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POLITICAL POLARIZATION AND EXPECTED ECONOMIC OUTCOMES

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ABSTRACT

We use a large-scale representative survey of households from October 19-21 that elicits respondents' expectations about the presidential election's outcome as well as their economic expectations to document several new facts. First, people disagree strongly about the likely outcome of the election, despite widespread publicly available polling information. Most Democrats are very confident in a Biden win while most Republicans are very confident in a Trump win. Second, respondents predict a fairly rosy economic scenario if their preferred candidate wins but a dire one if the other candidate wins. Since most respondents are confident in their favored outcome, unconditional forecasts are similar across parties despite the fact that underlying probability distributions and conditional forecasts are very different. Third, when presented with recent polling data, most voters change their views by little unless they are independent and/or have relatively weak priors about the outcome. Information that emphasizes the uncertainty in polling data has larger effects in terms of reducing polarization in expected probabilities over different electoral outcomes. Fourth, exogenous information that changes individuals' probability distribution over electoral outcomes also changes their unconditional forecasts in a corresponding manner. These changes in economic expectations in turn are likely to affect household economic decisions.

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I Introduction

We all have different political preferences. But despite wanting different things, voters should be able to broadly agree on the *likelihood* of different electoral outcomes given that much of the relevant polling information is publicly available. This is, in fact, far from being the case. Using a recent large-scale representative survey of the U.S. population, we show that the perceived probabilities over different possible outcomes in the 2020 U.S. presidential election differ systematically across party lines. *87% of Democrats expect Biden to win while 84% of Republicans expect Trump to win.* Importantly, this stark disagreement does not reflect two sets of partisan voters each foreseeing a close election that just barely breaks their way. Among Republicans, the average probability they assign to Trump winning is 76%, with *more than one in five saying that Trump will win with 100% probability.* Among Democrats, the average probability assigned to Biden winning is 74%, with almost 15% of them saying that Biden will win with 100% probability.

We show that these differences in probability distributions across party lines are not innocuous. Americans hold fundamentally different *conditional* expectations about the economy over the next year depending on the presidential winner, despite the fact that Presidents seem to have little discernible effect on the economy, especially over short horizons (Blinder and Watson, 2016). Republicans expect a fairly rosy economic scenario if Trump is elected but a very dire one if Biden wins. Democrats hold diametrically opposing views and expect calamity if Trump is re-elected but an economic boom if Biden wins. Because both sets of voters are confident in their candidate winning, their unconditional forecasts about the economy are broadly similar. But this similarity masks fundamental disagreements about conditional expectations and the probability distributions associated with them. When the election is ultimately decided, one group of voters will become much more pessimistic than they have been so far. They may also be more likely to question the legitimacy of the election's outcome if they did not foresee it as remotely possible. The winning group's expectations, in contrast, will be largely unaffected since they already expected to win. As a result, the *average* macroeconomic outlook can deteriorate after the elections.

Why do individuals of different political persuasions hold such different views about the likely outcome of the election? We can rule out some potential explanations. For example, Republicans and Democrats are similar in the extent to which they get news from social media versus newspapers versus television. They are also similar in how much they claim to be paying

attention to the election, with about 60% of each following the election very closely. But voters who pay close attention to the election are, if anything, *less* likely to agree about electoral outcomes than those who are paying less attention. It is precisely those voters paying close attention to the election who are likely to hold the most extreme views about whether Trump or Biden is likely to win. Those paying less attention to the economy are much more likely to think that the election is close to a toss-up.

This result suggests that it is the content of the news that attentive voters are receiving that are leading them to hold such disparate views. Indeed, there are sharp differences in voters' preferred news sources. For example, with television, 40% of Democrats report that CNN is their favored news channel (vs. 23% of Republicans) while 50% of Republicans claim that Fox News is their favored news channel (vs. 17% of Democrats). Given the well-known differences in perspectives across news channels, this provides one possible rationale for the systematically different electoral outlook across the two parties (Della Vigna and Kaplan, 2007; Gentzkow and Shapiro, 2010).¹

One implication of having voters being so confident in the election outcome is that they should tend to be unmoved by new information that they receive since, with Bayesian learning, agents place little weight on new signals when their prior beliefs are tight. We test this prediction using a randomized control trial in which randomly selected participants are presented with recent (and very similar) polling data from different sources (Fox, ABC, and MSNBC). Consistent with Bayesian learning, we find that treated individuals tend to revise their beliefs toward the provided information relative to a control group but quantitatively, the revision is small on average. In fact, for Republicans and Democrats, the responses are effectively zero regardless of the news source. So we find little evidence for an “echo chamber.” Instead, the views of many individuals of either party are so tightly held that they are unaffected by information that calls for a more nuanced view. Only for Independents, or more generally for those who are less confident about the outcome of the election, do we find strong effects of new information on perceived electoral outcomes.

Interestingly, we find stronger effects of polling information if we include a description of the range of possible outcomes that is included within the margin of error. The baseline ABC poll, for example, points toward a 12-point lead for Biden but this could be as high as a 19-point lead

¹ Another contributing factor could be geographic segmentation. If Democrats are surrounded by Democrats and Republicans are surrounded by Republicans, each will tend to perceive their party as likely to win.

or as low as 5-point lead. When presented this way to individuals, their perceived probability of either candidate winning shrinks more strongly toward 50-50 and away from extreme outcomes. One implication of this is that households likely do not understand, or are not sufficiently made aware of, the margins of error associated with polling data. Were news reports to emphasize the *uncertainty around new polls* rather than their point values, this would likely help the population avoid diverging toward such strong beliefs about which candidate is “certain” to win.

The information treatments also allow us to assess whether changes in individuals’ perceptions of the likelihood of different electoral outcomes feed into their unconditional *economic* expectations. We can do so because we observe individual conditional expectations (i.e., what they expect for each of the two outcomes) as well as the change in the probability that they assign to each outcome. Combined with the prior (before the treatment) and posterior (after the treatment) unconditional forecasts of individuals, we can assess whether all of these beliefs are internally consistent. By and large, we find that as individuals change their probabilities over different outcomes, they revise their unconditional forecasts in a corresponding manner. This implies that when the election uncertainty is resolved and a winner is declared, the prior probabilities on the two possible outcomes will shift to the actual outcome and therefore individuals’ unconditional forecasts will adjust accordingly. Members of the losing party, given their pessimism about the economy under the other candidate, will therefore become significantly more pessimistic about the overall economic outlook. To the best of our knowledge, this is the first direct evidence that agents revise their unconditional macroeconomic forecasts in a manner directly consistent with a weighted average of conditional beliefs across outcomes.

Finally, we consider whether these changes in beliefs that are likely to follow the election will translate into the spending decisions of individuals. A growing literature has found that exogenous changes in people’s expectations affect their decisions, whether for households (Coibion et al. 2019b, D’Acunto et al. 2020) or firms (Coibion et al. 2020b). Using questions on whether respondents think now is a good time to buy a house, a car or other durable goods, we show that individuals’ macroeconomic expectations are strongly correlated with these perceptions. This suggests that election-driven changes in beliefs on the part of consumers will likely translate into their spending decisions as well.

In addition to a large corpus of research studying determinants of households’ macroeconomic expectations, our paper relates to several strands of the literature. A growing body

of work suggests that Americans have become more polarized in their views. For example, Alesina, Stantcheva, and Teso (2018) and Alesina, Miano, and Stantcheva (2020) document that Americans not only have become substantially more polarized in their view on government and society but also in their perception of objective facts. These findings are related to earlier work in political science such as Bartels (2002) showing that voters view economic variables such as unemployment and inflation as performance indicators of the party in the White House and that voters' perception of these variables is driven by their political view. Jerit and Barabas (2012) depart from this perceptual bias for 'performance indicators' and show in general that partisans have a higher degree of general knowledge about facts that confirm their view of the world and lower levels for topics that challenge them. They also show that this gap is larger for topics that receive a large media coverage. More generally, there is much work studying political business cycles and how macroeconomic variables can affect electoral outcomes (see Franzese (2002) for a survey). In contrast to this literature, we study not only polarization in political views but also how electoral outcomes causally affect macroeconomic expectations (rather than the economy determining electoral outcomes).

A recent literature documents that individuals have a more positive economic outlook when the White House is controlled by the party they lean towards. Using data from the Michigan Survey of Consumers, Mian, Sufi, and Khoshkhoh (2018) document an increasing trend in polarization and a divergence of economic expectations by political leaning. Kamdar and Ray (2020) show that disagreement in expectations is particularly big after elections in which the Presidential party switches and develop a rational inattention model to account for their findings. We contribute to this literature in several ways. First, we examine not only unconditional macroeconomic expectations, but expectations conditional on a given candidate winning the elections. Second, we have data jointly on political and macroeconomic expectations. Finally, we implement a randomized controlled trial to establish a causal effect of electoral outcomes on economic expectations.

We also contribute to the literature studying the role of media for behavior and more generally persuasion in economics (DellaVigna and Gentzkow, 2010). DellaVigna and Kaplan (2007) for the US, Enikoplov, Petrova, and Zhuravskaya (2011) for Russia, and Barone, D'Acunto, and Narcisco (2015) for Italy, among others, document the causal effect of media on election outcomes. Media bias can also bias rational agents in the short run when they are not

aware that information is excluded (Besley and Prat, 2006; Kamenica and Gentzkow, 2011). Moreover, a long literature studies the link between the media and political polarization more generally (Glaeser and Ward, 2006; Campante and Hojman, 2013). We contribute to this literature by linking political views (and possibly bias) to macroeconomic expectations.

The paper is organized as follows. Section 2 describes how the survey was implemented and the range of questions included. Section 3 presents results on the political preferences and outlook of respondents. Section 4 focuses on the economic expectations of participants and how those expectations relate to different possible electoral outcomes. Section 5 studies the revision in people's perceptions of how the election will turn out when recent polling data from recent sources is presented to them. Section 6 concludes.

II Measuring Political Preferences and Voting Intentions

We fielded an online survey on political views, economic expectations, and voting intentions between October 19th and 21st using Qualtrics. The survey resulted in more than 5,000 respondents and the sample is stratified by gender, age, and household income. The survey consisted of several parts.² First, we elicit some baseline demographic information including age, gender, household income, past spending and future spending plans, homeownership, savings and investment allocations, and the detailed employment situation. We then elicit participants' subjective expectations for inflation, current and future unemployment and mortgage rates, as well as their expectations for future household income growth. Related to COVID-19, we ask households whether they have lost income or wealth due to the pandemic and how much time it will take until life returns to normal.

The following block elicits political preferences. First, we elicit which party they lean towards including the Democratic, Republican, Green, and Libertarian Parties which were shown in randomized order to alleviate any anchoring or ranking effects. We then asked how closely survey participants were following the elections, whether they would vote for Trump or Biden if the election was today and how strongly they supported the candidate using a slider with a range from 0 to 100, with the ordering of the candidates again appearing in random order.

² We report the full questionnaire in the Appendix.

We then elicited voting intentions and modes of voting, such as plans to vote in person, to vote via mail or whether they have already voted by mail. Because people sometimes do not want to disclose that they would vote for a certain candidate, we also elicited who they think would win the election as well as their confidence. Subsequently, we again elicited respondents' subjective expectations about the future state of the economy, but this time *conditional* on either Trump or Biden winning the election. We then asked respondents to select the three most important items from a list of 16 economic objective in the upcoming elections including full employment, economic growth, reliable safety net, stable prices, low taxes, high equity valuations, more equal income distribution, higher minimum wages, a strong dollar, or free trade.

Afterwards, we asked respondents about their news sources for the upcoming elections such as social media, newspapers, TV, or radio as well as their preferred cable TV news channel such as CNN, Fox News, or MSNBC. To also get an idea of whether political uncertainty results in precautionary savings, we asked respondents whether they currently save more than usual and how much more or less they currently save compared to normal.

The next block in the survey was the information treatment experiment. We randomly split the sample into five groups, a control group that did not receive any information, and four treatment groups. Treatment group 1 received the information that "According to recent reporting on Fox News, Biden is ahead of Trump by a 53-43 percentage margin." Group 2 read "According to recent reporting on MSNBC, Biden is ahead of Trump by a 54-42 percentage margin." Group 3 received the information that "According to recent reporting on ABC, Biden is ahead of Trump by a 54-42 percentage margin." The last group received "According to recent reporting on ABC, Biden is ahead of Trump by a 54-42 percentage margin. The margin of error in the polls is about 3.5 percentage points. This means that, while the best estimate of the difference between Biden and Trump is 12 percentage points, with high probability, the difference may be as large as 19 percentage points or as little as 5 percentage points." The latter treatment allows us to also investigate whether uncertainty in polling conveyed to households has an effect on their economic expectations and voting intentions.

Subsequently, we elicited again households' voting and subjective macroeconomic expectations. First, we ask again for the expectations and confidence on who will win the elections. We then elicit whether the upcoming election changed participants' behavior relative to previous election when it comes to volunteering, donating, voting, or demonstrations and asked whether

they were concerned about foreign interference, riots, food shortages, mail voter fraud, failure to concede by the losing candidate, or whether courts would determine the election outcome. We then ask respondents again about their expectations for the unemployment and mortgage rates, their personal income growth, as well as the inflation rate. We conclude the survey asking participants whether they think now it a good or bad time to purchase a house, car, or other large appliances, furniture, or electronics.

We report descriptive statistics in Appendix Table 1. The sample is equally split between women and men and we observe a somewhat equally split distribution across income bins with almost a third of the sample reporting a household income above \$100,000. Roughly 30% of the survey population are either below age 30 or above age 60 with the remaining 40% spread across the age bins. 41% of the sample owns a house without a mortgage and only 26% are renters. Two thirds have financial wealth of more than one month of income, about one quarter is liquidity constraint, and the average monthly consumer spending is \$3,500.

III Voting Intentions and Expectations

We begin with first describing the political leanings of our sample. We find (Table 1) that 41% of our sample leans towards the Republican Party and 36% leans towards the Democratic Party. The remainder of respondents (“Other”) is accounted for by those who lean to the Green party (share = 2%), the Libertarian party (3%), other party (1%) and those who “do not lean to any party” (15%) or “prefer not to answer” (2%). Based on answers to this question, we will subsequently refer to individuals’ political affiliation as being Republican, Democrat, or Other.

