We Think That They Think: Political Affiliation and Higher-Order Beliefs*

Rupal Kamdar
Indiana University, Bloomington

Walker Ray
Federal Reserve Bank of Chicago and CEPR

Mauricio Ulate
Federal Reserve Bank of San Francisco

September 2025

Abstract

Surveys consistently show large heterogeneity of macroeconomic beliefs across consumers, and yet very little is known about consumers' *higher-order* beliefs. In this paper, we conduct a series of novel surveys eliciting inflation forecasts from U.S. consumers. Crucially, we ask respondents to report their higher-order beliefs of consumers across the political spectrum. In this context, we document new facts regarding the role of partisanship in both own- and higher-order beliefs. We find that higher-order beliefs differ substantially from own beliefs. Qualitatively, consumers correctly understand the "partisan gap" in inflation forecasts: consumers affiliated with the current president have lower inflation expectations. However, the "perceived" (higher-order) partisan gap is larger than the actual partisan gap in inflation forecasts. These patterns are true both unconditionally as well as under simple conditional (hypothetical) political scenarios. Information treatments from partisan news sources are successful at moving inflation expectations in the intended direction. Our results show that political identity is an important driver of own and higher-order beliefs.

*rkamdar@iu.edu, walkerdray@gmail.com, mauricioulate@gmail.com. We thank Yuriy Gorodnichenko, Ricardo Reis, Yoon Joo Jo, and Amil Dasgupta for excellent comments and suggestions. We also thank seminar participants at the LSE and the London Junior Macro Conference. This project was partially funded by the Department of Economics, Indiana University and Indiana University Research through the Social Sciences Research Funding Program. The views expressed in this document are those of the authors and do not necessarily reflect those of the Federal Reserve Bank of Chicago, the Federal Reserve Bank of San Francisco, or the Federal Reserve System.

1 Introduction

Full-information rational expectations (FIRE), a workhorse framework in macroeconomics, makes a key simplifying assumption that all agents share the same information set, and that this fact is common knowledge. Thus, "higher-order beliefs" (beliefs regarding *others'* expectations) are identical to first-order beliefs. However, the assumption of common knowledge is not innocuous in situations with coordination frictions or strategic complementarities (e.g., Woodford 2001, Morris and Shin 2002). With imperfect information and dispersed expectations, higher-order beliefs become relevant. Perhaps surprisingly, we still know very little about how individuals actually form higher-order beliefs regarding macroeconomic aggregates. The scant evidence available, drawn from relatively homogeneous environments, suggests that people assume others think similarly to themselves (Coibion et al. 2021).

Inflation expectations of U.S. consumers offer a compelling setting in which to study higher-order belief formation for two key reasons. First, survey evidence has uncovered wide dispersion in first-order inflation expectations. Second, in recent years inflation disagreement has consistently fallen along partisan lines. This raises a natural question: if Democratic and Republican voters hold significantly different macroeconomic beliefs, do they also hold distinct *higher-order* views about what each side believes? And can the partisan patterns of higher-order beliefs shed light on the drivers of partisan disagreement? This paper answers those questions using an original survey that elicits both own inflation expectations and what respondents think other consumers across the political spectrum expect.

We empirically investigate how higher-order beliefs are shaped by political identity. Specifically, we conduct three waves of novel surveys on U.S. consumers that elicit both first-order inflation expectations and higher-order inflation expectations by political party—what respondents think typical Democrats, Republicans, and Independents believe one-year-ahead inflation will be. The first wave was conducted in 2023 and focused on the effects of information treatments on own and higher-order beliefs. The second wave was conducted in the days before and after the November 2024 election and investigates conditional beliefs in the hypothetical scenarios that Trump or Harris were to become president. The third wave was conducted shortly after Trump's "Liberation Day" tariffs were announced and investigates own and higher-order beliefs conditional on different tariff regimes.

Using these surveys, we document new facts about own expectations, higher-order

beliefs, and political affiliation. We confirm previous research (e.g., Mian et al. 2021, Kamdar and Ray 2022) indicating that there is a large partisan gap in inflation expectations of consumers: individuals who are politically aligned with the president tend to have lower inflation expectations than those who are not. We show that respondents understand that there is a partisan gap in inflation expectations. For example, in 2023 when Biden was in office, respondents understood that Democrats held lower inflation expectations than Republicans; consumers also understood that this partisan gap reversed following the re-election of Trump in 2024.

While the "perceived" partisan gap aligns qualitatively with the actual partisan gap, consumers systematically *overestimate* its magnitude. Relatedly, we also find that respondents view their own expectations as more "moderate" than those of other members of their own party; that is, one's own inflation expectations typically fall between one's higher-order beliefs about the average Democrat and Republican inflation expectations.

Additionally, despite the prominence of partisan disagreement in first-order beliefs, we find little evidence of large partisan disagreement in higher-order beliefs. That is, both Democrats and Republicans share similar higher-order beliefs regarding the partisan gap in inflation expectations. We find one key exception: in the week immediately before the 2024 presidential election, Democrats and Republicans differ in their perceptions of the partisan gap. While Democrats believe that the average Republican has higher inflation expectations than the average Democrat, Republicans believe the opposite. This is potentially driven by the fact that in our survey, both parties expect their candidate to win the election.

To better understand the drivers of own and higher-order beliefs, we also study conditional beliefs and explore information treatments. In the week before the 2024 election, we find that when consumers are asked to condition their inflation forecasts on either Trump or Harris winning the 2024 election, partisan disagreement about higher-order beliefs disappears. That is, conditional on Trump winning, respondents across both political affiliations believe Republicans will have lower inflation expectations than Democrats; conditional on Harris winning, Republicans and Democrats believe the opposite. Interestingly, following Trump's election, the higher-order beliefs elicited from respondents are nearly identical to those elicited a few days earlier and conditional on Trump prevailing.

We further assess conditional beliefs around different tariff scenarios. In a low-tariff hypothetical, higher-order beliefs of the partisan gap in inflation expectations are similar for Republicans and Democrats. However, in a high-tariff hypothetical, beliefs

about the partisan gap differ by party: Democrats' higher-order beliefs regarding average Republican inflation expectations are much lower than those of Republicans themselves. Overall, the conditional analyses from the 2024 election and the tariff regimes suggest there is typically limited partisan disagreement about conditional higher-order beliefs. The only exception involved the high-tariff scenarios, which are likely less familiar and more difficult to reason through than the other hypotheticals.

Finally, using information treatments from Fox News or MSNBC, we show that respondents of all political parties update their inflation expectations towards the given signal. Basic "facts-only" reporting from either source tend to compress the distribution of beliefs. "High-spin" treatments move expectations of both Republicans and Democrats in the direction of the narrative; however, the effect is asymmetric across parties, with individuals responding more to the treatments from their ideologically-aligned news source. Higher-order beliefs are not affected by the information treatments.

In addition to shedding light on the role of political polarization in shaping beliefs, our results have broader implications. First, our novel findings regarding higher-order beliefs can help inform and discipline theoretical models of expectation formation. For instance, Democrats and Republicans not only make distinct first-order forecasts, but are also aware of this and correctly anticipate that the other will disagree. Thus, straightforward stories of private signals, naive misperceptions, simple "echo chambers," or standard level-k models cannot explain the data, as these models do not generate strong, predictable patterns in perceived disagreement.

Furthermore, we show empirically that the degree of perceived disagreement is overstated relative to actual disagreement. Thus, basic "agree to disagree" models (in which agents have identical information sets but hold dogmatic priors) also fail, as perceived and actual disagreement should coincide. Moreover, our finding that the weeks preceding the 2024 presidential election actually led to partisan disagreement of the partisan gap itself implies that even more sophisticated "agree to disagree" models would struggle to explain all of our findings.

Our results have importance beyond understanding the belief formation process alone. Although beyond the scope of our paper, the patterns we document regarding higher-order beliefs of partisan disagreement have potential implications for the determination of aggregate quantities. In general, settings with dispersed expectations and coordination mechanisms imply that higher-order beliefs influence aggregate outcomes. We highlight two key ways in the context of partisanship and inflation expectations in

the U.S. where this is likely to hold; this is far from an exhaustive list. First, the U.S. features substantial regional variation in political affiliation. Following a transition from a Democratic to a Republican president, inflation expectations in Democratic regions increase. Moreover, since individuals tend to view themselves as holding more moderate inflation views than their own party, individuals in Democratic regions perceive that the inflation expectations of those around them have increased substantially more than they really have. The opposite is true for Republican regions. To the extent that regional inflation expectations affect the decisions of price-setters, this implies regional variation in realized inflation that differs not only from the FIRE benchmark, but also from what would prevail with correct perceptions of the partisan gap.

Second, political affiliation differs systematically across sectors and occupations. Because individuals overestimate the partisan gap in inflation expectations, they are likely to believe that workers in heavily Republican industries have exceptionally high inflation expectations under Democratic presidents. If the perceived inflation expectations of potential workers affect the decisions of wage-setters at firms, we would expect variation in equilibrium wages across occupations arising from the misperceptions of the partisan gap.

Our paper builds on and contributes to two strands of literature. First, a large theoretical literature shows that relaxing common knowledge assumptions makes higher-order beliefs consequential for decision-making, equilibria, and dynamics. Woodford (2001) demonstrates how private information generates sluggish price adjustment, as firms only slowly adjust their higher-order beliefs about the actions of other firms. Morris and Shin (2002) investigate the value of public information in settings featuring private information and strategic complementarity. Angeletos and La'O (2009) incorporate Calvo (1983) pricing with imperfect information, and show that shocks can have long-lasting effects on macroeconomic dynamics. Huo and Takayama (2024) formalize rational-expectations equilibria with higher-order moments. Angeletos and Lian (2018) and Farhi and Werning (2019) show how relaxing common knowledge can help resolve the forward guidance puzzle. Despite the substantial amount of theoretical work, there is limited empirical evidence for how agents in the economy form their higher-order beliefs outside of the experimental literature and in macroeconomic contexts. The only exception, to our knowledge, is Coibion et al. (2021). They conduct a survey of firms in New Zealand to assess managers' own expectations and their beliefs of other managers' expectations. They find that the average higher-order inflation forecast across firms is similar to the average first-order inflation expectation. We add to this literature by in-

vestigating higher-order beliefs of U.S. consumers, where groups are defined by political party and thus quite heterogeneous.

Second, we contribute to the growing empirical literature on inflation expectations and partisanship. Many papers have shown the role of political affiliation in first-order beliefs, and some have investigated the effects of partisan beliefs on decisions such as consumption and pricing. See for example: Mian et al. (2021), Kamdar and Ray (2022), Binder et al. (2024), Kay et al. (2025), Gillitzer and Prasad (2018), Gerber and Huber (2009), and Benhabib and Spiegel (2019). We contribute to this literature by documenting second-order beliefs by political party. This allows us to assess how the actual partisan gap differs from the perceived partisan gap, as well as how respondent's view their own beliefs relative to their own party.

Another strand of the partisan expectations literature has assessed how information treatments affect beliefs along party lines. For example, Garzon et al. (2025) conduct a survey with information treatments in the wake of "Liberation Day". They find that information about the effects of tariffs on inflation differentially raises Democratic inflation expectations; whereas, information about the effects of tariffs on unemployment differentially raises Republican unemployment expectations. Huseynov and Murad (2024) show that in response to news attributed to partisan media sources, survey respondents overreact in the sense of Bordalo et al. (2020); however, when the source is omitted respondents' updating is closer to FIRE. We add to this literature by assessing how information treatments with different levels of partisan spin affect own-beliefs. Overall, our empirical moments can help discipline models of higher-order beliefs with partisan news sources.

The rest of the paper proceeds as follows. Section 2 describes the surveys we conducted. Section 3 analyzes respondents' first and second-order beliefs, while Section 4 documents beliefs conditional on election and tariff outcomes, as well as the response to information treatments. We conclude in Section 5.

2 Survey Waves

We fielded three survey waves on Prolific, an online sampling and survey company. Each wave included a common core set of questions: (i) respondents' point and distributional expectations for one-year-ahead inflation, (ii) second-order beliefs about what typical Democrats, Republicans, and Independents expect regarding one-year-ahead inflation,

and (iii) a full demographic profile including party identification.[1] Beyond this common core, each wave was customized to answer specific questions and gain insight into how evolving political and policy developments affected these beliefs. We discuss each of the three waves in detail below; Appendix A provides survey flow charts and the exact language used for key questions.

Our first survey wave was conducted in mid-2023; the second in the weeks before and after the 2024 Presidential election; and the third in mid-2025. For each wave, our sample consisted of one-third Democrats, one-third Republicans, and one-third Independents. This stratification helped ensure we obtained sufficient power for analyses across the political spectrum. Despite this stratification, the demographic characteristics of our sample are similar to those in the broader U.S. population. Table 1 provides demographic characteristics for each of the survey waves and compares them to U.S.-level demographic characteristics from the 2023 American Community Survey (ACS).

Table 1 shows that our sample is highly similar in terms of gender and race. Relative to the population, our survey respondents tend to be somewhat younger, more likely to be employed, and more likely to have attended college. The income distribution is very similar except that our survey has fewer individuals at the top of the income distribution. The demographic characteristics of our respondents are stable across survey waves.

2.1 July and September 2023, News Treatments

The first wave, conducted in July and September 2023, was fielded during a period without large political developments and was the only wave to include information treatments. Respondents were randomly assigned to either the control group or to one of four treatment groups that received short news excerpts. The treatment excerpts varied along two dimensions: (i) *source*: either Fox News (right-leaning) or MSNBC (left-leaning), and (ii) *spin*: either "low spin" (in which facts were reported with minimal framing) or "high spin" (which included commentary from an economist that gives the story a stronger subjective perspective). The low-spin treatments were administered in July 2023 and the high-spin treatments were administered in September 2023. See below for the exact phrasing of the four treatments. The control groups received no information treatment for both the July and September 2023 surveys.

[1]Throughout the paper, for own and second-order point estimates of expected inflation, we winsorize the top and bottom 5% of responses.

Table 1: Comparison of Demographic Characteristics Across Waves and with ACS

Variable	Wave 1	Wave 2	Wave 3	All	ACS
Age group					
18 to 24	10.06	12.12	10.44	10.81	11.62
25 to 34	30.52	30.12	33.61	30.91	17.28
35 to 44	22.77	27.63	23.16	24.46	17.07
45 to 54	16.81	17.76	16.64	17.10	15.45
Over 55	19.84	12.37	16.15	16.71	38.58
Gender					
Female	43.06	56.76	53.67	49.46	50.50
Male	54.92	41.66	45.51	48.87	49.50
Ethnicity					
White	79.43	70.29	70.96	74.92	72.30
Non-white	20.57	29.71	29.04	25.08	27.70
Education					
No college	35.41	37.10	27.73	34.67	55.00
College or more	64.59	62.90	72.27	65.33	45.00
Employment status					
Not employed	25.74	29.46	22.51	26.44	38.90
Employed	74.26	70.54	77.49	73.56	61.10
Income					
Less than 50k	38.22	34.85	32.46	36.11	32.30
50-100k	34.29	35.52	34.26	34.70	28.80
100-150k	14.95	17.68	18.27	16.43	17.40
150-200k	6.41	6.14	9.46	6.84	9.10
More than 200k	4.16	4.07	5.06	4.28	12.40
N	1779	1205	613	3597	.

