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# Is It Still the Economy? Economic Voting in Polarized Politics

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#### Abstract

How does polarized politics affect electoral accountability? In this paper, I investigate the impact of political polarization on two channels through which voters can sanction incumbents for poor policy outcomes: voting for the opposition and abstaining. Using presidential election results at the county level, I show that, under polarized environments, the number of voters punishing the incumbent party for poor economic performances decreases in both channels. Survey analyses confirm that as the perceived ideological distance between parties increases, partisans are less likely to (i) negatively evaluate the economy when their party holds the Presidency and (ii) among those who have a negative view of the economy, they are less likely to penalize their party for negative economic assessments. These results show that polarization affects economic evaluation and clouds the responsibility for economic conditions, decreasing voters' willingness to sanction the incumbent party.

Keywords: economic voting; polarization; abstention; election results; survey data

In the 1992 presidential election, Bill Clinton's campaign strategist, James Carville, coined one of the most quoted sentences in politics – 'It's the economy, stupid' – to emphasize that campaign workers should focus on the deteriorating situation of the economy under George H.W. Bush's administration. The vast literature on economic voting suggests that economic performances influence election results and thus demonstrates the utility of Carville's strategy (Lewis-Beck and Stegmaier 2018). Voters reward incumbents at the polls when the economy prospers and punish them if it does not. Recently, however, economic performances have not shaped election results as predicted by the economic voting literature. In 2020, for example, high inflation did not bring about the expected 'red wave' in the US midterm elections. In 2024, good economic indicators do not seem to favour President Biden in the polls. These less predictable outcomes should bring another consistent finding in the literature back: the ability of voters to assign government responsibility for economic performances depends on the political context (Powell Jr and Whitten 1993). Institutions and other factors that make up the political environment affect voters' capacity to attribute blame or credit to the government.

Over the last decades, political polarization has become a central feature in US politics and many other countries that have experienced the rise of radical political leaders and parties

<sup>&</sup>lt;sup>1</sup>See, for instance, Dan Balz's analysis in the Washington Post.

<sup>&</sup>lt;sup>2</sup>See the Pew Research Center's report published in January 2024.

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(Hetherington 2001; Bischof and Wagner 2019). Previous works have shown that polarization can influence voting behaviour, but we still do not have sound evidence about *how* polarizing politics impacts electoral accountability. Does the polarization of the political environment affect the link of representation between voters and elected officials? How do voters react to policy outcomes as politics becomes more polarized? There is evidence that elite polarization clarifies the ideological distance between major parties and stimulates motivated reasoning, thereby reducing the propensity with which voters rely on substantive information (Druckman, Peterson and Slothuus 2013). Hence, I argue that polarized environments cloud both perceptions of and responsibility for government performances, lessening the impact of policy outcomes on voting.

In this paper, I investigate how polarization affects two channels through which economic voting can operate: voters can either (i) cast a ballot for the opposition or (ii) abstain in order to express their dissatisfaction with incumbents. Based on previous studies on polarization (Graham and Svolik 2020; Druckman, Peterson and Slothuus 2013; Donovan et al. 2020), I theorize that the number of voters crossing party lines or abstaining in response to a deteriorating economy decreases as political polarization increases.<sup>3</sup> Because polarized politics emphasizes the ideological difference between parties, induces partisan-motivated reasoning, and can bias economic perceptions, I argue that voters will tend to stick with their preferred party even when economic conditions indicate that they should desert it at the polls.

To test these hypotheses, I estimate models that split the electorate in presidential elections into three groups: voting for the incumbent party, the opposition, and abstention.<sup>4</sup> The results confirm that, under polarized politics, the number of voters punishing the party in government for poor economic conditions decreases. Even abstention becomes a weaker mechanism of economic voting when the environment gets more polarized. With survey data, I test *how* perceptions of polarization affect economic voting and *which* voters are more sensitive to this influence. I find that (i) perceived polarization reduces the probability that partisans negatively evaluate the economy under the administration of their preferred party and (ii) among those who can still have a negative economic assessment, perceived polarization decreases partisans' willingness to punish their party.

Four major contributions follow from these analyses. First, they demonstrate that polarization weakens electoral accountability. Voters are less inclined to penalize or reward the party in government for policy outcomes in polarized environments. Second, the paper shows that beyond moderating the effect of economic voting on the share of voters casting a ballot for the opposition, polarized politics reduces the number of those who abstain as a means to punish the incumbent party. It highlights that voters can use abstention to express dissatisfaction with the performance of incumbents, but polarization also narrows this channel of economic voting. Third, by estimating the impact of polarization on the electorate, this paper demonstrates that polarizing environments can be consequential in determining election results. Increasing polarization from a moderate value observed until the early 1990s to a high value observed in the late 2000s reduces by half the negative effect of unemployment on the share of voters supporting the incumbent party. Finally, my survey analyses suggest that besides shaping how partisans evaluate economic performances, perceived polarization also affects partisans' propensity to hold their party accountable.

The paper unfolds as follows. In the next section, I discuss how voters respond to the economy in the context of polarization and derive hypotheses that guide my empirical analyses. In the third section, I present the aggregate-level data, explain how I model the compositional data to test my hypotheses and discuss the results. In the fourth section, I use the American National Election

<sup>&</sup>lt;sup>3</sup>Similarly, fewer voters will cast a ballot for the party in government in response to a prosperous economy when polarization is high.

<sup>&</sup>lt;sup>4</sup>I use the terms 'incumbent party' and 'party in government' to refer to the President's party in US politics. The opposition is the other major party competing for the Presidency.

Studies (ANES) data to test hypotheses about *how* partisans are affected by political polarization in their electoral response to economic conditions. I conclude with a discussion of the theoretical implications of the results and how they may travel to other democracies that have been experiencing the radicalization of politics.

## Polarized Politics and Economic Voting

Periodic elections are the chief mechanism linking citizens and their government. We expect that voters will manifest prospective and retrospective evaluations at the polls (Manin, Przeworski and Stokes 1999). Prospectively, voters should assess which candidate proposes the best political agenda to deal with society's issues in the period following the election. Retrospectively, voters should evaluate the performance of political parties in office before the polls. Economic conditions prior to elections are the source of retrospective voting that have received the most attention in the literature (Healy and Malhotra 2013; Lewis-Beck and Paldam 2000; Kramer 1971; Fiorina 1978; Key 1966). The economic voting theory predicts that citizens use the economy to inform their vote choice, rewarding (punishing) incumbents when economic conditions are prosperous (deteriorating). However, since the seminal work of Powell Jr and Whitten (1993), scholars have demonstrated that the ability of voters to attribute responsibility for economic outcomes depends on the political context (Palmer and Whitten 1999; Anderson 2000; Nadeau, Niemi and Yoshinaka 2002; Bengtsson 2004; Duch and Stevenson 2008; Hobolt, Tilley and Banducci 2013). Institutions and political factors that make up the electoral context determine the 'clarity of responsibility'. That is, the political context shapes the ease with which voters can assign blame or credit for economic outcomes.5

Over the last decades, polarization has become a salient feature of American politics and other democracies (Bischof and Wagner 2019; Przeworski 2019; Levitsky and Ziblatt 2018). In the U.S. Congress, representatives follow party-line voting that reflects the ideological distinction between the two major parties (McCarty, Poole and Rosenthal 2016; Jacobson 2003). The polarization of the political environment has created a new field of empirical work that investigates the effects of polarized politics on voters' attitudes and behaviour. Scholars have demonstrated that elite polarization (i) induces partisan-motivated reasoning and, as a consequence, reduces the relevance of substantive information for voters' decisions (Druckman, Peterson and Slothuus 2013; Lodge and Taber 2013; Donovan et al. 2020); (ii) makes voters less prone to punish politicians who violate democratic principles (Graham and Svolik 2020); and (iii) clarifies ideological differences between parties, increasing the number of partisans and decreasing the share of voters switching between the two main parties (Hetherington 2001; Smidt 2017). Yet, we still know little about how these individual-level findings shape trends in the electorate, where patterns of voting behaviour can drive election results as ballots are added up. Particularly, there is scarce evidence on how polarized environments affect electoral accountability. Ellis and Ura (2021) first noticed a negative association between polarization and economic voting in presidential elections. However, their analysis does not systematically assess how this association operates.<sup>6</sup> In this paper, I fill this gap to shed light on the impact of polarization on voting dynamics in response to economic performances.

