Partisan Polarization and Voter Turnout in U.S. Elections

by

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ABSTRACT

A large amount of research examines the effect of partisan polarization on the institution of Congress, yet we know remarkably little about this political phenomenon's precise effect on the political behavior of the American electorate. Some scholars argue that polarization is healthy for democracy because it allows political elites to send clear cues to the mass public, but other scholars postulate that polarization is bad for democracy. Decades of research on voter turnout resulted in a vast accumulation of knowledge on the subject. However, scholars must pay greater attention to data collection and measurement strategies because the prevalent technique to quantify voter turnout artificially deflates participation rates. I take two paths to uncover the effects of partisanship on the decision to vote. From the micro perspective, I utilize a variety of partisanship measures based on survey data. From the aggregate perspective, I argue that calculating voter turnout based on the voting eligible population (VEP) is a superior measurement strategy to other techniques. I adoopt a VEP measure of voter turnout for state-wide races (1994-2010). The results suggest that polarization is an important factor that increases voter turnout at both the individual and aggregate levels.

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INTRODUCTION

Political participation lies at the heart of democracy because representative democracy is unthinkable without the ability of citizens to freely influence the direction of their government. Opportunities to influence democratic governments may take many forms, but arguably, no single act is more important than voting. Through elections, citizens align with other like-minded individuals to make their preferences known. They indicate their selection for government officials, and they attempt to influence the direction of public policy. Additionally, elections provide a punishment-reward mechanism where citizens may reward a legislator for achieving a collective good as defined by the constituency, or they may remove the incumbent from office for straying too far from the state or district's preferred goals.

Even though elections are an important part of representative democracy, participation varies greatly from country to country. Many European nations see high rates of voter turnout due to compulsory voting laws, but other nations, particularly the United States, sees much lower levels of voter turnout even considering our nation's established tradition as a representative democracy. For many Americans, voting is the only form of political participation, but many citizens choose to abstain from the process entirely. This feature of American politics is especially puzzling considering the relatively high levels of education in the United States (Powell, 1986). This feature of American politics is what Brody (1978) identified as the, "puzzle of participation."

Many factors are thought to influence whether a citizen decides to vote. For instance, class and social associations (Lazarsfeld *et al.*, 1944; Berelson *et al.*, 1954), strength of partisan and ideological identification (Campbell *et al.*, 1960), possessing

a vast accumulation of political resources (Verba *et al.*, 1995), and high levels of socio-economic status (Wolfinger and Rosenstone, 1980) are some of the most important factors that encourage an individual to show-up on election day. Other factors that discourage electoral participation include but are not limited to registration requirements (Rosenstone and Wolfinger, 1978), residential relocation (Squire *et al.*, 1987), economic hardship (Rosenstone, 1982), and the structural arrangement of American institutions (Hill, 2006).

Of the factors that influence electoral decision-making, scholars continue to demonstrate the importance of partisanship. Since the 1960s, many empirical studies buttressed the original findings found in *The American Voter* and demonstrated the increased reliance on partisanship for electoral decision-making (Converse and Markus, 1979; Green *et al.*, 2002; Lewis-Beck *et al.*, 2008; Miller and Shanks, 1996). In fact, a few scholars (Lau and Redlawsk, 2001, 2006; Popkin, 1994) indicate that voters base their electoral choices on partisanship rather than becoming fully informed about specific policies and candidates. Hetherington (2001) notes that reliance on partisanship is as high as it as ever been for presidential elections, and we are nearly replicating an all-time high found in the 1950s for congressional elections.

1.1 Polarization in American Politics

Most observers of American politics admit that there is a sharp division between Democrats and Republicans at just about every level of government. In today's Congress, members rarely cross the aisle to work with members of the opposition party. Voting along strict party lines is the norm rather than the exception, and ideological moderates among both parties increasingly face extinction (Fleisher and Bond, 2004). In terms of partisan ideology, Democratic members gravitate toward the liberal end of the spectrum, and Republican members tack towards the conservative

poll (Abramowitz and Saunders, 1998). The two congressional parties now display more differences than they do commonalities (Lowry and Shipan, 2002). Acrimony characterizes the institutional atmosphere within Congress because derision defines inter-party differences.

This institutional arrangement is what is known as partisan or ideological polarization. This phenomenon clearly affect the legislative process within Congress, but the precise impact of polarization on the electorate is unclear. Aldrich (1995) famously stated that political parties are endogenous institutions, meaning that the actors within parties determine how they behave and how the public perceives them. This line of logic applies to Congress as well because legislators are one of the primary vehicles that directs the course of the nation's public policies. As a result, individual legislator behavior, as well as the aggregate-level behavior between the two parties, directly influences the American public's perception of Congress (Durr *et al.*, 1997; Hibbing and Theiss-Morse, 1995; Kimball and Patterson, 1997), which should have a direct impact on the voting behavior of the electorate.

Most scholars admit that partisan polarization is an undeniable feature of American politics, but they often disagree over how deep the partisan divide runs. One school of thought (Ahuja, 2008; Fiorina *et al.*, 2006; Fiorina and Abrams, 2009) postulates that partisan polarization is limited to the politically active class, and while many voters may think of themselves as Democratic or as Republican, the policy or ideological preferences of the mass public does not reflect stark divisions found among political elites. Instead, this line of thought stresses that the American electorate has simply sorted into groups of like-minded individuals, but there is still a great deal of overlapping policy or ideological cleavages within the mass public, meaning that moderates primarily comprise the American electorate.

The other perspective (Abramowitz, 2010; Jacobson, 2009) suggests that the division between Democrats and Republicans is not an elite-level phenomenon, and that the sharp partisan divisions found at the elite-level do extend to the mass public. According to this argument, political engagement is an important intervening variable that influences opinion and electoral behavior. Politically sophisticated Americans – citizens who express a great deal of interest in politics and are very knowledgeable about political events – are especially likely to mimic elite-level polarization in their ideological positions and policy preferences, all else equal. This portion of the electorate almost always votes for their party's candidates, and they vehemently defend the policy prescriptions stated in their party's platform. The division between Democrats and Republicans with average political sophistication also exists, but the partisan divide for these individuals is slightly less pronounced than it is for sophisticated individuals in the American electorate.

Addressing whether polarization extends into the electorate is a difficult endeavor to undertake because scholars have put forth compelling evidence on both sides of the argument. From a theoretical standpoint, the argument that polarization is confined to the elite class is appealing because this means that most Americans are moderates who have a great deal of common ground ideologically. However, this line of thought also suggests that there is something very different about people who serve in office or who serve as a formal part of the party apparatus. There is considerable difference between the preferences of these elected officials, which leads to a severe crisis in representation because our leaders are out of touch with the average voter's preferences. In other words, the legislator-constituent dyad has broken down, and policy congruence between constituents and elected officials is only a reality in theoretical discussions.

From a practical standpoint, this perspective of polarization is frightening. A breakdown in representation constitutes a threat to the American commitment to republican democracy. If elected officials pursue their own wishes at the expense of their constituents without repercussions, then such a process is likely to increase cynicism about the political system, which should decrease the likelihood that citizens will participate electorally. Thus, the process becomes a vicious cycle where mistrust and cynicism decreases the likelihood of voting, and deflated turnout rates leads to a further breakdown of policy congruence and, ultimately, representation.

However, if polarization does extend into the mass electorate, then this is a completely different story of representation – one that is both theoretically and normatively appealing. If the more sophisticated portion of the electorate displays similar levels of polarization to elected officials, then at least some portion of the electorate experiences policy congruence and effective representation. Other Americans who are less active and less engaged will not experience the same level of policy congruence as citizens whose preferences coincide with elites, but they at least have some of their concerns addressed.

As with the previous perspective, the relationship between polarization and electoral participation is tautological, but the covariation between these two concepts is very different according to this description. If representatives and active citizens in the electorate share similar views, then this should reduce cynicism about government because voters are getting some of what they want. According to this assessment, polarization should energize the electorate by giving citizens an opportunity to choose representatives who share similar views, which should, in turn, increase the likelihood of participating in electoral politics, *ceteris paribus*.

Aside from a representation perspective, polarization should encourage individuals to vote because it injects a moral component into electoral politics because each side

invokes moral superiority to implement their policy platforms. As personal morality becomes a defining component of policy debate, hostility between Democratic and Republican candidates increases, and each party wants their policy implemented with no concession to the other side. Consequently, personal morality and party loyalty are more important than acknowledging competing ideals through robust democratic debate. Candidates and their supporters consistently try to obfuscate their opponent's messages and policy positions in order to win office because they feel the other side's platform portends destruction for the country.

1.2 Polarization and Voter Turnout

Two schools of thought can help explain how polarization relates to voter turnout. The Michigan model (Campbell *et al.*, 1960) suggests that just about everything comes down to partisanship. The activity of political elites or things such as political events in the news have very little sway over our political activity or decision-making because our political behavior is relatively stable. In other words, the Michigan model suggests that polarization has very little effect on voter turnout because our partisan predispositions drive our political behavior.

The other school of though (Claassen and Highton, 2009; Levendusky, 2010; Zaller, 1992) suggest that voters are very much influeced by the political activity of political elites. According to elite discourse theory, the opinions that voters hold are a direct function of the political information that is transmitted through elite discourse. Partisanship only serves as guide to either accept or reject that information.

I argue that a model of voter turnout should utilize both of these perspectives. Polarization is not just an elite-level phenomenon. Polarization should energize the electorate because it allows voters to clearly interpret messages from political elites, which reduces the costs of participation and increases the reliance on party images

(Brewer and Stonecash, 2009; Trilling, 1978). An increased emphasis on partisanship with a lower participation cost should encourage electoral participation at the individual and aggregate levels.

However, the effect of polarization should not produce the same effect on all segments of the American electorate. Political sophistication conditions the degree to which voters behave in a partisan manner. In other words, polarization increases the likelihood of voting for those who are paying attention to politics. Politically sophisticated voters already pay a great deal of attention to what their elected officials are doing, so polarization likely just reinforces the partisan tendencies that these voters already have. This means that polarization should have the most pronounced effect on the behavior of moderately aware voters. In other words, polarization encourages moderately aware individuals to mimic the behavior of the most active segments of the American electorate. I expect polarization has a minimal effect on voters with low political sophistication.

1.3 Measuring Turnout and Polarization

As with many other empirical debates in the social sciences, the conclusions offered by scholars to explain political phenomena often reflect the underlying operational definitions and measurement strategies of the concept at hand. Empirical studies of voter turnout and polarization are no exception to this evaluation. Additionally, different types of research design and their corresponding levels of analysis can reveal different things about the nature of congressional elections. As a result, I make use of both individual-level and aggregate-level analyses in order to triangulate the the precise relationship between polarization and voter turnout. In this section, I identify my operational definitions of voter turnout and polarization, and I indicate how I intend to measure each of these concepts in the forthcoming analyses.

1.3.1 Measuring Turnout

The turnout literature demonstrates the importance of correctly measuring participation because debate exists as to whether turnout is on the decline or on the rise in the United States. A few scholars (Patterson, 2002; Teixeria, 1992; Wattenburg, 2002) argue that participation in modern American elections is on precipitous decline when compared to the 1950s. This view of American turnout is popular in the literature, and scholars have offered a variety of explanations to account for this occurrence. For example, the lack of social capital (Putnam, 2000), generational replacement (Miller and Shanks, 1996), negative advertising (Ansolabehere and Iyengar, 1995), cable television (Baum and Kernell, 1999), selective mobilization (Rosenstone and Hansen, 1993), diminishing partisan attachment (Abramson and Aldrich, 1982), and the prevalence of divided government (Franklin and Hirczy de Mino, 1998) are some of the various factors thought to depress voter turnout.

Scholars who argue that electoral participation is on the decline typically estimate voter turnout by dividing the total number of ballots cast by the number in the population over the age of 18. This measure is known as the voting-aged population measure (VAP). However, measuring turnout in this manner proves problematic because it conceals true participation rates and artificially reports downward voting trends. Burden (2000, 2003) first noticed a discrepancy between VAP estimates and self-reported turnout rates in the American National Election Survey (ANES), which he attributed to respondent over-reporting. Martinez (2003) suggests that the difference between the VAP and the ANES measure was largely due to sample selection rather than over-reporting because the ANES did not include non-citizens in their sample.

Different measurement strategies such as the the voting eligible population (VEP) measure remove people who are ineligible to vote – non-citizen residents and felons – from the calculation (McDonald and Popkin, 2001; McDonald, 2002, 2010, 2011). The VEP measure demonstrates stability in turnout rates since the 1950s and an upward trend in the past few national elections. The VEP measure is much closer to the turnout rates reported in ANES than is the VAP calculation (McDonald, 2003). There is still a small gap between the VEP and the self-reported measure, but the gap is stable. Holbrook and Heidbreder (2010) demonstrate that VEP measure performs much better than the VAP for both national and state elections, and that this alternative measurement strategy changes what types of inferences scholars can make about the American electorate, particularly that the declining turnout rate is incorrect.

I adopt the VEP measure of turnout because of its widespread acceptance in the voting behavior literature. The VEP measure of turnout is vastly superior to other techniques used to estimate aggregate-level participation. Properly measuring turnout is important for my purposes because improperly measuring voter turnout is likely to change the covariation between polarization and electoral participation. In order to have a proper understanding of how these two variables operate in the aggregate, I make use of the VEP measure of turnout in each state from 1994 through 2010.

In order to measure individual-level turnout, I utilize several different cross-sections of survey data. Both the American National Election Survey (ANES) and the Co-operative Congressional Election Survey (CCES) provide a variety of questions that enable me to evaluate what encourages individuals to vote.

1.3.2 Measuring Polarization

Many scholars conceptualize polarization as a strict manifestation of partisanship, meaning that our affective attachment to partisan symbols or labels drives our political behavior. These scholars tend to place little or no emphasis on the role that ideology plays for partisan differentiation either among members of Congress or individuals within the electorate. Others place a great deal of emphasis on the role of ideology, especially at the elite-level. However, the underlying process driving polarization within the electorate is less clear, but, nonetheless important.

For studies of Congress, scholars typically assess polarization by quantifying ideology or partisanship through roll-call votes, but no consensus exists as to which conception produces greater influence on the behavior of legislators. A wealth of research (Krehbiel, 1998; Levitt, 1996; Lucas and Deutchman, 2007; Poole and Daniels, 1985; Poole and Rosenthal, 1991, 2001, 2007; Cox and Poole, 2002; McCarty *et al.*, 2001, 2006) stresses that legislator preferences and, more specifically, ideology guide roll-call voting decisions and that these preferences are stable over time. Others (Garand and Clayton, 1986; Lee, 2009; Sinclair, 1981, 2006; Smith, 2007; Snyder and Groseclose, 2000, 2001; Wright and Schaffner, 2002) argue that partisanship guides voting decisions for members of Congress.

This is an important debate within the congressional voting literature because each perspective implies different things for members of Congress. If legislators use their personal preferences to vote a certain way, then they are relatively free to support any proposal of their choice. However, if party is more important than personal preferences, then the party apparatus considerably constrains their choices. Both of the these perspectives are incredibly important for testing both institutional and constituency-based theories of political behavior for the institution of Congress.

In this dissertation, I argue that ideology structures the behavior of our elected officials because political elites – members of Congress and state legislators – have first hand information of public policy debates, and they have a firm understanding of what types of issues coincide with their ideological positions. In other words, legislators have a great deal of ideological constraint guiding their voting decisions. Following (Poole and Rosenthal, 2007) and (Shor and McCarty, 2011), I adopt the spatial model framework in order to form my measures of polarization. These measures of ideology in Congress and state legislatures are widely accepted in the literature for their validity and reliability. More importantly, the nature of these multi-dimensional scaling technique allow for direct comparison of ideology and polarization across time, which is important for my aggregate-level analyses.

Scholars have also spent a great deal of effort evaluating the use of partisanship and ideology among the American electorate. In contrast to the study of these topics for legislative chambers, the conclusions are incredibly lopsided. These studies question the ability of the American public to incorporate ideological knowledge into their political opinions, but they show that Americans depend greatly upon partisanship (Campbell *et al.*, 1960; Converse, 1964; Converse and Markus, 1979; Green *et al.*, 2002; Lewis-Beck *et al.*, 2008; Miller and Shanks, 1996). Other research (Smith, 1980, 1989) suggests that the inability of Americans to use ideology may, at least partially, be due to measurement problems. Jessee (2012) indicates that many Americans are able to use ideology once they are placed on the same measurement scale as members of Congress.

Elite discourse theory is agnostic as to whether citizens in the electorate are able to incorporate ideological information into their opinions. This theory suggests that citizens use elite information to inform their decision-making and that they either accept or reject this information based on their predispositions and political sophistication,

all else equal. It is possible that some individuals have the ability to incorporate ideological information into their opinions, but others simply notice the partisan processes at play. Even among sections of the mass public who do not pay a great attention to political detail, the use of ideological language to describe the party system is widespread. In today's political landscape, people tend to think of Democrats and the liberal party and Republicans as the conservative party. Most Americans are able to correctly identify the polarity of the party system without great knowledge of the various candidate for office or specific policy debates.

I do not take a strong position as to whether the American electorate primarily uses ideology or partisanship to guide their opinions and vote choice. It is possible that some do, but others do not. Variables such as political sophistication and education have a great deal of influence as to which processes voters are able to use for their decision-making. For the purposes of this dissertation, it does not really matter whether ideology or partisanship influences a voter's decision to participate electorally because the behavior of political elites reinforces ideological or partisan divisions in the electorate.

In order to form my individual-level measures of polarization, I make use of a variety of cross-sectional survey data. The ANES has a great deal of information about intention to vote and vote choice. Additionally, these surveys ask respondents to evaluate parties, candidates, and policy proposals along an ideological scale, which makes them well-suited for analyses of polarization and voter turnout.

1.4 Plan for the Dissertation

In the coming sections, I proceed as follows. In Chapter 2, I provide a detailed discussion of how my theoretical expectations demonstrate the relationship between polarization and voter turnout. Additionally in this chapter, I propose a few formal

hypotheses. In Chapter 3, utilize a number of techniques in order to provide evidence of polarization at both the individual and aggregate levels. Beginning with Chapter 4, I move to my empirical analyses by assessing levels of polarization over time for individuals. In Chapter 5, I utilize the VEP measure of voter turnout to assess how polarization influence electoral participation in the aggregate. In Chapter 6, I provide a discussion of my results, and I address the implications of my research.

Chapter 2

POLARIZATION AND VOTER TURNOUT IN U.S. ELECTIONS

In the previous chapter, I described the current state of the literature pertaining to polarization and voter turnout. Previous research has done an excellent job of describing how polarization affects the institutional mechanisms of Congress. However, the theoretical link between polarization and the electorate is much less clear. In this chapter, I lay down the theoretical foundation for the forthcoming analyses. Additionally, in this chapter I address a number of hypotheses related to polarization and electoral behavior at both the individual and aggregate levels.

Zaller (1992) is famously remembered for saying that public opinion is a marriage between predispositions and public discourse. In some ways, public opinion may be a bit more complicated than that, but in many other ways, his assessment of public opinion is spot on. His work went to great lengths to show that political elites have a great deal of influence over the opinions voters report that they have about political issues. His work is largely about describing how voters form political opinions, how those opinions change, and why people respond to political stimuli – in his case, surveys – the way they do.

Since the publication of the American Voter, political scientists have known that partisan identification is an important aspect of why people make the political decisions that they do. In the tradition of that work and Zaller's work, it is safe to say that partisanship is a perceptual lense that colors the way humans see the political world. For those of us who strongly identify with party labels, it biases the political decisions we make, it affects the policies and candidates that we support, and it ultimately affects the the types of information that we use to update our information

banks. Strong partisans tend to be very attentive to politics, and they tend to pick up more information from elite discourse than do other types of voters.

Generally speaking, Independent voters do not identify as strongly with a particular party label. In fact, they tend to completely avoid forming attachments with either of the two major parties. Additionally, Independent voters tend to be less interested in politics than their strong partisan counterparts. This generally means that they are less engaged with the political world, and as a result, they tend not to encounter as many political messages contained through elite discourse.

Electoral competition naturally creates competing messaging frames, and due to the structure of our two-party system, voters tend to hear two dominate message frames from political elites most often transmitted through the news media. Each party has a vested interest in establishing an image of itself to create a brand that allows parties to present themselves to voters. The whole purpose of electoral competition between political parties is convince voters that their brand is better and to convince voters to cast a vote for their slate of candidates.

The work of Downs (1957) stresses the importance of the median voter. Downs' theory suggests that we could think of the partisanship of the electorate as a normally distributed probability distribution. Most voters are located at the center of the distribution with rather moderate policies and looser attachment the party labels. However, in a polarized environment, the distribution of voters becomes stretched towards the ends of the spectrum. Fewer voters are located at the center of the distribution, meaning the competition between the parties for the center of the electorate becomes more fierce.

Because evaluations of the political system depend on a number of factors voters are very like to see the party system differently from one another. Some voters are likely to see a great deal of difference between the two parties, yet others will report

seeing no difference between the two. This fact is likely to occur for a variety of reasons. Some of these reasons include but are not limited to partisan attachment, interest in politics, education, and other factors known to affect political behavior. Nevertheless, as the ideological distance between the the two parties grows, the number of voters who see no difference between the two parties should decrease considerably.

As the number of messages from political elites increases and the content of such messages becomes increasingly negative under a polarized environment, voters should begin to evaluate the party system differently. Voters should evaluate the party system more frequently, and the content of these evaluations should change. Considering this aspect of polarization and political behavior, I propose two formal hypotheses:

Evaluation Frequency Hypothesis: Voters who see higher levels of polarization between the two parties will provide a greater number of comments about the two parties when asked their opinions about them in surveys or interviews.

Affective Evaluation Hypothesis: Voters who see higher levels of polarization between the two parties will provide stronger opinions about each of the two parties. Strong partisans will provide more positive evaluations of their party and more negative evaluations of the competing party.

As the number of political messages from political elites increases, strong partisans should be the most likely to receive and accept political content. This should reinforce their already well-established habit of voting. However, as the intensity of political messages increases from political elites, independent voters should also be more likely to receive the content form political elites. As result, the likelihood of voting should increase for all types of partisans, but the most pronounced effect should be found among independent voters. Considering this expectation, I propose an additional hypothesis:

Voter Turnout Hypothesis: Voters who see higher levels of polarization will have a higher probability of voting than will voters who see lower levels of polarization between the two parties.

Voter turnout at the macro-level is very different than individual-level turnout because electorates are collections of individuals. However, because electorates are collections of individuals, elite discourse should still predict greater turnout in the aggregate. Rather than changing the probability that an individual voter will cast a ballot, polarization will produce a higher overall turnout rate in a particular state or congressional district. Considering this expectation, I propose a final hypothesis:

Macro Turnout Hypothesis: States that display higher levels of polarization will have higher rates of voter turnout than will states who have lower levels of polarization.

Chapter 3

EVIDENCE OF POLARIZATION

In this chapter, I assess levels of polarization for both the voters and elected officials. The the data used to evaluate polarization among voters comes from the American National Election Survey (ANES). Several variables contained in this survey prove incredibly useful for assessing levels of polarization among the electorate. For instance, I make use of partisanship self-placement, the ideological self-placement, ideological placement of the parties, feeling thermometers, and issue scale variables to determine whether the American electorate is polarized.

Researchers administer the ANES during presidential election years and almost all midterm election years with the exception of the 2006 and 2010. During presidential election years, the survey is administered in a pre-election wave and a post-election wave. Non-presidential years typically contain a post-election survey only. Each year of the ANES is a nationally representative cross-section of the American electorate, but many of the question contained in the various cross-sections of the ANES ask similar questions, but many others also change over time. The questions that do remain the same over time (or relatively similar over time) are published in the ANES cumulative data file (CDF). This data file includes the 1948 - 2012 ANES cross-sections, but it does not include many of the panel studies that are included in the year to year cross-sections. In this chapter, I make use of three primary ANES datasets – the 1972 and 2012 cross-sections and the ANES CDF.

For members of Congress, I rely on DW-NOMINATE scores (Poole and Rosenthal, 2007) to demonstrate the existence of polarization because of their widely accepted use within the congressional voting literature. Over the past several decades, scholars

demonstrated both the reliability and validity of these measures. However, there are alternatives to these measures. I briefly survey these alternatives, and I demonstrate that these different measurement strategies make little difference because they are all based on similar theory, and they produce nearly identical results.

As evidence of polarization in the state legislatures, I rely on NPAT scores (Shor and McCarty, 2011). These scores have also been show to be valid measure of ideology and polarization at the state-level. A variety of scaling techniques have been used to explain the roll-call voting patterns of state legislators, but these analyses are often conducted for a limited number of years and a limited number of states. Shor and McCarty's work solves this problem. Their ideology measures allow comparison of each legislative chamber within each state, comparisons between states, comparisons over time, and comparisons between Congress.

3.1 Polarization in the American Electorate

As mentioned in the previous chapter, political scientists tend to disagree over whether the American electorate is polarized. The evidence of polarization I present in this section is mixed. In term of partisan and ideological identification, the ANES data show relatively similar distributions over the duration of the survey. However, the ANES data also show some interesting trends as well. First, by estimating a spatial model on the issue preference scales presented in the ANES, the data show that the American electorate is sorting into like-minded groups; although, there is still a good deal of ideological overlap pertaining to the partisan cleavages. Second, two questions ask ANES respondents to place the parties on an ideological scale. These two questions demonstrate that the American electorate very much sees the parties as polarized. The two party placement variables are a much better test of how polarization affects individual-level voting behavior because they directly measure how individuals receive

and evaluate information from political elites. Finally, thermometer rating provide an opportunity to assess the affective evaluations of the party system and of American political ideologies.

