0.0005	0.0003
confidence in prediction	0.003**	0.002**
Features of the survey		
first block unemployment	0.02	-0.04**
# of obs	2987	2987
pseudo R-sq	0.0163	0.0167

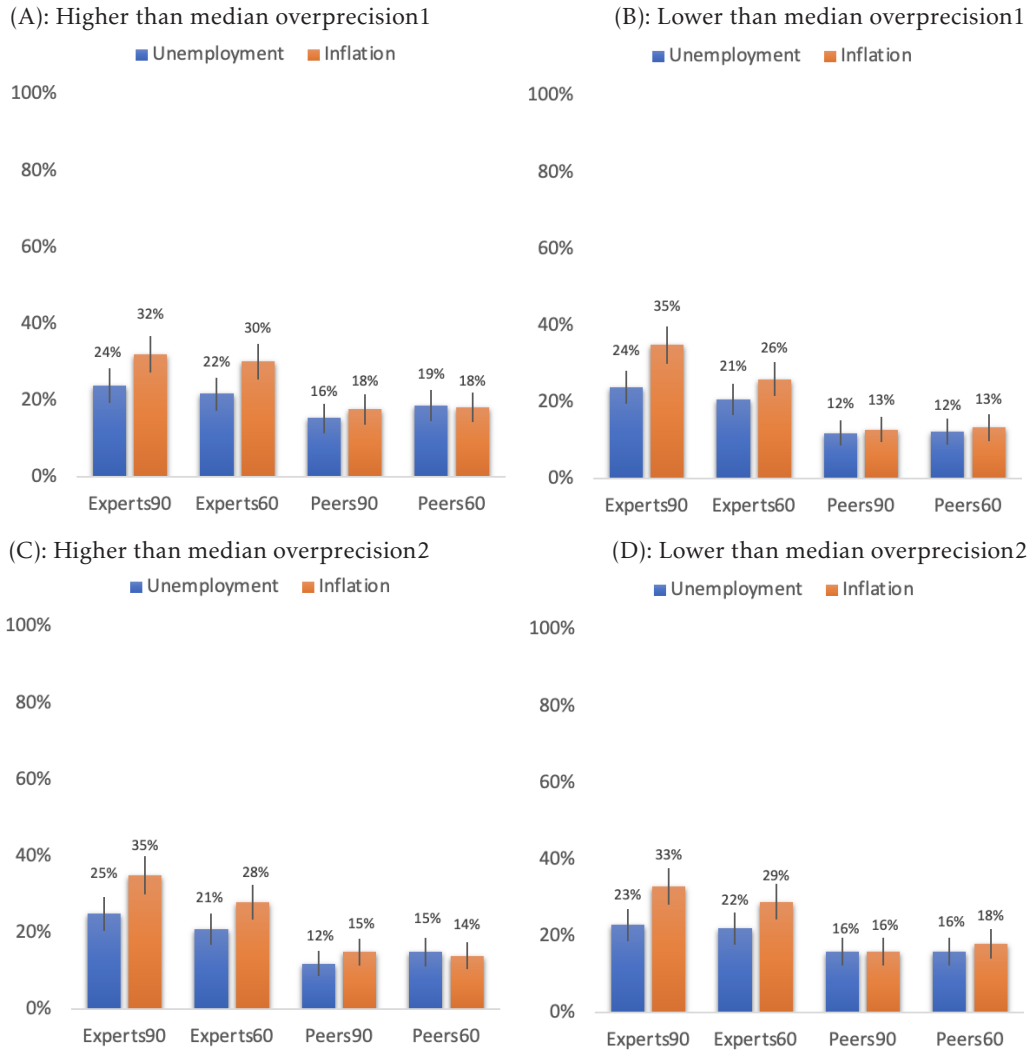
Notes: Marginal effects after LOGIT regressions are reported. We pool together data from all four treatments. We use dummy variables for high education (college graduate or higher) and high income (above 100K) because the categorical variables educ and inc, which take 5 or 6 values, are highly correlated $corr = 0.68$ with $p = 0.000$. The indicator variable Republican takes the value 1 if the participant indicated that her party affiliation is "Republican". The participant is coded as young if she is born in 1980 or later. ** (*) indicates significance at 5% (10%) level.