<sup>&</sup>lt;sup>5</sup>Using institutional and power rules indices, Dassonneville and Lewis-Beck (2017) find that institutions do not 'significantly deflect' the impact of economic growth on vote choice (2017, 534). Yet, their findings also corroborate a chief point of clarity of responsibility: factors that make up the political context can moderate the magnitude of economic voting.

<sup>&</sup>lt;sup>6</sup>Ellis and Ura (2021) provide the first evidence that polarization decreases the impact of growth on the incumbent vote share. However, their empirical strategy has limitations. They analyze time-series data (17 elections) and do not account for stationarity. Also, the authors limit their study to the incumbent vote share. Hence, they cannot investigate which channel of economic voting – opposition, abstention, or both – drives the results. Although my empirical strategy employs a series for elite polarization, it seeks to overcome these limitations, at least in part, by using compositional outcomes and an economic indicator that varies across counties. The county-level data imply that the between-unit (cross-sectional) variation of the

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Voters willing to desert political parties in response to economic conditions are the sine qua non for economic voting. A set of voters must defect to the opposition or abstain when the economy deteriorates. Similarly, voters who otherwise would have voted for the opposition or abstained must reward the incumbent party when economic conditions prosper. Does this necessary condition of electoral accountability hold under polarized politics? Voters may still assess the economy in polarized environments (Ang et al. 2021), but polarization should decrease their willingness to attribute responsibility for economic performances (Ellis and Ura 2021) as polarized politics detaches presidential approval from economic assessments (Donovan et al. 2020) and weakens the link between economic conditions and economic opinion (Goidel and Kellstedt 2022). By influencing economic opinions, emphasizing the ideological difference between parties, and stimulating motivated reasoning, polarization is a contextual factor that moderates economic voting. Rather than assigning responsibility to their preferred (disliked) party for poor (good) economic performances, voters are likely to resort to motivated reasoning to accommodate party attachment and perceptions about the economy under polarized politics. In other words, voters stick with their preferred parties even when economic conditions suggest that they should desert it in the election. This is the sticking effect of polarized politics that weakens electoral accountability. In the following subsection, I discuss how polarization may affect both channels through which voters can respond to poor economic conditions: voting for the opposition and abstention.

## How does Polarization Moderate Economic Voting?

Individual-level findings in the literature on polarization suggest that polarized politics has a chief effect on voting behaviour: as the ideological distance between parties becomes more evident for a larger group of citizens, the number of swing voters decreases. Elite polarization clarifies the ideological position of political parties for ordinary citizens (Hetherington 2001). As a consequence, voters can increasingly rely on partisan cues to make their decisions (Druckman, Peterson and Slothuus 2013; Parker-Stephen 2013). Rather than searching for information about the performance of incumbents and observing candidates' proposals, voters tend to assume that the ideological difference between parties suffices to inform vote choice. Among partisans and independents who lean towards one of the major parties, polarization enhances affective attachment to parties and stimulates motivated reasoning. Partisans, therefore, are less likely to waver in their support under polarized environments.

But the impact of polarization on voting behaviour is not restricted to partisan voters. By illuminating the ideological divergence between parties, polarization also influences how independents, less-engaged voters – and even nonvoters – perceive candidates (Smidt 2017). Since the influential work of Converse (1964), scholars have characterized voters who are prone to change their support as less informed, indifferent, or ambivalent (Zaller 2004; Mayer 2008). These voters are less likely to distinguish the different positions of political parties on policy issues. For this reason, they would be more responsive to new information such as the performance of incumbents (Key 1966). However, as Smidt (2017) shows, independents are more likely to recognize the importance of parties' issue positions when polarization clarifies party differences. The recognition of parties' ideological differences reduces ambivalence among independent voters, who also become less likely to move across party lines in successive elections.

In terms of economic voting, these processes, induced by polarization, lead to the expectation that the number of voters defecting to the opposition to punish incumbents for a poor economy

outcome and the economic indicator in my analysis is larger than their within-unit (overtime) variation. In addition to the lagged dependent variable in the aggregate-level strategy, this between-unit variation reduces the possibility of a spurious relationship due to time. Further, my aggregate-level results are robust to models that include a time-trend variable (see Figure S6). Finally, I use survey data to test my hypotheses at the individual level and find similar results controlling for election fixed effects that exclude unobserved variables that change over time. All these tests enhance the confidence that the findings in this paper are not driven by time.

decreases as political polarization increases. Similarly, voters who identify with the opposition become less likely to cast a ballot for the party in government when the economy prospers. In other words, voters tend to stick with their parties in polarized politics even if economic conditions indicate that they should switch parties at the polls. Empirically, this expectation leads to the first hypothesis of this paper:

**Hypothesis 1.** Political polarization reduces the percentage of voters selecting the opposition to punish the party in government for poor economic conditions.<sup>7</sup>

Besides affecting vote choice, polarization can also influence participation. When politics is polarized, what is at stake in the election tends to be higher because the distance between parties' policy agendas is larger and sharper. Also, as mentioned before, more voters can notice this ideological difference and thus become more concerned about election results. Additionally, affective polarization makes the victory of a party excessively costly for those voters who dislike it – particularly if voters perceive candidates in the other party as extremists (Hall and Thompson 2018). Finally, the social pressure to participate in polarized environments tends to be high as polarization enhances the number of politically engaged citizens. Social pressure and network are, in turn, crucial determinants of participation (Gerber, Green and Larimer 2008; Sinclair 2012; McClendon 2014). For these reasons, the benefit from participating may increase for many citizens who are now more likely to notice and care about election outcomes (Downs 1957). In a nutshell, polarized politics may increase political engagement and participation (Abramowitz 2010; Hetherington 2008). It follows from this expectation that:

**Hypothesis 2a.** Political polarization decreases the share of voters who use abstention to punish the party in government for poor economic conditions.

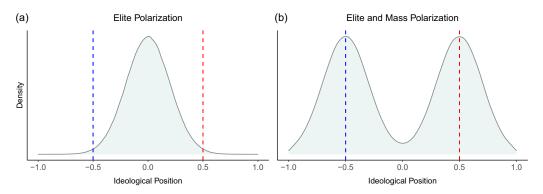
Under low polarization, voters who are dissatisfied with economic outcomes but do not intend to support the opposing party can still opt for a third option: abstention. However, as the environment becomes more polarized, both the cost of abstaining and the benefit from participating should also increase. Therefore, fewer voters will abstain as a means to penalize their preferred party for negative economic conditions under polarized environments. Hypotheses 1 and 2a reflect my theoretical expectations of a sticking effect of polarization: voters are less likely to blame their party for policy outcomes and thus desert it at the polls when politics is polarized.

Hypothesis 2a implies that turnout depends on the benefits voters link to election outcomes. These benefits are, in turn, a function of the set of candidates available in the race (Downs 1957; Riker and Ordeshook 1968). When the benefits voters associate with candidates in the choice set are low, these voters will be less likely to participate. Hence, abstention should be modelled as one of the options available to voters at elections. Although the idea of abstaining as a voting option is not new, few empirical analyses incorporate abstention as an option voters can take whenever they are not satisfied with the choices on the ballot (Horiuchi and Kang 2018; Weschle 2014; Dostie and Dupré 2012; Arzheimer and Evans 2010). I am unaware of any work theorizing how abstention in response to economic conditions varies as a rational reaction of voters to the political context, particularly to increasing polarization.

<sup>&</sup>lt;sup>7</sup>My argument also implies that polarization reduces the number of voters deserting the opposition to reward the party of the President when the economy prospers. However, to facilitate the interpretation of the economic indicator I use in my empirical model (unemployment), Hypothesis 1 emphasizes the impact of polarization on the flow of voters from the incumbent party towards the opposition in response to poor economic conditions.

<sup>&</sup>lt;sup>8</sup>Similarly, third parties with no chance to win the election could also be an option for those who want to express dissatisfaction with their preferred party but would not cast a ballot for the opposition. As these third options are not real contenders, voting for them is equivalent to a wasted vote. It can, thus, be used to express dissatisfaction with the two major options.

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**Figure 1.** Scope Conditions of Abstention in Response to Economic Circumstances. *Note:* Curves represent the distribution of voters across the ideological continuum that ranges from extreme liberal (-1) to extreme conservative (1). Dashed lines indicate the ideological placement of parties.