Next we examine the voting intentions of survey participants if the election was held today, the level of support for the candidate, how/whether they plan to vote, and the expected election outcome, both for the overall sample but also separately for Democrats, Republicans, and Others (Table 1). Among all respondents, Trump has a slight edge over Biden with 44% versus 43% supporting Trump. This small unconditional difference, however, masks tremendous differences in voting plans across the political spectrum. Republican-leaning survey respondents plan to vote for Trump with 88% probability and Democrats plan to vote for Biden with 90% chance. Only 7% of Republicans would vote for Biden while only 6% of Democrats plan to vote for Trump. Biden has a lead of 35% to 26% among those that neither lean Republican nor Democrat. Yet, the level of support among these voters is substantially lower than among Republicans and Democrats with

an average level of support of 74 out of 100 relative to around 86-87 for Democrats and Republicans.

When it comes to voting plans, we see that both parties seem to have been successful in mobilizing their respective base because only 5% of Republicans either do not plan to vote or are unsure, compared to 6% for Democrats. Yet, stark differences emerge in terms of means of voting: Almost 70% of Republicans plan to vote in person compared to only 45% of Democrats. Among survey participants that neither identify as Republican or Democrats, Independents for short, we see that 33% are either not planning to vote, are not sure, or prefer not to answer.

When we ask who will likely win the election, we see a slight lead of Trump versus Biden of 46% to 45% with large gaps arising across party lines. 84% of self-identified Republicans expect Trump to win, whereas 87% of likely Democrats expect Biden to win. Among Independents, Biden has a slight edge of 39% to 36%. The difference between Democrats' and Republicans' outlook on the likely outcome of the election is striking given that most relevant information that speaks to electoral outcomes (e.g. polls) is publicly available to all and widely reported.

The results so far do not differentiate between those that intend to vote and unlikely voters and hence, their predictive outcome for an election that was held today is not clear because we might see differences in voting intentions across party lines. When we focus on likely voters and repeat the voting intentions for the overall sample and separately by party, we again see a slight lead of Trump versus Biden of 49% to 47%. Only 4% of likely voters are unsure on who to vote for and 1% prefers not to answer. Among self-identified Republicans, 90% plan to vote for Trump and among Democrats, 92% plan to vote for Biden. Among Independents that intend to vote, Biden has a somewhat larger lead over Trump of 48% to 35%.³

We elicited survey participants' perceived chance of Trump or Biden winning the election and the confidence in the response with higher levels corresponding to higher levels of confidence. To ensure the results are not due to a priming effect, we randomly split the sample in half and asked 50% for the chance of Trump winning the election and 50% for the chance of Biden winning the election. Absent third-party and write-in candidates, the chance of Trump winning should be

³ Relative to other polling data, these voting preferences and plans appear to be more favorable to Trump. We conjecture that a social desirability bias is less prevalent in an online survey like ours compared to a phone interview which might explain why we differ from other polls. For example, conservatives appear to be less willing to participate in polls and this can bias the sample. See <https://www.nationalreview.com/2020/10/the-pollster-who-thinks-trump-is-ahead/> for a related discussion.

equal to 100 minus the chance of Biden winning. For the overall sample, we indeed see (the bottom panel of Table 1) some evidence for a form of anchoring, because within the respective sample, we do observe average chances of both Trump and Biden winning of larger than 50% with a level of confidence of close to 70%.

Among Republicans, the chance of Trump winning is 76% with a level of confidence of 80, whereas the chance of Trump winning under the ‘Biden’ framing is only 53.5%. Among Democrats, we see an average chance of Biden winning of 74.3% with a level of confidence of 77 and an implied chance of Biden winning of 60.8% under the ‘Trump’ framing. Panel A of Figure 1 plots the distribution of responses for the probability of either candidate winning, broken down by party. These distributions are strikingly different. More than one in five Republicans think that Trump will win with a 100% probability, whereas virtually no Democrats do. Almost 15% of Democrats think that Biden will win with a probability of 100%, while effectively none of the Republican respondents do. In short, Democrats and Republicans seem to have dramatically polarized expectations about who will win the election and what the probability distribution of election outcomes looks like. In contrast, among Independents, we observe the chance of Trump and Biden winning is roughly equal to 50%.

The intensity of support across party lines is also reflected in the confidence respondents have in their reported probability of Trump or Biden winning. Figure 2 shows that there is generally a linear relationship between the reported probability and confidence. Theoretically, one should have expected a U-shaped relationship between the probability and confidence: respondents reporting 0 and 100 percent probability should exhibit maximum confidence (after all they effectively rule out any other outcome) while respondents with 50-50 chance split should be least confident. While we observe a positive relationship between the probability and confidence on the 50 to 100 percent probability segment, we do not observe a negative relationship between the two on the 0 to 50 percent probability segment. This in part reflects the fact that we have few people reporting zero probability for a candidate but this could also reflect differences in interpretation of 0 and 100 percent probabilities.

To get an idea of how predictive the survey data might be for actual election outcomes, we also asked respondents about their level of engagement regarding the upcoming elections in addition to their intention to actually vote. We find (Table 2) that 56% of our sample follows the election very closely with another 30% following it somewhat closely. Results for Republicans

and Democrats are almost identical in that 91% follow the election somewhat or very closely. Instead, among Independents, 33% report that they do not follow the election closely. Hence, based on the level of interest in the upcoming elections, we see both major parties were equally successful in engaging their base.

The degree to which individuals follow the election closely matters for the strength of their convictions about the outcome. Panel B of Figure 1 plots the distribution of beliefs about the probability of Trump winning, decomposed based on how closely respondents follow the election. Strikingly, those who follow the election very closely are particularly likely to say that Trump will win either with 100% probability or 0% probability. In contrast, among those who say they follow the election less closely, the distribution of priors about the outcome is concentrated more closely around the 50-50 break. Hence, the dramatic difference in views about how the election will turn out across potential voters does not stem from a lack of attention. Instead, those who follow the election most closely seem to hold the most extreme views. This suggests that the information that agents collect about the election leads to more polarized views about the likely outcome.

Do we observe large differences in news sources across Republicans and Democrats? One possibility is that they acquire and read information from different sources such as print media versus social media. Yet, when we asked them where they get their majority of news regarding the upcoming elections, we do not observe any noticeable differences in sources of news. 46% (43%) of Democrats (Republicans) consume mainly news from Television. Social media ranks second for both groups with Republicans assigning 4% higher importance to social media compared to Democrats with the latter assigning a 5% higher importance to newspapers, the third most important source, compared to Republicans.

Given how little heterogeneity in channels of information seems to exist across Democrats and Republicans, we asked whether they consume their news from the same or different TV channels, given that some channels are often perceived as being more partisan. Voters might consume news from channels that more closely align with their views because of some form of confirmation bias or the views expressed in these channels might in fact shape the views of the voters. Either way, we would expect some form of differences in preferred cable news channels across party lines given the different political coloring of cable TV channels in the US. We indeed see that Fox News is the preferred source of TV news for 50% of Republicans compared to only 23% for CNN. The picture flips completely for self-identified Democrats for whom CNN is the

most relevant channel with 40%, whereas Fox News only ranks close fourth with 17% behind MSNBC and other cable channels. Consistent with Mullainathan and Shleifer (2005), Halberstam and Knight (2016), and others, these results suggest a strong matching between voters and cable news channels which might contribute to the increasing polarization of views across the political spectrum.

The segregation of information sources along party lines can have clear political consequences. For example, concerns about the coming elections also show sharp differences by political leaning (the bottom panel of Table 2). Self-identified Democrats are particularly concerned about foreign interference, the losing candidate refusing to concede, and the outcome of the election being determined by courts. In contrast, self-identified Republicans view these as less important issues and instead are more concerned about riots and mail-vote fraud. These divergent views on the threats to fair elections is consistent with the differential treatment of these issues by the media. For example, Benkler (2020) documents that while Democrat-leaning media outlets tend to emphasize the safety of mail-in votes, Republican-leaning media outlets tend to stress potential for fraud in mail-in voting.⁴

IV Economic Expectations

The previous section documents a striking contrast in how individuals of different political persuasions perceive the likelihood of different electoral outcomes, despite the fact that most of the relevant polling information is publicly available. In this section, we consider to what extent these differences extend to the economic expectations and preferences of different individuals.

Differences in economic objectives could be one important determinant for the general political leaning and the choice of a specific candidate in the upcoming election. In Table 3 we report the three most important economic objectives that survey participants chose out of a pre-specified list of 16 possible topics. There are some notable differences. Democrats have a stronger preference for equity and redistribution: a third select a more equal distribution of income as well as raising the minimum wage (vs. 13% and 12% of Republicans respectively). Republicans are more likely to emphasize a rising stock market (23% vs 12%). But along most dimensions the *similarities* in objectives across political lines are striking. For example, while 32% of Republicans

⁴ See <https://www.cjr.org/analysis/trump-twitter-disinformation-voter-fraud-election.php> for more details on differences in coverage across media sources.

select lower taxes, so do 27% of Democrats. The proportions of Republicans and Democrats selecting full employment in the economy (38% and 31% respectively) or stable economic growth (34% and 29% respectively) are also very similar. We see little difference in the shares assigned to fiscal discipline (such as lower government debt or balanced budgets) across the two parties, nor do we see significant differences for free trade or a business-friendly environment. In short, differences in economic preferences are surprisingly limited across the two parties.

We also do not observe very significant differences in how individuals of different parties have been affected by the COVID outbreak (Table 4). On a scale from 1 to 10 with 10 being highly concerned,⁵ the average level of financial concern is close to 6 for both Republicans and Democrats, about 30% of each have lost income and around 25% have lost wealth due to the pandemic with an average dollar loss of similar amount. The only noticeable difference in terms of corona concerns is the fact that Democrats expect the average time until life returns to normal in the place where they live to be almost 3 months longer than Republicans.⁶ Hence, in both economic preferences and recent economic experiences, the differences between Democrats and Republicans do not seem particularly large, especially relative to the very different outlooks they have about the upcoming election.

How do these political perspectives extend to the forward-looking economic expectations of individuals? Table 5 presents the unconditional forecasts of respondents regarding inflation, unemployment, mortgage rates and their personal income growth at different horizons. These are again broadly similar across the two parties. Both Republicans and Democrats expect one-year ahead inflation of slightly above 2% with a standard deviation implied by the probability distribution that each individual reports of slightly above 4%. Similarly, we see almost identical nowcasts and forecasts for one-year ahead unemployment rates of around 14% that decrease to around 10% over the next three to five years. Also for mortgage rates little difference by political leaning arises, with mortgage rates expected to increase by about 1 percentage point over the next

⁵ The exact question wording reads: “How concerned are you about the effects that the coronavirus might have on the financial situation of your household? Please choose from 0 (Not at all concerned) to 10 (Extremely concerned).”

⁶ The difference in beliefs about severity of the COVID19 crisis can be linked to political leanings and media. For example, Alcott et al. (2020) and Barrios and Hochberg (2020) document that political leaders from different parties and news channels with different political leanings have sent divergent messages about the severity of the pandemic which resulted in Republicans reducing mobility by less compared to Democrats. Moreover, a gap exists between Republicans and Democrats in the beliefs of how severe the pandemic is and about the implications for personal income. Bursztyn et al. (2020) document that even within the same cable news channel differences in the degree of ‘misinformation’ about the pandemic exist and result in higher number of COVID cases and related deaths.

five to ten years from a nowcast of 5%. A larger difference arises for expected personal after-tax income growth over the next twelve months with Republicans expecting on average a growth rate of almost 8%, whereas Democrats only expect 4% growth, which could be consistent with their different perspectives on how long COVID will be a problem locally. But at first glance, these forecasts suggest broadly similar macroeconomic outlooks across party affiliation.

However, these apparent similarities mask fundamental and striking differences in individuals' underlying views about the future of the economy. We asked respondents to give us economic forecasts *conditional* on either Biden or Trump winning (the bottom two panels of Table 5; see also densities of the distributions in Figure 3). Republicans, conditional on Trump winning, expect 3 percentage point lower inflation, 2.2 percentage points higher income growth, 3 percentage points lower unemployment, and 1.4 percentage points lower mortgage rates compared to a scenario in which Biden is elected president. Thus, Republicans perceive a Trump win as dramatically better for the economy, even at a short-run horizon of 1 year, relative to a Biden victory. Democrats have a completely different view. They perceive much better economic outcomes in the scenario in which Biden is elected president compared to a scenario in which Trump is re-elected.

The fact that Republicans and Democrats seem to have similar unconditional forecasts despite having dramatically different conditional forecasts reflects the fact that, in each case, they place a lot of weight on the probability of their candidate winning. Across parties, they associate that outcome with a fairly rosy economic outlook compared to the alternative. So across the two parties, the unconditional economic expectations are broadly similar even if they reflect very different expectations of what happens in each possible scenario. One way to see that partisan expected election outcomes almost fully determine their macroeconomic expectations is to compare the unconditional forecasts to the weighted average of the conditional forecasts. To explore this insight further, we regress unconditional expectations for inflation, personal income growth, unemployment rate, and mortgage rate on the conditional forecasts for these variables weighted by the assigned probabilities of the scenarios, that is, whether Trump or Biden will win the election. Formally, we estimate the following specification

$$E_i X = b_0 + b_1 \times [Prob_i\{Trump\ wins\} \times E_i(X|Trump\ wins) + Prob_i\{Biden\ wins\} \times E_i(X|Biden\ wins)] + error \quad (1)$$

where $E_i X$ is respondent i 's expectation of variable X , $Prob_i\{Y \text{ wins}\}$ is respondent i 's estimate of candidate Y winning the elections, $E_i(X|Y \text{ wins})$ is the forecast for variable X conditional on candidate Y winning. One should expect that b_1 is be close to one.