FIGURE A.1: Fraction of people with confidence between 50 and 60 who follow experts and peers for each question in each treatment.



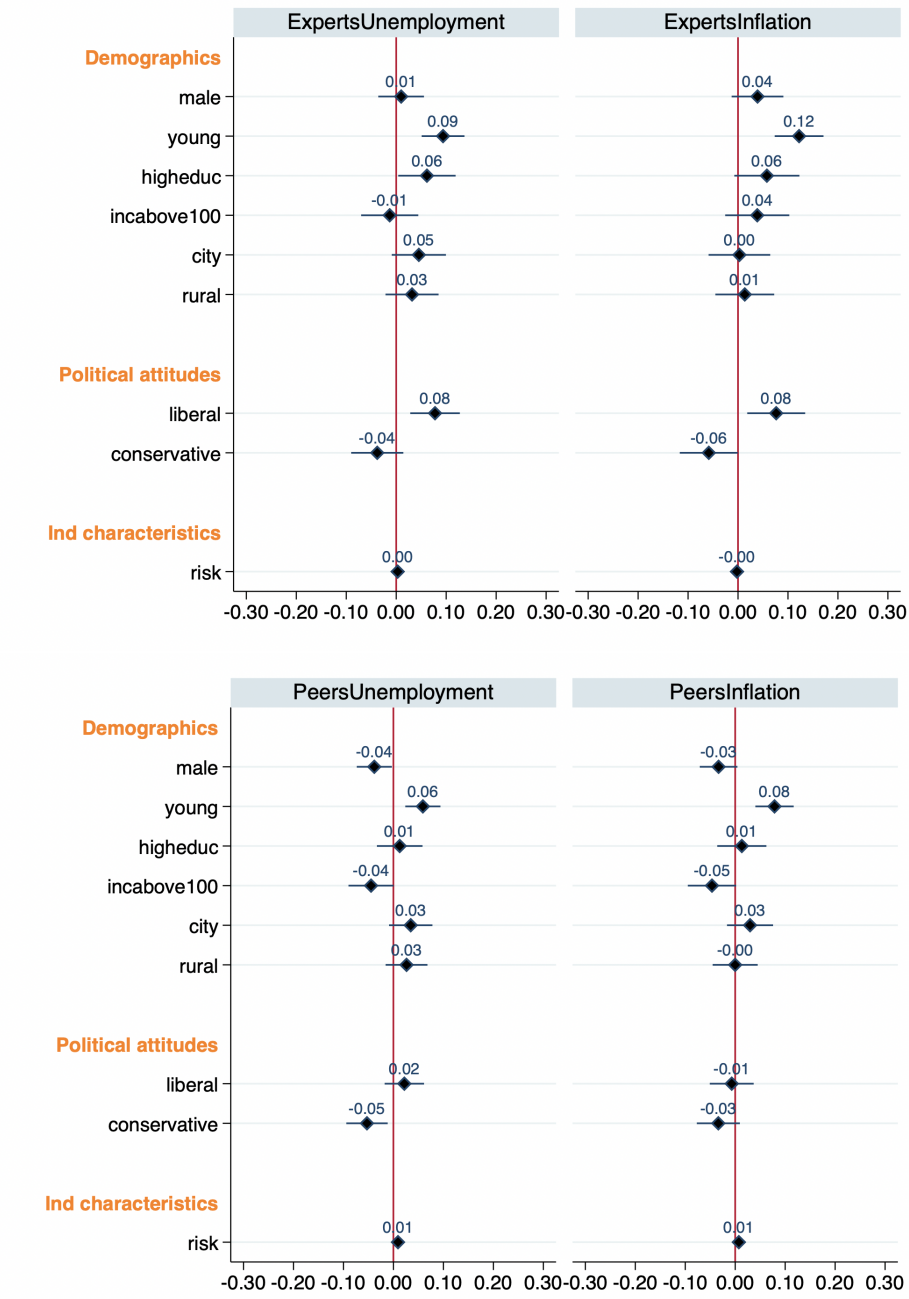
Notes: This figure replicates Figure 1 from the main text of the paper for people who reported confidence levels between 50 and 60 in each of the two questions.