3.1.1 Partisan and Ideological Identification as a Measures of Polarization

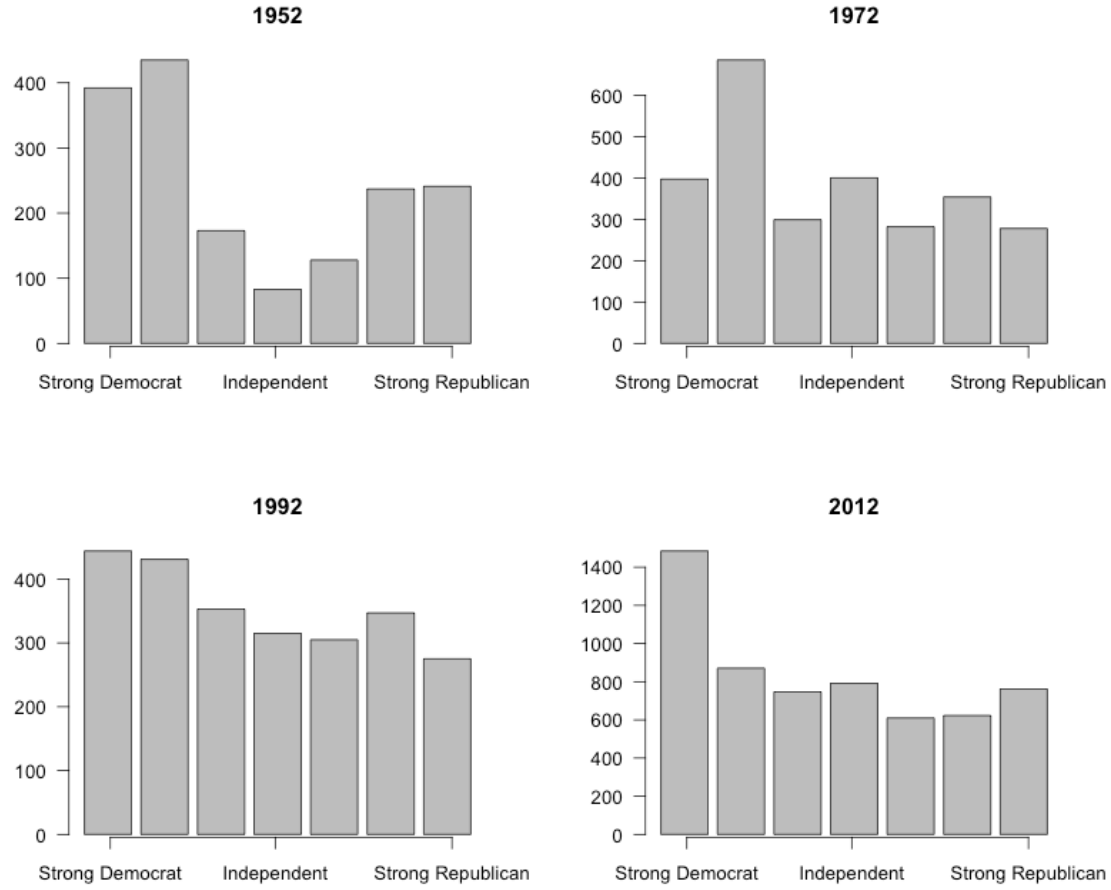
Over the past several decades, political scientists stressed the importance of partisanship for the American electorate. One way to think about polarization is to consider whether the strength of identification is increasing over time. The ANES has consistently asked Americans about their strength of party identification during each election since 1952. Party identification is measured on a 7 point scale that ranges from Strong Democrat to Strong Republican. Figure 3.1 depicts unweighted estimates of partisan identification in the American electorate for the 1952, 1972, 1992, and 2012 elections.[1]

This figures demonstrates that partisan identification is relatively similar during each of these four elections. The 1952 cross-section suggests a good deal of polarization between each end of the partisan identification scale. Partisans and strong partisans comprise more of the sample than do independents and independents who lean towards one of the parties. However, each of the other cross-sections contained in this figure convey a different pattern. They suggest that independents and leaning independents make up a good deal of the sample of voters in each of their respective years. If the partisan identification variable was a good indicator of polarization, then the 1972, 1992, and 2012 distributions would look more like 1952.

The ANES began asking respondents to evaluate their ideological positions during the 1972 survey. The ideological identification variable is measured on a similar scale

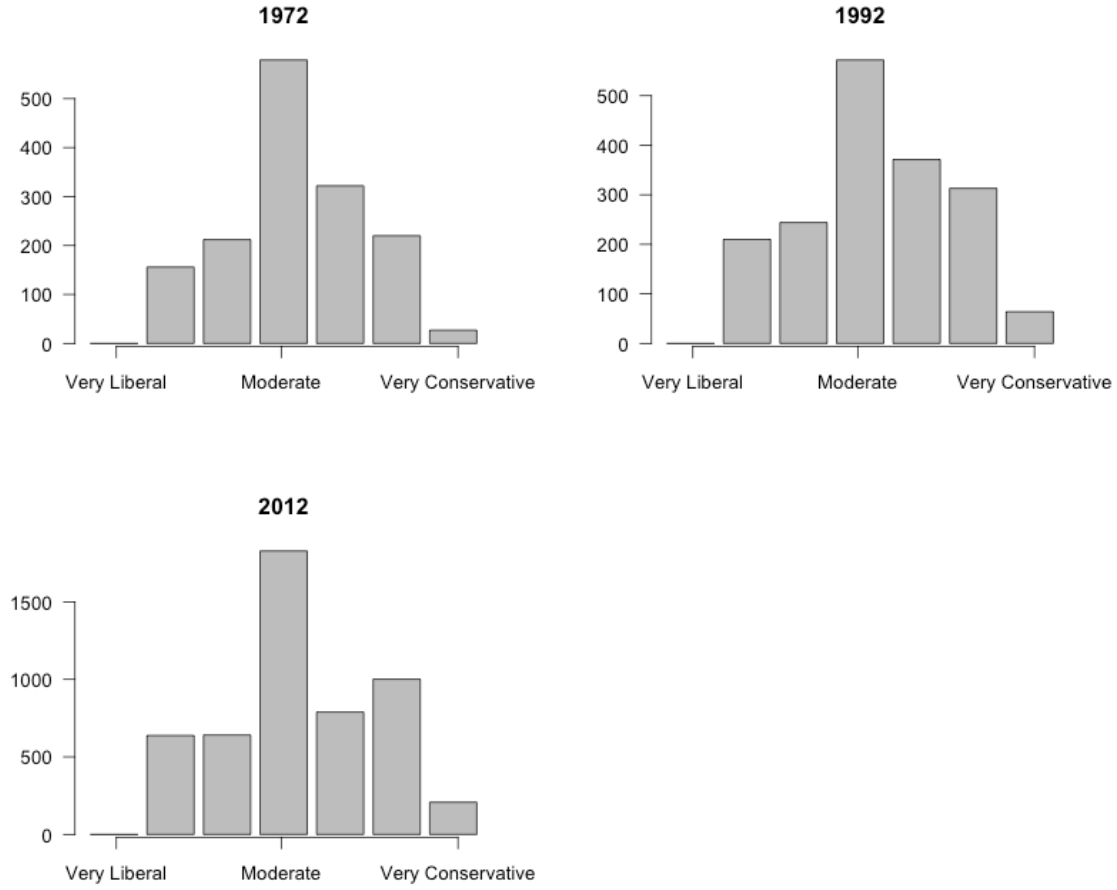
[1]These estimates are unweighted because no probability weights were constructed for the 1952 and 1972 cross-sections of the ANES.

Figure 3.1: Partisan Identification in the American Electorate



to the 7 point party identification scale, ranging from very liberal to very conservative. Figure 3.2 conveys the unweighted estimates for voter ideological identification of American voters during 1972, 1992, and 2012 elections. As with the partisan identification variable, most of the sample respondents are located near the center of the scale. In each of these samples, more voters seem to identify as conservatives rather than as liberals. However, the distribution of voters along the ideological identification scale looks very similar in all three cross-sections, so it is difficult to say whether ideological self-identification has changed much over time.

Figure 3.2: Ideological Identification in the American Electorate



3.1.2 Ideological Placement of the Parties as a Measure of Polarization

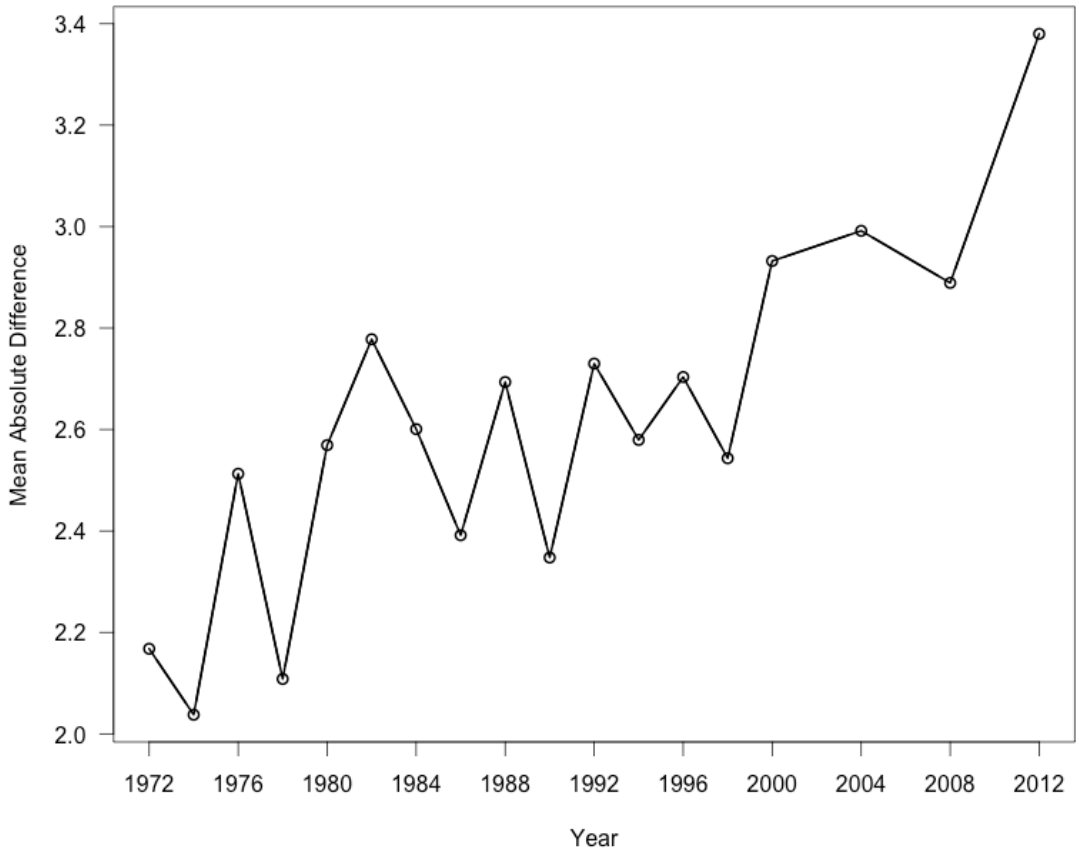
Beginning in 1972, the ANES asked survey respondents to place each of the parties on the same ideological scale that was used for ideological self-identification. These two survey questions provide an excellent opportunity to form a measure of polarization because each of these questions reflect how voters view each of the parties ideologically. These two questions are a good test of elite discourse theory because this measurement directly reflects how voters receive ideological content from political elites. I define polarization as the absolute difference between a survey respondent's ideological evaluation of the Democratic and Republican parties.

Figure 3.3 presents the unweighted estimates of polarization based on the ideological party placement variables from 1972 through 2012.[2] There are a couple of interesting patterns to take from this measure. First, polarization is on the rise through out the time series. 1974 represents the low point for polarization with an absolute mean difference of 2.03 between the two parties. The 2012 election constitutes the high point in the series with an absolute mean difference of 3.38 between Democrats and Republicans. This means that the level of polarization in 2012 is approximately 1.35 points greater on the polarization scale than in 1974.

Second, the beginning of the time series show peaks followed by a precipitous decline for the next election. This pattern suggests that voters see greater ideological differences between the parties during presidential election years than they do during midterm elections. This is an understandable feature of American politics because presidential elections tend to receive more attention from the media, and the get-out-the-vote efforts of each of the two parties tends to be greater in presidential election years. The end of the series shows much less change following presidential elections. This is due to the limitations of the data. The ANES did not ask this question in 2002, and there were no surveys in 2006 or 2010.

[2]There are no estimates for 2002, 2006, or 2010 because no surveys were conducted in 2006 or 2010, and the question was not asked in 2002.

Figure 3.3: Polarization Based on Ideological Placement of the Parties, 1972-2012



3.1.3 Issue Scales as a Measure of Polarization

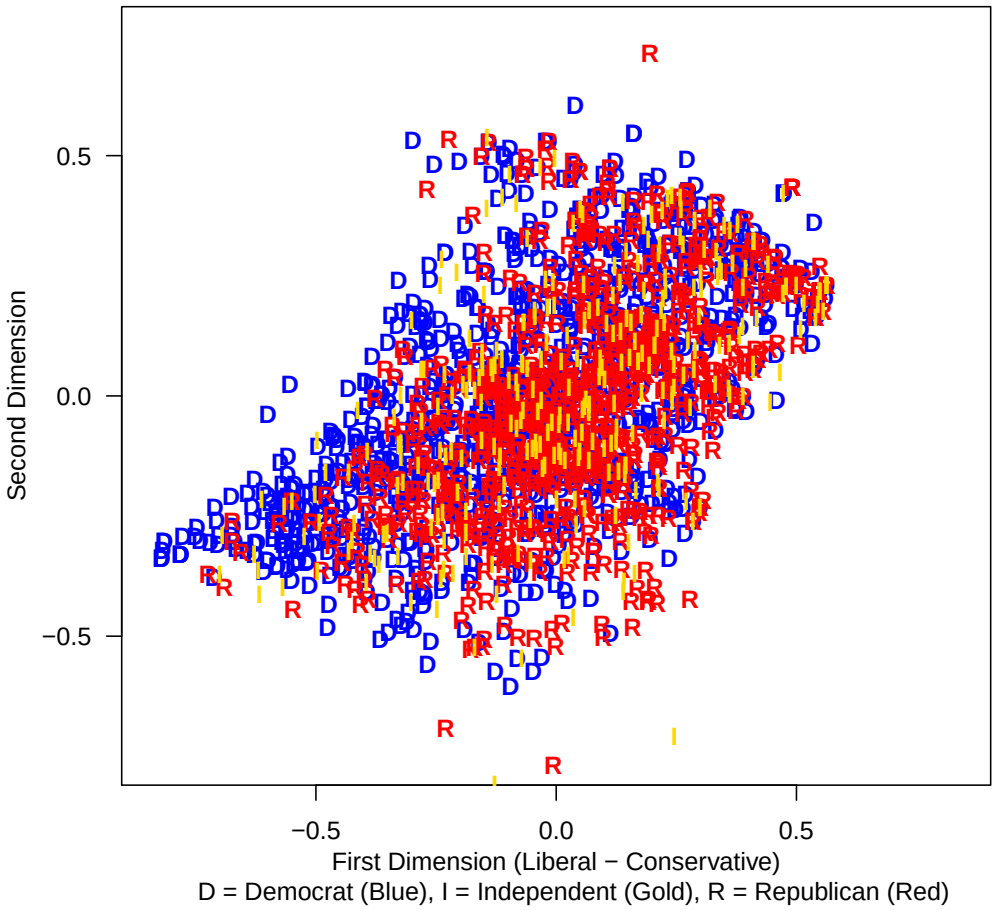
Since the mid-1960s, political scientists have debated the utility of the ideological self-placement variables. Many argue that self-placements are a poor measure of ideology. Beginning in 1972, the ANES began asking respondents about their preferences to a variety of issues. These questions asked respondents to locate their preferences on a 7 point scale. For example, respondents were asked whether the government should guarantee individuals jobs. A response of 1 would suggest that an individual supports the government guaranteeing jobs, and a response of 7 indicates that the individual supports letting the free market determine employment status.

These types of questions are very useful because they may be thought of as indicators for ideological preferences. In other words, these questions may be used to extract ideological preferences with a spatial model, and these estimates may be compared over time. I utilize Basic Space scaling (Poole, 1998) to recover the ideological preferences of American voters. The Basic Space method is notable for two primary reasons. First, the method can handle missing data, which allows for comparison across time or across geographic units, and second, many issues scales can be analyzed in one spatial model. Basic Space is a similar method to factor analysis, but instead of modeling the correlations or the covariances of the indicator variables, Poole's method models the data directly (Armstrong *et al.*, 2014). This is a desirable quality because Jackman (2001) demonstrates that correlation/covariance methods like factor analysis discard the means and variances of the input variables. In other words, no data is lost with the Basic Space scaling method.

The ANES CDF publishes a variety of issues scales over time. However, many of the questions are only asked for very short time intervals, which makes utilizing the same indicators of ideology difficult on a year to year basis. Instead of using the ANES CDF, I make use of the 1972 and 2012 cross-sections of the ANES. For the 1972 cross-section, I included the following issues scales as indicator variables for the spatial model: the respondent's position on government guarantee of jobs, increasing the tax rate, withdraw from Vietnam, government action on inflation, marijuana decriminalization, busing to achieve integration, government healthcare, women's role is in the workplace, and whether a women should have the right to terminate her pregnancy.

Figure 3.4 demonstrates that there was not a great deal of ideological divisions among the American electorate during 1972. Some Democrats are farther to left on the liberal-conservative dimension, for the most part, Democrats, Independents,

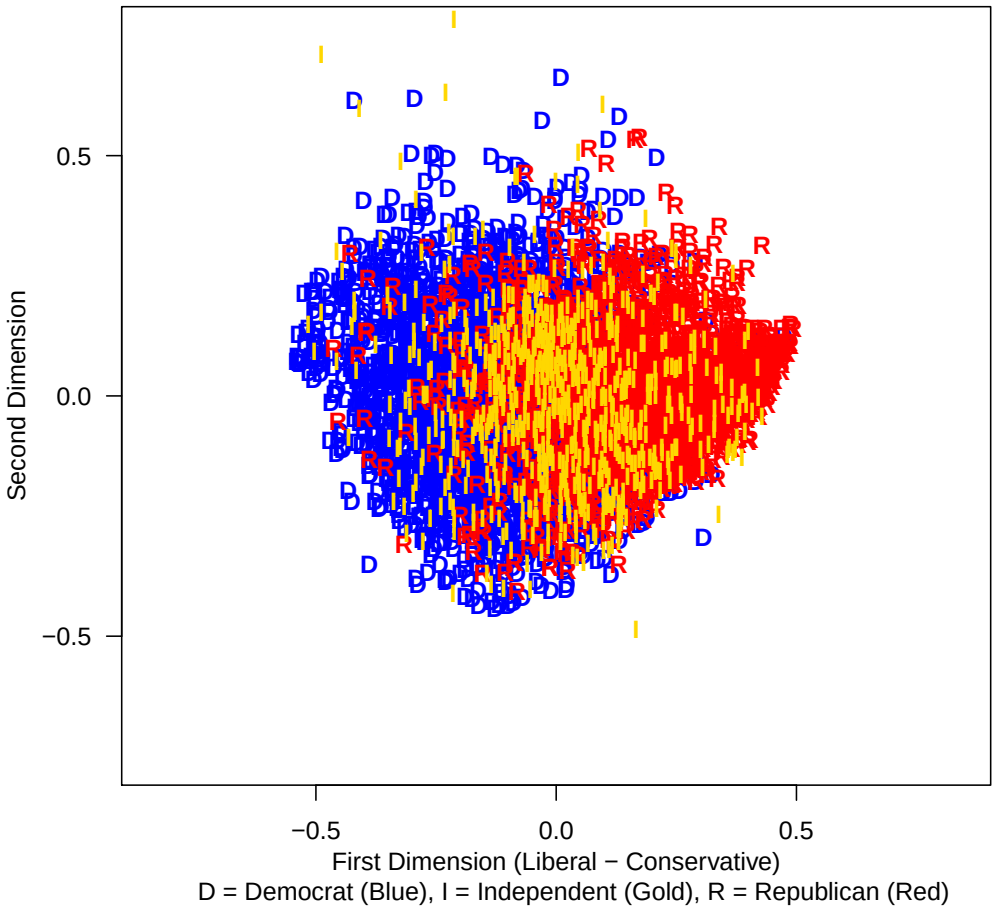
Figure 3.4: Basic Space Scaling of ANES Issue Scales, 1972



and Republicans are all stacked on top of one another. These results suggest that the liberals, moderates, and conservatives are evenly spread across all three types of partisans.

For the 2012 cross-section of the ANES, I included the following issue scales as indicator variables for the spatial model: the respondent's position on domestic spending, defense spending, government health care, gun control, the government guaranteeing jobs, immigration, providing aid to African-Americans, environmental regulations, af-

Figure 3.5: Basic Space Scaling of ANES Issue Scales, 2012



firmative action, social security privatization, school spending, welfare spending, gay marriage, abortion, and the death penalty.

Figure 3.5 suggests that a great deal of ideological sorting has occurred for the American electorate in 2012. Democrats are primarily clustered to the left of the spatial model, and Republicans are primarily clustered to the right of the model. Independents are located in the middle of the spatial map, and they have a great deal of overlap with both parties. While the relationship is far from perfect, the

ideological divisions between Democrats, Independents, and Republicans is are much more noticeable in 2012 than they were in 1972.

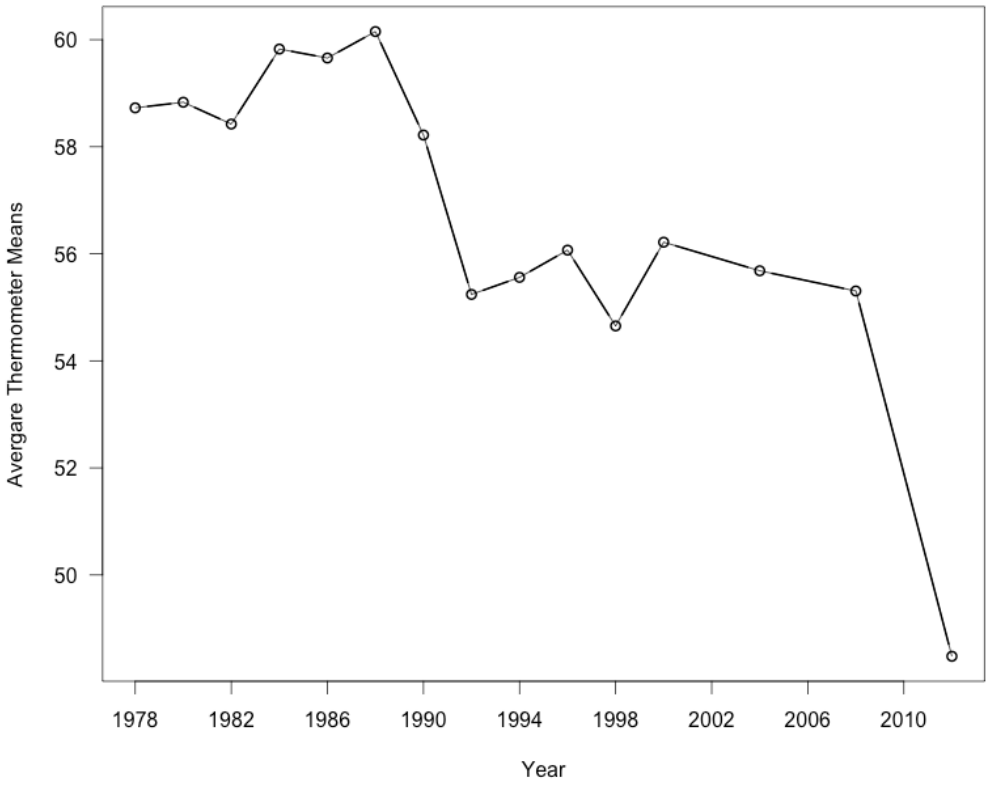
3.1.4 Feeling Thermometers as Affective Evaluations

As with the various issue scales, the ANES made use of feeling thermometers for a variety of political groups. For instance, the ANES asked respondents to report their assessment of the Democratic Party, the Republican Party, liberals, and conservatives on a scale of 0 to 100. These questions are very different than the previous ANES questions that ask specifically about ideology, issue preferences, or partisanship. These feeling thermometers are about affective evaluations of particular groups. While examining each of these feeling thermometers in isolation of one another can inform researchers about a particular group, for the purposes of this project, it is more appropriate to analyze these scales in terms of the party system or in terms of political ideologies. As result, I take the average of the two party thermometers, and then, I take the average of the two ideology thermometers in order to form alternative specifications of partisanship and ideology. In contrast to the party placement variables or the Basic Space Scaling estimates, lower averages of the thermometer scales should reflect a lower affective evaluation of the party system or political ideologies, which should result due to a polarized electorate.

Figure 3.6 presents the average party thermometer rating means by year from 1978 through 2012.[3] At earlier time points in the series, ANES respondents had much higher affective evaluations of the two parties. This likely reflects the lower amount of polarization perceived by voter during the 1970s and 1980s. During the 1990s, the mean evaluations of the two parties begins to drop precipitously. This likely reflects

[3]There is no estimate for 2002 because the two party thermometer questions were not asked in this year.

