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Partisan Perspectives on Inflation: Exploring Bias in Economic Expectations

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Abstract

Inflation expectations are important determinants of future inflation and individual consumer behavior. Recent attention has been devoted to individual-level heterogeneity in inflation expectations. I consider political partisanship as a source of heterogeneity and question whether expectations are biased by partisanship. I find that they are, i.e., that individuals from the president's political party expect lower inflation relative to members of the opposing party (this difference is statistically insignificant during the Bush presidency), and that this result cannot be explained by additional sources of heterogeneity. I also examine whether belonging to the president's political party affects the rationality of expectations and find, first, that individuals from the president's political party base their expectations more closely on CPI relative to the opposing party (although this difference is too small to be statistically distinguishable during the Bush and Biden administrations), and second, that members of the president's party have more accurate expectations.

1 Introduction

Inflation expectations are an important factor in monetary policy decisions. Firm's inflation expectations affect investment, hiring, and price-setting (Coibion, Gorodnichenko, and Kumar 2018), while consumers' expectations are relevant for consumption, saving, financing, and labor supply decisions (Andrade, Gautier, and Mengus 2020; Duca-Radu, Kenny, and Reuter 2021). Through these channels, expected inflation is seen as a key driver of actual inflation, though some economists critique the theoretical and empirical basis for this belief (Rudd 2021). Regardless, many central banks track inflation expectations to ensure they remain well-anchored, and attempt to influence them through conventional monetary policy (the setting of short-term interest rates) and central bank communication.

In the United States, the University of Michigan Surveys of Consumers have tracked individual-level inflation expectations since 1978. Though inflation expectations are often taken at the aggregate level in policy analysis and macroeconomic modeling, these micro-data demonstrate that individuals are widely divergent in their expectations (see Figure 1), generating interest in individual-level heterogeneity.

Figure 1: Interquartile Range of Inflation Expectations
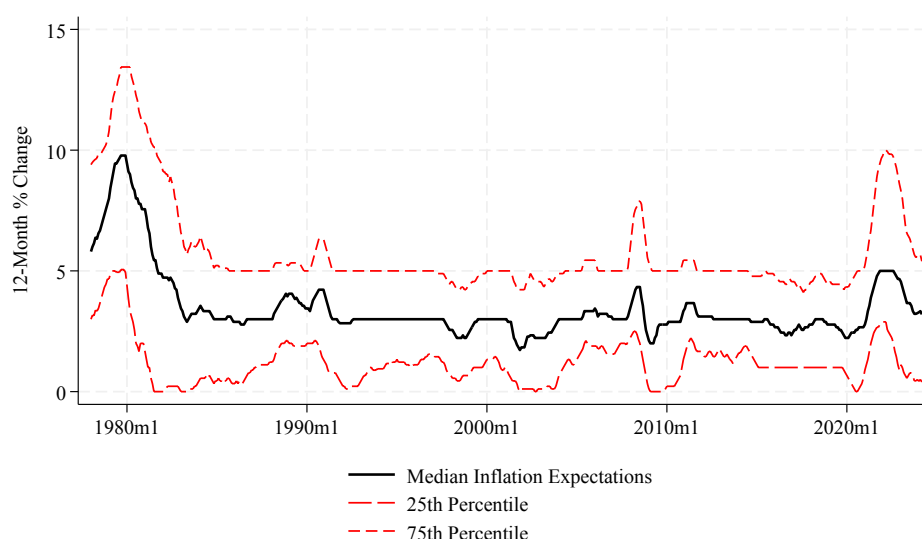
Notes: Expectations data come from the University of Michigan Surveys of Consumers and are recorded in 12-month percent change from January 1978 to March 2024. Median expectations are plotted along with the 25th and 75th percentiles.

A recently growing body of literature suggests that individual experiences influence inflation expectation formation - a significant departure from the theoretical assumption that expectations draw from objective evaluations of the economy ("full information rational expectations"). Macroeconomic modeling literature has demonstrated that heterogeneity in consumer expectations can generate over-investment in real assets (Sims 2009) impact the economy's vulnerability to exogenous shocks (Badarinza and Buchmann 2011), and make shocks more persistent (Pedemonte, Toma, and Verdugo 2023).

In this paper, I consider partisan affiliation as a source of individual-level heterogeneity. The relationship between political partisanship and inflation expectations (and, more generally, evaluations of the economy) is explored in literature investigating polarization and partisan bias in economic perceptions (both retrospective and prospective) and the implications of such bias (Ladner and Wlezien 2007; Gerber and Huber 2010; McGrath 2017; Gillitzer and Prasad 2018; Bachmann et al. 2021; Gillitzer, Prasad, and Robinson 2021; Mian, Sufi, and Khoshkhou 2023). In the case of this literature, partisan bias is present when perceptions/expectations are polarized in such a way that Democrats and Republicans demonstrate favoritism towards their respective party, i.e., individuals from the president's political party perceive the same economic information more favorably than individuals from the opposing political party.

My paper examines a specific and timely case – whether inflation expectations in the United States are biased by political partisanship. I hypothesize that they are, i.e., that individuals expect lower inflation when they belong to the president's political party relative to opposition party supporters.[1] I also consider whether politically aligned individuals exhibit more rational expectations.[2]

Using monthly, repeated cross-sectional data from the University of Michigan Surveys of Consumers, I find that individuals from the president's political party expect lower inflation on average, than individuals from the opposing party (this difference is statistically insignificant during the Bush administration), and that this result cannot be

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1. This characterization implies that individuals associate lower inflation with more positive macroeconomic outcomes, which is consistent with Bachmann et al. 2021 and Gillitzer, Prasad, and Robinson 2021.

2. This is motivated by the finding from Bachmann et al. 2021 that voters' misperceptions of economic conditions decline when the president belongs to the party that voters support.

explained by previously documented sources of heterogeneity in inflation expectations,[3] homeownership status, or regional variation in inflation (both constant and time-varying). Individuals from the president's political party have expectations that are closer to current inflation, though this effect is statistically indistinguishable during the Bush and Biden administrations. Expectations more accurately predict inflation for individuals belonging to the president's political party across all administrations. These results lead me to conclude that inflation expectations are biased by political partisanship, but that the relationship between partisan bias and rationality is unclear.

The paper proceeds as follows. Section 2 provides a review of the aforementioned empirical literature on partisan bias in economic perceptions and expectations. Section 3 describes the data, Section 4 explains the empirical strategy, and Section 5 presents results and robustness checks. I discuss the implications of these results, identify limitations, and make suggestions for future research in Section 6.