There is, however, some evidence that polarization can also increase abstention (Rogowski 2014). Although polarized environments stimulate partisan-motivated reasoning, scholars have found that some voters can still update their assessment based on incumbents' performance (Lewis-Beck and Stegmaier 2018; Healy and Malhotra 2013), candidates' characteristics (Stone 2017), and new information (Peterson 2017; Boudreau and MacKenzie 2018). Particularly, weak partisans and independents would not rely solely on partisan cues to make their voting decisions even when they perceive the ideological distance between parties more objectively. Under polarized environments, they could still react to negative performances of their favourite party in managing the economy. Yet, the affective impact of polarization influences how they perceive the other party (Iyengar et al. 2019). To the extent they no longer see the other party as an alternative, abstention could be a more attractive option to express dissatisfaction with their favourite party in polarized politics. In this context, some voters would not see themselves represented by either side, although they may still prefer one major party to another. This expectation leads to an alternative hypothesis about the effect of polarization on abstention:

**Hypothesis 2b.** Political polarization increases the share of voters who use abstention to punish the party in government for poor economic conditions.

This hypothesis represents *the expressive abstention effect* of polarization, which could increase the number of voters who choose abstention to signal that they are disappointed with how their preferred party managed the economy.

Hypotheses 2a and 2b describe opposite expectations about how polarization can affect abstention in response to economic conditions. These contradictory predictions stem from the fact that the effect of polarizing politics on abstention depends on the ideological distribution of the electorate. In a hypothetical scenario in which voters' ideological distribution has a single peak between two polarized parties, moderates and partisan leaners who are disappointed with their preferred parties may choose to abstain. The other party is no longer an attractive alternative as it is too far away from their ideological positions. Panel A in Figure 1 depicts this context in which polarization can provoke expressive abstention. Yet, this scenario would also create the opportunity for entrepreneurial politicians to move towards the median voter (Downs 1957). As a result, political polarization should decrease over time, leading to a trend opposite to the one observed in the data. Hence, this hypothetical scenario, which is necessary to confirm the expressive abstention effect of polarization, would be out of equilibrium.

<sup>&</sup>lt;sup>9</sup>As Figure 3 shows, elite polarization has been increasing over time.

However, if the electorate has two peaks at opposite sides of the political spectrum that map to the position of polarized parties, the cost of abstaining will be high for a large set of voters. Even if they are dissatisfied with their preferred party, their ideological distance from the other viable option encourages motivated reasoning and reinforces their partisan choice. Panel B in Figure 1 displays a context in which both the masses and the elites are polarized. Under these circumstances, polarization will decrease the number of voters who abstain as a means to sanction their favourite party.

In summary, Hypotheses 1 and 2a predict that political polarization has the same attenuating effect on both channels through which economic voting can operate. Polarized politics decreases both the number of voters who cast a ballot for the opposition to sanction incumbents for poor economic conditions and the number of those who abstain in order to penalize the party in government for poor economic outcomes. Although the necessary condition for Hypothesis 2b would be out of equilibrium, I test for it as an alternative to Hypothesis 2a. The next section describes the data and method I use to test Hypothesis 1 and adjudicate between Hypotheses 2a and 2b with election results at the county level.

At the aggregate level, though, I cannot investigate *which* voters behave in line with these hypotheses and *how* polarization affects them. <sup>10</sup> Motivated reasoning suggests that partisans are particularly affected by polarization in their response to economic conditions. For these voters, the cost of having the party they dislike in the presidency increases with polarization. Given the evidence that partisan cues bias overall judgement of responsibility among partisans and that polarization detaches presidential approval from economic assessments and weakens the link between economic conditions and economic opinion (Rudolph 2006; Donovan et al. 2020; Goidel and Kellstedt 2022), I argue that as the perception of polarization increases among partisans, they become less likely to negatively evaluate the economy when their preferred party holds the Presidency. As such, I expect that:

**Hypothesis 3a.** As (perceived) polarization increases, partisans become less likely to negatively evaluate the economy when their preferred party holds the presidency.

Yet, besides affecting economic assessments, there is another mechanism through which polarization can moderate economic voting. Some partisans may still be able to assess the economy in polarized environments, as Ang et al. (2021) show. But it does not follow that those partisans intend to use this assessment to inform their vote choice, assigning importance to economic issues and blame to their preferred party (Kane and Anson 2023). Under high levels of polarization, partisans are less likely to hold their preferred party accountable for poor economic performances. Instead, they tend to resort to motivated reasoning to accommodate party attachment and economic perceptions. Therefore, I predict that:

**Hypothesis 3b.** As (perceived) polarization increases, partisans who negatively evaluate the economy become less likely to punish their preferred party in response to economic conditions.

Figure 2 depicts the two links of the economic voting chain that polarization can moderate. Polarized politics may weaken the connection between economic conditions and economic perception, but it can also shape how assessments of the economy influence vote choice. In the fourth section, I describe my empirical strategy to test Hypotheses 3a and 3b with ANES data and present the results.

<sup>&</sup>lt;sup>10</sup>Searching for cues about voters' behaviour from information reported at the county level would be an ecological inference (King, Tanner and Rosen 2004). Rather, I use the county-level data to investigate whether the moderating effect of polarization on electoral accountability is consequential and which channel of economic voting is affected by polarizing politics: the opposition, abstention, or both.

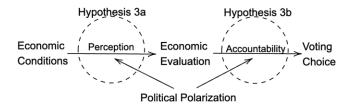


Figure 2. Polarization and the Chain of Economic Voting.

# **Presidential Election Results by County**

#### Data and Research Design

An ideal case to test the impact of polarization on economic voting would hold institutional factors that may influence the clarity of responsibility constant while the level of polarization varies. The results of the U.S. presidential elections combine these conditions.

The level of national polarization has changed over time in American politics, but the institutional framework that can moderate economic voting remained constant. Moreover, the two-party system makes the US appropriate for measuring polarization and estimating its effect. Although other democracies have experienced the emergence of radical leaders, multiparty systems and different levels of party attachment create challenges to conceptualizing and studying polarization. In multiparty democracies, this phenomenon may indicate the radicalization of politics rather than the ideological polarization of the whole party system. In the US, changes in the ideological distance between the two major parties express variation in elite polarization, which is the measure I employ to capture changes in polarizing politics.

Figure 3 shows that the ideological distance between the median Republican and median Democratic representatives in the House has increased since the 96th U.S. Congress in 1981. However, most of the change in ideological polarization occurred after 1990. Between 1957 and 1989, the ideological distance between median representatives in the two major parties increased by 16 per cent, from 0.57 to 0.66. From 1991 to 2019, which is the period analyzed in this paper, the gap has increased by 35 per cent, from 0.66 to 0.89. The increasing distance between parties over this period seems to be driven mostly by the Republican party. Whereas the median Democratic has moved about 18 per cent to the left – from -0.32 to -0.38 – the conservative position of the median Republican increased approximately 48 per cent during the same period – from 0.35 to 0.52.12

To test my hypotheses at the aggregate level, I implement a seemingly unrelated regressions (SUR) strategy in which the electorate is divided into three categories: the share of votes for the incumbent party, for the opposition, and abstention. Following the approach developed by Aitchison (1982) to model compositional data and used by Tomz, Tucker and Wittenberg (2002) to study election results in multiparty systems, the outcome variables of the SUR model are the J-1 log-transformed ratios between the percentage of voters in each j piece of the constituency – voters casting a ballot for the party in government, for the opposition, and abstainers – to a baseline category (j=1). Thus, for a county i in election t, the outcome variables are defined as follows:

<sup>&</sup>lt;sup>11</sup>In the conclusion section, I briefly discuss an expectation about how the radicalization of politics may affect economic voting in multiparty systems.

<sup>&</sup>lt;sup>12</sup>In Figure 3, the lowest level of polarization was observed in 1961 (0.54) and the highest in 2017 (0.9). Figures S19 and S20 split the series into two, before and after 1990, to show the distance between the two parties has increased mostly since 1991.

<sup>&</sup>lt;sup>13</sup>To report the results in Figure 4, I estimate two SUR models, one in which abstention is the baseline category and another with the share of votes for the opposition as the denominator.

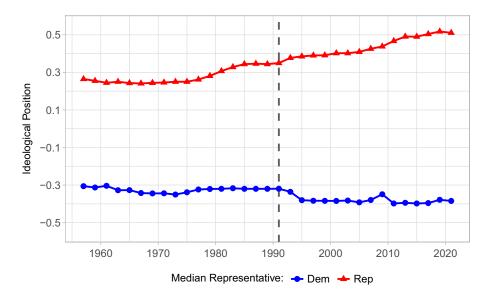


Figure 3. Polarization in the U.S. Congress over time.

