Inflation, Blame Attribution, and the 2022 US Congressional Elections*

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Abstract

This study investigates the impact of inflation on the 2022 U.S. midterm elections, a period witnessing the resurgence of inflation as a major concern in the U.S. for the first time in decades. We utilize a pre-registered survey with an embedded experiment to investigate the political repercussions of rising prices. We find that individuals experiencing a higher personal inflation burden are more inclined to support Republican candidates. Our survey experiment further assesses the impact of partisan messaging leading up to the election, focusing on two primary narratives: government spending, as emphasized by Republicans, and corporate greed, highlighted by Democrats. The results indicate that attributing inflation to government spending decreases support for Democrats, whereas associating it with corporate greed undermines confidence in the Republicans' ability to effectively manage inflation. Economic voting behavior depends not only on objective economic conditions but also on how political parties subjectively frame these conditions.

KEYWORDS: political economy, inflation, economic voting, US congressional elections, presidential approval

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Motivation and Theory

In 2022, the US economy experienced significant inflation for the first time in 40 years. The inflation rate started to rise in 2021 and peaked at 9.1% in June 2022, far exceeding the Federal Reserve's target of 2%. Inflation topped the list of voters' concerns in a Pew Research Center poll conducted in April/May 2022: 70% considered it a "very big problem." Yet although President Biden's approval rating hovered at around 40% in the run-up to the midterm elections, Republican candidates underperformed relative to historical averages, surprising many.

Inflation, defined as a broad increase in the prices of goods and services, can spark political unrest by eroding the purchasing power of consumers and businesses. When faced with rising production costs, businesses often pass these increases onto consumers. A rise in the cost of everyday necessities is particularly significant, as it diminishes individuals' ability to buy the same amount with their money, which can lead to increased difficulty in household decision-making (Binetti, Nuzzi and Stantcheva, 2024), potentially resulting in significant voter backlash (Hibbs, 1979). Additionally, policy measures aimed at controlling inflation, such as higher interest rates or fiscal austerity, can potentially increase unemployment (Hibbs, 1977) and prompt further backlash (Baccini and Sattler, forthcoming). Polling during previous periods of high inflation indicates that rising prices can significantly damage the popularity of political incumbents (Fischer and Huizinga, 1982; Hibbs, 1979; MacKuen, 1983).

This paper examines how inflation influenced voting in the 2022 midterms. We developed an original, pre-registered survey and administered it prior to the 2022 midterm elections to examine if higher personal inflation burdens were associated with voting intentions. In an experiment embedded in the survey, we identify how partisan messaging about the sources of inflation influenced support for Democrats and Republicans. Our analysis draws insights from the economic voting literature, which suggest that inflation may jeopardize incumbents' electoral prospects as voters hold them accountable for poor economic performance (Lewis-Beck and Stegmaier, 2000). High inflation in previous periods led to support for conservatives and dramatic shifts in economic policy (Frieden, 2007, p. 366–369). It is therefore plausible that the high inflation period could have weakened support for Democrats in the 2022 US congressional elections, considering Democrats control over the presidency, House, and Senate during this time. This is the first hypothesis that we explore below.

¹https://pewrsr.ch/3zI9F6T [Accessed on May 26, 2022.] Nearly all Americans, 93%, considered inflation a "very big" or "moderately big" problem.

²https://www.reuters.com/world/us/biden-approval-edges-up-41-reutersipsos-\ finds-2022-09-27/

However, inflation's impact on voting might not solely operate through objective economic conditions. One, the "most important" issues in polling do not always directly influence vote choice (Sides, Tesler and Vavreck, 2019; Mutz, 2022; Wlezien, 2005). Two, numerous studies have indicated that economic grievances do not tend to factor heavily in voting decisions (Kinder and Kiewiet, 1979; Kiewiet, 1983; Anderson, 2007; Feigenbaum and Hall, 2015a; Mutz, 2018). Three, some voters may absolve elected leaders altogether, instead attributing inflation to the monetary policy decisions of unelected central bankers (Bodea and Hicks, 2015a,b; Bodea and Higashijima, 2017).

It is also possible that candidates can shape voters' understanding about the causes of economic shocks. Politicians may offer partisan attribution narratives to deflect blame from their party and cast it on their opponents. This paper examines whether voters' responses to inflation depend on the messaging they receive about its causes, building on literature demonstrating politicians' ability to frame economic phenomena to their advantage (Albertson and Gadarian, 2015; Ballard-Rosa, Goldstein and Rudra, 2024; Guisinger, 2017; De Vries, Hobolt and Walter, 2021; Naoi, 2020). For instance, in her foundational study on American public opinion on international trade, Guisinger (2017) shows that individuals' views are shaped by messaging from politicians, rather than a deep understanding of the specific details of trade policy or its distributional consequences. This literature highlights the power of political messaging and communication strategies in shaping public opinion on complex policy issues and economic conditions.

In the run-up to the 2022 midterm elections, political elites sought to link responsibility for rising inflation to traditional ideological divisions over the size of government and the influence of business, blaming either government spending or corporate greed.³ Although the increase in US government spending began during the Trump Administration, Republicans blamed President Biden and congressional Democrats' spending programs for inflation. Our second hypothesis is that attributing rising inflation to government spending will weaken support for Democratic candidates.

Conversely, Democrats attributed rising inflation to corporate greed rather than government spending.⁴ They argued that companies' price hikes, which some Democrats labeled "greedflation," were responsible for inflation. Democrats in turn blamed these corporate price hikes to the Trump Administration's anti-regulatory

 $^{^3 {\}rm https://www.nytimes.com/2022/06/03/business/economy/price-gouging-inflation.} \\ {\rm html}$

⁴We note that supply chain disruptions caused by COVID shutdowns, and the Russian invasion of Ukraine, among other factors, also likely contributed to inflation (Di Giovanni et al., 2022; Baqaee and Farhi, 2022). However, in the 2022 election context, these factors were less frequently mentioned, leading us to focus on the most prominent political narratives during this period.

approach and, more broadly, to Republican support of corporate interests. As a third hypothesis, we propose that attributing inflation to corporate profits will weaken support for Republican candidates.

