Seeing the Economy through Colored Glasses: Partisanship in Macro and (not in) Micro Expectations*

Kyung Woong Koh
Johns Hopkins University

Adrian Monninger
Johns Hopkins University

Tao Wang
Bank of Canada

March 20, 2025
(Preliminary Draft)

Abstract

Political views affect households' macroeconomic expectations, but personal economic circumstances and self-interested motives remain the dominant factors shaping their beliefs. Using an expanded dataset covering U.S. Presidential elections from 1992 to 2020, we show that households personal finance expectations exhibit significantly less partisan bias than their macroeconomic expectations, as households are more directly informed about their own situations. We show that households "cheerlead" for policies to be beneficial to the broader economy often not because such policies are enacted by their favored winning party, but because they expect to personally gain from them. We develop and empirically estimate a factor model of belief formation that integrates mechanisms such as partisan biases, political sentiment, and differences in belief extrapolation. Our analysis quantifies the time-varying importance of partisanship and microeconomic disparity in driving polarized views of the macroeconomy.

Keywords: Macroeconomic Expectations, Elections, Partisanship, Political Opinions
JEL Codes: E21, E71

*Koh: kkoh8@jh.edu; Monninger: amonnin1@jhu.edu; Wang: taowangeconomics@gmail.com. We thank seminar participants at Johns Hopkins for their comments. The views of this paper are those of the authors and not of their respective institutions.

1 Introduction

Political polarization has long been discussed in the public domain but was often perceived as orthogonal to macroeconomic dynamics. However, after Donald Trump won the 2016 U.S. presidential election, a growing literature has emphasized the interaction of polarization and the macroeconomy through the channel of partisanship in households' economic expectations.[1] Belief differences translate into divergent economic decisions, such as stock investments (Meeuwis et al., 2022), and have important macroeconomic consequences (Binder et al., 2024; Kuang et al., 2024). Recently, partisan bias has also been proposed to explain the unusually gloomy post-pandemic consumer sentiment unexplained by contemporaneous macroeconomic fundamentals, or the so called "viberecession"[2]

We build on the recent literature documenting sudden divergence and switch in macroeconomic expectations along partisan lines around the 2016 U.S. election. In this paper, we confirm that a wide range of expectations of different macroeconomic variables exhibit visible partisan shifts, and not only during the 2016 U.S. presidential election. Our results are twofold: first, we confirm that macroeconomic ("macro") expectations are subject to clear-cut partisan shifts. Second, and uniquely for our paper, households' perceptions and expectations about their personal finance situations, which we call "micro expectations", face much smaller or even negligible partisan shifts. We find the latter finding, novel to our paper, as intuitive and even reassuring. We would expect households to be more informed about their individual economic circumstances, and partisan attitudes cannot entirely overrule expectations of their heterogeneous and idiosyncratic circumstances.

As a preliminary demonstration of our results, we run an empirical exercise similar to Mian et al. (2021) to estimate partisan mean expectations of key labor market expectations based on county-level electoral results. We impute counties as Republican if the two-party vote share (excluding independent or third-party candidates) of Republicans is larger than those of Democrats, and vice versa. In Figure 1, we show the mean expectations of a higher nationwide unemployment rate in the next 12 months (Subfigure 1a), the perceived probability of job separation (Subfigure 1b), and the probability of job finding conditional on unemployment (Subfigure 1c).

[1] See Kamdar and Ray (2022), Mian et al. (2021), Meeuwis et al. (2022), Stantcheva (2024), and Binder et al. (2024), etc. Partisanship in consumer sentiment has been a recurring theme in the monitoring reports of the Michigan Survey of Consumer Expectations (University of Michigan, 2022, 2024) and Gallup (Evans, 2025). More strikingly, the partisan switch around political turnovers was observed in real-time the week after the 2024 U.S. election in consumer sentiment measures by Morning Consult, as reported in *New York Times*(Casselman, 2024). Examples are proliferating.

[2] See Economist (2023, 2024b,a); Burn-Murdoch (2024) for media coverage of this topic and Harris and Sojourner (2024); Bolhuis et al. (2024) for further scholarly analysis. Particularly relevant to our paper is the blog post (Cummings and Mahoney, 2023), which attributed such a pattern partly to the asymmetric partisan biases between Democrats and Republicans.

We see that partisan expectations in Figure 1, on the expectations of the nationwide unemployment rate, changed along partisan lines around the 2016 Presidential election. Shortly after Donald Trump's victory, expectations of a higher nationwide unemployment rate in Republican counties decreased, while those in Democratic counties increased. However, this partisan shift around the 2016 election did not happen with individually perceived job separation and job finding rates (Figures 1b and 1c). We provide this visual exercise as preliminary evidence that partisan shifts in expectations appear for macroeconomic variables but not microeconomic ones.

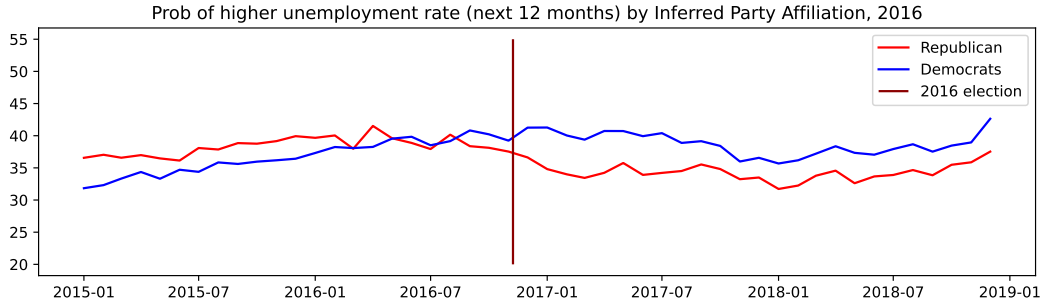
When survey respondents' political leaning is not directly observable, geographic information is used to infer that and helps to establish results like those in Mian et al. (2021) and Meeuwis et al. (2022). However, voters' political preferences vary within geographical regions and change over time. Thus, we argue that it is important to go beyond geographical information for such inference given the wide heterogeneity within regions and across time in respondents' partisan preferences. In this paper, we impute respondents' partisan preferences at the individual level, and allow them to be time-varying across election cycles. We use survey data on macro and micro expectations from both the *Survey of Consumer Expectations* by the Federal Reserve Bank of New York (henceforth SCE) and the *Survey of Consumers* by the University of Michigan (MSC). Uniquely in our paper, we also use data from the *American National Election Study* (ANES), a large-scale survey of actual and potential voters in U.S. presidential elections, from 1992 to 2020 (American National Election Studies, 2021).

We impute individual respondents' partisan affiliations (or preference) by first regressing observed demographic variables on observed political affiliation variables using the ANES data, then cross-multiplying the resulting coefficients with corresponding demographic variables from the SCE (we explain this procedure in more detail in Section 2). We find that our empirical results are robust with both county-level or individual-level imputations of political affiliation. However, our imputed data on respondent-level partisanship then allows us to analyze our results in even finer detail than previous studies with county-level imputations (Mian et al., 2021).

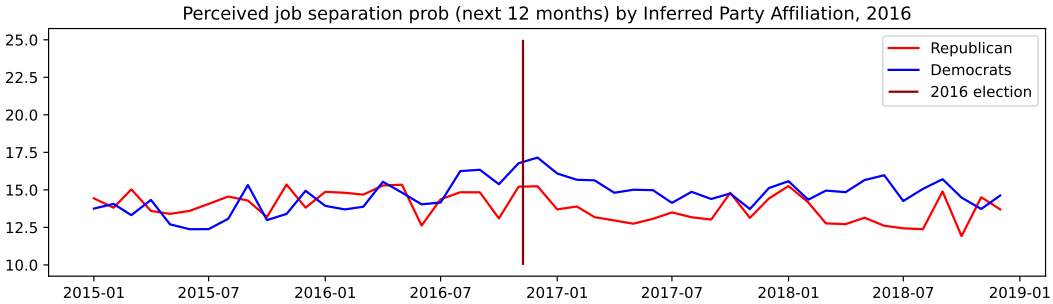
Our empirical methodology addresses a major limitation of data availability on SCE and MSC respondents' partisan preferences. The SCE does not publicly release the political preferences of its respondents, and it only began in 2013. The MSC has sporadic data on political preferences starting from 2006 (other than brief periods in 1980-1985), and only started collecting that data on a regular monthly basis since February 2017. Previous studies, especially those that use SCE data, could only comment on the 2016 and/or 2020 elections. With our empirical methodology, we widen the sample of electoral data to 8 U.S. presidential elections from 1992 to 2020.

To understand how partisan attitudes can lead to both more subjective macro expectations and less subjective micro expectations, we construct a model of economic belief formation that

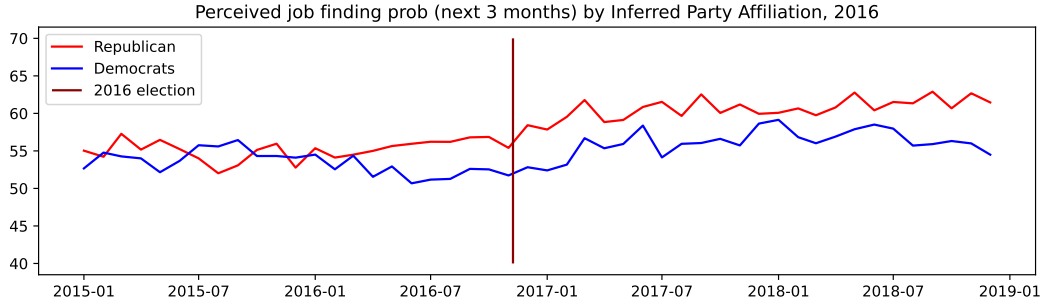
Figure 1: Expectations about Labor Market Outcomes by County-level Electoral Returns, 2016



(a) Unemployment rate, next 12 months



(b) Job separation rate, next 12 months



(c) Job finding rate, next 12 months

County-level political party affiliations are inferred from procedures in Sections 3.1 and 4.2. These tables are generated using data from the 2016 U.S. Presidential election results and the Survey of Consumer Expectations (SCE) from January 2015 to December 2018. From top to bottom, the figures show mean (inferred) partisan expectations for (i) the perceived probability of a higher nationwide unemployment rate in the next 12 months, (ii) the perceived probability of the respondent being separated from their job in the next 12 months, and (iii) the perceived probability of the respondent finding a new job in the next 3 months conditional on being separated from their job. Red lines indicate the mean responses of Republican counties, blue lines indicate those of Democratic counties, and the dark red line indicates the date of the 2016 Presidential election (in which the Republican candidate, Donald Trump, won).

features three key assumptions. First, households form their views about the macroeconomy partly based on their economic circumstances, for which they are better informed and inherently more concerned. This feature is meant to capture our empirical finding that households are less subjective in micro expectations than macro expectations. Second, the degree to which micro expectations are loaded onto macro expectations depends upon individual-specific and potentially time-varying factors, such as political sentiment. This captures the idea that partisan preferences influence how households view the macroeconomy, even if they cannot overrule fundamentally the effects of personal economic circumstances. Third, in addition to the partisanship and political sentiment, we also allow expectations to be driven by time-invariant personal characteristics and common time-fixed effects across households.

We empirically estimate such a factor model of micro and macro expectations using the rich panel structure of the SCE and repeated cross-sections of the MSC, both of which elicit a large array of beliefs regarding personal finances and the macroeconomy. We treat the alignment between a household's observed or imputed political affiliation and that of the incumbent candidate (or party) as a hidden factor that triggers not only a drift in the level of macroeconomic expectations but also the loadings from microeconomic expectations onto macroeconomic ones of the same individuals. The nexus between micro and macro expectations is governed by such an imperfectly observed mental state. Furthermore, we also allow the beliefs to be driven by partisan biases that entirely stem from one's political leaning, unconditional on the incumbent's party. Having individual-specific probability of party affiliation based on our imputation, instead of ones at the level of the geographic units such as U.S. states or counties, provides a richer variation across individuals that helps estimate our model parametrically.

Ex-ante, our model is agnostic about the exact degree of belief distortion resulting from their political preferences. In theory, the belief distortion from political biases may simply result in an attenuation of objectivity based on an individual's economic well-being depending on if their preferred political candidate is in power. But at one extreme, households not politically aligned with the incumbent president can lead to households holding entirely contrarian macro expectations and even macro facts. Our estimation results confirm both subjective macro expectations and more objective micro expectations. On one hand, regardless of partisan preferences, one's macroeconomic views are in general highly correlated with their economic circumstances. On the other hand, households' macro expectations can be distorted by factors such as their political (dis)alignment with the current political environment. Across a wide range of expectation domains and spanning eight U.S. presidential election cycles since 1992, we find that there exists not only a level difference between macroeconomic expectations by the incumbent and opponent parties' affiliates but also a varying strength of the link between one's microeconomic expectations and macroeconomic views. Both state-dependent forces contribute to a sudden divergence or even flip in expectations around times of political turnover.

Why does partisanship drive divides in macroeconomic views? In the last part of this paper, we attempt to provide one explanation for such "colored glasses". There might be many psychological factors that are not necessarily economically relevant, such as cheerleading motives. We nevertheless find evidence for the importance of self-interest-based rationales underlying people's subjectivity in macroeconomic views. The reason is, intuitively speaking, households expect their preferred party/candidate to enact policies that benefit them personally, but also extrapolate such personal benefits onto rosier views of the macroeconomy. Note that it is not just self-interest consideration alone, e.g. personally benefiting from expected future policies, but also the belief extrapolation in the form of "what is good to me personally, would also be good to the macroeconomy" that matters for such an explanation. We establish evidence supporting such a hypothesis using the Public Policy submodule of the SCE, which elicits households' expectations about future changes in an array of macroeconomic policies and their perceived effects on such policies on their *personal* economic well-being. During the sample period between 2013 and 2023, we find strong evidence for self-interest-based extrapolation in one's perceptions of the macroeconomy. In particular, when one expects future macroeconomic policies to bring about personal benefits, they not only expect an improvement in personal finances on many fronts but also expect better outlooks of future macroeconomy across domains. Our results closely align with such findings as Stantcheva (2020) and Stantcheva (2024) regarding the formation mechanisms of policy views.

Previous Literature

Our paper primarily contributes to the expanding literature that shows links partisanship to expectations and economic decisions, in the context of stock market (Addoum and Kumar, 2016; Meeuwis et al., 2022; Cassidy and Vorsatz, 2021), inflation expectations (Binder, 2023; Bachmann et al., 2021; Choi et al., 2022; Gillitzer et al., 2021), consumer sentiment (Mian et al., 2021), patenting behavior (Engelberg et al., 2023), corporate investment (Rice, 2020), bank lending (Dagostino et al., 2023), and credit ratings (Kempf and Tsoutsoura, 2021). A large literature has established that the expectations in survey data affect individual economic decisions, such as consumption spending and portfolio choices.[3]

Our paper is perhaps closest to Kamdar and Ray (2022), which finds that a major common factor of macroeconomic expectations/decisions of individuals is political sentiment: optimism in economic expectations while the respondent's preferred candidate is the incumbent. This helps explain the persistent spread ("bias") between optimism and pessimism at any point in time and swings ("switch") shortly after the date of the election. Building on the factor model

[3]Burke and Ozdagli (2023); Crump et al. (2022); Ichiue and Nishiguchi (2015); Dräger and Nghiem (2021); Duca-Radu et al. (2021); Wang (2023).

framework of expectations, we extend their focus, from only macroeconomic expectations to also microeconomic expectations and emphasize the importance of heterogeneity in individual economic circumstances.

Broadly speaking, we also show additional evidence for the subjectivity of macroeconomic expectations held by households. For instance, Andre et al. (2022) shows that households think of different propagation channels of the shocks, in particular demand- and supply-side mechanisms. Bursztyn et al. (2023) and Guillochon (2022) focus on politically divided news sources. The mechanisms documented in this paper might also reflect the "motivated belief" (Brunnermeier and Parker, 2005); and the echo chamber effects (Cookson et al., 2023). Our joint focus on both micro and macro expectations is also related to the different responsiveness of firms to microeconomic versus macroeconomic news (Born et al., 2022).

Political scientists have long studied the effects of partisanship in survey responses on beliefs about the economy.(Bullock and Lenz, 2019) It has long been established that, for example, Republicans are more likely to respond than Democrats that deficits rose during the Clinton administration[4], while Democrats are more likely to respond that inflation rose under the Reagan administration[5] (Bullock et al., 2015). As early as the 1960s, political scientists have been aware of the "role of enduring partisan commitments in shaping attitudes towards political objects (Campbell et al. (1960), p. 135). Using survey data from the American National Election Survey (ANES), Bartels (2002) found partisan biases in subjective evaluations of the George H. W. Bush administration in 1990-1992, and even in more objective economic data such as unemployment and inflation in the 1980-1988 period. More recently, Prior et al. (2015) found that the survey expectations about the economy reflect a mix of factual beliefs and wishful opinions, although Bullock et al. (2015) found that such partisanship "cheerleading" effects are reduced when respondents are given financial payments for factually correct responses.[6]

Our framework and findings also corroborate with several studies beyond the economic domain. For instance, Gaines et al. (2007) examines how partisanship influences the interpretation of factual information, leading to different opinions despite similar factual beliefs. It highlights that interpretations, rather than factual beliefs, drive opinions, making policy change signals more likely to come from independents and weak partisans. Compared to these studies, our paper formalizes and estimates a model of belief formation based on survey expectations that align with the long-held idea that partisanship is a lens through which individuals perceive reality. Just like social issues, news events, policies, etc, individuals' views about future economic conditions can also be influenced by such a factor. Lastly, our finding that personal

[4]During the Clinton administration, Fiscal Year 2000 saw the first federal budget surplus in nearly 50 years.

[5]During Reagan's presidency, CPI inflation fell from 10.3% in 1981 to 4.1% in 1988.

[6]See Bullock et al. (2019) for a detailed review of the political science literature of partisanship in survey responses.

finance expectations are less subject to partisan bias than macroeconomic expectations echoes the finding of Conover et al. (1987).

2 Empirical Strategy

2.1 Imputation using county-level electoral returns

Following Mian et al. (2021), we use county-level electoral returns and SCE respondent-level data to impute partisan expectations on macro and micro variables. For county-level electoral returns, we do the following procedure:

1. We use data on county-level electoral returns for each party during the 2016 and 2020 Presidential elections. (Democratic, Republican, and third-party/other votes). We crosswalk counties and aggregate electoral returns into commuting zones, as the SCE lists each respondent's commuting zone.