FIGURE A.2: Tendency to follow others depends on how overconfident one is.



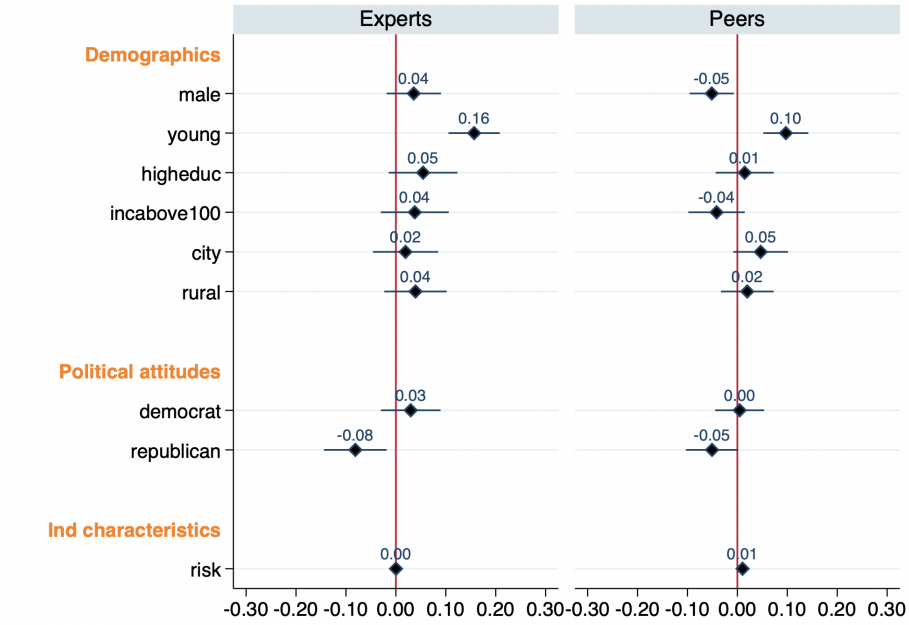
Notes: This figure replicates Figures 1 (B) and (C) from the main text of the paper for individuals who are above and below the median of each of our two measures of overprecision. Overprecision1 is defined using the qualitative assessment of accuracy, while overprecision2 is defined using the numerical assessment (probability that the answer is within 25 years of the correct one); see footnote 9 for how the measures are constructed.

FIGURE A.3: Correlates of Trusting Experts and Peers Separately for Each Question



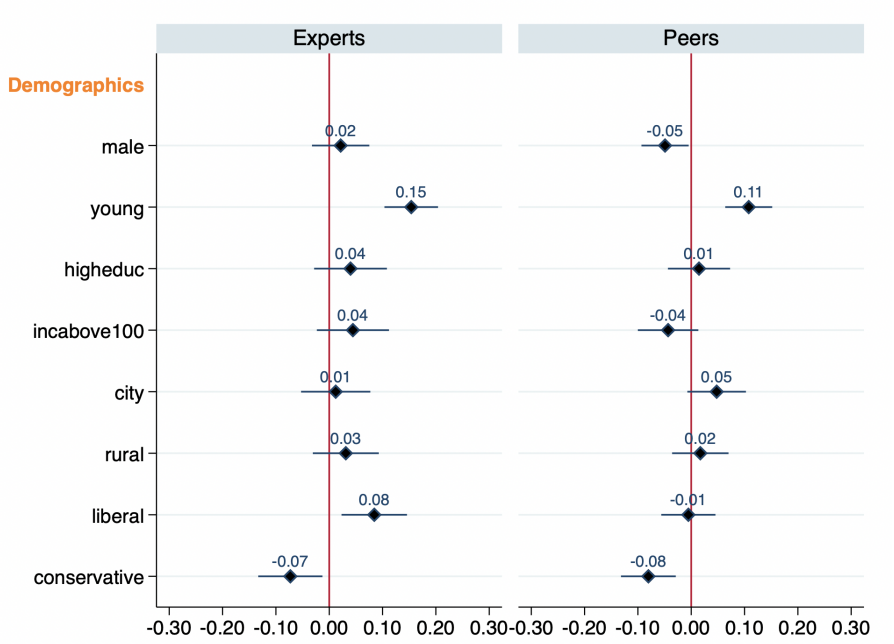
Notes: Marginal effects after the logistic regressions are reported. The dependent variable is an indicator that a participant will change her mind about unemployment (inflation). We pool the data from Experts60 and Experts90 treatments together and from Peers60 and Peers90 treatments together. The regressions control for individual characteristics (risk), the order of blocks (unemployment first or inflation first), and confidence of own prediction. The diamond is the average marginal effect; the whiskers are the 95% confidence intervals.