Notes: This table reports the demographic characteristics of survey respondents for each of the survey waves as well as for all waves combined. The values are percentages within each category for each subgroup. "N" refers to the total number of observations (by wave or in total). Wave 1 refers to the July and September of 2023 waves, Wave 2 refers to the November 2024 wave, and Wave 3 to the April 2025 wave. The last column reports demographic characteristics from the 2023 American Community Survey. For the Prolific surveys, the gender and income categories do not necessarily sum to 100% due to the presence of either non-binary individuals or individuals that "prefer not to say" their gender or income.

Low-Spin, Fox Treatment:

> On June 13, 2023, Fox Business reported the following: Inflation cooled again in May [2023] to the lowest rate in two years, but a spike in the cost of used cars, rent and groceries kept prices uncomfortably high for millions of U.S. households. [...] Prices climbed 4% on an annual basis. Although inflation has cooled from a peak of 9.1%, it remains about more than double the pre-pandemic average and well above the Federal Reserve's 2% target rate.

Low-Spin, MSNBC Treatment:

On June 14, 2023, MSNBC reported the following: Brand new data shows inflation fell to its lowest level in two years last month [May 2023] at just 4%.[...] Although that is much slower than the 9% that we saw last year, [...] economists are saying that's an encouraging sign. We'd like to get a little closer to 2%, so it's not mission accomplished just yet. But when you look at things like airline fares, they're going down. Gasoline prices also went down between April and May so all of those are welcome news I imagine to a lot of Americans.

High-Spin, Fox Treatment:

On September 1, 2023, Fox News provided the following report on inflation: Overall, inflation is up nearly 16% from January 2021, when Biden first took office, to last month. Groceries are up nearly 20%. "Real unemployment," which includes those who are discouraged from looking for work or underemployed, spiked to 7.1%.

Steve Moore (Distinguished Fellow in Economics at The Heritage Foundation and former Economic Advisor to President Trump) said, "for 22 of the last 24 months, wages are behind what the rate of inflation [has been], and what that means is that the average family is about 5,000 dollars poorer today than they were when Joe Biden came into office."

High-Spin, MSNBC Treatment:

On August 16, 2023, MSNBC provided the following report on inflation: Inflation has gone from 8.5% to 3.2%. Unemployment remains at nearly a 50 year low. Our economy has the lowest inflation rate and the strongest economic recovery of all the G7 nations. The prospect of a recession is diminishing due in part to strong consumer confidence. The 'Bidenomics' score card: 13.2M jobs created, 789,000 manufacturing jobs created, and unemployment at 3.5%.

Robert Reich (Professor of Public Policy at University of California Berkeley and Former Secretary of Labor for President Clinton) said, "the economy is great. It's a 'Goldilocks economy.' I'll tell you, I've been watching or participating in economic policy for at least 30 years, and I don't recall an economy that is this good."

In terms of the survey flow, we began by eliciting respondents' point forecast of inflation over the coming year. Treated respondents were then shown one of the above news excerpts and asked a multiple-choice comprehension question to ensure they read it. Both the treated and control groups were then asked to provide a subjective distribution of their own inflation expectations.[2] Then, we asked second-order beliefs of inflation expectations for typical Democrats, Republicans, and Independents. The survey concluded with demographic questions. Overall, this design allows us to measure the effects of low- and high-spin news from left-leaning and right-leaning news sources on own-beliefs and second-order inflation expectations.

2.2 November 2024, Presidential Election

The second wave was conducted in the days before and after the November 2024 presidential election. In this survey, we maintained the baseline questions about one's own inflation expectations and second-order beliefs of inflation expectations along party lines. In addition, we included questions of one's own beliefs and second-order beliefs in hypothetical scenarios based on the outcome of the election. Each respondent was asked to provide their own and second-order point forecasts in the case that Trump won the election and in the case Harris won the election. Prior to the election itself, we also included a question asking respondents for their subjective probability that Trump or Harris would prevail. Following the election, we removed this question; however, we maintained the hypothetical of what would have happened if Harris were to have won.

2.3 April 2025, Liberation Day Tariffs

The third wave was conducted in April 2025 following President Trump's "Liberation Day" tariffs announcement, as well as after the 90-day pause on implementation. Similar to the survey conducted around the presidential election, we presented hypothetical tariff rates and elicited expectations under these scenarios. More precisely, in this wave we asked respondents to report their own and second-order expected inflation beliefs in a hypothetical "low" tariff setting where the tariffs are removed and the average tariff rate is between 0% and 5% over the coming year; and a hypothetical "high" tariff setting

[2] Asking the point forecast before treatment and the distribution after treatment helps mitigate demand effects and avoids respondent fatigue and frustration from repeating the same question.

where the average tariff rate is above 5%.

3 Perceptions of Partisan Inflation Expectations

This section documents stylized facts about unconditional moments of consumers' own and higher-order inflation forecasts. To set the stage, we use the Michigan Survey of Consumers (MSC) to first document the dynamics of the partisan divide in inflation expectations. Although the MSC has asked about one-year-ahead inflation expectations since 1978, political affiliation has only been elicited consistently since 2006.

Figure 1 tells a clear story of inflation expectations by political party: those affiliated with the party of the president have lower inflation expectations than those affiliated with the opposing party. Panel A plots six-month rolling averages of inflation expectations by political affiliation and the intensity of that affiliation. Individuals aligned with the president's party tend to report lower inflation expectations, whereas those aligned with the opposition report higher expectations. The difference is largest for strong partisans and smaller for weak partisans. Panel B plots coefficients from six-month rolling regressions of inflation expectations on an indicator variable which measures if the respondent either affiliates with or leans toward the Republican party. The reference group are respondents who either lean towards or are affiliated with the Democratic party; true Independents are omitted. Thus, the estimated coefficient reflects the difference between Republican and Democrat inflation expectations. Relative to Democrats, Republicans report lower inflation expectations under Republican presidents and higher expectations under Democratic presidents. For most of the sample, this difference is statistically different from zero.

The sign of the inflation expectation differences between Republicans and Democrats aligns with the political party controlling the presidency. In addition, the magnitude of the difference was relatively stable from 2006-2020. During this period, individuals associated with the party of the president had roughly 1-2 percentage points (pp) lower inflation expectations. However, following the sharp increase in inflation from 2021-2022, the magnitude of partisan differences in inflation expectations also increased significantly. During this time, the MSC data shows that average inflation expectations differed between Republicans and Democrats by as much as 5pp. Following the decline in inflation from 2023-2025, the difference in average inflation expectations across Republicans and Democrats also declined, but still remained elevated relative to histori-

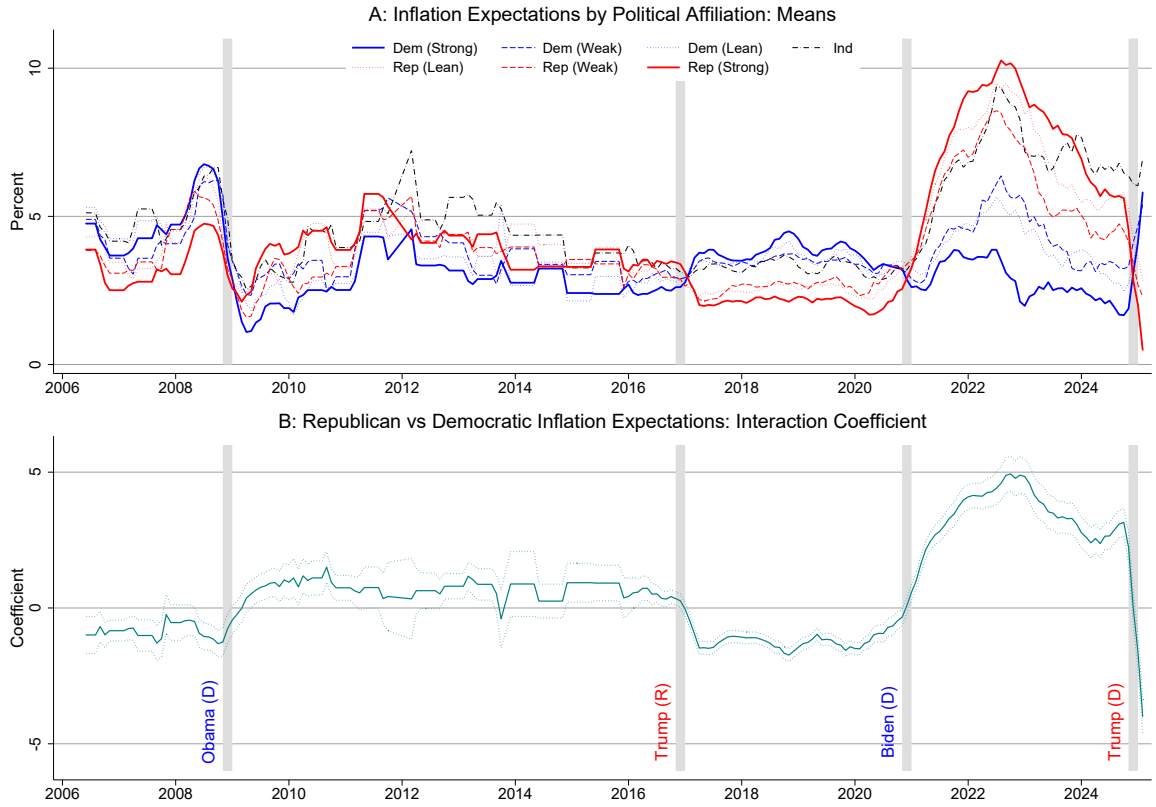


Figure 1: Inflation Expectations by Political Affiliation

Notes: Panel A plots the coefficient from regressing one-year-ahead inflation expectations on indicators for disaggregated political affiliation using a six-month rolling window. Panel B plots the coefficient from regressing one-year-ahead inflation expectations on an indicator for Republican using a six-month rolling window and a sample of only Republicans and Democrats. The gray vertical shading marks the occurrence of general elections where the president's party changed, they are accompanied by the last name of the newly-elected president and their party affiliation. The gray shading starts in November of the election year and ends in January of the following year (inauguration). Data are from the MSC.

cal levels. Between 2022-2024, average inflation expectations differed between Republicans and Democrats by roughly 3pp; following the 2024 election, the gap widened (and changed sign) to roughly -4pp.

3.1 Perceptions of the Partisan Gap

We now turn to assessing if respondents in our survey understand the partisan gap. To do so, define the average inflation expectations of Republicans (R), Democrats (D), and

Independents (I) in the U.S. population as:

$$\hat{\pi}^P_{t+1} = \frac{1}{N^P} \sum_j \mathbb{1}(P(j) = P)\mathbb{E}^j_t[\pi_{t+1}], \quad \text{where } P = R, D, I,$$

where j indicates an individual with subjective expectations $\mathbb{E}^j_t$ at time t and who associates with the Republican party ($P(j) = R$), the Democratic party ($P(j) = D$), or neither ($P(j) = I$). The total number of individuals associated with each party is indicated by N^P. Using this notation, the "partisan gap" in inflation expectations documented in Figure 1 is given by $\hat{\pi}^R_{t+1} - \hat{\pi}^D_{t+1}$.

Next, define the "higher-order belief of the partisan gap" for an individual i as the subjective perception of the difference in average inflation expectations of Republicans and those of Democrats:

$$\hat{\pi}^{i,GAP}_{t+1} \equiv \mathbb{E}^i_t[\hat{\pi}^R_{t+1} - \hat{\pi}^D_{t+1}]. \tag{1}$$

We use our survey waves to study the properties of $\hat{\pi}^{i,GAP}_{t+1}$ over time as well as across political affiliation.

Figure 2 focuses on the first and third waves of our survey that were conducted in 2023 and 2025. The top row reports estimates of $\hat{\pi}^{i,GAP}_{t+1}$ across Democrats, Republicans, and Independents. Panel A uses data from July 2023, Panel B is based on responses collected in September 2023, and Panel C uses data from the April 2025 survey. Blue bars denote point estimates, and the orange lines denote 95% confidence intervals. The black dots and lines denote point estimates and 95% confidence intervals of the estimated (first-order) partisan gap in each survey. The bottom row reports the entire distribution of $\hat{\pi}^{i,GAP}_{t+1}$ across Democrats and Republicans in the same set of surveys (in Panels D, E, and F, respectively).

Figure 2 shows that the estimated (first-order) partisan gap in inflation expectations from our surveys is consistent with the evidence from the MSC in Figure 1. In our 2023 surveys, Republicans had higher inflation expectations than Democrats by approximately 2pp, while in our 2025 surveys Republicans had lower inflation expectations than Democrats by approximately 3-4pp. Figure 2 shows that *qualitatively, individuals correctly perceive the partisan gap*: across all political parties, our estimates of $\hat{\pi}^{i,GAP}_{t+1}$ are positive in 2023 and negative in 2025. However, our survey results reveal that *quantitatively, individuals overstate the magnitude of the partisan gap*. In both of our 2023 surveys, the perceived partisan gap for all parties is above the actual partisan gap. Moreover, with the exception of Democrats in Panel A, the perceived partisan gap is at

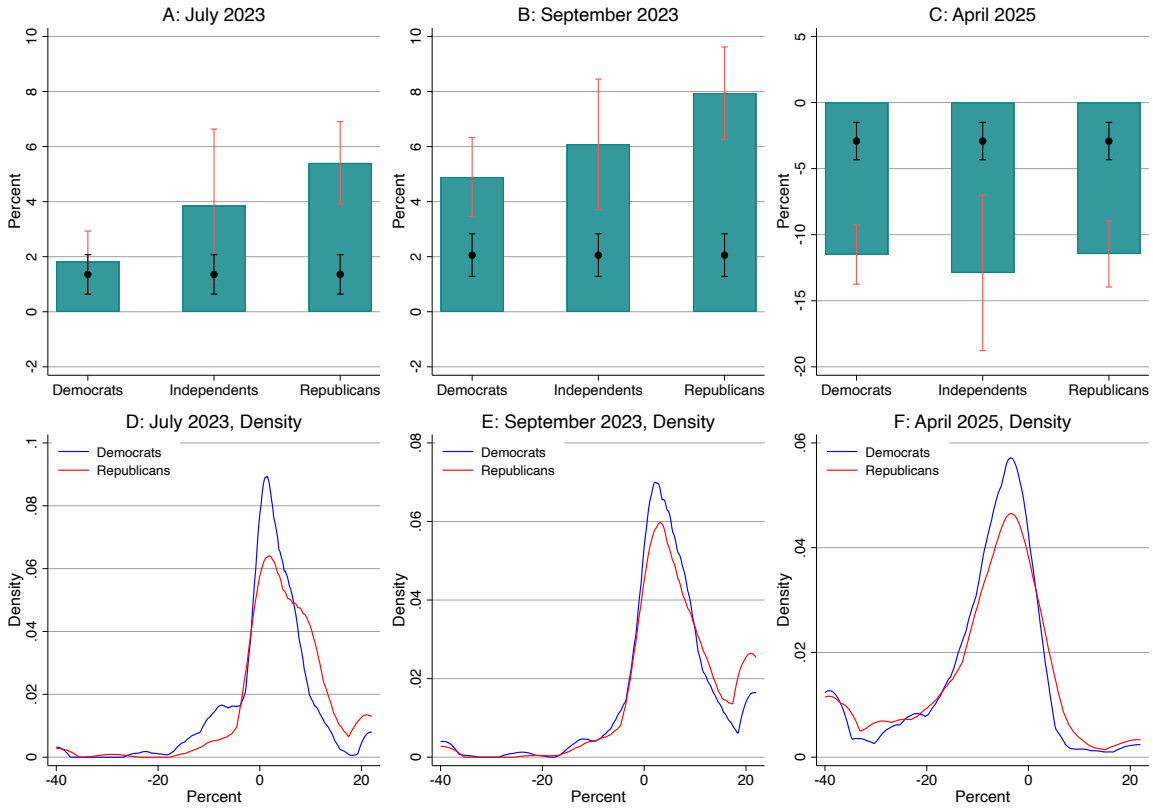


Figure 2: Higher-Order Beliefs of the Partisan Gap, 2023 and 2025

Notes: In Panels A, B, and C, blue bars and orange 95% confidence intervals are associated with the average higher-order belief of the partisan gap, separately for Democrats, Independents, and Republicans. Black point estimates and 95% confidence intervals are for the true partisan gap. Panels D, E, and F report kernel densities of the higher-order beliefs of the partisan gap, for Republicans (in red) and Democrats (in blue). Equation 1 defines the higher-order belief of the partisan gap.

least 2pp larger (and the actual partisan gap is for the most part not included in the 95% confidence intervals). The magnitude of the misperception widens in 2025, when the average perception of the partisan gap across all political groups is more than double the actual partisan gap.