2   Literature Review

Much research evaluating partisan bias in economic perceptions and expectations considers how evaluations of the economy change around the time of a presidential election (Ladner and Wlezien 2007; Gerber and Huber 2010; McGrath 2017; Gillitzer and Prasad 2018; Mian, Sufi, and Khoshkhou 2023). Ladner and Wlezien 2007 find that in the U.S. and the United Kingdom, individuals who believe their preferred party will win an election are more optimistic about the economy than those who believe their party will lose. They argue that economic expectations do depend on retrospective economic perceptions (expectations are "rational") but that both expectations and retrospective perceptions reflect political preferences. Gerber and Huber 2010 measure changes in economic assessments in the United States after the 2006 unanticipated Democratic takeover of Congress. They find that individuals revise their expectations immediately following the election with Democrats evaluating the economy more positively, and Republicans evaluating the

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3. These include gender (Bruine de Bruin et al. 2010, Madeira and Zafar 2015, Binder 2017), income (Bruine de Bruin et al. 2010, Binder 2017), marital status (Bruine de Bruin et al. 2010), education level (Bruine de Bruin et al. 2010, Madeira and Zafar 2015, Binder 2017), age (Malmendier and Nagel 2016), and stock-market investment behavior (Binder 2017).

economy more negatively (relative to their prior expectations and one another).

Gerber and Huber 2010 also find that individuals revise their reported spending intentions in ways that reflect their relative optimism. This is bolstered by their 2009 findings that consumption change (measured using county-level quarterly taxable sales) following a presidential election is correlated with a county's partisan complexion (Gerber and Huber 2009). Gillitzer and Prasad 2018 demonstrate that in Australia, supporters of the winning party after an election are substantially more optimistic about the economy than supporters of the opposite party. They find that shifts in economic sentiment affect reported spending intentions and that these intentions are indicative of actual spending.

That this "sentiment" (economic and/or political) is related to economic behavior has been repeatedly demonstrated. Benhabib and Spiegel 2019 instrument for state-level sentiments in the U.S. by positing that states with a higher share of congressmen from the political party of the incumbent president will be more optimistic. They find a positive relationship between sentiment and future state economic activity. McConnell et al. 2018 and Biolsi and Lebedinsky 2021 demonstrate that a similar relationship exists at the individual level. Claus and Nguyen 2023 find that in Australia, individual changes in economic optimism affect savings and borrowing, but that when this optimism is misplaced (i.e., not reflective of eventual improvements in personal financial situations), individuals decrease borrowing, putting downward pressure on consumption growth.

Mian, Sufi, and Khoshkhou 2023 find no relationship between economic optimism and individual behavior. Using data from the University of Michigan Surveys of Consumers, they find that individuals in the U.S. perceive future economic conditions more optimistically when they are politically aligned with the incumbent president and that this tendency has increased over time but has no impact on spending. Potentially related is the result from McGrath 2017 that findings from Gerber and Huber 2009 do not hold with the inclusion of data from two additional elections.

In the papers closest to my own, Bachmann et al. 2021 and Gillitzer, Prasad, and Robinson 2021 examine partisan bias in inflation expectations. Bachmann et al. 2021 use individual-level inflation expectations from the New York Fed Survey of Consumer Expectations from June 2013 to June 2018. They find that individuals in Democrat-dominated

states expect lower inflation under Obama than individuals in Republican-dominated states and that this switches when Trump is elected, though the statistical significance of these results varies depending on the time frame considered and the classification strategy utilized for Democratic/Republican states.

Gillitzer, Prasad, and Robinson 2021 show that individuals in the U.S. and Australia expect lower inflation when their political party aligns with the president's/prime minister's. They use U.S. individual-level inflation expectations and political affiliation from the University of Michigan Surveys of Consumers to cover the 2008 and 2016 presidential elections, while data surrounding the 2012 election come from RAND Corporation's American Life Panel. They demonstrate that their findings cannot be explained by other sources of heterogeneity in consumer inflation expectations and defend the assertion that consumers associate low inflation with good economic conditions by showing that individuals who are politically aligned with the president expect better economic outcomes across a range of other macroeconomic indicators.

I further the contributions of Bachmann et al. 2021 and Gillitzer, Prasad, and Robinson 2021 by examining whether inflation expectations are biased by partisanship beyond 2018, uniquely capturing the Biden administration, COVID-19 pandemic and ensuing elevated inflation. I demonstrate that results are robust to the inclusion of an additional confounding variable: whether or not an individual owns stocks,[4] and demonstrate that results cannot be explained by time-varying differences in regional inflation. Finally, I perform tests of expectation rationality by examining whether belonging to the president's political party is associated with expectations that are closer to current inflation and/or more accurately predict future inflation.

3 Data Description

Data on inflation expectations and partisan affiliation come from the Surveys of Consumers conducted by the University of Michigan. Surveys are conducted on a nationally-

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4. Binder 2017 find that stock market investors are more certain in their inflation expectations and, thus, demonstrate greater willingness to spend on durable goods. Republicans are slightly more likely than Democrats to invest in the stock market. In the University of Michigan Surveys of Consumers data, 72% of Republicans own stocks compared to 69% of Democrats. (Gallup independently reports this as 66% of Republicans and 64% of Democrats in 2023) (Gallup 2023).

representative random sample of about 600 individuals monthly. On average, two thirds of the individuals surveyed each month are new respondents, while the remaining third is being interviewed for the second time (six months from their previous interview). Due to limited political affiliation data, I do not use the panel structure of the data. As a result, the sample is a monthly repeated cross-section. The individual-level data are available from 1978, but I only consider September 2006 to March 2024, again due to limited partisan affiliation data.[5] My sample contains 61,325 surveyed individuals across 120 months.

The survey includes the following question: "During the next 12 months, do you think that prices in general will go up, or go down, or stay where they are now?" This question probes an individual's understanding of the presence of inflation.[6] The next question asks, "By about what percent do you expect prices to go (up/down) on the average, during the next 12 months?" Answers to this question are my chosen measure of inflation expectations, summarized in Table 1.

Table 1: Summary Statistics of Expectations and CPI

	Mean	Median	SD	Min	Max	N
Inflation Expectations	4.14	3.00	5.99	-50.00	50.00	61325.00
CPI	3.04	2.26	2.31	-1.23	8.99	61325.00

Notes: Inflation expectations and CPI are recorded in 12-month percent change from September 2006 to March 2024. Expectations data come from the University of Michigan Surveys of Consumers, while inflation rates come from BLS, accessed through FRED. A t-test confirms that the means are different from one another with greater than 99% confidence.

Data on inflation (Consumer Price Index [CPI] for all urban consumers) come from the U.S. Bureau of Labor Statistics (BLS), accessed through the Federal Reserve Bank of St. Louis (FRED).[7] Data are recorded monthly in 12-month percent change from September

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5. Within this time period, the survey asked about partisan affiliation in these months: September-November 2006, March-June 2008, September 2008-June 2009, March-May 2010, September-November 2010, April-May 2012, September-November 2012, June 2014, June 2015, June-October 2016, and all months following February 2017.

6. Individuals who answer that prices will stay the same are probed with this question: "Do you mean that prices will go up at the same rate as now, or that prices in general will not go up during the next 12 months?" Individuals who still answer that prices will not go up are recorded as expecting 0% inflation. Individuals who self-correct and report that prices will go up at the same rate as now (expect inflation to be positive but constant) are then asked by what percent they expect prices to change, and this answer is recorded as their inflation expectation.