2. As a first pass, if a commuting zone had more Democratic(Republican) votes than the other party, we impute the commuting zone as a Democratic(Republican)-leaning commuting zone, and the SCE respondent living in this commuting zone has partisan preferences imputed as Democratic(Republican).

3. We then take the mean response of to various questions from the SCE survey by imputed political party preferences. We also use data the sub-modules of the SCE, namely the Household Spending Survey (HSS) and Household Finance Survey (HFS). For example, for the SCE question on the expected inflation rate in the next 12 months, we take the mean for imputed Democrats versus imputed Republicans.

2.2 Imputation using individual-level data

A novel empirical contribution of this paper is to use ANES survey data to impute partisan preferences of SCE/MSC respondents. For each presidential election year, the ANES releases microdata of each respondent's political party affiliation, voting intention/choice on Presidential election candidates, and various demographic variables. We use this information to impute political party preferences under the following procedure:

1. From the ANES survey for each presidential election year, we collect the respondent's voting intention/choice (which Presidential candidate they voted for/would like to vote for). From each respondent, we also collect demographic variables that appear in both

the ANES and the SCE/MSC. The MSC has a more limited set of demographic variables available for use. See Table 1 for the list of demographic variables used in either the SCE or MSC datasets.

2. We run two probit regressions of these demographic variables on the respondent's party of voting intention/choice: one for respondents who responded Democratic, and another for those who responded Republican.

3. We then take the vector of coefficients from the probit regressions and multiply them by corresponding demographic variables for respondents in the SCE/MSC data for each election cycle. For the purposes of this paper, an "election cycle" is defined as the 2 calendar years leading up to and 2 full calendar years after a U.S. presidential election. For example, we define the 2016 election cycle as the period from January 2015 to December 2018, the 2020 election cycle from January 2019 to December 2022, and etc.

   This procedure yields two values: a predicted or imputed value for the SCE/MSC respondent's likelihood of being a Democrat (after cross-multiplying them by coefficients from the Democrat probit regression from the ANES data) and another for the likelihood of being a Republican.

4. If the SCE/MSC respondent has a higher predicted Democratic value than a predicted Republican value, we impute that SCE/MSC respondent as Democratic, and vice versa.

Variable	SCE	MSC
Age (and age squared)	✓	✓
Sex (male/female)	✓	✓
Ethnicity dummies	✓	✗
Level of education dummies	✓	✓
Employment status dummies	✓	✓
Marriage status	✓	✓
Spouse's employment status	✓	✗
3+ years in current residence	✓	✗
Homeownership	✓	✗
Income bracket dummies (high, middle, low)	✓	✓
State of residence dummies	✓	✗
Census region of residence dummies	✗	✓

Table 1: List of demographic variables used in imputation of individual-level partisanship, in SCE and MSC respondents. Ethnicity dummies: White, Black, Asian, Native American, Hispanic. Level of education dummies: high school or less, high school graduate, some college, associate degree, baccalaureate degree, post-baccalaureate degree. Employment status dummies: working, temporarily laid off, unemployed, retired, permanently disabled, homemaker, student. Census region of residence dummies: Northeast, South, Midwest, West.

In Tables A.1 to A.5 of the Appendix, we list coefficients from our imputation method using ANES and MSC data for Democrats and Republicans from the 2004 to 2020 election cycles.

In Tables A.6 and A.7, we show the same from our imputation method using ANES and SCE data.

We argue that our imputation process is important for two reasons: first, we aim to predict SCE/MSC respondents' political preferences more accurately than simply using geographical(county/state/Census region) information, as done in previous papers like Mian et al. (2021). Second, survey microdata on political affiliation is not collected or generally withheld for much of the sample period in the MSC or SCE. The MSC did not systematically collect political affiliation until the 2016 election (albeit during some months starting from the 2008 election), and the SCE microdata which is publicly available does not reveal respondents' political preferences. Therefore, it is important to check how accurate our imputation method is, by comparing our imputation outcomes to the limited available actual data on political preferences. Given its validity, and given that the ANES surveys began in 1948, our imputation would allow us to extend the data to the entire available sample of the SCE or the MSC data, with the latter dataset going back to 1978.

We confirm the first point by showing that our imputation method, with all the available demographic variables, imputes the political affiliations of MSC respondents more accurately than using only geographical information. In Table A.8 of the Online Appendix, we show the probabilities that our imputation with all the demographic variables predicts MSC respondents' political affiliations ("Correct imputation"), as opposed to the using only geographical or regional data ("Regions-only imputation"). These probabilities are computed for each election cycle. The MSC started collecting data on political affiliations of respondents, sporadically during the 2004, 2008, and 2012 election cycles, then more comprehensively during the 2016 and 2020 election cycles. We find that the more comprehensive imputation, using all available demographic data *and* geographical information, predicts correctly an average of 56.8%, as compared to 49.7% with only geographical information. By election cycle, this difference is as low as 1.5% in 2012, to 12.4% in 2016.

The differences across election cycles also implies that there are changes in the relationship between individual respondents' political affiliation and their demographic and geographical variables. In other words, there is political realignment across election cycles, a common theme in U.S. political history. This justifies our approach of running the imputation process for each election cycle, especially given the much greater number of cross-sections (election cycles) in our study as compared to the previous literature.

3 Comparing Partisan Expectations around Election Outcomes

3.1 Salient Switches in Macro Expectations

In this section, we infer individual-level political party affiliation using ANES and SCE data. We compute the mean level of expectations on several variables relating to the macroeconomy, labor markets, and household spending.

In Figure 2, we show the mean response of the SCE respondents whom we impute as Democratic (henceforth "Democratic respondents") and as Republican ("Republican respondents") on three variables in the 2016 election cycle. Subfigure 2a shows the mean response of (imputed) Democratic and Republican respondents of their expected probability of a higher *nationwide* unemployment rate in the next 12 months. We find a significant increase in the partisan difference in expectations of the unemployment rate shortly after the 2016 Presidential election when the Republican candidate (Donald Trump) won. Shortly after the election, we see that Republican respondents' mean expected probability of a higher nationwide unemployment rate decreased, while those for Democrats increased, effectively changing the sign of and widening the partisan difference in macroeconomic expectations of the labor market.

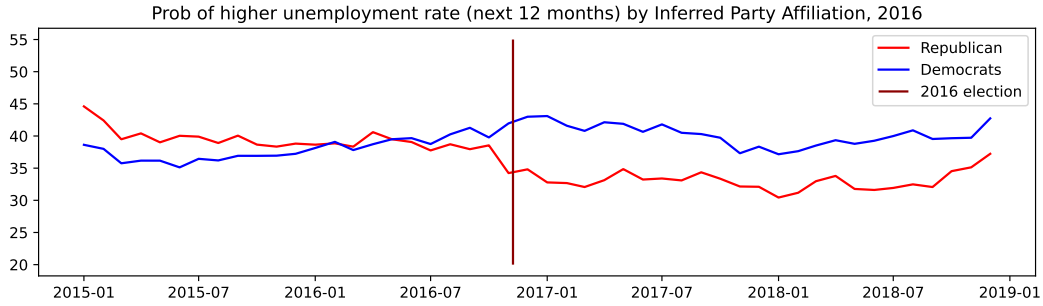
3.2 Less Divergence in Micro Expectations

However, this partisan difference is not as significant in the next two subfigures. In Subfigure 2b, we run the same exercise for the respondent's own expectations for their perceived probability of job separation in the next 12 months. In Subfigure 2c, we run the same exercise for the respondent's own expectations for their perceived probability of finding a job in the next 3 months, conditional on becoming unemployed.

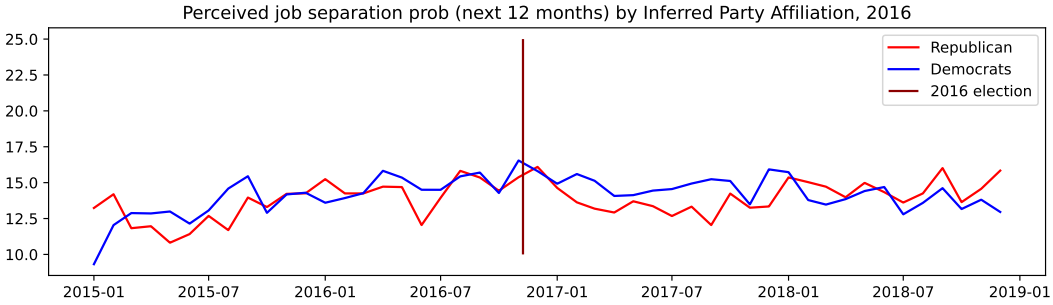
In both of these subfigures, the partisan difference is not as apparent before or after the election. As these variables relate to the expectations of the respondent's *own* job prospects rather than the macroeconomic expectations of the job market as a whole, we include these results as evidence in our hypothesis that there is a greater partisan difference in expectations for macroeconomic variables than microeconomic (individual) ones.

We show that this phenomena in micro expectations also appears in the 2020 election cycle. Figure 3 compares partisan expectations about individual labor market outcomes in the 2016 and 2020 election cycles. For reference, Subfigures 3a and 3c are identical to Subfigures 2b and 2c, for the 2016 election cycle. We replicate the exercise for the 2020 election cycle, from January 2019 to December 2022, in Subfigures 3b (job separation) and 3d (job finding). In those subfigures, like in the 2016 election cycle, we do not find a visible difference in partisan

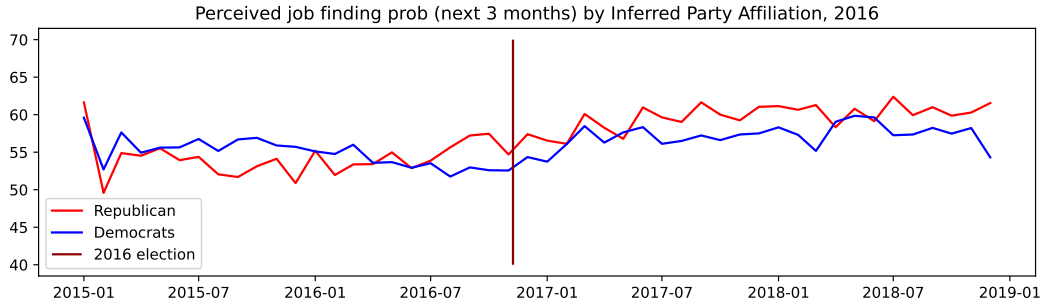
Figure 2: Expectations about Labor Market Outcomes by Individual-level Inferred Partisanship, 2016.



(a) Unemployment rate, next 12 months



(b) Job separation rate, next 12 months



(c) Job finding rate, next 12 months

Individual political party affiliations are inferred from procedures in Sections 3.1 and 4.2. These tables are generated using data from the 2016 American National Election Survey (ANES) and the Survey of Consumer Expectations (SCE) from January 2015 to December 2018. From top to bottom, the figures show mean (inferred) partisan expectations for (i) the perceived probability of a higher nationwide unemployment rate in the next 12 months, (ii) the perceived probability of the respondent being separated from their job in the next 12 months, and (iii) the perceived probability of the respondent finding a new job in the next 3 months conditional on being separated from their job. Red lines indicate the mean responses of Republican respondents, blue lines indicate those of Democratic respondents, and the dark red line indicates the date of the 2016 Presidential election (in which the Republican candidate, Donald Trump, won).

expectations on individual labor market outcomes. This further implies that the partisan difference visible in macro expectations are not as apparent in micro expectations, in both the 2016 and 2020 election cycles.

3.3 Real Income Expectations are Driven by Different Inflation Expectations

Meanwhile, expectations of respondents' own real household income growth in the next 12 months exhibit partisan differences punctuated shortly after the presidential elections. We show the results in Figure 4. Democratic expectations on real household income growth are consistently greater than Republican expectations in the 2015-2016 period. These practically disappear during the whole of the Trump administration: in the 2017-2018 period, i.e. the second half of Subfigure 4a, as well as the 2019-2020 period, the first half of Subfigure 4b. After Joe Biden's election in November 2020, these differences reappeared in the 2021-2022 period, the second half of Subfigure 4b.

A similar qualitative pattern appears for respondents' own real wage growth expectations in Subfigures 4c and 4d; a narrowing of partisan expectations during the Trump administration, then a widening during the Biden administration.[7]

3.4 Detecting Partisan Bias and Sentiment

The provided figures above indicate whether there are partisan components to households' expectations before and after the election. We differentiate between two ways partisanship can influence elicited beliefs. First, *partisan bias* indicates whether Democrats have, on average, different beliefs than Republicans throughout the election cycle. Second, *political sentiment* refers to state-contingent beliefs that an individual might perceive the state of the economy differently depending on whether they are politically aligned with the winner of the presidential election. To get a better sense of these two effects, we apply a regression analysis.

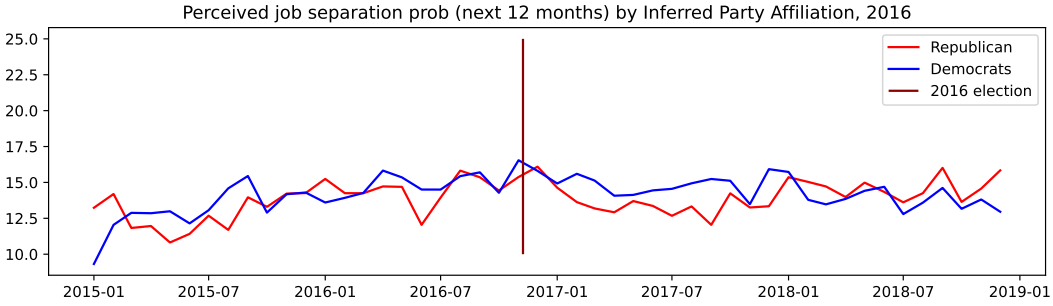
We regress elicited beliefs Belief_{it} from the SCE or MSC on our imputed party affiliation Party_i, a dummy variable for post-election periods PostElect_t, and an interaction term $\text{Party}_i \times \text{PostElect}_t$:

$$\text{Belief}_{it} = \alpha_0 + \alpha_1 \text{Party}_i + \alpha_2 \text{PostElect}_t + \alpha_3 \text{Party}_i \times \text{PostElect}_t + Controls_{it} + \varepsilon_{it} \quad (1)$$

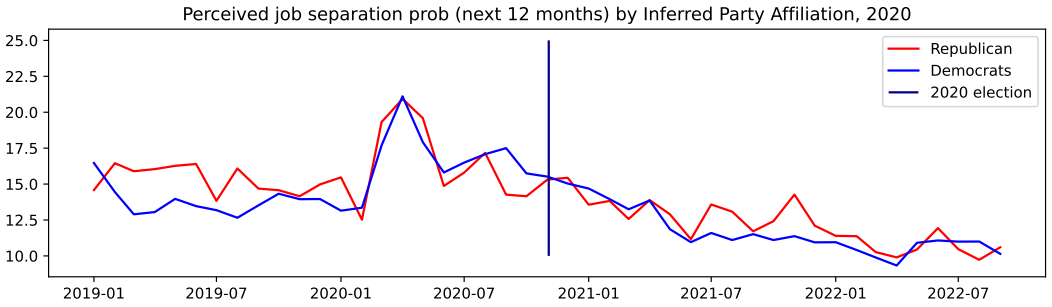
Here, Party_i reflects whether respondent i was affiliated with the a party whose candidate won the Presidential election. For example, in election years where Democrats won (2020, 2012, and

[7]This difference is not as visually apparent in *nominal* household income expectations, which implies that these changes in partisan expectations over time are driven by partisan inflation expectations.

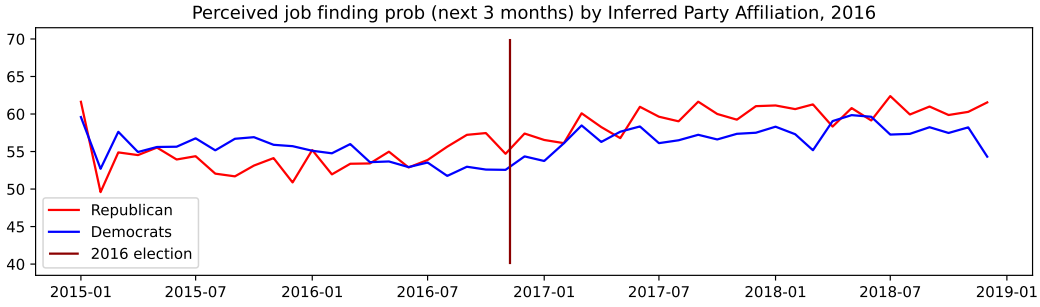
Figure 3: Expectations about Individual Outcomes by Individual-level Inferred Partisanship, 2016 and 2020.