This paper evaluates how inflation and competing attribution messages shaped voting behavior in the 2022 midterms. Our survey reveals that higher reported inflation burdens correlate with less support for Democratic candidates. Additionally, our survey experiment randomly assigned treatments emphasizing either government spending or corporate greed as inflation causes, assessing their impact on voter preferences. Our experimental findings reveal that partisan messaging about inflation affects perceptions and vote intentions. Government spending attributions weakened support for Democrats, while corporate greed attributions undermined confidence in Republicans' ability to tackle inflation. These offsetting effects may help explain why the 2022 midterms did not result in a significant Republican advantage, despite high inflation.

Our study contributes to the existing literature on the influence of economic conditions on voting behavior (e.g., Fair, 1978; Abramowitz, 1985; Kiewiet, 1983; Lewis-Beck and Stegmaier, 2000; Powell and Whitten, 1993; Feigenbaum and Hall, 2015b; Mutz, 2018; Owen, 2019; Jardina, 2019; Rickard, 2022; Baccini and Weymouth, 2021; Wu and Huber, 2021). While most recent economic voting research has focused on international economic shocks (Ballard-Rosa, Jensen and Scheve, 2022; Jensen, Quinn and Weymouth, 2017; Rickard, 2022), our paper examines the role of inflation, a topic receiving less attention due to a multi-decade period of low rates in major economies. Earlier work explored the links between inflation, public opinion, and voting (Hibbs, 1979; Erikson, MacKuen and Stimson, 2002; MacKuen, 1983), but empirical analyses yielded mixed and inconclusive results (e.g., Kramer, 1971; Powell and Whitten, 1993).

Our paper contributes two significant insights to the study of the politics of inflation. First, we find a detrimental impact of inflation on electoral support for Democrats. Second, our analysis shows that attributing inflation to either government spending or corporate greed influences voter attitudes in contrasting ways. Democrats are vulnerable to criticisms that their fiscal programs contribute to inflation, as anticipated by Hibbs (1977). Conversely, Republicans' close ties to business interests can become a liability if voters attribute rising prices to corporate actions. Our approach illuminates the impact of inflation on political behavior through the channel of partisan attribution. Consequently, it extends the economic voting literature by emphasizing the significant role of subjective political framing in shaping electoral outcomes.

Hypotheses

We examine three hypotheses regarding the possible effects of inflation on voting.

Hypothesis 1. Higher perceived inflation in an individual's consumption basket will be associated with weaker support for Democratic candidates.

Hypothesis 2. Attributing inflation to government spending will weaken support for Democratic candidates.

Hypothesis 3. Attributing inflation to increasing corporate profits will weaken support for Republican candidates.

Original Survey on Inflation and Voting

In late October 2022, we conducted an original survey of approximately 2,000 US adults on Forthright. The platform recruits respondents representative of the population on a variety of demographic characteristics including gender, age, education, party identification and household income.⁵ To summarize our approach, the survey first asked respondents about their perceptions of inflation. Respondents were then randomly assigned to a treatment group attributing inflation to either government spending or corporate greed, or to a control group. Following the experiment, we asked questions regarding respondents' voting intentions and approval of Democrats and Republicans in Congress.

To capture the inflation burden for respondents, we use both objective and subjective measures. This approach helps us understand how different aspects of inflation impact voting behavior while addressing potential endogeneity concerns, as objective measures are potentially less likely to be endogenous to vote choice. We include two objective measures: dummy variables coded as '1' for respondents who commute to work, to assess the burden of higher gas prices, and for those who rent, given the notably high rent inflation in 2022. Both gas prices and shelter costs significantly contributed to the overall rise in inflation in the US.⁶ We also include two subjective indices: *Inflation (personal)*, which captures personal experiences of inflation, and *Inflation (community)*, which captures respondents' perceptions of

 $^{^5{}m Thus}$ our sample is more representative of the population than those recruited from similar platforms such as MTurk.

⁶See here for recent data: https://www.reuters.com/markets/us/gas-shelter-costs-send-us-consumer-prices-higher-sept-2023-10-12/. The logic for relying on these dummies is that people who commute and rent are more vulnerable to inflation than people who do not.

⁷We rely on two questions: 1) Over the past year, have the prices of things you buy generally increased, decreased, or stayed about the same? and 2) To what degree have you decreased spending as a result of inflation? We take the average value of these two questions and label this

inflation's impact on their community and the country.⁸ The correlation between these objective measures (Rent and Commuting) and the subjective measures (*Inflation (personal)* and *Inflation (community)*) is quite low (i.e., $\rho = 0.1$), indicating that they capture different aspects of the inflation burden.

Before introducing our model and the estimation results, we recognize some limitations of our approach. Most importantly, inflation cannot be randomly assigned, and so measuring the causal effect of inflation on voting is impossible. In the individual surveys, self-reported inflation burdens may be contaminated by other correlates of vote choice, despite our efforts to control for underlying variation (Wlezien, Franklin and Twiggs, 1997). Specifically, there may be concerns that perceptions of inflation at both the individual and community levels are endogenous to partisanship; for instance, Republicans may report higher inflation than Democrats when Democrats are in power. Since partisanship is central to voting behavior, this potential endogeneity poses some challenges to correctly identify the effect of inflation at the observational level. Acknowledging these shortcomings, we complement the observational analysis with an original survey experiment, which allows us to measure the causal effect of different attribution messaging on respondents' vote intentions and their approval of Democrats and Republicans in Congress.

Our main model specification for the correlational analysis is the following:

$$Y_i = \alpha + \gamma_c + \beta_1 Inflation_i + \beta_2 X_i + \epsilon_i, \tag{1}$$

where Y_i captures our dependent variable at the individual level i: the respondent's stated intention to vote for a Democratic candidate in 2022. Inflation captures the inflation burden for respondents based on the following factors: Rent; Commuting; Inflation (personal); and Inflation (community). Our richest model specification includes a battery of individual-level controls, which are stored in the matrix X_i : Education, employment, gender, income, party identification, personal financial situation, assessment of national unemployment rate, position on abortion, and approval of President Biden. γ_c are county fixed effects, α is the constant, and ϵ are the residuals.