Figure 3.6: Average Party Thermometer Ratings, 1978-2012

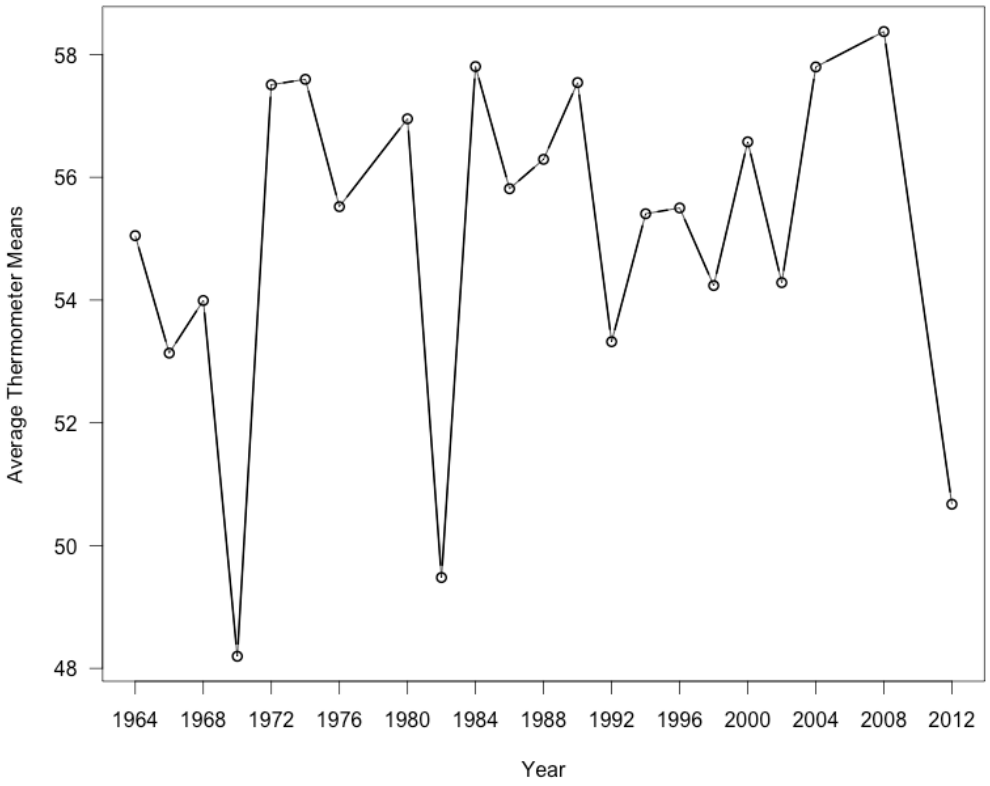


voters' dissatisfaction with the partisan imbroglios between President Clinton and Congressional Republicans. The downward trend continues during the Bush presidency, and it explodes during Obama's tenure in office.

Figure 3.7 reports the average ideological thermometer rating means by year from 1964 through 2012.[4] Unlike the average party thermometer rating, the trend is much less noticeable for the average ideological thermometer rating. The 1970, 1982, and 2012 elections are noticeable low points for affective evaluations of ideology, but for other elections in the series, the mean evaluation fluctuates around the center of the scale.

[4]There are no estimates for 1978 because the question was not asked in that year.

Figure 3.7: Average Ideological Thermometer Ratings, 1964-2012



3.2 Polarization in Congress

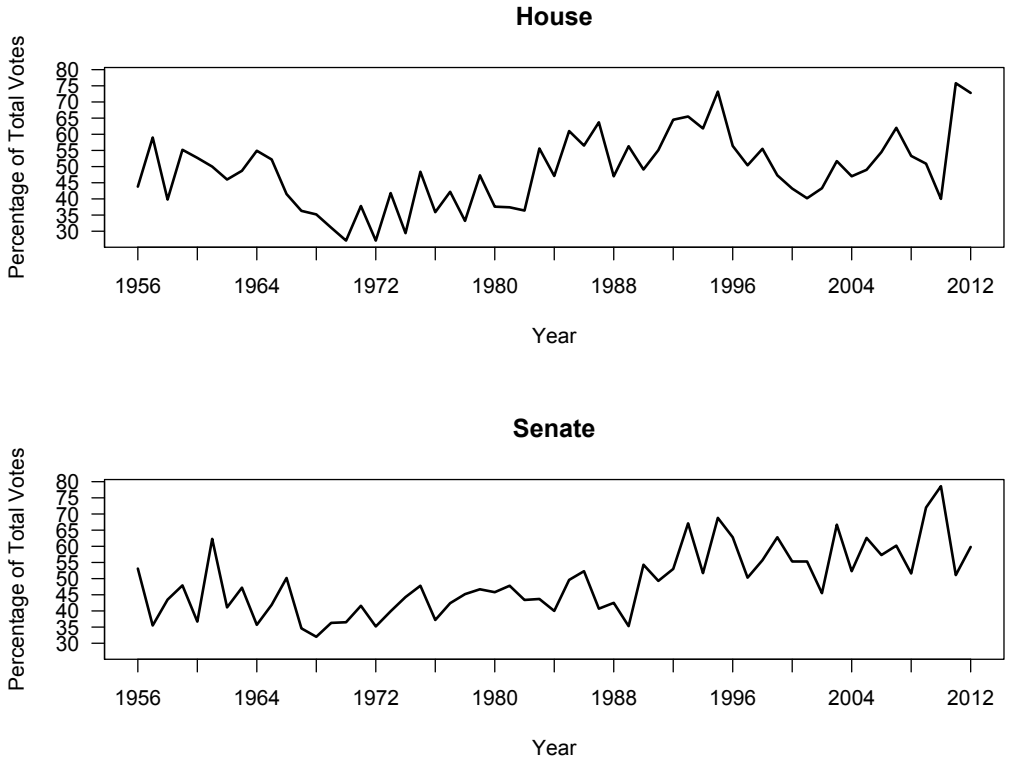
An impressive amount of research demonstrates the existence of polarization in Congress (Fiorina *et al.*, 2006; Lowry and Shipan, 2002; McCarty *et al.*, 2006; Poole and Daniels, 1985; Poole and Rosenthal, 1984, 1991, 2001, 2007; Fleisher and Bond, 2004; Rohde, 1991). Scholars use a variety of techniques to identify a polarized party system. Of these, three of the most common methods to quantify partisanship in Congress are the percentage of party unity votes, the percentage of moderate legislators, and producing measures of ideology from roll-call analysis. A party unity vote occurs when a majority of one party votes against a majority of the other party. Figure 3.8 presents the percentage of party unity votes in Congress from 1956-2012.

Generally, a noticeable pattern of party unity voting emerges from the 1950s onward. During the 1970s, party unity voting declined in both chambers, and then the level of partisan voting rebounds, which is noticeable by the steadily increasing trend depicted in the figure. In 1970, the House cast 27.1% of party unity votes, which was the lowest percentage in the post-World War II era. In 1955, the Senate voted 29.9% of the time along party lines, which was its lowest instance of party unity votes.

The highest frequency of party unity votes occurred rather recently. In 2011, the House voted along party lines 75.8% of the time. This incredibly high percentage of party unity votes is undoubtedly a reflection of the sharp divisions in the chamber, and the presence of divided government. In 2010, the Senate reached its highest instance of party unity votes where they voted along party lines 78.6% of the time.

Several factors explain the increased number of party unity votes. First, both the ideological divide between the two parties and the ideological homogeneity within each party increased considerably since the 1950s (Poole and Rosenthal, 2007; McCarty *et al.*, 2006; Abramowitz and Saunders, 1998). Second, the number of ideologically moderate members and cross-pressured partisans are declining rapidly (Fleisher and Bond, 2004). Moderates are less ideological than their fellow partisans, but they still have more in common with their own party than they do with the other party. Cross-pressured members are more ideologically similar to the opposition party than they are to their own party. When Congress possesses a high percentage of cross-pressured members, the two parties display overlapping ideologies and policy cleavages. However, when the number of moderate and cross-pressured members declines, this indicates a sharp division between the parties; one that makes compromise unlikely if not impossible.

Figure 3.8: Party Unity Votes in the U.S. Congress, 1956-2012



During the 1950s, the atmosphere in Congress was much more collegial than it is today. Members of Congress frequently crossed the aisle to work with members of the other party. Strict party line votes were much less common, and the two parties displayed a significant number of over-lapping public policy cleavages. In other words, both the Republican and Democratic parties possessed a majority of members considered to be ideological moderates. That is not to say that no partisan squabbles existed within the legislature. They did exist but not to the extent that we see them today. Compromise was possible, and we thought of our representatives more like statespersons rather than self-serving partisans. In many ways, this period nearly achieved the normative requirements of Madisonian democracy.[5]

[5]The term Madisonian democracy means very different things to different scholars, especially in the political theory literature. I do not intended to enter this debate here.

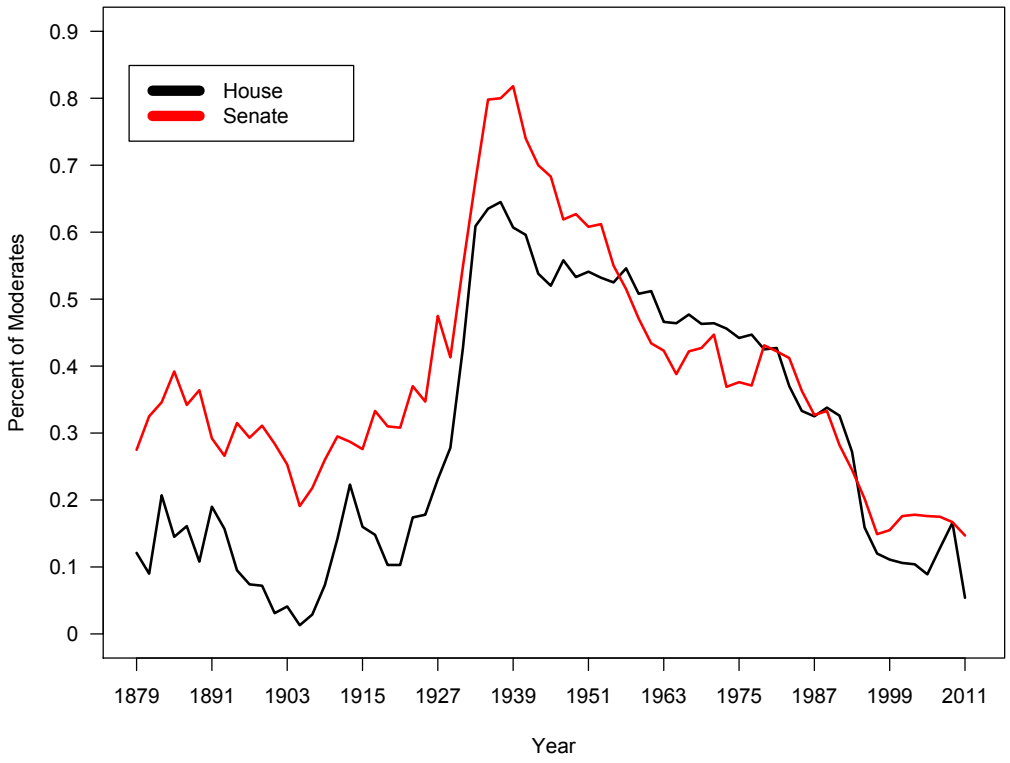
Figure 3.9 illustrates how the number of moderates in Congress changed over time.[6] At the end of the 19th century, the number of moderates in Congress was relatively low, but this trend began to change during the World War II era where each chamber displayed a record number of moderates. Recently, the number of moderates in each chamber resembles the pattern at the beginning of the time series. Generally, the House of Representatives has a smaller percentage of members who are moderates than does the Senate. However, in the post-Civil Rights era, the difference between the two chambers is negligible, and the percentage of moderates in each chamber is on a steady decline.

Scholars typically assess levels of polarization by quantifying ideology or partisanship through roll-call votes, but no consensus exists as to which conception produces greater influence on the behavior of legislators. A wealth of research (Krehbiel, 1998; Levitt, 1996; Lucas and Deutchman, 2007; Poole and Daniels, 1985; Poole and Rosenthal, 1991, 2001, 2007; Cox and Poole, 2002; McCarty *et al.*, 2001, 2006) stresses that individual preferences and, more specifically, ideology guide legislator voting decisions and that these preferences are stable over time. Others (Garand and Clayton, 1986; Lee, 2009; Sinclair, 1981, 2006; Smith, 2007; Snyder and Groseclose, 2000, 2001; Wright and Schaffner, 2002) argue that partisanship guides voting decisions for members of Congress. This is an important debate within the congressional voting liter-

Rather, I am simply referring to the notion that compromise between the majority and the minority is typically seen as ideal. For more on this discussion, see Dahl (1956).

[6]Members of Congress are considered moderates if their DW-NOMINATE score falls between -.25 and .25 (Fleisher and Bond, 2004).

Figure 3.9: Percentage of Moderates in the U.S. Congress, 1879-2012

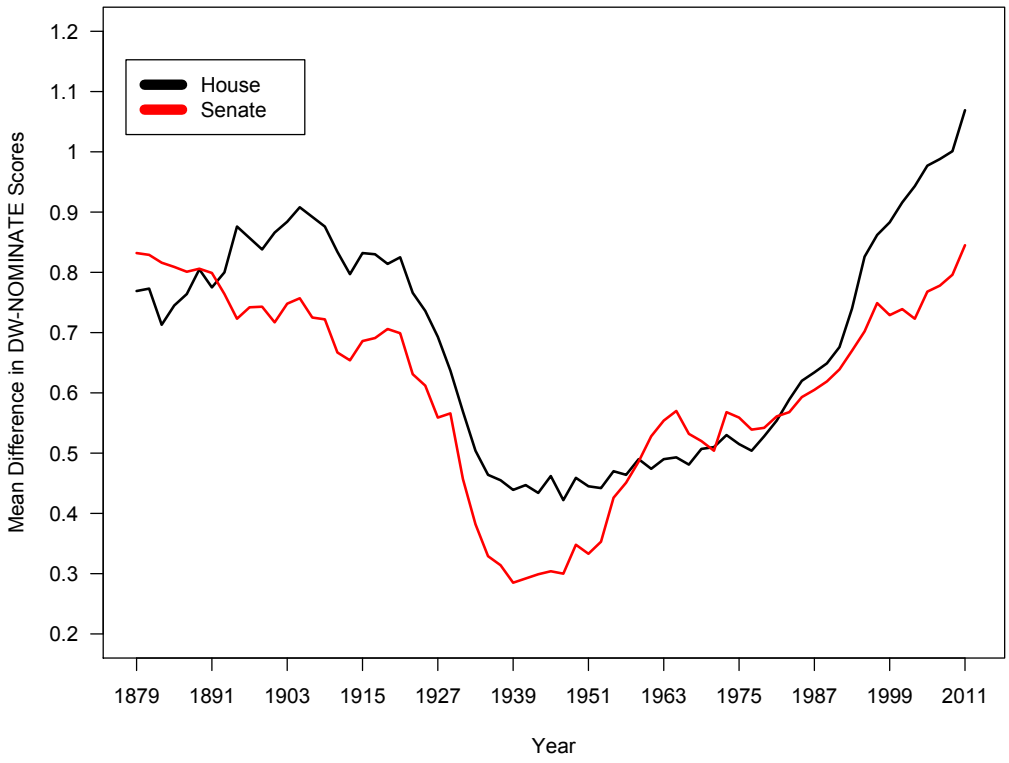


ature because each perspective implies different things for members of Congress. If legislators use their personal preferences to vote a certain way, then they are relatively free to support any proposal of their choice. However, if party is more important than personal preferences, then the party apparatus considerably constrains their choices.

Figure 3.10 illustrates how the nature of polarization waxed and waned in Congress since the end of the 19th century. This figure presents the mean difference between Republicans and Democrats based on the first dimension of DW-NOMINATE scores.[7]

[7]The DW-NOMINATE scores were compiled primarily by Keith Poole and Howard Rosenthal. The data are made available on their website, which may be found at the following address: `http://pooleandrosenthal.com/political_polarization.asp`. I provide a full discussion of the DW-NOMINATE procedure in the Data and Measurement section.

Figure 3.10: Ideological Polarization in the U.S. Congress, 1879-2012



These measures of ideology reflect a member's voting record, and Poole and Rosenthal (2007) argue that they are direct measures of ideology. The beginning of the time series indicates a remarkable amount of polarization in both chambers of Congress. Polarization in both chambers of Congress reached an all-time low during the World War II years, but it rebounded during the 1960s. The current level of polarization constitutes an all-time high in the House of Representatives, and the current level of partisanship in the Senate matched its peak-level during the end of the 19th century.

During the 1950s, a segment of the political science community (American Political Science Association 1950; Ranney 1951, 1954) felt ideologically distinct parties were a good thing, and they argued that Congress should pursue reforms to make Congress function more like party-based European parliaments. According to this so-called

responsible or conditional party government theory, each party should offer strikingly different visions for the country, and the majority party should be able to implement its policy platform. However, the minority party must behave in a responsible manner by presenting a contrasting vision for society that they may implement upon their return to power. Conditional party government scholars consider the dialogue between the parties as the essence of rational debate, and rational debate is a sign of a healthy democracy.

A number of scholars (Rohde, 1991; Aldrich and Rohde, 2001) argue that the American Congress nearly meets the requirements for conditional party government. However, not everyone agrees that an ideologically charged party system is good for democracy because polarization manifests itself in the procedural mechanisms of Congress. Sinclair (2006) laments this arrangement and says that polarization directly relates to the decline of sanguine discourse. In other work (Sinclair, 2007), she demonstrates that unfettered partisan control of Congress leads to unorthodox parliamentary tactics that assures the majority procedural advantage over the minority party. This is especially true in the House of Representatives where tactics to maintain dominance include but are not limited to suspension of the rules of debate, ignoring minority amendments, multiple committee referrals to kill minority sponsored legislation, and combining partisan legislation with omnibus bills so that it is not politically expedient for the minority party to vote against the bill. An example of using an omnibus bill for partisan means is when leaders combine divisive issues with the budget to promote legislative success. Under this type of atmosphere, the minority's only weapon is unity. They must remain steadfast and prevent any of their members from defecting to the winning coalition.

The structural arrangement of the Senate produces natural protections for the minority party because parliamentary procedure is very different in this chamber.

Mainly due to unanimous consent agreements, the minority possesses considerably more power in the Senate than they do in the House of Representatives. Here, the minority's chief weapon is obstruction, and the filibuster, more often than not, brings the Senate to its knees. Gridlock characterizes the institution because of the super-majoritarian requirement to overcome the filibuster. This institutional arrangement of the Senate paralyzes the entire legislative branch. As a result, Congress, frequently, cannot address the issues of the day.

3.3 Polarization in the State Legislatures

Roll-call analyses can also be useful techniques to quantify polarization in the state Legislatures. The theories that are used to explain polarization at the national-level can also be applied in state legislative branches of government. A few scholars (Aldrich and Battista, 2002; Wright and Clark, 2005; McCarty *et al.*, 2006) have estimated spatial models to quantify the role of ideology in state legislative chambers. However, the availability of roll-call records at the state-level is much less than it is for Congress which typically means that state-by-state comparisons and year-to-year comparisons are difficult.

At least, this was the case until Shor and McCarty (2011) collected enough roll-call data at the state level and created a measure that placed the state legislative chambers on the same ideological scale. These measures are known as NPAT scores. A fuller description of these measures will be addressed in Chapter 5. For now, it is enough to say that these NPAT scores are very similar to NOMINATE scores. A single dimension explains the lion's share of variance in roll-call behavior found in state legislatures. NPAT scores are comparable over-time, between legislative chambers, and between each state. Additionally, these measure of ideology (and polarization) are comparable to polarization scores in Congress.

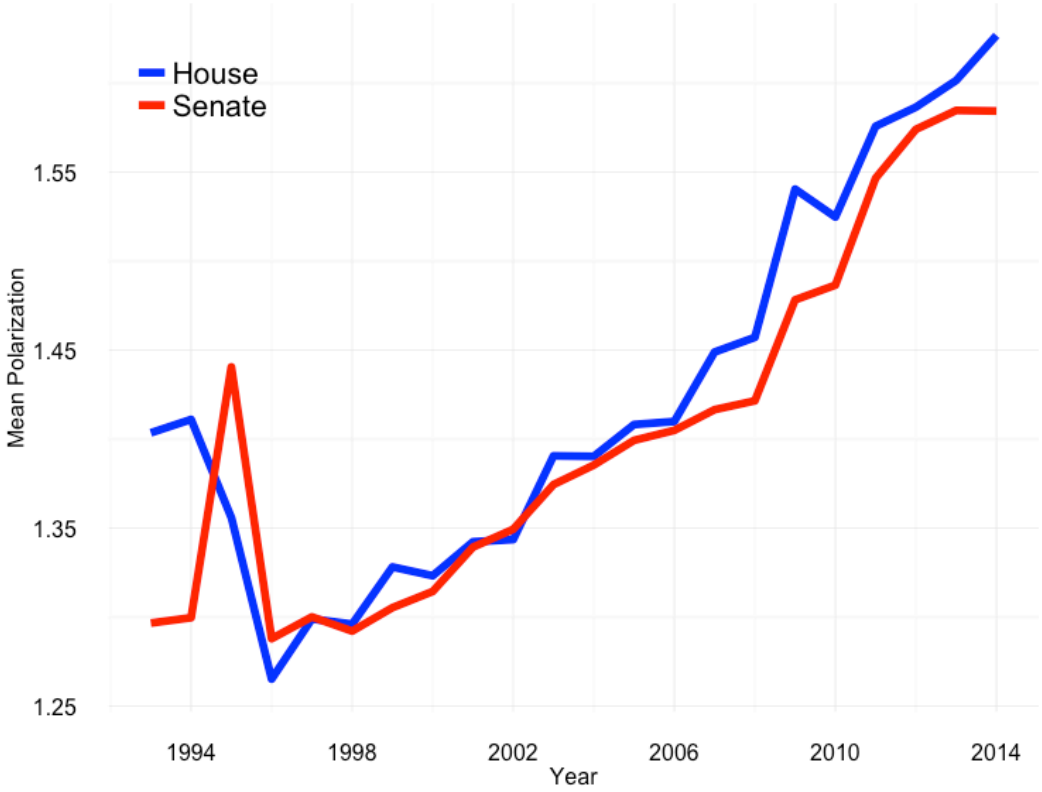
Figure 3.11 shows the yearly mean polarization scores across state Senates and State Houses. Both of the overall polarization trends are remarkably similar. The level of mean polarization in state Senates is roughly the same as the level of mean polarization in state Houses. The low point in each of the series was 1996, and 2014 represents the high point of polarization in the time series. This suggests that polarization is not only a phenomenon found in Congress. It extends to the legislatures as well.

Figure 3.12 breaks down some of the yearly averages by party and by chamber. In other words, this figure shows the party ideological means by state legislative chamber. The two panels on the left side of the figure show the average ideological estimates for state Republicans, and the two panels on the right side of the figure show the average ideological estimates for state Democrats.

The the average ideology scores for House Republicans reached an all time high in 1994, and then, it took a drastic dive to its low point in 1996. Since then, the average ideological score for House Republicans has been steadily increasing, but it is still not as high as the 1994 average. Senate Republicans have a somewhat different story than their House counterparts. For example, 1996 was also the low point for their ideological means, but their highest ideological mean score occurred in 2014. This means that state Senate Republicans are the most ideological that they have ever been.

The overall trends for state Democrats are remarkably similar to their Republican counterparts. The two decreasing trend lines show that they are also becoming much more liberal than they have been in the past. The overall average scores for House Democrats were at the most moderate point in 1994, and they have been steadily increasing since 1994. House Democrats in the state legislatures are currently at their all-time high in terms of average ideological scores. The trends for Senate Democrats

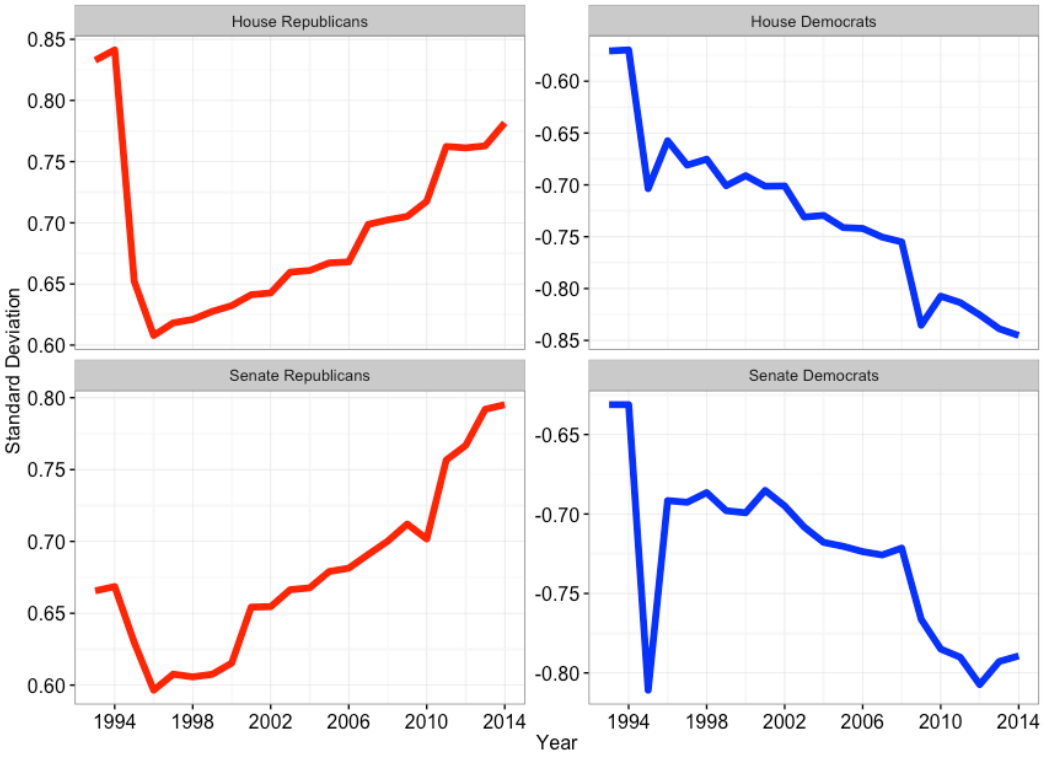
Figure 3.11: Polarization in the State Legislatures, 1993-2014



are largely the same as their House counterparts. They were the most moderate that they have ever been in 1994, and they are now the most liberal they have ever been.