7. In what follows, I use "CPI" and "inflation" interchangeably. Because CPI is measured in 12-month percent change, observations are monthly U.S. average inflation rates.

2006 to March 2024. These data, alongside expectations data, are summarized in Table 1 and plotted in Figure 2.[8] Expectations of inflation are, on average, higher than CPI by 1.1 percentage points, and a t-test confirms this difference at the 1% significance level. As seen in Figure 2, CPI only surpasses expectations in September 2009 and October 2021 through February 2023. The range of expectations is significantly wider and demonstrates that extreme values exist in the data, which is also apparent in the density distribution plots (Figures 3 and 4).[9]
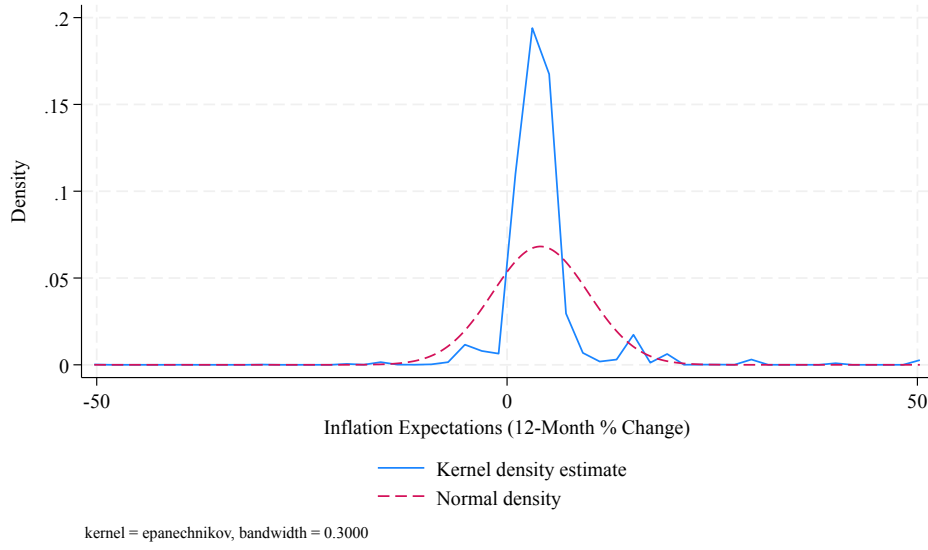
Figure 2: Inflation Expectations and CPI
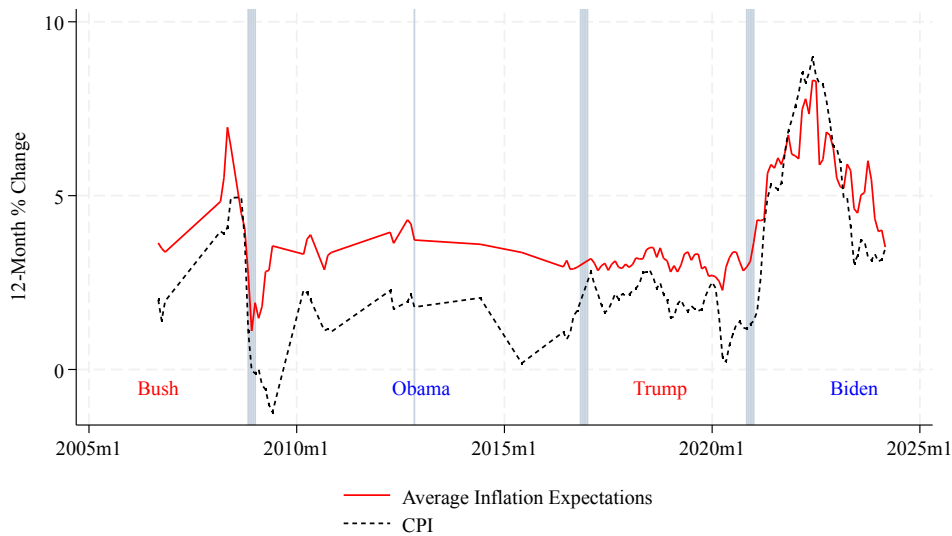
Notes: Inflation expectation data come from the University of Michigan Surveys of Consumers and are plotted as monthly averages of all individuals who have recorded political affiliation information (though this could be "independent"). Data is missing for select months 2006-2017 (see footnote 5). Vertical grey bars mark November-January of a presidential election year (in years when the president's political party switched) while the vertical grey line at November 2012 marks Obama's re-election. Labels at the bottom indicate the president in office. CPI data come from BLS, accessed through FRED. Both variables are recorded in 12-month percent change.

With regard to partisanship, surveyed individuals are asked "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent or what?" My analysis compares inflation expectations between Democrats and Republicans only,

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8. At each time t, CPI is recorded as a percent change relative to the past 12 months, while average expectations recorded at each time t refer to expected percent change over the next 12 months.

9. I do not remove these extreme values from my analysis. It is unlikely that they represent errors in the data collection process as interviewers are instructed to probe all unusually large responses and data processing procedures ensure that all values are transcribed correctly. There is a risk that these improbably small or large values indicate misunderstanding of the question, but they may also contain important information (individuals do expect very high inflation or are highly uncertain in their expectations).

Figure 3: Kernel Density of Inflation Expectations

kernel = epanechnikov, bandwidth = 0.3000

Notes: Inflation expectations data come from the University of Michigan Surveys of Consumers and are recorded in 12-month percent change from September 2006 to March 2024. Expectations are concentrated around their mean of 4.06. Extreme values of -50% expected inflation and 50% are present in the data. As noted in footnote 9, I do not remove these extreme values from my analysis. The normal density distribution is plotted for reference.

Figure 4: Kernel Density of CPI

kernel = epanechnikov, bandwidth = 0.2000
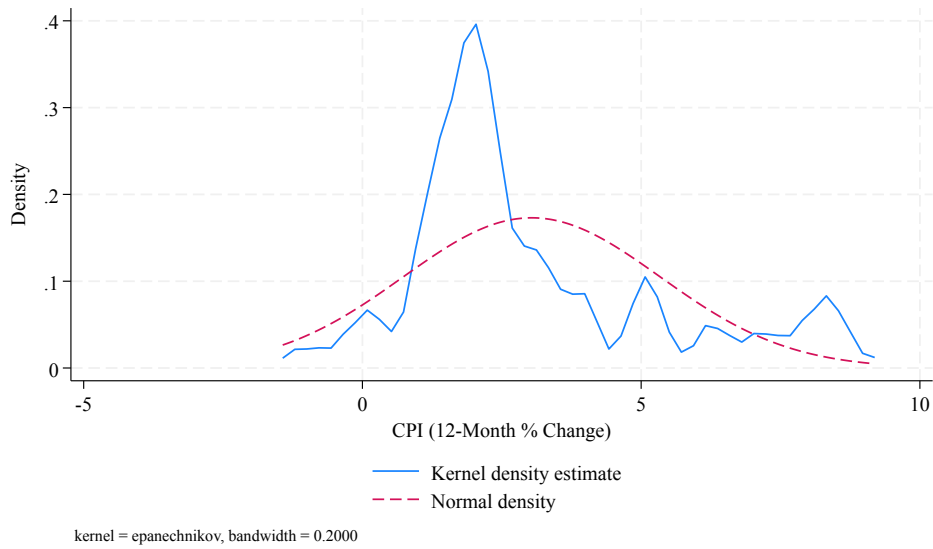
Notes: CPI data come from BLS, accessed through FRED, and are recorded in 12-month percent change from September 2006 to March 2024. CPI is concentrated around its mean of 3.03. The normal density distribution is plotted for reference.