We see in Table 6 that for income growth, and especially for unemployment and mortgage rates,⁷ a tight link between unconditional and conditional forecasts. Paired with the results in Table 5 that the conditional forecasts of Republicans and Democrats vary widely, the current results reconfirm that both Republicans and Democrats assign a high weight on their respective candidate winning the election. Results for inflation are not directly comparable because we elicited a full probability distribution for the unconditional expectations but point estimates for the two conditional estimates.

In short, both Republicans and Democrats place a disproportionate weight on the possibility of their candidate winning (assuming the true probability is closer to 50-50). This affects not just their perceptions of the outcome of the election but also, given the large differences in their conditional forecasts across election outcomes, their economic expectations about the future. Since one party is bound to lose the election, those individuals should therefore experience a dramatic downward revision in their economic outlook, as they shift the weight in their expectations away from their favored (and rosy) outcome and to the alternative (very negative) outcome that they had been heavily discounting.

V News, Political Expectations and Individual Economic Outlooks

How is it that opinions about the likely outcome of the presidential election could be so different across individuals of different political persuasions? As shown in section 3, one force is that individuals self-select into different news sources. Given the well-known biases of different news media, this likely contributes to differences about perceived outcomes. In this section, we provide several additional results that contribute to answering this question. First, we show that, because many individuals have such strong prior beliefs about electoral outcomes (namely that their candidate will win), they place little weight on new information that is provided to them. Only those with relatively weak priors significantly revise their views. Second, by not emphasizing the uncertainty in polling data, the news media contributes to the polarization in views about electoral outcomes. When we present individuals with polling data that shows not just mean outcomes but

⁷ The corresponding binscatters are reported in Appendix Figure 1.

also *the span of possible outcomes within the polling margin of error*, respondents revised their beliefs by larger amounts towards a tighter election race. This helps shrink the dramatic difference in views about electoral outcomes across Republicans and Democrats. Third, we show that as this information changes the perceived probabilities of each candidate winning, individuals also change their overall economic expectations in line with these changing probabilities. Fourth, changes in economic expectations are likely to affect households' economic decisions.

A. Treatment effect of information provision on perceived electoral probabilities.

We now aim to study the effect of news media on perceived election outcome probabilities and their impact on economic expectations. Observational studies often have a hard time identifying the effects of information provision on voters' beliefs (and more generally economic expectations) and have to rely on the quasi-exogenous spread of the availability of cable TV news channels or similar identification schemes (e.g., Della Vigna and Kaplan 2007). Indeed, sorting of voters into TV channels suggests that the choice of information source is endogenous. To address potential endogeneity of information flows, we utilize the randomized provision of polling information that was done in the survey. Specifically, and as described in section 2, individuals were randomly assigned to one of five groups. The control group received no additional information, three treatments groups were provided with recent polling data from Fox, ABC and MSNBC respectively, while a fifth group was presented with the same polling data from ABC but also presented with a range of polling outcomes included within the confidence interval. Using these treatments, we estimate the following specification:

$$E_i^{Post} X = b_0 + b_1 \times E_i^{Prior} X + \sum_{m=2}^5 b_m \times E_i^{Prior} X \times \mathbb{I}\{i \in Treatment\ m\} + \sum_{m=2}^5 \gamma_m \times \mathbb{I}\{i \in Treatment\ m\} + error \quad (2)$$

where $E_i^{Post} X$ and $E_i^{Prior} X$ are respondent i 's posterior and prior expectations for variable X , $\mathbb{I}\{i \in Treatment\ m\}$ is an indicator variable equal to one if respondent i is in treatment group m . Note that coefficients b_2, \dots, b_5 and $\gamma_2, \dots, \gamma_5$ measure the evolution of beliefs relative to the control group so that we can read the treatment (causal) effects directly from the estimated coefficients.

Bayesian updating predicts that “slope” effects b_2, \dots, b_5 should be negative as respondents with more extreme views should revise their beliefs towards the middle of the distribution, that is,

the posterior distribution of beliefs should be more concentrated. If b_2, \dots, b_5 are zero, then respondents either do not find the provided information useful (e.g., the source of information is not sufficiently credible or precise relative to the prior), or they are not Bayesian learners (e.g., respondents may be irrational or use another rule to revise beliefs). The sign of “level” effects $\gamma_2, \dots, \gamma_5$ indicates where the provided signal is relative to the average pre-treatment beliefs: positive (negative) $\gamma_2, \dots, \gamma_5$ mean the signal is above (below) the initial beliefs.

We estimate specification (2) on the full sample as well as subsamples based on political leaning, preferred source of TV news, and confidence in the initial beliefs. For the full sample, we find (column (1) in Table 7) that the slope of the control group (b_1) is close to one, thus suggesting that respondents in the control group revise their beliefs relatively little, although there is clearly a sign of some mean reversion in the reported probability of Trump winning the election (which is consistent with some measurement/reporting error in the responses).

Second, the estimated slope coefficients b_2, \dots, b_5 are generally negative, which is consistent with some Bayesian learning from the provided information. The information treatments are therefore successful in moving average beliefs of Trump or Biden winning closer to 50%. For example, for those with a zero prior of Trump winning, the Fox News treatment raises their belief about the probability of Trump winning by 2% points while reducing the perceived probability of Trump winning by 2.5% points among those initially claiming that Trump would win with 100% probability. However, the absolute magnitudes of $\hat{b}_2, \dots, \hat{b}_5$ are relatively small (≈ 0.04 in absolute magnitude for most treatments) so respondents are putting relatively little weight on the information provided to them. One interpretation of this result is that it could be consistent with most respondents watching the elections closely, so that the provided information is not informative given a relatively well-informed audience, that is, the increment of the provided information is relatively modest. However, it is difficult to reconcile this interpretation of a well-informed audience with the fact that so many respondents think Trump will win with either 0% or 100% probability. Another interpretation of the small absolute magnitudes of $\hat{b}_2, \dots, \hat{b}_5$ is that the provided information is not perceived as particularly precise or credible, or equivalently that recipients are already so confident in their prior information that they place little weight on new information.

Third, for the full sample, we find relatively little differentiation between sources of information. That is, \hat{b}_2 (information source is Fox News), \hat{b}_3 (information source is MSNBC),

and \hat{b}_4 (information source is ABC News) are roughly similar in magnitude (≈ -0.04), as are the level effects (the γ_m are not generally significantly different from one another). This finding suggests that these news channels are approximately equally strong in moving the beliefs of the *general* population. This is also true within Republicans or Democrats (columns 2 and 3): we do not see a stronger response of Republicans to Fox News than to MSNBC or vice-versa for Democrats. However, the slope effects are much larger (ranging from -0.17 to -0.32) for Independents (column 4). This pattern is consistent with the fact that Republicans and Democrats have strong confidence in their initial perceived probabilities of who is going to win the elections and the provided information is not enough to induce them to alter those beliefs. Note that this interpretation is inconsistent with the “echo chamber” effect⁸ because respondents do not show *differential* sensitivity to the source of information. Independents are more receptive to new information as their priors are initially more diffuse. In short, the estimates for the general population (column 1) mask dramatic heterogeneity across political groups.

The importance of the strength of respondents’ prior beliefs is further illustrated in columns 8-10 of Table 7, when we split respondents based on whether their confidence in the election outcome are low (0 to 50), medium (50 to 90) or high (90 to 100). Bayesian learning predicts that revisions in beliefs should be smallest (largest) for respondents with high (low) confidence in their beliefs. Consistent with this insight, we find that revisions are indeed the largest for respondents with low (0 to 50) confidence scores (column 8 in in Table 7) and smallest for respondents with high (90 to 100) confidence scores (column 10). For those who are most uncertain (column 8), the effects of providing recent polling data can be quite large. For example, the ABC treatment would raise the perceived probability of Trump winning by 15 percentage points for someone with a zero prior of Trump winning and would lower that probability by 16 percentage points if their initial prior of Trump winning was 100 percent. In contrast, when we split the sample based on the preferred cable news channel (column 5 through 7 in Table 7), we find few clear patterns in the estimated “slope” and “level” coefficients. This reflects the fact that preferred news sources are not very highly correlated with how confident people are in their beliefs about the outcome of the election.

⁸ The “echo chamber” effect in media means that people tend to select themselves into groups of like-minded people so that their beliefs are reinforced while information from outsiders might be ignored.

Given the importance of individuals' prior uncertainty about the election outcome in determining how they respond to news, one might expect news that emphasizes the uncertainty in the outcome to have particularly strong effects in moving individuals away from strong priors that their preferred candidate will definitely win. This is precisely what we test in the final treatment, which presents not just the same ABC poll as before (reporting a 54-42 Biden lead) but also different outcomes that are within the margin of error (ranging from a 19 point difference to a 5 point difference). We find that this treatment has more powerful effects on perceived electoral outcomes than any other treatment. For example, the slope coefficient across the general population is almost twice as large as for other treatments. For those who are less confident in their priors, the effects are even larger. This result suggests that the way in which polling information is presented to individuals is important. In particular, if news media more systematically explained how imprecise polls were and the range of possible outcomes supported by any poll, this would contribute to reducing the excessive confidence observed in individuals of both parties.

In summary, we show that exogenously provided polling information can move households' beliefs about electoral probabilities and thus contribute to attenuating extreme views. However, the sensitivity to the provided information is highly heterogeneous. We find that political leaning and confidence in beliefs are likely strong determinants of how respondents react to the provided information. Because Republicans and Democrats tend to have very strong confidence in their candidates winning the elections, these groups are particularly insensitive to the provided facts. On the other hand, individuals with weaker political affiliations or weaker convictions about who is going to win are more responsive to the provided polling data. We also document that supplying respondents with an estimate of uncertainty in the polls tends to reduce polarization in views as posterior beliefs become more concentrated around the central tendency.

B. The sensitivity of macroeconomic expectations to political outcomes

As we have discussed above, respondents with strong political leanings tend to ascribe dire macroeconomic outcomes to the scenario when their candidate does not win. If we can move households' beliefs about who is going to win, can we move their macroeconomic expectations accordingly? If so, we have evidence that beliefs about political outcomes can causally move macroeconomic expectations. To this end, we estimate the following specification:

$$E_i^{Post} X - E_i^{Prior} X = b_0 + b_1 \times [\widehat{Prob}_i^{Post}\{Trump\ wins\} - Prob_i^{Prior}\{Trump\ wins\}] \quad (3)$$

$$\times [E_i^{Prior}(X|Trump\ wins) - E_i^{Prior}(X|Biden\ wins)] + error$$

where the dependent variable is the revision of macroeconomic expectations for variable X (posterior beliefs minus prior beliefs), $Prob_i\{Y\ wins\}$ is respondent i 's estimate of candidate Y winning the elections, $E_i(X|Y\ wins)$ is the forecast for variable X conditional on candidate Y winning. If respondents are rational, we should expect $b_1 \approx 1$.

Note that we use the posterior probability of Trump winning the 2020 Presidential elections $\widehat{Prob}_i^{Post}\{Trump\ wins\}$ predicted by specification (2). We use the predicted value to address possible endogeneity (mainly measurement error and mean reversion) of the posterior probability. In addition, because specification (3) looks at the changes in beliefs and probabilities and so the adverse effects of measurement error in the data are likely exacerbated, we use several filters to remove outliers. First, we trim the top and bottom 5% for each variable, i.e., revision $E_i^{Post}X - E_i^{Prior}X$, change in probabilities $[\widehat{Prob}_i^{Post}\{Trump\ wins\} - Prob_i^{Prior}\{Trump\ wins\}]$, and the difference in conditional forecasts $[E_i^{Prior}(X|Trump\ wins) - E_i^{Prior}(X|Biden\ wins)]$. This helps to exclude observations with e.g., unrealistic revisions (probabilities go from 0 and 100). Second, we also restrict the sample to survey respondents with $||[E_i^{Prior}(X|Trump\ wins) - E_i^{Prior}(X|Biden\ wins)]| < 10$, that is, the difference in conditional forecasts is less than 10%. This filter helps to further eliminate extreme views when the unfavorable candidate is prescribed catastrophic consequences. Finally, for inflation, we use $E_i^{Prior}X = Prob_i^{Prior}\{Trump\ wins\} \times E_i^{Prior}(X|Trump) + Prob_i^{Prior}\{Biden\ wins\} \times E_i^{Prior}(X|Biden)$ because the unconditional forecast is elicited as a probability distribution question while the posterior beliefs are extracted as point predictions.

We find (Table 8)⁹ that respondents causally revise their macroeconomic expectations in response to their change in beliefs about electoral probabilities. Furthermore, consistent with theoretical predictions under rationality, the magnitude of the response roughly corresponds to the implied change given the change in probabilities and the difference in conditional forecasts (i.e., we cannot reject the null that \hat{b}_1 is equal to 1).

These results suggest that beliefs about political outcomes can indeed be an important determinant of macroeconomic expectations. Because policymakers often rely on the management of macroeconomic expectations (especially inflation expectations) to attenuate business cycle

⁹ The corresponding binscatters are presented in Appendix Figure 3.

fluctuations, policymakers in technocratic institutions (e.g., central banks) should be aware that some variation in macroeconomic expectations is beyond their control. For example, the resolution of electoral uncertainty will lead many individuals to become significantly more pessimistic about the future state of the economy when their preferred candidate fails to be elected, with little offsetting effect from the victors who already largely expected their candidate to win. In other words, regardless of who wins, the expected effect on economic expectations of households will be negative.

C. Macroeconomic expectations and consumer spending.

Macroeconomic expectations should affect consumer spending, investment and other key variables. Given that members of the losing party will experience a sharp decline in optimism after the election, one might expect corresponding declines in consumer spending and other economic decisions of households. These effects should be particularly strong in areas that contain relatively more members of the losing party. In other words, locations with predominantly Republican (Democrat) voters can experience a “recession” if Trump (Biden) loses.