The two previous figures showed how state legislature polarization has changed on a year to year basis, and these figures have shown how the two parties have changed in terms of ideology in their respective chamber. However, these two figures do not account for different levels of polarization among the states. The next two figures demonstrate how states with low, medium, and high polarization have changed from 1996 until 2014. The two polarization variables were binned into roughly equal thirds based on a percentile raking of their polarization scores. I decided to use 1996 as the starting point of this comparison because the 1994 and 1995 years have a lot of cases missing from the data.

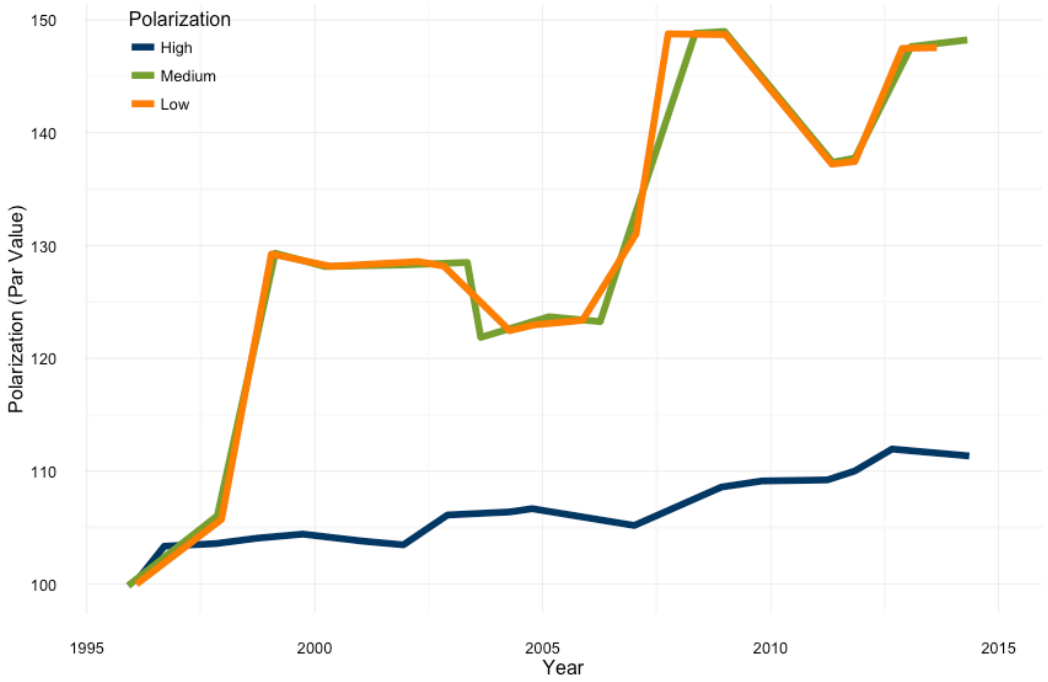
Figure 3.12: Ideology in the State Legislatures by Party and Chamber, 1993-2014



In order to accomplish this comparison, I had to rescale the polarization variables so each state would have the same starting point. To do this, I divided each legislative chambers polarization measure by their 1996 value and multiplied it by 100. This measure of polarization places each state on a par with one another, and it shows how much a state has changed on a year-to-year basis. A score of 100 represents the base line score in 1996, so a score of 110 in 1997 would show an increase of 10% increase in polarization compared to the state's 1996 value. A score of 140 in 2016 would be a 40% increase in polarization since 1996. A score of 90 in 1997 would represent a 10% decrease in polarization compared to the state's value in 1996, and a score of 70 in 2016 represents a 30% decrease since 1996.

Figure 3.13 shows how polarization has changed in state Senates from 1996-2014. A few interesting things are immediately noticeable from this figure. First, regardless

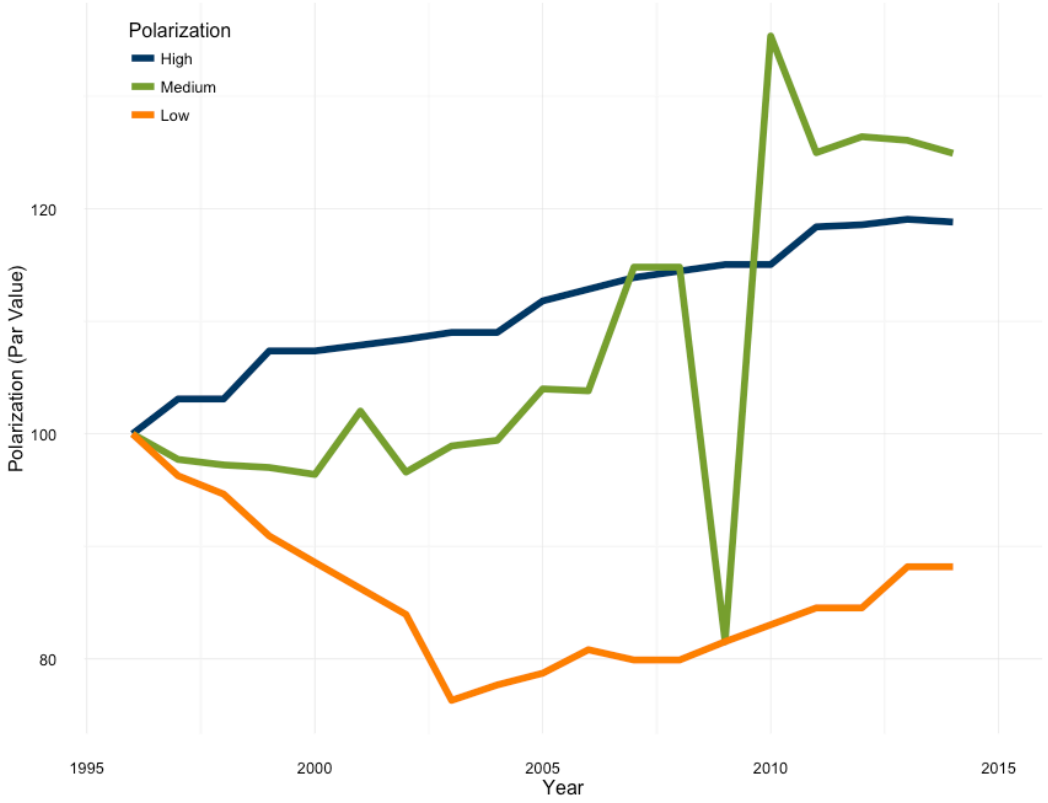
Figure 3.13: Change in State Senate Polarization, 1996-2014



of whether states exhibit high, medium, or low polarization, all states have shown an increase in state Senate chambers since 1996. Second, states with low or medium polarization display the most change in their Senates since 1996. In fact, the figure shows that these two groupings have essentially the same rate of change. States with low or medium polarization have seen nearly a 50% rise in polarization since 1996. Third, even though states that were classified as highly polarized states in 1996 have still increased in their polarization levels by 10%.

Figure 3.14 shows how polarization has changed in state Houses from 1996 - 2014. The rate of change is very different for state Houses than it is for state Senates. The first striking difference is that states that displayed a low amount of polarization in 1996 actually saw a decrease in polarization compared to to the state Senates. For example, state with a low amount of polarization in their state houses have seen a decrease in polarization by a little more than 20%. Second, states who had a medium amount of polarization in 1996 have seen their House chamber polarization level in-

Figure 3.14: Change in State House Polarization, 1996-2014



crease by about 25%, and states with high levels of polarization in 1996 have seen a 20% increase compared to their 1996 levels.

3.4 Summary

The analyses in this chapter have shown a lot of interesting things about polarization in the electorate and polarization in our legislative branches. First, polarization in the electorate does not seem to be on the same scale as it does in Congress or in our state legislatures. The analyses pertaining to partisan identification, ideological identification, and multi-dimensional scaling of issue scales shows the the American electorate gravitates toward the political center. However, that does not mean that the electorate has not changed over the past few decades. A remarkable amount of sorting has undertaken in the American electorate. Voters who identify as Republicans and

Democrats are more like their co-partisans than they have ever been. The basicspace scaling analysis showed clear clustering of partisans on their respective sides of the ideological scale. Despite this clustering, Democratic and Republican voters are still relatively close to the center.

The DW-NOMINATE scores show that members of Congress are very polarized. This trend has been on the rise since the 1950s, and it is continuing until today. Parties in Congress are more cohesive than they have ever been. The number of moderates is on the decline, and party unity voting is at an all time high. However, polarization is not a phenomenon confined to Congress. NPAT scores indicates that state legislatures have polarized as well, and they also indicate the polarization is on the rise in state legislatures as well.

Even though voters tend to be more moderate than legislators. Voters still see the party system as very polarized. The analyses of party placement show that this is surely the case. The fact that voters see the party system as very polarized, and that they have sorted into like-minded groups suggests that voters are responding to polarized elite discourse. This means that the polarization measure based on party placement will be incredibly important in the coming analyses of voter turnout. How voters see the party system should have an influence on whether an individual decides to vote.

Chapter 4

MICRO-LEVEL POLARIZATION AND U.S. ELECTIONS

In this chapter, I demonstrate that partisan polarization significantly impacts several aspects of individual-level voting behavior in congressional elections. Using data from the American National Election Survey (ANES) cumulative data file (CDF), I suggest that polarization is a significant variable that affects how voters evaluate both of the parties in terms of salience and affect. I also indicate that partisan polarization has a positive impact on micro-level turnout, meaning that it increases the probability of voting for all types of partisans. Finally, I denote that partisan polarization increases the likelihood that voters who identify as Independents will vote for Democratic Senate candidates during the 2012 election, but I also find that polarization increases the likelihood that Independents will vote for Republican Senate candidates in the 1992 election. Polarization seems to only be related to vote choice in the House of Representatives during the 2012 election. The results I present in this chapter suggest that the importance of polarization is one the rise, and that it has a significant impact on the political behavior of American voters.

4.1 Affective Evaluations of Parties

Starting in the 1950s, the ANES asked respondents to list the number of things they like and the number of things they dislike about each of the parties in two separate questions. The responses for each of these questions were coded on a scale from 0 likes (or dislikes) to 5 likes (or dislikes). These two questions were used to form affect variables for both Democrats and Republicans respectively by subtracting the

total number of dislikes from the total number of likes. The affect scales for both Republicans and Democrats range from -5 to 5.

Although the ANES began asking these types of questions in the 1950s, they discontinued this line of questioning with the 2004 survey. Additionally, the ANES did not ask survey respondents to place each of the parties on a seven-point ideological scale until 1972, which means that construction of the party polarization variable is not possible until the 1972 election. Considering the limitation of the data, I use the 1972, 1992, and 2004 subsets of the ANES CDF to evaluate how polarization is related to party affect.

Table 4.1 presents the linear model results for affective evaluations of the Republican Party. The models contain three primary terms of interest – party identification, polarization, and an interaction between party identification and polarization – as well as a list of statistical controls that are common in the political behavior literature. The estimates are adjusted with the probability weights furnished within the ANES CDF, and the standard error of the estimates are adjusted via Taylor Series approximation.[1]

For the 2004 election, the party identification and polarization variables are statistically significant, and the effect of these variables is in the expected direction. A one-unit increase in the party identification variable produces a .36 more positive evaluation of the Republican Party while holding other relevant variables constant.

[1]These models were estimated with the Zelig 4.2 package in R (Carnes, 2015). The Zelig package works by calling to the Survey package (Lumley, 2015) in R, which adjusts the estimates according to their probability weights. The Zelig package is a useful tool for inference because it is able to simulate predictions for complicated models. For more on how the probability weights are constructed please see DeBell and Krosnick (2009) and the American National Election Survey codebook. For more on the details behind Taylor Series Approximation please see the above citations for the Zelig and Survey Packages.

Table 4.1: Linear Models of Republican Party Affect

	2004	1992	1972	1972
Intercept	−1.05*	−1.03*	−2.08*	−2.44*
	(0.39)	(0.25)	(0.37)	(0.33)
Party ID	0.36*	0.26*	0.33*	0.42*
	(0.05)	(0.03)	(0.06)	(0.03)
Polarization	−0.17*	−0.24*	−0.11	0.04
	(0.07)	(0.04)	(0.08)	(0.04)
Interest (Medium)	0.07	−0.03	0.11	0.11
	(0.12)	(0.09)	(0.15)	(0.15)
Interest (High)	−0.16	−0.12	0.03	0.04
	(0.13)	(0.10)	(0.17)	(0.17)
Age	−0.00	−0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)
Male	0.02	−0.04	0.03	0.02
	(0.10)	(0.07)	(0.11)	(0.12)
White	−0.39*	−0.17*	0.47*	0.50*
	(0.11)	(0.09)	(0.19)	(0.19)
South	0.11	0.19*	0.31*	0.31*
	(0.11)	(0.07)	(0.14)	(0.14)
Education (No Diploma)	−0.34	−0.13	0.12	0.11
	(0.29)	(0.18)	(0.19)	(0.19)
Education (High School)	−0.32	−0.17	−0.06	−0.09
	(0.25)	(0.16)	(0.17)	(0.17)
Education (Some College)	−0.39	−0.31	−0.15	−0.18
	(0.26)	(0.17)	(0.21)	(0.21)
Education (Bachelors)	−0.62*	−0.39*	−0.16	−0.20
	(0.29)	(0.18)	(0.21)	(0.21)
Education (Grad Degree)	−0.65*	−0.54*	−0.30	−0.33
	(0.31)	(0.19)	(0.37)	(0.37)
Income (33rd Percentile)	0.20	0.20	0.25	0.27
	(0.14)	(0.12)	(0.23)	(0.24)
Income (67th Percentile)	0.12	0.25*	0.05	0.07
	(0.15)	(0.12)	(0.18)	(0.18)
Income (95th Percentile)	0.16	0.16	−0.06	−0.04
	(0.16)	(0.12)	(0.20)	(0.20)
Income (100th Percentile)	0.31	−0.02	0.32	0.34
	(0.21)	(0.19)	(0.31)	(0.32)
Party ID * Polarization	0.05*	0.06*	0.04*	
	(0.02)	(0.01)	(0.02)	
N	949	1807	679	679
AIC	3488.22	6383.10	2420.87	2422.70
BIC	3857.23	6801.06	2764.44	2748.19
$\log L$	−1668.11	−3115.55	−1134.44	−1139.35

Standard errors in parentheses

* indicates significance at $p < 0.05$

This is understandable considering that higher values of the party identification variable represents strong Republican voters. By contrast, a one-unit increase in the polarization variable produces a .17 decrease in affective evaluations of the Republican Party, all else equal. Thus, the model suggests that higher levels of polarization produce a greater likelihood that a voter will negatively evaluate the Republican Party. However, the relationship between polarization and Republican Party affect may change according to strength of party identification. The significant interaction term between party identification and polarization for the 2004 model suggests that this is the case. In other words, polarization affects strong partisans differently than it does voters who identify as Independent partisans.

For example, the model suggests that among voters who perceive maximum levels of polarization a strong Republican will have 3.78 more positive evaluations of the Republican Party than will a strong Democrat, all else equal.[2] The model also suggests that among voters who perceive no polarization a strong Republican will have 2.13 more positive evaluations of the Republican Party than will a strong Democrat, *ceteris paribus*. Considering other relevant factors, strong Republicans who see a high-level of polarization between the parties will have .95 higher affective evaluations of the Republican Party than will strong Republicans who see no polarization between the parties, and strong Democrats who see a high level of polarization between the parties will have .71 lower evaluations of the Republican Party than will strong Democrats who see no polarization between the parties.

Figure 4.1 contains the conditional predictions based on the linear model for Republican Affect during the 2004 election.[3] The mean predictions and their correspond-

[2]These model predictions were estimated with the simulation function in the Zelig package.

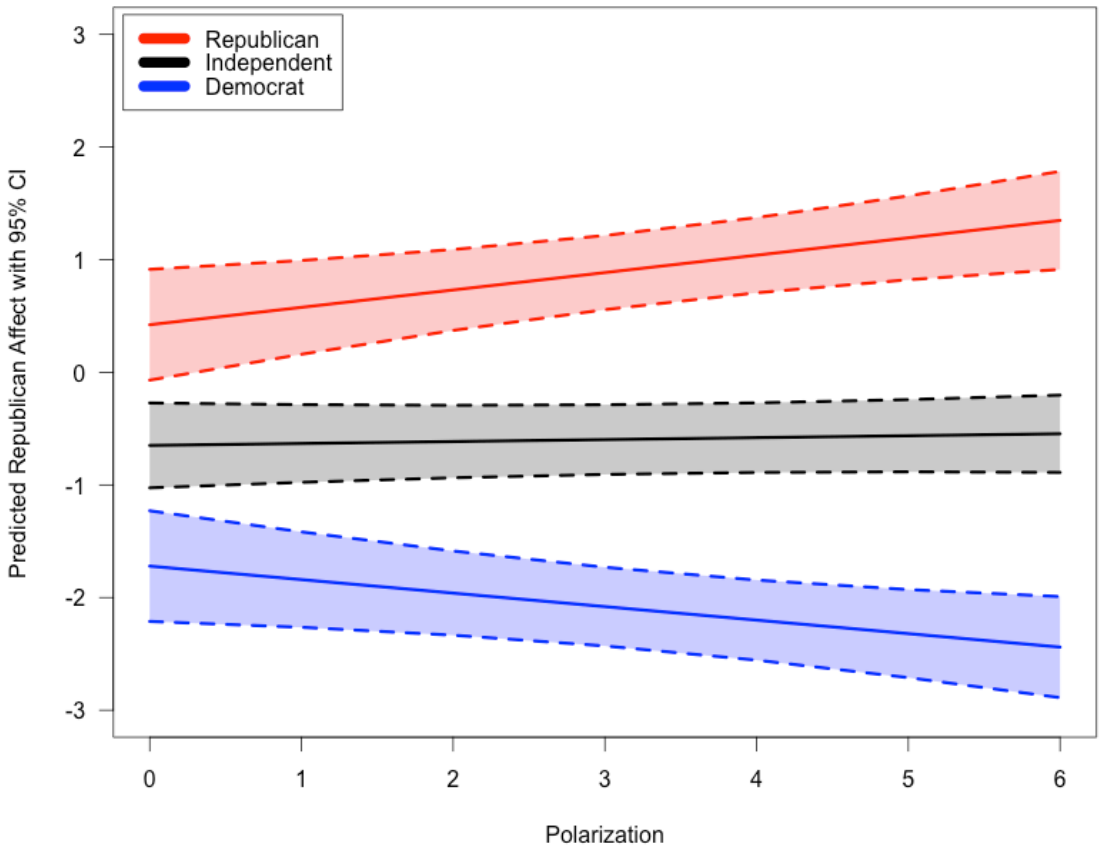
[3]These model predictions were created using the base "predict" command in the R Statistical Computing Environment.

ing 95% confidence intervals were estimated for a 40 year old, white, non-southern, male with a bachelor's degree and high interest in the campaign. Values of partisanship were held at strong Republican, pure Independent, and strong Democrat. The figure shows that by moving from no polarization to high levels of polarization a strong Republican is much more likely to report more positive evaluations of the Republican Party. By contrast, a strong Democrat is much more likely to report more negative evaluations of the Republican Party as polarization moves from its minimum to maximum value. Moreover, pure Independents are equally likely to report the same number of affective evaluations of the Republican Party regardless of whether they view the party system as polarized during the 2004 election.

For the 1992 election, a similar relationship exists between polarization and the affective evaluations of the Republican Party; although, the relationship between these variables is slightly less pronounced than it was in the 2004 election. The party identification and polarization variables are both significant in the 1992 model. Both of the variables' effects for the 1992 model are in the same direction as the 2004 model. A one-unit increase in the party identification variable produces a .26 greater positive evaluation of the Republican Party, and a one-unit increase in the polarization variable produces a .24 decrease in positive evaluations of the Republican Party. The interaction term between party identification and polarization is also significant for the 1992 election, which, again, suggests that the relationship between polarization and partisan identification is different depending on whether a voter identifies as a strong partisan or a political independent.

For instance, this model suggests that among voters who perceive maximum levels of polarization a strong Republican will have 3.71 more positive evaluations of the Republican Party than will a strong Democrat after considering other relevant predictors. However, among voters who see no polarization between the two parties,

Figure 4.1: Predicted Republican Party Affect by Partisanship, 2004

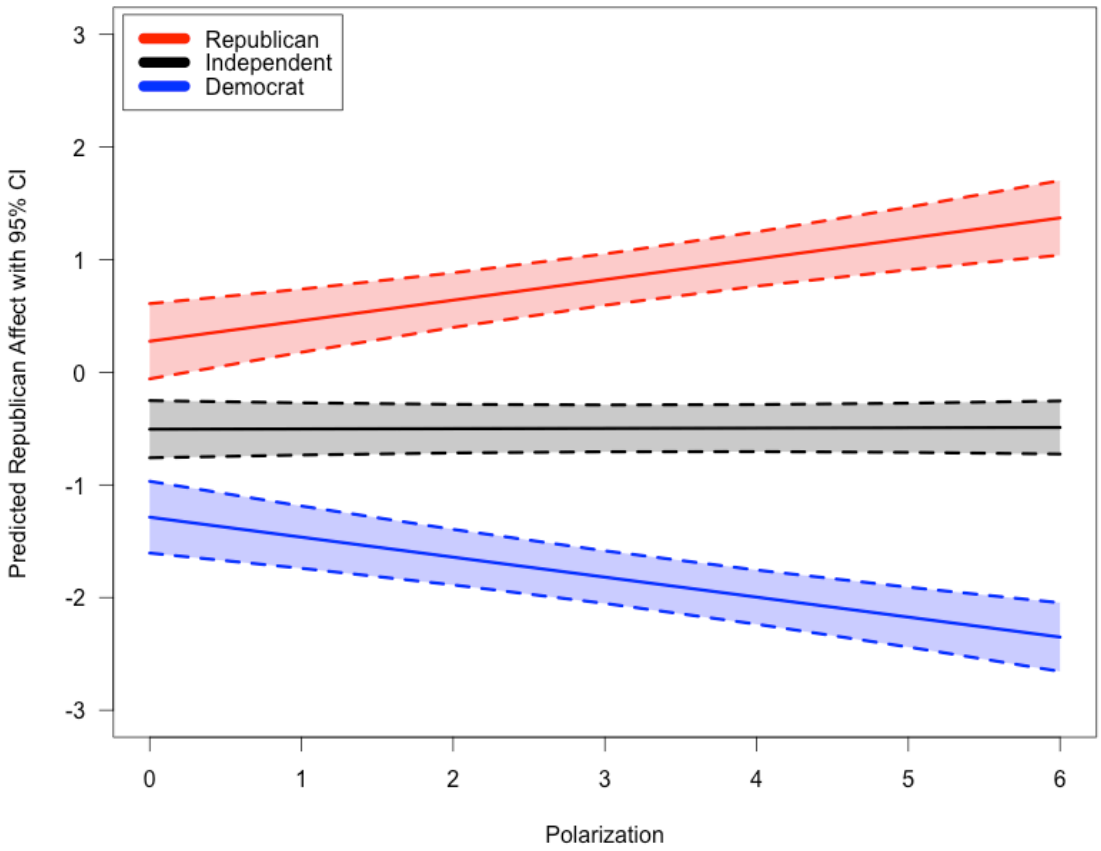


a strong Republican will have on average 1.56 more positive evaluations of the Republican Party than will strong Democrats, all else equal. By holding relevant predictors at their mean values, a strong Republican who sees a high level of polarization will have 1.08 greater evaluations of the Republican Party than will a strong Republican who sees no polarization between the parties. Similarly, a strong Democrat who sees a high level of polarization will have 1.06 lower affective evaluations of the Republican Party than will a strong Democrat who sees no polarization between the parties, all else equal.

Figure 4.2 reports the conditional predictions based on the linear model for Republican Affect during the 1992 election. As with the 2004 model, the mean predictions and their corresponding 95% confidence intervals were estimated for a 40 year old, white, non-southern, male with a bachelor's degree and high interest in the campaign. Values of partisanship were held at strong Republican, pure Independent, and strong Democrat. The relationship between party identification, polarization, and Republican affect is largely the same as it was for the 2004 election. Both sets of strong partisans have the same respective trend – strong Republicans are more likely to provide more positive evaluations of the Republican Party, but strong Democrats are much more likely to report negative assessments of the party. Independents are virtually unaffected by polarization when it comes to their evaluations of the Republican Party during the 1992 election. The primary difference between the predictions for the 1992 model compared to the predictions for the 2004 model is that there is slightly less uncertainly in the predictions for 1992, which is evidenced by the closer fit of the confidence intervals to the prediction line. However, the difference in estimate uncertainty between the two models is likely due to the larger sample size in the 1992 cross-section of the ANES.

For the 1972 election, the relationship between polarization and affective evaluations of the Republican Party is much less pronounced than in 2004 or 1992. For this model, the party identification variable is statistically significant, and its effect is in the expected direction. A one-unit increase in the party identification variable produces a .33 more positive evaluation of the Republican Party. However, the polarization term is not statistically significant. The interaction term between party identification and polarization is significant in the 1972 model. However, when one of the main terms of the interaction is not statistically significant, then the convention in political science is to remove the interaction from the model. I re-estimated the

Figure 4.2: Predicted Republican Party Affect by Partisanship, 1992



model without the interaction, but the polarization term is still not significant. The results of this model are located in the fourth column of Table 4.1. Because the polarization term is not significant, I refrain from interpreting this model further.