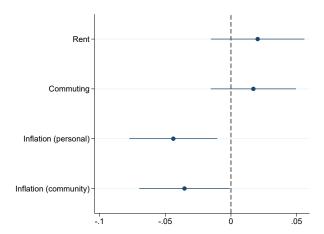
Figure 1 displays the results of the analysis at the individual level when the variable *Inflation (personal)*. The higher the value of this variable, the more respondents feel the inflation burden.

⁸We rely on three questions: 1) How much of a problem is inflation in the US as a whole?; 2) Inflation in your local community is ...; and 3) The negative impact of inflation in your local community has been We take the average value of these three questions and label this variable *Inflation (community)*. The higher the value of this variable, the more respondents feel the inflation burden in the country/community.

⁹Table B.2 (in Appendix B) shows that, after controlling for socio-economic and geographical variables, party identification is not a significant predictor of *Inflation (personal)* and *Inflation (community)*.

outcome variable measures the probability of voting for the Democrat. The coefficients of our measures of inflation burden (i.e. Inflation (personal) and Inflation (community)) are always negative and significant, which indicates that respondents who feel the burden of inflation personally and observe it in their local economy are less likely to vote for the Democrat than those who do not. We find no evidence that renting and commuting reduce the probability of voting for a Democratic candidate.¹⁰

Figure 1: Probability of Voting for the House Democratic Candidate (voting intention)



Note: Sample: 1,712 respondents. Outcome: "If an election for US Congress were being held today, who would you vote for in the district where you live?" (1 = Democratic candidate, 0 = Republicans). Table B.1 (Model 2) reports the full results including controls. 95% C.I.

Table B.3 shows the results of the model in equation 1 by party identification. We estimate the model separately on the sub-samples of Republicans, Democrats, and Independents. The standard errors in each sub-sample are larger due to the lower number of observations. That said, it seems that the results at the individual-level are driven by Independents, especially for *Inflation (personal)*.

Overall, our individual-level analysis suggests that inflation has a negative (though generally weak) effect on the probability of voting for a Democrat. In sum, we find evidence in support of H1.¹¹

¹⁰Figure B.1 shows that results of *Inflation (personal)* and *Inflation (community)* are similar if we drop the two objective measures of inflation, i.e. *Rent* and *Commuting*. Table B.1 (Model 1) reports the full results of this model specification including controls.

¹¹We complement the individual-level observational analysis with an analysis at the district level, as proposed in our pre-analysis plan. We report these results in Appendix A. Since we are able to measure the burden of inflation more precisely using our original survey, our results are stronger at the individual level than the district level.

Experimental Results: Inflation Attribution Channels

We embedded an experiment into our survey to estimate whether different blame attributions for rising inflation have a causal effect on voting behavior and political attitudes. We first asked respondents several questions to assess the extent to which they felt personally affected by inflation, as noted above. We developed treatments to reflect the two main inflation attribution channels espoused by Republicans and Democrats, respectively, in during the campaigns of 2022: one explaining that government spending caused inflation; the other attributing inflation to corporate greed (See Figures 2 and 3). We then randomly assigned respondents into either the control group or one of two treatment groups. We block-randomized the treatment assignment based on whether the respondent identified as a Republican, Democrat, or Independent. The control group received no additional information.

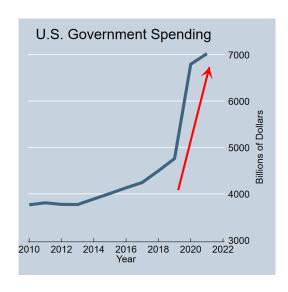


Figure 2: Treatment 1: Government Spending

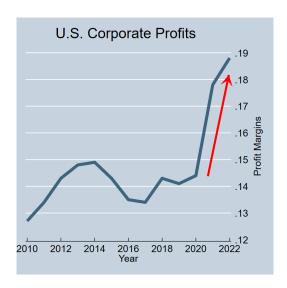
Note: Respondents in the government spending treatment group were presented with the following statement and graph, including their party identification as provided in advance by Forthright: "Government spending has skyrocketed. Many [OWN PARTY] agree that excessive government spending has caused inflation by increasing the national debt."

¹²In September 2022 we ran a small pilot survey of approximately 500 respondents to test whether the survey questions are realistic and well understood.

¹³Appendix D presents the full survey, and Appendix E provides additional information about the survey experiment. To confirm the strength of our treatments, we implement manipulation checks, which we describe in Appendix C.

¹⁴Forthright provides this information directly to the researcher prior to treatment assignment. The block randomization method is designed to randomize subjects into groups that result in equal sample sizes. This method is used to prevent severe imbalances in sample allocation with respect to both known and unknown confounders, reducing possible sources of bias in experimental designs.

Figure 3: Treatment 2: Corporate Greed



Note: Respondents in the corporate greed treatment group were presented with the following statement and graph, including their party identification as provided in advance by Forthright: "Corporate profits have skyrocketed because corporations have raised prices. Many [OWN PARTY] agree that excessive corporate profits caused inflation."

Our survey contained four main outcome questions. One, "If an election for US Congress were being held today, who would you vote for in the district where you live?" (which we label Pr(Dem=1)). Two, "Do you approve or disapprove of the way Democrats in Congress are handling inflation?" (Approve Dem). Three, "Do you approve or disapprove of the way Republicans in Congress are handling inflation?" (Approve Rep). Four, "Do you agree or disagree with the following statement: Republicans would be better at handling inflation than Democrats (Rep better). 17

Our model specification is the following:

$$Y_i = \alpha_0 + \beta_1 SPENDING_i + \beta_2 GREED_i + \epsilon_i, \tag{2}$$

where the dependent variable Y_i is one of the four outcome questions that we observe for each respondent *i.* $SPENDING_i$ and $GREED_i$ are the randomized treatments, which vary across respondents. β_1 and β_2 are the key coefficients, which we expect to have different effects on the outcomes. We expect that β_1 and β_2 will be statistically significantly different from each other because the two narratives of inflation should

¹⁵The options are: the Republican Party candidate; the Democratic Party candidate; Other; I would not vote. We used this question in our previous estimates on inflation burden and voting.