FIGURE A.4: Correlates of Trusting Experts and Peers with Party Affiliation instead of Liberal-Conservative Measure



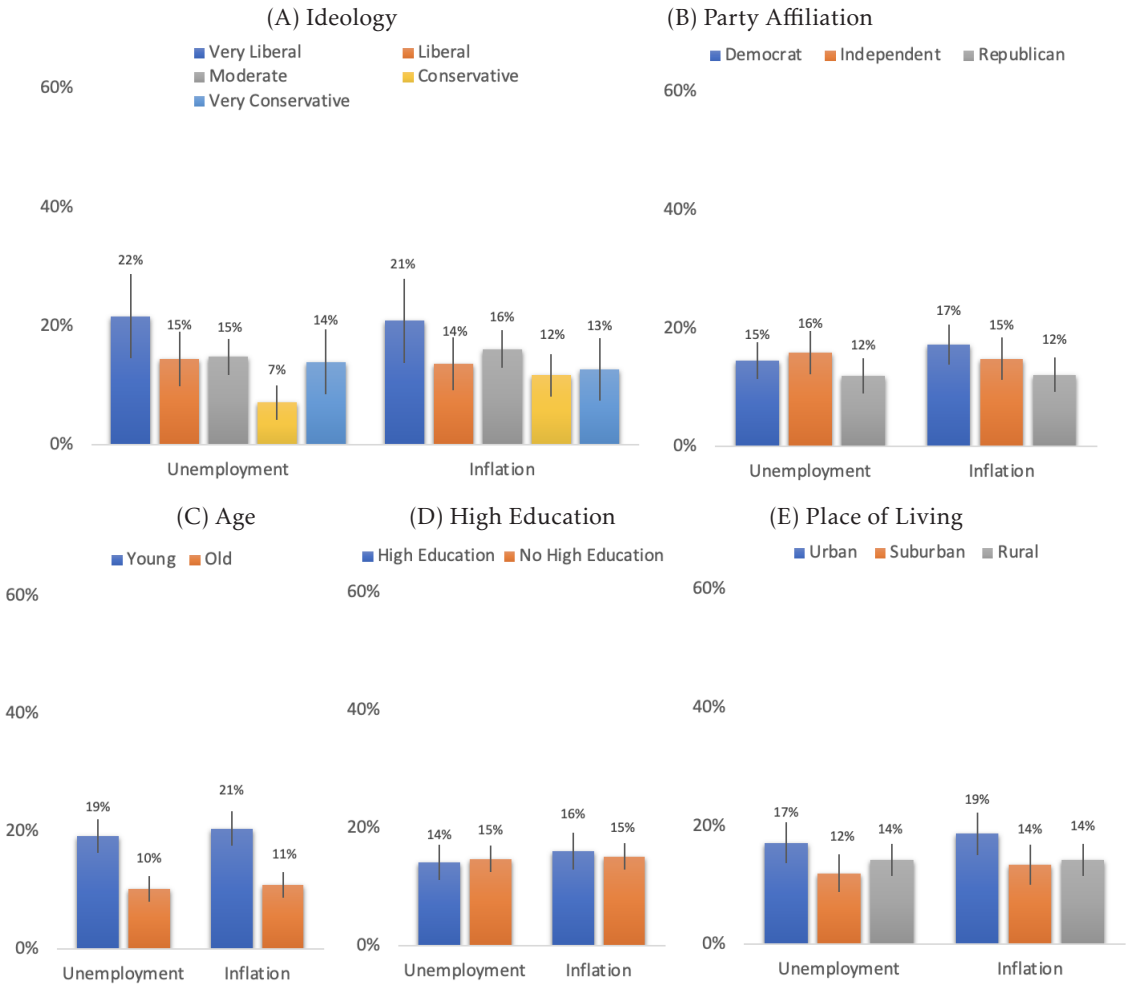
Notes: Marginal effects after the logistic regressions are reported. The dependent variable is an indicator that a participant trusts experts or peers, i.e., will change her mind for at least one of the questions. We pool the data from Experts60 and Experts90 treatments together and from Peers60 and Peers90 treatments together. The regressions control for individual characteristics (risk), the order of blocks (unemployment first or inflation first), and confidence of own prediction. The diamond is the average marginal effect; the whiskers are the 95% confidence intervals.