Moving beyond mean differences, the bottom row of Figure 2 reports kernel density estimates of the higher-order partisan gap $\hat{\pi}_{t+1}^{i,GAP}$ across Democrats (in blue) and Republicans (in red). The mode of the distribution tells the same story as the estimated means in Panels A, B, and C: $\hat{\pi}_{t+1}^{i,GAP}$ was positive in 2023 and turned negative in 2025 across both Democrats and Republicans. In addition, the density estimates reveal fat asymmetric tails: in 2023, a relatively large fraction of respondents believed that the partisan gap was above 10pp; and in 2025, a similarly large fraction of respondents be-

lieved the partisan gap was less than -20pp.

The estimated distributions also reveal that despite the sizable differences in first-order inflation expectations, higher-order beliefs regarding the partisan gap feature relatively muted differences across partisan lines. In particular, both the mode of the distribution as well as the size of the tails are remarkably similar across Democrats and Republicans for all the surveys fielded in 2023 and 2025.

Figure 3 repeats our analysis regarding perceptions of the partisan $\hat{\pi}_{t+1}^{i,GAP}$ using data from our surveys conducted in the weeks immediately before and after the presidential election in 2024.

Our results following the 2024 election (Panels B and D) generally align with our findings in Figure 2. In particular, across all political parties, average perceptions of

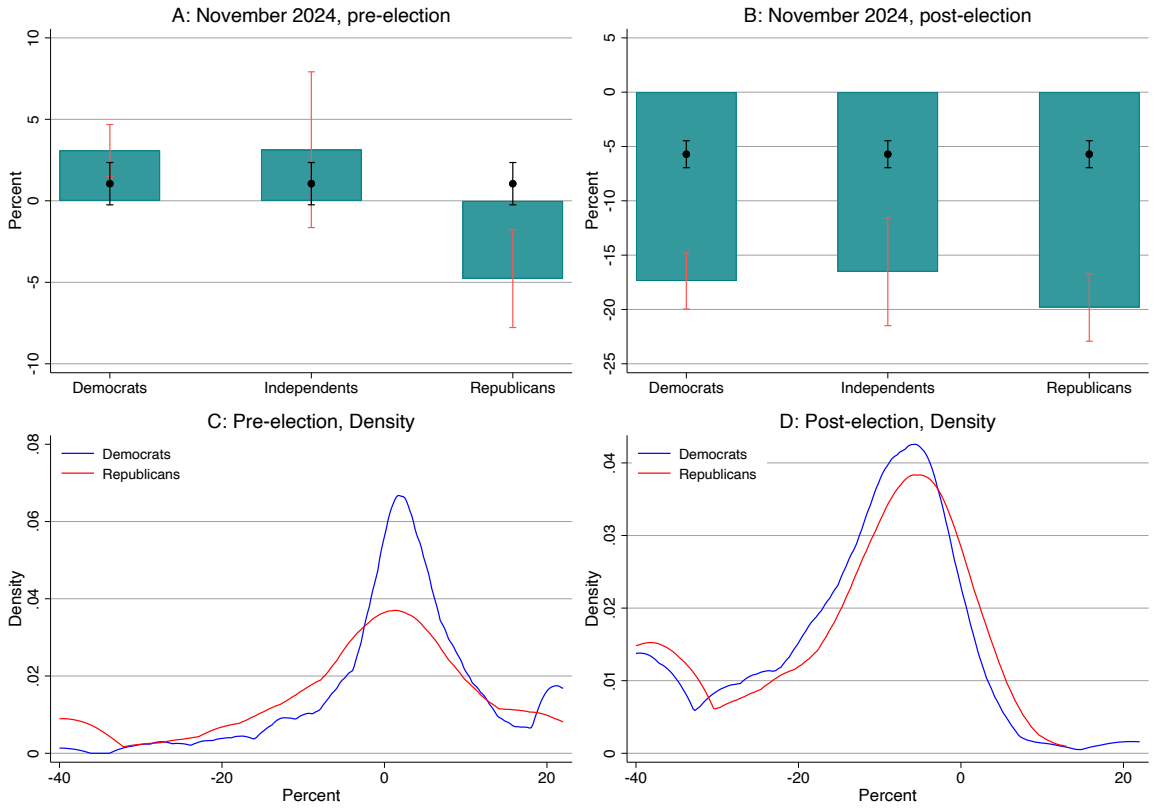


Figure 3: Higher-Order Beliefs of the Partisan Gap, 2024 Election

Notes: In Panels A and B, blue bars and orange 95% confidence intervals are associated with the average higher-order belief of the partisan gap, separately for Democrats, Independents, and Republicans. Black point estimates and 95% confidence intervals are for the true partisan gap. Panels C and D report kernel densities of the higher-order beliefs of the partisan gap, for Republicans (in red) and Democrats (in blue). Equation (1) defines the higher-order belief of the partisan gap.

the partisan gap $\hat{\pi}_{t+1}^{i,GAP}$ are negative, larger in magnitude than the actual (first-order) partisan gap, and the asymmetric fat-tailed distribution of higher-order beliefs are similar across Republicans and Democrats. By contrast, there are some key differences in the results from the survey conducted in the weeks preceding the 2024 presidential election. Panel A shows that in the lead-up to the election, Republicans perceived a negative partisan gap while Democrats perceived a positive partisan gap (and in both cases the 95% confidence intervals do not contain zero). Independents perceived a positive partisan gap, although it is not statistically significant. Panel C shows that the overall distribution of the higher-order partisan gaps $\hat{\pi}_{t+1}^{i,GAP}$ across Democrats and Republicans differ along the same lines. For instance, the fraction of Democrats whose higher-order partisan gap beliefs are above 10pp is larger than Republicans, while the fraction of Republicans reporting partisan gap perceptions below -20pp is also much higher than Democrats.

As we discuss later, our survey reveals that many Republicans thought the likelihood of Trump winning the election was high, while Democrats thought Harris was likely to prevail. Therefore, the partisan differences in higher-order beliefs are likely driven by the fact that Republicans thought Trump would win and therefore expected Republican inflation expectations to be lower than those of Democrats. By contrast, Democrats expected Harris to win and therefore expected Republican inflation expectations to be above those of Democrats. We return to this point in Section 4.

3.2 Perceptions of Own-Party Gaps

Next, we investigate how respondents view their own inflation beliefs relative to what they think members of their own party believe. Define the "higher-order belief of the own-party gap" as the difference between a respondents' higher-order belief of their own-party's expectation and their own expectation:

$$\hat{\pi}_{t+1}^{i,OWN} \equiv \mathbb{E}_t^i[\hat{\pi}_{t+1}^{P(i)} - \pi_{t+1}], \tag{2}$$

where $P(i)$ is respondent i's political affiliation. The higher-order belief of the own-party gap therefore measures the difference between an individual's (higher-order) perception of the average inflation expectations of members of their own party relative to their own forecast.

We first study the properties of own-party gaps $\hat{\pi}_{t+1}^{i,OWN}$ in the survey waves con-

ducted in 2023 and 2025. Figure 4 repeats our analysis from Figure 2 for own-party gap perceptions. The top row reports estimates of $\hat{\pi}_{t+1}^{i,OWN}$ across Democrats, Republicans, and Independents. Panel A uses data from July 2023, Panel B is based on responses collected in September 2023, and Panel C uses data from the April 2025 survey. Blue bars denote point estimates, and the orange lines denote 95% confidence intervals. Panels D, E, and F in the bottom row report the entire distribution of $\hat{\pi}_{t+1}^{i,OWN}$ across Democrats and Republicans.

Panels A, B, and C of Figure 4 provide evidence that respondents tend to view their own expectations as more "moderate" than their own party. Consider the 2023 surveys, which were conducted during Biden's term. As previously documented, Republicans had higher inflation expectations than Democrats and respondents qualitatively understood

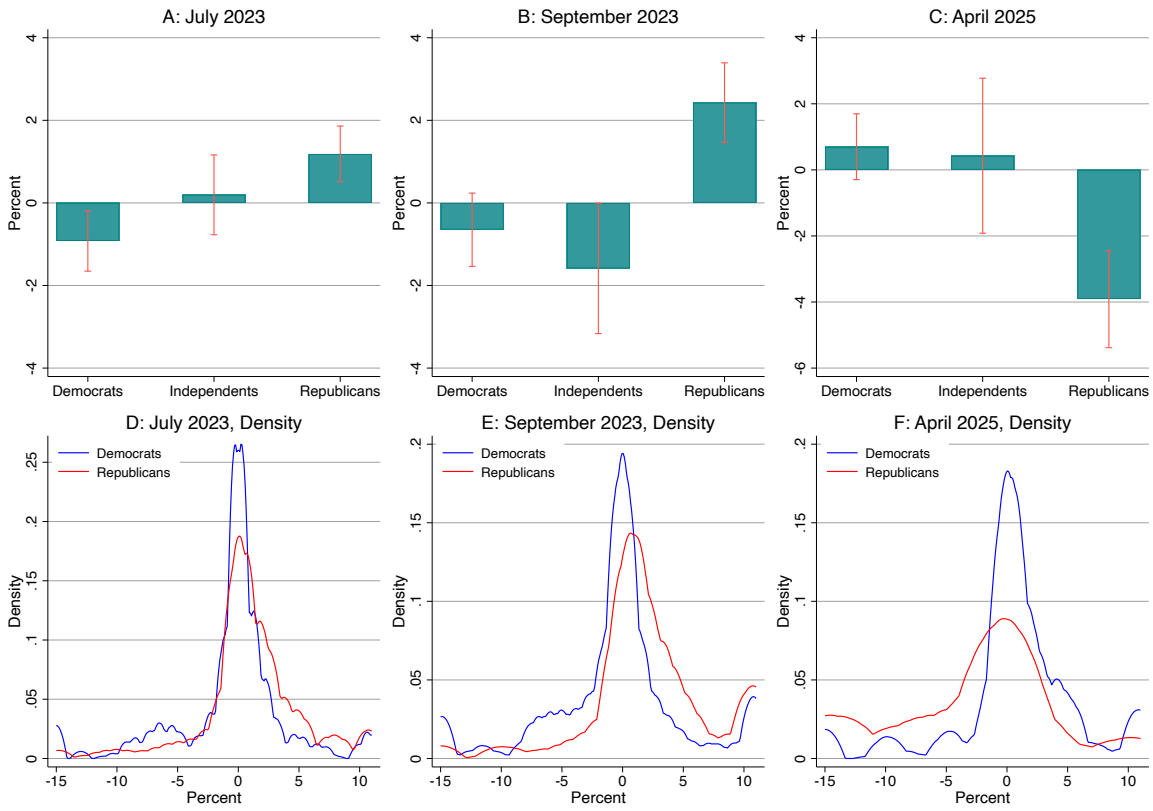


Figure 4: Higher-Order Beliefs of the Own-Party Gap, 2023 and 2025

Notes: In Panels A, B, and C, bars plot the average higher-order belief of the own-party gap, for Democrats, Independents, and Republicans separately. 95% confidence intervals are included. Panels D, E, and F report kernel densities of higher-order beliefs of the own-party gap, for Republicans (in red) and Democrats (in blue). Equation (2) defines the higher-order belief of the own-party gap.

this partisan gap. However, average own-party gaps are non-zero for Republicans and Democrats. Instead, in 2023 the average Democrat believed that fellow Democrats held *lower* inflation expectations than they did personally, producing a negative own-party gap $\hat{\pi}_{t+1}^{i,OWN} < 0$. By contrast, the average Republican believed that the average inflation forecasts of their own party exceeded their own forecast, yielding a positive own-party gap $\hat{\pi}_{t+1}^{i,OWN} > 0$. For the surveys that follow Trump's election, the estimated signs reverse across parties. The higher-order belief of the own-party gap is positive for Democrats and negative for Republicans. Interestingly, across all surveys, non-partisan Independents have no statistically significant higher-order belief of their own-party gap (though the confidence intervals are large).

Panels D, E, and F of Figure 4 plot kernel density estimates of the perceived own-party gap $\hat{\pi}_{t+1}^{i,OWN}$ across Republicans (in red) and Democrats (in blue). Unlike perceptions of the partisan gap, there are relatively large fractions of respondents who report that their beliefs and their own-party higher-order beliefs coincide: in each survey there are a relatively large fraction of respondents, across both Democrats and Republicans, who report $\hat{\pi}_{t+1}^{i,OWN} \approx 0$. However, the estimated densities show that perceptions of the $\hat{\pi}_{t+1}^{i,OWN}$ vary over time and across party.

In the 2023 waves, with Biden in office, Republicans believed that members of their own party had inflation expectations that exceeded their own inflation expectations (fatter right tail). Democrats at the same time believed that members of their own-party had inflation expectations that were lower than their own inflation expectations (fatter left tail). In the April 2025 surveys with Trump in office, we find the opposite. That is, Republicans believed that members of their own party had inflation expectations that were lower than their own inflation expectations (fatter left tail), whereas Democrats had large higher-order beliefs of the own-party gap (fatter right tail). To summarize, higher-order beliefs of the own-party gap have a fatter right (left) tail when the presidency is occupied by the opposing (preferred) candidate.

As with higher-order beliefs regarding the partisan gap, there are some important differences regarding the higher-order beliefs of the own-party gap in the weeks surrounding the 2024 presidential election. Figure 5 repeats the analysis of own-party gaps in the weeks before (Panels A and C) and after (Panels B and D) the election.