¹⁶The last two outcomes range from 1 (disapprove strongly) to 4 (approve strongly).

¹⁷The outcomes range from 1 (Strongly disagree) to 4 (Strongly agree).

pull respondents' attitudes in opposing directions. The baseline category is the control group, which received no explanation on the source of inflation. α_0 is the constant, whereas ϵ_i are the residuals. We estimate OLS regressions with robust standard errors.

Table 1: Experimental Analysis

	(1)	(2)	(3)	(4)	
		OLS			
	Pr(Dem=1)	Approve Dem in Congress	Approve Rep in Congress	Rep Better at Handling Inflation	
SPENDING	-0.092***	-0.154***	0.096*	0.076	
	(0.029)	(0.057)	(0.052)	(0.064)	
GREED	-0.004	0.024	-0.012	-0.157**	
	(0.029)	(0.059)	(0.052)	(0.065)	
Constant	0.540***	2.211***	2.086***	2.568***	
	(0.021)	(0.042)	(0.037)	(0.046)	
SPENDING=GREED) ` ´		,		
F(1, 1757)	9.24	9.75	4.25	13.56	
Prob > F	(0.002)	(0.002)	(0.039)	(0.000)	
Observations	1,760	2,006	2,006	2,006	

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Note: OLS regression with robust standard errors. The dependent variables capture voting behaviour, approval for Democrats and Republicans in Congress, and assessment of how parties handle inflation. SPENDING and GREED are the two treatments. Differences between the coefficient of the two treatments are assessed using the Wald test.

The results appear in Table 1. There are three main takeaways. 18

First, the coefficients of SPENDING and GREED are always significantly different one another, according to the Wald test. This implies that the GREED narrative helped to offset the negative effects of inflation on support for Democratic candidates, which likely would have been more pronounced if voters had been exposed solely to the narrative blaming inflation on government spending.

Second, the SPENDING treatment has a negative effect on support for Democrats, in line with H2. It reduces the intention to vote for the Democratic candidate in 2022 and the approval of Democrats in Congress while increasing the approval of Republicans in Congress. In Model 4, the SPENDING treatment has no significant effect on voters' assessments that Republicans would be better at handling inflation

¹⁸Note that results of manipulation tests reported Figures C.1 and C.2 in Appendix C indicate that respondents in the SPENDING (GREED) treatment group are significantly more likely to blame high inflation on excessive government spending (corporate greed). The effect is notable: The mean of the treated groups is 3.3 (or higher) on a scale from 1–4. In our sample, respondents believe that excessive corporate greed bears a larger effect on inflation than excessive government spending. We also report the manipulation tests by party line (see Figure C.3 and C.4). As expected, Democrats blame corporate greed more than government spending, whereas the opposite is true for Republicans.

than Democrats. We note that in our sample, respondents generally believe that Republicans are better at handling inflation than Democrats, as evidenced by the positive coefficient of the constant term.

Third, our analysis indicates that the corporate greed narrative weakened the belief that Republicans would handle inflation better than Democrats, as shown in Model 4. In contrast, Model 1 shows that the GREED coefficient is essentially zero, indicating no significant impact on the intention to vote for a Democratic candidate. This suggests that while the GREED narrative affects perceptions of party competence in handling inflation, it does not directly influence voting intentions. Notably, however, 54% of our sample intended to vote for a Democratic candidate (as indicated by the constant term), which is higher than the actual share in the 2022 elections (47%). This higher baseline support for Democrats may have contributed to a ceiling effect, limiting the potential to further increase support for Democrats following the experimental manipulation. In sum, the support for H3 is limited.

Table C.1 in Appendix C shows the results by party identification. A caveat is that each sub-sample has a relatively low number of observations, raising concerns about limited statistical power given that we have two treatments and one control group in each sub-sample. That said, our results seem to indicate that Independents drive the negative effect of SPENDING on the probability of voting for Democratic candidates and for the approval of Democratic Party in Congress. The negative effect of GREED on the belief that Republicans would be better at handling inflation is driven by the Republican sub-sample, which is a striking result given the level of polarization of American politics.

Taken together, our observational and experimental evidence indicates that inflation weakened electoral support for Democratic candidates in the 2022 congressional elections. The government spending attribution message weakened support for Democrats. However, while the corporate greed narrative did not significantly change voting intentions, it did undermine the belief that Republicans would handle inflation better than Democrats. This suggests that attributing inflation to corporate price hikes weakened the Republicans' perceived advantage on the inflation issue, even though it may not have significantly impacted overall voting behavior. More broadly, our findings indicate that politicians have considerable leeway to shape perceptions of complex issues such as inflation to their advantage.

Conclusion

This paper examines the impact of inflation and competing attribution messages on voting behavior in the 2022 U.S. midterm election. Results from a pre-registered

survey experiment revealed that information attributing inflation to government spending weakened support for Democrats, while attributions of corporate greed weakened some Republican advantages on the issue of inflation. The opposing effects may offer insight into why the 2022 midterms did not result in significant gains for Republicans despite high inflation.

The analysis advances our understanding of the effects of economic shocks on political behavior. Complex phenomena like inflation are rightfully attributable to multiple causes—economists have not reached a consensus on the primary sources of the recent bout of inflation. The ambiguity around the sources of shocks provides an opening for political messaging to influence mass public perceptions about economic conditions. This insight helps explain the conflicting findings in the economic voting literature: voting responses to economic shocks depend on the policymakers' ability to shape perceptions about who is to blame.

Our study suggests new directions for research on economic voting. One path is to further examine the effects of monetary policy on voting. A common response to inflation is monetary policy tightening, which can lead to job losses and slower economic growth. The inflation-employment tradeoff is likely to reemerge as a core political economy issue, one that will constrain policymaking, and one that political parties will seek to exploit to their electoral advantage in the US and other countries. Our key insight is that political parties have considerable leeway to shape perceptions of complex economic phenomena such as inflation to their advantage. Understanding how parties' messaging strategies about future economic shocks affect voting behavior will be of utmost importance.