Note: The median Republican (red line) and the median Democratic (blue line) representative in the House. The vertical dashed line shows when my aggregate-level analysis starts. Source: Voter View Project.

$$s_{jit} = \log\left(\frac{y_{jit}}{y_{1it}}\right) \forall j \neq 1 \tag{1}$$

where  $y_{jit}$  is the share of voters in the category j. I create the log-ratios  $s_{jit}$  with data on presidential election results, turnout, and voting-age population by county from 1992 to 2020. My main models use a measure of effective abstention, which combines votes for third parties and the number of voters who abstained. This measure is appropriate to test if voters can express their dissatisfaction with the incumbent for economic conditions through a channel other than voting for the opposition. A vote for a third party in U.S. presidential elections is equivalent to a wasted vote. Yet, casting a ballot for a third party can still express voters' dissatisfaction with their preferred party.  $^{15}$ 

For the explanatory variables, polarization is measured with the difference in the DW-nominate scores of the median House Republican and the median Democrat in the U.S. Congress immediately before each election (Theriault 2008; Lewis et al. 2021). Given the growing nationalization of local and state politics (Jacobson 2015 2013), this national-level measure is appropriate for capturing changes in polarized politics and estimating their effect on presidential elections. My economic indicator is the average annual unemployment rate in the county reported by the U.S. Bureau of Labor Statistics, which is expected to be negatively associated with votes for the incumbent party in presidential elections. Besides increasing the cross-sectional variation of my data and, as such, reducing the potential influence of temporal patterns, the local economy is

<sup>&</sup>lt;sup>14</sup>Data from Dave Leip's Atlas of US Presidential Elections.

<sup>&</sup>lt;sup>15</sup>The results are robust to models without the share of voters who cast a ballot for third parties. See Figure S1.

<sup>&</sup>lt;sup>16</sup>Data from the Voter View Project.

<sup>&</sup>lt;sup>17</sup>Data from the Local Area Unemployment Statistics (LAUS) program. The main results are robust to models that use data from the Quarterly Census of Employment and Wages (Healy and Lenz 2017). See Figure S4. Further, I use the unemployment rate to explore the between-unit variation of my data. Yet, the main findings hold with models that use the annual change in the unemployment rate. See Panel B in Figure S3.

close to the reality that voters experience and can affect presidential election outcomes (Healy and Lenz 2017). After all, the national economy is the aggregation of local indicators.<sup>18</sup>

In addition to the large cross-section variation in my data introduced by the economic indicator and outcome variables, I address methodological concerns regarding the upward trend of national polarization with three other empirical strategies. First, my aggregate-level analyses control for the lagged dependent variables (LDV), ensuring that my compositional outcomes in Equation 1 are stationary. Second, the results are robust to models that, besides the LDV, include a time-trend variable that can capture the influence of other factors that might be trending in national politics. Finally, my individual-level models use election fixed effects to exclude unobserved variables that change over time, and their results are consistent with my findings at the aggregate level. Altogether, these strategies demonstrate that the results in this paper are not spuriously driven by temporal influence.

My final dataset has 3,108 counties across eight consecutive elections. With these data, I estimate a system of J-1 equations using the following interactive model:

$$s_{jit} = \beta_{1j} \text{Unemp}_{it} + \beta_{2j} \text{Pol}_t + \beta_{3j} \text{Unemp}_{it}^* \text{Pol}_t + \delta_{kj} \mathbf{x}_{it} + \alpha_j \text{State}_i + \beta_{4j} \text{CloseElec}_{it} + \beta_{5j} \text{RepPre}_t + \beta_{6j} \text{IncCand}_t + \phi_j s_{jit-1} + \varepsilon_{jit}$$
(2)

where Unemp<sub>it</sub> is the unemployment rate, Pol<sub>t</sub> stands for polarization,  $x_{it}$  is a vector of K demographic variables at the county level, and  $\mathbf{State}_i$  is a vector of fixed effects indicating the state in which the county i is located. CloseElec<sub>it</sub> measures the distance in vote share between the two presidential candidates in the state where the county i is located, RepPre<sub>t</sub> is a dummy variable indicating whether the Republican party held the presidency at t, IncCand<sub>t</sub> is an indicator of whether an incumbent candidate ran for reelection at t, and  $s_{jit-1}$  is the LDV, the temporal lag of the dependent variable.  $^{21}$   $\varepsilon_{jit}$  is an error term that may be correlated across the J-1 equations of the SUR model.

The parameterization of the SUR model is similar to a multinomial logistic regression. For each explanatory variable, the SUR model estimates J-1 coefficients. Each of these coefficients is the

<sup>&</sup>lt;sup>18</sup>Ideally, I would like to have precise information on economic growth by county too, but this variable is not available for the whole period. Yet, unemployment is an appropriate economic indicator at the county level since inflation was stable in the period and economic growth may be less tangible to voters (Cheibub and Przeworski 1999; Lewis-Beck and Paldam 2000). Also, the strong association between growth and unemployment suggests that the latter can capture relevant economic conditions at the county level. Between 2002 and 2019, a 1 per cent increase in county-level growth corresponds to a 2 per cent decrease in the unemployment rate. Further, my major findings are robust to model specifications that include the average change in per capita income as a proxy for economic growth in the county. See Figure S5. In addition, using a strategy similar to the model estimated by de Benedictis-Kessner and Warshaw (2020) and their data from a long series of presidential elections between 1972 and 2016, I find that increasing polarization moderates the effect of changes in wages at the local level on presidential election results. As expected, changes in wages have a positive effect on the incumbent party's performance, but polarization moderates this relationship. See Table S13. These results differ from de Benedicts-Kessner and Warshaw (2020, 12-13) who did not find variation in local economic voting over time. However, besides the interaction between 'a standardized variable' for election years and changes in wages, their models in Table 8 include time fixed effects (FE for stateyear). The authors probably use these fixed effects to account for time-variant unobservables. However, by adding fixed effects for time, their models limit the analysis to cross-sectional effects that capture variation across counties in a given year (and state). It happens because fixed effects for years capture all developments over time that are common to all counties (Kittel and Winner 2005, 272). In other words, their models estimate coefficients that represent the average effect of a predictor (for example, changes in wages) across units (counties) while holding constant all over-time changes in the data. Such a coefficient, therefore, shows the effect of a one-unit increase in the predictor on the outcome as both variables (the predictor and the outcome) change from unit to unit (that is, across counties) at a point in time (Kropko and Kubinec 2020, 8). By eliminating the over-time variation from the data with fixed effects, their models remove precisely the over-time changes common to all counties that the interaction between election years and the economic indicator was intended to capture.

<sup>&</sup>lt;sup>19</sup>See Figure S6.

<sup>&</sup>lt;sup>20</sup>See Equations 3 and 4.

<sup>&</sup>lt;sup>21</sup>Because my unit of analysis is the county, adding state fixed effects with the lagged dependent variable does not cause Nickell bias (Nickell 1981).

estimated impact of a one-unit increase in the explanatory variable on one of the  $s_{jit}$  outcomes, which is in the log-ratio form. A positive coefficient means that its predictor makes the category in the numerator of the logged ratio in Equation 1 larger at the expense of the baseline category in the denominator. Negative values, in turn, have the opposite interpretation. But the substantive interpretation of model results involves 'translating quantities of interest back into their original composition structures' (Philips, Rutherford and Whitten 2016, 271) – share of voters – as I show in Figure 5.

As demographic controls,  $x_{kit}$ , all models include the following predictors: share of black voters, share of Hispanic voters, share of Asian voters, share of young voters – less than 30 years old – share of the elderly population – more than 70 years old – the county population, share of people with a college degree, share of workers in the manufacturing sector, a rural-urban code, and the average per capita income in the county. <sup>22</sup> I use state fixed effects to account for electoral rules that can influence abstention and other state-specific factors. <sup>23</sup> Additionally, I control for the difference in vote share between the first two candidates in the state (CloseElec<sub>it</sub>) as the closeness of the election may affect turnout. The lagged log-ratio,  $s_{ijt-1}$ , controls for persistent features of the county that influence voting behaviour but cannot be observed. By controlling for the trade-off between categories in the last election, it can also address concerns about factors that may be gradually changing over time—such as turnout—and could be associated with the uptrend of elite polarization. <sup>24</sup>

Table 1 summarizes the expected relationship predicted by each hypothesis. In the trade-off between incumbent and opposition –  $s_{jit} = \log\left(\frac{\ln cumbent_{it}}{Opposition_{it}}\right)$  – Hypothesis 1 predicts that higher polarization reduces the impact of economic factors on voting across party lines. Thus, I expect that  $\hat{\beta}_{3j}$  will be significant in the opposite direction of  $\hat{\beta}_{1j}$  in the equation that estimates the flow of voters between the incumbent party and the opposition. Since an increasing unemployment rate is expected to harm the incumbent party in favour of the opposition ( $\hat{\beta}_{1j} < 0$ ), Hypothesis 1 predicts that polarization will attenuate this negative effect of unemployment on the incumbent's vote share – which implies that  $\hat{\beta}_{3j} > 0$ . As polarization increases, fewer voters will cast a ballot for the opposition to punish the party in government for rising unemployment.