Table 4.2 outlines the linear model results for affective evaluations of the Democratic Party during the 2004, 1992, and 1972 elections. As with the models for the affective evaluations of the Republican Party, the estimates are adjusted according

Table 4.2: Linear Models of Democratic Party Affect

	2004	1992	1972	1972
Intercept	1.39*	1.52*	2.22*	2.50*
	(0.45)	(0.25)	(0.38)	(0.33)
Party ID	−0.17*	−0.23*	−0.25*	−0.33*
	(0.06)	(0.03)	(0.05)	(0.03)
Polarization	0.35*	0.27*	0.14	0.03
	(0.08)	(0.04)	(0.08)	(0.04)
Interest (Medium)	0.13	0.32*	0.29*	0.29*
	(0.17)	(0.09)	(0.14)	(0.14)
Interest (High)	0.13	0.24*	0.14	0.13
	(0.19)	(0.10)	(0.16)	(0.16)
Age	−0.00	−0.00	−0.01*	−0.01*
	(0.00)	(0.00)	(0.00)	(0.00)
Male	−0.12	−0.24*	−0.04	−0.03
	(0.11)	(0.07)	(0.11)	(0.11)
White	−0.15	−0.14	−0.85*	−0.87*
	(0.13)	(0.08)	(0.19)	(0.19)
South	−0.04	−0.18*	−0.22	−0.22
	(0.12)	(0.07)	(0.13)	(0.13)
Education (No Diploma)	0.18	−0.02	−0.44*	−0.43*
	(0.34)	(0.17)	(0.22)	(0.22)
Education (High School)	−0.16	−0.13	−0.40*	−0.38*
	(0.32)	(0.14)	(0.19)	(0.19)
Education (Some College)	−0.11	−0.23	−0.65*	−0.62*
	(0.33)	(0.15)	(0.21)	(0.21)
Education (Bachelors)	−0.23	−0.13	−0.55*	−0.52*
	(0.35)	(0.17)	(0.22)	(0.22)
Education (Grad Degree)	0.11	−0.03	−0.23	−0.21
	(0.36)	(0.19)	(0.30)	(0.30)
Income (33rd Percentile)	−0.15	0.03	−0.09	−0.10
	(0.17)	(0.11)	(0.23)	(0.23)
Income (67th Percentile)	0.02	−0.15	0.15	0.13
	(0.18)	(0.11)	(0.17)	(0.17)
Income (95th Percentile)	−0.13	−0.08	0.16	0.15
	(0.19)	(0.12)	(0.18)	(0.18)
Income (100th Percentile)	−0.22	−0.06	−0.22	−0.23
	(0.24)	(0.21)	(0.25)	(0.25)
Party ID * Polarization	−0.10*	−0.08*	−0.03	
	(0.02)	(0.01)	(0.02)	
N	949	1807	679	679
AIC	3628.26	6341.27	2388.12	2388.52
BIC	3997.27	6759.22	2731.68	2714.01
$\log L$	−1738.13	−3094.63	−1118.06	−1122.26

Standard errors in parentheses

* indicates significance at $p < 0.05$

to the probability weights furnished within the ANES CDF, and the standard errors are adjusted by Taylor Series Approximation.[4]

The model for the 2004 election suggests that both party identification and polarization are important components of affective evaluations for the Democratic Party. Both variables are statistically significant in this model. Because higher values of the party identification variable represent Republicans, the variable's negative effect is in the hypothesized direction. A one-unit increase in the party identification variable produces a .17 reduction in positive affective evaluations of the Democratic Party. The direction of the polarization term may seem surprising at first. This coefficient suggests that a one-unit increase in the polarization variable produces a .35 greater evaluation of the Democratic Party. This may seem odd considering that the coefficients in the Republican affect models were negatively signed.[5] However, this variable should be interpreted in light of the interaction between party identification and polarization because higher order terms – like interactions – take precedent in model interpretation. In order to help with further interpretations of the model, I turn to simulated predictions of Democratic affect during the 2004 election.

The 2004 model suggests that among voters who see a maximum level of polarization a strong Democrat will report 4.47 higher evaluations of the Democratic Party than will a strong Republican, *ceteris paribus*. The model also suggests that among voters who are average on other characteristics and who see no polarization between the two parties strong Democrats will have 1.03 greater evaluations of the Democratic Party than will strong Republicans. For strong Republicans who see a maximum level

[4]Again, these calculations were automatically performed by the Zelig package in R due to the underlying survey design.

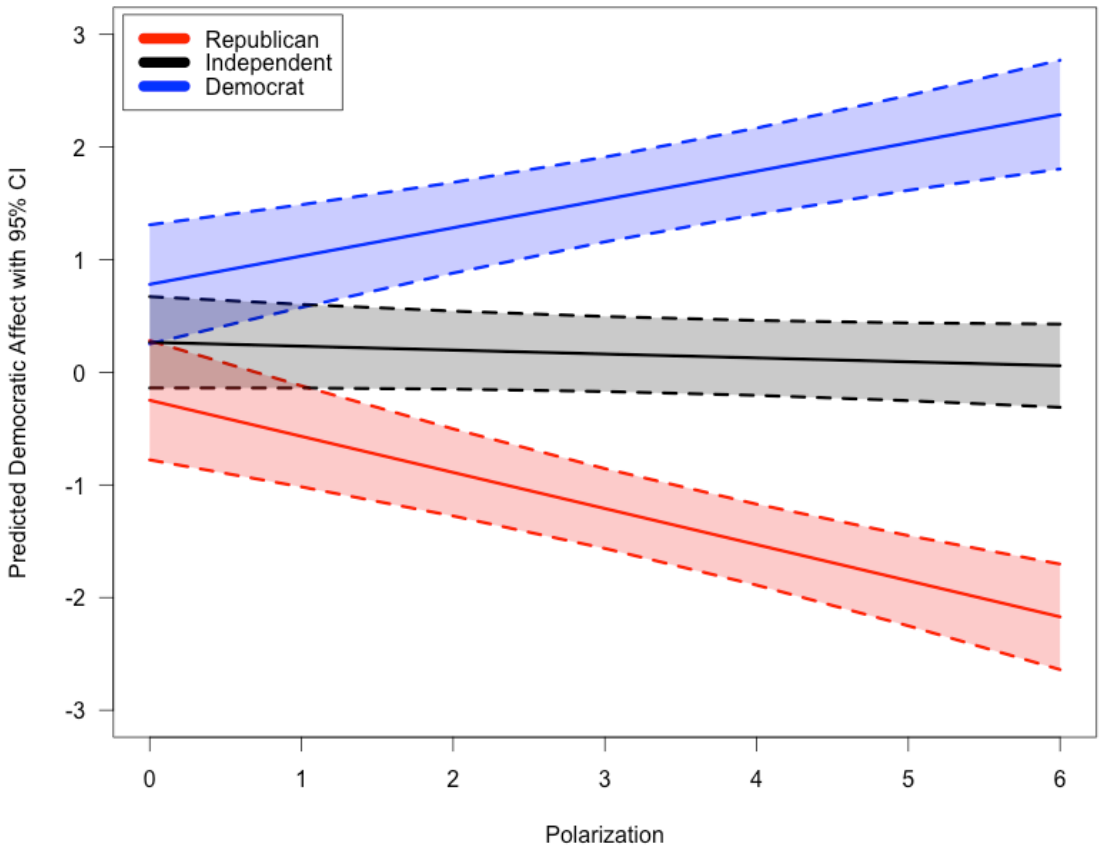
[5]When a model predicts a coefficient opposite its expected direction, this can often be a sign of multicollinearity. I conducted a variance inflation factor test, and the results are not significant. Multicollinearity is not a concern for the Democratic affect model.

of polarization between the two parties, they will have 1.92 fewer positive evaluations of the Democratic Party than a strong Republican who sees no polarization between the two parties, all else equal. Democrats who see a maximum amount of polarization between the two parties will, on average, have 1.50 greater evaluations of the Democratic Party than will strong Democrats who see no polarization between the two parties.

Figure 4.3 contains the conditional predictions based on the linear model for Democratic Affect during the 2004 election. As with the predictions for Republican affect, the mean predictions and their corresponding 95% confidence intervals were estimated for a 40 year old, white, non-southern, male with a bachelor's degree and high interest in the campaign. Values of partisanship were held at strong Republican, pure Independent, and strong Democrat. The figure suggests that by moving from no polarization to a maximum level of polarization a strong Democrat is much more likely to report positive evaluations of the Democratic Party. By contrast, a strong Republican is much more likely to report more negative evaluations of the Republican Party as polarization moves from the minimum value to the maximum value. Independents are largely unaffected by polarization when it comes to their affective evaluations of Democrats.

However, there are two primary differences between the predictions for this model and the model predictions for Republican affect during the 2004 election. First, although Independents do not appear to be as affected by polarization as the strong partisans, they are more likely to report negative evaluations of the Democrats than they are the Republicans under high levels of polarization. The trend for Independent affective evaluations of the Republicans was completely flat, meaning there was no change, but the trend for Independent affective evaluations of Democrats is downward but the change from minimum polarization to maximum polarization is incredibly

Figure 4.3: Predicted Democratic Party Affect by Partisanship, 2004



small. Second, under no polarization, all three partisan groups have relatively similar assessments of Democrats. This is noticeable by the overlapping confidence intervals of the predictions in Figure 4.3, which suggests no real difference for assessments of Democrats between partisan groups for the 2004 election when voters see no polarization between the parties.

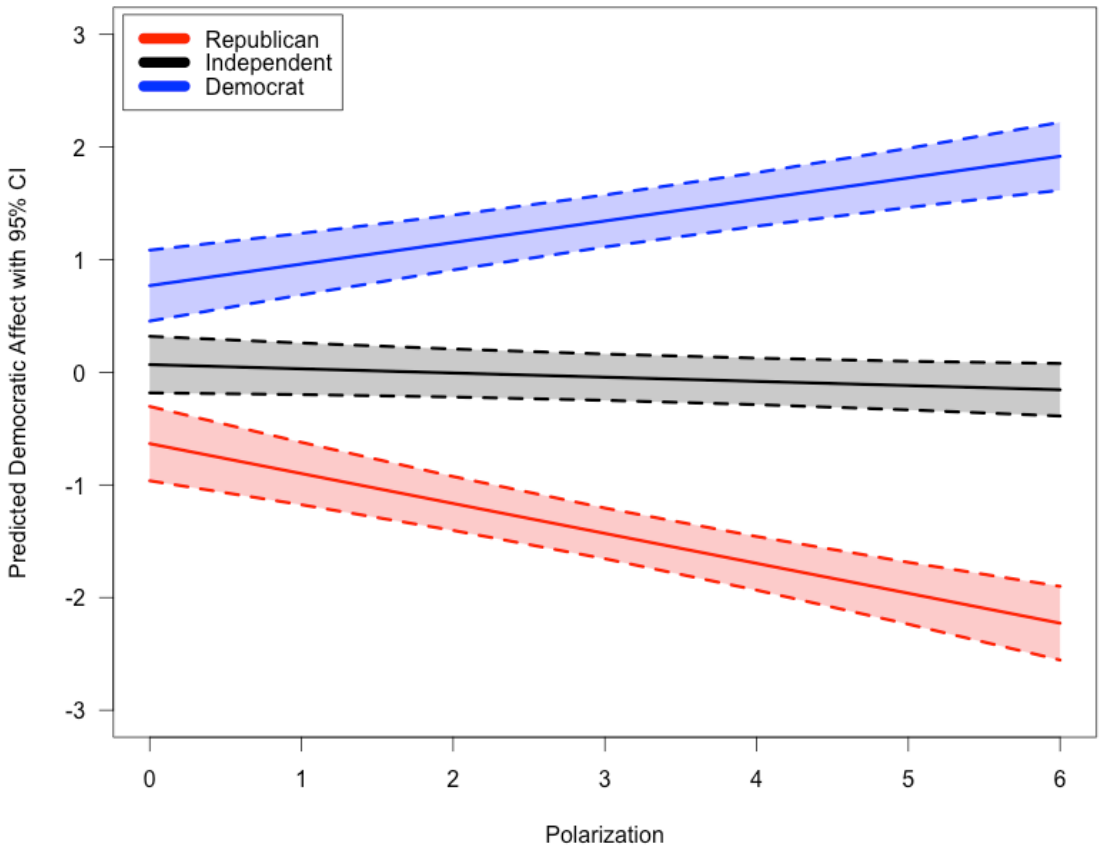
The 1992 model suggests a similar relationship between affective evaluations of the Democratic Party and polarization as does the 2004 model. Both the party identification and polarization variables are statistically significant. A one-unit increase in the party identification variable produces a .23 decrease in positive evaluations of

the Democratic Party, and a one unit increase in the polarization variable produces a .27 greater evaluation of the Democratic Party, all else equal. Additionally, the interaction between party identification and polarization is statistically significant, which suggests that polarization affects different types of partisans differently when it comes to affective evaluations of the Democratic Party during the 1992 election. As with the 2004 model, this coefficient should be interpreted in light of the predictions of the model.

For example, the 1992 Democratic Affect model suggests that among voters who see a maximum level of polarization a strong Democrat will have on average 4.15 greater evaluations of the Democratic Party than will a strong Republican, but among voters who see no polarization between the two parties a strong Democrat will only have 1.40 greater evaluations of the Democratic Party than will a strong Republican. For a strong Republican who sees a maximum level of polarization, they will have 1.59 fewer positive evaluations of the Democratic Party than will a strong Republican who sees no polarization between the two parties, all else equal. By contrast, a strong Democrat who sees the maximum level of polarization will have 1.15 more positive evaluations of the Democratic Party than will a strong Democrat who sees no polarization between the parties, *ceteris paribus*.

Figure 4.4 contains the conditional predictions based on the linear model for Democratic Affect during the 1992 election. As with the previous models of partisan affective evaluations, the mean predictions and their corresponding 95% confidence intervals were estimated for a 40 year old, white, non-southern, male with a bachelor's degree and high interest in the campaign. Values of partisanship were held at strong Republican, pure Independent, and strong Democrat. The relationship between polarization, party identification, and Democratic Party affect is nearly identical in 1992

Figure 4.4: Predicted Democratic Party Affect by Partisanship, 1992



as it was in 2004. As polarization moves from the minimum value to the maximum value, Democrats are more likely to report greater affective evaluations of the Democratic Party, but strong Republicans are much less likely to report positive evaluations of the Democratic as their perception of polarization changes. Independents are largely unaffected by polarization when it comes to their affective evaluations of Democrats, but there are still slightly less likely to report positive evaluations of the Democratic Party under high levels of polarization.

In the 1972 model, neither the polarization variable nor the interaction between party identification is statistically significant.[6] As result, I re-estimated the model by removing the interaction term. Excluding the interaction makes no difference for model interpretation because the main polarization term is still not statistically significant.[7] Because the main term of interest is not related to affective evaluations of the Democratic Party, I refrain from interpreting this model further.

4.2 Evaluations of Party Salience

As with the affective assessment variables, the ANES furnishes party salience variables based on the number of likes and dislikes that respondents give during their interviews. However, the calculation used to form these variables is slightly different than the affective evaluation variables in the previous section. The salience variables are formed by adding the number of likes to the number of dislikes for each of the parties respectively. Each of the party salience variables range from 0 to 10. Like the affect variables, the salience variables were made available to researchers beginning in the 1950s and ending with the 2004 ANES survey. Because the party placement variables which are necessary to produce the polarization variables were not made available until 1972 election, I make use of the 1972, 1992, and 2004 subsets of the ANES CDF to evaluate how polarization is related to party salience.

The party salience variables count the number of times a respondent provides a statement about each of the parties. Because count distributions violate many of the precepts of regression analysis derived from the Gauss-Markov assumption, I esti-

[6]Technically the polarization variable is significant at the $p < .10$ level. However, this threshold is beyond the alpha level that is conventionally accepted in Political Science. As result, I conclude that the term is not statistically significant.

[7]For this model, the polarization term is no longer significant at any conventional level of significance.

mated a series of zero-inflated negative binomial models to account for overdispersion and the high preponderance of zeros in each of these count variables.[8] I estimated each of these models within the psuedolikelihood framework in order to incorporate the survey probability weights into the likelihood.[9] Additionally, I estimated these models with robust standard errors because count models always contain heteroskedasticity (Cameron and Trivedi, 2010; Long, 1997). The inflation portion of the model (the binary component to explain the excess of zeros in the data) was fit to the data with a logit link.

Table 4.3 displays the zero-inflated negative binomial model results of party salience for Republicans and Democrats during the 2004 election. In each of the two models, the polarization variable is not statistically significant in the count portion of the model, meaning that polarization is unrelated to the number of comments a respondent makes about each of the two parties. However, the polarization variable is statistically significant in the inflation portion of the model, meaning that polarization reduces the likelihood of a respondent always giving zero comments about Repub-

[8]I estimated a series of count models on the unweighted survey data to determine whether the data was overdispersed and whether a zero-inflated count was appropriate. I used an unweighted model initially because likelihood ratio tests and their corresponding fit statistics are inappropriate for models estimated by psuedolikelihood methods to account for the inverse probability weights of the survey data. The likelihood ratio test between the poisson and the negative binomial models was statistically significant ($\chi^2 = 68.28$, $p < .001$), which indicates that the data are overdispersed, and the negative binomial is the correct count model. Additionally, I estimated a Vuong Test for non-nested models to determine whether an inflation model was necessary. The test was statistically significant ($z = -1.87$, $p < .05$), meaning a zero-inflated negative binomial is the correct model for the data.

[9]These models were estimated in STATA 12.1, and I estimated the post-estimation predictions with the S-post 9 package (Long and Freese, 2006).

Table 4.3: Zero-Inflated Negative Binomial Models of Party Salience, 2004

	Republicans		Democrats	
	Count	Inflation	Count	Inflation
Intercept	−0.56	−8.12	0.44	1.42
	(0.35)	(13.35)	(0.29)	(0.94)
Party ID	0.13	−0.13	−0.03	0.15
	(0.13)	(.09)	(0.01)	(.09)
Polarization	0.04	−0.51*	0.03	−0.55*
	(0.02)	(0.18)	(0.02)	(0.15)
Interest (Medium)	0.02	−1.30*	0.14	−0.66
	(0.15)	(0.40)	(0.11)	(0.37)
Interest (High)	0.19	−3.06*	0.35*	−1.51*
	(0.15)	(0.76)	(0.11)	(0.43)
Age	0.00	−0.03*	−0.00	−0.01
	(0.00)	(0.01)	(0.00)	(0.01)
Male	0.16*	−0.71	0.09	−0.28
	(.06)	(0.41)	(0.06)	(0.31)
White	0.04	0.19	−0.03	0.06
	(0.08)	(0.49)	(0.07)	(0.39)
South	−0.16*	−0.71	−0.09	0.11
	(0.06)	(0.66)	(.07)	(0.36)
Education (No Diploma)	0.78*	11.21	0.21	−0.66
	(0.33)	(13.40)	(0.26)	(0.92)
Education (High School)	0.81*	11.19	0.36	0.17
	(0.30)	(13.35)	(0.23)	(0.70)
Education (Some College)	1.07*	11.23	0.40	0.05
	(0.30)	(13.31)	(0.23)	(0.70)
Education (Bachelors)	1.17*	10.60	0.58*	−0.91
	(0.30)	(13.46)	(0.24)	(0.92)
Education (Grad Degree)	1.25*	10.50	0.61*	−0.18
	(0.30)	(13.34)	(0.23)	(0.87)
Income (33rd Percentile)	0.01	−0.17	−0.29*	−0.99
	(0.12)	(0.58)	(0.12)	(0.54)
Income (67th Percentile)	0.10	0.30	−0.09	−0.55
	(0.11)	(0.43)	(0.11)	(0.42)
Income (95th Percentile)	0.09	−0.32	−0.04	−0.61
	(0.11)	(0.60)	(0.11)	(0.71)
Income (100th Percentile)	0.21	−0.11	−0.00	−0.65
	(0.13)	(0.75)	(0.13)	(0.71)
$\log \alpha$	−2.80*		−2.79*	
	(0.53)		(0.52)	
α	0.06*		0.06*	
	(0.03)		(0.03)	
Total N	949		949	
Non-zero N	695		707	
Zero N	254		242	
$\log PsuedoL$	−1614.42		−16884.25	

Robust standard errors in parentheses

* indicates significance at $p < 0.05$

licans and Democrats respectively. Because the polarization variable is unrelated to the count portion of the model.[10] I refrain from interpreting this model further.

Table 4.4 presents the zero-inflated negative binomial model results of party salience for both Republicans and Democrats during the 1992 election. In contrast to the 2004 models, the polarization variable is statistically significant in both the count and inflation portions of these two models.[11] This means that voters who view greater levels of polarization between the two parties are more likely to provide a higher number of comments about Republicans and Democrats than are voters who see lower levels of polarization within the party system. Additionally, voters who see high levels of polarization between the two parties are also less likely to be included in always no comments (always zero) group than are voters who see low levels of polarization between the two major parties.

For example, the Republican Party salience model for 1992 suggests that an average 40 year old who identifies as a strong Republican and sees no polarization between the two parties has a 0.51 probability of being included in the always no comments group (always zero group), but an average 40 year old who identifies as a strong Republican and sees the maximum level of polarization between the two parties has a 0.05 probability of being in the always no comments group (always zero group). An average 40 year old Democrat who sees no polarization between the two parties has a 0.38 probability of being included in the always no comments group, but a 40 year old Democrat who sees the maximum level of polarization between the two parties

[10]I also estimated these two models with an interaction between polarization and party identification, but the term was not statistically significant in either portion of the model

[11]I also estimated each of these models with an interaction between polarization and party identification. However this term was not statistically significant. As result, I do not report these models.

Table 4.4: Zero-Inflated Negative Binomial Models of Party Salience, 1992

	Republicans		Democrats	
	Count	Inflation	Count	Inflation
Intercept	0.26	1.21	0.35*	1.89*
	(0.17)	(.63)	(0.16)	(0.79)
Party ID	0.01	0.09*	−0.05*	0.20*
	(0.01)	(0.04)	(0.01)	(0.06)
Polarization	0.06*	−0.49*	0.07*	−0.58*
	(.02)	(0.08)	(0.02)	(0.10)
Interest (Medium)	0.17	−0.44*	0.28*	−0.28
	(0.09)	(0.25)	(0.09)	(0.28)
Interest (High)	0.31*	−1.34*	0.39*	−0.92*
	(0.10)	(0.32)	(0.09)	(0.33)
Age	−0.00	−0.02*	−0.00	−0.45*
	(0.00)	(0.01)	(0.00)	(0.01)
Male	0.18*	−0.40*	0.13*	−0.70*
	(0.04)	(0.19)	(0.04)	(0.21)
White	0.01	0.18	0.11*	0.33
	(0.06)	(0.26)	(0.05)	(0.27)
South	−0.06	0.19	−0.05	−0.10
	(0.05)	(0.23)	(0.04)	(0.24)
Education (No Diploma)	−0.05	−0.16	0.03	−0.32
	(0.14)	(0.44)	(0.11)	(0.47)
Education (High School)	−0.07	−0.47	−0.02	−0.51
	(0.12)	(0.44)	(0.11)	(0.51)
Education (Some College)	0.11	−0.92	0.11	−1.30*
	(0.13)	(0.47)	(0.11)	(0.58)
Education (Bachelors)	0.24	−1.25*	0.30*	−1.51*
	(0.13)	(0.50)	(0.11)	(0.59)
Education (Grad Degree)	0.29*	−1.40*	0.45*	−1.27*
	(0.13)	(0.61)	(0.11)	(0.67)
Income (33rd Percentile)	−0.05	0.35	−0.11	0.42
	(0.09)	(0.32)	(0.08)	(0.38)
Income (67th Percentile)	0.05	0.70*	−0.01	0.51
	(0.08)	(0.30)	(0.08)	(0.36)
Income (95th Percentile)	0.14*	0.50	0.06	0.56
	(0.08)	(0.30)	(0.08)	(0.38)
Income (100th Percentile)	0.20*	−0.55	0.21*	0.14
	(0.10)	(0.71)	(0.10)	(0.58)
$\log \alpha$	−3.22*		−3.04*	
	(0.48)		(0.42)	
α	0.04*		0.05*	
	(0.02)		(0.03)	
Total N	1807		1807	
Non-zero N	1261		1261	
Zero N	546		546	
$\log PsuedoL$	−3093.28		−3114.94	

Robust standard errors in parentheses

* indicates significance at $p < 0.05$

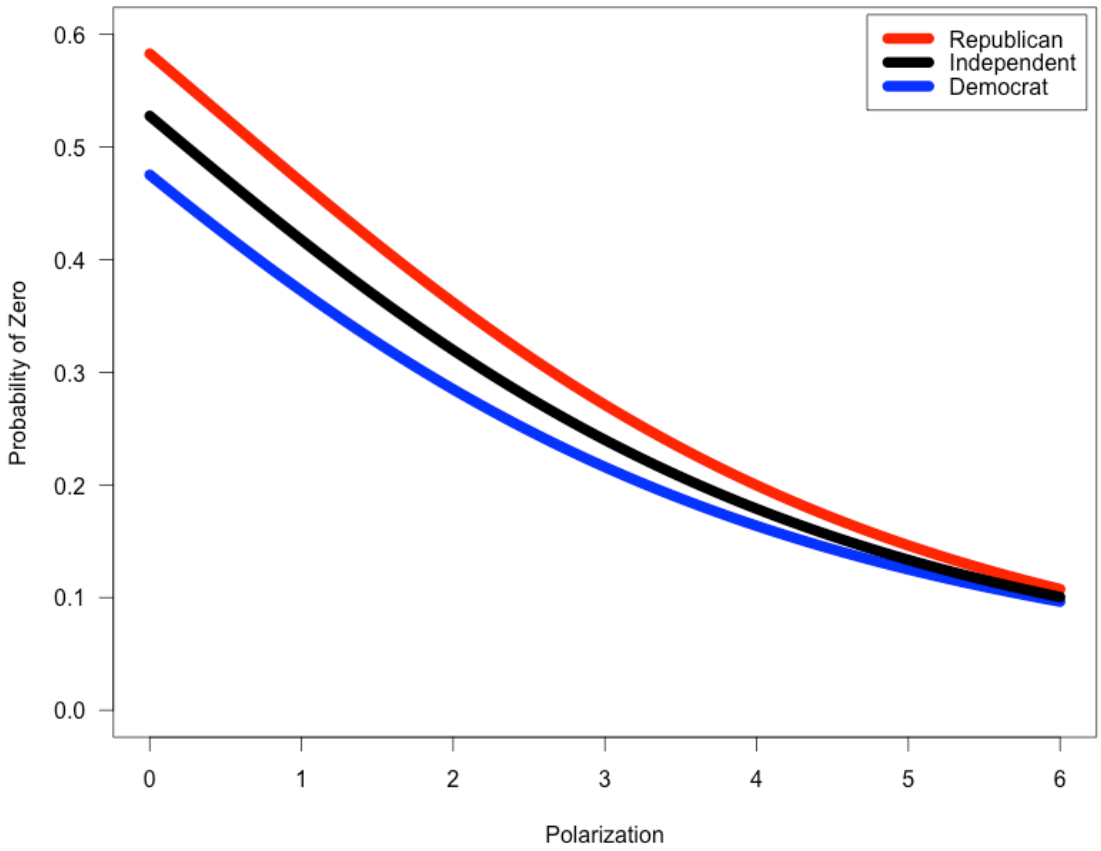
has a 0.03 probability of being placed in the always no comments category, all else equal. The pattern holds for Independents as well. An average 40 year old who identifies as an a pure Independent and sees no polarization between the two parties has a 0.45 chance of being included in the always no comments group, but an average 40 year old Independent who sees the maximum level of polarization between the two parties has a 0.04 probability of being included in the always no comments category.