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A Appendix A: District Level

Empirical strategy

Our main model specification is the following:

$$\Delta Y_i = \alpha + \gamma_s + \delta_p + \beta_1 \Delta Inflation_i + \beta_2 X_i + \epsilon_i, \tag{3}$$

where ΔY_i is the change in vote share for the House Democratic candidate between the 2018 and 2022 and the previous midterm elections in district *i*. Data come from Dave Leip's Atlas of the 2022 and 2018 US Congressional Elections.¹

 $\Delta Inflation_i$ is the first difference of the inflation rate measured by the average gas prices and the average cost of rent for district i in 2022 and 2019.²

 X_i is a matrix of standard controls: Unemployment (level and growth), age, race/ethnicity, education, and share of foreign-born citizens. Unemployment data come from the US Bureau of Labor Statistics, and data for the other controls come from the 2020 US census. All of these variables are measured in *levels* except for the change in the unemployment rate between 2022 and 2019.

State fixed effects γ_s net out time-invariant differences across states, and δ_p are population-decile fixed effects, which net out differences between rural and urban areas.³ We run ordinary least squares (OLS) regressions with robust standard errors clustered at the state level.

Results

Figure A.1 illustrates the point estimates and confidence intervals of the main price variables. Appendix Table A.2 reports all the models, which include controls and population decile fixed effects. In all models, the coefficient of both measures of inflation is negative, though it is never significant.

¹Data are available at https://uselectionatlas.org/. Since presidential elections tend to be more salient than midterm elections, which affects political mobilization, we rely on first differences with respect to the 2018 elections in our main model specifications. To match district-level election outcomes with our county-level covariates we rely on the crosswalk developed by Dorn et al. (2020).

²Gas prices come from the American Automobile Association (https://gasprices.aaa.com/). We collected data in October 2022 and we benchmark these prices with gas prices from January 2019 (the first available). Rent information comes from the Department of Housing and Urban Development (HUD) (https://www.huduser.gov/portal/datasets/50per.html). The HUD reports 50th percentile rents for all Fair Market Rent areas for zero-, one-, two-, three-, and four-bedroom units, which are averaged to create a general rent measure for each area. HUD reports these at the county level, and provides annual data since FY2001. We compare the most current data from FY2022 with the data from FY2019 (the first available).

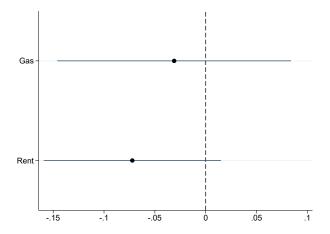
³State fixed effects are particularly important for the controls, which are included as levels.

Table A.2: District-level Analysis

	(1)	(2)	(3)	(4)
	OLS			
	Change of	Vote for the De	emocratic Par	ty (2022-2018)
Gas	-0.0360		-0.03102	-0.01921
	(0.0591)		(0.057)	(0.057)
Rent		-0.08606**	-0.07216	0.00125
		(0.041)	(0.043)	(0.105)
Unemployment (level)				0.01395**
				(0.007)
College degree (%)				-0.00012
				(0.001)
Unemployment (change)				-0.01179
				(0.011)
Age over 55 (%)				-0.00036
				(0.002)
Foreign born (%)				-0.00110
				(0.002)
White (%)				0.12631
				(0.094)
Constant	-0.00343	-0.04965***	-0.00056	-0.13781
	(0.0991)	(0.006)	(0.096)	(0.108)
	,	,	,	,
Observations	416	419	416	416
R-squared	0.128	0.130	0.130	0.172
State fixed effects	Yes	Yes	Yes	Yes
Pop decile fixed effects	No	No	No	Yes

Note: The sample is reported in the row "Observations." Outcome: Change of vote for House Democrats (2022-2018).

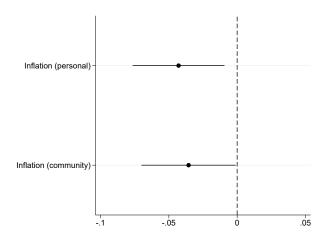
Figure A.1: District-level Results



Note: Sample: 416 districts. Outcome: Change of vote share for House Democratic candidates (from 2018 to 2022). Estimates refer to Model 3 in Table A.2, which reports the full results including controls. 95% C.I.

B Appendix B: Individual Level

Figure B.1: Probability of Voting for the House Democratic Candidate (voting intention)



Note: Sample: 1,712 respondents. Outcome: "If an election for US Congress were being held today, who would you vote for in the district where you live?" (1 = Democratic candidate, 0 = Republican can). Table B.1 (Model 1) reports the full results including controls. 95% C.I.

Table B.1: Individual-level Analysis

	(1)	(2)
-		LS
	Pr(Dem=1)	
Rent		0.028*
		(0.014)
Commuting		0.000
		(0.014)
Inflation (personal)	-0.049***	-0.050***
	(0.016)	(0.016)
Inflation (community)	-0.036**	-0.036**
	(0.016)	(0.016)
Education	-0.005	-0.003
	(0.004)	(0.004)
Employment	0.004	0.003
	(0.003)	(0.003)
Female voter	0.021	0.020
	(0.014)	(0.014)
Income	0.000	0.000
	(0.000)	(0.000)
Democrat ID	0.551***	0.551***
	(0.029)	(0.029)
Independent ID	0.280***	0.279***
•	(0.023)	(0.023)
Something else ID	0.329***	0.323***
C	(0.091)	(0.091)
Biden's approval	0.343***	0.341***
**	(0.029)	(0.029)
Financial situation	0.012**	0.013**
	(0.006)	(0.006)
Unemployment (national)	0.013**	0.013**
1 ,	(0.006)	(0.006)
Against abortion	-0.067***	-0.066***
	(0.009)	(0.009)
Constant	0.660***	0.636***
	(0.094)	(0.098)
County fixed effects	Yes	Yes
Observations	1,712	1,712
R-squared	0.771	0.772
Controls	Yes	Yes

Note: The sample is reported in the row "Observations." Outcome: Intention of voting for the Democrat in the 2022 congressional elections. Main independent variables are objective and subjective measures of inflation. Republican ID is the baseline category.