In Hypothesis 2a, I predict the attenuating effect of polarization on abstention in response to a poor economy. Motivated reasoning, affective polarization, and social pressure in a polarized electorate would increase the cost of abstention. In this context, a large set of voters will prefer to cast a ballot for their preferred party – even when economic conditions suggest that they should punish it – than abstain. Hence,  $\hat{\beta}_{3j}$  should be positive in the equation between the incumbent and abstention –  $s_{jit} = \log\left(\frac{\text{Incumbent}_{it}}{\text{Abstention}_{it}}\right)$  – reducing the number of voters who abstain in order to express dissatisfaction with economic outcomes.

According to the expressive abstention argument, Hypothesis 2b represents the opposite effect of polarization on abstention. That is,  $\hat{\beta}_{3j} < 0$  in the equation for the trade-off between the share of voters who cast a ballot for the incumbent party and the share of voters who abstain— $\log\left(\frac{\text{Incumbent}_{it}}{\text{Abstention}_{it}}\right)$ . As economic conditions deteriorate – *that is*, the unemployment rate increases – more voters would abstain from punishing the party in government. In other words,

<sup>&</sup>lt;sup>22</sup>Skewed variables were log-transformed. Table S1 presents descriptive statistics of aggregate-level variables.

<sup>&</sup>lt;sup>23</sup>In addition to electoral rules, there are blue and red states, that is, states in which a majority of citizens consistently vote for the Democratic or the Republican party respectively. A partisan dominance at the district level can also shape participation. The main findings are robust for models that use county fixed effects instead of state-level dummies. These results are also robust to clustered standard errors at the county level. See Figure S16 and Table S19.

<sup>&</sup>lt;sup>24</sup>The results are robust to models that, besides the LDV, include a time-trend variable to control for other national factors that might trend over time. See Figure S6.

political polarization would exacerbate the effect of the unemployment rate on the trade-off between a partisan vote and abstention in response to economic conditions.

#### **Findings**

In this section, I present the results of county-level analyses that interact the unemployment rate with political polarization. I focus on the coefficients for the economic indicator and its interaction with polarization. Full tables of coefficients are available in a Supplementary Material document. Each panel in Figure 4 displays the marginal effects of unemployment across levels of political polarization in one of the log-ratios estimated with Equation 2. Each icon indicates the predicted value of the marginal effect – in the log-ratio form – at a certain level of polarization with its respective 95 per cent confidence interval. These marginal effects are calculated as  $\hat{\beta}_{1j} + \hat{\beta}_{3j} * Pol_t$ . Negative values mean that unemployment benefits the category in the denominator at the expense of the one in the numerator.

The marginal effect of the unemployment rate on the trade-off between the incumbent party and the opposition ( $\hat{\beta}_{1j}$  from Equation 2) is negative and statistically significant (Column 1 in Table S3). This indicates that, in a hypothetical scenario of no or extremely low polarization, unemployment would have the negative effect expected by economic voting theory. In other words, as the unemployment rate increases, the share of voters who cast a ballot for the opposition increases as well – negative effects benefit the category in the denominator – at the expense of the party in government. Likewise, unemployment has a similar effect on the trade-off between the share of voters supporting the incumbent party and the share of those who abstain (Column 3 in Table S3). Of course, a scenario with no polarization is an implausible condition not observed in real-world data. As such, Figure 4 shows the marginal effect of unemployment across a moderate and a high level of polarization observed in the data.

Panel A in Figure 4 shows that moving from a moderate level of polarization observed for a long period in American politics – 0.6, the light-green triangle – to a high level similar to what exists nowadays – 0.85, the dark-red, upside-down triangle – drastically decreases the magnitude of the effect of unemployment in the trade-off between the incumbent party and opposition. This result supports Hypothesis 1: polarizing politics reduces the number of voters crossing party lines to sanction incumbents for poor economic conditions. The same pattern is observed in the trade-off between the vote share for the incumbent party and the share of abstainers (Panel B in Figure 4). This finding supports Hypothesis 2a, which states that polarization reduces the number of voters who abstain in response to a deteriorating economy to express dissatisfaction with the party in government. Consequently, these results reject the expressive abstention effect predicted by Hypothesis 2b.

Besides corroborating the expectation that polarization attenuates economic voting, these findings show that the moderating effect of polarized environments is substantial. As polarization increases, the impact of the unemployment rate tends to disappear. The marginal effect of unemployment in Panel A is close to zero when polarization is equal to 0.85 – a typical value observed in the late 2000s. It indicates that polarizing politics almost cancels out economic voting in response to local unemployment. Similarly, polarization decreases the share of voters moving from the incumbent party towards abstention in response to unemployment (Panel B). The effect on the trade-off between abstention and the incumbent party becomes about 50 per cent smaller as polarization moves from 0.6 to 0.85.

These results confirm that voters have two channels to punish incumbents for a poor economy - voting for the opposition and abstention - and demonstrate that polarizing

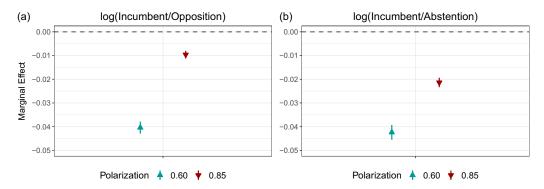
<sup>&</sup>lt;sup>25</sup>See Table S3 in the Supplementary Material.

<sup>&</sup>lt;sup>26</sup>95 per cent confidence intervals were computed using the standard error of marginal effects from interactions:  $\hat{\sigma}_{\text{ME}} = \sqrt{Var(\hat{\beta}_{1j}) + Pol.^{2*}Var(\hat{\beta}_{3j}) + 2*Pol.*Cov(\hat{\beta}_{1j}\hat{\beta}_{3j})}$  See Brambor, Clark and Golder (2006) for additional information.

Table 1.	Summary	of	Theoretical	Expectations

		Ехр	Expected Relationships by $s_{jit}$		
Hypotheses	Predictors and Estimates	$log(\frac{Incumbent}{Opposition})$	$log(\frac{Incumbent}{Abstention})$	$log(\frac{Opposition}{Abstention})$	
Economic Voting Hypothesis 1	Unemployment Rate $(\hat{eta}_{1j})$ Unemp.*Polarization $(\hat{eta}_{3j})$	- +	(–)	(+)	
Hypothesis 2a	Unemp.*Polarization $(\hat{\hat{eta}}_{3j})$		+	_	
Hypothesis 2b	Unemp.*Polarization $(\hat{eta}_{3j})$		_	+	

*Note*: The ratio indicates the trade-off between parties or a party and abstention. Bracketed signals are effects that are not clearly predicted by traditional economic voting theory. Hypotheses 3a and 3b cannot be tested at the aggregate level.



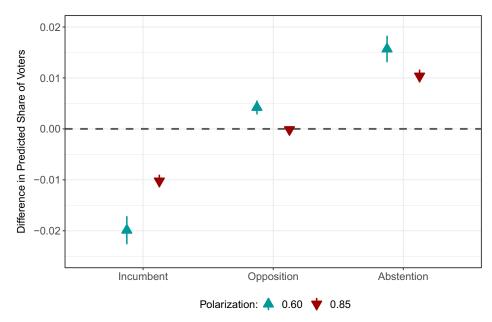
**Figure 4.** Marginal Effects of Unemployment (Log-ratio Form) across Levels of Polarization. *Note*: Light-green triangles and dark-red upside-down triangles represent the marginal effects of unemployment when polarization is moderate (0.6) and high (0.85). These marginal effects are computed as  $\hat{\beta}_{1j} + \hat{\beta}_{3j} * Pol_t$ .

environments affect both in the same way. Polarization decreases the number of voters willing to desert the incumbent party for poor economic performance. Under polarized politics, voters are so attached to their preferred parties that they are less likely to defect to the opposing party or abstain when the economy declines.