FIGURE A.5: Correlates of Trusting Experts and Peers Without Controls



Notes: Marginal effects after the logistic regressions are reported. The dependent variable is an indicator that a participant trusts experts or peers, i.e., will change her mind for at least one of the questions. We pool the data from Experts60 and Experts90 treatments together and from Peers60 and Peers90 treatments together. The diamond is the average marginal effect; the whiskers are the 95% confidence intervals.

FIGURE A.6: Fraction of people who follow Peers depending on their ideological views, party affiliation, age, education, and place of living



Notes: Fraction of subjects who are willing to change their mind if peers disagree with their estimates, pooling together Peers90 and Peers60 treatments. Panel (A) classifies subjects by their ideological views, excluding those who say they are not sure (10%). Panel (B) breaks the answers by party affiliation, excluding those who answer "Not Sure" and "Other" (11%). Panel (C) looks at the effect of age, where young is a participant who was born in 1980 or later. Panel (D) considers high education, where high education is an indicator for college graduates or higher degrees. Panel (E) looks at the effects of place of living.

TABLE A.2: Determinants of Trust in Experts and in Peers

	Dep. Variable: Trusting Index	
	Experts	Peers
Socio-demographics		
male	0.037 (0.028)	-0.049** (0.023)
young	0.151** (0.026)	0.093** (0.023)
high education	0.052 (0.035)	0.019 (0.023)
income above 100K	0.037 (0.035)	-0.042 (0.029)
city	0.018 (0.033)	0.049* (0.028)
rural	0.036 (0.032)	0.023 (0.027)
Political Attitudes		
liberal ideology	0.089** (0.032)	0.009 (0.026)
conservative ideology	-0.064** (0.031)	-0.074** (0.026)
Personal Characteristics		
risk	0.0004 (0.005)	0.010** (0.004)
confidence in predicting unemployment	0.0004 (0.0009)	-0.002** (0.0006)
confidence in predicting inflation	-0.004** (0.0009)	-0.0005 (0.0006)
Features of the survey		
first block unemployment	0.013 (0.026)	-0.0005 (0.0006)
# of obs	1498	1499
pseudo R-sq	0.0554	0.0503

Notes: Marginal effects after LOGIT regressions are reported. We pool together data from two treatments for Experts (column (2)) and two treatments for Peers (column (3)). We use dummy variables for high education (college graduate or higher) and high income (above 100K). The political attitude is coded as two indicator variables: liberal ideology and conservative ideology, leaving moderates to be the base group. The participant is coded as young if she was born in 1980 or later. ** (*) indicates significance at 5% (10%) level.

Table A.3: Regressions about Intention to Vaccinate

	Dependent Variable: Intention to Vaccinate (yes/no)			
	(A1) Experts	(B1) Peers	(A2) Experts	(B2) Peers
Trusting	0.12** (0.028)	-0.01 (0.032)	0.12** (0.029)	0.02 (0.034)
Belief % others before info	0.07** (0.007)	0.07** (0.007)	0.07** (0.008)	0.07** (0.007)
Socio-demographics				
male			0.10** (0.029)	0.18** (0.029)
young			-0.07** (0.029)	-0.09** (0.030)
high education			0.04 (0.038)	-0.03 (0.039)
income above 100K			0.07* (0.037)	0.09** (0.037)
city			0.02 (0.036)	-0.03 (0.036)
rural			-0.05 (0.033)	-0.03 (0.034)
Political Attitudes				
liberal ideology			0.10** (0.035)	0.10** (0.035)
conservative ideology			0.00002 (0.032)	-0.02 (0.032)
Personal Characteristics				
risk			-0.005 (0.006)	-0.002 (0.006)
overconfidence 1			0.036** (0.015)	-0.01 (0.015)
overconfidence 2			-0.0002 (0.001)	0.0002 (0.001)
# of obs	1498	1499	1498	1499
pseudo R-sq	0.0549	0.0519	0.0826	0.0883