Figure 4.5 illustrates how moving from the minimum value of polarization to the maximum value of polarization impacts the probability of never providing comments about the Republican Party (the always zero category) during the 1992 election. Each of the three colored lines represent the mean predicted probability of never providing any comments about the Republican Party for voters who are 40 years old and identify as Strong Republicans, Independents, and Strong Democrats. All other predictors in the model were held at their mean or modal value depending on their level of measurement.[12]

This figure indicates that under little or no polarization all three types of partisans have a similar probability of never providing any comments about the Republican Party during the 1992 election. Strong Republicans have a slightly higher probability of never providing any comments about their party than do Independents or Strong Democrats among voters who see no polarization between the two parties, but the difference in these predicted probabilities is rather small. For instance, the difference in the probability between Strong Republicans and Strong Democrats under no polarization is roughly 0.10.

[12]The predicted probabilities are slightly different the the predicted probabilities in the preceding paragraphs. This is due to the the different estimations commands used in STATA to estimate the conditional probabilities. The commands used to produce the graphing parameters in STATA 12.1 are not as flexible as the estimation commands in the S-Post Package.

Figure 4.5: Republican Party Salience Predictions, 1992



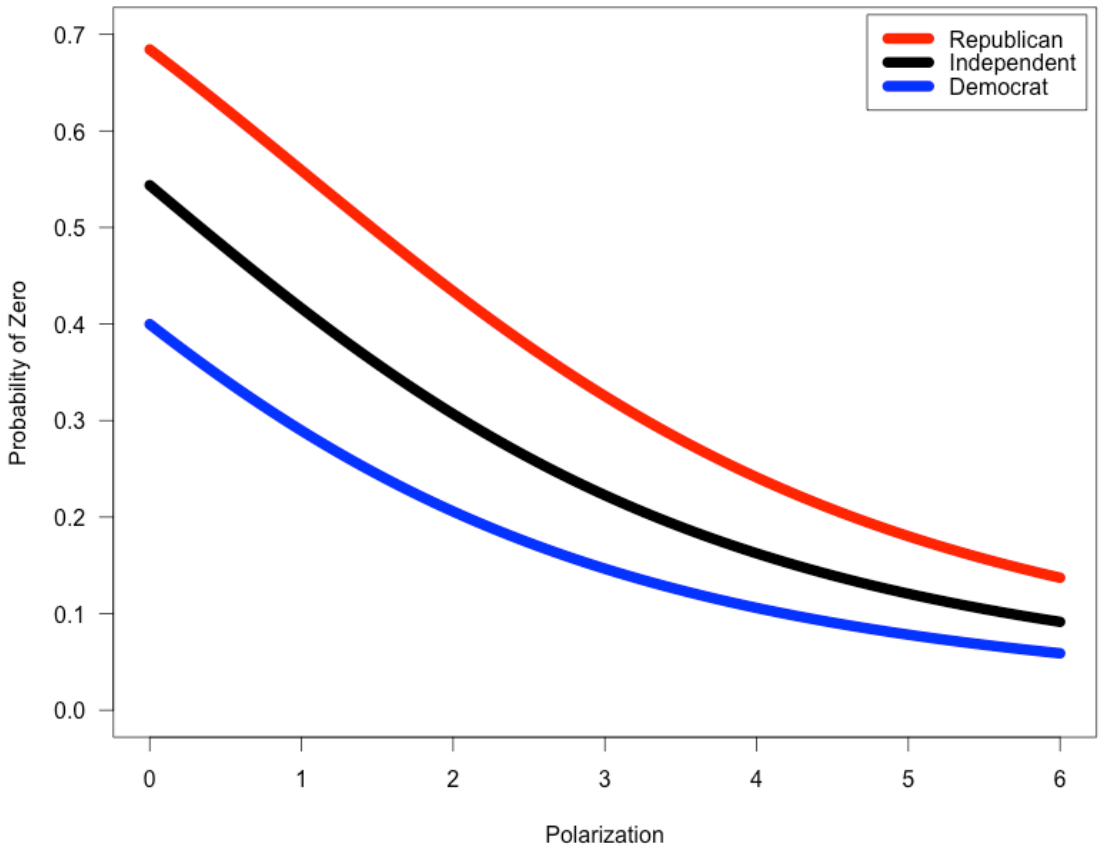
Among average voters who see a maximum level of polarization between the two parties, the probability of never providing any comments about the Republican Party during the 1992 election decreases considerably. Under this scenario, all three types of partisans – Strong Republicans, Independents, and Strong Democrats – have about a 0.10 probability of never voicing an opinion about the party, all else equal. The predictions from this model suggest that polarization is an important factor that increases the likelihood that voters will provide additional comments about the Republican Party during their post election ANES interviews.

The model for the Democrats suggests a similar relationship between polarization and party salience during the 1992 election. The results of this model are published in Table 4.4. To reiterate, both variables of interest – party identification and polarization – are statistically significant in this model. Additionally, the effect of these two variables is in the expected direction. The overall trends suggested by this model are similar to the Republican Salience Model for 1992, and moving from the minimum value to the maximum value of polarization reduces the probability of never providing any comments about the Democratic Party for all types of partisans.

For example, an average 40 year old who identifies as a strong Republican and sees no polarization between the two parties has a 0.60 probability of inclusion in the always zero category, all else equal. However, an average 40 year old who identifies as a strong Republican who sees a maximum amount of polarization between the two parties has a 0.05 probability of never providing comments about the Democratic Party. An average voter 40 year old voter who identifies as a strong Democrat and sees no polarization between the two parties has a 0.32 probability of never providing comments about the Democratic Party, but a comparable voter who sees the maximum level of polarization between the two parties has 0.01 probability of never providing comments about the Democratic Party. A 40 year old voter who sees identifies as an Independent and sees no polarization between the two parties has a 0.45 probability of never providing any comments about the Democratic Party, but a comparable voter who sees the maximum level of polarization between the parties has a 0.02 probability of being included in the always zero category, all else equal.

One major difference between the Republican Affect model and the Democratic affect model is that the rate of change in predicted probabilities between Strong Republicans, Independents, and Strong Democrats is different across these three groups as polarization moves from the minimum value to the maximum value. Figure 4.6 ill-

Figure 4.6: Democratic Party Salience Predictions, 1992



ustrates this relationship. Each of the three colored lines represent the mean predicted probability of never providing any comments about the Democratic Party for voters who are 40 years old and identify as Strong Republicans, Independents, and Strong Democrats during their interviews. All other predictors in the model were held at their mean or modal value depending on their level of measurement.[13]

[13]The predicted probabilities are slightly different the the predicted probabilities in the preceding paragraphs. This is due to the the different estimations commands used in STATA to estimate the conditional probabilities. The commands used to produce the graphing parameters in STATA 12.1 are not as flexible as the estimation commands in the S-Post Package.

As with the Republican Affect model, Strong Republicans are the most likely of the three partisan types to never provide any comments about the Democratic Party, but they also have the steepest rate of change in predicted probabilities as polarization moves from its minimum to maximum value. Figure 4.6 suggests that the polarization polarization variable has the strongest impact on Democratic Party salience for Strong Republicans. As polarization moves from the minimum to maximum value, Strong Republicans are much more likely to provide comments about the Democratic Party during their post-election ANES interviews.

For Independents, the relationship between polarization and Democratic Party salience is similar, but the change in predicted probabilities is much less pronounced. Under the no polarization condition, Independents have a roughly equal probability of always being included in the always no comments category, but as polarization increases to its maximum value, Independents are slightly less likely than Strong Republicans to never provide any comments about the Democratic Party during their post-election ANES interviews. For Strong Democrats, the rate of change in predicted probabilities as polarization moves from its minimum to maximum value is much less than it is for the other two types of partisans. The much flatter blue line in Figure 4.6 suggests this relationship. However, as with Strong Republicans and Independents, moving from no polarization to the maximum level of polarization significantly reduces the probability that a Strong Democrat will never provide any comments about the Democratic Party.

Table 4.5 reports the zero-inflated negative binomial models estimates of party salience for the 1972 election. The party identification variable is not statistically significant in either of these two models, meaning that strength of party identification is unrelated to providing comments about either party during the 1972 election. The polarization variable is statistically significant for for the Republican model, but it is

Table 4.5: Zero-Inflated Negative Binomial Models of Party Salience, 1972

	Republicans		Democrats	
	Count	Inflation	Count	Inflation
Intercept	−0.05	1.67*	0.26	1.51
	(0.25)	(0.84)	(0.29)	(1.91)
Party ID	0.03	0.03	−0.03	0.17
	(0.01)	(0.07)	(0.02)	(0.09)
Polarization	0.03	−0.42*	0.03	−0.31
	(0.03)	(0.13)	(0.03)	(0.20)
Interest (Medium)	0.05	−0.46	−0.03	−0.79
	(0.13)	(0.43)	(0.12)	(0.49)
Interest (High)	0.19	−0.53	0.12	−1.39
	(0.13)	(0.47)	(0.12)	(0.62)
Age	0.00	−0.04*	0.01*	−0.04*
	(0.00)	(0.01)	(.00)	(0.01)
Male	0.12	−0.13	0.02	−0.30
	(0.11)	(0.32)	(0.07)	(0.43)
White	−0.11	−0.00	0.03	0.27
	(0.11)	(0.57)	(0.14)	(1.06)
South	0.08	0.34	0.12	0.92
	(0.08)	(0.35)	(0.10)	(0.63)
Education (No Diploma)	0.35*	−0.04	0.16	−0.27
	(0.17)	(0.62)	(0.16)	(0.91)
Education (High School)	0.31*	−0.37	0.22	−0.61
	(0.14)	(0.58)	(0.14)	(0.91)
Education (Some College)	0.45*	−0.41	0.17	−1.43
	(0.17)	(0.64)	(0.16)	(1.17)
Education (Bachelors)	0.49*	−1.35	0.38*	−1.07
	(0.17)	(0.82)	(0.17)	(1.12)
Education (Grad Degree)	0.65*	−0.89	0.57*	−0.84
	(0.17)	(0.83)	(0.18)	(1.33)
Income (33rd Percentile)	−0.18	−0.99	−0.16	−1.71
	(0.16)	(1.04)	(0.18)	(2.04)
Income (67th Percentile)	0.06	0.23	0.09	−0.16
	(0.13)	(0.50)	(0.14)	(0.69)
Income (95th Percentile)	0.19	−0.29	0.04	−0.85
	(0.13)	(0.55)	(0.15)	(0.81)
Income (100th Percentile)	0.15	0.31	−0.09	−0.43
	(0.16)	(0.72)	(0.19)	(1.26)
$\log \alpha$	−14.42		−4.17*	
	(8.05)		(2.05)	
α	0.00		0.02	
	(0.00)		(0.03)	
Total N	679		679	
Non-zero N	482		504	
Zero N	197		175	
$\log PsuedoL$	−1151.11		−1161.97	

Robust standard errors in parentheses

* indicates significance at $p < 0.05$

only significant in the inflation portion of the model. Because these results are not robust, I refrain from interpreting the model further.

4.3 Voter Turnout

The preceding two sections describe how polarization affects party assessments in terms of salience and affect. How voters evaluate the party system are important components of whether they decide or not to vote. In this section, I address whether polarization affects whether voters actually cast a vote. The ANES asks voters a series of questions about their voting behavior in national elections. One question consistently asked in the ANES was whether a respondent voted in the national elections. In order to better understand how polarization influences the decision to vote or not vote, I make use of the 2012, 1992, and 1972 subsets of the ANES CDF.

A binary choice model is an intuitive path to select when comparing the outcomes of a dichotomous dependent variable. However, traditional options, such as the standard logit or probit model, do not account for the unequal error variances found in these voter turnout models. In the generalized linear model framework, hetereoskedasticity causes both bias and inefficiency in the coefficient estimates. A heteroskedastic probit model relaxes the unit variance assumption of the the traditional model, and it allows some of the error variance to depend on particular predictors in the model. I make use of this modeling strategy in the remainder of this section.[14]

Table 4.6 contains the results for the voter turnout for the three selected elections. In 2012, both the party identification and polarization variables are statistically sig-

[14]The age variable is the source of the heteroskedastic errors. A series of residual diagnostics revealed this variable as the culprit. Additionally, including age in the variance component produces a statistically significant term, indicating that a modified choice model is appropriate.

Table 4.6: Heteroskedastic Probit Models of Voter Turnout

	2012	1992	1972
Intercept	−0.01	−0.19	0.05
	(0.04)	(0.16)	(0.12)
Party ID	−0.01∗	−0.05∗	0.00
	(0.00)	(0.02)	(0.01)
Polarization	0.04∗	0.06∗	0.03
	(0.01)	(0.02)	(0.02)
Interest (Medium)		0.36∗	0.13
		(0.10)	(0.07)
Interest (High)	0.00	0.71∗	0.30∗
	(0.02)	(0.14)	(0.09)
Male	−0.04∗	−0.02	0.03
	(0.02)	(0.06)	(0.05)
White	0.01	0.11	0.02
	(0.02)	(0.08)	(0.09)
South	−0.03	−0.22∗	−0.19∗
	(0.20)	(0.07)	(0.06)
Education (No Diploma)	0.03	−0.22	0.07
	(0.05)	(0.15)	(0.07)
Education (High School)	0.10∗	0.16	0.13
	(0.05)	(0.12)	(0.07)
Education (Some College)	0.18∗	0.40∗	0.27∗
	(0.05)	(0.14)	(0.09)
Education (Bachelors)	0.15∗	0.48∗	0.34∗
	(0.03)	(0.15)	(0.10)
Education (Grad Degree)	0.18∗	0.76∗	0.31∗
	(0.06)	(0.22)	(0.14)
Income (33rd Percentile)	0.01	0.11	0.12
	(0.03)	(0.10)	(0.08)
Income (67th Percentile)	0.09∗	0.19∗	0.21∗
	(0.02)	(0.10)	(0.07)
Income (95th Percentile)	0.15∗	0.39∗	0.31∗
	(0.03)	(0.11)	(0.08)
Income (100th Percentile)	0.18∗	0.48∗	0.31∗
	(0.06)	(0.21)	(0.14)
$\log \sigma$			
Age	−0.02∗	−0.01∗	−0.01∗
	(0.00)	(0.00)	(0.00)
N	5016	1649	1347

Standard errors in parentheses

∗ indicates significance at $p < 0.05$

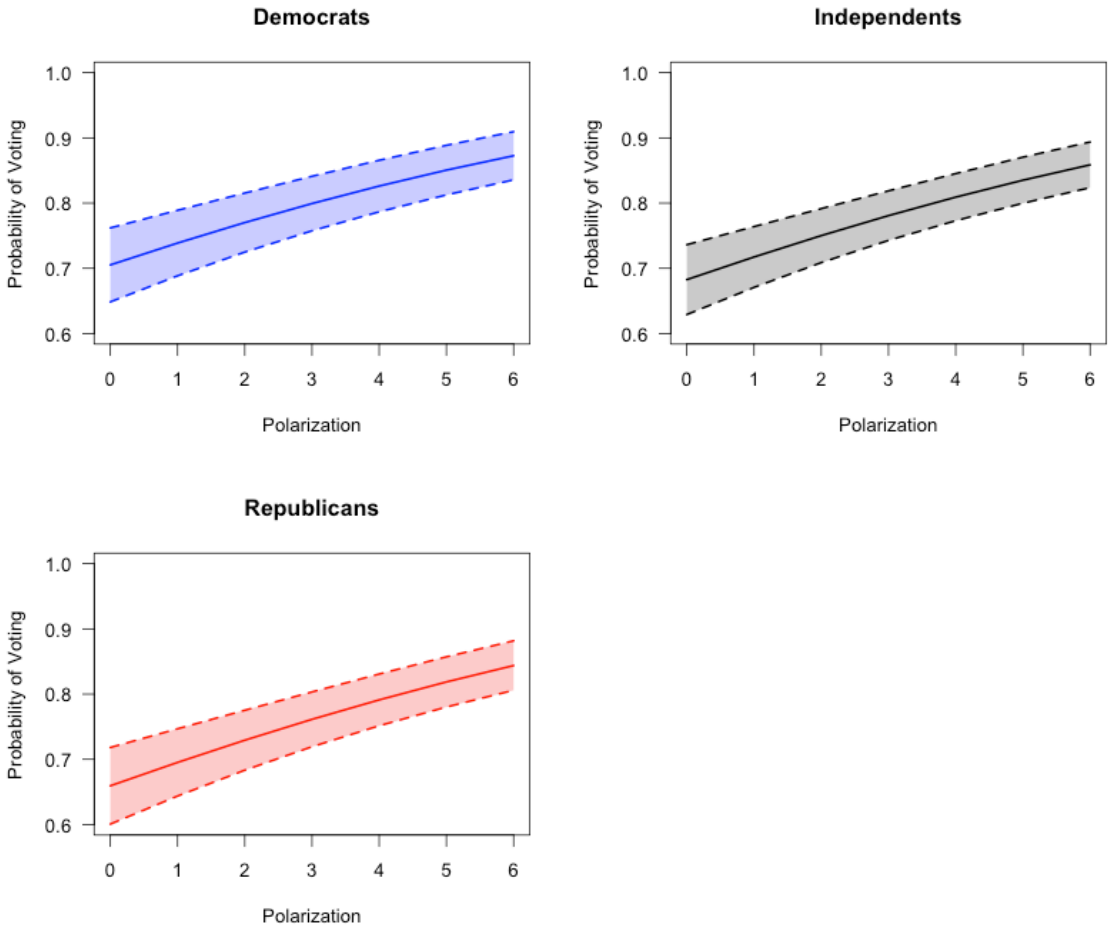
nificant, and each of these variables are signed in the expected direction.[15] The model suggests that polarization does increase the likelihood that a voter will cast a ballot in the election.

To better understand the magnitude that polarization has on the likelihood of voting. It is necessary to look at some predictions from the model because coefficients from a generalized linear model are not directly interpretable. Figure 4.7 contains the mean probability of voting with the associated 95% confidence intervals. The graph shows that the probability of voting increases when moving from no polarization to high level of polarization for Republicans, Independents, and Democrats alike. For example, a 40 year old, non-southern, white, male who has a high level of interest in campaign and identifies as a strong Republican has a 0.66 probability of voting in the election if he sees no polarization between the two parties. By contrast a comparable man who sees the maximum level of polarization between the two parties has a 0.84 probability of voting in the 2012 election, all else equal.

The trend holds for Independents and Democrats as well. An Independent with the same social characteristics as the previously mentioned Republican has a 0.68 probability of voting when he sees no polarization between the parties; however, a comparable Independent who sees a maximum level of polarization between the two parties has a 0.85 probability of voting. A Democrat with these same social characteristics who sees no polarization between the two parties has a 0.71 probability of voting in the election, but if a socially similar Democrat that sees a maximum level of polarization between the two parties has a 0.87 probability of casting a ballot in the election.

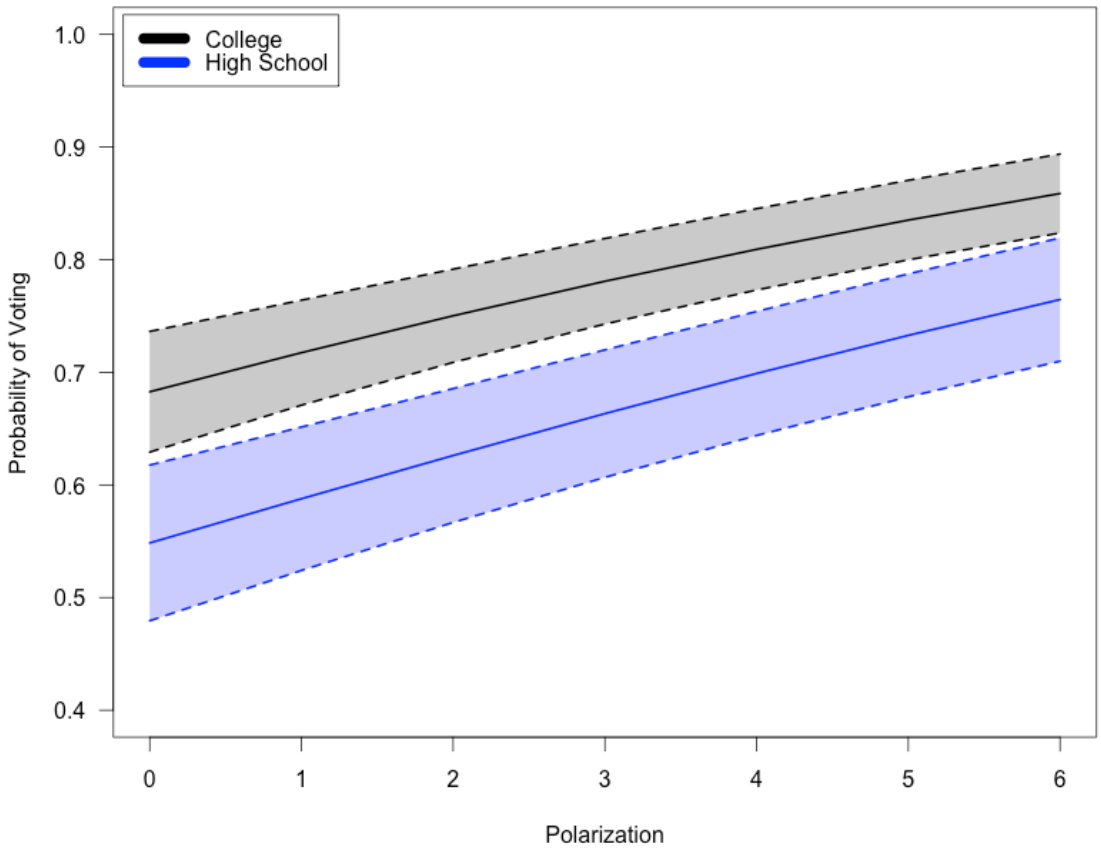
[15]I also estimated this model with an interaction term between party identification and polarization; however, this model was not statistically significant.

Figure 4.7: Voter Turnout Predictions by Party, 2012



The previous figure shows how the probability of voting changes across different different levels of polarization for different types of partisans. The relationship between polarization and voting can also been seen across different education levels. Figure 4.8 illustrates the differences in the probability of voting between a hypothetical voter who has a high school education versus a similar voter with a bachelors degree. The figure shows the mean probability of voting with the 95% confidence intervals varying by education. Consider, a 40 year old, white, non-southern, male who identifies as an Independent and sees no polarization between the two parties has a 0.55 probability of voting in a congressional election. By contrast, a similar voter who

Figure 4.8: Voter Turnout Predictions by Education, 2012

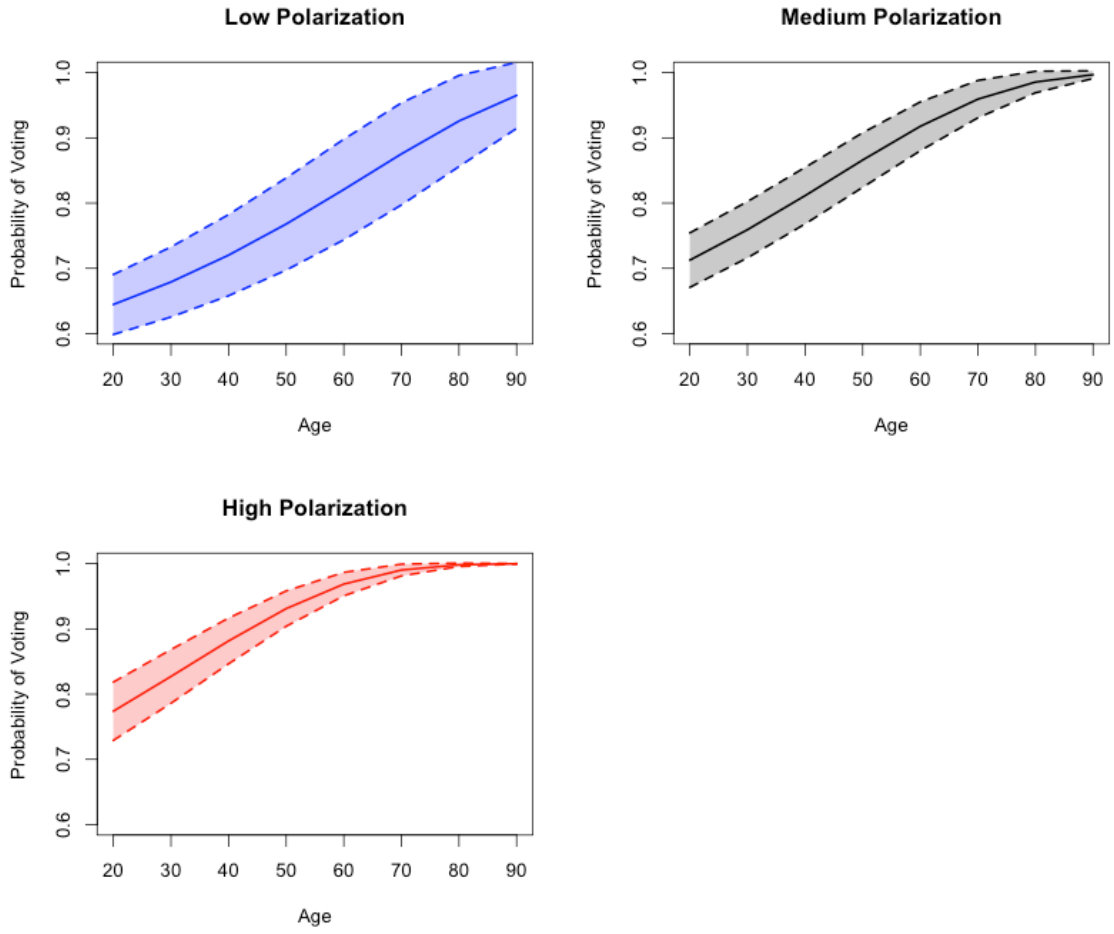


sees a maximum level of polarization between the Republican and Democratic parties has a 0.77 probability of casting a ballot for a member of Congress. A socially similar voter with a college degree has 0.68 probability of voting when he sees no polarization between the two parties, but a similar college graduate has a 0.86 probability of voting, considering other relevant factors.