Prior work has already documented the importance of some macroeconomic expectations for the decisions of households. For example, Coibion et al. (2019b) and D’Acunto et al. (2020) document how changes in the inflation expectations of households affect their economic decisions. Roth and Wohlfart (2020) show that when individuals become more pessimistic about their economic outlook, their desire to spend declines. Coibion et al. (2020a) find that exogenous changes in perceived real interest rates affect households’ perceptions of whether now is a good time to buy durable goods. Jointly, these results suggest that the electoral outcome, regardless of how it turns out, will have non-zero effects on household spending. If a similar result occurs with firms, this could further magnify the effects.

We can provide some additional evidence on how expectations map into desirability of spending within this survey as well. Specifically, we can examine how macroeconomic expectations are correlated with consumer plans to buy durable goods. We elicited survey respondents’ willingness to purchase larger ticket items such as cars, houses, and appliances on a five point scale ranging from 1 (very bad) to 5 (very good). In Table 9, we regress their willingness to buy for the different outcomes on their post-treatment subjective macroeconomic expectations. Consistent with the consumer Euler equation, households are more likely to think it’s a good time

to purchase larger ticket items when they expect higher inflation. Moreover, they are also more likely to purchase durables, when they expect higher personal income growth, lower future unemployment, and higher *future* mortgage rates.

Taken together, these results suggest that the upcoming election might trigger a wave of reluctance to consume after the Presidential election when the preferred candidate of many individuals does not win. This is likely to occur since many individuals of both parties overestimate the probability of their candidate being elected and have very dire views of the economic outlook if the other candidate is elected. An election that does not go their way will lead them to adopt this more pessimistic outlook and likely reduce their spending.

VI Conclusion

How households form economic expectations has been a long-standing research question in economics. However, in an increasingly polarized political environment, the striking differences in economic agendas as well as assessment of future electoral outcomes can potentially provide a fertile ground for understanding how divergent views about the economy develop. In this paper, we try to make progress by using a unique survey of households that provides detailed data *jointly* on political preferences and economic projections (including conditional and unconditional forecasts). The survey also implements a randomized control trial to examine how the provision of information about political polls influences households' beliefs about the outcome of the coming elections and their predictions about the future macroeconomic trajectory. As a result of these unique features of the survey, we document new facts about the interplay of politics and economics. Political and economic outcomes are very closely connected in people's minds, so that individual economic outlooks are dependent on expected political outcomes. This helps establish a clear causal link from electoral outcomes to significant changes in macroeconomic expectations.

We show dramatic differences in the expected outcome of the upcoming elections along party lines. Both Republicans and Democrats expect their preferred candidate to win with a very high probability and the economy to perform poorly when the candidate of the opposing party wins. Those who follow the election most closely are the ones most likely to hold extreme views about the outcome of the election, suggesting that differences in beliefs are not stemming from a lack of attention to information. Instead, this evidence points toward the importance of individuals relying on different information, leading them to reach conflicting conclusions about election

outcomes. Consistent with this, we confirm that individuals differ dramatically in terms of their preferred cable TV news channel: Fox News for Republicans and CNN for Democrats.

We then show in an information provision experiment that when directly exposed to similar information coming from different news sources, the average survey respondent displays little change in their beliefs. This is driven by the fact that neither Republicans nor Democrats respond to the information, regardless of its news source. This suggests that views are so strongly held among most partisans at this point that new information is effectively dismissed, regardless of its source. However, for Independents, or more generally those with weaker priors about the outcome of the election, there is a much more discernible response to the information. We then show that as individuals change their beliefs about the election outcome, they revise their broader economic outlook in a consistent manner which can change their views about whether now is a good time to buy durables. Taken together, these results suggest that the upcoming elections might trigger a decline in aggregate consumption after the Presidential election, as members of the losing party adopt a much more pessimistic outlook while those of the winning party maintain their previous optimism.

Another novel finding is that when we present individuals with polling data that shows not just the mean outcomes but also *the span of possible outcomes within the polling margin of error*, respondents revised their beliefs by larger amounts towards a tighter election race. This helps shrink some of the dramatic difference in views about electoral outcomes across individuals. One potential implication is that were the media to more systematically emphasize the range of outcomes included in any given poll, individuals would have a much better sense of the inherent uncertainty surrounding electoral outcomes. While this would do little to offset the many forces driving Americans further apart, it could at least help people agree about how uncertain the future really is.

This perceived uncertainty about likely electoral outcomes is important to maintain. When an individual cannot foresee a realistic scenario in which their candidate loses, as is the case for many of our respondents, an outcome in which their candidate is in fact defeated is unlikely to be treated as the outcome of a fair and free election. To the extent that increasingly polarized voters also see little chance of their candidate losing, as we document here, electoral outcomes will progressively be seen as illegitimate by rising shares of the population. Ensuring that voters can

correctly distinguish between what they want to see happen and what is likely to happen is therefore fundamental to sustaining a functioning democracy.

References

- Alesina, Alberto, Armando Miano, and Stefanie Stantcheva, 2020. "The Polarization of Reality," *American Economic Association Papers and Proceedings*, May 2020: 324-328.
- Alesina, Alberto, Stefanie Stantcheva, and Edoardo Teso, 2018. "Intergenerational Mobility and Preferences for Redistribution," *American Economic Review*, February 2018: 521-554.
- Allcott, Hunt, Levi Boxell, Jacob C. Conway, Matthew Gentzkow, Michael Thaler, and David Y. Yang, 2020. "Polarization and Public Health: Partisan Differences in Social Distancing during the Coronavirus Pandemic", *Journal of Public Economics* (forthcoming).
- Barone Guglielmo, Francesco D'Acunto, and Gaia Narciso, 2015. "Telecracy: Testing for Channels of Persuasion," *American Economic Journal: Economic Policy*, 7(2): 30-60.
- Barrios, John and Yael Hochberg, 2020. "Risk Perception Through the Lens of Politics in the Time of the COVID-19 Pandemic", manuscript.
- Bartels, Larry, 2002. "Beyond the Running Tally: Partisan Bias in Political Perceptions," *Political Behavior*, 24: 117-150.
- Benkler, Yochai, 2020. "How the media has abetted the Republican assault on mail-in voting." Columbia Journalism Review. Available at <https://www.cjr.org/analysis/trump-twitter-disinformation-voter-fraud-election.php>.
- Besley, Timothy and Andrea Prat, 2006. "Handcuffs for the Grabbing Hand? Media Capture and Government Accountability," *American Economic Review*, 96(3): 720-736.
- Blinder, Alan and Mark Watson, 2016. "Presidents and the US Economy: An Econometric Investigation," *American Economic Review*, April 2016: 1015-1045.
- Bursztyn, Leonardo, Aakaash Rao, David Yanagizawa-Drott, and Chris Roth, 2020. "Misinformation During a Pandemic", manuscript.
- Campante, Filipe R. and Daniel A. Hojman, 2013. "Media and polarization: Evidence from the introduction of broadcast TV in the United States." *Journal of Public Economics* 100:, 79-92.
- Coibion, Olivier, Dimitris Georgarakos, Yuriy Gorodnichenko and Michael Weber, 2020a. "Forward Guidance and Household Expectations," NBER Working Paper w26778.

- Coibion, Olivier, Dimitris Georgarakos, Yuriy Gorodnichenko and Maarten Van Rooij, 2019b. “How Does Consumption Respond to News about Inflation? Field Evidence from a Randomized Control Trial,” NBER Working Paper w26106.
- Coibion, Olivier, Yuriy Gorodnichenko and Michael Weber, 2019. “Monetary Policy Communications and their Effects on Household Inflation Expectations,” NBER Working Paper w25482.
- Coibion, Olivier, Yuriy Gorodnichenko and Tiziano Ropele, 2020b. “Inflation Expectations and Firm Decisions: New Causal Evidence,” *Quarterly Journal of Economics*, 135(1): 165-219.
- D’Acunto, Francesco, Daniel Hoang, and Michael Weber, 2020. “Managing Households’ Expectations with Unconventional Policies,” Manuscript.
- DellaVigna, Stefano and Ethan Kaplan, 2007. “The Fox News Effect: Media Bias and Voting,” *Quarterly Journal of Economics*, 122: 1187-1234.
- DellaVigna, Stefano and Matthew Gentzkow, 2010. “Persuasion: Empirical Evidence,” *Annual Review of Economics*, 2: 643-696.
- Enikolopov, Ruben, Maria Petrova, and Ekaterina Zhuravskaya, 2011. “Media and Political Persuasion: Evidence from Russia,” *American Economic Review*, 101(7): 3253-3285.
- Franzese, Robert J., Jr. 2002. “Electoral and Partisan Cycles in Economic Policies and Outcomes,” *Annual Review of Political Science* 5(1), 369-421.
- Glaeser, Edward L. and Bryce A. Ward, 2006. “Myths and Realities of American Political Geography,” *Journal of Economic Perspectives*, 20(2): 119-144.
- Gentzkow, Matthew and Jesse M. Shapiro, 2010. “What Drives Media Slant? Evidence from U.S. Daily Newspapers,” *Econometrica* 78(1), 35-71.
- Halberstam, Yosh, and Brian Knight, 2016. “Homophily, group size, and the diffusion of political information in social networks: Evidence from Twitter.” *Journal of Public Economics* 143, 73-88.
- Jerit, Jennifer, and Jason Barabas, 2012. “Partisan Perceptual Bias and the Information Environment,” *Journal of Politics*, 74(2): 672-684.
- Kamdar, Rupal, and Walker Ray, 2020. Polarized Expectations, manuscript.
- Kamenica Emir, and Matthew Gentzkow, 2011. “Bayesian Persuasion,” *American Economic Review*, 101(6): 2590-2615.

Mian, Atif, Amir Sufi, and Nasim Khoshkhoh, 2018. Government Economic Policy, Sentiments, and Consumption, manuscript.

Mullainathan, Sendhil, and Andrei Shleifer, 2005. "The Market for News." *American Economic Review* 95(4), 1031-1053.

Table 1. Political and voting preferences.

	Political leaning			
	All	Republican	Democrat	Other
	(1)	(2)	(3)	(4)
Political party affiliation, share	1.00	0.41	0.36	0.23
If vote now, how would you vote?				
Donald Trump	0.44	0.88	0.06	0.26
I would not vote	0.05	0.02	0.01	0.18
Joe Biden	0.43	0.07	0.90	0.35
Prefer not to answer	0.02	0.01	0.00	0.08
Unsure	0.05	0.03	0.02	0.14
If vote now, how would you vote? [Likely voters]				
Donald Trump	0.49	0.90	0.07	0.35
Joe Biden	0.47	0.08	0.92	0.48
Prefer not to answer	0.01	0.00	0.00	0.04
Unsure	0.04	0.03	0.02	0.13
How strongly do you support your candidate?	84.70 (21.00)	87.24 (19.16)	86.36 (19.69)	73.54 (25.10)
Voting plans				
No, I do not plan to vote	0.06	0.03	0.03	0.17
Not sure	0.04	0.02	0.03	0.10
Prefer not to answer	0.02	0.00	0.00	0.06
Yes, I have already voted by mail	0.17	0.11	0.26	0.13
Yes, I plan to vote by mail	0.19	0.15	0.23	0.18
Yes, I plan to vote in person	0.53	0.69	0.45	0.36
Who do you think is going to win?				
Donald Trump	0.46	0.84	0.09	0.36
Joe Biden	0.45	0.12	0.87	0.39
Prefer not to answer	0.09	0.05	0.05	0.25
Chance of winning and confidence in the reported chance				
Trump:				
chance of winning	56.3 (31.0)	75.8 (24.5)	39.2 (27.7)	52.3 (27.9)
confidence in chance of winning	68.0 (30.9)	80.3 (24.0)	61.1 (32.8)	60.0 (31.3)
Biden:				
chance of winning	58.4 (29.5)	46.5 (32.8)	74.3 (19.8)	53.3 (25.1)
confidence in chance of winning	69.9 (28.2)	67.4 (30.9)	77.4 (22.9)	62.6 (28.6)

Notes: All moments are computed using sampling weights. "Other" (column 4) includes respondents who when asked about their political affiliation chose Green party (share = 0.02), Libertarian party (0.03), other party (0.01), "do not lean to any party" (0.15), or "prefer not to answer" (0.02). The sample of likely voters is restricted to those who said "Yes, I have already voted by mail", "Yes, I plan to vote by mail", and "Yes, I plan to vote in person" and who did not say "I would not vote". Numbers in parentheses show standard deviations of scores for how strongly respondents support their candidates, for chance of winning, and for confidence in the reported chance of winning.

Table 2. Attention, sources of information, and concern about the elections.

	Political leaning			
	All	Republican	Democrat	Other
	(1)	(2)	(3)	(4)
How closely do you follow elections				
Not closely at all	0.05	0.02	0.02	0.16
Not so closely	0.09	0.06	0.07	0.17
Somewhat closely	0.30	0.29	0.27	0.34
Very closely	0.56	0.62	0.64	0.33
Where would you say you get the majority of your news regarding the presidential elections,				
Newspapers	0.14	0.12	0.17	0.11
Other	0.07	0.06	0.05	0.14
Radio and podcasts	0.07	0.09	0.06	0.07
Social media	0.28	0.30	0.26	0.30
Television	0.43	0.43	0.46	0.38
What is your preferred cable TV news channel?				
CNN	0.28	0.23	0.40	0.19
Fox News	0.32	0.50	0.17	0.23
MSNBC	0.11	0.06	0.18	0.11
Other	0.21	0.16	0.19	0.30
Prefer not to answer	0.08	0.05	0.06	0.17
Do any of the following make you concerned about the upcoming election?				
Foreign interference	5.80 (3.19)	5.52 (3.30)	6.59 (2.94)	5.04 (3.12)
Riots	6.27 (3.10)	6.94 (2.88)	5.76 (3.14)	5.85 (3.20)
Shortages of food or medical supplies	5.20 (3.26)	5.21 (3.40)	5.39 (3.12)	4.87 (3.18)
Mail-vote fraud	5.65 (3.55)	6.94 (3.07)	4.45 (3.61)	5.16 (3.49)
The losing candidate refuses to concede	5.98 (3.26)	5.49 (3.37)	7.03 (2.88)	5.23 (3.22)
The outcome is determined by courts	6.01 (3.08)	5.94 (3.12)	6.52 (2.94)	5.36 (3.08)

Notes: for the first three questions, the table reports shares of responses assigned to each option for a given question. All moments are computed using sampling weights. "Other" (column 4) includes respondents who when asked about their political affiliation chose Green party, Libertarian party, other party, "do not lean to any party", or "prefer not to answer". The bottom panel reports average scores and standard deviations (in parentheses) for concerns that respondents have about coming elections. The scores range from 1 (not a concern) to 10 (an extremely important concern).