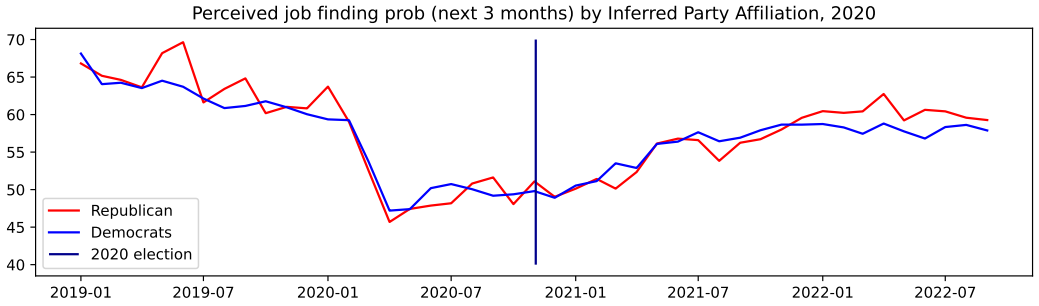
(a) Job separation rate, 2015-2018



(b) Job separation rate, 2019-2022



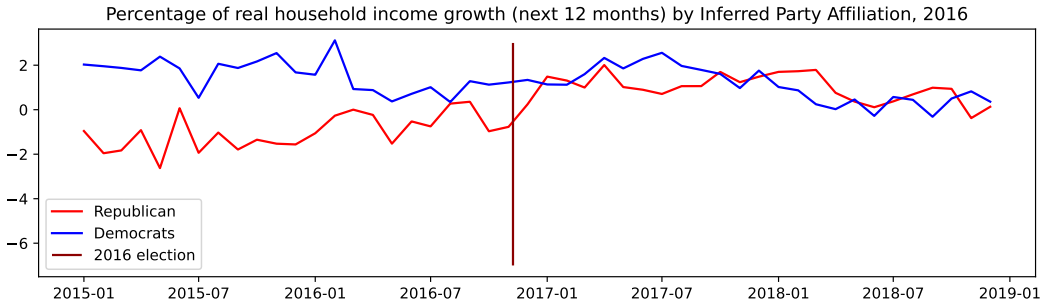
(c) Job finding rate, 2015-2018



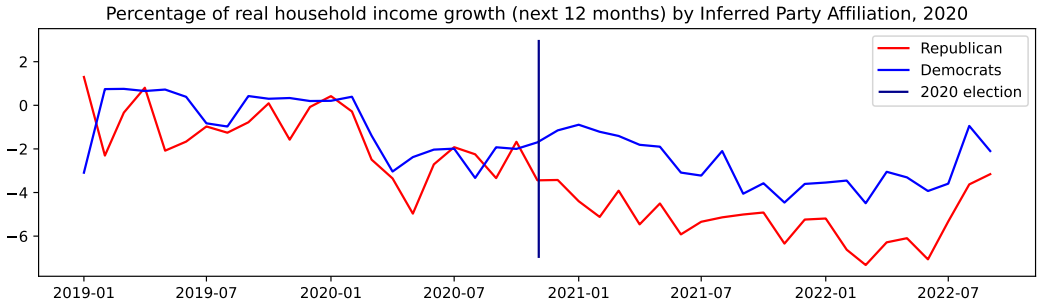
(d) Job finding rate, 2019-2022

These tables are generated using data from the 2016 and 2020 American National Election Survey (ANES) and the Survey of Consumer Expectations (SCE) from January 2015 to December 2022. Red lines indicate the mean responses of Republican respondents, blue lines indicate those of Democratic respondents, and the dark red and dark blue lines indicate the date of the 2016 and 2020 Presidential elections respectively.

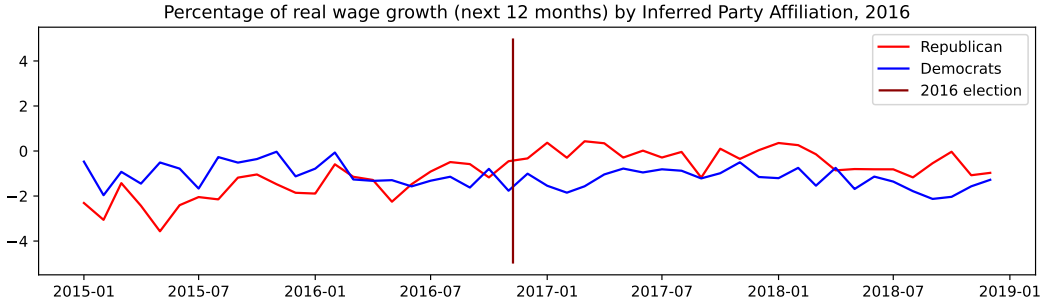
Figure 4: Income/Earning Expectations by Inferred Partisanship, 2016 and 2020.



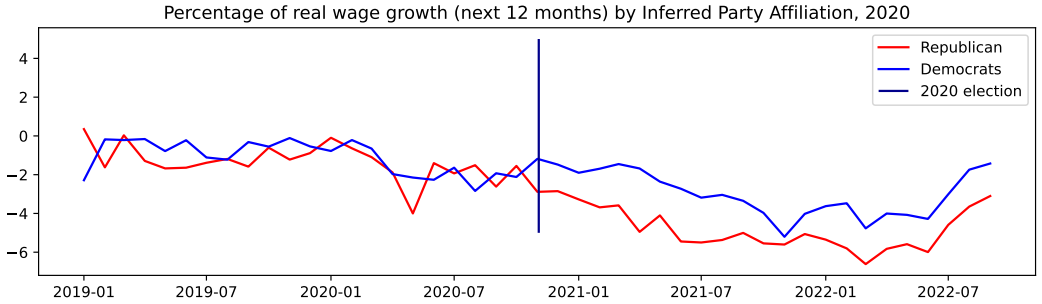
(a) Real household income growth rate in percentage points, next 12 months, 2015-2018



(b) Real household income growth rate in percentage points, next 12 months, 2019-2022



(c) Real wage growth rate in percentage points, next 12 months, 2015-2018



(d) Real wage growth rate in percentage points, next 12 months, 2019-2022

These tables are generated using data from the 2016 and 2020 American National Election Survey (ANES) and the Survey of Consumer Expectations (SCE) from January 2015 to December 2022. Red lines indicate the mean responses of Republican respondents, blue lines indicate those of Democratic respondents, and the dark red and dark blue lines indicate the date of the 2016 and 2020 Presidential elections respectively.

2008), we use Democrats as the independent variable and Republicans for 2016 and 2004.

We interpret the coefficients as follows: $\alpha_1 \neq 0$ indicates partisan *bias*, as households supporting different parties have, on average, a statistically significant difference in expectations of that variable. α_2 indicates a post-election shift of all respondents, regardless of partisan affiliation. $\alpha_3 \neq 0$ implies a *partisan sentiment*, as the post-election changes in expectations of households who support the winner change of that election cycle. We control for all household characteristics we used in the imputation stage and cluster standard errors at the individual level. Table A.9 in the appendix contains estimates for the coefficients of sentiment and bias (α_3 and α_1 respectively) for all micro and macro variables in SCE and MSC for all elections from 2004 to 2020 (statistically insignificant coefficients are displayed as 0).

In line with the figures, macro expectations tend to be more prone to partisan bias and switches after election results, in that there are more statistically significant coefficients for macro variables than for micro variables. For instance, the expected probability that the unemployment rate increases dropped by 4.6 percentage points (pp) for Republicans after the 2016 election and by 7.6pp for Democrats after the 2020 election. Contrarily, the perceived probability of job separation is not statistically significant for neither election. For the expected inflation rate, Republicans reduced their estimate on average by 0.9pp in 2016 and Democrats by 1.8pp in 2020. All these effects are not only statistically significant, but also economically meaningful.

In conclusion, the statistical analysis confirmed the partisanship *bias* and *sentiment* displayed in the figures for macroeconomic variables such as the unemployment or inflation rate. These effects are weaker for microeconomic variables.

3.5 From Micro to Macro: Partisan Bias, Sentiment, and Belief Extrapolation

From the analysis in the previous section, we found that households' expectations about their own economic situation (micro beliefs) are less affected by partisanship than expectations about the macroeconomy, e.g. about everyone else.

In both the SCE and MSC surveys, we select pairs of variables on related micro- and macroeconomic expectations. An example of such a pair is a respondent's micro expectations of their own probability of getting fired and their macro expectations of the national unemployment rate (the probability of others being fired). Another example is a respondent's (micro) beliefs on prices of individual categories of goods, such as food, rent, and gasoline, and their macro beliefs on the inflation rate (the prices of all other items). Respondents may observe for themselves the prices of individual items, and, based on those micro beliefs, extrapolate their beliefs on

the nationwide inflation rate.

We may think that agents extrapolate from and make statements about the macroeconomy based on their beliefs of their own individual situations. Under that possibility, agents who are positive in their individual situations (micro beliefs) may think more positive macro beliefs as well.[8] We can include partisanship into the realm of individual situations; households may see a stronger connection between their own situations and the situation of all other agents (micro to macro) depending on their political preferences or the political affiliation of the incumbent president.

Therefore, in this section we test the hypothesis that households' micro beliefs may also affect macro beliefs, in addition to their political preferences and the political affiliation of the current incumbent. Specifically, we augment the specification in Equation 1 with respondents' micro beliefs:

$$\begin{aligned}\text{MacroBelief}_{it} = \alpha_0 \\ &+ \alpha_1 \text{Party}_i + \alpha_2 \text{PostElect}_t + \alpha_3 \text{Party}_i \times \text{PostElect}_t \\ &+ \alpha_4 \text{MicroBelief}_{it} + \alpha_5 \text{Party}_i \times \text{MicroBelief}_{it} \\ &+ \alpha_6 \text{PostElect}_t \times \text{MicroBelief}_{it} + \alpha_7 \text{Party}_i \times \text{PostElect}_t \times \text{MicroBelief}_{it} \\ &+ \text{Controls}_i + \varepsilon_{it}\end{aligned} \tag{2}$$

where, again, Party_i is an indicator variable equal to 1 if the imputed political affiliation of the respondent is the same as that of the winning candidate in a particular election cycle. Now, MicroBelief_{it} and MacroBelief_{it} are pairs of respondent i's expectations on micro- and macroeconomic variables.

In this specification, these coefficients have the following interpretations:

- α_1: Partisan bias of macro variable
- α_3: Partisan sentiment of macro variable
- α_5: Partisan bias of extrapolation from micro beliefs to macro beliefs
- α_7: Partisan sentiment of extrapolation from micro beliefs to macro beliefs

Similar to equation 1, α_1 and α_3 capture how partisanship directly affects the expectation of macro beliefs through partisan *bias* and state-contingent *sentiment*. Additionally, α_5 and α_7 show how the extrapolation from micro variable and macro beliefs are influenced by partisanship. Specifically, α_5 says that Democrats put different weight on own experiences when

[8] Colloquially, households who are doing well may expect others may be doing well too.

extrapolating macro variables than their Republican counterparts. Lastly, α_7 means that the micro-macro extrapolation differs depending on who is in office. For instance, suppose an individual's probability of job separation as the micro belief and the aggregate unemployment rate as the macro belief. Individuals who perceive that their probability of job separation is low, but who also do not support the president in power, could think that their own economic situation is due to their own hard work rather than due to the policies of the incumbent president. Individuals might assume a disconnect between their own circumstances and the macroeconomy. Similarly, the connection between micro and macro expectations can be influenced by partisan campaigning, putting either more or less emphasis on these relationships. Hence, while we do not explicitly hypothesize on the sign of α_7, we find it important to analyze when discussing about partisanship.

As for what constitutes the variables MicroBelief_{it} and MacroBelief_{it}, we focus on two sets of variables. First, there are the variables on the expected inflation rate of categories of items for which we have survey data, such as gas, food, and rent prices of households. Second, there are the variables regarding the overall economy. For example, the MSC Index of Consumer Sentiment (ICS) is computed from responses of five questions, of which three focus on the personal situation[9] and two on the macroeconomy[10]. Additionally, also from the MSC data, we can relate expected personal finances[11] with expected conditions of businesses[12], as well as real personal income[13] with financial conditions of businesses[14].

As for the SCE survey data, we relate the micro beliefs of personal job separation and job finding probabilities with the macro beliefs of the aggregate unemployment rate.

[9]To construct our measure of micro sentiment from MSC microdata, we use 3 variables:
Q1 (PAGO) We are interested in how people are getting along financially these days. Would you say that you (and your family living there) are better off or worse off financially than you were a year ago?
Q3 (PEXP) Now looking ahead–do you think that a year from now you (and your family living there) will be better off financially, worse off financially, or just about the same as now?
Q19 (DUR) Think about the big things people buy for their homes – such as furniture, a refrigerator, stove, television, and things like that. Generally speaking, do you think now is a good or a bad time for people to buy major household items?

[10]To construct our measure of macro sentiment from MSC microdata, we use 2 variables:
Q5 (BUS12) Now turning to business conditions in the country as a whole–do you think that during the next 12 months we'll have good times financially or bad times financially?
Q9 (BUS5) Looking ahead, which would you say is more likely – that in the country as a whole we'll have continuous good times during the next 5 years or so, or that we will have periods of widespread unemployment or depression?
The index is created by using the sum and divide by base year (2003 January) and adding 2.

[11]Q3 (PEXP) Now looking ahead–do you think that a year from now you (and your family living there) will be better off financially, worse off financially, or just about the same as now?

[12]Q8 (BEXP) And how about a year from now, do you expect that in the country as a whole, business conditions will be better or worse than they are at present, or just about the same?

[13]Q15 (RINC) During the next year or two, do you expect that your (family) income will go up more than prices will go up, about the same as prices go up, or less than prices will go up?

[14]Q5 (BUS12) Now turning to business conditions in the country as a whole–do you think that during the next 12 months we'll have good times financially or bad times financially?

We re-scale all categorical expectations variables to a scale of $[0, 1]$, where larger values indicate more positive sentiment (i.e. 1 for positive, 0 for negative). For example, the MSC codebook includes a question for respondents' expectations of business conditions 12 months from now (`bus12`). For that question, the categorical responses reach from 1 for good (positive), 3 for neutral, and to 5 for bad (negative). In that case, we adjust the responses to a $[0, 1]$ scale such that 1 indicates positive expectations, while 0 indices negative expectations, and 0.5 for neutral expectations. For expectation variables with numerical percentage responses, we maintain percentages.

Table 2 shows the results for variables about the economy as a whole and table 3 about inflation. We provide the tables for combining election cycles to avoid clutter. For this, we use data from recent election cycles in which there has been a change in the presidential administration (2008, 2016, 2020, i.e. in which the incumbent did not win reelection), and provide results from the perspective of democrats (Tables A.10 and A.11 in the Appendix take the perspective of voters who supported the incumbent and winning presidential candidate).

A key takeaway is the strong correlation between micro and macro variables (α_4); respondents who expect increases in micro variables also expect increases in macro variables. Additionally, the correlation between micro and macro differs before and after the election (α_6). One could argue that during election campaigning, more emphasize is put on the macro variable independently of personal circumstances.

Regarding partisanship the results are mixed. While α_5 in table 2 means that democrats have on average a weaker connection between micro and macro variables than republicans, this does not seem to hold true for inflation related variables. Lastly, α_7 is significant for many micro-macro pairs. This means that how people extrapolate their individual circumstances to the macro economy differs depending on who is in office.

We can measure whether these effects are driven by supporters of a specific party or the current incumbent President. In Tables 2 and 3, we run the regressions as specified in Equation 2 for Democrats. As for Tables A.10 and A.11, we run the same regressions but for those households who supported the winning candidate in election cycles with political turnover (Democrats for 2008 and 2020, and Republicans for 2016). We chose this subsample of elections because these are the elections in which there was a political turnover of the Presidency from one party to another.

We take an example in the context of job separation and the unemployment rate. Column *Job Sep* in Table 2 states that when the expected probability of being fired decreases after the election, Democrats would expect a lower unemployment rate than Republicans. This is consistent with the intuition that households who are aligned with the president in power make stronger connections between their own circumstances and the state of the macroeconomy in

Table 2: Micro to Macro Partisan Bias and Switch for All Elections (I)
MSC elections 2008, 2016, 2020; SCE elections 2016-2020

	MSC macro	MSC micro	MSC bexp	MSC pexp	MSC bus12	MSC rinc	SCE	SCE Job Sep	SCE Job Find
predict_dem	-5.347	14.282***	-0.050**	-0.019	-0.010	0.005	0.478***	0.617**	-2.057***
	(7.327)	(2.216)	(0.022)	(0.015)	(0.035)	(0.020)	(0.004)	(0.270)	(0.769)
postElect	-27.282***	9.518*	-0.051***	-0.041***	-0.133***	-0.099***	-4.833***	-4.644***	-7.765***
	(0.727)	(5.219)	(0.002)	(0.010)	(0.004)	(0.004)	(0.033)	(0.041)	(0.789)
demXpostElect	43.312***	16.266***	0.210***	0.166***	0.192***	0.204***	-7.026***	-7.628***	-4.337***
	(11.326)	(4.602)	(0.039)	(0.029)	(0.057)	(0.038)	(0.162)	(0.568)	(0.271)
Micro		0.940***		0.386***		0.315***		0.227***	-0.034**
		(0.053)		(0.015)		(0.010)		(0.003)	(0.014)
Micro_postElect		-0.161***		0.057***		-0.001		0.018***	0.045***
		(0.042)		(0.019)		(0.001)		(0.001)	(0.013)
Micro_predict_dem		-0.218***		-0.043***		-0.033		-0.014	0.036***
		(0.029)		(0.005)		(0.034)		(0.023)	(0.012)
Micro_demXpostElect		0.171***		-0.027***		-0.079**		0.068***	-0.041***
		(0.032)		(0.005)		(0.034)		(0.018)	(0.008)
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Adj_R2	0.064	0.210	0.012	0.126	0.066	0.120	0.023	0.057	0.024
N	55987	55987	55987	55987	55987	55987	106395	63862	63882

Table 3: Micro to Macro Partisan Bias and Switch for All Elections (II)
MSC elections 2008, 2016, 2020; SCE elections 2016-2020

	MSC Inflation 1y	MSC Gas Price 1y	MSC Inflation 5y	MSC Gas Price 5y	SCE Inflation	SCE Gas Price	SCE Food Price	SCE Rent price
predict_dem	0.487***	0.489***	0.137	0.149	-0.425***	-0.693***	-0.769***	-0.640***
	(0.136)	(0.054)	(0.118)	(0.113)	(0.027)	(0.179)	(0.191)	(0.232)
postElect	2.112***	1.485***	0.458***	-0.037**	2.774***	2.181***	1.805***	1.592***
	(0.005)	(0.092)	(0.004)	(0.015)	(0.005)	(0.048)	(0.048)	(0.144)
demXpostElect	-1.556***	-1.338***	-0.400***	-0.451***	-1.978***	-0.829***	-0.313	-0.525**
	(0.087)	(0.138)	(0.058)	(0.074)	(0.094)	(0.095)	(0.194)	(0.267)
Micro		0.015***		0.005***		0.145***	0.385***	0.281***
		(0.003)		(0.000)		(0.005)	(0.002)	(0.013)
Micro_postElect		0.013***		0.004***		0.043***	0.001	0.010
		(0.003)		(0.000)		(0.007)	(0.004)	(0.017)
Micro_predict_dem		0.000		-0.001**		0.041	0.058	0.018
		(0.001)		(0.000)		(0.030)	(0.036)	(0.030)
Micro_demXpostElect		0.006***		0.003***		-0.070**	-0.126***	-0.080**
		(0.002)		(0.000)		(0.032)	(0.043)	(0.034)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Adj_R2	0.064	0.097	0.021	0.049	0.091	0.134	0.183	0.169
N	55046	33070	55522	41222	104155	90067	90258	90315

the labor market (see Table A.10).