The coefficients in Figure 4 are substantively uninformative because they show marginal effects in log-ratio form. We can use them to interpret the direction of the marginal effects and whether they are statistically distinguishable from zero or not. But to capture the size of these marginal effects in terms of changes in the share of voters in each category, I follow the strategy presented by Philips, Rutherford and Whitten (2016) to visualize the results of models with compositional data. I simulate a non-parametric bootstrap 1,000 times to estimate the impact of a one-standard-deviation increase in the unemployment rate of a hypothetical county in Pennsylvania under two scenarios, moderate (0.6) and high (0.85) ideological distance between parties at the national level.<sup>27</sup>

Since my models use state fixed effects, I employ the checklist suggested by Mummolo and Peterson (2018) to improve the interpretation of fixed-effect regressions. They argue that simulations must use within-unit typical shocks since fixed-effect models restrict the analysis to within-unit variation. Hence, I simulate the estimated difference in the share of voters for each category j – the incumbent party, opposition, and abstention – when the unemployment rate increases by a within-state standard deviation (a 2.3 per cent increase) from its mean (6.12 per cent).

<sup>&</sup>lt;sup>27</sup>Each simulation sample 90 per cent of the data with replacement. Values of polarization reflect typical levels of polarization observed until the 1990s and in the late 2000s. I use Pennsylvania for the simulation as it is a swing state with a medium electoral college.



**Figure 5.** Predicted Change in the Share of Voters. *Note:* Results generated with bootstrap. The y-axis is the change in the predicted share of voters in a category *j* (incumbent, opposition, and abstention) when there is a one-standard-deviation increase in the unemployment rate from its mean.

Figure 5 presents the results of these simulations. When the ideological distance between parties is moderate (0.6), a shock that increases the unemployment rate by one standard deviation in the county decreases the vote share of the incumbent party by approximately 2 per cent in that county. The size of this punishment for bad economic conditions becomes smaller as polarization increases. When polarization is equal to 0.85, the same shock in unemployment diminishes the vote share of the party in government by just 1 per cent. These results are similar to marginal effects estimated with OLS that regress the share of votes for the incumbent party on polarization and unemployment.<sup>28</sup> But with SUR models, I can also simulate changes in the other two categories. The gain in vote share for the opposition due to unemployment tends to vanish as polarization goes up. It moves from 1 per cent to practically no change in the share of voters moving towards the opposition. Equally, the increase in the share of voters who choose to abstain after a shock in the unemployment rate decreases from more than 1.5 per cent to approximately 1 per cent as polarization moves from 0.6 to 0.85.

These results illustrate the attenuating impact of polarization on economic voting predicted by Hypotheses 1 and 2a. Political polarization negatively affects both channels through which voters can punish incumbents. Under polarized politics, voters stick with their parties instead of penalizing them for poor economic performances. These findings differ from previous works that did not find an effect of local economic indicators on vote choice (Healy and Lenz 2017) or did not identify changes in economic voting over time (de Benedictis-Kessner and Warshaw 2020). These studies specify the dependent variable as the Democratic vote or change in the Democratic vote share which are typically stable at the local level due to party loyalties in the electorate. The

<sup>&</sup>lt;sup>28</sup>See Panel A in Figure \$3 with OLS estimates.

outcome in Equations 1 and 3, in turn, measures the trade-off between the president's party and one of the other two categories in the electorate (the opposing party or abstention). This outcome may capture more nationwide oscillations in voting behaviour across successive elections than local attachment to parties.<sup>29</sup> As such, it may represent more national variations than the dependent variables of previous works. Moreover, by including election fixed effects, other studies eliminated any common trends and temporal changes (for example, polarization), limiting the analyses to differences across localities (counties) while holding constant all shifts over time (Kittel and Winner 2005, 272; Kropko and Kubinec 2020, 8).<sup>30</sup> In this paper, the model in Equation 2 is dynamic, comparing changes in vote choice across successive elections without time fixed effects. This strategy can estimate how increasing polarization has influenced voters' reactions to economic conditions. As an observation study, however, this specification may raise concerns about other national-level changes that could also affect vote choice. To mitigate these concerns, I employ the empirical strategies described in the last subsection: LDVs, time-variant controls, a time-trend robustness check, and the individual-level analyses in the following section.<sup>31</sup>

# Survey Analyses

The empirical strategy presented in the last section reveals how polarization shapes economic voting in the electorate. The results show that polarization is consequential because it mitigates the impact of economic conditions on voters' decisions about whom to support in presidential elections. Yet, the aggregate strategy does not identify *which* voters react less strongly to economic conditions as polarization increases, nor the *mechanisms* in Figure 2 through which polarized politics may affect these voters. To do so, I test Hypotheses 3a and 3b with survey data. In both hypotheses, I predict that partisans become less likely to punish their party for poor economic conditions. However, these predictions differ regarding whether polarization would affect economic evaluations (Hypothesis 3a) or the willingness of partisans to hold their party accountable (Hypothesis 3b). These expectations are not mutually exclusive. In fact, the results in this section suggest that polarization shapes economic voting through both mechanisms: economic assessment and accountability.

#### Perceived Polarization and Economic Assessment

According to Hypothesis 3a, polarization reduces partisans' propensity to negatively evaluate the state of the economy when their party holds the Presidency. I use ANES data from 1992 to 2020 to estimate the impact of the reported ideological distance between parties – which measures how respondents perceive political polarization – on economic assessment. In the survey analyses, I use respondents' perceptions of polarization to estimate the impact of polarized politics on economic

<sup>&</sup>lt;sup>29</sup>To illustrate this point, the low adjusted r-square in column 3 in Table \$13 shows that county-level fixed effects do not explain much of the variation in the vote share for the incumbent party. Yet, county-level controls and the lagged dependent variables (log-ratios) account for most of the changes in the trade-off between the incumbent party and the opposition and in the trade-off between the incumbent party and abstention (see adjusted r-square in Tables \$3 and \$9). I thank a reviewer for calling my attention to this.

<sup>&</sup>lt;sup>30</sup>Table S12 shows that indicators of local unemployment rates are not statistically significant with fixed effects for year. However, by using election fixed effects to remove within-unit variation in the data, this model with fixed effects assumes that economic voting does not change with polarization. The relationship between local unemployment and the presidential election outcomes would be the same in the early 1990s and 2020, regardless of changes in political polarization.

<sup>&</sup>lt;sup>31</sup>As with any observational analysis, one may wonder whether other factors could drive the results. The empirical strategies in this paper intend to ensure that changes in economic voting are not a mere consequence of time or another factor shifting over time. All results suggest that polarization weakens economic voting. Yet, the empirical models cannot distinguish which components of polarizing politics (elite polarization, social sorting, converging identities, partisan media, affective polarization, and so on) may be responsible for changes in economic voting. It remains a question for future research. In this paper, elite polarization is simply a proxy for measuring the polarization of the political environment.

voting. I do so because polarizing environments should affect voting behaviour through how voters sense ideological distancing between political parties. Moreover, increasing observed polarization is expected to increase the perceived ideological gap between parties among voters (Hetherington 2001; Smidt 2017). In the subsection before the conclusion, I discuss the association between observed and perceived polarization. I measure perceived polarization as the gap between the location of the two parties reported by the respondent on a 7-point scale that ranges from extremely liberal to extremely conservative.<sup>32</sup> After normalizing this variable, the perceived gap ranges from 0 to 1.<sup>33</sup> To measure how respondents evaluate economic conditions, I use the question that asks whether the national economy 'has gotten better, stayed about the same, or gotten worse' over the past year before the election.