Panels A and C of Figure 5 show that before the 2024 presidential election, both Democrats and Republicans believed that their own party's inflation expectations were lower than their own. This represents a shift from what we found in 2023 for Republi-

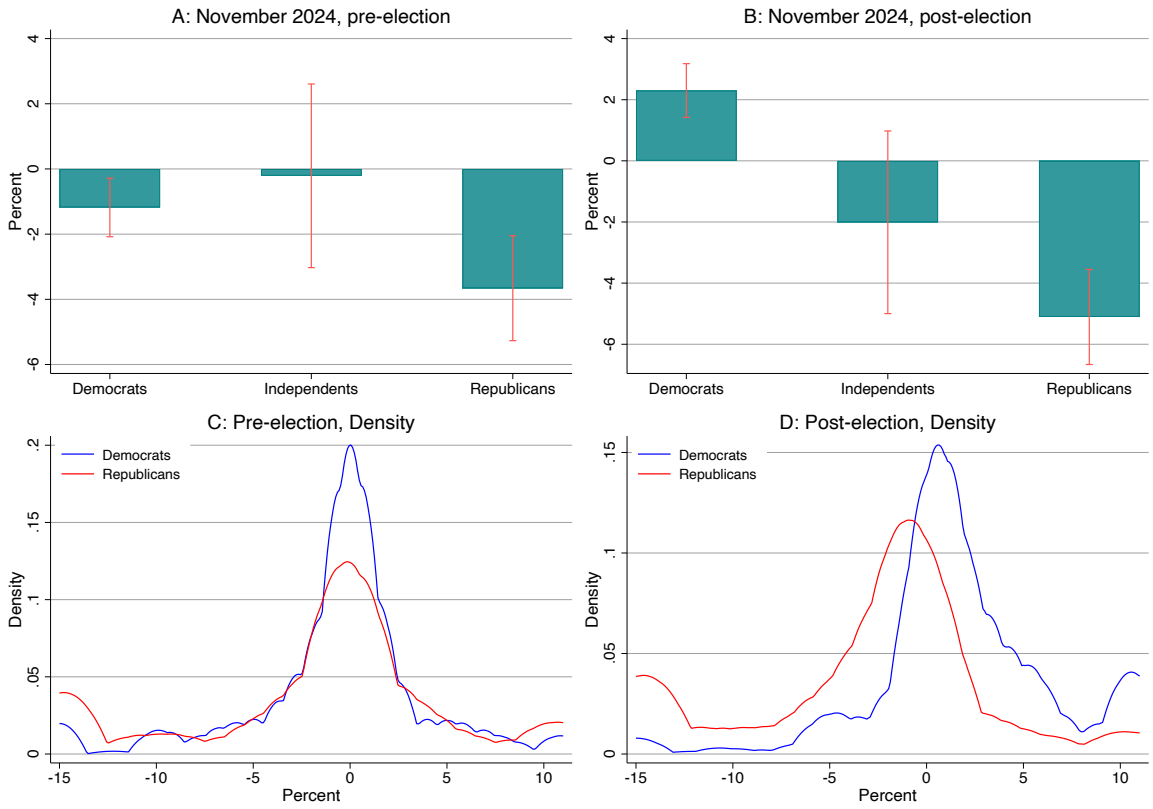


Figure 5: Higher-Order Beliefs of the Own-Party Gap, 2024 Election

Notes: In Panels A and B, bars plot the average higher-order belief of own-party gap, for Democrats, Independents, and Republicans separately. 95% confidence intervals are included. Panels C and D report kernel densities of higher-order beliefs of own-party gap, for Republicans (in red) and Democrats (in blue). Equation (2) defines the higher-order belief of own-party gap.

cans. However, these findings are still consistent with the interpretation that individuals perceive themselves as holding more moderate views compared to their own party. Recall from the results regarding perceptions of the own-party gap, both parties' supporters anticipate victory of their preferred candidate. To the extent that respondents project that optimism onto their fellow partisans, a negative perception of the own-party gap therefore still reflects a tendency to view oneself as having more moderate forecasts than the general beliefs of one's own political party.

Following the election (Panels B and D), Democrats on average have a positive own-party gap and Republicans on average have a negative own-party gap. These results are broadly in line with the findings in Figure 4 based on the 2025 survey waves.

Finally, Figure 6 includes a series of binscatter plots that show a respondent's own

(first-order) inflation forecast (on the x-axis) against higher-order beliefs (on the y-axis), by party, for the 2023 surveys. For example, Panel A uses only survey responses from Democrats; the x-axis contains own inflation expectations and the y-axis plots a respondent's higher-order beliefs of other Democrats' inflation expectations. Panels B and C also only use survey responses from Democrats; the x-axis still contains own inflation expectations, but the y-axis plots higher-order inflation expectations of Independents and Republicans, respectively. Panels D, E, F use only Republicans and plot their higher-order beliefs of Democrats, Independents, and Republicans, respectively. These plots help illustrate the relationship between an individual's own inflation expectations and higher-order beliefs of each party. First, notice that the relationship is strongest when comparing own-beliefs to higher-order own-party beliefs (Panels A and F). That is, a respondent's inflation expectations are strongly and positively correlated with their

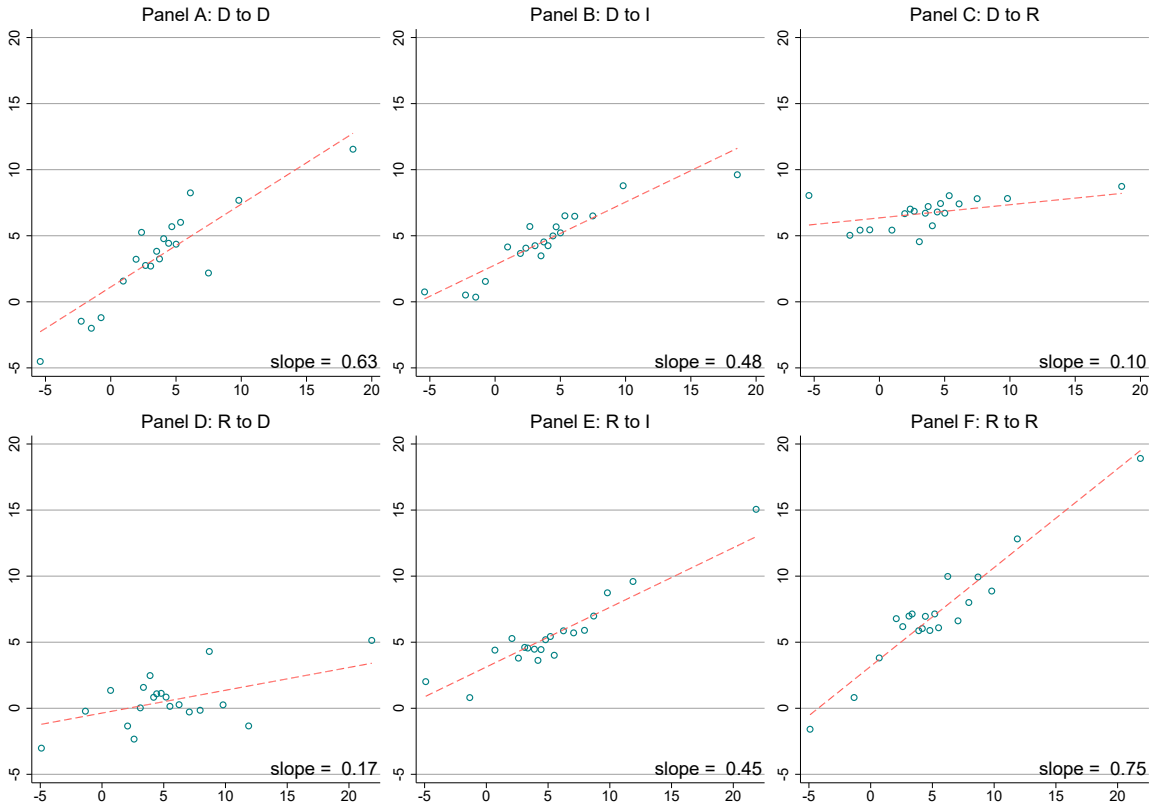


Figure 6: Association Between Own Beliefs and Higher-Order Beliefs, 2023

Notes: Binscatter plots of higher-order beliefs (y-axis) on own-belief (x-axis), by party. Panels A, B, and C use responses from Democrats only; D, E, and F use Republicans only. Higher-order beliefs of Democrats are used in Panels A and D; Independents in B and E; Republicans in C and F. Data are from the 2023 surveys only.

higher-order own-party expectations. This relationship weakens as we move to higher-order beliefs of parties further away on the political spectrum from oneself. Specifically, the relationship is smaller for independents (Panels B and E) and smaller still for the opposing party (Panels C and D).

We find that a similar pattern also holds following the 2024 election, as documented in Figure 7. The association between first- and higher-order beliefs is strongest within party (e.g., between Democrats' own beliefs and their higher-order belief of Democratic expectations).[3] The slope of the relationship across parties lines can even be negative. For example, in Panel C, Democrats' own inflation expectations are negatively correlated to their own higher-order beliefs of Republican inflation expectations. In Panel D, the slope of the relationship between Republican's own-inflation expectations and their higher-order beliefs of Democrats' expectations is the smallest across Panels D, E, and F, once again indicating that the relationship between own-beliefs and higher-order beliefs weakens when moving to parties further away from oneself.

4 Conditional Beliefs and Information Treatments

In Section 3 we documented novel persistent features regarding higher-order beliefs of partisan patterns of inflation expectations. We now turn to analyzing respondents' *subjective conditional beliefs* as well as their *reactions to information treatments* in order to elucidate the drivers of the observed behavior of the partisan gap. Specifically, we analyze higher-order inflation expectations of respondents in the days preceding the 2024 presidential election conditional on Trump or Harris winning. Furthermore, we assess higher-order beliefs conditional on if average tariffs over the next year are low (0 to 5%) or high (above 5%). We conclude this section with a discussion of the effects of the information treatments on own beliefs and higher-order beliefs.

Given the outsized role control of the presidency plays in driving partisan expectation gaps, examining the subjective conditional higher-order beliefs around the presidential election is a natural way to better understand the mechanisms at play in generating higher-order partisan beliefs. Similarly, the tariffs announced on "Liberation Day" represent a major pillar of the Trump administration's economic policy; thus, subjective conditional higher-order beliefs will also shed light on the drivers of higher-order beliefs.

[3] In the post-election sample, there is some evidence of non-monotonicity between first-order and own-party higher-order beliefs for Republicans at very high levels of own expectations (Panel F in Figure 7).

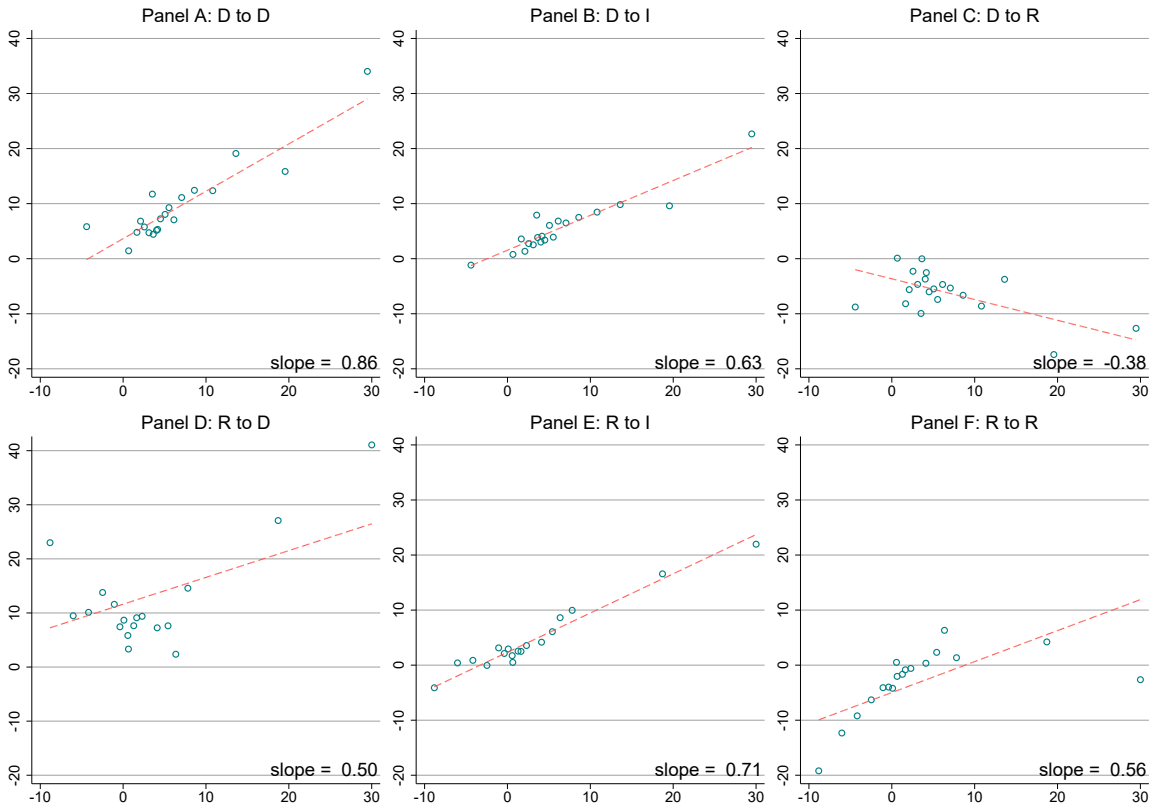


Figure 7: Association Between Own Beliefs and Higher-Order Beliefs, Post-Election

Notes: Binscatter plots of higher-order beliefs (y-axis) on own-belief (x-axis), by party. Panels A, B, and C use responses from Democrats only; D, E, and F use Republicans only. Higher-order beliefs of Democrats are used in Panels A and D; Independents in B and E; Republicans in C and F. Data are from all surveys taken after Trump won the 2024 election.

Finally, given the importance of partisan media in shaping partisan beliefs, our information treatments also provide important insights into the drivers of first- and higher-order beliefs.

4.1 Conditional Partisan Gaps: Election Outcome

In the pre-election survey, respondents were asked who they thought would win the election and the probability they assigned to that outcome. Figure 8 plots the distribution of respondents' subjective probabilities that Trump would win. Approximately 27% of Republicans and 35% of Democrats thought the election was a pure toss-up between Trump and Harris. However, the majority of partisan respondents tended to be optimistic that the candidate aligned with their own party would win.