Notes: Marginal effects after the logistic regressions are reported. In regressions (A1) and (A2) we pool together data from Experts90 and Experts60 treatments. In regressions (B1) and (B2) we pool together data from Peers90 and Peers60 treatments. The indicator "Trusting" takes value 1 if the participant is willing to change her mind regarding either inflation or unemployment (or both) following either peers or experts. The variable "Belief % other before info" captures the incentivized belief about the fraction of other participants who report that they intend to vaccinate before observing information regarding the intentions of peers or experts. Beliefs are measured in deciles. We use dummy variables for high education (college graduate or higher) and high income (above 100K). The political attitude is coded as two indicator variables: liberal ideology and conservative ideology, leaving moderates to be the base group. The participant is coded as young if she was born in 1980 or later. ** (*) indicates significance at 5% (10%) level.

TABLE A.4: Regressions about Intention to Change One's Mind about Vaccination

	Dep. Variable: Intention to Change One's Mind and Vaccinate (yes/no)			
	(C1) Experts	(D1) Peers	(C2) Experts	(D2) Peers
Trusting	0.12** (0.038)	0.20** (0.053)	0.11** (0.039)	0.21** (0.055)
Belief % others before info	0.01 (0.01)	0.001 (0.012)	0.01 (0.011)	-0.002 (0.013)
Beliefs % others after info	0.02** (0.008)	0.03** (0.010)	0.02** (0.008)	0.03** (0.010)
Take Vaccine (before info)	0.96** (0.047)	1.14** (0.057)	0.96** (0.048)	1.15** (0.059)
Socio-demographics				
male			0.03 (0.040)	-0.007 (0.047)
young			-0.05 (0.039)	-0.12** (0.050)
high education			0.12** (0.052)	0.01 (0.064)
income above 100K			-0.05 (0.052)	-0.02 (0.062)
city			0.06 (0.049)	0.07 (0.060)
rural			0.08* (0.047)	0.09 (0.056)
Political Attitudes				
liberal ideology			0.08* (0.047)	0.03 (0.058)
conservative ideology			-0.04 (0.044)	-0.02 (0.052)
Personal Characteristics				
risk			-0.0005 (0.008)	-0.0009 (0.009)
overconfidence 1			0.002 (0.020)	0.01 (0.023)
overconfidence 2			0.0006 (0.0006)	- 0.0001 (0.001)
# of obs	1498	1499	1498	1499
pseudo R-sq	0.61	0.65	0.62	0.66

Notes: Marginal effects after the logistic regressions are reported. The dependent variable is the self-reported intention to change one's own mind and vaccinate if X$ of Experts (Peers) declare that they are planning to vaccinate, where $X = 90$ in Experts90 (Peers90) treatment and $X = 60$ in Experts60 (Peers60) treatment. In regressions (C1) and (C2) we pool together data from Experts90 and Experts60 treatments. In regressions (D1) and (D2) we pool together data from Peers90 and Peers60 treatments. The indicator "Trusting" takes value 1 if the participant is willing to change her mind regarding either inflation or unemployment (or both) following either peers or experts. The variable "Belief % other before (after) info" captures the incentivized belief about the fraction of other participants who report that they intend to vaccinate before (after) observing information regarding the intentions of peers or experts. Beliefs are measured in deciles. Variable Take Vaccine (before info) is an indicator that a person reported intending to take the vaccine. We use dummy variables for high education (college graduate or higher) and high income (above 100K). The political attitude is coded as two indicator variables: liberal ideology and conservative ideology, leaving moderates to be the base group. The participant is coded as young if she was born in 1980 or later. ** (*) indicates significance at 5% (10%) level.