To investigate how partisans evaluate the economy as the perception of polarization increases, I estimate an ordered logistic model that regresses economic evaluation on an interactive model specified as follows:

$$Pr(y_i = e) = F(\beta_1 IdeoGap_i + \beta_2 Partisan_i + \beta_3 IdeoGap_i^* Partisan_i + \delta_k x_{ki} + \alpha Election_i + \varepsilon_i)$$
(3)

where the probability that respondent i will select the category e – the economy has gotten better, stayed the same, or gotten worse – is a function of her perception of the ideological gap between the two major parties (IdeoGap<sub>i</sub>), a partisanship variable that indicates if the respondent is a member of the president's party, Independent, or a member of the opposing party (Partisan<sub>i</sub>), an interaction between these two variables (IdeoGap<sub>i</sub>\*Partisan<sub>i</sub>), a set k demographic controls  $(x_{ki})$ , and a vector of election fixed effects (*Election*<sub>i</sub>).<sup>34</sup>

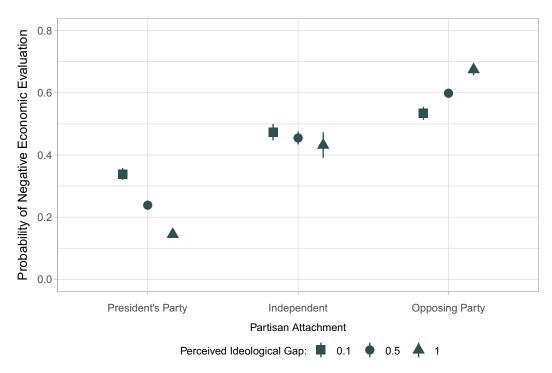
Figure 6 shows predicted probabilities that a respondent will report that the economy 'has gotten worse' across levels of perceived polarization (shapes). In support of Hypothesis 3a, as perceived polarization increases, members of the party holding the presidency are less likely to negatively evaluate the economy. The probability a supporter of the president's party will report that the economy 'has gotten worse' decreases from 0.35 to 0.15 as their perception of the ideological distance between parties moves from 0.1 to 1. This perceived polarization makes members of the opposing party, in turn, more likely to report a negative evaluation of the economy: the predicted probability of a negative economic assessment moves from 0.53 when the ideological gap is 0.1 to 0.68 when the reported distance between parties is 1. The ideological gap has no systematic effect on Independents. These findings corroborate Hypothesis 3a and previous studies (Donovan et al. 2020; Goidel and Kellstedt 2022), demonstrating that perceived polarization reduces partisans' disposition to negatively assess the economic performance of their preferred party.<sup>35</sup>

<sup>&</sup>lt;sup>32</sup>At the end of this section, I discuss how observed political polarization is associated with respondents' perceptions of polarization.

<sup>&</sup>lt;sup>33</sup>The normalization intends to create a scale of perceived polarization similar to the observed range of political polarization.

<sup>&</sup>lt;sup>34</sup>The set of controls includes gender, race, log-transformed age, and a dummy variable indicating whether the respondent has a college degree and income. Table S2 presents descriptive statistics of individual-level variables. The results are robust to specifications that include state fixed effects too. Moreover, to rule out the possibility of reverse causality, Figure S14 shows that the main findings are robust to a model that uses panel data from the Cooperative Congressional Election Study (CCES) to regress economic evaluation on a lagged measure of perceived polarization. The findings are also robust to models that use a five-category of partisanship. See Figure S18 and Table S14.

<sup>&</sup>lt;sup>35</sup>To further investigate Hypothesis 3a across partisanship, Figure S7 shows results by political party holding the Presidency at the time of the wave (Panels). As their perception of polarization increases, both Republican (Panel A) and Democratic (Panel B) identifiers are less likely to report a negative evaluation of the economy when their preferred party holds the Presidency, though this effect is stronger among Republicans.



**Figure 6.** Probability of a Negative Evaluation of the Economy.

Note: The horizontal axis indicates if the respondent is attached to the president's party, the opposition, or is an Independent. Shapes indicate the ideological gap between parties perceived by respondents. Full results can be found in Table \$4.

### Perceived Polarization and Economic Accountability

As Figure 2 illustrates, polarized politics can affect another link in the economic voting chain. Among members of the president's party who negatively evaluate the economy (Ang et al. 2021), polarization can weaken their willingness to use this economic assessment to inform their vote choice. In other words, partisans become less likely to punish their preferred party for poor economic conditions as polarization increases. This is the expectation of Hypothesis 3b. To test it, I split the ANES data described above by respondent's partisan attachment (Partisan $_i$  in Equation 3). For each subsample – members of the president's party, members of the opposing party, and Independents – I use multinomial logistic regressions to estimate the probability that a respondent i selects category m- voting for the incumbent party, the opposition, or abstention – as a function of the following interactive specification:<sup>36</sup>

$$Pr(y_i = m) = F(\beta_{1j}EconEval_i + \beta_{2j}IdeoGap_i + \beta_{3j}EconEval_i*IdeoGap_i + \delta_{ki}x_{ki} + \gamma_iState_i + \alpha_iElection_i + \varepsilon_i)$$
(4)

where the probability of a respondent i selecting category m is a function of her evaluation of the economy, EconEval<sub>i</sub>, her perception of the ideological gap between the two major parties, IdeoGap<sub>i</sub>, the interaction between these variables (EconEval<sub>i</sub>\*IdeoGap<sub>i</sub>), the same set of k

<sup>&</sup>lt;sup>36</sup>Mimicking the strategy with aggregate data, my individual-level models also use a measure of effective abstention that combines abstention and votes for third parties. The results are robust to models that split the effective abstention into two categories and models that use a 5-categories measure of partisanship. See Figure S12 and S13.

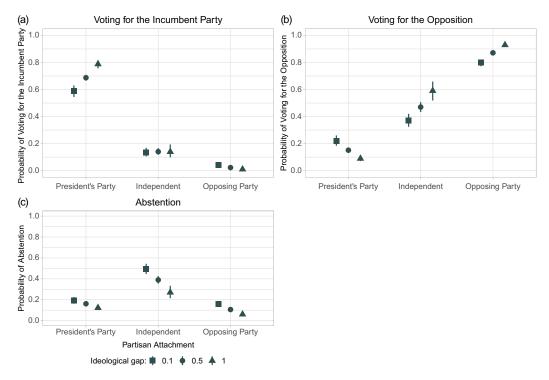


Figure 7. Vote Choice Given a Negative Economic Evaluation.

Note: Panels indicate respondents' vote choice. Shapes indicate the ideological gap between parties perceived by respondents. Full results in Table S5.

demographic controls ( $\mathbf{x}_{ki}$ ) in Equation 3, and vectors of state and election fixed effects ( $State_i$  and  $Election_i$ ). With this model specification, I can investigate how partisans react to economic evaluations under different presidencies and levels of the perceived ideological gap between parties.<sup>37</sup>

Figure 7 presents predicted probabilities of a respondent to vote for the incumbent party (Panel A), for the opposition (Panel B), or to abstain (Panel C), given that she negatively evaluates the economy. Icons represent the level of the perceived ideological distance between parties. In support of Hypothesis 3b, as the perceived ideological distance between parties increases, supporters of the president's party who negatively evaluate the economy become less likely to punish the incumbent party by either voting for the opposition or not participating. When the ideological gap is 0.1, the probability that a member of the president's party who reports that the economy is deteriorating will vote for the incumbent party is equal to 0.60. If s/he locates parties at extreme sides of the spectrum – *that is*, an ideological gap equal to 1 – this probability goes up to 0.80. Supporting Hypotheses 1, 2a, and 3b, Panels B and C show that under higher polarization, supporters of the president's party are less likely to sanction their party for economic conditions by voting for the opposing party or abstaining.<sup>38</sup> The probability a supporter of the incumbent

<sup>&</sup>lt;sup>37</sup>Since perceived polarization affects economic evaluation (Equation 3) and both explain voting behaviour (Equation 4), a potential post-treatment bias in Equation 4 is likely to attenuate the total effect of perceived polarization on vote choice. Similarly, polarization may increase voters' partisan attachment (Lupu 2015), and the latter can moderate economic voting (Kayser and Wlezien 2011). In other words, part of the negative effect of perceived polarization on voting behaviour could work through economic assessments and party attachment. Investigating these potential paths, though, is beyond the scope of this paper.

<sup>&</sup>lt;sup>38</sup>The effects on abstention are likely underestimated as survey responses tend to overestimate participation due to social desirability bias (Granberg and Holmberg 1991; Persson and Solevid 2014).

party will cast a ballot for the opposition in response to the deteriorating economy decreases from 0.22 to 0.09 as the perceived ideological distance between parties moves from 0.1 to 1 (Panel B in Figure 7).<sup>39</sup>

Supporters of the opposing party and Independents who negatively evaluate the economy become more likely to vote for the opposition. Independents reporting a negative economic assessment present a small probability of voting for the incumbent party regardless of their perception of the ideological distance between the two major parties. Moreover, consistent with the literature showing that nonpartisans are less interested and involved in politics (Lewis-Beck et al. 2008; Magleby, Nelson and Westlye 2011), Independents are always more likely to abstain than partisans. However, their propensity to abstain in response to a negative assessment of the economy decreases as they become more able to distinguish the ideological difference between parties. The probability of voting for the opposition among Independents who negatively evaluate the economy increases with the perceived ideological gap at the expense of abstention. These findings are in line with the results of previous studies which demonstrate that polarization clarifies the ideological positions of political parties for ordinary citizens and, as a result, reduces ambivalence among Independents (Hetherington 2001; Smidt 2017). Moderate voters who perceive a larger ideological gap between parties are not only less likely to move between parties across elections (Smidt 2017); they are also less likely to abstain in response to a negative economic evaluation.40

To sum up, individual-level results support Hypothesis 3b and the patterns predicted by the sticking effect of polarization on electoral accountability. As the perceived distance between parties increases, members of the president's party become more reluctant to punish their party for a negative evaluation of the economy.