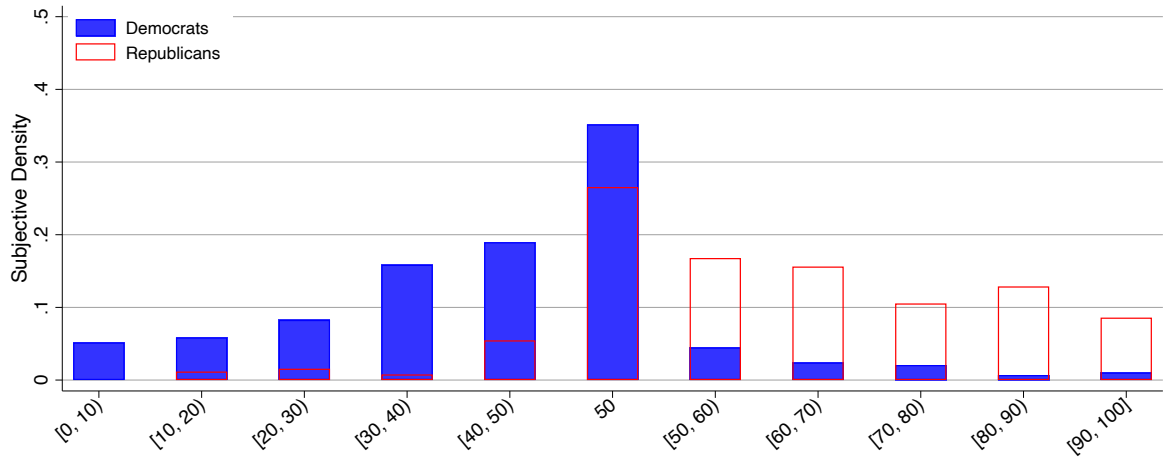


Figure 8: Subjective Probability of Trump Winning

Notes: Density of point estimates of the percent chance Trump will win the election. Respondents were asked "who do you think is more likely to win the presidential election" and could respond with Donald Trump, Kamala Harris, pure toss up (Donald Trump and Kamala Harris are equally likely), or prefer not to say. Individuals who selected pure toss up are assigned a 50% subjective probability that Trump would win. Respondents who selected an expected winner then assigned their perceived likelihood of that outcome by selecting one of five probability bins: 50-60%, 60-70%, 70-80%, 80-90%, or 90-100%. For respondents who predicted a Harris victory, we infer their perceived chance of a Trump win as 100% minus the probability they assigned to Harris. Data are from the 2024 pre-election survey only. Blue shaded bars include Democrats; red hollow bars include Republicans.

Figure 9 plots the kernel densities of the reported higher-order beliefs of the partisan gap $\hat{\pi}_{t+1}^{i,GAP}$ conditional on Trump winning (Panel A) and conditional on Harris winning (Panel B). Conditional on a Trump victory, both Republicans and Democrats expected there would be a negative partisan gap $\hat{\pi}_{t+1}^{i,GAP} < 0$; conditional on a Harris victory, they expected there would be a positive gap $\hat{\pi}_{t+1}^{i,GAP} > 0$. Interestingly, the densities for Republicans and Democrats are quite similar. This stands in contrast with the unconditional perceptions of the partisan gap at this time, as shown in Figure 3. Conditional on the outcome of the presidential election, perceptions of the partisan gap do not differ across party. However, because Democrats and Republicans disagree on the likelihood of a Trump or Harris victory, the unconditional perceptions of the partisan gap differ across party lines.[4]

Using the pre-election survey, we also investigate respondents' higher-order beliefs of their own-party gap $\hat{\pi}_{t+1}^{i,OWN}$ conditional on presidential outcome. Figure 10 plots the kernel densities by conditional outcome and political affiliation. Panel A reports results

[4]Whether the unconditional partisan differences regarding perceptions of the partisan gap $\hat{\pi}_{t+1}^{i,GAP}$ are consistent with partisan differences in higher-order beliefs regarding the election outcome probabilities is outside the scope of our survey.

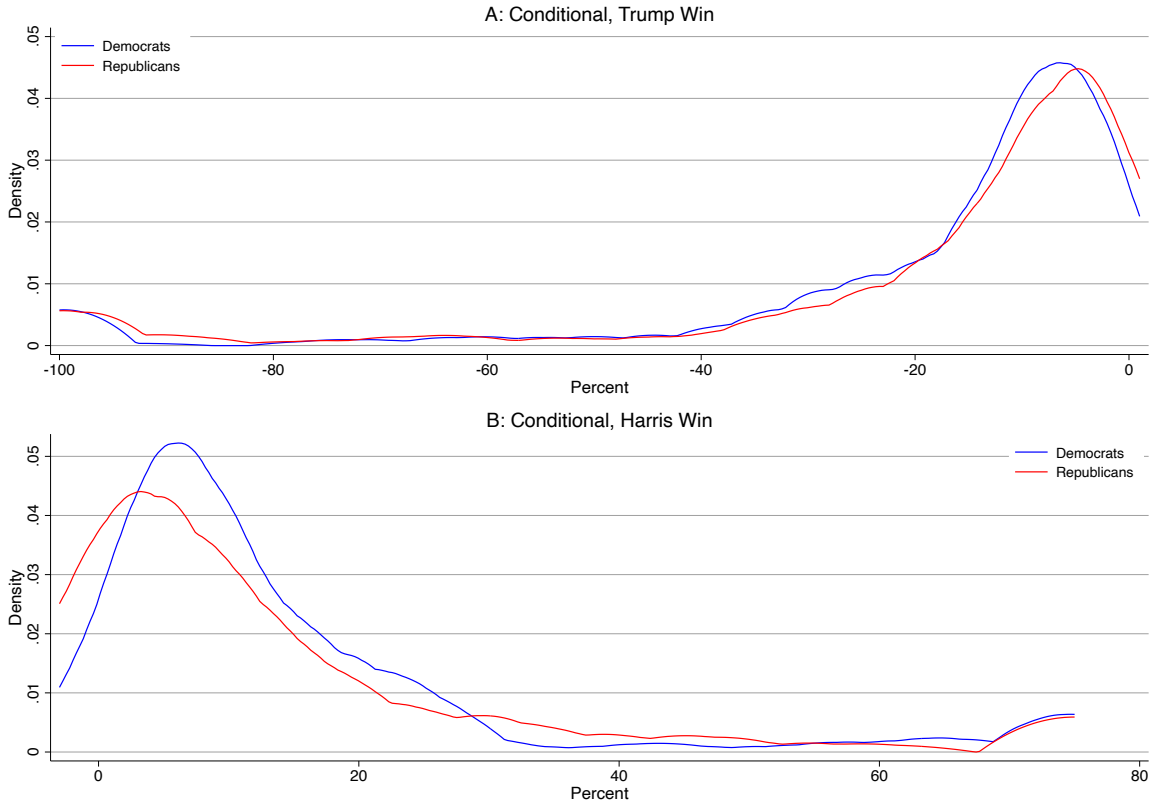


Figure 9: Higher-Order Beliefs of the Partisan Gap, Conditional on President

Notes: Kernel densities of the higher-order beliefs of the partisan gap, conditional on winner of the 2024 presidential election, separately for Democrats (in blue) and Republicans (in red). Panel A is conditional on Trump winning and Panel B is conditional on Harris winning. Data are from the 2024 pre-election survey.

for conditional beliefs in the case of a Trump victory, while Panel B reports results for the conditional of a Harris victory. As with our results regarding unconditional perceptions of own-party gaps, conditional own-party gap perceptions also feature a relatively large fraction of respondents who report identical first-order inflation forecasts and higher-order own-party inflation forecasts. However, conditional on Trump being elected (Panel A), the Republican density has a fatter left tail whereas the Democratic density has a fatter right tail. The opposite pattern holds conditional on Harris being elected (Panel B).

Overall, perceptions of the own-party gap conditional on hypothetical outcomes of the presidential election align closely with the unconditional patterns documented in Section 3. While there is substantial heterogeneity in the conditional own-party gaps, the results in Figure 10 are consistent with our previous stylized facts. Recall that under

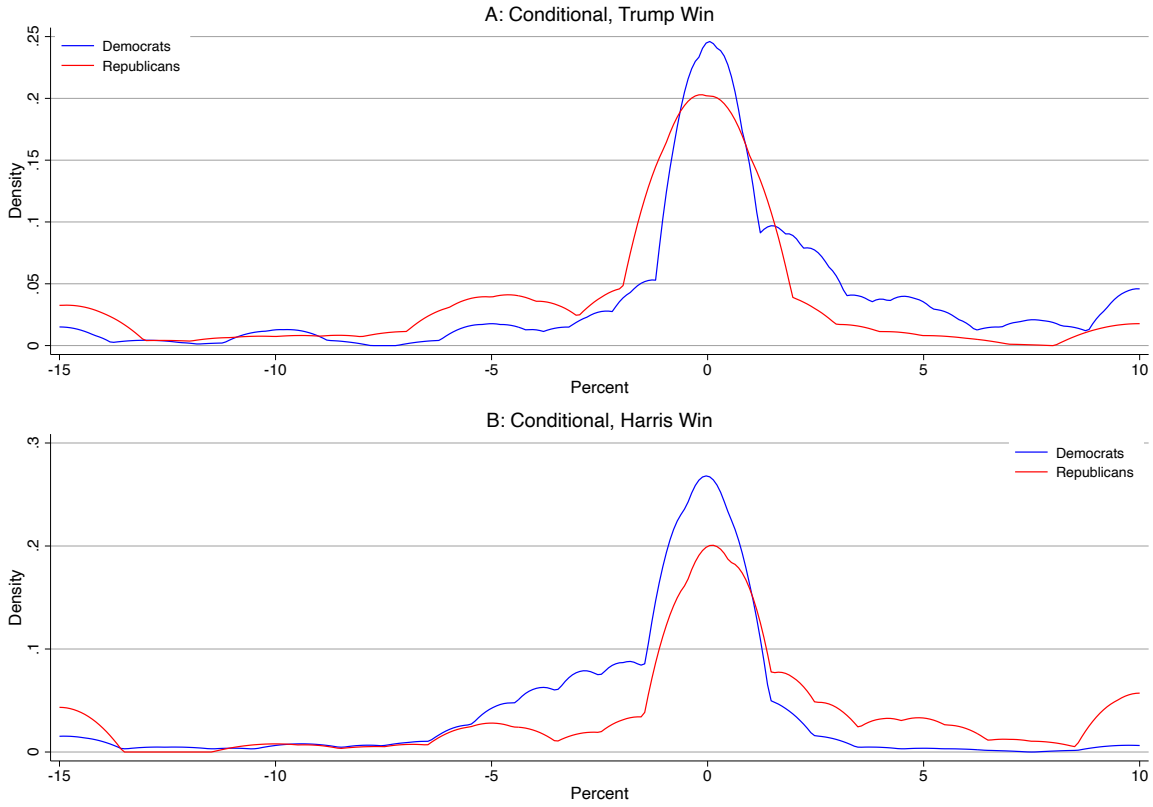


Figure 10: Higher-Order Beliefs of the Own-Party Gap, Conditional on President

Notes: Kernel densities of the higher-order beliefs of the own-party gap, conditional on the winner of the 2024 presidential election, separately for Democrats (in blue) and Republicans (in red). Panel A is conditional on Trump winning and Panel B is conditional on Harris winning. Data are from the 2024 pre-election survey.

a Republican president, the partisan gap is negative (Republicans have lower inflation expectations than Democrats), which is qualitatively understood by respondents. In addition, Republicans typically report that their own inflation expectations are higher than other Republicans; and vice versa for Democrats. The opposite pattern is observed under a Democratic president. Our findings regarding the conditional perceptions of the own-party gap $\hat{\pi}_{t+1}^{i,OWN}$ line up with this pattern. These results are consistent with the interpretation that, conditional on either Trump or Harris winning the election, both Democrats and Republicans view themselves as holding more moderate beliefs than other members of their own party.

In addition, we also compare the pre-election higher-order beliefs of the partisan gap conditional on Trump winning to the post-election higher-order beliefs of the partisan gap. Figure 11 plots the densities for Democrats (Panel A) and Republicans (Panel B).

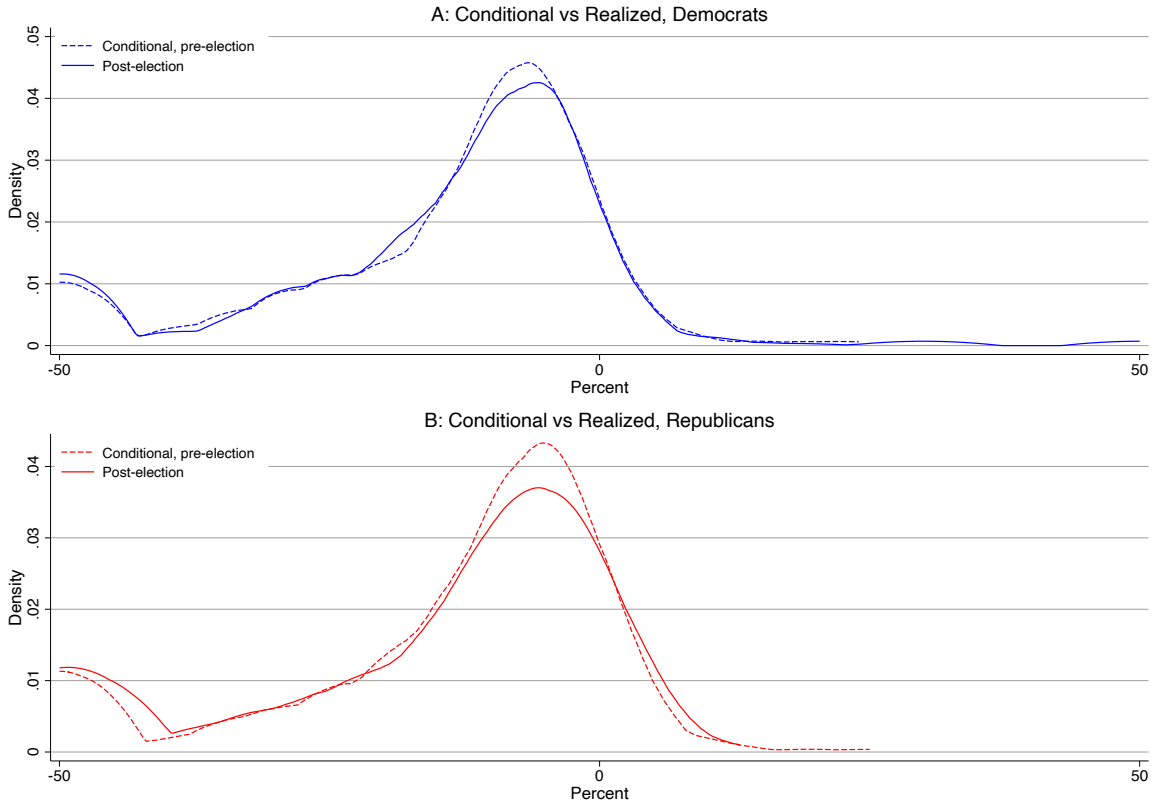


Figure 11: Conditional and Realized Higher-Order Beliefs of the Partisan Gap

Notes: Kernel densities of the higher-order beliefs of partisan gap. The solid lines are post-election and the dotted lines are pre-election and conditional on Trump winning. Panel A uses Democrats only and Panel B uses Republicans only.

The densities are remarkably similar, especially considering that we surveyed different respondents before and after the election. The nearly overlapping densities suggest that respondents understand how to think through simple conditional scenarios, even when these incorporate questions about higher-order beliefs. More broadly, this supports the use of vignettes and hypotheticals in survey research (Andre et al., 2022; Colarieti et al., 2024; Jiang et al., 2024).

4.2 Conditional Partisan Gaps: Tariff Hypotheticals

In addition to conditionals about the 2024 election outcome, we also assessed hypotheticals about tariff policy in April 2025. We asked for conditional own and higher-order beliefs under two hypothetical scenarios about tariffs that could play out over the coming year. In one, we asked about "the hypothetical scenario where the new tariffs are

removed and the average tariff rate over the next 12 months is between 0 to 5%", and in the other about "the hypothetical scenario that the new tariffs are not fully removed and the average tariff rate over the next 12 months is 5% or greater." We refer to these as the "low" and "high" tariff scenarios, respectively.