For inflation, we get mixed results. While α_7 is significant for many micro-macro pairs, we find a similar number of positive and negative coefficients, which does not lead to a singular conclusion. One could argue that households expect policies to have a different impact on gas, food, and rent, and hence, partisanship could play different roles. For instance, suppose that an individual sympathizes with the incumbent and sees that rent prices increase. If the individual believes that these are due to influences outside of policy, that individual would not predict higher inflation as much as another individual who does not sympathize with the incumbent (column *rent price* in Table A.11).

In summary, partisanship impacts household beliefs about the macroeconomy in more ways than purely through bias and sentiment. The degree to which changes in microeconomic circumstances get extrapolated into macroeconomic variables depends significantly on partisanship.

4 A Model of Expectation with Partisanship

The previous sections established several different channels in which partisanship affects macroeconomic expectations. We aim to formally capture these mechanisms in a coherent modeling framework that allows one to incorporate partisan expectations in standard forward-looking household decision problems. To that end, we introduce a factor model of macroeconomic expectations that can be flexibly estimated from survey data. We set up such a model in this section.

4.1 Setup

We start from a simple benchmark where partisanship does not affect one's macroeconomic expectations. An agent i observes their own individual (micro) situation $s_{i,t}$ with high precision, but does not perfectly observe the state of the aggregate economy ψ_t. They form individual expectations about the aggregate economy, $\tilde{\psi}_{i,t}$, partially based on their individual situation, as governed by the function $z(\cdot)$.

$$\tilde{\psi}_{i,t} = z(s_{i,t}) \tag{3}$$

We assume the form of $z(\cdot)$ to be a linear function of $s_{i,t}$,

$$z(s_{i,t}) = \alpha + \lambda s_{i,t}, \tag{4}$$

where λ measures the sensitivity of the macroeconomic expectations with respect to $s_{i,t}$. One

interpretation of such a functional form is that $s_{i,t}$ is a noisy signal of ψ_t, and α is some prior belief about the aggregate economy $\psi_{i,t}$. $z(s_{i,t})$ is formed based on non-sophisticated Bayesian updating, in which agents do not necessarily optimally decide λ based on information precision. Alternatively, $z(\cdot)$ can be interpreted as an "attribution" function in that it measures how much individuals attribute their future individual circumstances to the expected macroeconomic conditions.

In order to capture partisanship-induced belief differences and admit other unspecified sources of variations of beliefs across individuals and time, we assume instead that $z(\cdot)$ is state-dependent, varying with other two variables $\kappa_{i,t}$ and $x_{i,t}$, as specified below.

$$\begin{aligned}
&z(s_{i,t}, x_{i,t}, \kappa_{i,t}) = \mathbf{1}(\kappa_{i,t} = D)\omega + \mathbf{1}(x_{i,t} = 1)z^{up}(s_{i,t}) + \mathbf{1}(x_{i,t} \neq 1)z^{down}(s_{i,t}) + \zeta_i + \phi_t + \varepsilon_{i,t} \\
&x_{i,t} = \mathbf{1}(\kappa_{i,t} = D)\mathbf{1}(\Theta_t = D) + \mathbf{1}(\kappa_{i,t} = R)\mathbf{1}(\Theta_t = R) \\
&z^{up} = \alpha^{up} + \lambda^{up} s_{i,t} \\
&z^{down} = \alpha^{down} + \lambda^{down} s_{i,t}
\end{aligned} \tag{5}$$

Here, $\kappa_{i,t}$ captures the unconditional partisan affiliation of agent i at time t. For simplicity, we assume $\kappa_{i,t}$ is either one of D or R, but this can be generalized into more than two parties. Therefore, ω is meant to capture the stable difference in the level of macroeconomic expectations held by D compared to that by R. We assume this difference arises from strong priors due to partisanship.

The second part of the beliefs, z^{up} and z^{down}, captures partisan sentiment and extrapolations that vary with current politics. $x_{i,t}$ depends on not only one's political preference but also on whether the current political environment favors their party. $\mathbf{1}(x_{i,t} = 0, 1)$ is an indicator function that equals 1 when agent i's preferred candidate/party is in power, e.g. $x_{i,t} = 1$. z^{up} and z^{down} are state-dependent attribution functions; z^{up} is the agent's attribution from their situation to the macroeconomy in the case where the agent's preferred party is in power, and z^{down} for the opposite case. Although not imposed as a restriction, in general, it may be natural to assume that both $z^{up}(\cdot)$ and $z^{down}(\cdot)$ share signs but have different slopes ($\lambda^{up} \neq \lambda^{down}$), indicating that the responsiveness of macroeconomic belief to idiosyncratic signals is state-dependent. Furthermore, we assume the constant term α also differs across the two states, e.g. $\alpha^{up} \neq \alpha^{down}$, implying that the partisanship also induces level shifts in macroeconomic beliefs independent of one's micro expectations. We refer to the scenario in which λ^{up} is not equal to λ^{down} as partisanship in extrapolation, and the scenario in which α^{up} differs from α^{down} to the partisan shift in the sentiment.

Lastly, ζ_i captures individual-specific and time-invariant heterogeneity in macroeconomic expectations that could stem from many other factors such as demographics, which are deemed as

important in the literature. ϕ_t captures common sources of variations to expectations across all respondents, due to changes in economic conditions, common information updating, sentiment changes, etc. While we refer the reader to the large volume of literature that studies the drivers of these components, they are outside the focus of this paper, and we simply exclude these two components in the estimation stage.

On one hand, our model makes the intuitive assumption supported by our regression results, that personal economic expectations serve as a basis of one's macroeconomic expectations. Partisanship does not overrule its relevance in household expectations about macroeconomy. On the other hand, it captures the role of partisanship as a lens between households' perceptions of macroeconomy and their personal economic conditions.[15]

Furthermore, with such a formulation, we have a mapping between agent i's microeconomic expectations at time t, $s_{i,t}$, to their macroeconomic expectations $\tilde{\psi}_{i,t}$, as a function of their partisanship $x_{i,t} \in \{0, 1\}$.

4.2 Model Implications

Our model differentiates three mechanisms which we have broadly called partisanship, as estimated by the reduced form regressions in Section 3.5: (a) ω, the partisan bias unconditional on the current state of the macroeconomy and politics, estimated as α_1 in regressions specified in Equation 1. (b) α^{up} and α^{down}, the post-election sentiment shift in macroeconomic expectations when one's preferred candidate/party wins or loses the presidency; (c) state-dependent extrapolations, e.g. different λ^{up} and λ^{down}, that lead to varying degrees of sensitivity between individual expectations and macroeconomic expectations. It is easy to show that either (b) or (c) could contribute to a sudden switch in the party-specific macroeconomic expectations around elections witnessing partisan changes. This mechanism exactly corresponds to the non-zero estimate of α_3 in the reduced form regression as in Equation 1. Such a switch around election outcomes has been a salient pattern in various macroeconomic expectations, as shown in Section 3.

Figure A.1 in Online Appendix B shows simulated results on how either non-identical αs or non-identical λs can result in a partisan switch in macroeconomic expectations around elections with a political turnover (a change in the incumbent party). Meanwhile, a non-zero ω implies partisan bias between two parties, and it alone will not cause a discrete switch around elections with political turnover. Meanwhile, the microeconomic expectations $s_{i,t}$ are not subject to such partisan switches, consistent with our empirical findings. Note that we also take the

[15] It is fair to argue that partisanship is simply one of the many factors, or "mindsets" in the words of Chinoy et al. (2023), that affect how people view the information and reality.

distribution and dynamics of $s_{i,t}$ as given. It may be the case that there are constant differences in microeconomic expectations along partisan lines, reflecting persistent differences between the two parties' supporters in their economic conditions.

The exact degree of importance of each of these channels can be uncovered by estimating such a model using rich microdata spanning multiple election cycles. We can also empirically investigate if the partisanship in macroeconomic expectations has intensified over time and depends on the specific domain of economic expectations.

4.3 Estimation of the Model

To empirically estimate the model, in addition to Equation 5, we also assume that the idiosyncratic shocks/measurement errors $\varepsilon_{i,t}$ follow an i.i.d. normal distribution: $\varepsilon_{i,t} \sim N(0, \sigma_\epsilon)$. Then, we can use the maximum-likelihood estimation (MLE) method to obtain the following parameters: $\Gamma = [\lambda^{up}, \lambda^{down}, \alpha^{up}, \alpha^{down}, \omega]$. We directly approximate σ_ϵ by the unconditional variance of $\tilde{\psi}_{i,t}$ in the data instead of treating it as one of the parameters to be estimated. The parameter estimates vary very little on the choice of σ_ϵ.

Approximating $\kappa_{i,t}$ and $x_{i,t}$: Both $s_{i,t}$ and $\tilde{\psi}_t$ are observed from micro survey data, but we do not perfectly observe $\kappa_{i,t}$ or $x_{i,t}$. Instead, we use the imputed propensities of one's party affiliations, $\widehat{prob}(\kappa_{i,t} = O)\ \forall O \in [D, R]$ obtained from the procedure in Section 2.2.

The approximated probability that one's preferred candidate is power $prob(x_{i,t} = 1)$ is, therefore, the product of the likelihood of i's partisanship $\kappa_i \in [D, R]$, and one indicator if the current president is from i' preferred party. $\Theta_t \in [D, R]$.

$$\widehat{prob}(x_{i,t} = 1) = \widehat{prob}(\kappa_{i,t} = D)\mathbf{1}(\Theta_t = D) + \widehat{prob}(\kappa_{i,t} = R)\mathbf{1}(\Theta_t = R) \tag{6}$$

Data processing: We difference out time-fixed effects ϕ_t in all expectations. This excludes any common component that drives universal changes in macroeconomic expectations at any point in time, such as changes in macroeconomic conditions, public news releases, etc. For the SCE data, where individuals are surveyed for up to 12 months, we also difference out individual fixed effects ζ_i. To facilitate comparability across variables and time, we also normalize the data by its unconditional standard deviation so that we can interpret sensitivity estimates in the unit change of the respective variable. For expectations measured as probabilities, we use their transformed values based on a logit function, e.g. $f(x) = \log(\frac{x}{1-x})$[16] in the estimation so that they are not bounded, which is more consistent with the assumption that the measurement errors/shocks $\varepsilon_{i,t}$ are normally distributed.

[16]For the corner case of x =1, we adjust it by an infinitesimal value before the transformation.

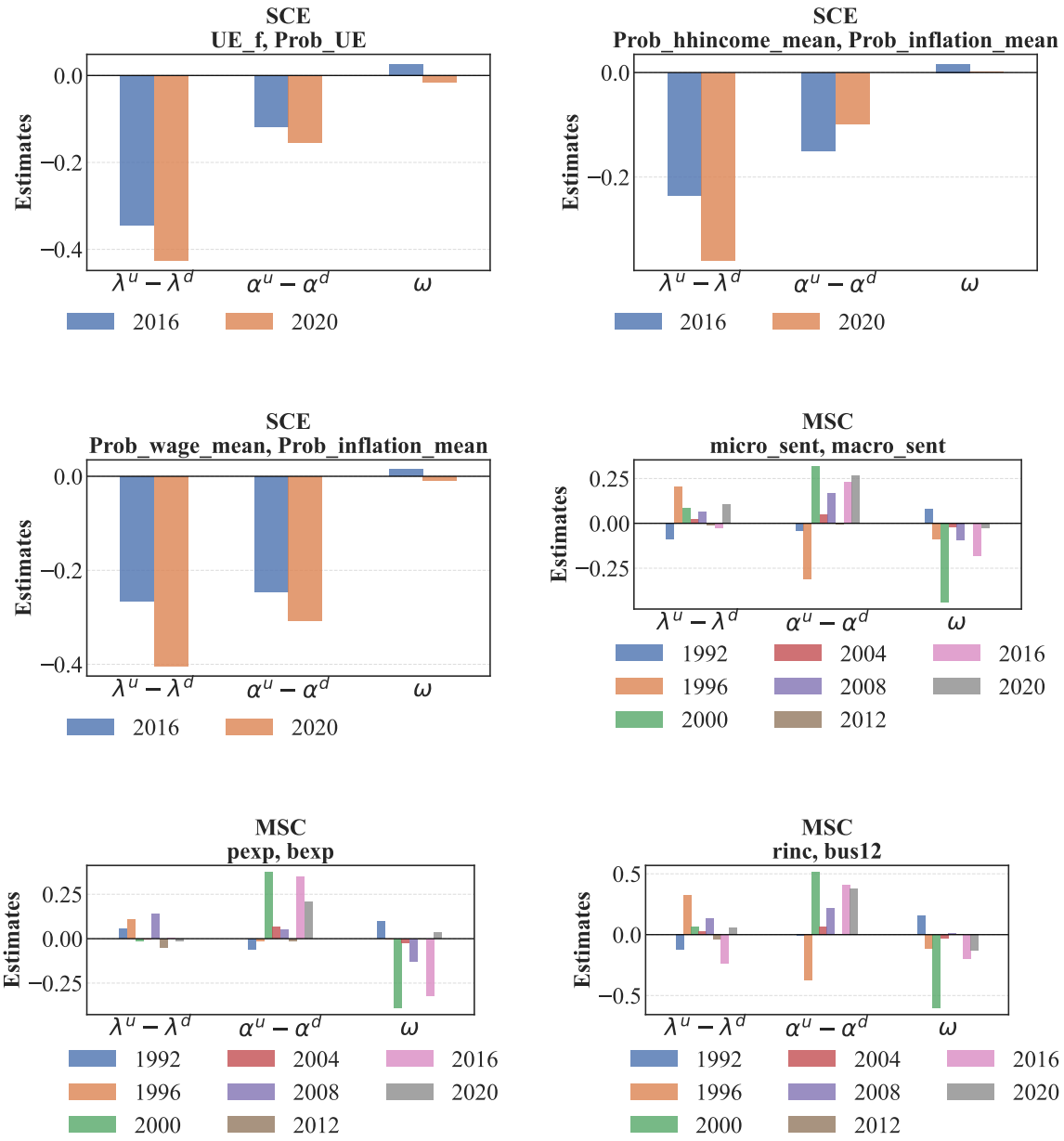
4.4 Results

For each of the eight U.S. presidential election cycles from 1992 to 2020, we estimate the vector of five parameters, Γ, for six pairs of micro and macroeconomic expectations elicited in either MSC or SCE, respectively. They include individual job finding probability (UE_f) versus nationwide unemployment rate ($Prob_UE$); expected household nominal income growth ($Prob_hhincome_mean$) versus expected inflation rate ($Prob_inflation_mean$); expected nominal wage growth ($Prob_wage_mean$) versus expected inflation rate $Prob_inflation_mean$; MSC sentiment about personal finance $micro_sent$ versus macroeconomy $macro_sent$; personal finance expectations ($pexp$) versus overall business conditions ($bexp$); real income expectations ($rinc$) versus business conditions ($bus12$). The estimated parameters are reported in Figure 5. (See Table A.18 in the Appendix for an expanded list of expectations.)

With the exception of the 1992 election cycle, three patterns consistently emerge from our estimates. First, the estimates of $\alpha^{up} - \alpha^{down}$ indicate across expectation domains and election cycles, it has always been the case that the incumbent party's affiliates are more optimistic about the macroeconomy than the other. This is seen in negative values of $\alpha^{up} - \alpha^{down}$ for unemployment rate expectations and inflation expectations, and positive values for macroeconomic sentiment, expectations about business conditions, etc. Second, across specifications, it is not only the sentiment but also the degree of belief extrapolation that differs between incumbent versus opponents' affiliates, e.g. λ^{up} generally differing from λ^{down}. Although the exact way the belief extrapolation varies across domains of expectations, the estimates for the 2016 and 2020 election cycles imply that the mapping from microeconomic expectations onto macroeconomic views is more attenuated for incumbent parties. We can interpret these results as households aligned with the incumbent party holding onto their priors and reacting less to their new information in forming their views about the macroeconomy. Third, given the measured heterogeneous microeconomic expectations, overall, all three components as defined above contribute to the partisanship in expectations during our estimation sample. The estimates suggest the overall importance of the state-dependent nature of the partisanship as implied by the non-identical λs and αs. Partisanship is not simply a time-invariant trait across individuals, instead, reflecting its interactions with national politics.

Time-varying importance of partisanship: Through the lens of our model, we are able to compare the time-varying importance of partisanship in macroeconomic beliefs. In particular, we measure such importance by the explanatory power of our factor-model estimates, as measured by R^2 from a linear regression of observed $z_{i,t}$ on $\hat{z}_{i,t}$, which are predicted by observed $s_{i,t}$ and estimated parameters $\widehat{\Gamma}$. Also note that values of $z_{i,t}$ are residualized from individual and time-fixed effects. Therefore, the R^2 here can be thought of as the fraction of the variations in macroeconomic beliefs net of common and individual specific factors that can be purely

Figure 5: Model Estimates



These figures plots the parameter estimates for each survey, each pair of micro and macroeconomic expectations, and each election cycle. Superscripts u and d represent *up* and *down* for brevity.

explained by partisan factors. Our headline finding is that partisanship has not been a new phenomenon. Beyond the 2016 and 2020 elections, in which the polarization in views of the macroeconomy has drawn particular discussion, the model estimates of earlier cycles at least since 2004 across an array of beliefs exhibit comparable contribution of partisan factors. Yet it is worth noting that before 2000, partisanship did seem to play a less important role. This echoes the often-raised claim of the growing importance of political polarization in the past two decades.