Table 3. Economic objectives most important when thinking about which candidate to support.

Economic objective	Political leaning			
	All (1)	Republican (2)	Democrat (3)	Other (4)
full employment in the economy	0.34	0.38	0.31	0.33
a stable rate of economic growth	0.30	0.34	0.29	0.25
a reliable safety net	0.13	0.09	0.18	0.13
stable prices	0.18	0.18	0.18	0.19
a friendly business environment	0.12	0.13	0.09	0.13
high earnings for yourself	0.16	0.15	0.15	0.18
a strong performance of the stock market	0.17	0.23	0.12	0.14
a more equal distribution of income in the economy	0.23	0.13	0.34	0.22
lower taxes	0.32	0.36	0.27	0.34
lower government debt	0.14	0.14	0.12	0.16
a balanced budget	0.17	0.17	0.16	0.17
reducing monopoly power of large companies	0.13	0.09	0.17	0.13
free trade	0.08	0.08	0.07	0.09
raising the minimum wage	0.22	0.12	0.33	0.25
exporting more than importing	0.11	0.15	0.07	0.10
a strong dollar	0.19	0.23	0.15	0.19

Notes: The table report the share of respondents who chose a given economic objective (listed in the left column). Respondents can choose up to three objectives. All moments are computed using sampling weights. “Other” (column 4) includes respondents who when asked about their political affiliation chose Green party, Libertarian party, other party, “do not lean to any party”, or “prefer not to answer”.

Table 4. Direct impact of COVID19.

	Political leaning			
	All	Republican	Democrat	Other
	(1)	(2)	(3)	(4)
Financial concerns because of COVID	5.91 (3.18)	5.86 (3.34)	6.18 (3.02)	5.60 (3.08)
Lost earnings due to COVID, flag	0.26 (0.44)	0.30 (0.46)	0.26 (0.44)	0.21 (0.41)
Lost earnings due to COVID, \$'000	7.01 (11.10)	6.09 (10.20)	7.40 (11.27)	8.58 (12.65)
Lost financial wealth due to COVID, flag	0.22 (0.42)	0.26 (0.44)	0.21 (0.41)	0.17 (0.37)
Lost financial wealth due to COVID, \$'000	10.89 (20.53)	9.59 (19.04)	10.87 (19.00)	14.57 (26.26)
Time of return to normalcy, months	11.56 (12.20)	10.22 (12.17)	12.94 (11.81)	11.82 (12.58)

Notes: The table reports averages and standard deviations (in parentheses) for qualitative and quantitative indicators of COVID19's direct impact on households' welfare. All moments are computed using sampling weights. "Other" (column 4) includes respondents who when asked about their political affiliation chose Green party, Libertarian party, other party, "do not lean to any party", or "prefer not to answer".

Table 5. Macroeconomic expectations, pre-treatment.

Expectations/Perceptions	Political leaning							
	All		Republican		Democrat		Other	
	mean	SD	mean	SD	mean	SD	mean	SD
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Unconditional								
Inflation, 1-year-ahead, implied mean	2.18	3.10	2.01	2.88	2.36	3.23	2.21	3.29
Inflation, 1-year-ahead, implied st.dev. (uncertainty)	4.57	3.66	4.86	3.75	4.38	3.53	4.34	3.66
Personal (after tax) income growth	5.55	22.43	7.67	24.86	4.04	20.12	4.11	20.94
UE rate, current	14.53	10.99	14.64	10.93	14.49	10.74	14.39	11.50
UE rate, 1-year-ahead	13.62	10.91	13.10	10.81	14.10	10.63	13.84	11.51
UE rate, next 3-5 years	10.02	8.79	9.88	8.80	10.25	8.64	9.91	8.97
Mortgage rate, current	4.88	4.10	4.92	4.17	4.88	4.00	4.81	4.15
Mortgage rate, end of 2021	5.33	4.38	5.37	4.44	5.40	4.32	5.16	4.37
Mortgage rate, next 5-10 years	5.96	4.51	6.01	4.59	6.04	4.44	5.75	4.46
Conditional on Trump winning								
Inflation, 1-year-ahead, point prediction	4.56	5.97	3.74	5.64	5.92	6.46	4.07	5.44
Personal (after tax) income growth	2.50	3.99	3.50	4.34	1.75	3.59	2.16	3.69
UE rate, 1-year-ahead	11.83	10.09	10.16	9.53	14.11	10.13	11.59	10.40
Mortgage rate, end of 2021	5.22	4.56	5.12	4.52	5.61	4.64	4.80	4.47
Conditional on Biden winning								
Inflation, 1-year-ahead, point prediction	5.44	6.10	6.83	6.67	4.33	5.47	5.03	5.70
Personal (after tax) income growth	1.69	3.06	1.33	2.93	2.30	3.26	1.47	2.83
UE rate, 1-year-ahead	11.50	9.33	13.18	9.65	10.13	8.53	10.90	9.63
Mortgage rate, end of 2021	5.72	4.87	6.54	5.05	5.22	4.66	5.14	4.70

Notes: The table reports averages (columns 1, 3, 5, 7) and standard deviations (columns 2, 4, 6, 8) for macroeconomic expectations. Expectations are unconditional (the top panel of the table) or conditional on a given candidate winning (the bottom two panels). All moments are Huber-robust (i.e., robust to outliers) and computed using sampling weights. “Other” (columns 7 and 8) includes respondents who when asked about their political affiliation chose Green party, Libertarian party, other party, “do not lean to any party”, or “prefer not to answer”. UE rate stands for the unemployment rate. Mortgage rate is for the 30-year fixed-rate mortgage. Unconditional inflation expectations are elicited as probability distribution. All other expectations are elicited as point predictions.

Table 6. Consistency of conditional and unconditional forecasts.

Dependent variable: Unconditional forecast	Forecast for			
	Inflation	Personal income growth	Unemployment rate	Mortgage rate
	(1)	(2)	(3)	(4)
Weighted conditional forecasts	-0.024*** (0.002)	0.370*** (0.029)	0.897*** (0.007)	0.981*** (0.004)
Observations	4,936	5,043	4,481	3,923
R-squared	0.023	0.125	0.810	0.956

Notes: The table reports the estimated slope coefficients in specification (1) for various expectations. All regression results are based on the Huber-robust regression with sampling weights. The dependent variable is a pre-treatment unconditional forecast. The regressor is a weighted sum of conditional forecasts, $\{\text{Expectation if Trump wins}\} \times \{\text{probability of Trump wins}\} + \{\text{Expectation if Biden wins}\} \times \{\text{probability of Biden wins}\}$. Heteroskedasticity robust standard errors are reported in parentheses. ***, **, * denote statistical significance at 1, 5 and 10 percent.

Table 7. The effect of information treatments on probabilities of electoral outcomes.

Dependent variable: Posterior (Chance of Trump winning)	Full sample	Political leaning			Preferred Cable News Channel			Confidence in the prior		
		Repub.	Democrat	Other	CNN + MSNBC	Fox	Other	[0,50]	(50,90]	(90,100]
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Prior (Chance of Trump winning)	0.829*** (0.015)	0.226*** (0.056)	0.269*** (0.045)	0.480*** (0.065)	0.171*** (0.051)	0.542*** (0.054)	0.817*** (0.029)	0.634*** (0.043)	0.517*** (0.047)	0.479*** (0.048)
Prior × (Fox treatment)	-0.047** (0.020)	0.101 (0.062)	0.132** (0.062)	-0.302*** (0.086)	0.048 (0.071)	-0.013 (0.071)	0.000 (0.038)	-0.239*** (0.065)	-0.043 (0.062)	0.043 (0.068)
Prior × (MSNBC treatment)	-0.039* (0.020)	-0.021 (0.064)	0.036 (0.060)	-0.174** (0.083)	-0.014 (0.067)	-0.130* (0.076)	-0.047 (0.040)	-0.170*** (0.063)	-0.108* (0.062)	-0.022 (0.067)
Prior × (ABC treatment)	-0.042** (0.020)	0.070 (0.063)	0.018 (0.063)	-0.315*** (0.094)	-0.128* (0.068)	-0.015 (0.072)	-0.016 (0.035)	-0.319*** (0.067)	-0.014 (0.058)	-0.087 (0.071)
Prior × (ABC [w/ ranges] treatment)	-0.070*** (0.022)	-0.009 (0.062)	-0.036 (0.065)	-0.286*** (0.091)	-0.064 (0.070)	-0.083 (0.072)	-0.038 (0.040)	-0.422*** (0.070)	-0.096 (0.062)	-0.058 (0.073)
I(Fox treatment)	2.144* (1.126)	-8.117* (4.289)	-1.897 (2.010)	19.492*** (4.623)	0.101 (3.395)	1.133 (4.968)	-1.284 (2.001)	13.360*** (3.507)	2.183 (3.274)	-3.304 (4.424)
I(MSNBC treatment)	0.550 (1.055)	-2.165 (4.223)	-0.228 (1.947)	7.196* (4.354)	-1.431 (3.265)	4.780 (5.106)	1.740 (2.098)	5.257* (3.173)	5.437* (3.294)	-1.149 (4.246)
I(ABC treatment)	2.133** (1.078)	-7.686* (4.253)	2.534 (2.072)	16.150*** (5.020)	5.268 (3.396)	0.067 (4.842)	0.971 (1.891)	15.636*** (3.585)	-0.220 (3.006)	4.060 (4.537)
I(ABC [w/ ranges] treatment)	3.579*** (1.188)	-0.279 (4.140)	5.087** (2.326)	13.162*** (4.680)	3.786 (3.423)	4.609 (4.866)	1.593 (2.149)	19.143*** (3.690)	4.192 (3.272)	7.007 (4.746)
Observations	4,530	2,073	1,793	1,169	2,019	1,611	1,348	1,311	1,981	1,733
R-squared	0.736	0.177	0.286	0.185	0.184	0.245	0.757	0.414	0.323	0.239

Notes: The table reports the estimated slope coefficients in specification (2) for various expectations. All regression results are based on the Huber-robust regression with sampling weights. The dependent variable is the posterior perceived chance of Trump winning the 2020 Presidential elections. “Other” (column 4) includes respondents who when asked about their political affiliation chose Green party, Libertarian party, other party, “do not lean to any party”, or “prefer not to answer”. Heteroskedasticity robust standard errors are reported in parentheses. ***, **, * denote statistical significance at 1, 5 and 10 percent.

Table 8. The causal effect of revised election probabilities on macroeconomic expectations.

Dependent variable: Forecast revision	Macroeconomic variable			
	Inflation	Personal income growth	Unemployment rate	Mortgage rate
	(1)	(2)	(3)	(4)
(Change in probability)×(Difference in conditional forecasts)	0.683 (0.445)	1.941* (1.085)	1.153** (0.453)	1.496*** (0.573)
Observations	2,827	3,050	2,587	3,340
R-squared	0.001	0.001	0.002	0.003

Notes: The table reports the estimated slope coefficients in specification (3) for various expectations. All regression results are based on the OLS regression with sampling weights. The dependent variable is the change in macroeconomic expectations, i.e., $E_i^{Post}X - E_i^{Prior}X$ for variable X . The regressor is the change in the perceived probability of Trump winning the 2020 Presidential elections $[\widehat{Prob}_i^{Post}\{Trump\ wins\} - Prob_i^{Prior}\{Trump\ wins\}]$ multiplied by the difference in conditional forecasts across the candidates $[E_i^{Prior}(X|Trump) - E_i^{Prior}(X|Biden)]$. The posterior probability of Trump winning the 2020 Presidential elections $\widehat{Prob}_i^{Post}\{Trump\ wins\}$ is the value predicted by specification (2) (the estimates are reported in column (1) of Table 7). Heteroskedasticity robust standard errors are reported in parentheses. ***, **, * denote statistical significance at 1, 5 and 10 percent.

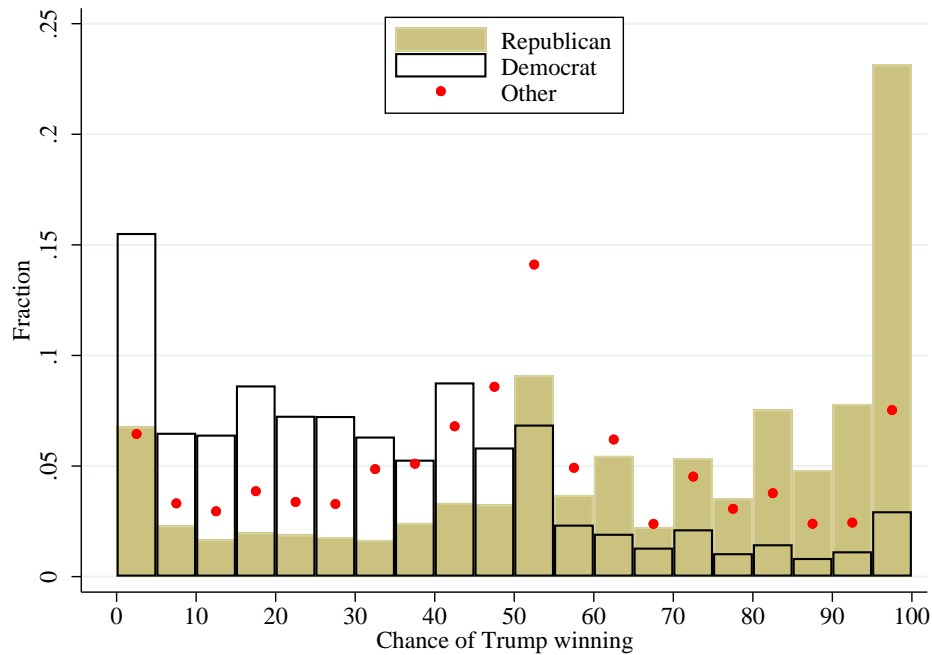
Table 9. Consumer spending plans and macroeconomic expectations.