Figure 4.9 shows how polarization affects the probability of voting across the age variable.[16] Under a low polarization scenario (polarization = 0), a 40 year old, non-

[16]As with the other voter turnout plots, the figure shows the mean probability of voting with the 95% confidence intervals.

Figure 4.9: Voter Turnout Predictions by Age, 2012



southern, white male with a bachelors degree who identifies as an Independent has a 0.76 probability of voting the 2012 election. Whereas, a socially similar voter who sees a medium amount of conflict between the parties (polarization = 3) has a 0.86 probability of making their electoral preferences known. When a demographically similar voter sees the maximum amount of polarization (polarization = 6), they have a 0.93 probability of voting.

There are two other interesting findings that appear from the conditional probabilities depicted in Figure 4.8. First, when comparing the low polarization condition to the high polarization condition, the probability that a younger voter (20 years of age)

increases by 0.25. Second, while the mean probability of voting does not change as drastically for older Americans when moving from low polarization to the maximum value of polarization, the uncertainty around their estimates decreases considerably, which is evidenced by the increasingly narrow confidence intervals across the different values of polarization.

The results for the 1992 voter turnout model are relatively similar to the 2012 results. In this model both party identification and polarization are statistically significant, and each coefficient is signed in the expected direction.[17] As with the 2012 model, the positive polarization coefficient suggests that it increases the likelihood that a voter will cast a ballot during the 1992 election.

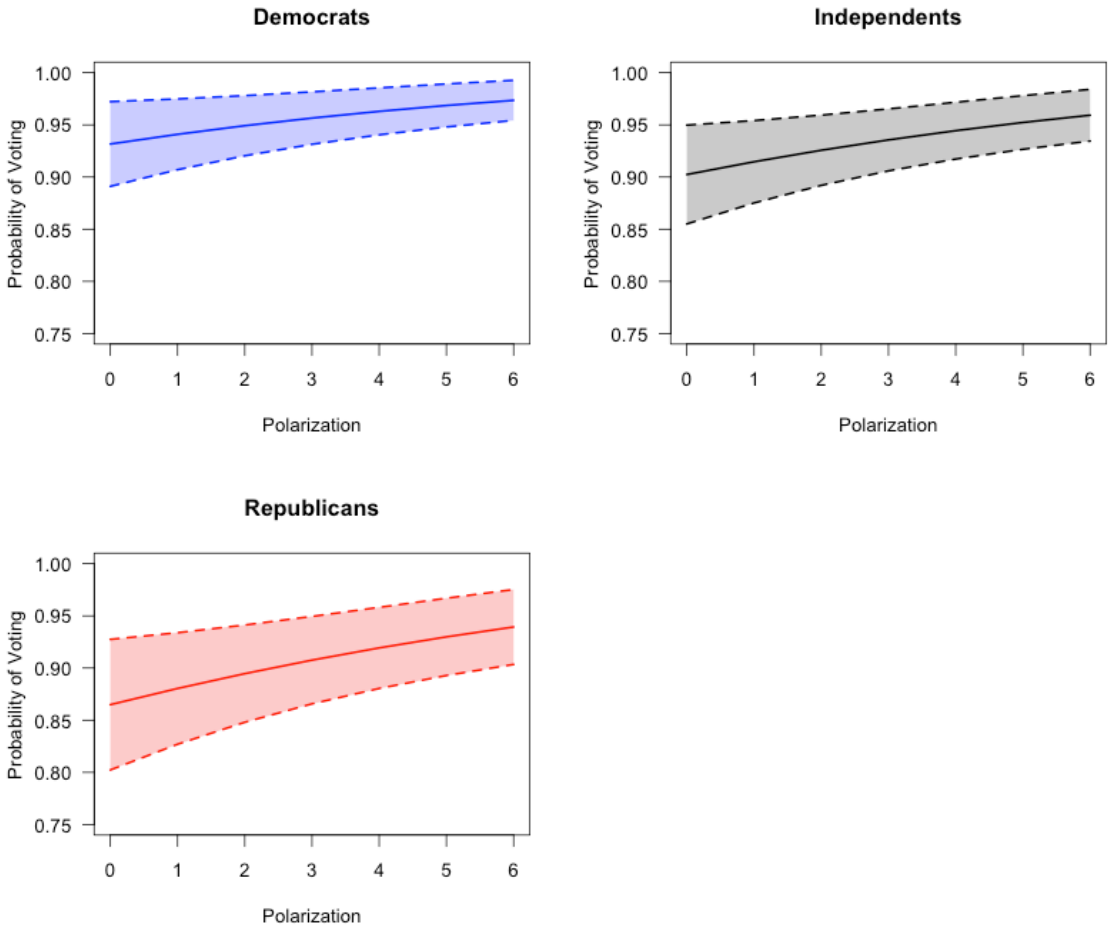
Figure 4.10 shows how the probability of voting changes as polarization moves from its minimum value to its maximum value for Republicans, Independents, and Democrats during the 1992 election.[18] In contrast to the 2012 results, the change in probability of voting is not as drastic; however, the change is still statistically significant and substantively meaningful. A 40 year old, white, non-southern male who identifies as a Republican has a 0.86 probability of voting in the 1992 election under the no polarization condition. A comparable Republican who sees a maximum level of polarization between the two parties has 0.94 probability of casting a ballot, all else equal.

The trend is also similar for both Independents and Democrats. A socially similar Independent has 0.90 probability of voting under the no polarization condition, and a comparable Independent who is average on other characteristics has a 0.96 voting during the 1992 election. In a similar vein, a 40 year old, white, non-southern male

[17]I also estimated a model with an interaction term between party identification and polarization; however, the term was not statistically significant.

[18]The figure shows the mean probability of voting with the 95% confidence intervals.

Figure 4.10: Voter Turnout Predictions by Party, 1992

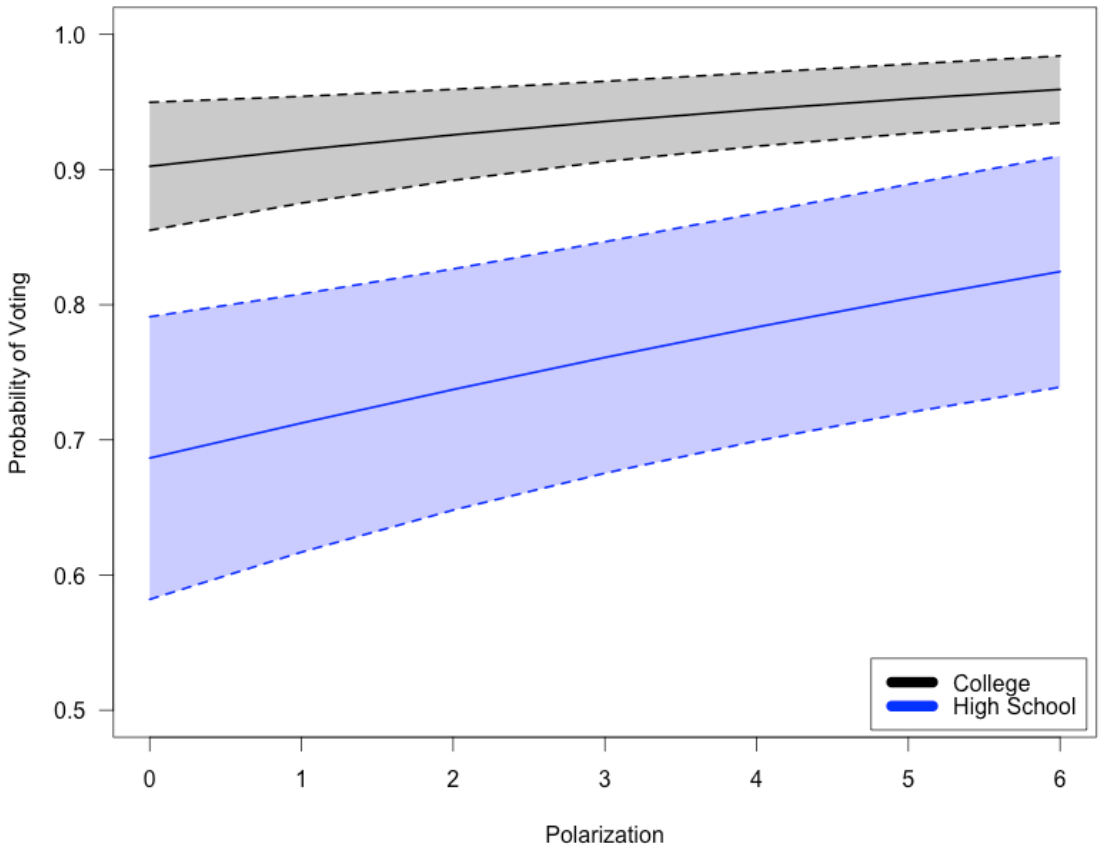


who identifies as a Democrat and sees no polarization between the two parties has a 0.93 probability of voting in the 1992 election. However, a similar Democrat who sees the maximum level of polarization between the two parties has 0.98 probability of casting a ballot in the 1992 congressional election.

Figure 4.11 shows the relationship between polarization and the probability of voting broken down my education level.[19] As with the 2012 model, the 1992 model compares a high school graduate to a college graduate. A 40 year old, white, non-

[19]The figure shows the mean probability of voting with the associated 95% confidence intervals.

Figure 4.11: Voter Turnout Predictions by Education, 1992



southern male who identifies as an Independent has a 0.69 probability of voting during the 1992 election at the minimum level of polarization, but as polarization moves to it's maximum value, a demographically similar voter has a 0.83 probability of voting, *ceteris paribus*.

By contrast, a college graduate with similar social characteristics has a 0.90 probability of voting during the 1992 under the no polarization scenario, but a comparable college graduate has a 0.96 probability of voting when he sees the maximum amount of polarization between the two parties. The change in probability is small, but it is statistically significant and substantively important.

Figure 4.12: Voter Turnout Predictions by Age, 1992

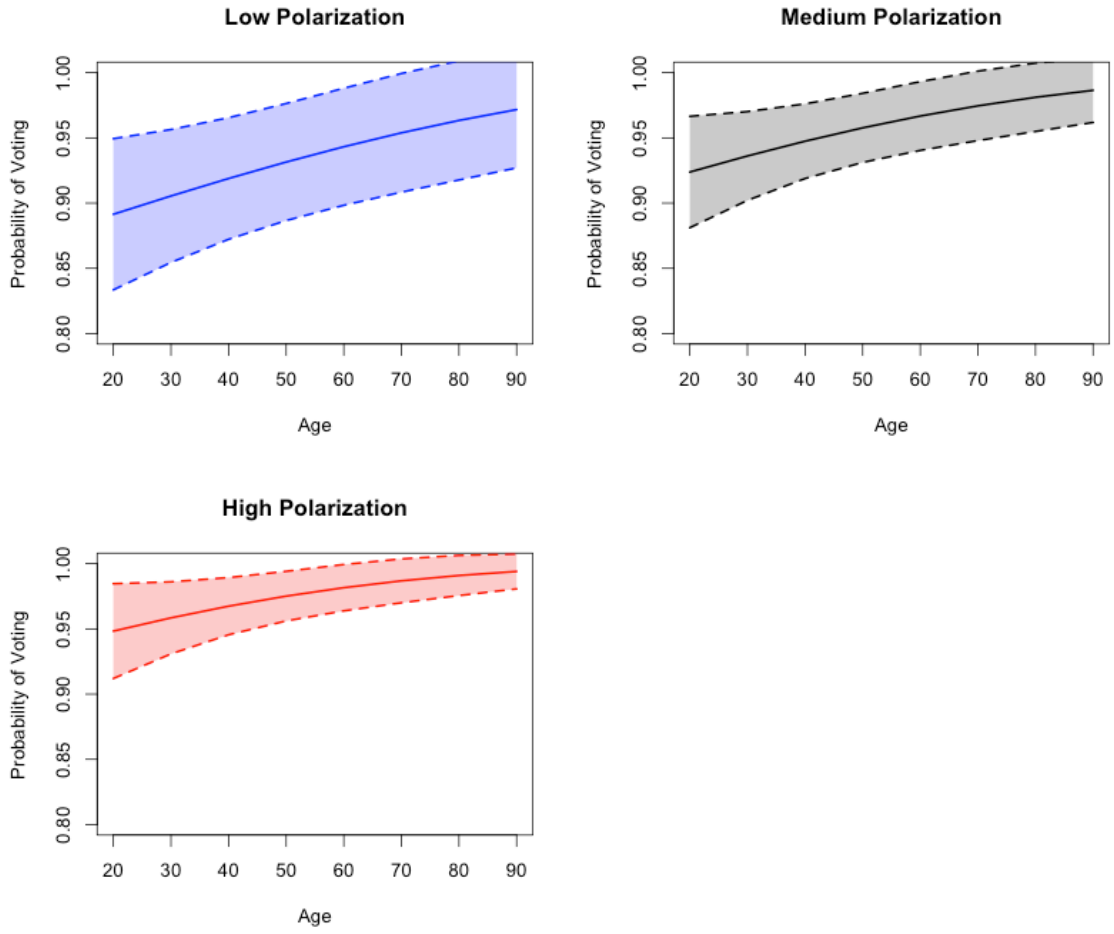


Figure 4.12 illustrates how polarization changes the probability of voting during the 1992 election across the age variable.[20] A 40 year old, white, non-southern, male with a bachelors degree and who identifies as an Independent and sees no polarization between the two parties has a 0.93 probability of voting during the 1992 election. However, a comparable voter who sees a medium level of distance between the two parties (polarization = 3) has a 0.96 probability of voting in the 1992 election. A

[20]The figure shows the mean probability of voting with the associated 95% confidence interval.

socially similar voter who sees the maximum level of polarization between the two parties a has a 0.99 probability of voting, considering other important factors.

The 1972 voter turnout model does not suggest that polarization was an important factor during this election. The coefficient is signed in the expected direction, but the estimates do not achieve statistical significance by any conventional standard.[21] Because the main variable of interest is not significant, I refrain from elaborating in this model further.

4.4 Vote Choice

In the previous sections, I demonstrated that polarization influences how voters evaluate the party system, and that it increases the probability of voting for all types of partisans for two of the three selected elections. Considering these results, a natural question arises: Do either of the parties receive an electoral advantage due to a more polarized party system? The results of the analyses in this section are mixed in this respect. During the 2012 election, the Democrats received an electoral advantage from polarization in the both the House and the Senate races. However, the Republicans received an electoral advantage from polarization for the 1992 Senate races. Polarization, however, seems less of a factor in House races for the time periods chosen for these analyses.

The ANES furnishes vote choice variables that asks voters whether they voted for the Democratic or Republican candidate for both the Senate and the House of Representatives. These questions are a staple of the ANES timeseries data file, meaning that they have been asked consistently over time. In order to determine how polarization interacts with vote choice, I make use of the 2012, 1992, and 1972 subsets of the ANES CDF.

[21]The coefficient neither meets the p=.05 nor p=.10 standard of significance.

4.4.1 Senate Elections

Table 4.7 presents the results for Senate vote choice models during the 2012, 1992, and 1972 elections. Each of these models tests whether voters prefer Democratic Senate candidates to Republican Senate candidates. I estimated a series of logit models to account for the binary nature of the dependent variable. Unlike the voter turnout models, the data generation mechanism for the Senate vote choice models does not contain a heteroskedastic component. As with the other models in this chapter, I incorporated the sampling weights furnished by ANES into the analyses, and the standard error of the estimates were adjusted via Taylor Series Approximation.

During the 2012 election, several variables prove to be important predictors of Senate vote choice. Party identification, polarization, and the interaction term between party identification and polarization are statistically significant. As with the other models, party identification is signed in the expected direction, which indicates that Republicans are less likely to support Democratic Senate candidates than are Democrats. The positive coefficient for the polarization term suggests that as polarization rises, voters are more likely to prefer the Democratic Senate candidate, all else equal. The significant interaction term suggests that polarization does not affect all partisans equally when it comes to selecting their Senators.

To better understand how each of these variables relate to vote choice it is necessary to look at the model's predictions. Figure 4.13 displays the probability of voting for a Democratic Senate candidate during the 2012 election.[22] A 40 year old, white, non-southern, male who identifies as a Republican has about a 0.06 probability of voting for the Democratic Senate candidate in his state if he sees no polarization between the parties. A comparable Republican who sees the maximum amount of po-

[22]The figure shows the mean probability of voting for a Democratic Senate candidate with the 95% confidence intervals.

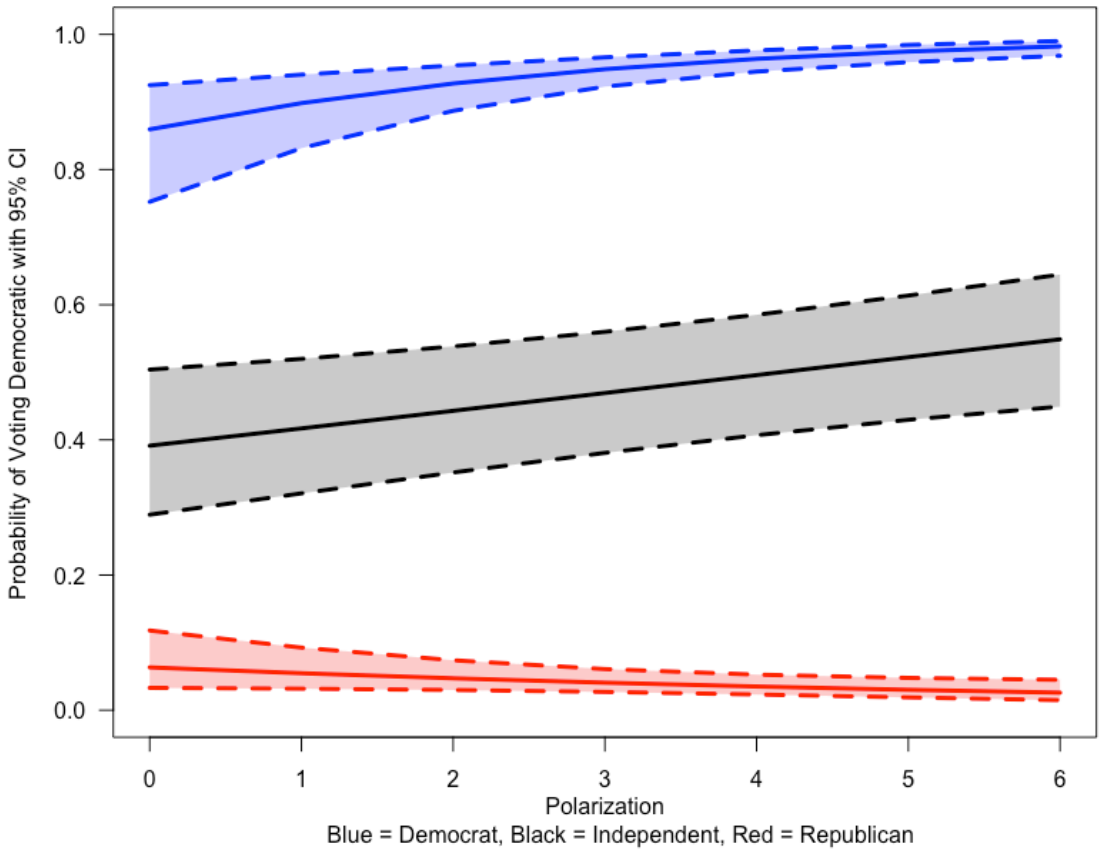
Table 4.7: Logit Models of Senate Vote Choice

	2012	1992	1972
Intercept	2.54*	2.03*	1.47
	(0.90)	(0.91)	(0.78)
Party ID	−0.75*	−0.34*	−0.40*
	(0.14)	(0.10)	(0.10)
Polarization	0.45*	0.33*	0.11
	(0.16)	(0.15)	(0.14)
Interest (Medium)		0.20	0.43
		(0.41)	(0.33)
Interest (High)	−0.43*	0.67	0.50
	(0.16)	(0.41)	(0.33)
Age	0.01	−0.00	−0.01
	(0.00)	(0.01)	(0.01)
Male	−0.15	−0.03	0.20
	(0.16)	(0.18)	(0.21)
White	−0.63*	−0.56	−0.43
	(0.20)	(0.29)	(0.39)
South	−0.49*	0.78*	0.63*
	(0.18)	(0.25)	(0.22)
Education (No Diploma)	−0.04	0.01	0.11
	(0.80)	(0.59)	(0.41)
Education (High School)	0.79	−0.04	0.27
	(0.73)	(0.51)	(0.38)
Education (Some College)	1.01	−0.25	0.37
	(0.74)	(0.52)	(0.41)
Education (Bachelors)	0.74	0.01	0.31
	(0.74)	(0.54)	(0.45)
Education (Grad Degree)	0.88	−0.11	0.55
	(0.74)	(0.56)	(0.51)
Income (33rd Percentile)	0.13	−0.17	−0.48
	(0.29)	(0.39)	(0.44)
Income (67th Percentile)	0.17	−0.37	0.00
	(0.22)	(0.37)	(0.34)
Income (95th Percentile)	0.05	−0.14	−0.36
	(0.23)	(0.38)	(0.34)
Income (100th Percentile)	−0.05	0.12	−1.01
	(0.30)	(0.50)	(0.51)
Party ID * Polarization	−0.09*	−0.10*	−0.05
	(0.04)	(0.03)	(0.04)
N	2715	788	557

Standard errors in parentheses

* indicates significance at $p < 0.05$

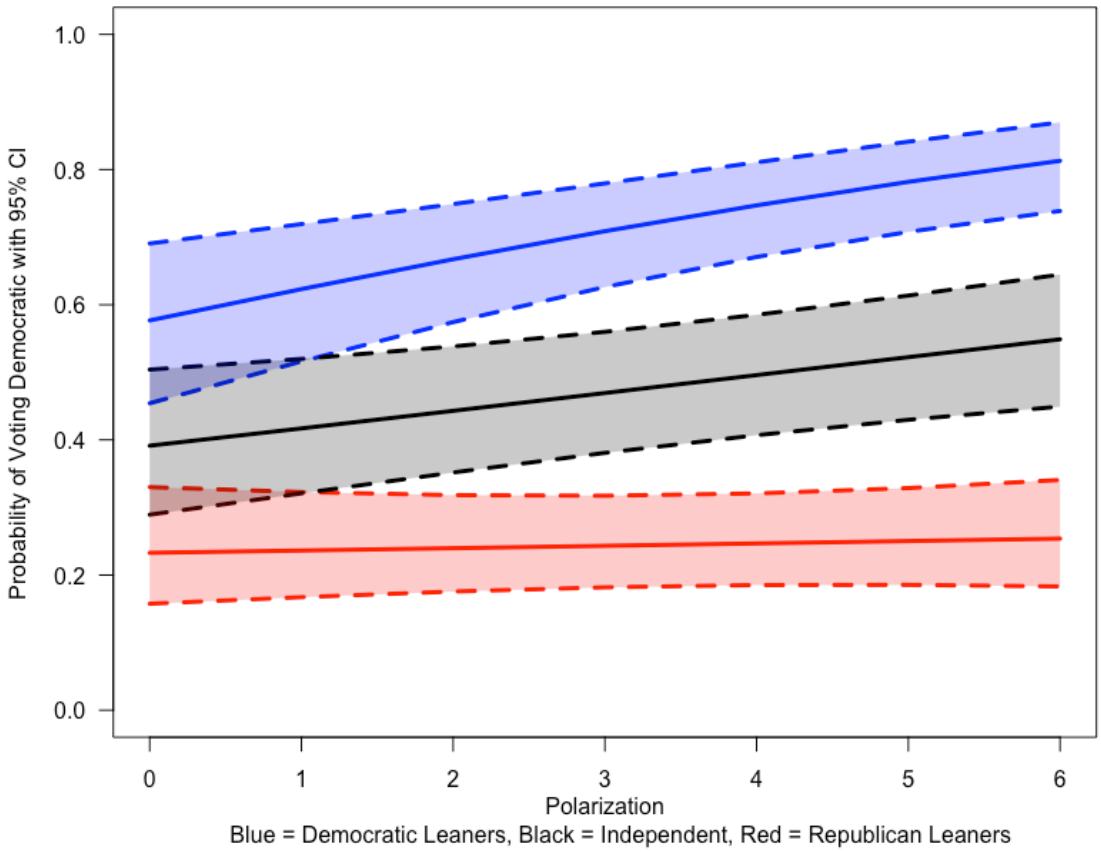
Figure 4.13: Senate Vote Choice Among Strong Partisans, 2012



larization between the parties has a 0.02 probability of voting for the Democratic Senate candidate, all else equal. In other words, voters who identify as strong Republicans have almost no chance of voting for the Democratic Senate candidate in their state. However, moving from the minimum to the maximum value of polarization, even among strong Republicans, still produces a statistically significant change in probability of voting for a Democratic Senate candidate.