Table B.2: Perception of inflation and partisanship

	(1)	(2)
	OLS	
	Inflation (personal)	Inflation (community)
Democratic ID	0.052	-0.003
	(0.054)	(0.048)
Independent ID	-0.017	-0.081***
	(0.040)	(0.030)
Education	-0.003	-0.013
	(0.009)	(0.009)
Employment	-0.004	-0.001
	(0.007)	(0.007)
Female voter	0.133***	0.085***
	(0.031)	(0.029)
Income	-0.001	-0.001
	(0.001)	(0.001)
Biden's approval	-0.294***	-0.286***
11	(0.048)	(0.040)
Financial situation	0.029**	0.016
	(0.014)	(0.013)
Unemployment	-0.015	-0.025**
1 ,	(0.013)	(0.011)
Against abortion	0.026	0.010
C	(0.017)	(0.018)
Constant	-1.884***	-2.340***
	(0.144)	(0.122)
County fixed effects	Yes	Yes
Observations	1,953	1,953
R-squared	0.225	0.214

Note: The sample is reported in the row "Observations." Outcomes: 1) Over the past year, have the prices of things you buy generally increased, decreased or stayed about the same? (Model 1) 2) How much of a problem is inflation in the U.S. as a whole? (Model 2). Republican ID is the baseline category. Respondents who answer "something else" to the party ID question are dropped.

Table B.3: Individual-level Analysis: By Party ID

	(1)	(2)	(3)
•	` ′	OLS	` ′
•		Pr(Dem=1)	
	Republican sample	Democratic sample	Independent sample
Rent	-0.003	-0.010	0.116**
TON	(0.021)	(0.017)	(0.046)
Commuting	-0.009	-0.010	-0.058
Commuting	(0.022)	(0.018)	(0.042)
Inflation (personal)	-0.035	-0.016	-0.121**
initiation (personal)	(0.028)	(0.018)	(0.050)
Inflation (community)	-0.026	-0.029*	-0.056
initiation (community)	(0.031)	(0.017)	(0.042)
Education	-0.003	-0.000	0.008
Eddeanon	(0.005)	(0.005)	(0.013)
Employment	0.009	0.003*	0.009
Employment	(0.006)	(0.002)	(0.010)
Gender	-0.031	0.020	0.074
Gender	(0.024)	(0.020)	(0.047)
Income	-0.001**	0.000	0.002*
meome	(0.000)	(0.000)	(0.001)
Biden's Approval	0.265***	0.078**	0.560***
Biden's Approvai	(0.068)	(0.035)	(0.068)
Financial Situation	0.012	0.007	0.015
i maneiai Situation	(0.011)	(0.007)	(0.022)
Unemployment (national)	0.001	0.007)	0.017
Onemployment (national)	(0.011)	(0.005)	(0.022)
Against Abortion	-0.048***	-0.006	-0.090***
Against Abortion	(0.013)	(0.015)	(0.025)
Constant	0.595***	0.912***	1.020***
Constant	(0.171)	(0.108)	(0.231)
	(0.171)	(0.100)	(0.231)
County fixed effects	Yes	Yes	Yes
Observations	541	560	343
R-squared	0.352	0.215	0.672

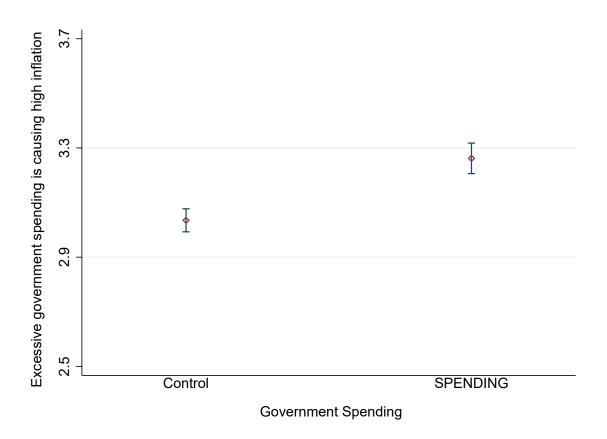
Note: The sample is reported in the row "Observations." Outcome: Intention of voting for the Democrat in the 2022 congressional elections (Model 1). Main independent variables are objective and subjective measures of inflation. Sub-samples by party identification: Republicans, Democrats, and Independents.

C Appendix C: Experimental Analysis

To check the strength of our treatments, we asked the following manipulation questions to all respondents in both the treated and control groups:

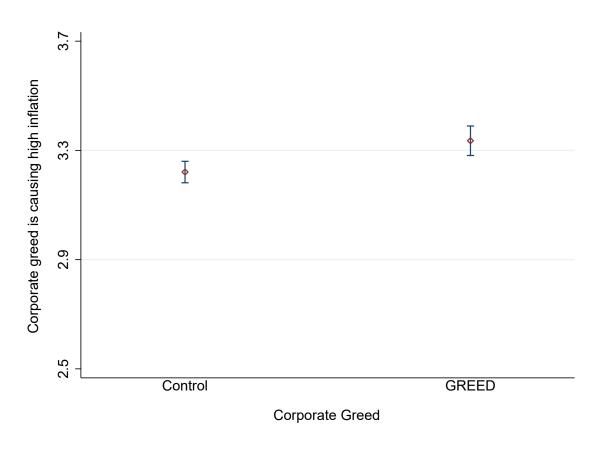
- 1. "To what extent do you think excessive government spending/corporate greed is causing high inflation in the US?" a) A great deal (4); b) A fair amount (3); c) Not much (2); d) Not at all (1) (results in Figure C.1 (left)).
- 2. "Which of the following statements comes closest to describing your view?" a) Excessive government spending/corporate greed is THE major reason that inflation is high (4); b) Excessive government spending/corporate greed is one of several reasons that inflation is high (3); c) Excessive government spending/corporate greed is only a very minor reason that inflation is high (2); d) Government spending/corporate greed has no effects on inflation (1) (results in Figure C.1 (right)).