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although independents are included in average inflation expectations. Table 2 compares inflation expectations and demographic characteristics between the two parties. Republicans expect higher inflation on average than Democrats, though both have a median expectation of 3.2% inflation. Regarding other demographic characteristics, on average, Republicans are older and have higher incomes compared to Democrats. Republicans also have a higher proportion of men, people without college degrees, married individuals, and those who own stocks and homes. Geographically, Republicans are more concentrated in the North Central and Southern regions, while Democrats are predominantly found in the Northeast and West.

Figure 5 plots average monthly inflation expectations for Democrats and Republicans from September 2006 to March 2024. On average, in years when the president is a Republican, Democrats expect higher inflation than Republicans do. On the other hand, when the president is a Democrat, Republicans expect higher inflation. Democrats and Republicans appear to revise their expectations according to party lines close to elections. These observations motivate my analysis, especially given the finding from Blinder and Watson 2016 that there is no statistically significant difference in inflation under Democrat and Republican presidents from 1945-2013 (Gillitzer, Prasad, and Robinson 2021 extend this through 2016). As a result, there is no obvious "rational" explanation for these revisions.

4   Empirical Strategy

To assess whether inflation expectations are biased by partisanship, I estimate the following model by Ordinary Least Squares (OLS), initially without the inclusion of controls and fixed-effects:

$$\pi_{i,t}^e = \beta_0 + \beta_1 Dem_i + \beta_2 Pres_j + \beta_3 Dem_i Pres_j + C_i \gamma + \alpha_r + \epsilon_{i,t} \tag{1}$$

where $\pi_{i,t}^e$ represents individual-level year-ahead inflation expectations at time t in 12-month percent change; Dem_i is a binary variable indicating that an individual is a democrat; $Pres_j$ is a set of binary variables indicating which president is in office (Bush serves

Table 2: Expectations and Demographics by Political Party

	Republican	Democrat
Inflation Expectations (Mean)	4.40	3.53
	(6.36)	(5.26)
Inflation Expectations (Median)	3.20	3.20
	(1.09)	(1.08)
Age	54.15	51.42
	(16.59)	(17.29)
Household Income	105568.20	102643.85
	(91253.29)	(92973.43)
Has College Degree	0.57	0.67
	(0.50)	(0.47)
Is Female	0.41	0.56
	(0.49)	(0.50)
Is Married	0.67	0.56
	(0.47)	(0.50)
Owns Stocks	0.72	0.69
	(0.45)	(0.46)
Owns Home	0.82	0.70
	(0.38)	(0.46)
Lives in North Central	0.25	0.23
	(0.43)	(0.42)
Lives in Northeast	0.14	0.19
	(0.35)	(0.39)
Lives in South	0.42	0.34
	(0.49)	(0.47)
Lives in West	0.20	0.24
	(0.40)	(0.42)

Notes: Data come from the University of Michigan Surveys of Consumers. Means are reported along with standard deviations in parentheses. Inflation expectations are recorded in 12-month percent change. Total household income is measured in current U.S. dollars. Expectations, age and income are continuous variables while all other variables are binary.

Figure 5: Inflation Expectations by Political Party
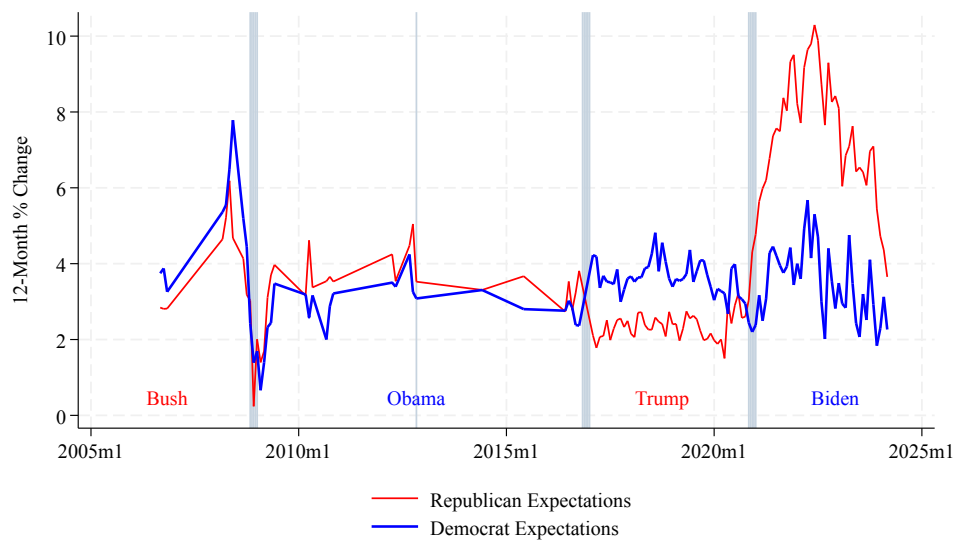
Notes: Inflation expectations come from the University of Michigan Surveys of Consumers and are recorded in 12-month percent change from September 2006 to March 2024. Here they are monthly averages disaggregated by political party. Data is missing for select months 2006-2017 due to missing political affiliation information (see footnote 9). Vertical grey bars mark November-January of a presidential election year (in years when the president's political party switched) while the vertical grey line at November 2012 marks Obama's re-election. Labels at the bottom identify the president in office.

as the reference category); C_i is a vector of demographic covariates (age, income, sex, whether or not the individual has a bachelors degree, is married, owns stocks or owns a home); and α_r are fixed effects for census regions North Central, Northeast and South (with West being the reference category).

I compare expectation rationality between individuals who belong to the president's political party and individuals from the opposing political party with two simple tests. First, in Equation (2), I am interested in how rationally informed expectations are, i.e., whether belonging to the president's political party is associated with expectations that are closer to current inflation (CPI at the time expectations were reported).

$$(\pi_t - \pi_{i,t}^e) = \beta_0 + \beta_1 Dem_i + \beta_2 Pres_j + \beta_3 Dem_i Pres_j + C_i\gamma + \alpha_r + \epsilon_{i,t} \qquad (2)$$

In Equation (3), I am interested in the accuracy of inflation expectations, i.e., whether belonging to the president's political party is associated with expectations that are closer to realized inflation (year-ahead CPI).[10]

$$(\pi_{t+12} - \pi_{i,t}^e) = \beta_0 + \beta_1 Dem_i + \beta_2 Pres_j + \beta_3 Dem_i Pres_j + C_i\gamma + \alpha_r + \epsilon_{i,t} \qquad (3)$$

In this model, expectations data become restricted to September 2006 - March 2023 because CPI data do not extend past March 2024. For a graph of expectations by political party and CPI, see Figure 10 in Appendix 2.