Expectations	Good time to buy:		
	house	car	appliance
	(1)	(2)	(3)
Inflation, 1-year-ahead	0.498*** (0.100)	0.201** (0.087)	0.379*** (0.096)
Personal income growth, 1-year-ahead	0.893*** (0.095)	0.750*** (0.083)	0.688*** (0.088)
Unemployment rate, end of 2021	-0.446*** (0.103)	-0.266*** (0.083)	-0.246*** (0.088)
Mortgage rate, end of 2021	0.726*** (0.118)	0.649*** (0.099)	0.682*** (0.104)
Observations	5,034	5,032	5,033
R-squared	0.077	0.063	0.071

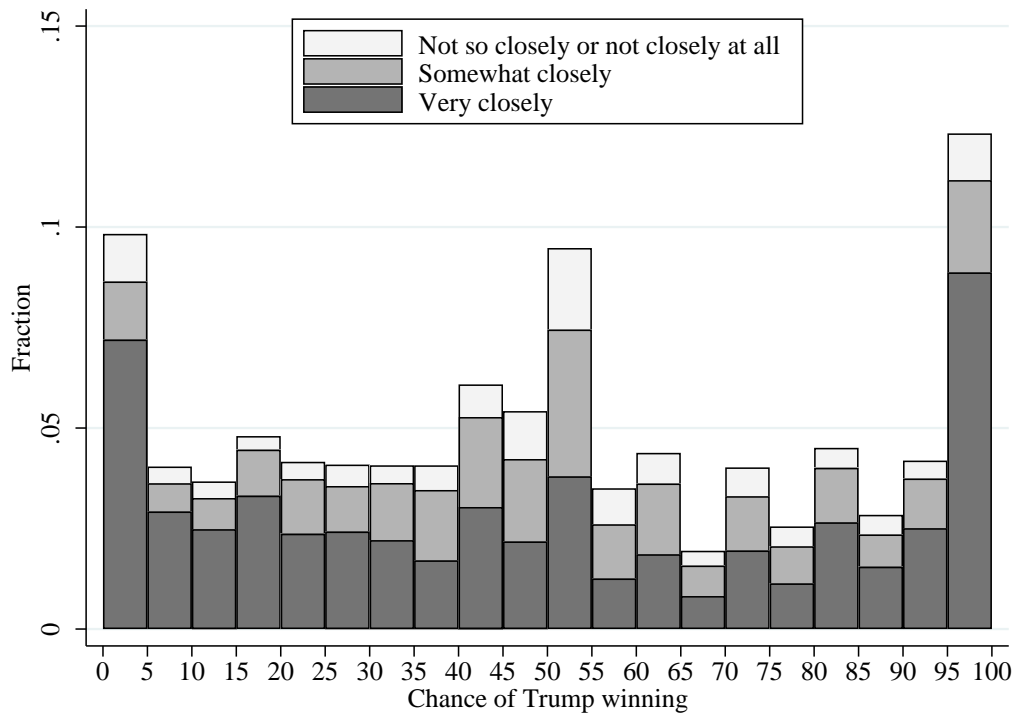
Notes: The dependent variable is the score on the question about whether now is a good time to buy a house/car/appliance. The responses are scored from 1 (very bad) to 5 (very good). All estimates are based on the Huber-robust regression using sampling weights. All macroeconomic expectations (regressors) are from the post-treatment stage and divided by 100 (e.g., i.e., 5% unemployment is coded as 0.05). Heteroskedasticity robust standard errors are reported in parentheses. ***, **, * indicate statistical significance at 1, 5 and 10 percent.

Figure 1. Distributions of perceived chances of Trump winning the 2020 Presidential election.

Panel A: By political affiliation

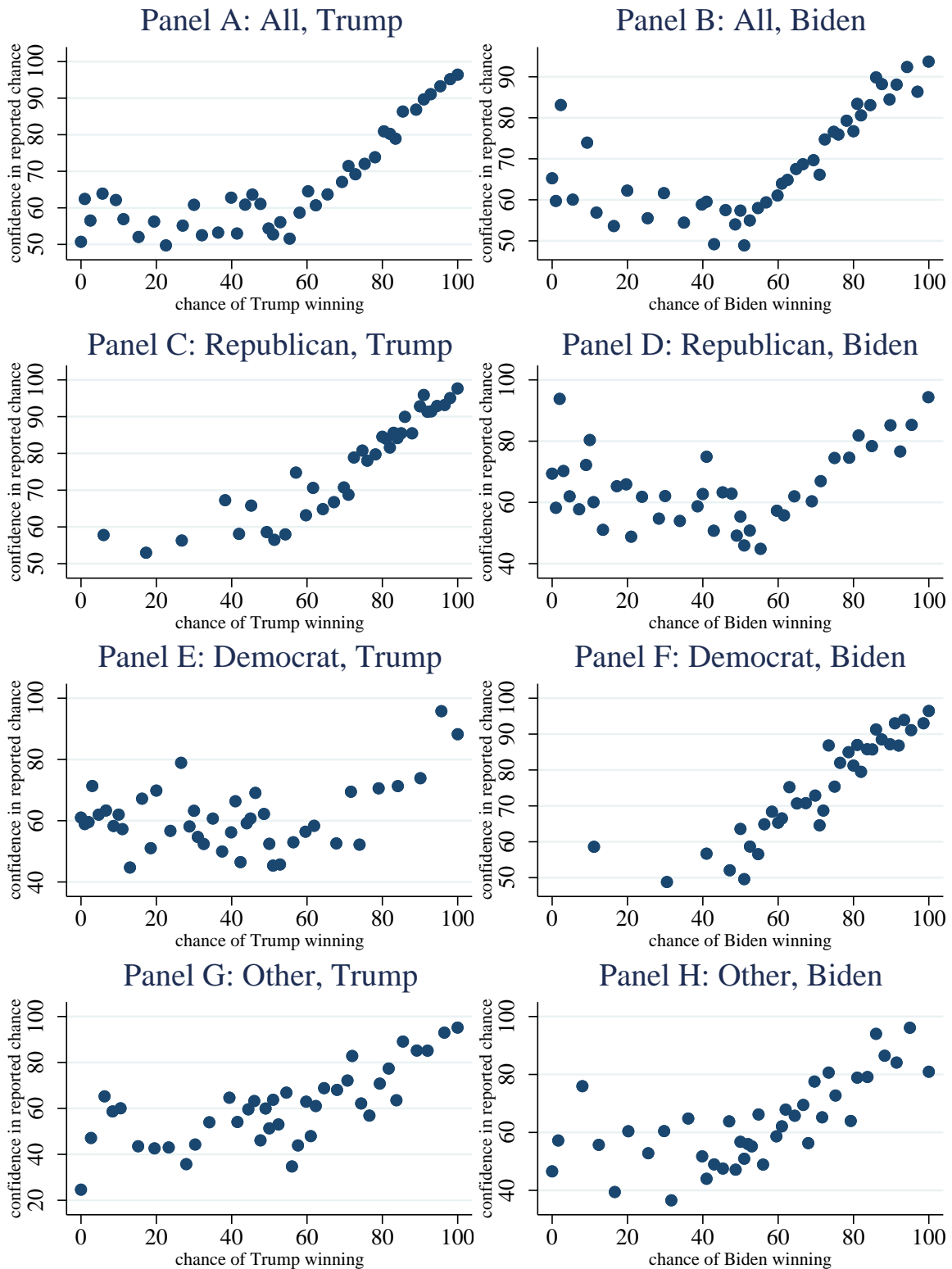


Panel B: By how closely they follow the election



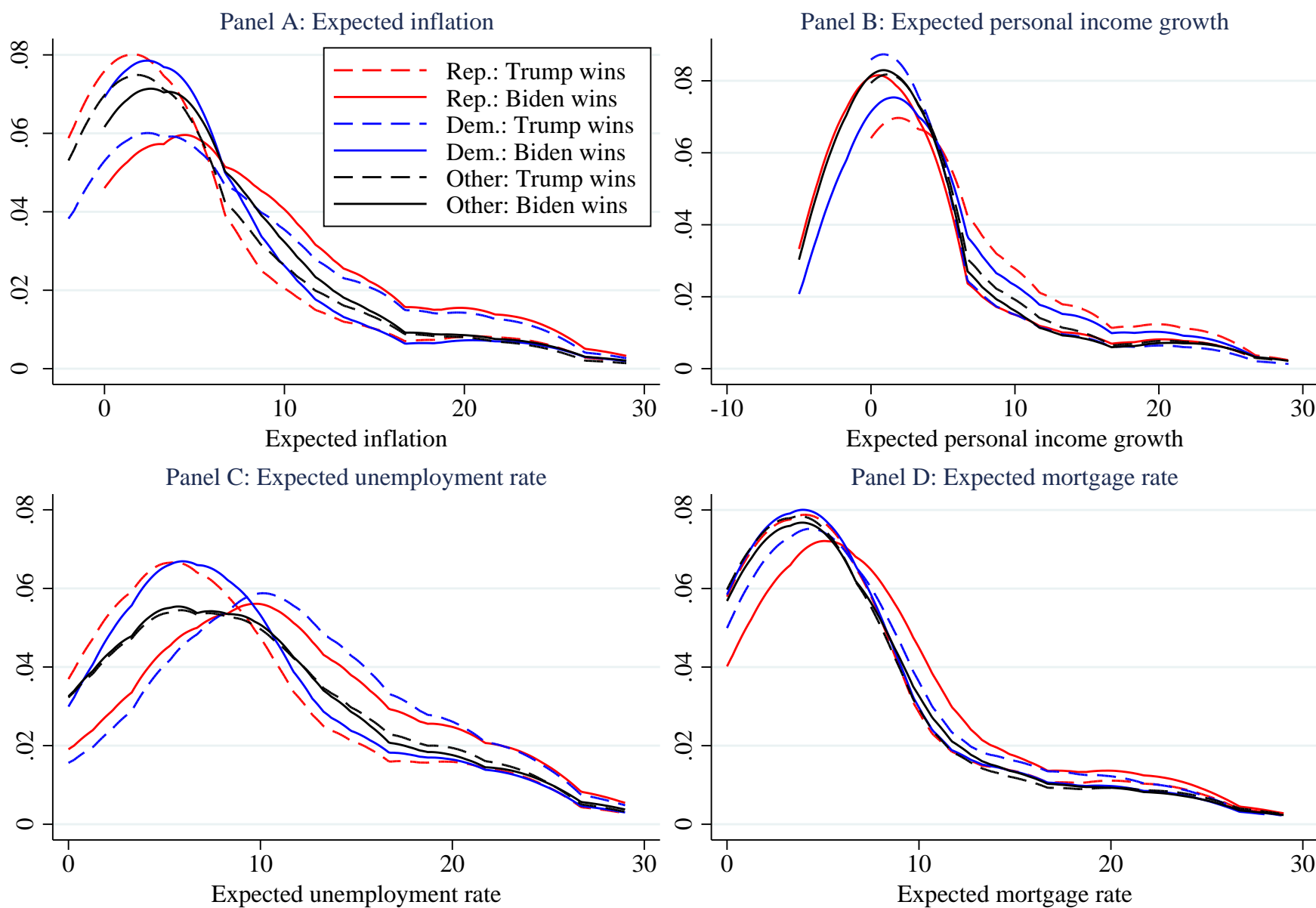
Notes: Panel A plots the distribution of perceived chances of Trump winning the 2020 Presidential election, separately for each political leaning. Panel B plots the distribution of perceived chances of Trump winning with a decomposition by how closely individuals follow the election. All statistics are computed using sampling weights. “Other” includes respondents who when asked about their political affiliation chose Green party, Libertarian party, other party, “do not lean to any party”, or “prefer not to answer”.

Figure 2. Chance of winning and confidence in reported chance of winning.



Notes: respondents are randomly split into two equally-sized groups. One group is asked about the chance of Trump winning the 2020 Presidential election (left column). The other group is about the chance of Biden winning (right column). Each panel reports a binscatter for the reported chance and confidence (from 0 to 100) in the reported chance. All statistics are computed using sampling weights. “Other” includes respondents who when asked about their political affiliation chose Green party, Libertarian party, other party, “do not lean to any party”, or “prefer not to answer”.

Figure 3. Distribution of conditional forecasts by political leaning, restrict the sample to (-30%,30%).