5 The Role of Policy Expectations in Partisanship in Macroeconomic Expectations

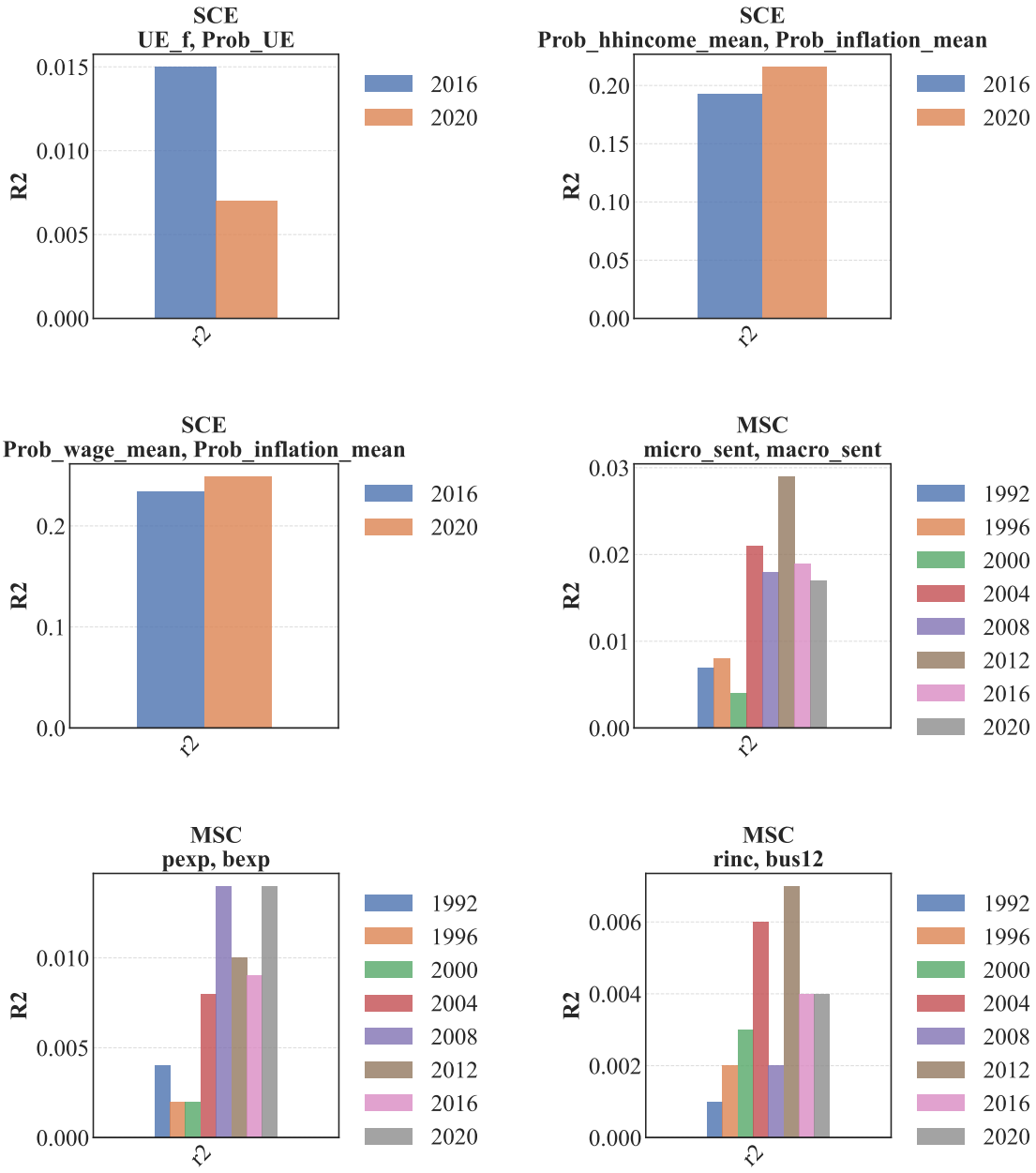
Our evidence confirms that households hold partisan views of the economy. However, we remain agnostic about the underlying causes of the so-called "colored glasses" until this point. In addition to previous explanations by the literature, such as the polarization of news media along partisan lines[17], we inspect the role of households' expectations of public policies.

Political alignment undoubtedly stems from a wide range of non-economic considerations. Still, as economists, we test the hypothesis that households with different expectations on the positive(negative) macroeconomic effects of policies enacted by the winning presidential candidate can explain sudden shifts in optimistic(pessimistic) shifts of partisan expectations shortly after elections. We find mixed evidence regarding such a hypothesis in Section 5.1. Households only positively associate some policies of their preferred winning party to a better macroeconomy but negatively associate others, which suggests that partisanship cheerleading cannot be the only driver of policy views. Meanwhile, in Section 5.2, we report that self-interest remains prominent in driving households' views of a policy's impacts on the macroeconomy. Households tend to believe certain policies to be beneficial to the *macro*economy when they expect to benefit from them *personally*. Our findings of the importance of both self-interest and partisanship echo the framework of Stantcheva (2020, 2024). We now turn to detailed results.

To explore the role of households' beliefs on public policies on partially, we use data from the Public Policy Survey (PPS) sub-module of the SCE, which is conducted every 4 months. As an example, we look at partisan expectations concerning public policies during the 2016 and 2020 elections. First, we describe the SCE questions on household expectations of public policies. The PPS asks households on two types of questions public policy expectations: first on which direction a respondent thinks that a given policy will change, and second on whether the respondent thinks this presumed policy change will have a positive/negative effect on their

[17]See evidence from Chahrour et al. (2024); Cummings et al. (2024); Harris and Sojourner (2024).

Figure 6: Time-varying Importance of Partisanship in Macroeconomic Expectations Implied by Model Estimates



The figure plots the R^2 of a linear regression of observed cross-sectional macroeconomic expectations on their predicted values from the model estimates, for each pair of micro and macroeconomic beliefs, and each election cycle.

own household.[18] We use the PPS submodule's microdata for 6 types of public policies: welfare benefits, payroll tax increase, unemployment benefits, capital gains tax, income tax, and income tax for highest income bracket.

We then use these variables to construct proxy variables, for each type of public policy, on the household's expected "Direction" of policy change and the expected "Effect" of that policy on their individual household. We construct our dataset from the PPS variables as such. In the PPS microdata, for each policy j, the variable 'hidqp2_j' records the direction of the policy change that each PPS respondent expects. A respondent can either expect that a policy is more likely to expand/increase or to reduce/decrease.[19] We re-scale the 'hidqp2_j' variable fo reach policy j to a $[-1, 1]$ scale (-1 for reduction/decrease, 1 for expansion/increase). We call the re-scaled variables our "Direction" variables, and are meant to proxy for which direction each PPS respondent expects the policy to change. For each policy j, we shall denote the Direction and Effect variables as PolicyDirection$_{jit}$" and PolicyEffect$_{jit}$ for respondent i in time t.

As for the effect of each public policy j, the PPS variable 'qp2_j' records, *based on that respondent's response to* 'hidqp2_j', whether the expected change in policy will affect their own household positively or negative. We re-scale the 'qp2_j' variables to a $[-1, 1]$ scale (-1 for very negative, 1 for very positive), and call these our "Effect" variables. The Effect variables are meant to proxy for how much each PPS respondent thinks that their expected direction of change in the public policy will affect their household.

5.1 Cheerleading Effects and Partisanship

In this subsection, we aim to see how partisan households adjust their macro/micro beliefs conditional on their preferred political candidate winning the presidency. Here, for each policy j, we run regressions with the Direction variable PolicyDirection$_{jit}$ and its interaction terms with the Party$_i$ and PostElect$_t$ variables. Specifically, we look at Democratic households' responses to the Democratic candidate Joe Biden winning the 2020 election: Party$_i = 1$ for Democrats (and 0 for Republicans), and PostElect$_t = 1$ for months from December 2020 to December 2022 (and 0 for months from January 2019 to November 2020).

[18] For the latter type of variables, the PPS questions specifically ask for the policy change's effect on the *individual* household, not the general public.

[19] In the case that the respondent thinks that both outcomes are equally likely, the SCE randomizes the respondent's response between either category.

We then run the following policy direction belief regressions, separately for each policy j:

$$\begin{aligned}\text{Belief}_{it} = \alpha_0 &+ \alpha_1 \text{Party}_i + \alpha_2 \text{PostElect}_t + \alpha_3 \text{Party}_i \times \text{PostElect}_t \\ &+ \alpha_4 \text{PolicyDirection}_{jit} + \alpha_5 \text{PolicyDirection}_{jit} \times \text{Party}_i \\ &+ \alpha_6 \text{PolicyDirection}_{jit} \times \text{PostElect}_t \\ &+ \alpha_7 \text{PolicyDirection}_{jit} \times \text{Party}_i \times \text{PostElect}_t + Controls_i + \varepsilon_{it} \end{aligned} \tag{7}$$

In Table A.17 of the Online Appendix, we show the signs and coefficients from these regressions for the same 6 policies mentioned above, throughout only the 2020 election cycle. In that table, the coefficients in the "Change" column are our α_4 estimates, namely the correlation between the direction of the policy change and the change in macro/micro beliefs. The "$\times \text{Party}_i$" column corresponds to α_5, namely the additional effect of Democratic partisanship on macro/micro beliefs. The "$\times \text{postElect}_t$" column corresponds to α_6, the post-electoral shift in households' economic beliefs. Finally, "$\times \text{Party}_i \times \text{postElect}_t$" column corresponds to α_7, namely the post-electoral partisan effect on Democrats' beliefs after Joe Biden winning the election.

One finding of interest in Table A.17 is on the $\times \text{Party}_i \times \text{postElect}_t$ coefficients, i.e. the change in macro/micro beliefs for Democratic households after the 2020 election. The $\times \text{Party}_i \times \text{postElect}_t$ column (α_7) is generally, if significant, negative. In the case for beliefs on the probability of a higher national unemployment rate, we observe 3 out of 6 of these coefficients as statistically insiginificant or zero, and the other 3 coefficients as negative. However, we also see that this coefficient has more null results for the perceived job separation probability (5 zero coefficients, 1 negative coefficient).

In other words, after Joe Biden's election in November 2020, Democrats' beliefs of the macroeconomy (the national unemployment rate) generally decreased by more than Republicans' beliefs, but much less so for their own personal economic situation (the perceived probability of job separation). The evidence implies a partisan and post-electoral effect of households' macro beliefs, but less so in micro beliefs; Democrats who saw Joe Biden win the 2020 election thought that the economy would improve (lower national unemployment) even if their own circumstances would not change. Thus, our results in Table A.17 point to our main finding again, that electoral turnover are more likely to affect households' beliefs about the macroeconomy than those about their personal economic situation.

5.2 Self-interested Motives in Policy Views

In this subsection, we look into self-interested motives as a possible cause of the partisan shift in micro and macro expectations. We run regressions for each policy to a select number

of macro/micro belief variables Belief_{it}, with control variables and an election cycle dummy variable,[20] separately for each policy j:

$$\text{Belief}_{it} = \alpha_0 + \alpha_1 \text{PolicyDirection}_{jit} + \alpha_2 \text{PolicyEffect}_{jit} + Controls_i + \varepsilon_{it}$$

where α_1 represents how much individuals' beliefs on expected direction of policy changes affects macro/micro beliefs, and α_2 represents the same for expected effects of policy changes.

In Table A.16 of the Online Appendix, we show the signs and significance levels of each policy belief coefficient in each regression involving a macro or micro expectation variable. For a visual summary, we include bar plots, with standard error bands, for 4 variables in Figure 7. We include results for expectations for the national unemployment rate ('Prob_UE'), the individual job separation rate ('UE_s'), as well as the probability of inflation increasing ('Prob_inflation_mean'), and the expected increase in gas prices, all in the next 12 months. Each bar represents the estimated coefficient of the policy belief variable on a macro/micro belief variable.

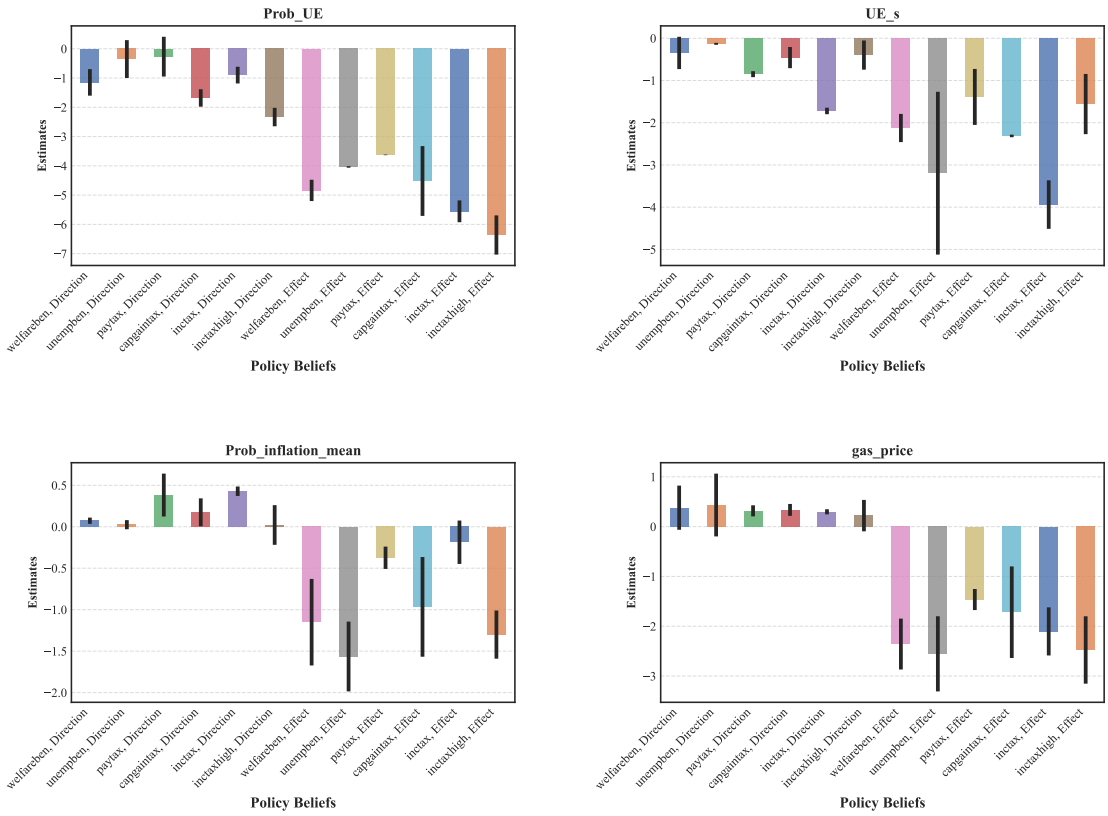
It is visually striking that the coefficients for the vast majority of the "Effect" variables, regardless of the policy (and of the direction of change of policy), are highly significant and exhibit the same sign. For example, for the national unemployment rate, all the Effect variables (the right half of the graph) are negative and statistically significant. We also see this for expectations of individuals' job separation rates and also for expectations of the inflation rate and of gas prices. In other words, individuals who expect policy changes that will have a positive effect on their households also tend to expect macroeconomic conditions to improve in the future (lower unemployment, lower inflation, etc.). Generally, we interpret these results as preliminary evidence that individuals relate their expectations on the effects of policies to expectations of macro and micro variables. We take these results as supporting evidence to our claim that households' expectations of their personal circumstances are positively correlated with their expectations of the macroeconomy.

6 Conclusion

In this paper, we find that partisan switches in households' expectations shortly before and after elections are observed more strongly for macroeconomic variables than for microeconomic variables of households' individual circumstances. This result is a nuanced interpretation that was previously not made in the literature, which did not distinguish between macro and micro

[20] Given that the SCE currently only has data for the 2016 and 2020 election cycles, we simply include a dummy variable for the 2020 election cycle.

Figure 7: Estimates of Coefficients from Policy Belief Regressions



Bar plot of estimated coefficients from policy belief regressions, for select macro/micro belief variables. From top left to bottom right: *Prob_UE*: national unemployment rate; *UE_s*: job separation rate; *Prob_inflation_mean*: expected inflation rate; *gas_price*: Price of gasoline. Each thick colored bar is the estimated coefficient in the corresponding regression for the policy, with ± 1 standard deviation around the mean in thin black bars. The left half of each bar plot shows the estimated coefficients for the policy belief *direction* variables, and the righit half for the policy belief *effect* variables.

expectations.

Empirically, we show this for a large range of macro and micro beliefs across both the SCE and MSC surveys. In the process, we also make a methodological contribution to the literature by imputing individuals' political preferences from demographic and geographic data. This vastly expands the data available for analysis to 8 election cycles, from 1992 to 2020. Our expanded dataset allows us to conclude that the divergent behavior of households' expectations between macroeconomic and microeconomic variables is true across many elections, a result not shown in the previous literature. Furthermore, we find that households' partisan macro beliefs can be explained in part by their partisan micro beliefs, which we test with multiple pairs of micro and macro beliefs.

Our empirical findings can be explained by the insight that households are more informed of expectations of their individual economic situations, which are less affected by partisanship than their macro expectations. To verify, we construct and estimate a structural model of households' beliefs based on their microeconomic expectations, their partisanship, and the contemporary state of the politics, e.g. incumbent political party. We argue that our empirical findings of the sudden switch around election outcomes can be replicated with either (1) a partisan bias in macro expectations or (2) differences in attribution of micro beliefs to macro beliefs, based on individual households' political sentiment (whether their preferred candidate is in power).

As for why there is partisanship in macroeconomic expectations, our empirical results with policy belief variables from SCE microdata imply that partisan households have greater divergence in beliefs on the direction of policy changes than their effects on individual (their own) households. While this may be due to the close nature of the 2016 and 2020 U.S. presidential elections, for now we find more evidence in favor of differing expectations of policy changes than of the policies' effects on individual households.

References

Addoum, Jawad M and Alok Kumar, "Political sentiment and predictable returns," *The Review of Financial Studies*, 2016, *29* (12), 3471–3518.

American National Election Studies, "ANES 2020 Time Series Study Full Release [dataset and documentation]," 2021.

Andre, Peter, Carlo Pizzinelli, Christopher Roth, and Johannes Wohlfart, "Subjective models of the macroeconomy: Evidence from experts and representative samples," *The Review of Economic Studies*, 2022, *89* (6), 2958–2991.

Bachmann, Oliver, Klaus Gründler, Niklas Potrafke, and Ruben Seiberlich, "Partisan bias in inflation expectations," *Public Choice*, 2021, *186*, 513–536.

Bartels, L. M., "Beyond the Running Tally: Partisan Bias in Political Perceptions," *Political Behavior*, 2002, *24*, 117–150.

Binder, Carola, "Political party affiliation and inflation expectations," *Working Paper*, 2023.

Binder, Carola Conces, Rupal Kamdar, and Jane M Ryngaert, "Partisan expectations and COVID-era inflation," *Journal of Monetary Economics*, 2024, p. 103649.

Bolhuis, Marijn A, Judd NL Cramer, Karl Oskar Schulz, and Lawrence H Summers, "The Cost of Money is Part of the Cost of Living: New Evidence on the Consumer Sentiment Anomaly," Technical Report, National Bureau of Economic Research 2024.

Born, Benjamin, Zeno Enders, Manuel Menkhoff, Gernot J Müller, and Knut Niemann, "Firm expectations and news: micro v macro," *Working Paper*, 2022.

Brunnermeier, Markus K and Jonathan A Parker, "Optimal expectations," *American Economic Review*, 2005, *95* (4), 1092–1118.