Figure C.1: Manipulation Test (SPENDING)



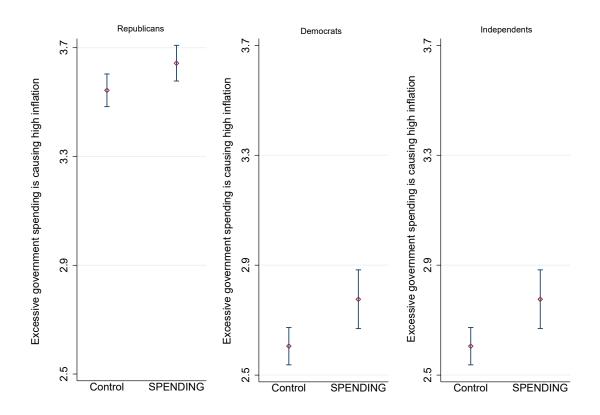
Note: Sample: 2,006 respondents. Outcome: "To what extent do you think excessive government spending is causing high inflation in the US?" (Not at all (1); Not much (2); A fair amount (3); A great deal (4)). 95% C.I.

Figure C.2: Manipulation Test (GREED)



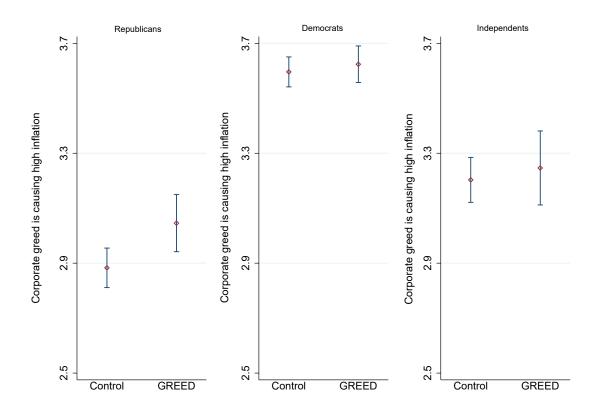
Note: Sample: 2,006 respondents. Outcome: "To what extent do you think corporate greed is causing high inflation in the US?" (Not at all (1); Not much (2); A fair amount (3); A great deal (4)). 95% C.I.

Figure C.3: Manipulation Test by party ID (SPENDING)



Note: Sample: 2,006 respondents. Outcome: "To what extent do you think excessive government spending is causing high inflation in the US?" (Not at all (1); Not much (2); A fair amount (3); A great deal (4)). 95% C.I.

Figure C.4: Manipulation Test by party ID (GREED)



Note: Sample: 2,006 respondents. Outcome: "To what extent do you think corporate greed is causing high inflation in the US?" (Not at all (1); Not much (2); A fair amount (3); A great deal (4)). 95% C.I.

Table C.1: Experimental Analysis: By Party ID

	OLS			
	Republican sample	Democratic sample	Independent sample	
	(1)	(2)	(3)	
		Pr(Dem=1)	. ,	
SPENDING	0.004	0.007	-0.155***	
	(0.021)	(0.015)	(0.056)	
GREED	-0.000	-0.005	-0.090	
	(0.021)	(0.016)	(0.058)	
Constant	0.046***	0.972***	0.562***	
	(0.015)	(0.011)	(0.040)	
Observations	633	648	457	
	(4)	(5)	(6)	
		Approve Dem in Congre	ess	
SPENDING	0.039	-0.047	-0.251***	
DI LINDING	(0.078)	(0.074)	(0.088)	
GREED	-0.010	0.050	-0.125	
GILLED	(0.078)	(0.068)	(0.095)	
Constant	1.463***	3.022***	2.093***	
Constant	(0.057)	(0.053)	(0.065)	
Observations	665	670	620	
Observations	665	679 (8)	620	
	(/)	(7) (8) (9) Approve Rep in Congress		
SPENDING	0.141*	-0.046	-0.042	
SI ENDING	(0.079)	(0.077)	(0.081)	
GREED	0.026	0.029	-0.060	
GKEED	(0.088)	(0.075)	(0.084)	
Constant	2.668***	1.636***	2.023***	
Constant	(0.061)	(0.054)	(0.058)	
	(0.001)	(0.054)	(0.030)	
Observations	665	679	620	
	(10)	(11)	(12)	
	Re	p Better at Handling Inf	lation	
SPENDING	-0.071	-0.193**	0.148	
	(0.063)	(0.086)	(0.104)	
GREED	-0.162**	-0.134	-0.057	
	(0.069)	(0.084)	(0.107)	
Constant	3.561***	1.728***	2.505***	
	(0.045)	(0.064)	(0.075)	
Observations	665	679	620	

Note: OLS regression with robust standard errors. The dependent variables capture voting behaviour, approval for Democrats and Republicans in Congress, and assessment of how parties handle inflation. SPEENDING and GREED are the two treatments. Sub-samples by party identification: Republicans, Democrats, and Independents.

D Appendix E: Full Survey

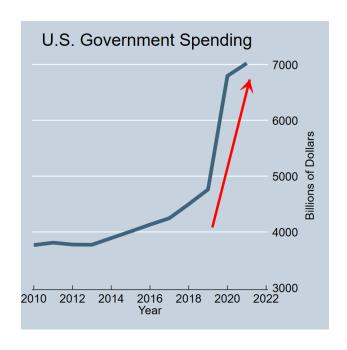
- 1. Do you rent or own the residence in which you live?
 - Rent
 - Own
- 2. Approximately how much time do you spend driving to work per day (roundtrip)?
 - 0-30 minutes
 - 30-60 minutes
 - 60-90 minutes
 - Greater than 90 minutes
 - I work from home
 - I commute but I do not drive
- 3. We are interested in how people are getting along financially these days. Would you say that you and your family living here are better off, worse off, or just about the same financially as you were a year ago?
 - A lot better off
 - A little better off
 - A little worse off
 - A lot worse off
 - Just about the same
- 4. Over the past year, has unemployment increased, decreased or stayed about the same?
 - Increased a lot
 - Increased a little
 - Staved about the same
 - Decreased a little
 - Decreased a lot
- 5. How satisfied are you with government regulation of businesses and industries in the US?
 - very satisfied
 - somewhat satisfied
 - somewhat dissatisfied
 - very dissatisfied
- 6. Where would you rate yourself on a scale of 1 to 5, where 1 means you think the government should do only those things necessary to provide the most basic government functions, and 5 means you think the government should take active steps in every area it can to try and improve the lives of its citizens? [1/2/3/4/5]
- 7. Do you think abortion should be legal in all cases, legal in most cases, illegal in most cases, or illegal in all cases?
 - Legal in all cases
 - Legal in most cases