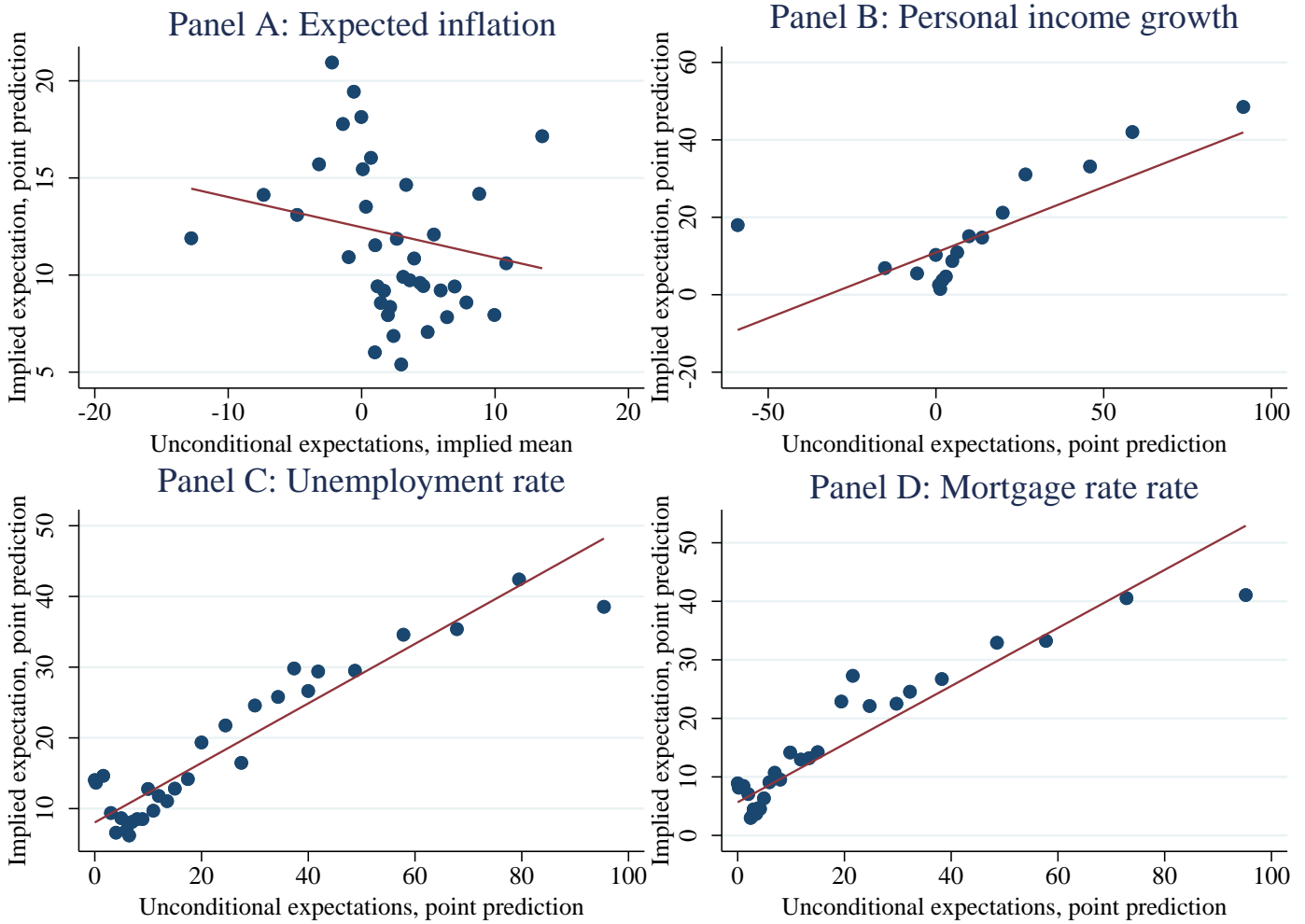
Notes: each panel plots kernel densities for conditional forecasts by political leaning. The sample is restricted to responses between -30% and 30%. The bandwidth is set at 3 percent.

Appendix A. Additional Figures and Tables

Appendix Table 1. Descriptive statistics.

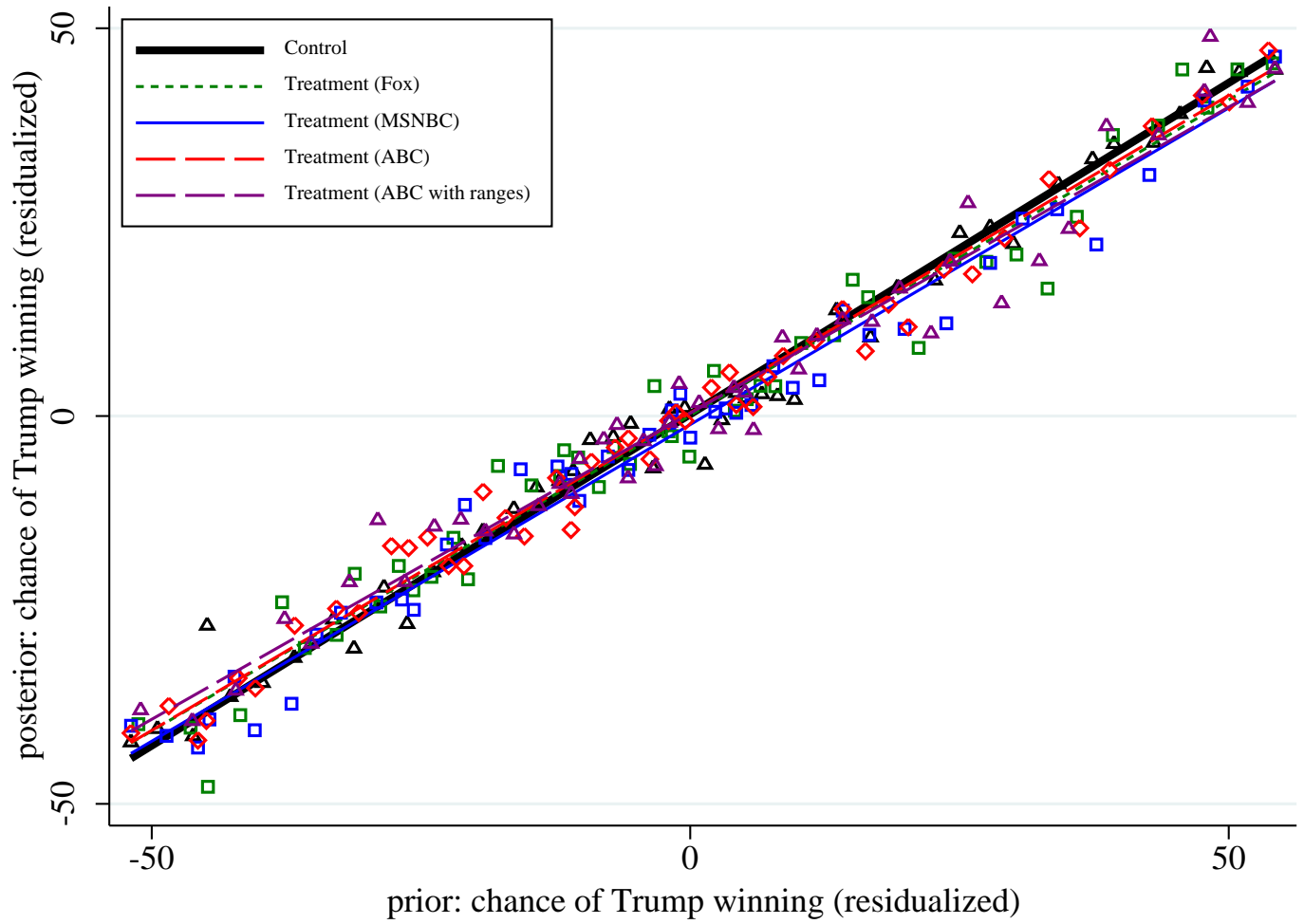
variable	Raw		Weighted	
	mean	sd	mean	sd
	(1)	(2)	(3)	(4)
Female	0.50	0.50	0.51	0.50
Male	0.50	0.50	0.49	0.50
HH income: less than \$25,000	0.15	0.36	0.18	0.39
HH income: between \$25,000 and \$34,999	0.10	0.30	0.08	0.28
HH income: between \$35,000 and \$49,999	0.10	0.30	0.12	0.32
HH income: between \$50,000 and \$69,999	0.17	0.38	0.17	0.38
HH income: between \$70,000 and \$99,999	0.18	0.38	0.13	0.33
HH income: more than \$100,000	0.29	0.46	0.31	0.46
Region: Midwest	0.26	0.44	0.21	0.41
Region: Northeast	0.20	0.40	0.17	0.38
Region: South	0.39	0.49	0.38	0.49
Region: West	0.15	0.36	0.24	0.43
Age group: age<35	0.33	0.47	0.27	0.45
Age group: age>=35 & age<=44	0.24	0.43	0.17	0.38
Age group: age>=45 & age<=54	0.08	0.27	0.17	0.37
Age group: age>=55 & age<=59	0.07	0.26	0.09	0.28
Age group: age>=60	0.27	0.44	0.30	0.46
Housing: Other	0.03	0.17	0.03	0.16
Housing: Own house/apartment and have a fixed-rate mortgage	0.27	0.44	0.26	0.44
Housing: Own house/apartment and have a variable-rate mortgage	0.04	0.19	0.04	0.19
Housing: Own house/apartment without a mortgage	0.41	0.49	0.41	0.49
Housing: Rent our house/apartment	0.25	0.43	0.26	0.44
Have significant financial wealth	0.67	0.47	0.66	0.47
Liquidity constrained	0.26	0.44	0.26	0.44
Consumer spending per month, \$'000	3.60	3.00	3.56	2.96
Bought a durable over the last 6 months	0.49	0.50	0.46	0.50
Plan to buy a durable over the last 6 months	0.53	0.50	0.50	0.50
Employed	0.65	0.48	0.61	0.49

Appendix Figure 1. Compare unconditional and implied expectations.



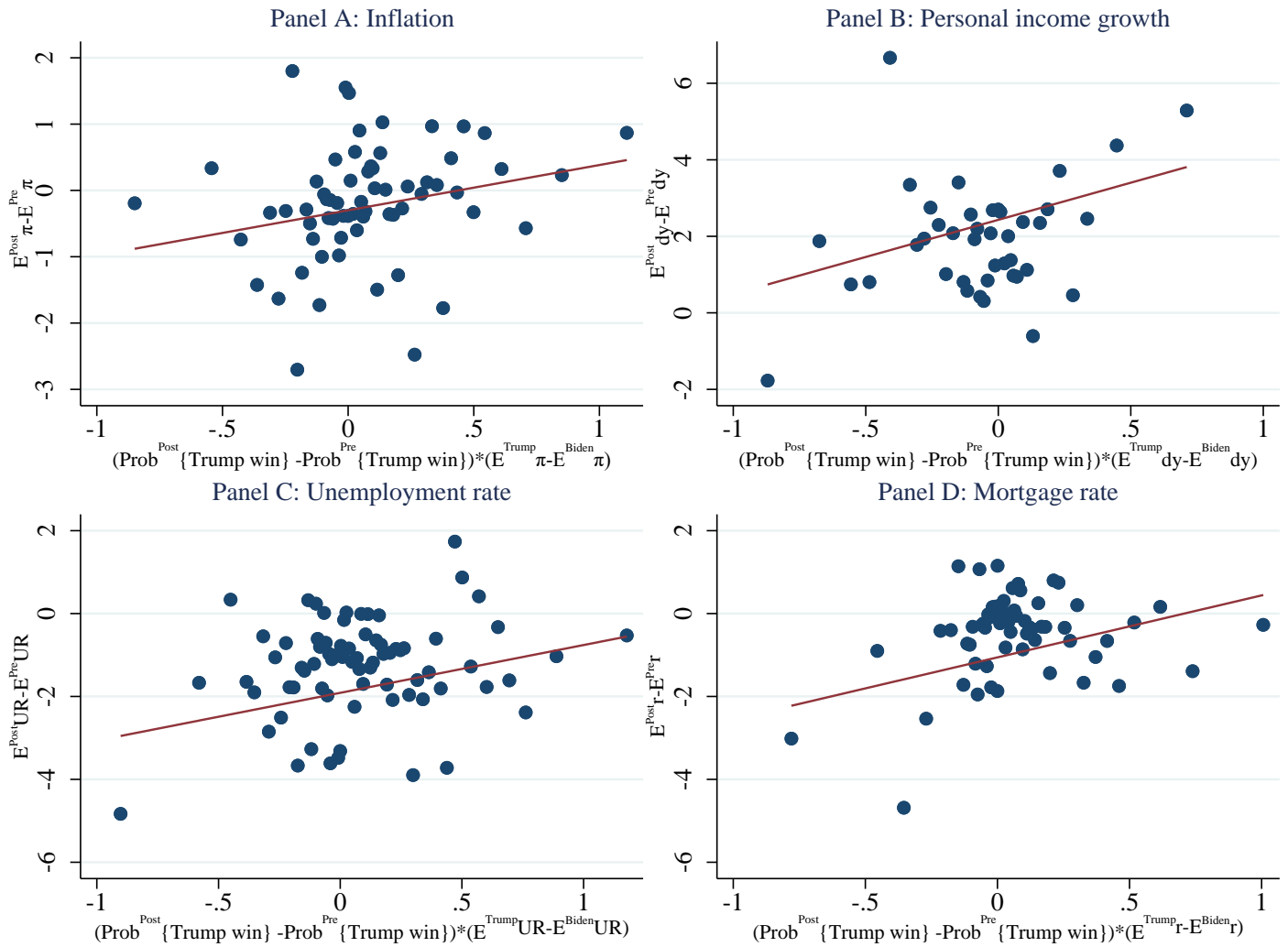
Notes: the figure reports binscatter plots of unconditional forecasts (horizontal axis) vs. probability-weighted conditional forecasts (vertical axis). Probability-weighted conditional forecasts are computed as $\{ \text{Expectation if Trump wins} \} \times \{ \text{probability of Trump wins} \} + \{ \text{Expectation if Biden wins} \} \times \{ \text{probability of Biden wins} \}$. Sample weights are applied everywhere. The horizontal axis is for the unconditional expectations. Note that for inflation, it is the implied mean from the reported distribution. All other expectations are point predictions.

Appendix Figure 2. Posterior vs. prior beliefs about chance of Trump winning the 2020 Presidential election.



Notes: the figure plots binscatter of posterior vs. prior beliefs by treatment group. The lines show linear fit. All results are based on Huber-robust moments using sampling weights.

Appendix Figure 3. Revision of macroeconomic expectations in response to revisions in election probabilities.



Notes: The figure reports binscatters of the change in macroeconomic expectations, i.e., $E_i^{Post} X - E_i^{Prior} X$ for variable X , (vertical axis) vs. the change in the perceived probability of Trump winning the 2020 Presidential elections $[\widehat{Prob}_i^{Post}\{Trump\ wins\} - \widehat{Prob}_i^{Prior}\{Trump\ wins\}]$ multiplied by the difference in conditional forecasts across the candidates $[E_i^{Prior}(X|Trump) - E_i^{Prior}(X|Biden)]$. The posterior probability of Trump winning the 2020 Presidential elections $\widehat{Prob}_i^{Post}\{Trump\ wins\}$ is the value predicted by specification (2) (the estimates are reported in column (1) of Table 7). These binscatters correspond to Table 9.