Figure 12 plots the kernel densities of the higher-order beliefs of the partisan gap conditional on low tariffs (Panel A) and conditional on high tariffs (Panel B). The estimated densities show that most Republicans and Democrats believe that the partisan gap is substantially negative in either hypothetical scenario. In other words, regardless of the tariff scenario or the political party of the respondent, people tend to expect that the average Republican will have lower inflation expectations than the average Democrat.

Democrats and Republicans have similar higher-order beliefs about the partisan gap in the low-tariff scenario. Under the high-tariff scenario, however, the higher-order

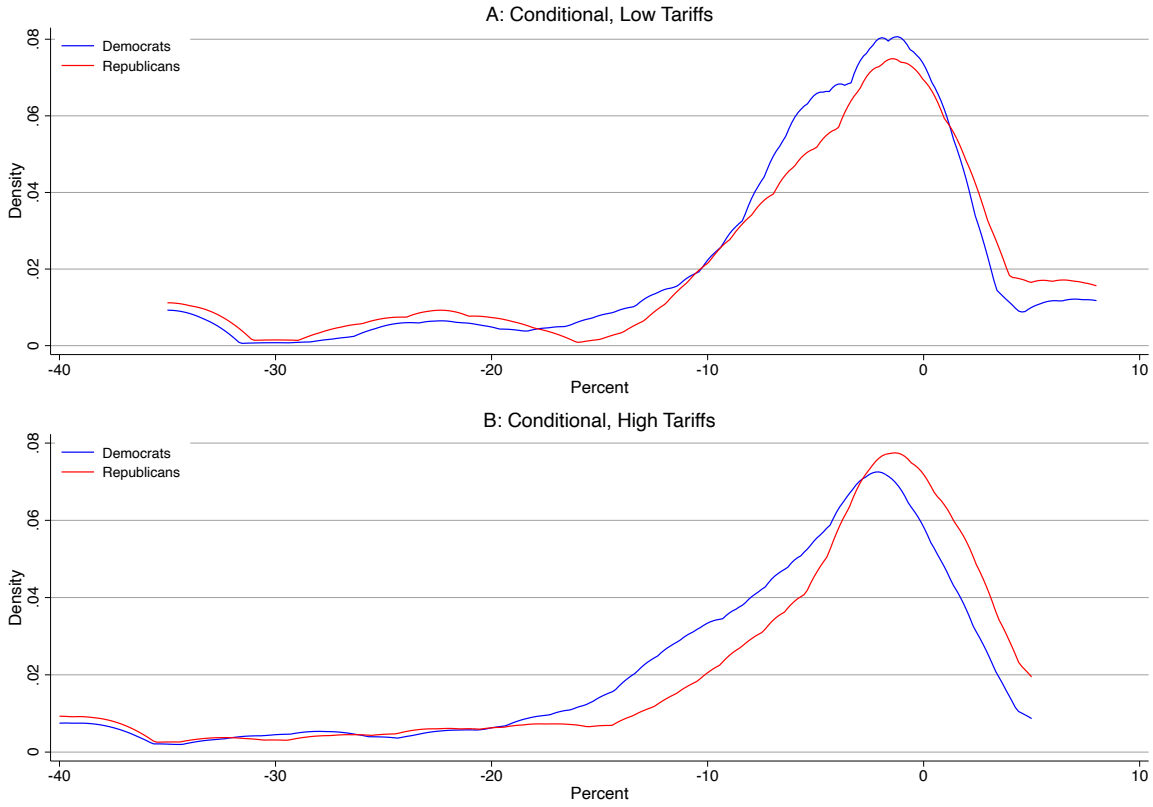


Figure 12: Higher-Order Beliefs of the Partisan Gap, Conditional on Tariff Regime

Notes: Kernel densities of the higher-order beliefs of the partisan gap, conditional on tariff scenario, separately for Democrats (in blue) and Republicans (in red). Panel A is conditional on a low-tariff scenario and Panel B is conditional on a high-tariff scenario. Data are from the April 2025 surveys.

partisan gap is perceived to be more negative by Democrats relative to Republicans. This is driven by disagreement in higher-order beliefs regarding inflation expectations of the average Republican in the high-tariff setting. Specifically, Democrats believe that under high tariffs, the average Republican will have very low inflation expectations, whereas Republicans believe the average Republican will only have moderately low inflation expectations.

Putting our results from these tariff conditionals and the election conditionals together, we typically find that there is not much partisan disagreement about higher-order beliefs (see Figures 9 and 12). The one exception is the high-tariff scenario. This may be because the high-tariff scenario is less familiar or more difficult for respondents to reason through, thereby generating greater misalignment in partisan perceptions.

4.3 Understanding the Partisan Gap: Information Treatments

In this section, we show that information treatments affect subjective distributions and lead agents to update beliefs towards the information they are shown. Specifically, "low-spin" treatments that mostly present factual information (with a small partisan angle) compress subjective distributions towards the objective information being shown. On the other hand, "high-spin" treatments that emphasize a political narrative drive beliefs away from factual information and towards the narrative being presented.

Recall that in the "low-spin" treatments, respondents are told that inflation was 4%, as well as some minor partisan spin on that information. Figure 13 shows that the beliefs of respondents exposed to this "low-spin" treatment become more compressed towards 4% inflation relative to the control group. This broadly holds for Democrats and Republicans and across both news sources.

In the "high-spin" treatments, respondents are shown more partisan interpretations of recent developments in inflation. The Fox News excerpt highlights the high cumulative rate of inflation under Biden, while the MSNBC excerpt highlights the decrease in inflation relative to other countries. Panels A and B of Figure 14 show that both Democrats and Republicans who are shown the MSNBC treatment have lower inflation expectations than their control group counterparts. However, Democrats react more to the high-spin MSNBC treatment, cutting their mean inflation expectation by 0.92pp, while Republicans only reduced theirs by 0.19pp. Panels C and D show that in response to the Fox treatment, both Democrats and Republicans have higher inflation expectations (relative to the control). In this case, Republicans react more to the high-spin Fox treatment, in-

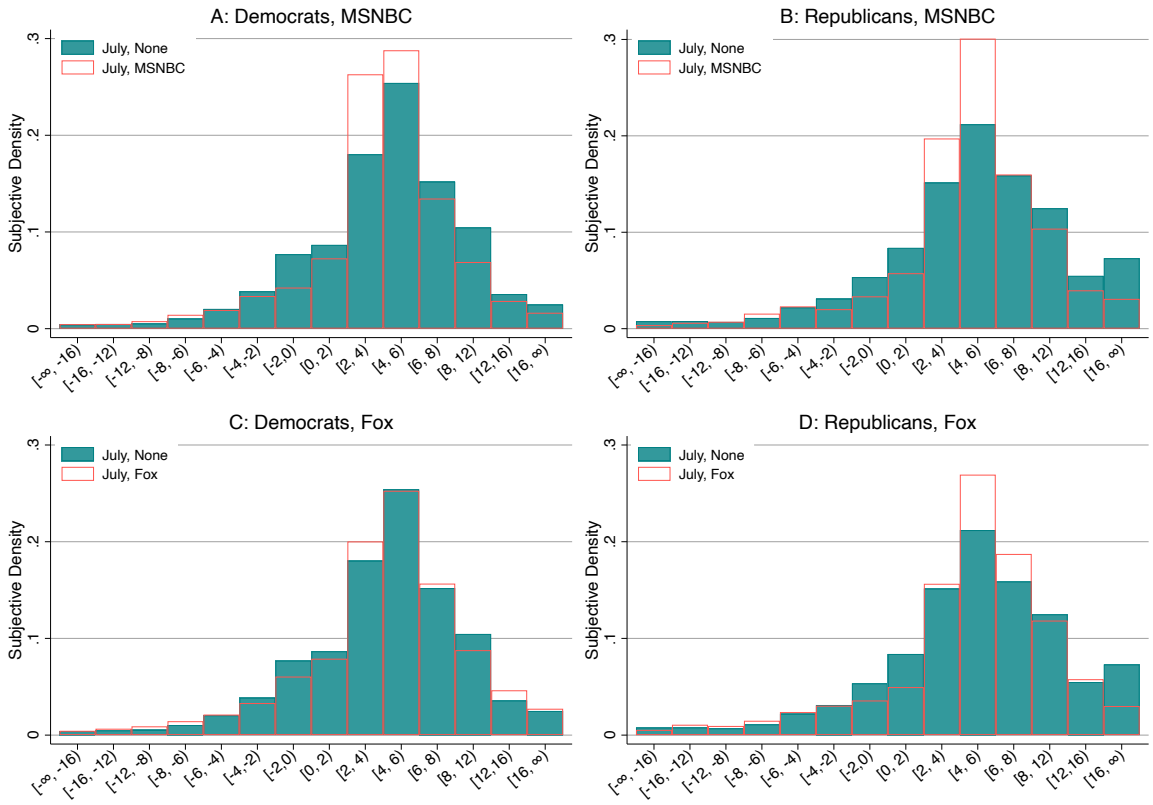


Figure 13: Subjective Densities, Low-Spin Treatments

Notes: Subjective density plots for the July 2023 survey featuring "low-spin" treatments. Panels A and C include only Democrats and B and C include only Republicans. Panels A and B compare the no treatment group (blue filled bars) to the MSNBC treatment (orange hollow bars). Panels C and D compare the no treatment group (blue filled bars) to the Fox treatment (orange hollow bars).

creasing their mean inflation expectation by 2.04pp, while Democrats only increase theirs by 1.11pp. This provides some evidence that the members of each party seem to react more strongly to the treatment from their respective ideologically-aligned news source.

These results help us understand the role of media and information in shaping the partisan gap. The first mechanism is differential exposure to partisan news sources. Democrats and Republicans consume news from distinct outlets (Shearer et al., 2025), and to the extent that these news sources provide differential "spin" in their reporting, this will lead to a partisan gap in expectations. The second mechanism is differential responsiveness to news. We show that both Democrats and Republicans update their expectations when confronted with high-spin reporting from either side; however, the responsiveness is asymmetric. Democrats are more sensitive to left-leaning narratives,

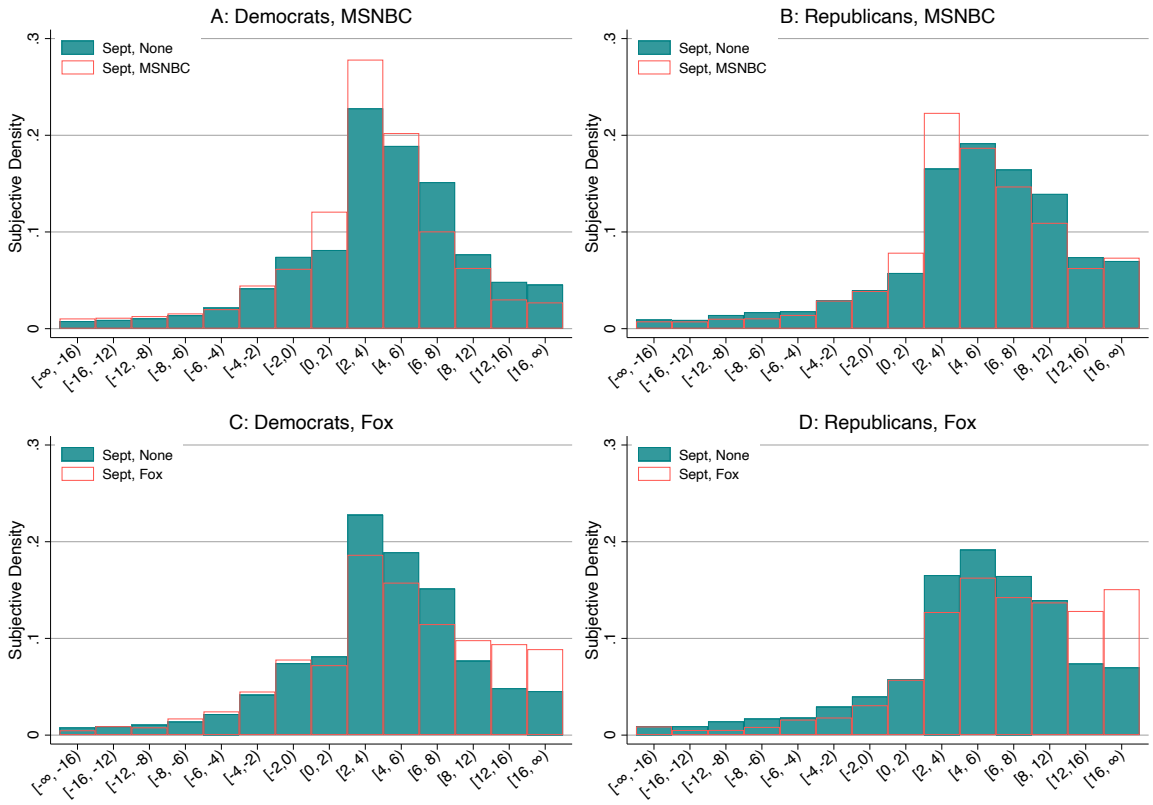


Figure 14: Subjective Densities, High-Spin Treatments

Notes: Subjective density plots for the July 2023 survey featuring "high-spin" treatments. Panels A and C include only Democrats and B and C include only Republicans. Panels A and B compare the no treatment group (blue filled bars) to the MSNBC treatment (orange hollow bars). Panels C and D compare the no treatment group (blue filled bars) to the Fox treatment (orange hollow bars).

whereas Republicans respond more to right-leaning ones. This asymmetry means that even if both groups were exposed to the same news, their beliefs would still differ, since each side places disproportionate weight on the narrative aligned with its priors.