5 Results

5.1 Partisan Bias in Inflation Expectations

The results of the first model are provided in Table 3, where results are organized by inclusion of controls and standard error treatment. On average, individuals expect lower inflation when their political party matches the president's (when they are "politically aligned" with the president), though this difference is statistically indistinguishable during the Bush administration. Figure 6 plots these results.

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10. Survey responses collected in month t indicate an individual's expectations about month $t + 12$.

Table 3: Results: Partisan Bias in Inflation Expectations

	(1)	(2)	(3)	(4)
Democrat	0.157	0.157	-0.006	-0.006
	(0.200)	(0.131)	(0.205)	(0.186)
Obama	-0.491***	-0.491	-0.541***	-0.541
	(0.166)	(0.246)	(0.168)	(0.244)
Democrat × Obama	-0.717***	-0.717*	-0.681***	-0.681
	(0.236)	(0.252)	(0.240)	(0.315)
Trump	-1.434***	-1.434***	-1.293***	-1.293***
	(0.145)	(0.200)	(0.147)	(0.181)
Democrat × Trump	1.041***	1.041***	1.096***	1.096***
	(0.209)	(0.110)	(0.213)	(0.133)
Biden	3.989***	3.989***	4.117***	4.117***
	(0.190)	(0.263)	(0.194)	(0.262)
Democrat × Biden	-4.389***	-4.389***	-4.254***	-4.254***
	(0.257)	(0.332)	(0.262)	(0.296)
Constant	3.858***	3.858***	4.390***	4.390***
	(0.139)	(0.136)	(0.205)	(0.114)
Observations	37004	37004	35288	35288
R^2	0.082	0.082	0.097	0.097
Controls	No	No	Yes	Yes
Standard Errors	Robust	Clustered	Robust	Clustered

Notes: ***p<0.01 **p<0.05 *p<0.10. The reference category for specifications (1) and (2) is Republicans during the Bush administration. Specifications (3) and (4) include demographic controls. Specifications (1) and (3) report heteroskedasticity-robust standard errors in parentheses. Specifications (2) and (4) report regionally-clustered standard errors in parentheses. Data come from the University of Michigan Surveys of Consumers and expectations are recorded in 12-month percent change.

Figure 6: Partisan Bias in Inflation Expectations
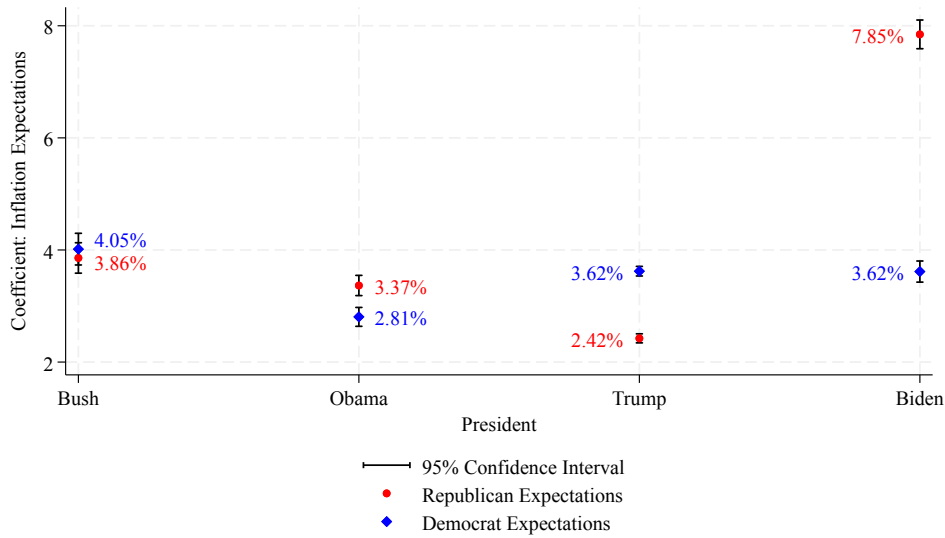
Notes: Relevant linear combinations of regression coefficients are reported for Republicans and Democrats during each administration (see Table 3 for regression results). Inflation expectations are recorded in 12-month percent change. 95% confidence intervals are shown.

The effect is strongest during the Biden and Trump presidencies - Democrats' expectations are 4.23 percentage points lower under Biden and 1.20 percentage points higher under Trump, relative to Republicans'. Results are significant at the 1% threshold with the exception of the coefficient on Democrat (the difference in inflation expectations between Democrats and Republicans when Bush is president). These results are robust to the inclusion of demographic controls and regional fixed effects, indicating that the observed effect of partisan bias on inflation expectations is not driven by age, income, education, sex, marriage status, stock and homeownership status, or time-invariant regional differences. The results are mostly robust to regional-level clustering of standard errors.

5.2 Robustness: Regional Differences

For the above result to be indicative of partisan bias, heterogeneity in actual inflation experiences must not be correlated with political preferences (Republicans and Democrats must not experience significantly different inflation rates). It is unlikely for this to be the case as the government cannot target inflation rates of different groups. However, it could be possible that Democrats and Republicans live in different regions and experience, on

average, different regional inflation. Inclusion of a region fixed effect controls for regional differences that stay constant over time. However, within-region variation in inflation over time is not controlled for, and could influence an individual's inflation expectations. To determine if this is the case, I compare inflation rates in Republican and Democrat census regions. Data on regional CPI come from BLS.

As seen in Table 2, in this sample, the North Central and South census regions have a greater share of Republicans relative to Democrats while more Democrats live in the Northeast and West. This characterization is somewhat supported by the Pew Research Center, who report that while all four census regions have a greater share of Democrats relative to Republicans, the North Central has only 4 percentage points more Democrats and the South has only 1 percentage point more (relative to 20 points more in the Northeast and 11 points more in the West) (Pew Research Center 2014).

For each president, I compare average regional inflation in regions that are politically-aligned with the president with inflation in regions not politically-aligned with the president (see Table 6 in Appendix 1). I find that under Bush and Obama, there are no statistically significant differences between inflation in Republican and Democratic regions, indicating that differences in inflation expectations shown in Figure 6 are not likely to be driven by regional differences in inflation. However, under Trump, inflation in Republican regions was lower than inflation in Democratic regions at 99% confidence, and under Biden, inflation in Democratic regions was lower than inflation in Republican regions at 90% confidence, introducing the possibility that differences in expectations under these presidents are driven by regional differences rather than partisan bias.

Notably, the magnitudes of the differences in inflation are smaller than the magnitudes of the differences in expectations. At the means, under Trump, inflation was 0.6 percentage points lower in Republican regions than in Democratic regions while Republicans expected 1.2 points lower inflation. Under Biden, inflation was 0.6 points lower in Democratic regions than Republican regions while Democrats expected 4.24 points lower inflation. Figure 9 in Appendix 1 plots regional inflation during the Trump and Biden administrations. It is evident that higher inflation in the West under Trump and lower inflation in the Northeast under Biden are driving these averages. I exclude individuals

in these regions (under each respective administration) and show that my results remain robust (see Table 7 in Appendix 1).