- Illegal in most cases
- Illegal in all cases
- 8. For which candidate did you vote in **the November 2020 presidential election**?
 - Donald Trump
 - Joe Biden
 - Other candidate.
 - I did not vote in the November 2020 presidential election
- 9. For which party did you vote in **the November 2018 mid-term election**? [1,4]
 - Republican Party
 - Democratic Party
 - Independent
 - I did not vote in the November 2018 mid-term election
- 10. Do you approve or disapprove of the way President Joe Biden is handling his job as president?
 - Approve
 - Disapprove
- 11. Over the past year, have the prices of things you buy generally increased, decreased or stayed about the same?
 - Increased a lot
 - Increased a little
 - Stayed about the same
 - Decreased a little
 - Decreased a lot
- 12. To what degree have you decreased spending as a result of inflation?
 - A great deal
 - Somewhat
 - Not much
 - Not at all
- 13. How much of a problem is inflation in the US as a whole?
 - A very big problem
 - A moderately big problem
 - A small problem
 - Not a problem at all
- 14. Inflation in your local community is ...
 - A very big problem
 - A moderately big problem
 - A small problem
 - Not a problem at all
- 15. The negative impact of inflation in your local community been ...
 - Much more severe than in the nation as a whole

- Somewhat more severe than in the nation as a whole
- Somewhat less severe than in the nation as a whole
- Much less severe than in the nation as a whole
- Don't know/Not sure
- 16. Who has the greatest ability to control rising prices in order to reduce inflation in the United States?
 - The President
 - Congress
 - The Federal Reserve
 - Businesses and corporations
 - Consumers

[INSERT TREATMENTS HERE.]

Figure D.5: TREATMENT 1: Government spending



Note: "Government spending has skyrocketed. Many [OWN PARTY] agree that excessive government spending has caused inflation by increasing the national debt."

[POST TREATMENT QUESTIONS]

- 17. How likely is it that you will vote in the November 2022 congressional elections?
 - Definitely will vote
 - Probably will vote
 - Might vote
 - Probably will not vote
 - Definitely will not vote
- 18. If an election for US Congress were being held today, who would you vote for in the district where you live?

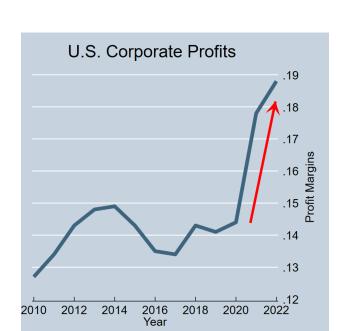


Figure D.6: TREATMENT 2: Corporate profits

Note: "Corporate profits have skyrocketed because corporations have raised prices. Many [OWN PARTY] agree that excessive corporate profits caused inflation."

- The Republican Party candidate
- The Democratic Party candidate
- Other
- I would not vote
- 19. Do you happen to know the political party of the US congressional representative currently representing your district?
 - Republican
 - Democrat
 - Uncertain
- 20. Do you approve or disapprove of the way Democrats in Congress are handling inflation?
 - Approve strongly
 - Approve somewhat
 - Disapprove somewhat
 - Disapprove strongly
- 21. Do you approve or disapprove of the way Republicans in Congress are handling inflation?
 - Approve strongly
 - Approve somewhat
 - Disapprove somewhat
 - Disapprove strongly

- 22. Do you agree or disagree with the following statement: Republicans would be better at handling inflation than Democrats.
 - Strongly agree
 - Agree somewhat
 - Disagree somewhat
 - Strongly disagree
- 23. To what extent do you think excessive government spending is causing high inflation in the US?
 - A great deal
 - A fair amount
 - Not much
 - Not at all
- 24. Which of the following statements comes closest to describing your view?
 - Excessive government spending is THE major reason that inflation is high.
 - Excessive government spending is one of several reasons that inflation is high.
 - Excessive government spending is only a very minor reason that inflation is high.
 - Government spending has no effects on inflation.
- 25. To what extent do you think corporate greed is causing high inflation in the US?
 - A great deal
 - A fair amount
 - Not much
 - Not at all
- 26. Which of the following statements comes closest to describing your view?
 - Corporate greed is THE major reason that inflation is high.
 - Corporate greed is one of several reasons that inflation is high.
 - Corporate greed is only a very minor reason that inflation is high.
 - Corporate greed has no effects on inflation.

E Appendix F: Information about the Survey Experiment

Our research adheres to the APSA Principles and Guidance for Human Subjects Research, and has received ethics clearance from the Research Ethics Board of [anonymized information] (REB File #: 22-06-055).

We conducted our original survey with Forthright. The sample was drawn from an online panel that panel operates on a voluntary basis, meaning that members have the option to join and participate. In addition, participants in the study provided their consent after completing a registration process that required them to opt-in twice. This process ensures that the participants are genuinely interested in taking part in the study and that their data is collected in a manner consistent with ethical and legal guidelines, and according to Forthright privacy policies, which are described in further detail here: https://www.beforthright.com/privacy.

The study did not involve at-risk or vulnerable populations. Our sample is representative (in terms of age, sex, region, and employment status) of the US adult population. The study did not use deception. The study did not interfere with the political process. The sample is relatively small, and we checked close districts and confirmed that our study could not have affected the results. The study protects the confidentiality of the respondents. We did not collect data that would make the respondents identifiable.

Forthright compensated the respondents for their time. Each survey participant received \$1 for their answers, which represents approximately 32% of the fee we paid to Forthright for them to conduct the survey. This payment is in line with what other similar platforms offer to respondents.