Moving beyond individuals' own expectations, we find that information treatments have little effect on higher-order beliefs. Figure 15 plots the kernel densities of the higher-order beliefs of the partisan gap, by party and survey wave. For example, Panel A uses only Democrats and the low-spin July 2023 survey, and plots the kernel densities of the higher-order beliefs of the partisan gap for (i) the control group, (ii) the MSNBC treatment group, and (iii) the Fox treatment group. The densities look similar (and indeed are not statistically different from each other based on Kolmogorov-Smirnov tests). Panels B, C, and D feature the same pattern; information treatments do not

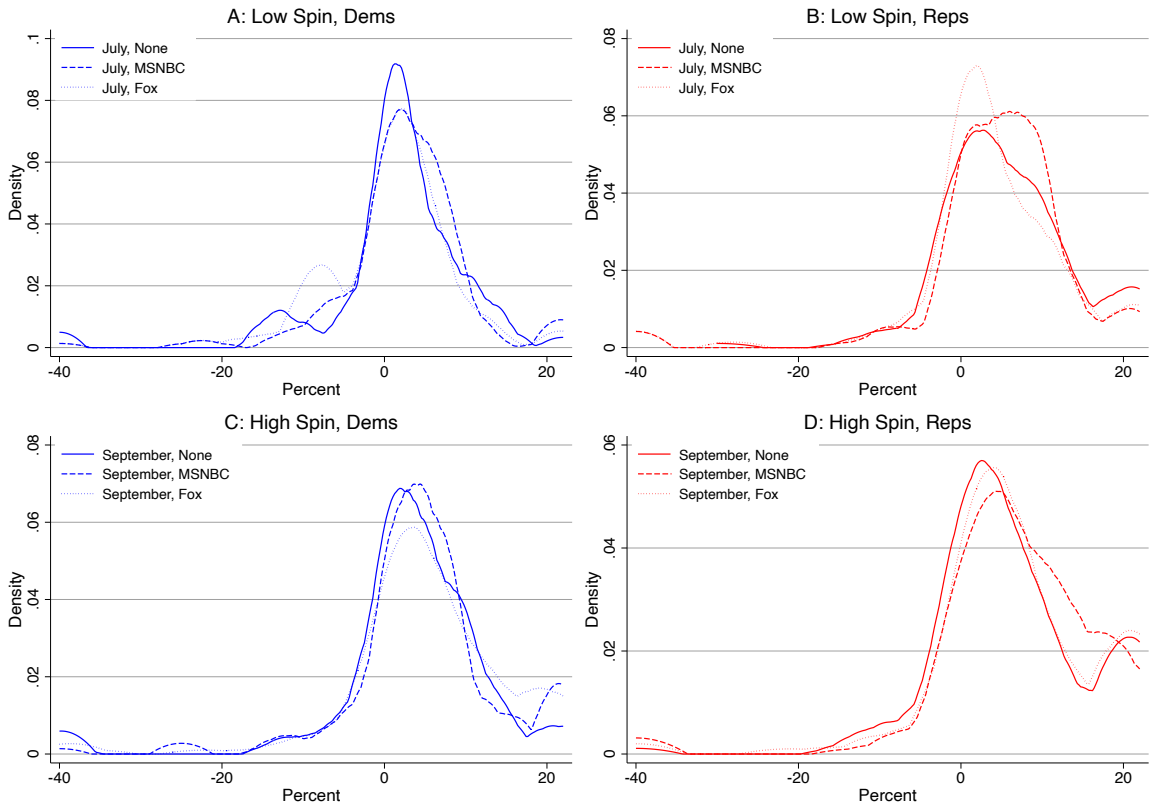


Figure 15: Higher-Order Beliefs of the Partisan Gap, Treatment Effect

Notes: Kernel densities of the higher-order beliefs of the partisan gap, by information treatment and political party. Panels A and C include Democrats only. Panels B and D include Republicans only. Data are from the July 2023 survey in Panels A and B and the September 2023 survey in Panels C and D.

significantly affect higher-order beliefs.

5 Conclusion

This paper provides new empirical evidence about how partisan identity shapes both first-order and higher-order macroeconomic beliefs. Using three original survey waves fielded between mid-2023, around the 2024 election, and following the April 2025 tariffs announcement, we document several new facts. First, the well-known partisan gap in U.S. consumers' one-year-ahead inflation expectations is readily perceived by respondents: Democrats and Republicans both understand that "their side" expects lower inflation when their preferred candidate occupies the White House. However, this perceived gap is systematically overstated. Both Republicans and Democrats believe the partisan

spread is larger than it actually is, suggesting that partisanship amplifies impressions of disagreement even when objective differences are modest. Next, individuals view their own forecasts as more "moderate" than those of their own-party; typical respondents place themselves between what they believe the average Democrat and the average Republican expect. All of these results hold even in hypothetical scenarios regarding the outcome of the 2024 presidential election. However, hypothetical scenarios regarding tariff rates reveal partisan disagreement even in higher-order beliefs. Finally, information treatments show that factual ("low-spin") news compress the distribution of beliefs toward the signal, whereas partisan, perspective-driven ("high-spin") stories shift the entire distribution in the intended direction, regardless of the respondent's political affiliation.

References

Andre, P., Pizzinelli, C., Roth, C., and Wohlfart, J. (2022). Subjective Models of the Macroeconomy: Evidence from Experts and Representative Samples. *The Review of Economic Studies*, 89(6):2958–2991.

Angeletos, G.-M. and La'O, J. (2009). Incomplete Information, Higher-Order Beliefs and Price Inertia. *Journal of Monetary Economics*, 56:S19–S37.

Angeletos, G.-M. and Lian, C. (2018). Forward Guidance without Common Knowledge. *American Economic Review*, 108(9):2477–2512.

Benhabib, J. and Spiegel, M. M. (2019). Sentiments and Economic Activity: Evidence from US States. *Economic Journal*, 129(618):715–733.

Binder, C. C., Kamdar, R., and Ryngaert, J. M. (2024). Partisan Expectations and COVID-Era Inflation. *Journal of Monetary Economics*, 148:103649.

Bordalo, P., Gennaioli, N., Ma, Y., and Shleifer, A. (2020). Overreaction in Macroeconomic Expectations. *American Economic Review*, 110(9):2748–82.

Calvo, G. A. (1983). Staggered Prices in a Utility-Maximizing Framework. *Journal of Monetary Economics*, 12(3):383–398.

Coibion, O., Gorodnichenko, Y., Kumar, S., and Ryngaert, J. (2021). Do You Know that I Know that You Know...? Higher-Order Beliefs in Survey Data. *The Quarterly Journal of Economics*, 136(3):1387–1446.

Colarieti, R., Mei, P., and Stantcheva, S. (2024). The How and Why of Household Reactions to Income Shocks. Technical report, National Bureau of Economic Research.

Farhi, E. and Werning, I. (2019). Monetary Policy, Bounded Rationality, and Incomplete Markets. *American Economic Review*, 109(11):3887–3928.

Garzon, J. H., Hwang, T., and Joo, Y. J. (2025). How Partisanship Shapes Economic Expectations: Evidence from the 2025 US Tariff Announcement. Technical report.

Gerber, A. S. and Huber, G. A. (2009). Partisanship and Economic Behavior: Do Partisan Differences in Economic Forecasts Predict Real Economic Behavior? *American Political Science Review*, 103(3):407–426.

Gillitzer, C. and Prasad, N. (2018). The Effect of Consumer Sentiment on Consumption: Cross-Sectional Evidence from Elections. *American Economic Journal: Macroeconomics*, 10(4):234–269.

Huo, Z. and Takayama, N. (2024). Rational Expectations Models with Higher-Order Beliefs. *Review of Economic Studies*, page rdae096.

Huseynov, S. and Murad, Z. (2024). Seeing Through Different Lenses: Partisanship and Updating of Inflation Expectations.

Jiang, J. H., Kamdar, R., Lu, K., and Puzzello, D. (2024). How do Households Respond to Expected Inflation? An Investigation of Transmission Mechanisms. Working paper.

Kamdar, R. and Ray, W. (2022). Polarized Expectations, Polarized Consumption. Technical report.

Kay, B. S., Lakdawala, A., and Ryngaert, J. (2025). Partisan Bias in Professional Macroeconomic Forecasts. *Available at SSRN 5324623*.

Mian, A., Sufi, A., and Khoshkhou, N. (2021). Partisan Bias, Economic Expectations, and Household Spending. *The Review of Economics and Statistics*, pages 1–46.

Morris, S. and Shin, H. S. (2002). Social Value of Public Information. *American Economic Review*, 92(5):1521–1534.

Shearer, E., Eddy, K., Lipka, M., and Matsa, K. E. (2025). The Political Gap in Americans News Sources. *Pew Research Center*.

Woodford, M. (2001). Imperfect common knowledge and the effects of monetary policy. NBER Working Papers 8673, National Bureau of Economic Research, Inc.

Appendix A Survey Flow and Questions

A.1 Survey Flow

Figures A1, A2, and A3 present the flow for each of our three main survey waves.