Appendix B: Survey Questionnaire

1. What is your date of birth? (Please select the month, day, and year in the respective dropdown boxes)
2. What is your gender?
 - Male
 - Female
3. Which category represents the total combined pre-tax income of all members of your household (including you) during the past 12 months? Please include money from all jobs, net income from business, farm or rent, pensions, interest on savings or bonds, dividends, social security income, unemployment benefits, Food Stamps, workers compensation or disability benefits, child support, alimony, scholarships, fellowships, grants, inheritances and gifts, and any other money income received by members of your household who are 15 years of age or older.
 - less than \$25,000
 - between \$25,000 and \$34,999
 - between \$35,000 and \$49,999
 - between \$50,000 and \$69,999
 - between \$70,000 and \$99,999
 - more than \$100,000
4. Over the last three months on average, how much did your household spend (**per month**) on all goods and services in total?
Please enter a number between 1 and 10,000 total spending.
Total monthly spending \$ _____
5. Suppose that you had to make an unexpected payment equal to one month of your after-tax income, would you have sufficient financial resources (access to credit, savings, loans from relatives or friends, etc.) to pay for the entire amount?
 - Yes
 - No
 - Don't know/prefer not to answer
6. Which of the following best characterizes your household:
 - Own our house/apartment without a mortgage
 - Own our house/apartment and have a fixed-rate mortgage
 - Own our house/apartment and have a variable-rate mortgage
 - Rent our house/apartment
 - Other
7. Which fraction of your income do you typically save? 0 means you do not save anything and 100 means you typically save all your income.
Slider from 0 to 100
8. Does your household have total financial investments (excluding housing) worth more than one month of combined household income?
 - Yes
 - No

9. Over the last 6 months, did you buy a new home, car, or other major big-ticket item (fridge, TV, furniture, etc.)?
- Yes
 - No
10. Do you currently plan to buy a new home, car, or other major big-ticket item (fridge, TV, furniture, etc.) in the next 12 months?
- Yes
 - No

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

11. In THIS question, you will be asked about the probability (PERCENT CHANCE) of something happening. The percent chance must be a number between 0 and 100 and the sum of your answers must add up to 100. What do you think is the percent chance that, **over the next 12 months...**

	Percentage Chance
▪ the rate of inflation will be 12% or more	_____
▪ the rate of inflation will be between 8% and 12%	_____
▪ the rate of inflation will be between 4% and 8%	_____
▪ the rate of inflation will be between 2% and 4%	_____
▪ the rate of inflation will be between 0% and 2%	_____
▪ the rate of deflation (opposite of inflation) will be between 0% and 2%	_____
▪ the rate of deflation (opposite of inflation) will be between 2% and 4%	_____
▪ the rate of deflation (opposite of inflation) will be between 4% and 8%	_____
▪ the rate of deflation (opposite of inflation) will be between 8% and 12%	_____
▪ the rate of deflation (opposite of inflation) will be 12% or more	_____
▪ % Total	_____

12. Do you have a paid job?
- Yes
 - No

IF: Q12=YES

13. How much do you make before taxes and other deductions at your [main/current] job, on an annual basis? Please include any bonuses, overtime pay, tips or commissions.

_____ dollars per year

- Prefer not to answer

IF: Q12=YES

14. How many total hours per week do you work in a typical week these days?

_____ Hours/week [RANGE: 0-168, ONE DECIMAL]

- Prefer not to answer

IF: Q12=YES

15. What do you think is the percent chance that you will lose your job during the next 12 months?

_____ % [RANGE: -100-100, ONE DECIMAL]

IF: Q12=NO

16. Are you actively looking for a job? (Select one)

- Yes
- No

RANDOMIZE answer options

IF: Q16=NO

17. Here are a number of possible reasons why people who are not working choose not to look for work. Please select all that apply to you.

- Homemaker
- Raising children
- Student
- Retiree
- Disabled, health issues
- Couldn't find a job
- On break
- No financial need
- Temporarily laid-off (expect to be recalled with the next 6 months)
- Temporarily laid-off (do not expect to be recalled with the next 6 months)
- Other

IF: Q16=YES

18. What do you think is the percent chance that you will find a job during the next 12 months?

_____ % [RANGE: -100-100, ONE DECIMAL]

19. What is your best guess about what the current unemployment rate in the US is, what it will be in 12 months and over the next 3-5 years?

- Current unemployment rate: _____ % [RANGE: 0-100, ONE DECIMAL]
- Unemployment rate in 12 months: _____ % [RANGE: 0-100, ONE DECIMAL]
- Over the next 3-5 years? _____ % [RANGE: 0-100, ONE DECIMAL]

20. What do you think is the current interest rate on a fixed-rate 30-year mortgage for someone with excellent credit and what do you think it will be in the future?

- Current rate? _____ % per year [RANGE: 0-100, ONE DECIMAL]
- At the end of 2020? _____ % per year [RANGE: 0-100, ONE DECIMAL]
- At the end of 2021? _____ % per year [RANGE: 0-100, ONE DECIMAL]

- In the next 5-10 years? _____% per year [RANGE: 0-100, ONE DECIMAL]

21. How much higher or lower do you think your household's total after-tax (i.e., 'take home') income will be over the next twelve months compared to the last twelve months? Please provide an answer in percentage terms.

- My after-tax income will rise by _____% [RANGE: 0-300, ONE DECIMAL]
- My after-tax income will stay the same
- My after-tax income will fall by _____% [RANGE: 0-300, ONE DECIMAL]

22. How concerned are you about the effects that the coronavirus might have on the financial situation of your household? Please choose from 0 (Not at all concerned) to 10 (Extremely concerned)
Slider from 1 to 10

23. Have you lost earnings due to coronavirus concerns? Please provide an estimate.

- \$_____ [RANGE: 1-9,999,999]
- I have not lost earnings
- Prefer not to answer
- Do not know

24. Have you lost any financial wealth due to coronavirus concerns? Please provide an estimate.

- \$_____ [RANGE: 1-9,999,999]
- I have no financial wealth
- I have not lost financial wealth
- Prefer not to answer
- Do not know

25. How long do you think it will be before conditions return to normal in your location? Answer 0 if there are currently no coronavirus-related policies in place.

- Months: _____

RANDOMIZE LIST

26. Which political party do you lean towards?

- Democratic party
- Republican party
- Green party
- Libertarian party
- Other party
- I do not lean toward any party (independent)
- Prefer not to answer

27. How closely are you following the 2020 presidential election?

- Very closely
- Somewhat closely
- Not so closely

- Not closely at all

Randomize the ordering of Trump and Biden

28. If the presidential election were being held today and the candidates were Donald Trump, the Republican, and Joe Biden, the Democrat, for whom would you vote? []

- Donald Trump
- Joe Biden
- Unsure
- I would not vote or would vote for a different candidate
- Prefer not to answer

If Q28="Trump" or Q28="Biden"

29. How strongly do you support [pipe in response from Q28]? 0 means barely support at all and 100 means completely support.

Slider from 0 to 100

If Q28="Unsure"

Randomize the ordering of Trump and Biden

30. Are you leaning toward Trump or Biden?

- Donald Trump
- Joe Biden
- Neither
- Prefer not to answer

If Q30="Trump" or Q30="Biden"

31. How strongly do you support [pipe in response from Q30]? 0 means barely support at all and 100 means completely support.

Slider from 0 to 100

32. Do you plan to vote in the 2020 presidential election?

- yes, I plan to vote in person
- yes, I plan to vote by mail
- yes, I have already voted by mail
- no, I do not plan to vote
- not sure
- prefer not to answer

33. Who do you expect to win the presidential election? [randomize list]

- Donald Trump
- Joe Biden
- Prefer not to answer

Randomize over Q34/Q35/ and Q36/Q37; 50% each combo

34. What do you think is the percent chance that Donald Trump will win the election? Please choose a number between 0 and 100, where 0 indicates absolutely no chance and 100 indicates absolutely for sure and 50 indicates even odds.
Slider from 0 to 100
35. You said that there is a ABC [pipe response from Q34] chance that Donald Trump will be elected president. How confident are you in your answer? 0 means little confidence and 100 means fully confident
Slider from 0 to 100
36. What do you think is the percent chance that Joe Biden will win the election? Please choose a number between 0 and 100, where 0 indicates absolutely no chance and 100 indicates absolutely for sure and 50 indicates even odds.
Slider from 0 to 100
37. You said that there is a ABC [pipe response from Q37] chance that Joe Biden will be elected president. How confident are you in your answer? 0 means little confidence and 100 means fully confident
Slider from 0 to 100
38. If Donald Trump is elected president, what do you predict for the economy over the next 12 months?
- The inflation rate will be ___ % (if you expect deflation enter a negative value, if you expect no inflation, enter 0)
 - The unemployment rate will be ____% [range 0 to 100]
 - Your personal income will grow by ____% [range -100% to 100%]
 - The interest rate for a 30-year mortgage will be ____% in December 2021
39. If Joe Biden is elected president, what do you predict for the economy in 12 months?
- The inflation rate will be ___ % (if you expect deflation enter a negative value, if you expect no inflation, enter 0)
 - The unemployment rate will be ____% [range 0 to 100]
 - Your personal income will grow by ____% [range -100% to 100%]
 - The interest rate for a 30-year mortgage will be ____% in December 2021

RANDOMIZE LIST

40. What economic objectives are most important to you when you think about which candidate to support? Please select the three most important to you among the following options.
- full employment in the economy
 - a stable rate of economic growth
 - a reliable safety net
 - stable prices
 - a friendly business environment
 - high earnings for yourself
 - a strong performance of the stock market
 - a more equal distribution of income in the economy
 - lower taxes
 - lower government debt

- a balanced budget
- reducing monopoly power of large companies
- free trade
- raising the minimum wage
- exporting more than importing
- a strong dollar

RANDOMIZE LIST

41. Where would you say you get the majority of your news regarding the presidential election?

- Social media (such as Facebook, Twitter, YouTube, Reddit, etc.)
- Newspapers (such as the New York Times, Wall Street Journal, etc.)
- Television (such as CNN, Fox, etc.)
- Radio and podcasts (such as The Rush Limbaugh Show, NPR, etc.)
- Other

RANDOMIZE LIST

42. What is your preferred cable TV news channel?

- CNN
- Fox News
- MSNBC
- Other
- Prefer not to answer

Randomly split sample in 5 groups with 20% each seeing one of the treatments below

Group A. control SHOW: NOTHING

Group B. treatment SHOW: According to recent reporting on Fox News, Biden is ahead of Trump by a 53-43 percentage margin.

Group C. treatment SHOW: According to recent reporting on MSNBC, Biden is ahead of Trump by a 54-42 percentage margin.

Group D. treatment SHOW: According to recent reporting on ABC, Biden is ahead of Trump by a 54-42 percentage margin.

Group E. treatment SHOW: According to recent reporting on ABC, Biden is ahead of Trump by a 54-42 percentage margin. The margin of error in the polls is about 3.5 percentage points. This means that, while the best estimate of the difference between Biden and Trump is 12 percentage points, with high probability, the difference may be as large as 19 percentage points or as little as 5 percentage points.

If people got Q34/Q35, they should get Q43/Q44

43. What do you think is the percent chance that Joe Biden will win the election? Please choose a number between 0 and 100, where 0 indicates absolutely no chance and 100 indicates absolutely for sure and 50 indicates even odds.

Slider from 0 to 100

44. You said that there is a ABC [pipe response from Q43] chance that Joe Biden will be elected president. How confident are you in your answer? 0 means little confidence and 100 means fully confident
Slider from 0 to 100

If people got Q36/Q37, they should get Q45/Q46

45. What do you think is the percent chance that Donald Trump will win the election? Please choose a number between 0 and 100, where 0 indicates absolutely no chance and 100 indicates absolutely for sure and 50 indicates even odds.
Slider from 0 to 100

46. You said that there is a ABC [pipe response from Q45] chance that Donald Trump will be elected president. How confident are you in your answer? 0 means little confidence and 100 means fully confident
Slider from 0 to 100

RANDOMIZE

47. How is the upcoming presidential election changing your behavior relative to previous elections: I am more likely, less likely, no change
- to donate to political campaigns
 - to volunteer time to political campaigns
 - to vote
 - to participate in demonstrations and other forms of political activism
 - prefer not to answer

RANDOMIZE

48. Do anything of the following make you concerned about the upcoming election? Please score from 0 (not a concern) and 10 (an extremely important concern)
- foreign interference
 - riots
 - shortages of food or medical supplies
 - mail-vote fraud
 - the losing candidate refuses to concede
 - the outcome is determined by courts
 - prefer not to answer

49. Taking all things together, would you say you are:
- Very happy
 - Rather happy
 - Not very happy
 - Not at all happy

50. What do you think the inflation rate (as measured by the Consumer Price Index) is going to be over the next 12 months? Please provide an answer as a percentage change from current prices.

If you think there was inflation, please enter a positive number. If you think there was deflation, please enter a negative number. If you think there was neither inflation nor deflation, please enter zero.

_____ % [RANGE: -100-100, ONE DECIMAL]

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

_____ % [RANGE: -100-100, ONE DECIMAL]

52. What is your best guess about the unemployment rate in the U.S. at the ...?

- End of 2020: _____ % [RANGE: 0-100, ONE DECIMAL]
- End of 2021: _____ % [RANGE: 0-100, ONE DECIMAL]
- Longer run: _____ % [RANGE: 0-100, ONE DECIMAL]

53. What do you think is the current interest rate on a fixed-rate 30-year mortgage for someone like you and what do you think it will be in the future?

- Current rate? _____ % per year [RANGE: 0-100, ONE DECIMAL]
- At the end of 2021? _____ % per year [RANGE: 0-100, ONE DECIMAL]
- In the next 5-10 years? _____ % per year [RANGE: 0-100, ONE DECIMAL]

RANDOMIZE ORDERING

54. Generally speaking, do you think that now is a good time or a bad time **to buy**...

<ul style="list-style-type: none">▪ A house or apartment▪ A car or other vehicle▪ Large appliances, furniture, electronics (incl. gadgets)	<ul style="list-style-type: none">▪ Very good▪ Good▪ Neither good nor bad▪ Bad▪ Very bad
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