To further investigate whether partisan differences in inflation expectations are driven by regional differences or by partisan bias, I consider whether individuals who share the president's political party and live in regions they are not politically-aligned with (Democrats living in the North Central and South/Republicans living in the Northeast and West) still expect lower inflation than individuals from the opposing political party, and find that they do. This further indicates that results in Figure 6 are driven more by partisan bias than by regional differences in inflation.

5.3 Closeness of Expectations to CPI by Political Party

The results of the second model, which considers the effect of belonging to the president's political party on the closeness of expectations to CPI at the time expectations were reported (hereafter referred to as "closeness"), are summarized in Table 4 and Figure 7. Being politically aligned with the president is associated with greater closeness for every president in the period, although the difference is statistically insignificant during the Bush and Biden administrations. Thus, belonging to the president's political party is associated with inflation expectations that appear more rationally informed during the Obama and Trump administrations. The Democrat coefficient again lacks statistical significance while all other coefficients are significant at 99% or 95% confidence. Results are robust to the inclusion of demographic controls and regional fixed effects with the exception of the Trump binary variable coefficient, which measures the difference in inflation expectations when the President is Trump versus Bush for Republicans. The results are mostly robust across standard error treatments.

Figure 7 plots absolute value differences between CPI at time t and inflation expectations reported in that same month, where smaller "deviations from inflation" indicate greater closeness. The effect is largest in magnitude during Trump's presidency: Republicans' expectations differed from CPI by 1.2 percentage points less than Democrats'. Under Obama, Democrats' expectations differed from CPI by 0.51 percentage points less than Republicans'. The weakest effects occurred during the Bush and Biden presiden-

Table 4: Results: Closeness by Political Party

	(1)	(2)	(3)	(4)
Democrat	-0.207	-0.207	-0.035	-0.035
	(0.197)	(0.142)	(0.201)	(0.197)
Obama	-1.542***	-1.542***	-1.495***	-1.495***
	(0.165)	(0.239)	(0.167)	(0.240)
Democrat × Obama	0.720***	0.720*	0.690***	0.690
	(0.234)	(0.261)	(0.238)	(0.324)
Trump	0.344**	0.344	0.203	0.203
	(0.143)	(0.214)	(0.146)	(0.200)
Democrat × Trump	-0.988***	-0.988***	-1.048***	-1.048***
	(0.206)	(0.117)	(0.210)	(0.139)
Biden	-1.322***	-1.322**	-1.448***	-1.448**
	(0.189)	(0.246)	(0.193)	(0.254)
Democrat × Biden	4.353***	4.353***	4.215***	4.215***
	(0.255)	(0.321)	(0.260)	(0.303)
Constant	-0.877***	-0.877***	-1.418***	-1.418***
	(0.137)	(0.144)	(0.204)	(0.124)
Observations	37004	37004	35288	35288
R^2	0.061	0.061	0.078	0.078
Controls	No	No	Yes	Yes
Standard Errors	Robust	Clustered	Robust	Clustered

Notes: ***p<0.01 **p<0.05 *p<0.10. The dependent variable is $\pi_t - \pi_{i,t}^e$. The reference category for specifications (1) and (2) is Republicans during the Bush administration. Specifications (3) and (4) include demographic controls. Specifications (1) and (3) report heteroskedasticity-robust standard errors in parentheses. Specifications (2) and (4) report regionally-clustered standard errors in parentheses. Data on expectations and controls come from the University of Michigan Surveys of Consumers while CPI data come from BLS.

Figure 7: Closeness of Expectations to CPI by Political Party
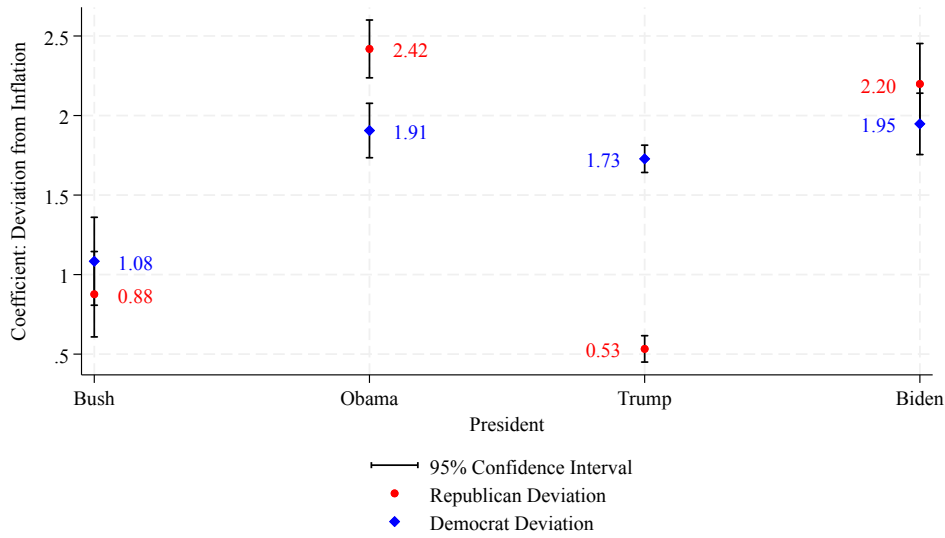
Notes: Relevant linear combinations of regression coefficients are reported for Republicans and Democrats during each administration (see Table 4 for regression results). Smaller "deviations from inflation" indicate greater closeness. Inflation expectations and CPI are recorded in 12-month percent change. 95% confidence intervals are shown.

cies: Republican's expectations differed from CPI by just 0.20 percentage points less than Democrats under Bush, while Democrats' expectations differed from CPI by just 0.25 percentage points less than Republicans' under Biden, and both differences are statistically indistinguishable (as seen in Figure 7).

5.4   Accuracy of Expectations by Political Party

Results of the third model indicate whether individuals who are politically aligned with the president have more accurate inflation expectations (see Table 5). I find that belonging to the president's political party is associated with greater accuracy under all four administrations. This result is largest in magnitude for the Trump and Bush administrations. Under Trump, Republicans were 0.95 percentage points more accurate than Democrats, while this difference was 0.78 points under Bush. The effect is weakest under Biden and Obama administrations: Democrats expectations were 0.57 and 0.51 points more accurate, respectively.