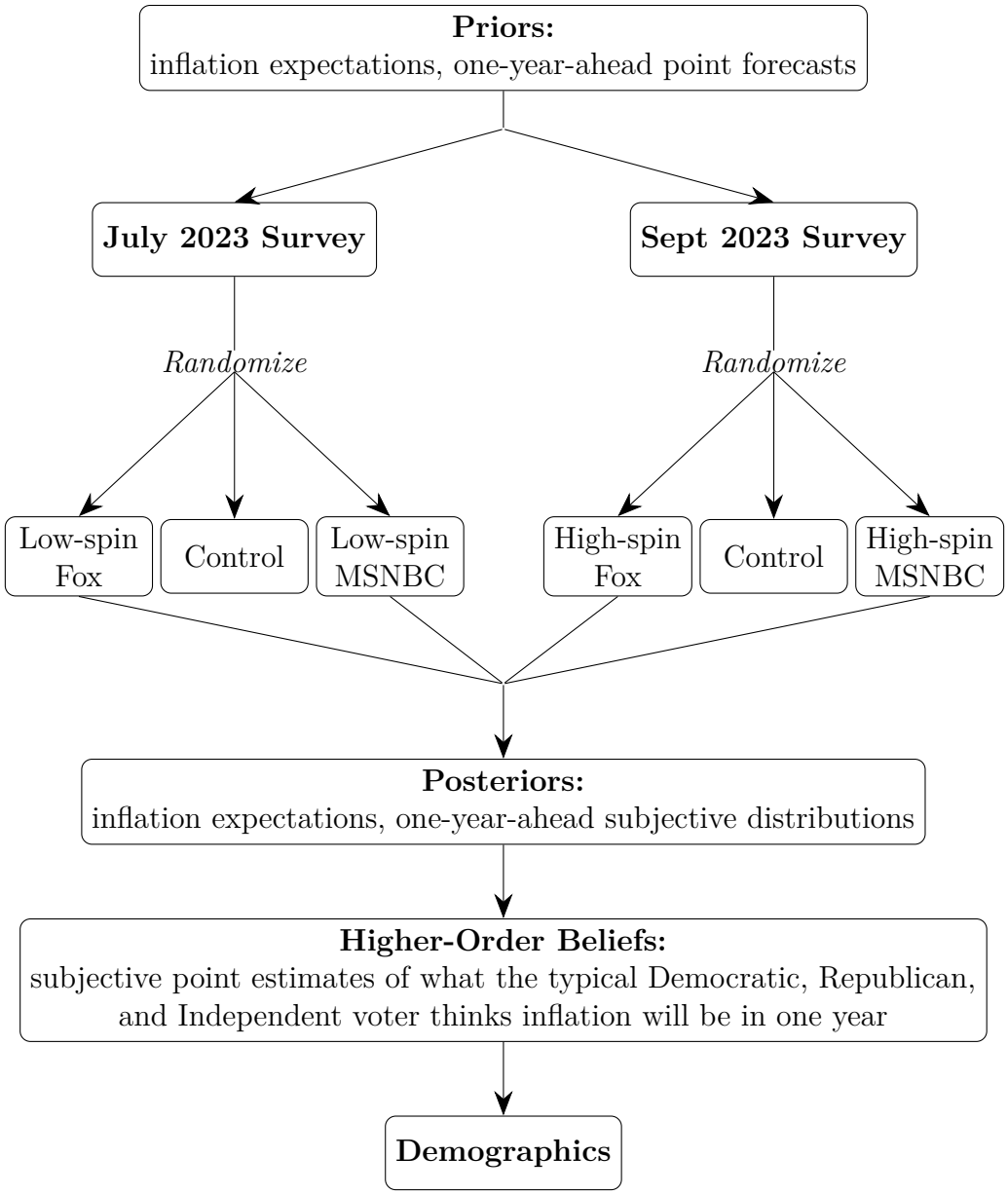


Figure A1: July and September 2023, News Treatment Survey Flow

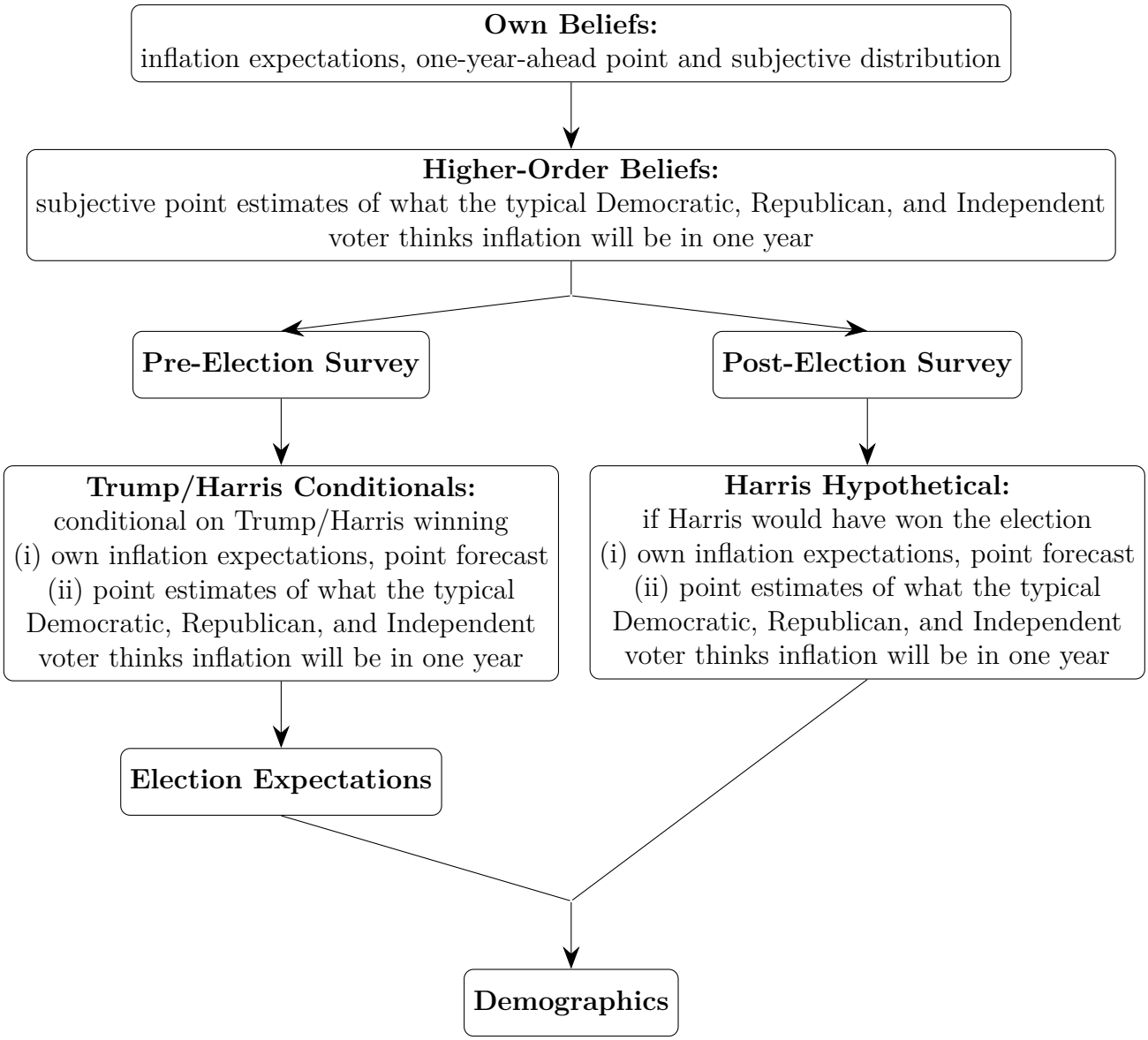


Figure A2: November 2024, Presidential Election Survey Flow

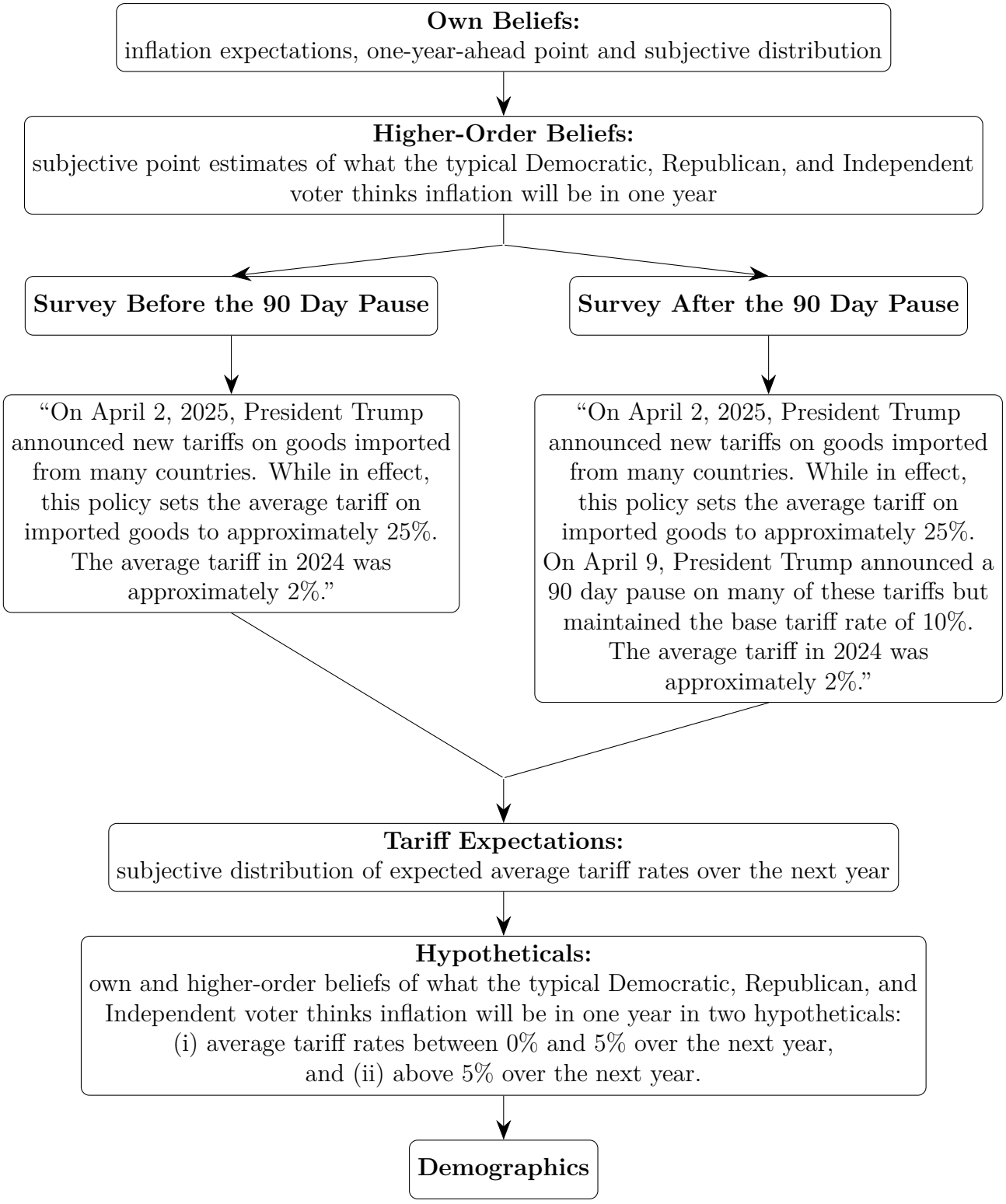
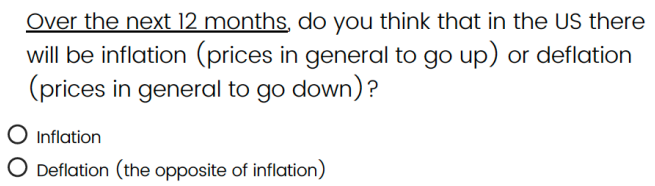


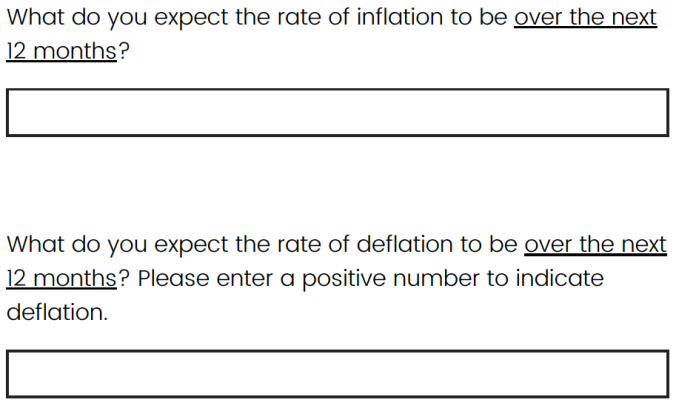
Figure A3: April 2025, Liberation Day Tariffs Survey Flow

A.2 Example Questions

In this section, we provide screenshots of key questions in our survey. Respondent's own point estimates of inflation expectations are elicited as follows. We begin with a qualitative question:



Based on their response, subjects see one of the following questions which ask for their inflation or deflation point forecast:



We elicit subjective distributions as follows:

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

For example, numbers like:

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

Next, we would like you to think about the different things that may happen to inflation in the US over the next 12 months. We realize that this question may take some effort.

In your view, what would you say is the percent chance that over the next 12 months...

the rate of inflation will be 16% or higher	0 %
the rate of inflation will be between 12 and 16%	0 %
the rate of inflation will be between 8 and 12%	0 %
the rate of inflation will be between 6 and 8%	0 %
the rate of inflation will be between 4 and 6%	0 %
the rate of inflation will be between 2 and 4%	0 %
the rate of inflation will be between 0 and 2%	0 %
the rate of deflation (opposite of inflation) will be between 0% and 2%	0 %
the rate of deflation (opposite of inflation) will be between 2 and 4%	0 %
the rate of deflation (opposite of inflation) will be between 4 and 6%	0 %
the rate of deflation (opposite of inflation) will be between 6 and 8%	0 %
the rate of deflation (opposite of inflation) will be between 8 and 12%	0 %
the rate of deflation (opposite of inflation) will be between 12 and 16%	0 %
the rate of deflation (opposite of inflation) will be 16% or higher	0 %
Total	0 %

Higher-order belief questions are difficult, and so we begin with a transition and primer:

> Next, we will ask you to think about what *other* people expect about the economy. We will ask you questions about what you think the **typical Democratic Party voter**, the **typical Republican Party voter**, and the **typical Independent voter** expects regarding inflation and unemployment.

We then ask for the respondent's higher-order inflation expectations for each party. Below we provide the "typical Democratic voter" example. The questions "typical Republican voter" and "typical Independent voter" expectations are asked in an analogous matter. We use red and gray, rather than blue font, for Republicans and Independents, respectively. The color choices are intended to ease the interpretation for respondents.

> Let's begin with questions about your beliefs about the **typical Democratic voter**. We know this is difficult. Please provide us your best estimates.

> Over the next 12 months, do you think that the **typical Democratic voter** expects inflation (prices in general to go up) or deflation (prices in general to go down)?
>
> ○ Inflation
> ○ Deflation (the opposite of inflation)

> What do you think the **typical Democratic voter** expects the rate of inflation to be over the next 12 months?
>
> [ ]

> What do you think the **typical Democratic voter** expects the rate of deflation to be over the next 12 months? Please enter a positive number to indicate deflation.
>
> [ ]

In the pre-2024 election survey, we ask for expectations conditional on Harris and conditional on Trump winning. Below is an example using Harris; however, there was an analogous survey block with Trump. We begin with a transition:

> Next, we would like to ask you for your expectations about the US economy **in the hypothetical scenario where Kamala Harris wins the presidential election**.

Then, we elicit own inflation expectations, conditional on the presidential outcome:

> **Suppose Kamala Harris wins the presidential election**. In that case, over the next 12 months, do you think that in the US there will be inflation (prices in general to go up) or deflation (prices in general to go down)?
>
> ○ Inflation
> ○ Deflation (the opposite of inflation)

> **Suppose Kamala Harris wins the presidential election**. In that case, what do you expect the rate of inflation will be over the next 12 months?
>
> [ ]

> **Suppose Kamala Harris wins the presidential election**. In that case, what do you expect the rate of deflation will be over the next 12 months? Please enter a positive number to indicate deflation.
>
> [ ]

Maintaining the hypothetical, we then elicit higher-order beliefs for each party. Below see an example using the "typical Democratic voter":

Suppose Kamala Harris wins the presidential election. In that case, over the next 12 months, do you think that the **typical Democratic voter** will expect inflation (prices in general to go up) or deflation (prices in general to go down)?

- ○ Inflation
- ○ Deflation (the opposite of inflation)

Suppose Kamala Harris wins the presidential election. In that case, what do you think the **typical Democratic voter** will expect the rate of inflation to be over the next 12 months?

[ ]

Suppose Kamala Harris wins the presidential election. In that case, what do you think the **typical Democratic voter** will expect the rate of deflation to be over the next 12 months? Please enter a positive number to indicate deflation.

[ ]

In the pre-2024 election survey, we also asked who the respondent expected would win the presidential election:

Next, we will ask you for your thoughts about the upcoming presidential election. Regardless of who you support, who do you think is **more likely to win the presidential election**?

- ○ Kamala Harris
- ○ Donald Trump
- ○ Pure toss-up (Donald Trump and Kamala Harris are equally likely)
- ○ Prefer not to say

Conditional on their response to their prior question, a follow-up question may be asked. If they expect Trump or Harris to win, they would receive the respective question below. If a respondent expects a "pure toss-up," they do not get a follow-up question, and we assign a 50% chance belief that each candidate would win. If a respondent prefers not to say, we assign their probability as missing.

What do you think is the percent chance that Donald Trump will win the presidential election?

- ○ 50-59%
- ○ 60-69%
- ○ 70-79%
- ○ 80-89%
- ○ 90-100%

What do you think is the percent chance that Kamala Harris will win the presidential election?

- ○ 50-59%
- ○ 60-69%
- ○ 70-79%
- ○ 80-89%
- ○ 90-100%

In the survey following the 2024 election, we ask for inflation expectations in the hypothetical scenario that Harris had won. When we do this we begin with a transition:

> Next, we would like to ask you for your expectations about the US economy **in the hypothetical scenario where Kamala Harris had won the presidential election**.

Under the Harris counterfactual, we then ask for their point forecast for inflation:

> **Imagine if Kamala Harris had won the presidential election**. In that hypothetical scenario, over the next 12 months, do you think that in the US there will be inflation (prices in general to go up) or deflation (prices in general to go down)?
>
> ○ Inflation
> ○ Deflation (the opposite of inflation)

> **Imagine if Kamala Harris had won the presidential election**. In that hypothetical scenario, what do you expect the rate of inflation will be over the next 12 months?
>
> [ ]

> **Imagine if Kamala Harris had won the presidential election.** In that hypothetical scenario, what do you expect the rate of deflation will be over the next 12 months? Please enter a positive number to indicate deflation.
>
> [ ]

Under the Harris counterfactual, we also elicit higher-order beliefs, for each party (the Democratic example is below):

Imagine if Kamala Harris had won the presidential election. In that hypothetical scenario, over the next 12 months, do you think that the **typical Democratic voter** will expect inflation (prices in general to go up) or deflation (prices in general to go down)?

- ○ Inflation
- ○ Deflation (the opposite of inflation)

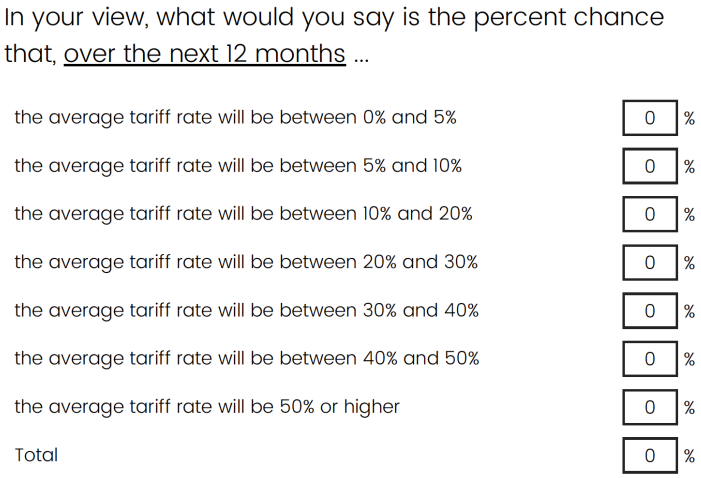
Imagine if Kamala Harris had won the presidential election. In that hypothetical scenario, what do you think the **typical Democratic voter** will expect the rate of inflation to be over the next 12 months?

[ ]

Imagine if Kamala Harris had won the presidential election. In that hypothetical scenario, what do you think the **typical Democratic voter** will expect the rate of deflation to be over the next 12 months? Please enter a positive number to indicate deflation.

[ ]

For the surveys following the April 2nd tariffs announcement, we collect respondents' subjective distributions of the average tariff rate over the next 12 months as follows:


In your view, what would you say is the percent chance that, over the next 12 months ...

the average tariff rate will be between 0% and 5%	0 %
the average tariff rate will be between 5% and 10%	0 %
the average tariff rate will be between 10% and 20%	0 %
the average tariff rate will be between 20% and 30%	0 %
the average tariff rate will be between 30% and 40%	0 %
the average tariff rate will be between 40% and 50%	0 %
the average tariff rate will be 50% or higher	0 %
Total	0 %

We use two hypothetical tariff regimes, "low" and "high", which we respectively describe as:

Next, we would like to ask you for your expectations about the US economy **in the hypothetical scenario where the new tariffs are removed and the average tariff rate over the next 12 months is between 0 to 5%.**

Instead, now we would like to ask you about your expectations about the US economy **in the hypothetical scenario that the new tariffs are not fully removed and the average tariff rate over the next 12 months is 5% or greater**.

For each of the tariff hypotheticals, we elicit own and higher-order beliefs by party. For example, below is a question eliciting higher-order beliefs about Democrats' inflation expectations in the low-tariff hypothetical.

Suppose the average tariff on imported goods over the next 12 months is between 0% and 5%. Do you think that the **typical Democratic voter** given this hypothetical scenario would expect inflation (prices in general to go up) or deflation (prices in general to go down) over the next 12 months?

- ○ Inflation
- ○ Deflation (the opposite of inflation)

Suppose the average tariff on imported goods over the next 12 months is between 0% and 5%. What do you think the **typical Democratic voter** given this hypothetical scenario would expect the rate of inflation to be over the next 12 months?

[ ]

Suppose the average tariff on imported goods over the next 12 months is between 0% and 5%. What do you think the **typical Democratic voter** given this hypothetical scenario would expect the rate of deflation to be over the next 12 months? Please enter a positive number to indicate deflation.

[ ]