Bullock, John G., Alan S. Gerber, Seth J. Hill, and Gregory A. Huber, "Partisan Bias in Factual Beliefs about Politics," *Quarterly Journal of Political Science*, 2015, *10*, 519–578.

_ , _ , _ , and _ , "Partisan Bias in Surveys," *Annual Review of Political Science*, 2019, *22*, 325–342.

Bullock, John G and Gabriel Lenz, "Partisan bias in surveys," *Annual Review of Political Science*, 2019, *22* (1), 325–342.

Burke, Mary A and Ali Ozdagli, "Household inflation expectations and consumer spending: evidence from panel data," *The Review of Economics and Statistics*, 2023, *105* (4), 948–961.

Burn-Murdoch, John, "How our sense of economic reality is being distorted," *Financial Times* May 2024.

Bursztyn, Leonardo, Aakaash Rao, Christopher Roth, and David Yanagizawa-Drott, "Opinions as facts," *The Review of Economic Studies*, 2023, *90* (4), 1832–1864.

Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes, *The American Voter*, John Wiley & Sons., 1960.

Casselman, Ben, "Republicans See a Better Economic Outlook. Now Its Democrats Who Dont.," *The New York Times* November 2024. Accessed: 2025-01-31.

Cassidy, Will and Blair Vorsatz, "Partisanship and portfolio choice: Evidence from mutual funds," *Available at SSRN 3977887*, 2021.

Chahrour, Ryan, Adam Hale Shapiro, and Daniel J Wilson, "News Selection and Household Inflation Expectations," Technical Report 2024.

Chinoy, Sahil, Nathan Nunn, Sandra Sequeira, and Stefanie Stantcheva, "Zero-sum thinking and the roots of US political divides," Technical Report, National Bureau of Economic Research 2023.

Choi, Sangyup, Sang-Hyun Kim, Myunghwan Andrew Lee, Siye Bae, and Myungkyu Shim, "Partisan Bias in Inflation Beliefs: New Evidence from Korea," Technical Report 2022.

Conover, Pamela Johnston, Stanley Feldman, and Kathleen Knight, "The personal and political underpinnings of economic forecasts," *American Journal of Political Science*, 1987, pp. 559–583.

Cookson, J Anthony, Joseph E Engelberg, and William Mullins, "Echo chambers," *The Review of Financial Studies*, 2023, *36* (2), 450–500.

Crump, Richard K, Stefano Eusepi, Andrea Tambalotti, and Giorgio Topa, "Subjective intertemporal substitution," *Journal of Monetary Economics*, 2022, *126*, 118–133.

Cummings, Ryan and Neale Mahoney, "Asymmetric amplification and the consumer sentiment gap," Nov 2023. Briefing Book blog post.

_ , Giacomo Fraccaroli, and Neale Mahoney, "Bad News Bias in Gasoline Price Coverage," May 2024. Briefing Book blog post.

Dagostino, Ramona, Janet Gao, and Pengfei Ma, "Partisanship in loan pricing," *Journal of Financial Economics*, 2023, *150* (3), 103717.

Dräger, Lena and Giang Nghiem, "Are consumers' spending decisions in line with a euler equation?," *Review of Economics and Statistics*, 2021, *103* (3), 580–596.

Duca-Radu, Ioana, Geoff Kenny, and Andreas Reuter, "Inflation expectations, consumption and the lower bound: Micro evidence from a large multi-country survey," *Journal of Monetary Economics*, 2021, *118*, 120–134.

Economist, The, "The pandemic has broken a closely followed survey of sentiment," *The Economist* September 2023.

_ , "American consumers are finally cheering up," *The Economist* February 2024.

_ , "Why are Americans so gloomy about their great economy?," *The Economist* January 2024.

Engelberg, Joseph, Runjing Lu, William Mullins, and Richard R Townsend, "Political sentiment and innovation: Evidence from patenters," Technical Report, National Bureau of Economic Research 2023.

Evans, Mary Claire, "U.S. Economic Confidence Ticks Down as Partisans' Views Shift," *Gallup News* January 2025. Accessed: 2025-01-31.

Gaines, Brian J, James H Kuklinski, Paul J Quirk, Buddy Peyton, and Jay Verkuilen, "Same facts, different interpretations: Partisan motivation and opinion on Iraq," *The Journal of Politics*, 2007, *69* (4), 957–974.

Gillitzer, Christian, Nalini Prasad, and Tim Robinson, "Political attitudes and inflation expectations: Evidence and Implications," *Journal of Money, Credit and Banking*, 2021, *53* (4), 605–634.

Guillochon, Justine, "News-driven household macroeconomic expectations: regional vs. national telecast information," *Available at SSRN 4071206*, 2022.

Harris, Ben and Aaron Sojourner, "Why are Americans so displeased with the economy?," 2024.

Ichiue, Hibiki and Shusaku Nishiguchi, "Inflation expectations and consumer spending at the zero bound: Micro evidence," *Economic Inquiry*, 2015, *53* (2), 1086–1107.

Kamdar, Rupal and Walker Ray, "Polarized Expectations, Polarized Consumption," 2022.

Kempf, Elisabeth and Margarita Tsoutsoura, "Partisan professionals: Evidence from credit rating analysts," *The Journal of Finance*, 2021, *76* (6), 2805–2856.

Kuang, Pei, Michael Weber, and Shihan Xie, "Perceived Political Bias of the Federal Reserve," Technical Report, National Bureau of Economic Research 2024.

Meeuwis, Maarten, Jonathan A Parker, Antoinette Schoar, and Duncan Simester, "Belief disagreement and portfolio choice," *The Journal of Finance*, 2022, *77* (6), 3191–3247.

Mian, Atif, Amir Sufi, and Nasim Khoshkhou, "Partisan bias, economic expectations, and household spending," *Review of Economics and Statistics*, 2021, pp. 1–46.

of Consumers University of Michigan, Survey, "Survey of Consumers - Notes: The Partisan Economy," 2022.

_ , "Survey of Consumers - Notes: Partisan Perceptions and Expectations," 2024.

Prior, Markus, Gaurav Sood, Kabir Khanna et al., "You cannot be serious: The impact of accuracy incentives on partisan bias in reports of economic perceptions," *Quarterly Journal of Political Science*, 2015, *10* (4), 489–518.

Rice, Anthony B, "Executive partisanship and corporate investment," *Journal of Financial and Quantitative Analysis*, 2020, pp. 1–30.

Stantcheva, Stefanie, "Understanding economic policies: What do people know and learn," *Unpublished Manuscript, Harvard University*, 2020, pp. 2309–2369.

_ , "Why do we dislike inflation?," Technical Report, National Bureau of Economic Research 2024.

Wang, Tao, "Perceived versus calibrated income risks in heterogeneous-agent consumption models," Technical Report, Bank of Canada 2023.

A Online Appendix

2004 (MSC)	Democrat		Republican	
Age	-0.0277*	(0.016)	0.0351**	(0.0162)
Age squared	0.0003	(0.0002)	-0.0003**	(0.0002)
Female	0.076	(0.0963)	0.0255	(0.0972)
HS or less	0.1647	(0.2123)	-0.2377	(0.218)
Some College	-0.0327	(0.1235)	0.0686	(0.1242)
BA Degree	0.0442	(0.1286)	-0.0571	(0.1288)
Post BA	0.4859***	(0.1534)	-0.4917***	(0.1548)
Married	-0.208**	(0.1043)	0.3392***	(0.1046)
3+ children	-0.3424	(0.2377)	0.3412	(0.2338)
Own Residence	0.0008	(0.1152)	0.0461	(0.116)
Income Mid	-0.0676	(0.1117)	0.2267**	(0.1121)
Income High	-0.1439	(0.1597)	0.3155**	(0.1601)
Region: Northeast	-0.0006	(0.1386)	-0.0097	(0.1403)
Region: Midwest	-0.0802	(0.1305)	0.1424	(0.1315)
Region: South	-0.1876	(0.1249)	0.2791**	(0.1256)
Constant	0.6295*	(0.3633)	-1.2841***	(0.3709)
Obs.	780		780	
R^2	0.028		0.051	

Table A.1: Coefficients of demographic variables from Probit regression of Democratic/Republican party affiliation using demographic variables common to American National Election Survey (ANES) and Michigan Survey of Consumers (MSC) cross-sectional data. 2004 Presidential election, with sample period from Jan 2003 to Dec 2006. For all applicable tables in this Appendix, *, **, and *** indicate respectively statistical significance at the 10%, 5%, and 1% levels, and standard errors are in parentheses.

2008 (MSC)	**Democrat**		**Republican**	
Age	0.03	(0.0220)	-0.0389*	(0.0226)
Age squared	-0.0004*	(0.0002)	0.0005**	(0.0002)
Female	0.0451	(0.1024)	0.0266	(0.1043)
HS or less	0.5821***	(0.2157)	-0.7769***	(0.2360)
Some College	-0.0225	(0.1396)	0.0838	(0.1412)
BA Degree	0.1563	(0.1356)	-0.0809	(0.1369)
Post BA	0.2372	(0.1909)	-0.268	(0.1924)
Married	-0.5213*	(0.2965)	0.654**	(0.3258)
3+ children	-0.0999	(0.1574)	0.2913*	(0.1602)
Own Residence	-0.0174	(0.1400)	0.1374	(0.1450)
Income Mid	-0.2554	(0.1662)	0.3056*	(0.1735)
Income High	-0.7633***	(0.1823)	0.8769***	(0.1881)
Region: Northeast	0.1662	(0.1951)	-0.096	(0.1997)
Region: Midwest	-0.1476	(0.1581)	0.0373	(0.1610)
Region: South	-0.2224*	(0.1217)	0.2541**	(0.1237)
Constant	0.5421	(0.5804)	-0.9408	(0.6006)
Obs.	667		667	
R^2	0.065		0.091	

Table A.2: Coefficients of demographic variables from Probit regression of Democratic/Republican party affiliation using demographic variables common to American National Election Survey (ANES) and Michigan Survey of Consumers (MSC) cross-sectional data. 2008 Presidential election, with sample period from Jan 2007 to Dec 2010.

2012 (MSC)	**Democrat**		**Republican**	
Age	0.0714***	(0.0221)	-0.0612***	(0.0228)
Age squared	-0.0007***	(0.0002)	0.0007***	(0.0002)
Female	-0.0874	(0.1031)	0.0612	(0.1062)
HS or less	0.5779***	(0.1822)	-0.8593***	(0.2096)
Some College	-0.1596	(0.1459)	0.2054	(0.1484)
BA Degree	-0.1338	(0.142)	0.1989	(0.1435)
Post BA	0.2401	(0.1728)	-0.2506	(0.1765)
Married	-0.5082***	(0.1431)	0.6356***	(0.1539)
3+ children	0.2042	(0.2000)	-0.1853	(0.2094)
Own Residence	-0.2999**	(0.1272)	0.2247*	(0.1324)
Income Mid	-0.3981***	(0.1226)	0.425***	(0.1278)
Income High	-0.2585	(0.1611)	0.34**	(0.1653)
Region: Northeast	-0.1299	(0.1652)	0.281*	(0.1693)
Region: Midwest	-0.0791	(0.1475)	0.1159	(0.1515)
Region: South	-0.0261	(0.1286)	0.0783	(0.1338)
Constant	-0.6168	(0.4949)	-0.0499	(0.5120)
Obs.	661		661	
R^2	0.079		0.109	

Table A.3: Coefficients of demographic variables from Probit regression of Democratic/Republican party affiliation using demographic variables common to American National Election Survey (ANES) and Michigan Survey of Consumers (MSC) cross-sectional data. 2012 Presidential election, with sample period from Jan 2011 to Dec 2014.

2016 (MSC)	**Democrat**		**Republican**	
Age	0.0091	(0.0087)	0.009	(0.0088)
Age squared	-0.0001	(0.0001)	0	(0.0001)
Female	0.2462***	(0.0494)	-0.1673***	(0.0500)
HS or less	0.1861	(0.1269)	-0.148	(0.1291)
Some College	0.074	(0.0701)	-0.0178	(0.0701)
BA Degree	0.2531***	(0.0662)	-0.2321***	(0.0665)
Post BA	0.6666***	(0.0760)	-0.5736***	(0.0776)
Married	-0.1216**	(0.0559)	0.1842***	(0.0563)
3+ children	-0.2413**	(0.1055)	0.1451	(0.1041)
Own Residence	-0.2804***	(0.0615)	0.2829***	(0.0623)
Income Mid	-0.1165*	(0.0618)	0.2049***	(0.0627)
Income High	-0.0248	(0.0757)	0.0822	(0.0770)
Region: Northeast	0.1128	(0.0786)	0.0857	(0.0809)
Region: Midwest	-0.0979	(0.0711)	0.2308***	(0.0729)
Region: South	-0.302***	(0.0656)	0.4279***	(0.0672)
Constant	-0.2288	(0.2053)	-1.0311***	(0.2122)
Obs.	2777		2777	
R^2	0.054		0.069	

Table A.4: Coefficients of demographic variables from Probit regression of Democratic/Republican party affiliation using demographic variables common to American National Election Survey (ANES) and Michigan Survey of Consumers (MSC) cross-sectional data. 2016 Presidential election, with sample period from Jan 2015 to Dec 2018.

2020 (MSC)	**Democrat**		**Republican**	
Age	-0.0166	(0.0150)	0.0299*	(0.0153)
Age squared	0.0002	(0.0001)	-0.0002	(0.0001)
Female	0.0758	(0.0592)	-0.046	(0.0599)
HS or less	-0.2409	(0.1919)	-0.0334	(0.1786)
Some College	0.0611	(0.0915)	0.0378	(0.0892)
BA Degree	0.3677***	(0.0827)	-0.2619***	(0.0826)
Post BA	0.5688***	(0.0859)	-0.4963***	(0.0876)
Married	-0.1679*	(0.0908)	0.3146***	(0.0955)
3+ children	-0.2997***	(0.1045)	0.3212***	(0.1016)
Own Residence	-0.1393*	(0.0833)	0.1417*	(0.0855)
Income Mid	0.1022	(0.0911)	0.1232	(0.0906)
Income High	0.1761*	(0.0953)	-0.0204	(0.0955)
Region: Northeast	0.005	(0.0953)	0.0859	(0.1003)
Region: Midwest	-0.1706**	(0.0847)	0.2613***	(0.0878)
Region: South	-0.3616***	(0.0799)	0.415***	(0.0821)
Constant	0.2334	(0.3611)	-1.6531***	(0.3748)
Obs.	1925		1925	
R^2	0.05		0.056	

Table A.5: Coefficients of demographic variables from Probit regression of Democratic/Republican party affiliation using demographic variables common to American National Election Survey (ANES) and Michigan Survey of Consumers (MSC) cross-sectional data. 2020 Presidential election, with sample period from Jan 2019 to Dec 2022.

2016 (SCE)	**Democrat**		**Republican**	
Age	0.0145	(0.0103)	0.0102	(0.0105)
Age squared	-0.0002	(0.0001)	0.0000	(0.0001)
Female	0.2993	(0.0531)***	-0.2213	(0.0542)***
Black	1.2749	(0.1125)***	-1.7102	(0.1602)***
Asian	0.1588	(0.1452)	-0.3948	(0.1555)**
Native American	0.6905	(0.4262)	-0.8248	(0.4566)*
Hispanic	0.8564	(0.0967)***	-0.8534	(0.1045)***
Multiracial	0.4035	(0.1361)***	-0.3351	(0.1385)**
HS or less	0.0402	(0.1418)	0.0796	(0.1462)
Some College	0.0838	(0.0855)	0.0066	(0.0862)
Assoc. Degree	-0.0424	(0.0945)	0.1141	(0.0942)
BA Degree	0.3179	(0.0828)***	-0.2392	(0.0834)***
Post BA	0.7240	(0.0923)***	-0.5719	(0.0937)***
Temporarily Laid Off	-0.1638	(0.2911)	-0.0097	(0.2975)
Unemployed	-0.0232	(0.125)	-0.0497	(0.1321)
Retired	0.1126	(0.0972)	-0.1377	(0.0973)
Permanently Disabled	-0.0060	(0.1459)	-0.1139	(0.1555)
Homemaker	-0.4402	(0.1265)***	0.3452	(0.1226)***
Student	0.3137	(0.1648)*	-0.0479	(0.1811)
Married	-0.0598	(0.0652)	0.1623	(0.0663)**
Spouse: Temporarily Laid Off	-0.0387	(0.4342)	-0.2555	(0.4473)
Spouse: Unemployed	-0.1291	(0.1644)	0.0357	(0.1717)
Spouse: Retired	0.1450	(0.0972)	-0.1696	(0.0974)*
Spouse: Permanently Disabled	-0.0244	(0.1865)	-0.0431	(0.1892)
Spouse: Homemaker	-0.1322	(0.1153)	-0.0259	(0.1119)
Spouse: Student	-0.1030	(0.2229)	0.2852	(0.226)
Resided 3+yrs in Current Address	0.0337	(0.0614)	-0.0262	(0.063)
Own Residence	-0.2412	(0.0707)***	0.2557	(0.0726)***
Other Residence	-0.1647	(0.1118)	0.1845	(0.1166)
3+ children	-0.2945	(0.1156)**	0.2287	(0.114)**
Income Mid	-0.0583	(0.0663)	0.1490	(0.0679)**
Income High	0.0514	(0.0813)	-0.0041	(0.0829)
Constant	-0.6975	(0.2719)**	-0.7665	(0.2805)***
Obs.	2810		2810	
R^2	0.133		0.150	

Table A.6: Coefficients of demographic variables from Probit regression of Democratic/Republican party affiliation using demographic variables common to American National Election Survey (ANES) and Survey of Consumer Expectations (SCE) cross-sectional data. 2016 Presidential election, with sample period from Jan 2015 to Dec 2018.