Coefficients under Bush and Obama are significant at 99% confidence, while the Democrat-Trump interaction coefficient (the additional difference in the accuracy of ex-

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Table 5: Results: Accuracy by Political Party

	(1)	(2)	(3)	(4)
Democrat	-0.770***	-0.770***	-0.562**	-0.562***
	(0.230)	(0.120)	(0.237)	(0.080)
Obama	1.304***	1.304**	1.331***	1.331**
	(0.181)	(0.280)	(0.184)	(0.278)
Democrat × Obama	1.278***	1.278***	1.186***	1.186**
	(0.264)	(0.200)	(0.270)	(0.207)
Trump	2.734***	2.734***	2.578***	2.578***
	(0.160)	(0.203)	(0.164)	(0.173)
Democrat × Trump	-0.374	-0.374***	-0.484**	-0.484***
	(0.239)	(0.052)	(0.246)	(0.018)
Biden	0.014	0.014	-0.149	-0.149
	(0.220)	(0.253)	(0.226)	(0.248)
Democrat × Biden	5.448***	5.448***	5.286***	5.286***
	(0.299)	(0.244)	(0.305)	(0.190)
Constant	-2.634***	-2.634***	-2.907***	-2.907***
	(0.154)	(0.160)	(0.220)	(0.078)
Observations	33111	33111	31570	31570
R^2	0.068	0.068	0.084	0.084
Controls	No	No	Yes	Yes
Standard Errors	Robust	Clustered	Robust	Clustered

Notes: ***p<0.01 **p<0.05 *p<0.10. The dependent variable is $\pi_{t+12} - \pi_{i,t}^e$. The reference category for specifications (1) and (2) is Republicans during the Bush administration. Specifications (3) and (4) include demographic controls. Specifications (1) and (3) report heteroskedasticity-robust standard errors in parentheses. Specifications (2) and (4) report regionally-clustered standard errors in parentheses. Data on expectations and controls come from the University of Michigan Surveys of Consumers while CPI data come from BLS.

pectations for Democrats when Trump is President relative to Republicans under Bush) and Biden binary variable coefficient (difference in expectation accuracy when the President is Biden versus Bush for Republicans) are statistically insignificant. Regardless, all coefficient linear combinations are statistically different from one another (see Figure 8). These results are robust to the inclusion of demographic controls, regional fixed effects, and across different standard error treatments.

Figure 8: Accuracy (Closeness of Expectations to Future CPI) by Political Party
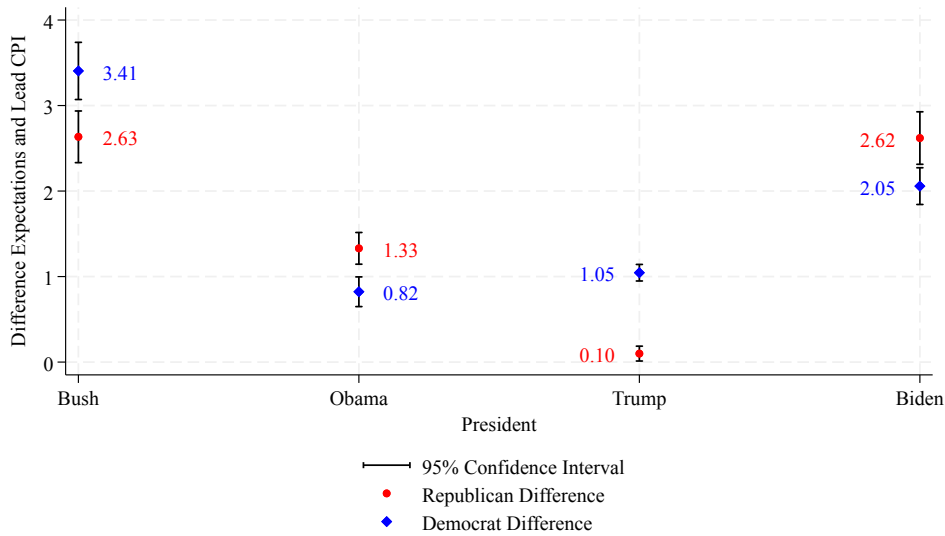
Notes: Relevant linear combinations of regression coefficients are reported for Republicans and Democrats during each administration (see Table 5 for regression results). Smaller "deviations from future/lead CPI" indicate greater accuracy. Inflation expectations and CPI are recorded in 12-month percent change. 95% confidence intervals are shown.

6 Discussion, Limitations, and Future Research

The contribution of this paper is to evaluate political partisanship as a source of heterogeneity in inflation expectations and to document the presence of partisan bias in these expectations during the Obama, Biden, and Trump presidencies. Under these administrations, individuals appear to have a simplified view of inflation, in that it will be lower ("better") when the party they support holds office. This has implications regarding the treatment of expectations in macroeconomic modeling, potential effects on consumer behavior, the salience of central bank independence for consumers, and the importance of

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effective central bank communication.

The presence of partisan bias suggests that inflation expectations are not entirely economically rational (in that they are affected by factors other than objective evaluations of the economy). This has implications for the treatment of expectations in macroeconomic models, and supports literature exploring deviations from the assumption of full information rational expectations.

A significant limitation of this paper is the inconclusive findings regarding economic rationality. My results indicate that belonging to the president's political party is associated with expectations that appear more rationally informed during the Obama and Trump administrations, and are more accurate across all administrations. However, because inflation rates in this period were, on average, lower than expectations, individuals who expect lower inflation also appear more rationally informed and accurate. This is especially evident during the Bush and Obama administrations, as seen in Figure 10 in Appendix 2. Thus, these results do not necessarily indicate that individuals think and act more rationally when they support the president in office.

As covered in Section 2, findings regarding the effect of political sentiment on actual economic activity are mixed. Future research should examine whether biased inflation expectations result in different economic behavior between Democrats and Republicans. In theory, inflation expectations affect consumption, saving, and labor supply decisions. For example, expecting higher inflation should coincide with higher willingness to spend on durable goods. Politically-biased expectations could result in irrational allocations by partisans. Examining this empirically could provide insight into whether partisan bias is indicative of genuinely different beliefs between partisans, or if individuals are demonstrating support for their preferred party by intentionally reporting more optimistic expectations.

As discussed by Gillitzer, Prasad, and Robinson 2021, partisan bias in inflation expectations implies a lack of understanding of central bank independence. This underscores the importance of effective central bank communication, especially in the context of recent high inflation. Pedemonte, Toma, and Verdugo 2023 find that high disagreement in expectations can make shocks more persistent and more memorable, thus increasing

their effect on future expectations. As a result, persistent partisan bias could exacerbate the effects of a negative shock like a high-inflationary episode. Given the high degree of political polarization under the Biden administration (in inflation expectations and independently documented), the Federal Reserve should be increasingly responsive to high inflation via conventional monetary policy and prioritize effective, bipartisan communication to decrease its tenure.

Limitations of this analysis include the lack of consistent political affiliation information in the University of Michigan Surveys of Consumers. Future research should supplement for missing months and for prior presidential administrations with alternative data sources such as the Gallup Daily Poll. Access to these data could allow for more conclusive results during the Bush administration and could reveal how partisan bias in inflation expectations has changed over time. Utilizing a panel data structure would also allow for more causal interpretation.

In lieu of panel data, future research should include a more localized geographical control if these data become available. This would demonstrate with more certainty that partisan bias in inflation expectations is irrational and not driven by heterogeneous inflation experiences between Democrats and Republicans. A future version of this paper will introduce independents to serve as a baseline of comparison, and include an additional specification across all three regression models that includes a time trend to control for additional intertemporal variation.