### Observed Polarization and the Perceived Ideological Gap

These micro-level analyses confirm my early findings with aggregate data. Results at both levels imply that polarization weakens economic voting. Yet, is perceived polarization – the perceived ideological gap between parties – associated with observed levels of political polarization? In line with Lupu's (2015) findings showing that citizens in polarized systems perceive their parties to be more polarized, Figure S2 in the Supplementary Material provides evidence to support an affirmative answer to this question. It shows that results at the county level are robust to models that use the average perceived ideological distance from ANES data instead of the distance between representatives in the House. Indeed, both observed elite polarization and the perceived ideological distance between parties are moving up over time (Lelkes 2016; Smidt 2017). Figure S9 plots trends in observed and perceived polarization among voters by party attachment. Consistent with Lelkes' (2016) results using the mass public's placement of parties on policy issues, the perceived gap between parties increases in the electorate over time (yellow line). Partisans are driving these results (blue and red lines).

To further observe the association between political polarization and voters' perceptions about the ideological distance between parties, I regress the perceived ideological gap reported by ANES

<sup>&</sup>lt;sup>39</sup>Again, in order to further investigate which type of voter is more likely to behave according to Hypothesis 3b, Figure S8 split the data by respondents' partisan attachment and the political party holding the Presidency at the time of the wave. For each subsample that combines a category of party identification (Democrats, Independents, and Republicans) with a party in the presidency, I estimate Equation 4. Both Republican (Panel A) and Democratic (Panel B) identifiers are less likely to hold their party accountable for negative economic assessment as perceived polarization increases, but the magnitude of the effect is larger among Republicans.

<sup>&</sup>lt;sup>40</sup>Independents may be either more attached to the party in the opposition due to polarization or more responsive to economic conditions. Combined with Smidt's (2017) results, my analyses at the county level suggest that the former explanation is correct: the number of floating voters in response to economic indicators decreases also among Independents as polarization increases.

respondents on an interaction between observed polarization and partisanship, controlling for all variables described in Equation 4. Results from this regression cannot be interpreted as a causal relationship, given that the model does not address issues concerning reverse causality. Yet, they indicate a strong relationship between observed party polarization and how voters perceive it. Figure S10 in Supplementary Material plots the marginal effects of this interaction. Polarization is positively associated with the perceived ideological gap across all categories of party identification but it is stronger among Republican identifiers. These results suggest that observed polarization influences perceptions of polarization in the electorate, especially among partisans. Hence, the moderating effect of polarized politics on economic voting observed with the aggregate-level data is likely operating through how voters perceive the ideological difference between parties (Hetherington 2001; Smidt 2017). Here is a supplication and partisans and partisans are causal relationship, controlling for all variables are causal relationship, controlling for all variables are causal relationship, controlling for all variables are causal relationship, cannot be interpreted as a causal relationship, cannot be interpreted as a

### Conclusion

In this paper, I propose a theoretical framework and empirical strategy to investigate how polarizing politics affects two channels through which voters can punish the incumbent party for economic conditions: voting for the opposition and abstention. The *sticking effect* of polarization on electoral accountability predicts that political polarization decreases both the number of voters who cast a ballot for the opposition and the number of those who abstain in response to a deteriorating economy. Findings from models that analyze presidential election outcomes at the county level support these hypotheses. As polarization increases, fewer voters move from the party in government towards either the opposition or abstention as a reaction to a negative economic condition – increasing unemployment. Individual-level findings confirm that partisans (i) become less likely to negatively evaluate the economic performance of their party and (ii) less prone to sanction their party as perceptions of the ideological distance between parties increase.

Together, these findings provide evidence that polarization undermines electoral accountability in response to economic performances. The number of voters willing to punish the incumbent party for poor policy outcomes shrinks with polarizing politics. The implications for political representation are stark. By presenting voters with clear ideological options, polarization can increase the public's interest and engagement (Abramowitz 2010), making it easier for voters to understand what political parties represent and, as a result, allowing voters to cast a ballot based on their ideological preferences (Hetherington 2001). Hence, some level of polarization can improve political representation. However, it does not follow that polarization strengthens electoral accountability. Actually, as the environment becomes more polarized, partisan voters tend to rely more on motivated reasoning than objective indicators of policy performance. Since citizens assign responsibility for events beyond the president's control (Achen and Bartels 2004; Kane 2016), it would be tempting to conclude that polarization might be correcting voters' biases about economic performances. However, the results show that polarizing politics accentuates voters' predisposition (Clifford et al. 2023), making partisans more complacent about their preferred party's performance and more rigorous with the party they dislike.

This paper shows with both aggregate- and individual-level data that, like other contextual factors (Powell Jr and Whitten 1993), polarization clouds voters' ability to attribute responsibility for economic performances. Institutions are only one of the elements in the political context that can blur the responsibility for economic conditions or reduce voters' willingness to acknowledge

<sup>&</sup>lt;sup>41</sup>Full results in Model 1 of Table S7. Figure S11 and Model 2 in Table S7 present similar results using a 5-category measure of partisanship. Together with the findings presented in Figures S7 and S8, these results suggest that Republicans may be more sensitive to polarization, in line with the thesis of asymmetric polarization (Mann and Ornstein 2016). They suggest that future research on polarization and voting behaviour should investigate whether findings are heterogeneous across party attachment.

<sup>&</sup>lt;sup>42</sup>Similarly, Table S8 and Figure S15 show that economic evaluation is associated with the average unemployment rate at the state level: A higher unemployment rate decreases the probability of a positive economic assessment. Unfortunately, ANES data do not inform counties' FIPS codes of respondents for multiple survey waves.

it. Polarized politics is another contextual factor moderating electoral accountability. Rather than assigning responsibility to their preferred party for economic failures, voters are likely to resort to motivated reasoning to accommodate party attachment and perceptions about the economy under polarized politics. When the polarization of the political environment is high, the link between economic conditions and economic evaluation weakens among partisans. And if the economy deteriorates, it is not the fault of their party. Similarly, if the economy prospers, it is not because of policies adopted by the party they dislike. Consistent with this pattern, my survey analyses suggest that polarization affects both partisans' economic assessments and their propensity to blame their parties for poor economic outcomes. To the extent that local politics is nationalizing (Jacobson 2015), polarization is likely becoming a moderator of economic conditions in state and local elections too. Future research can explore whether economic voting observed in state elections (de Benedictis-Kessner and Warshaw 2020) has also decreased in response to polarization.

Moreover, this paper demonstrates that voters have two channels to express dissatisfaction with incumbents: voting for the opposition and abstention. Hence, abstention can and should be modelled as an option available to voters similar to vote choices. Indeed, my findings show that political polarization affects both channels of economic voting in a similar fashion. Future research on how polarized politics shapes voting behaviour should explore whether abstention plays a role in the explanation. Finally, by estimating the impact of polarization on the electorate, this paper shows that the polarization of the political environment is consequential. The change in polarization observed in the USA over the last thirty years reduces by half the punishment the party in government faces for an increase in unemployment. These results should encourage future research to investigate other consequences of polarization at the aggregate level, where patterns of voting behaviour can shape election outcomes.

The US context has some specificities that raise concerns about *whether* and *how* the findings in this paper may travel to other democracies. The two-party system and the strong attachment of voters to parties make American politics an appropriate case to study the impact of polarization on economic voting. In multiparty systems, however, the radicalization of some political parties may or may not increase polarization depending on how other parties place themselves across political issues. Yet, there is evidence that the emergence of radical parties leads to a polarizing environment by emphasizing extreme views on one side of the ideological scale and stimulating a backslide effect on the other side (Bischof and Wagner 2019). But in multiparty contexts, besides the challenge of conceptualizing polarization, voters may show a distinct behaviour as there are more options available along ideological dimensions. Williams and Whitten (2015) show that voters tend to hold ideological blocs of parties accountable for economic conditions, moving away from the incumbent party and other parties ideologically close to the incumbent when economic conditions are poor. Polarization may weaken this behaviour. Instead of switching ideological blocs in response to economic conditions, voters may be more like to choose parties within the same ideological bloc as politics become more polarized. This is an open field for future research.

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Data Availability. Replication data for this paper can be found at Harvard Dataverse at: https://doi.org/10.7910/DVN/RRC5BU.

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