2020 (SCE)	**Democrat**		**Republican**	
Age	-0.0227	(0.0172)	0.0442	(0.018)**
Age squared	0.0002	(0.0002)	-0.0004	(0.0002)**
Female	0.0601	(0.0638)	-0.0402	(0.0658)
Black	0.6326	(0.1565)***	-1.4077	(0.2342)***
Asian	-0.0766	(0.1598)	-0.2219	(0.17)
Native American	0.0929	(0.2461)	-0.1839	(0.2529)
Hispanic	0.3342	(0.1154)***	-0.5155	(0.1222)***
Multiracial	0.2803	(0.1741)	-0.2922	(0.1827)
HS or less	-0.2591	(0.2091)	0.0311	(0.1959)
Some College	0.0941	(0.1142)	0.0438	(0.1122)
Assoc. Degree	0.0838	(0.1217)	0.0134	(0.119)
BA Degree	0.4346	(0.1085)***	-0.2775	(0.1078)**
Post BA	0.6131	(0.1116)***	-0.4876	(0.1127)***
Temporarily Laid Off	0.1595	(0.2067)	-0.0137	(0.2153)
Unemployed	-0.5285	(0.4016)	0.4455	(0.368)
Retired	-0.0837	(0.1216)	0.0131	(0.1213)
Permanently Disabled	0.1919	(0.2049)	-0.0173	(0.2121)
Homemaker	-0.2848	(0.1323)**	0.1971	(0.1285)
Student	0.8045	(0.6288)	-1.2620	(0.9386)
Married	-0.0755	(0.0949)	0.2073	(0.1019)**
Spouse: Temporarily Laid Off	-0.0487	(0.1969)	-0.1042	(0.2019)
Spouse: Unemployed	-0.1502	(0.1454)	-0.0050	(0.1506)
Spouse: Retired	0.1435	(0.1118)	-0.0229	(0.1124)
Spouse: Permanently Disabled	-0.0982	(0.2061)	-0.0734	(0.2109)
Spouse: Homemaker	-0.1372	(0.1357)	0.1289	(0.1336)
Spouse: Student	0.0983	(0.3676)	0.3276	(0.3777)
Resided 3+yrs in Current Address	0.0220	(0.0785)	0.1038	(0.0818)
Own Residence	-0.1786	(0.0922)*	0.1031	(0.0978)
Other Residence	-0.3184	(0.2313)	0.0924	(0.2269)
3+ children	-0.2639	(0.108)**	0.2613	(0.1067)**
Income Mid	0.1018	(0.0948)	0.0946	(0.0954)
Income High	0.1572	(0.1007)	-0.0506	(0.1024)
Constant	0.2748	(0.4261)	-1.5831	(0.4486)***
Obs.	1941		1941	
R^2	0.083		0.110	

Table A.7: Coefficients of demographic variables from Probit regression of Democratic/Republican party affiliation using demographic variables common to American National Election Survey (ANES) and Survey of Consumer Expectations (SCE) cross-sectional data. 2020 Presidential election, with sample period from Jan 2019 to Dec 2022.

MSC imputations (%)	2004	2008	2012	2016	2020
True Positives	**20.10**	**39.64**	**32.00**	**34.56**	**40.94**
True Negatives	**34.34**	**16.17**	**23.23**	**25.75**	**16.48**
False Positives	12.93	31.85	23.04	22.99	32.71
False Negatives	32.63	12.33	21.73	16.70	9.88
Correct imputation	**54.44**	**55.82**	**55.24**	**60.31**	**57.42**
Regions-only imputation	48.79	50.32	53.73	47.93	47.72
Obs.	**990**	**5,855**	**1,528**	**10,843**	**18,507**

Table A.8: Accuracy of imputation method using MSC data. All numbers are in percentages of total sample for each Presidential election period (2004, 2008, 2012, 2016, and 2020). True positives: Imputation method correctly identifies respondent as Democrat. True negatives: Imputation method correctly identifies respondent as Republican. False positives: Imputation method falsely identifies respondent as Democrat. False negatives: Imputation method falsely identifies respondent as Republican. Regions-only imputation: accuracy of imputation given only U.S. Census region dummies (Northeast, Midwest, South, and West).

Variable description	Horizon	Macro/Micro	Survey	Election 2004		Election 2008		Election 2012		Election 2016		Election 2020	
				Switch	Bias	Switch	Bias	Switch	Bias	Switch	Bias	Switch	Bias
						Labour Market							
Prob of higher unemployment rate	12m	Macro	MSC	0	0.187***	0	0	-0.023*	0.237***	-0.218***	0.170***	-0.238***	0.176***
Prob of higher unemployment rate	12mo	Macro	SCE							-4.662***	0	-7.618***	11.143*
Prob of losing job	5y	Micro	MSC	0	4.451**	0	-5.402***	0	0	-3.465***	3.107**	-3.477***	0
Perceived job separation prob	12mo	Micro	SCE							0	3.922**	0	0
Perceived job finding prob	3mo	Micro	SCE							2.252**	0	0	0
Prob of hiring more workers	12mo	Micro	SCE							7.495**	-8.360***	0	-20.548***
Prob of quitting	12mo	Micro	SCE							0	0	0	0
Prob of higher personal wage rate	12mo	Micro	SCE							0	0	-0.047**	0
Prob of higher nominal income	12mo	Micro	MSC	0	-4.470***	0	0	-0.820**	0	1.066***	-1.560***	1.682***	1.500**
Percentage of real wage growth	12mo	Micro	SCE							0	0	0	0
Prob of higher real household income	12mo	Micro	MSC	0	-0.144***	0.050***	0.056***	0	0	0.081***	-0.094***	0.085***	-0.045**
Prob of higher household income	12mo	Micro	SCE							-0.045***	0.045**	-0.076***	0.402**
Percentage of real household income growth	12mo	Micro	SCE							0.624*	0	0	0
						Household Spending							
Expected probability of spending growth	12mo	Micro	SCE							0	0	0	0
Expected spending growth rate	12mo	Micro	SCE							-0.403*	0	0	4.808**
						Micro Inflation							
Expected Increase in gas prices	12mo	Micro	SCE							-1.585***	1.502***	-2.933***	0
Expected Increase in gas prices	12mo	Micro	MSC	0	0	0	3.555*	0	-25.050***	-2.863**	0	-12.125***	11.996***
Expected Increase in gas prices	5y	Micro	MSC	0	0	0	22.900***	0	-79.312***	-10.671***	0	-21.096***	25.782***
Expected Increase in food prices	12mo	Micro	SCE							-0.490***	0.998***	-1.815***	0
Expected Increase in medical prices	12mo	Micro	SCE							-1.598***	1.484**	-1.283***	0
Expected increase in college prices	12mo	Micro	SCE							-0.517**	0	0	0
Expected increase in rent	12mo	Micro	SCE							-0.394*	0	-1.248***	0
Expected increase in gold	12mo	Micro	SCE							0	0	-1.068**	0
				0	0	-0.394***	0	0	1.753***	-0.532***	0	-2.241***	1.708***
						Macro Variables							
Expected inflation rate	12mo	Macro	MSC	0	0	-0.394***	0	0	1.753***	-0.532***	0	-2.241***	1.708***
Expected inflation rate	5y	Macro	MSC	0	0	-0.383***	0	0	0	-0.289***	0	-0.548***	0.968***
Prob of inflation	12mo	Macro	SCE							0.018***	-0.046**	0.018*	0
Expected inflation rate	12mo	Macro	SCE							-0.937***	0	-1.843***	0
Prob of higher house prices	12mo	Macro	SCE							0	-0.095*	-0.129***	0.415**
Expected house price change	12mo	Macro	SCE							-0.305*	0	0	-3.171***
Prob of higher interest rate	12mo	Macro	SCE							2.479***	-9.660**	1.979**	0
Interest rates rise/fall	12mo	Macro	MSC	-0.028**	0	-0.085***	0.077***	-0.027**	0	0	0	0.047***	0
Prob of higher stock market	12mo	Macro	SCE							2.285***	-5.969***	3.720***	0
Business conditions improve/decline	12mo	Macro	MSC	0	-0.129***	0.031***	-0.074***	0.032**	0	0.224***	-0.160***	0.267***	-0.159***
Index of Consumer Sentiment	12mo	Macro	MSC	0	-24.922***	5.930***	0	0	-21.034***	27.328***	-20.503***	32.145***	-14.142***
Index of Current Economic Conditions	12mo	Macro	MSC	0	-13.969***	0	0	0	-17.661**	13.939***	-12.110***	18.845***	0
Index of Consumer Expectations	12mo	Macro	MSC	0	-31.957***	8.940***	0	0	-23.198***	35.928***	-25.894***	40.688***	-20.244***
Macro Sentiment Index	12mo	Macro	MSC	0	-52.772***	20.132***	-10.975**	0	-45.337***	69.140***	-45.495***	73.529***	-41.115***
Micro Sentiment Index	12mo	Micro	MSC	0	-17.888***	0	0	0	-13.516**	14.839***	-14.147***	20.848***	-4.858**

Table A.9: Comparison of Expectation Variables throughout Elections (Coefficients)

Table A.10: Micro to Macro Partisan Bias and Switch for All Elections (I)
MSC elections 2008, 2016, 2020; SCE elections 2016-2020

	MSC macro	MSC micro	MSC bexp	MSC pexp	MSC bus12	MSC rinc	SCE	SCE Job Sep	SCE Job Find
predict_win	-0.769	7.973	0.013	-0.008	-0.002	-0.001	0.084	0.259	1.510**
	(8.446)	(10.329)	(0.027)	(0.026)	(0.044)	(0.033)	(0.101)	(0.364)	(0.734)
postElect	-27.385***	7.644	-0.053***	-0.047***	-0.134***	-0.100***	-4.848***	-4.709***	-8.180***
	(1.059)	(6.531)	(0.003)	(0.004)	(0.005)	(0.005)	(0.043)	(0.112)	(0.372)
winXpostElect	41.326**	27.209	0.170***	0.176***	0.189**	0.215***	-7.168***	-7.769***	-7.993***
	(17.235)	(16.583)	(0.047)	(0.060)	(0.088)	(0.071)	(0.249)	(0.549)	(0.410)
Micro		0.927***		0.384***		0.314***		0.223***	-0.041***
		(0.064)		(0.004)		(0.009)		(0.002)	(0.006)
Micro_postElect		-0.145***		0.063***		0.000		0.022***	0.052***
		(0.053)		(0.005)		(0.004)		(0.004)	(0.006)
Micro_predict_win		-0.082		0.032		0.002		-0.010	-0.024*
		(0.106)		(0.055)		(0.032)		(0.016)	(0.014)
Micro_winXpostElect		0.037		-0.100*		-0.115***		0.064***	0.019*
		(0.109)		(0.058)		(0.035)		(0.012)	(0.011)
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Adj_R2	0.064	0.208	0.011	0.126	0.066	0.120	0.023	0.057	0.024
N	55987	55987	55987	55987	55987	55987	106395	63862	63882

Table A.11: Micro to Macro Partisan Bias and Switch for All Elections (II)
MSC elections 2008, 2016, 2020; SCE elections 2016-2020

	MSC Inflation 1y	MSC Gas Price 1y	MSC Inflation 5y	MSC Gas Price 5y	SCE Inflation	SCE Gas Price	SCE Food Price	SCE Rent price
predict_win	0.096	0.006	-0.054	-0.043	-0.029***	0.341***	0.464***	0.342***
	(0.186)	(0.273)	(0.075)	(0.066)	(0.011)	(0.065)	(0.114)	(0.049)
postElect	2.120***	1.485***	0.466***	-0.036***	2.780***	2.086***	1.650***	1.477***
	(0.001)	(0.069)	(0.002)	(0.011)	(0.006)	(0.084)	(0.108)	(0.189)
winXpostElect	-1.409***	-1.105***	-0.270***	-0.304***	-1.924***	-1.401***	-1.139***	-1.018***
	(0.017)	(0.189)	(0.048)	(0.033)	(0.087)	(0.157)	(0.169)	(0.096)
Micro		0.015***		0.005***		0.127***	0.359***	0.266***
		(0.003)		(0.000)		(0.012)	(0.010)	(0.017)
Micro_postElect		0.014***		0.004***		0.062***	0.029**	0.025
		(0.003)		(0.000)		(0.013)	(0.013)	(0.022)
Micro_predict_win		0.003		-0.000		-0.058***	-0.074***	-0.035***
		(0.003)		(0.000)		(0.007)	(0.013)	(0.004)
Micro_winXpostElect		0.004		0.003***		0.029***	0.007	-0.026***
		(0.003)		(0.000)		(0.005)	(0.006)	(0.001)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Adj_R2	0.063	0.097	0.021	0.049	0.091	0.135	0.184	0.169
N	55046	33070	55522	41222	104155	90067	90258	90315

Table A.12: Micro to Macro Partisan Bias and Switch for All Elections *Dispersion* (I)
MSC elections 2008, 2016, 2020; SCE elections 2016-2020

	MSC macro	MSC micro	MSC bexp	MSC pexp	MSC bus12	MSC rinc	SCE	SCE Job Sep	SCE Job Find
predict_dem	3.925	41.282**	-0.012	-0.126***	0.012	-0.245**	5.024	10.181**	32.385
	(2.498)	(17.292)	(0.021)	(0.035)	(0.022)	(0.118)	(5.831)	(4.645)	(28.094)
postElect	-3.520***	11.294***	0.031***	0.086***	-0.025***	-0.075	-1.390	12.172*	37.494***
	(0.235)	(1.343)	(0.001)	(0.026)	(0.007)	(0.244)	(2.541)	(7.390)	(12.304)
demXpostElect	4.567***	-11.362	-0.003	0.184***	0.032***	0.210	2.991	-0.452	-31.897
	(1.528)	(30.304)	(0.011)	(0.055)	(0.012)	(0.251)	(1.968)	(5.379)	(26.237)
Micro		0.267*		0.387***		0.147		0.526	0.809
		(0.156)		(0.097)		(0.197)		(0.394)	(0.658)
Micro_postElect		-0.393***		-0.186**		0.145		-0.721	-1.209***
		(0.036)		(0.088)		(0.692)		(0.547)	(0.450)
Micro_predict_dem		-1.014***		0.370*		0.738*		0.052*	-0.990
		(0.382)		(0.192)		(0.380)		(0.029)	(1.267)
Micro_demXpostElect		0.432		-0.575***		-0.471		0.244**	1.085
		(0.790)		(0.169)		(0.742)		(0.115)	(0.889)
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Adj_R2	0.202	0.231	0.484	0.530	0.173	0.202	0.470	0.555	0.481
N	288	288	288	288	288	288	194	194	194

Table A.13: Micro to Macro Partisan Bias and Switch for All Elections *Dispersion* (II)
MSC elections 2008, 2016, 2020; SCE elections 2016-2020

	MSC Inflation 1y	MSC Gas Price 1y	MSC Inflation 5y	MSC Gas Price 5y	SCE Inflation	SCE Gas Price	SCE Food Price	SCE Rent price
predict_dem	-1.267***	-0.933***	-0.608***	-0.711	-3.503	3.566	2.486	1.941
	(0.105)	(0.301)	(0.233)	(0.544)	(3.807)	(3.395)	(4.616)	(6.208)
postElect	0.638	0.580	0.290	0.187	-1.606	0.969	3.656**	9.996**
	(0.522)	(0.696)	(0.331)	(0.617)	(1.045)	(1.406)	(1.759)	(4.668)
demXpostElect	-0.025	0.145*	-0.021	0.987**	1.338	1.369**	-0.177	-6.279**
	(0.181)	(0.081)	(0.144)	(0.439)	(2.663)	(0.572)	(2.786)	(2.914)
Micro		0.044***		0.016***		0.289*	1.006***	1.024**
		(0.016)		(0.004)		(0.154)	(0.145)	(0.520)
Micro_postElect		-0.002		0.001		-0.156*	-0.862**	-1.566**
		(0.019)		(0.008)		(0.094)	(0.343)	(0.746)
Micro_predict_dem		0.004		0.008		0.029	-0.098	-0.491
		(0.003)		(0.006)		(0.110)	(0.200)	(0.479)
Micro_demXpostElect		-0.006*		-0.015***		-0.074	0.152	0.893
		(0.003)		(0.005)		(0.086)	(0.792)	(0.689)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Adj_R2	0.495	0.679	0.459	0.591	0.644	0.754	0.744	0.747
N	288	288	288	288	194	192	192	192

Table A.14: Micro to Macro Partisan Bias and Switch for All Elections *Dispersion* (I)
MSC elections 2008, 2016, 2020; SCE elections 2016-2020

	MSC macro	MSC micro	MSC bexp	MSC pexp	MSC bus12	MSC rinc	SCE	SCE Job Sep	SCE Job Find
predict_win	-2.369	37.984***	0.003	-0.037	-0.010	-0.228	-5.881	-5.445	49.010
	(3.847)	(13.857)	(0.008)	(0.088)	(0.025)	(0.211)	(5.787)	(7.519)	(30.229)
postElect	-1.334	35.435***	0.037***	0.106***	-0.007	-0.252*	-1.378	9.973**	48.594***
	(2.410)	(11.005)	(0.006)	(0.027)	(0.012)	(0.131)	(4.286)	(4.768)	(15.554)
winXpostElect	0.200	-59.788**	-0.015***	0.097*	-0.005	0.616***	2.856	3.272	-52.038
	(3.355)	(27.261)	(0.004)	(0.058)	(0.027)	(0.086)	(5.422)	(8.968)	(37.052)
Micro		0.365**		0.436***		0.056		0.549**	1.236**
		(0.179)		(0.135)		(0.099)		(0.227)	(0.569)
Micro_postElect		-0.959***		-0.234***		0.683*		-0.565	-1.647**
		(0.244)		(0.088)		(0.354)		(0.437)	(0.644)
Micro_predict_win		-1.081**		0.108		0.572		-0.022	-1.788
		(0.428)		(0.245)		(0.527)		(0.215)	(1.154)
Micro_winXpostElect		1.560**		-0.329*		-1.698***		-0.023	1.809
		(0.733)		(0.175)		(0.217)		(0.258)	(1.356)
Controls	YES	YES	YES	YES	YES	YES	YES	YES	YES
Adj_R2	0.168	0.199	0.499	0.537	0.124	0.210	0.481	0.555	0.536
N	288	288	288	288	288	288	194	194	194

Table A.15: Micro to Macro Partisan Bias and Switch for All Elections *Dispersion* (II)
MSC elections 2008, 2016, 2020; SCE elections 2016-2020