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Appendix 1: Robustness: Regional Differences

Table 6: Regional Inflation T-tests

	Rep Area	Dem Area	Diff. (Rep - Dem)	s.e.	obs.
Bush	2.8	3.1	-0.3	(0.5)	44
Obama	0.9	1.1	-0.2	(0.3)	88
Trump	1.6	2.2	-0.6***	(0.1)	188
Biden	5.8	5.1	0.6*	(0.4)	148

Notes: ***p<0.01 **p<0.05 *p<0.10 T-tests compare average regional inflation during each presidential administration between Republican areas (North Central and South census regions) and Democratic areas (Northeast and West census regions). Data are restricted to months contained in the inflation expectations data (see footnote 5).

Figure 9: Regional CPI under Trump and Biden
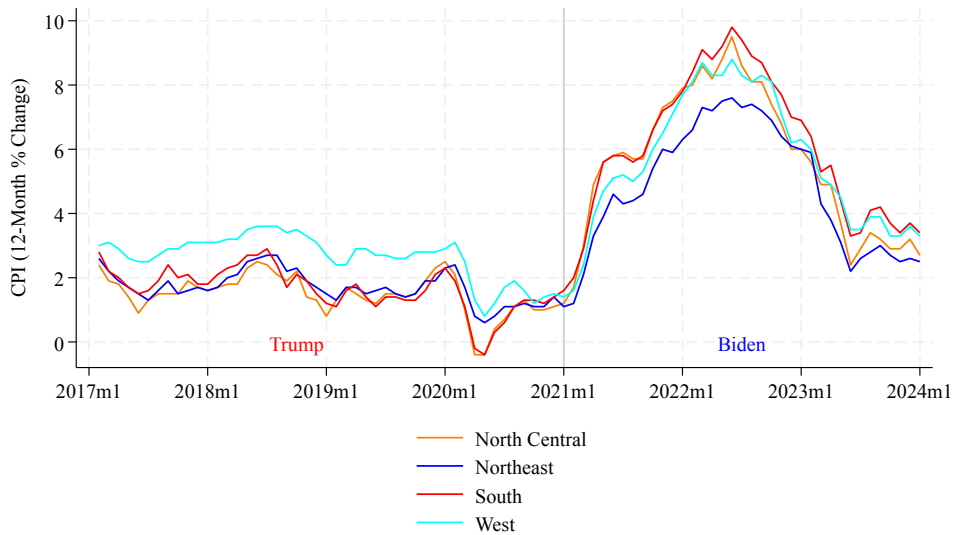
Notes: CPI is plotted by census region over time in units of 12-month percent change. The grey vertical bar indicates Biden's inauguration in January 2021. Data come from BLS.
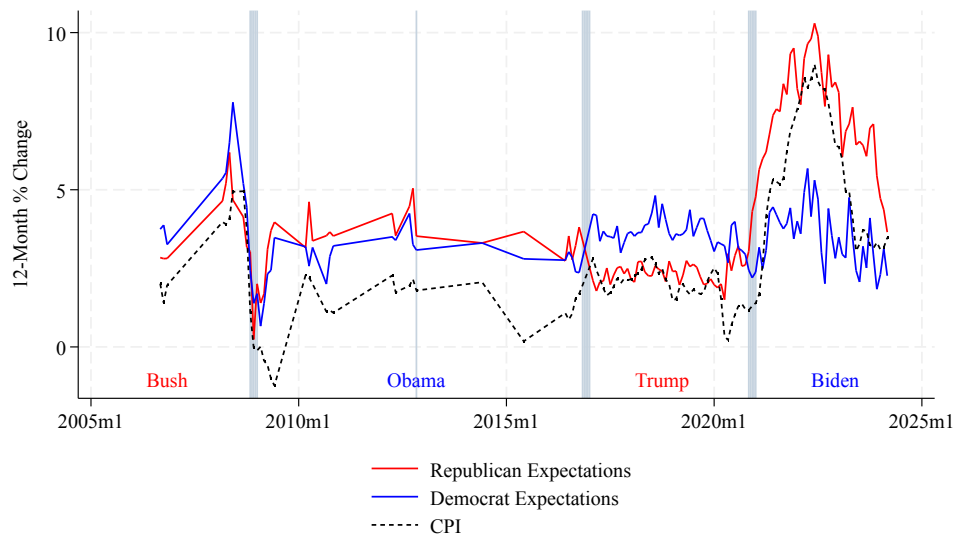
Table 7: Results: Excluding West (Trump) and Northeast (Biden)

	(1)	(2)	(3)	(4)
Democrat	0.157	0.157	-0.004	-0.004
	(0.200)	(0.131)	(0.205)	(0.190)
Obama	-0.491***	-0.491	-0.540***	-0.540
	(0.166)	(0.246)	(0.168)	(0.243)
Democrat × Obama	-0.717***	-0.717*	-0.683***	-0.683
	(0.236)	(0.252)	(0.240)	(0.317)
Trump	-1.504***	-1.504***	-1.340***	-1.340***
	(0.146)	(0.137)	(0.151)	(0.126)
Democrat × Trump	1.086***	1.086***	1.099***	1.099***
	(0.211)	(0.081)	(0.215)	(0.122)
Biden	4.050***	4.050***	4.203***	4.203***
	(0.196)	(0.238)	(0.200)	(0.227)
Democrat × Biden	-4.470***	-4.470***	-4.329***	-4.329***
	(0.266)	(0.345)	(0.270)	(0.319)
Constant	3.858***	3.858***	4.395***	4.395***
	(0.139)	(0.136)	(0.225)	(0.172)
Observations	31651	31651	30133	30133
R^2	0.085	0.085	0.102	0.102
Controls	No	No	Yes	Yes
Standard Errors	Robust	Clustered	Robust	Clustered

Notes: ***p<0.01 **p<0.05 *p<0.10 Results of regression model 1 ("Partisan Bias in Inflation Expectations") excluding individuals from the West under Trump and Northeast under Biden. The reference category for specifications (1) and (2) is Republicans during the Bush administration. Specifications (3) and (4) include demographic controls. Specifications (1) and (3) report heteroskedasticity-robust standard errors in parentheses. Specifications (2) and (4) report regionally-clustered standard errors in parentheses. Data come from the University of Michigan Surveys of Consumers and expectations are recorded in 12-month percent change.

Appendix 2: Expectations by Political Party and CPI

Figure 10: Inflation Expectations and CPI

Notes: Inflation expectation data come from the University of Michigan Surveys of Consumers and are plotted as monthly averages disaggregated by political party. Data is missing for select months 2006-2017 (see footnote 5). Vertical grey bars mark November-January of a presidential election year (in years when the president's political party switched) while the vertical grey line at November 2012 marks Obama's re-election. Labels at the bottom indicate the president in office. CPI data come from BLS, accessed through FRED. Both variables are recorded in 12-month percent change.