	MSC Inflation 1y	MSC Gas Price 1y	MSC Inflation 5y	MSC Gas Price 5y	SCE Inflation	SCE Gas Price	SCE Food Price	SCE Rent price
predict_win	0.457**	0.096	0.130***	-0.211	-4.034***	0.130	-5.254***	-2.867
	(0.221)	(0.148)	(0.028)	(0.375)	(0.890)	(1.699)	(1.244)	(4.146)
postElect	0.730	0.654	0.379	0.595	-2.082**	1.647	3.951***	7.657
	(0.506)	(0.673)	(0.306)	(0.441)	(0.931)	(2.273)	(1.053)	(7.211)
winXpostElect	-0.233*	0.026	-0.213***	0.119	2.407	-1.134	-0.888	-0.266
	(0.135)	(0.211)	(0.066)	(0.587)	(2.457)	(1.411)	(1.258)	(6.778)
Micro		0.045***		0.018***		0.397**	0.912***	0.778**
		(0.013)		(0.002)		(0.163)	(0.208)	(0.369)
Micro_postElect		-0.002		-0.004		-0.234*	-0.979***	-1.313
		(0.019)		(0.005)		(0.120)	(0.218)	(0.933)
Micro_predict_win		0.003		0.005		-0.220*	0.136	-0.053
		(0.006)		(0.005)		(0.125)	(0.354)	(0.453)
Micro_winXpostElect		-0.008		-0.005		0.152	0.413	0.334
		(0.005)		(0.008)		(0.148)	(0.518)	(1.070)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Adj_R2	0.498	0.680	0.466	0.594	0.646	0.759	0.758	0.743
N	288	288	288	288	194	192	192	192

	Welfare Benefits		Unemployment Benefits		Payroll Tax		Capital Gains Tax		Income Tax		Income Tax, High Incomes	
	Direction	**Effect**	**Direction**	**Effect**	**Direction**	**Effect**	**Direction**	**Effect**	**Direction**	**Effect**	**Direction**	**Effect**
Prob of higher unemployment rate	-**	-***	0	-***	0	-***	-***	-***	-***	-***	-***	-***
Perceived job separation prob	0	-***	-***	-*	-***	-**	-*	-***	-***	-***	0	-**
Perceived job finding prob	0	0	0	0	+***	0	+***	+***	0	0	0	+**
Prob of hiring more workers	0	+***	0	0	0	0	+**	+***	+***	+***	0	+***
Prob of quitting	0	0	0	0	0	-***	0	0	-***	-***	0	0
Prob of higher personal wage rate	-***	-***	+***	-***	0	-***	-**	0	0	-***	0	-***
Percentage of real wage growth	0	+***	-***	+***	0	0	0	+***	0	+***	0	0
Prob of higher household income	0	-***	-***	-***	0	-**	-***	0	0	-***	-***	-***
Percentage of real household income growth	-***	+***	-***	+**	+***	+***	+**	+**	0	+***	+*	0
Prob of higher interest rate	0	0	-***	0	0	+*	0	0	0	0	0	+***
Prob of higher stock market	0	+***	0	+***	-***	+***	-***	+***	-***	+***	0	+***
Prob of inflation	0	+*	0	+***	-*	+***	-**	0	0	+***	0	+***
Expected inflation rate	+*	-**	0	-***	0	-***	0	0	+***	0	0	-***
Easier to get credit now	+***	+**	0	0	+***	+**	0	+***	0	+***	0	+***
Easier to get credit in future	+***	+***	+***	+***	0	+***	0	+***	0	+***	+***	+***
Prob of higher house prices	0	0	0	0	0	-***	-***	0	-*	-***	-***	0
Expected house price change	+***	-*	-***	-**	0	-**	+*	0	0	+*	0	0
Expected probability of spending growth	-***	+***	0	0	-***	0	-**	0	0	+***	-***	+***
Expected spending growth rate	0	-***	-***	-***	+**	-*	0	-***	+*	-***	0	-***
Expected Increase in gas prices	0	-***	0	-***	+***	-***	+***	-*	+***	-***	0	-***
Expected Increase in food prices	0	-***	0	-**	0	-***	0	-**	0	-*	0	-**
Expected Increase in medical prices	0	-***	0	-***	0	-***	0	-***	0	-***	0	-***
Expected increase in college prices	-**	-***	-***	-***	0	-***	0	-***	0	-***	-***	-***
Expected increase in rent	-*	-***	-***	-***	0	-***	0	-**	0	-***	0	-***

Table A.16: Signs and significance levels of coefficients in regressions of policy beliefs on selected macro/micro expectations variables. Data from the SCE's Public Policy Survey (PPS) sub-module. For each type of public policy (columns), "Direction" stands for the direction of the policy change, on a scale of -1 to 1 (-1 for reduce/decrease, 1 for expand/increase), and "Effect" stands for the SCE PPS respondent's expectations of the effects of the respondent's expected policy change on their own households, on a scale from -1 to 1 (-1 for negative, 1 for positive). Separate regression results for each type of public policy on each type of micro/macro beliefs (rows). *, **, and *** represent significance of the coefficient at the 10%, 5%, and 1% levels.

Policy beliefs, 2020 election only	(1) Welfare Benefits				(2) Unemployment Benefits				(3) Payroll Tax			
	Change	×Party$_i$	×postElect$_t$	×Party$_i$ ×postElect$_t$	Change	×Party$_i$	×postElect$_t$	×Party$_i$ × postElect$_t$	Change	×Party$_i$	×postElect$_t$	×Party$_i$ × postElect$_t$
Prob of higher unemployment rate	-***	0	0	-***	-***	0	0	-***	-***	-***	0	-***
Perceived job separation prob	0	0	-***	-***	0	0	-***	0	+*	-***	-***	0
Percentage of real wage growth	-***	0	0	+**	-***	+*	+*	-***	+*	-***	-***	-***
Percentage of real household income growth	-***	-***	0	0	-***	0	-***	0	-***	-***	+**	0
Expected inflation rate	-***	-***	+**	-***	-***	-***	0	0	0	-***	-***	-***
Expected Increase in gas prices	0	-***	0	-***	0	-***	0	0	0	-***	0	-***
Expected Increase in food prices	+*	0	0	-***	-***	0	0	-***	0	-***	0	-***
	(4) Capital Gains Tax				(5) Income Tax				(6) Income Tax for Highest Income Bracket			
	Change	×Party$_i$	×postElect$_t$	×Party$_i$ ×postElect$_t$	Change	×Party$_i$	×postElect$_t$	×Party$_i$ × postElect$_t$	Change	×Party$_i$	×postElect$_t$	×Party$_i$ × postElect$_t$
Prob of higher unemployment rate	-***	-***	0	0	0	-***	0	0	-***	0	0	-***
Perceived job separation prob	0	-***	-***	0	0	-***	-***	0	0	+*	-***	0
Percentage of real wage growth	-***	-***	0	0	-***	-***	-***	-***	-***	-***	0	0
Percentage of real household income growth	-***	-***	0	0	-***	-***	+**	-***	+*	-***	-***	0
Expected inflation rate	0	-***	+*	0	0	-***	0	-***	-***	0	+*	0
Expected Increase in gas prices	0	+***	0	-***	0	-***	0	-***	-***	-***	0	0
Expected Increase in food prices	-***	0	0	-***	-***	-***	0	+*	-***	0	0	0

Table A.17: Signs and significance levels of coefficients in regressions of beliefs on policy **changes** on selected macro/micro expectations variables. 2020 election cycle only. Data from the SCE's Public Policy Survey (PPS) sub-module. For each type of public policy (columns), "Direction" stands for the direction of the policy change, on a scale of -1 to 1 (-1 for reduce/decrease, 1 for expand/increase). Party$_i$: Interaction with party dummy variable (1 for Democrats, 0 for Republicans). postElect$_t$: Interaction with post-election dummy variable (1 for after November 2020, 0 otherwise). Separate regression results for each type of public policy on each type of micro/macro beliefs (rows). *, **, and *** represent significance of the coefficient at the 10%, 5%, and 1% levels.

B Additional Model Results

Figure A.1 plots the simulated average beliefs of respondents from each party over a sample period covering three assumed switches in election outcomes.

Figure A.1: Model simulation with different parameter values

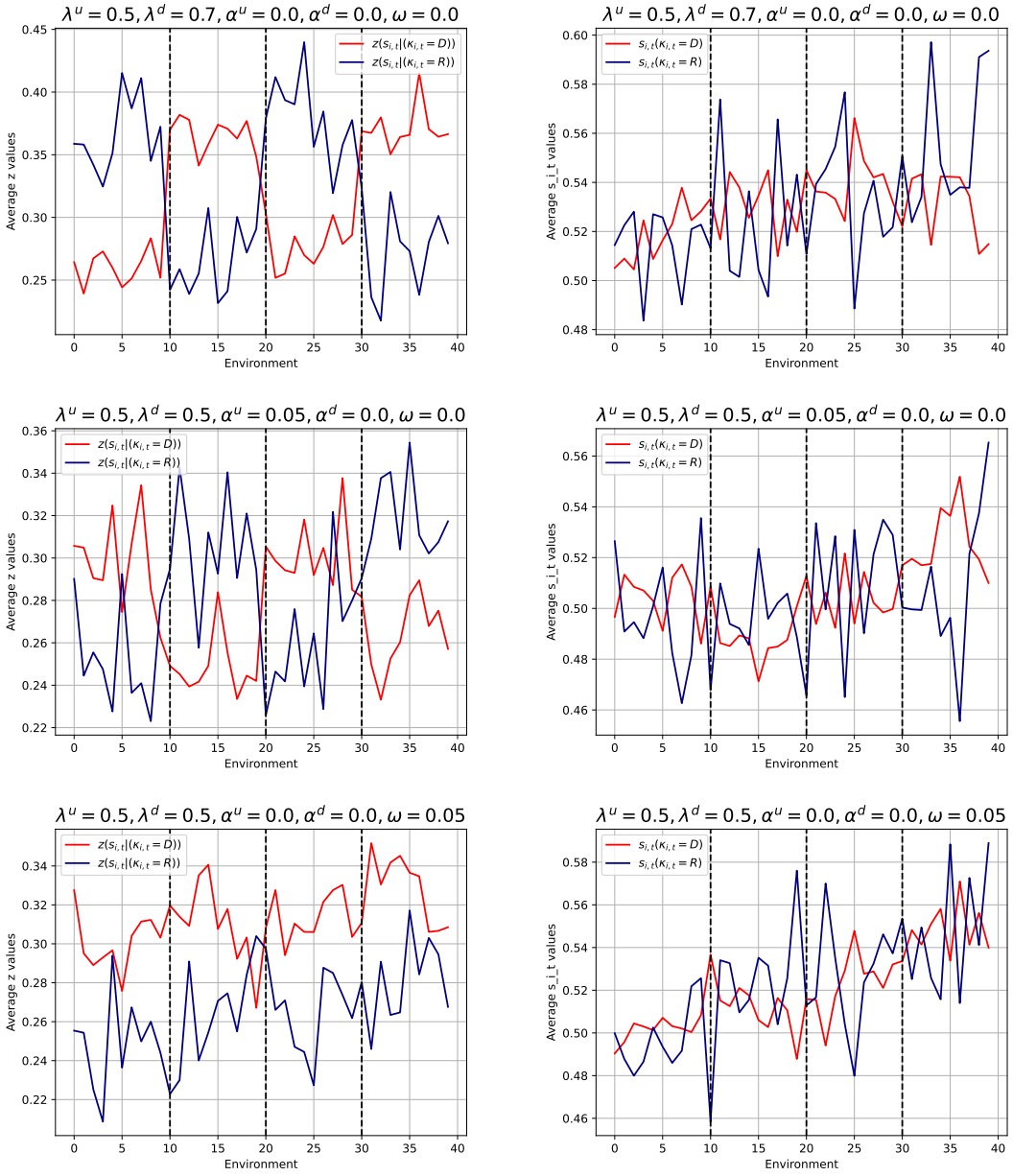


Table A.18: Model Estimates

					slope_up	slope_down	shift_up	shift_down	bias	coeff	r2	p_value
MSC	pexp	bexp	dem	1992	0.277	0.220	-0.071	-0.010	0.096	0.059	0.004	0.000
			rep	1992	0.352	0.154	0.126	-0.050	-0.074	0.061	0.004	0.000
			dem	1996	0.261	0.152	-0.003	0.008	-0.003	0.041	0.002	0.000
			rep	1996	0.246	0.194	0.023	-0.021	0.023	0.032	0.001	0.000
			dem	2000	0.211	0.226	0.361	-0.013	-0.389	0.040	0.002	0.000
			rep	2000	0.293	0.149	-0.311	0.001	0.368	0.046	0.002	0.000
			dem	2004	0.300	0.301	0.039	-0.026	-0.026	0.084	0.008	0.000
			rep	2004	0.288	0.313	-0.057	0.026	0.026	0.083	0.008	0.000
			dem	2008	0.420	0.282	0.100	0.051	-0.128	0.114	0.014	0.000
			rep	2008	0.281	0.421	-0.065	-0.018	0.118	0.095	0.010	0.000
			dem	2012	0.329	0.377	-0.003	0.008	-0.003	0.095	0.010	0.000
			rep	2012	0.398	0.319	0.009	-0.011	0.009	0.118	0.016	0.000
			dem	2016	0.300	0.299	0.324	-0.025	-0.323	0.088	0.009	0.000
			rep	2016	0.337	0.270	-0.287	0.013	0.339	0.088	0.009	0.000
			dem	2020	0.340	0.355	0.089	-0.119	0.033	0.110	0.014	0.000
			rep	2020	0.354	0.345	-0.068	0.050	0.027	0.120	0.016	0.000
	rinc	bus12	dem	1992	0.137	0.260	-0.066	-0.056	0.159	0.023	0.001	0.013
			rep	1992	0.246	0.169	0.120	0.088	-0.249	0.035	0.001	0.000
			dem	1996	0.343	0.016	-0.113	0.261	-0.113	0.044	0.002	0.000
			rep	1996	0.040	0.260	0.127	-0.114	0.127	0.045	0.002	0.000
			dem	2000	0.196	0.130	0.527	0.014	-0.601	0.047	0.003	0.000
			rep	2000	0.196	0.133	-0.490	0.013	0.557	0.025	0.001	0.001
			dem	2004	0.299	0.273	0.040	-0.027	-0.027	0.073	0.006	0.000
			rep	2004	0.261	0.312	-0.033	0.015	0.015	0.075	0.006	0.000
			dem	2008	0.292	0.162	0.098	-0.116	0.014	0.043	0.002	0.000
			rep	2008	0.186	0.268	-0.075	0.085	-0.016	0.049	0.003	0.000
			dem	2012	0.264	0.303	-0.001	0.002	-0.001	0.080	0.007	0.000
			rep	2012	0.309	0.264	-0.000	0.001	-0.000	0.090	0.009	0.000
			dem	2016	0.141	0.375	0.297	-0.111	-0.197	0.062	0.004	0.000
			rep	2016	0.346	0.174	-0.248	0.130	0.152	0.065	0.005	0.000
			dem	2020	0.271	0.211	0.255	-0.126	-0.133	0.060	0.004	0.000
			rep	2020	0.275	0.213	-0.173	0.017	0.236	0.059	0.004	0.000
	micro_sent	macro_sent	dem	1992	0.247	0.335	-0.053	-0.013	0.081	0.079	0.007	0.000
			rep	1992	0.278	0.309	0.033	0.012	-0.054	0.087	0.008	0.000
			dem	1996	0.375	0.169	-0.089	0.221	-0.089	0.082	0.008	0.000
			rep	1996	0.144	0.344	0.145	-0.122	0.145	0.064	0.005	0.000
			dem	2000	0.287	0.203	0.362	0.046	-0.440	0.059	0.004	0.000
			rep	2000	0.256	0.237	-0.311	-0.020	0.412	0.064	0.005	0.000
			dem	2004	0.410	0.389	0.030	-0.020	-0.020	0.135	0.021	0.000
			rep	2004	0.385	0.416	-0.040	0.018	0.018	0.139	0.023	0.000
			dem	2008	0.386	0.321	0.140	-0.029	-0.095	0.127	0.018	0.000
			rep	2008	0.332	0.374	-0.109	0.034	0.105	0.115	0.015	0.000
			dem	2012	0.430	0.439	-0.002	0.005	-0.002	0.155	0.029	0.000
			rep	2012	0.445	0.426	0.004	-0.007	0.004	0.169	0.034	0.000
			dem	2016	0.377	0.404	0.199	-0.031	-0.182	0.128	0.019	0.000
			rep	2016	0.411	0.373	-0.185	0.042	0.179	0.128	0.019	0.000
			dem	2020	0.432	0.324	0.144	-0.122	-0.024	0.119	0.017	0.000
			rep	2020	0.432	0.331	-0.104	-0.004	0.167	0.121	0.017	0.000
SCE	UE_s	Prob_UE	dem	2016	-0.048	0.156	0.415	0.117	0.002	0.130	0.015	0.000
			rep	2016	-0.035	0.145	0.449	0.083	-0.010	0.143	0.018	0.000
			dem	2020	-0.111	0.224	0.495	-0.039	-0.059	0.075	0.005	0.000
			rep	2020	-0.096	0.206	0.441	-0.007	-0.053	0.072	0.005	0.000
	UE_f	Prob_UE	dem	2016	-0.180	0.165	0.260	0.379	0.026	0.128	0.015	0.000
			rep	2016	-0.163	0.148	0.310	0.338	0.015	0.133	0.016	0.000
			dem	2020	-0.245	0.181	0.193	0.348	-0.015	0.086	0.007	0.000
			rep	2020	-0.217	0.164	0.212	0.347	-0.043	0.072	0.005	0.000
	Prob_wage_mean	Prob_inflation_mean	dem	2016	-0.077	0.189	-0.960	-0.715	0.014	0.494	0.234	0.000
			rep	2016	-0.056	0.169	-0.943	-0.731	0.015	0.491	0.230	0.000
			dem	2020	-0.132	0.272	-1.025	-0.718	-0.008	0.503	0.249	0.000
			rep	2020	-0.071	0.154	-0.811	-0.964	-0.024	0.517	0.257	0.000
	Prob_hhincome_mean	Prob_inflation_mean	dem	2016	-0.095	0.141	-0.950	-0.800	0.016	0.437	0.193	0.000
			rep	2016	-0.042	0.088	-0.905	-0.849	0.022	0.443	0.196	0.000
			dem	2020	-0.158	0.202	-0.971	-0.873	0.001	0.462	0.216	0.000
			rep	2020	-0.086	0.122	-0.794	-1.020	-0.041	0.467	0.221	0.000
	Prob_wage	Prob_stock	dem	2016	-0.085	0.052	-0.028	0.396	-0.011	0.059	0.003	0.000
			rep	2016	-0.047	0.019	0.056	0.336	-0.019	0.067	0.004	0.000
			dem	2020	-0.115	0.080	-0.076	0.456	-0.068	0.051	0.003	0.000
			rep	2020	0.064	-0.105	0.313	-0.061	0.072	0.035	0.001	0.000