By contrast, a 40 year old, white, non-southern, male who identifies as a Democrat has a 0.85 probability of voting for the Democratic Senate candidate when he sees no polarization between the two parties. A comparable Democrat who sees the maximum

Figure 4.14: Senate Vote Choice Among Independents, 2012



amount of polarization between the parties has a 0.99 probability of voting for the Democratic Senate candidate. The change in probability from the minimum value of polarization to the maximum value of polarization is slightly greater for a strong Democrat than it is for a strong Republicans. However, the result is basically the same: Strong Democrats are almost always going to vote for their party's candidate, and polarization simply reinforces this basic tendency.

The most striking instance of change is how polarization affects the vote choice of Independents. Figure 4.14 shows the probability of voting for the Democratic Senate candidate among Republican leaning Independents, Pure Independents, and Demo-

cratic leaning Independents.[23] A 40 year old, white, non-southern, male who identifies as a Republican leaning Independent and sees no polarization between the parties has a 0.23 probability of voting for the Democratic Senate. However, a comparable Republican leaning Independent who sees a maximum amount of polarization between the two parties has 0.25 probability of voting for the Democratic candidate, considering other relevant factors. A similar voter who identifies as a pure Independent has a 0.39 probability of voting for the Democratic Senate candidate under the no polarization scenario, but a socially similar pure Independent has a 0.55 probability of voting for the Democratic Senate candidate, all else equal.

The greatest amount of change in the probability of voting for a Democratic Senate candidate comes from Independents who lean toward the Democratic Party. For a 40 year old, white, non-Southern male who identifies as a Democratic leaning independent and sees no polarization between the parties has a 0.57 probability of voting for the Democratic Senate candidate. By contrast a similar voter who sees the maximum amount of polarization between the two parties has 0.82 probability of voting for the Democratic candidate.

The vote choice model for the 1992 is largely the same as the 2012 model. Both Party identification and polarization are statistically significant, and the coefficients are signed in the hypothesized direction. Again, the positive polarization coefficient suggests that when voters see a higher level of polarization Democratic Senate candidates benefit electorally. As with the 2012 model, it is necessary to assess the model's predictions in order to fully understand how polarization interacts with vote choice.

[23]The figure shows the mean probability of voting for the Democratic Senate candidate with the 95% confidence intervals.

Figure 4.15 displays the vote choice predictions among strong partisans for the 1992 election.[24] A 40 year old, white, non-southern, male who identifies as a strong Republican has a 0.33 probability of voting for the Democratic candidate when he sees no polarization between the parties. However, a comparable Republican who sees the maximum amount of polarization between the parties has 0.05 probability of voting for the Democratic candidate. Whereas, a similar voter who identifies as a strong Democrat and sees no polarization between the parties has a 0.79 probability of voting for the Democratic Senate candidate, and a comparable Democrat who sees the maximum amount of polarization between the parties has a 0.94 probability of voting for their party's Senate candidate, *ceteris paribus*.

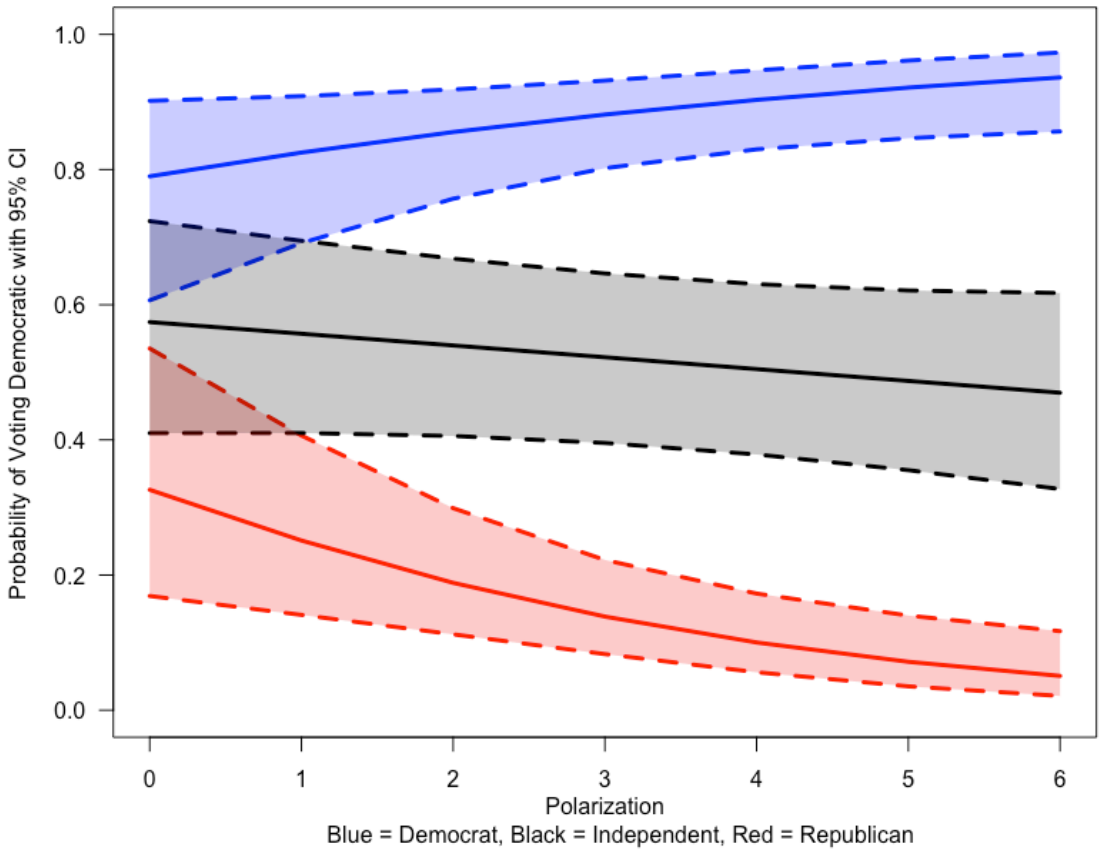
Figure 4.16 contains the vote choice predictions among Independents for the 1992 election.[25] As with the 2012 election, the 1992 vote choice model's most interesting predictions emerge among voters who call themselves Independents. In contrast to the 2012 election, the change in probability is in the opposite direction for the 1992 election. In other words, Republican Senate candidates received an electoral advantage among voters who see the party system as polarized for this election. For instance, A 40 year old, white, non-southern, male who identifies as a Republican leaning Independent and sees no polarization between the two parties has a 0.48 probability of voting for the Democratic candidate. However, a comparable partisan who see the maximum amount of polarization between the two parties has a 0.25 probability of voting for the Democratic Senate candidate.

For a demographically similar pure Independent who sees no polarization between the parties, they have 0.57 probability of voting for the Democratic Senate candidate.

[24]The figure shows the mean probability of voting for the Democratic Senate candidate with the 95% confidence interval.

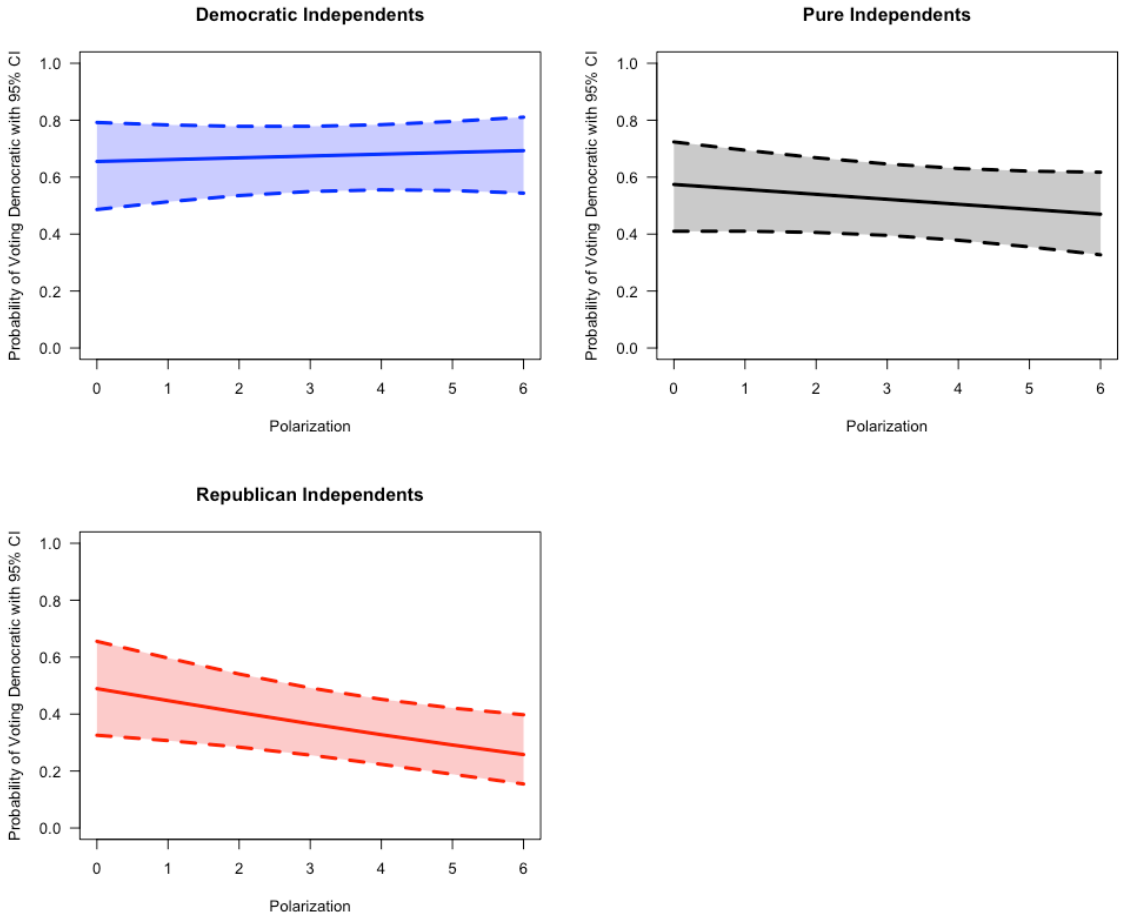
[25]The figure shows the mean probability of voting for the Democratic Senate candidate with the 95% confidence intervals.

Figure 4.15: Senate Vote Choice Among Strong Partisans, 1992



By contrast, a similar pure Independent who see the maximum amount of polarization between the parties has a 0.47 probability of voting for the Democratic Senate candidate. The change in probability among Democratic leaning Independents is relatively flat. A Democratic leaning Independent who mirrors the social characteristics of the other Independents and sees no polarization between the two parties has a 0.65 probability of voting for the Democratic Senate candidate. Whereas, a comparable voter who sees the maximum amount of polarization between the two parties has a 0.69 probability of voting for a Democratic Senate candidate.

Figure 4.16: Senate Vote Choice Among Independents, 1992



Returning to the results in Table 4.7, the voter choice model suggests that polarization is unrelated to vote choice for the 1972 election. The coefficients for party identification and polarization are in the expected direction. However, the estimates are not statistically significant. As result, I refrain from further elaboration of this model.

4.4.2 House of Representatives Elections

Table 4.8 shows the results for a series of vote choice models for the House of Representatives. As with the Senate models, these models predict whether a voter

Table 4.8: Logit Models of House Vote Choice

	2012	1992	1972
Intercept	4.47*	3.86*	3.86*
	(0.70)	(0.70)	(0.70)
Party ID	−1.09*	−0.59*	−0.59*
	(0.05)	(0.04)	(0.04)
Polarization	0.12*	−0.05	−0.05
	(0.05)	(0.05)	(0.05)
Interest (High)	−0.15	0.50	0.50
	(0.15)	(0.30)	(0.30)
Interest (Medium)		0.56	0.56
		(0.30)	(0.30)
Age	−0.01	−0.00	−0.00
	(0.00)	(0.01)	(0.01)
White	−0.85*	−0.59*	−0.59*
	(0.17)	(0.28)	(0.28)
South	−0.53*	−0.30	−0.30
	(0.15)	(0.19)	(0.19)
Education (No Diploma)	1.00	−0.87	−0.87
	(0.70)	(0.55)	(0.55)
Education (High School)	0.48	−0.58	−0.58
	(0.62)	(0.47)	(0.47)
Education (Some College)	0.81	−0.50	−0.50
	(0.63)	(0.48)	(0.48)
Education (Bachelors)	0.74	−0.75	−0.75
	(0.64)	(0.49)	(0.49)
Education (Graduate Degree)	1.17	−0.00	−0.00
	(0.64)	(0.51)	(0.51)
Income (33rd Percentile)	0.01	0.09	0.09
	(0.29)	(0.35)	(0.35)
Income (67th Percentile)	−0.47	−0.41	−0.41
	(0.24)	(0.32)	(0.32)
Income (95th Percentile)	−0.05	−0.40	−0.40
	(0.27)	(0.32)	(0.32)
Income (100th Percentile)	0.34	−1.50*	−1.50*
	(0.34)	(0.42)	(0.42)
N	3383	1095	1095

Standard errors in parentheses

* indicates significance at $p < 0.05$

will cast a ballot for the Democratic or Republican candidate in their House district. During the 2012 election, both the party identification and polarization variables are statistically significant, and each of these variable are signed in the expected direction. However, to fully understand how these variables influence vote choice it is necessary to look at the model's predictions.

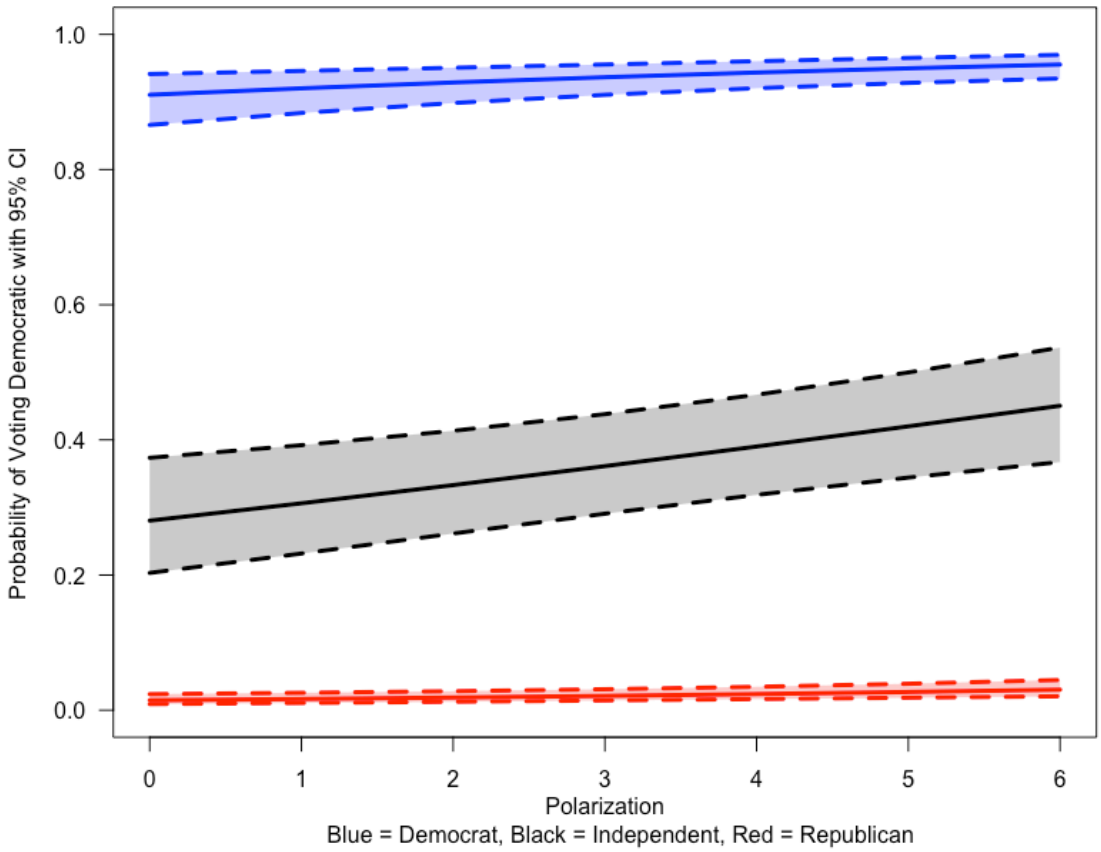
Figure 4.17 show the probability of voting for the Democratic House candidate during the 2012 election among strong partisans.[26] The figure largely shows what we know to be true among strong partisans: They almost always vote for their party's candidate. For example, a 40 year old, white, non-southern, male who identifies as a strong Republican and sees no polarization between the two parties has a 0.01 probability of voting for the Democratic candidate. However, a comparable Republican who sees a maximum level of polarization has a 0.03 probability of voting for the Democratic candidate. Despite the statistically significant change in probability, the substantive interpretation of this model is affectively the same: These two Republicans are incredibly unlikely to vote for the Democratic House candidate.

By contrast, a 40 year old, white, non-southern, male who identifies as a strong Democrat and sees no polarization between the two parties has a 0.94 probability of voting for the Democratic House candidate. A demographically similar voter who sees the maximum amount of polarization between the two parties has a 0.96 probability of voting for his party's candidate. As with the two hypothetical Republican voters, these two Democrats will almost always vote for the Democratic House candidate, all else equal.

The change in probability of voting for the Democratic House candidate is somewhat different among Independent voters. Figure 4.18 reports the results for Inde-

[26]The figure shows the mean probability of voting for the Democratic House candidate with 95% confidence intervals.

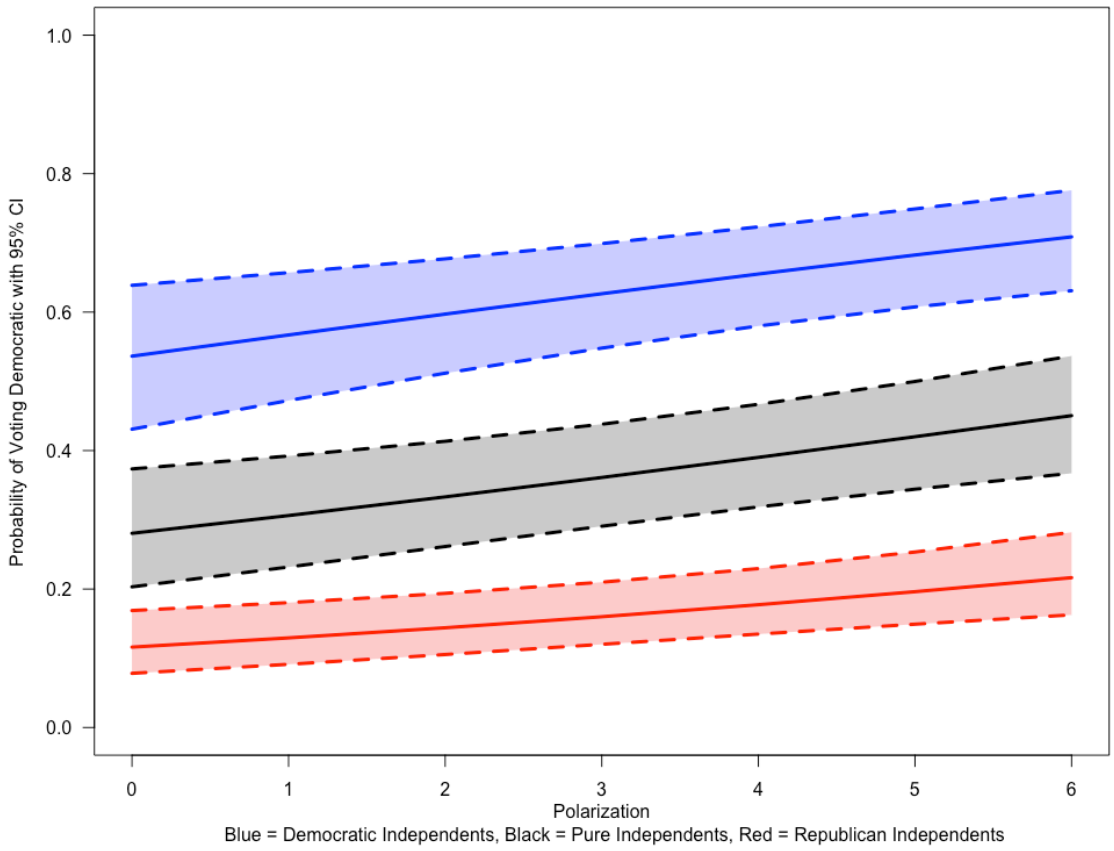
Figure 4.17: House of Representatives Vote Choice Among Strong Partisans, 2012



pendent voters.[27] Unlike the strong partisans, all three groups of Independent voters have a greater probability of voting for the Democratic candidate as polarization approaches its maximum value. For example, a 40 year old, white, non-southern, male who identifies as a Republican leaning Independent and sees no polarization between the two parties has a 0.12 probability of voting for the Democratic candidate. Whereas, a socially similar Republican leaning Independent has a 0.22 probability of casting a ballot for the Democratic House candidate.

[27]The figure shows the mean probability of voting for the Democratic House candidate with 95% confidence intervals.

Figure 4.18: House of Representatives Vote Choice Among Independents, 2012



A pure Independent who shares similar characteristics as the previously mentioned voter and sees no polarization between the two parties has a 0.28 probability of voting for the Democratic House candidate, but a pure Independent who mirror this demographic description and sees a maximum amount of polarization between the two parties has a 0.45 probability of voting for the Democratic House candidate, *ceteris paribus*.

The Democratic leaning Independents are similarly affected by polarization as are pure Independents. A 40 year old, white, non-southern, male who identifies as a Democratic leaning Independent and sees no polarization between the two parties

has a 0.53 probability of voting for the Democratic House candidate. A comparable voter who sees the maximum amount of polarization between the two parties has a 0.70 probability of voting for the Democratic House candidate, all else equal.

Returning to Table 4.8, The models for 1992 and 1972 show that polarization is unrelated to House vote choice during these two elections. The coefficients in each of the respective models suggest a lower likelihood of voting for Democratic House candidates. However, the estimates are not statistically significant. As result, I refrain from further elaboration of these two models.

4.5 Summary

The results in this chapter have shown several important things about polarization and political behavior. First, polarization has a strong influence on how strong partisans evaluate the party system. Polarization caused these types of voters to provide stronger evaluations of their party, and it caused them to have more negative evaluations of the other party. However, Independent partisans seemed to evaluate each of the parties similarly regardless of whether they saw the party system polarized or not. Additionally, polarization increased the number of comments that a voter would provide amount each of the two major parties.

In terms of voter turnout, polarization increased the probability that voters would cast a ballot in both House and Senate elections. These results held regardless of partisan identification. All types of partisan saw an increase in the probability of voting under a highly polarized party system. Additionally, these results held when examining voters in terms of age and education level.

Finally, polarization significantly impacted the vote choice of American citizens. During the 2012 election, polarization increased the likelihood that independent voters would chose the Democratic Senate and House candidates, but this result flipped for

during 1992 election. Independent voters were more likely to prefer the Republican Senate candidate during this election. No effect was found in the 1992 House contests.

Chapter 5

MACRO-LEVEL POLARIZATION AND U.S. ELECTIONS

The previous chapters placed emphasis on how polarization affects the individual voter. In this chapter, I change the unit of analysis to the U.S. states, and I focus on aggregate measures of political behavior. The primary dataset used in this chapter comes from the Correlates of State Policy Project (Jordan and Grossman, 2016).[1] This project contains approximately 700 variables that provide economic, political, and social measures for all 50 states spanning from 1900 - 2016.

5.1 Measuring Macro-level Voter Turnout

Despite the wealth of information contained in the entire Correlates project, I make use of a subset of variables that pertain to voter turnout and legislative elections. The dataset contains a voting-eligible measure of (VEP) of voter turnout that spans from 1980 - 2012. This is an extension of the original VEP measure (McDonald, 2002). The VEP turnout variable is estimated by two important components: the number of ballots cast and the eligible voting population. The former component of the VEP measure is calculated by tallying ballots cast for the state's highest office. During presidential election years, the presidency is the highest office on the ballot, and this is almost always the highest number of ballots cast during these years. In other years, the highest number of state-wide ballots cast is used. For example, this is most often the contest for U.S. Senate or the state's gubernatorial race. If no U.S. Senate or gubernatorial race was held, the highest available office total is the combination of

[1]This dataset is publicly available through The Institute for Public Policy and Social Research which is housed at Michigan State University. The data may be found by following this url: http://ippsr.msu.edu/public-policy/correlates-state-policy.

U.S. House ballots cast. In 2006, McDonald began using the combination of U.S. House ballots cast when these totals exceeded a U.S. Senate or gubernatorial race. This decision provides a better estimate of voter turnout when contests for higher offices are uncompetitive. Using the total number of ballots cast for the highest office is important because it places state-level turnout on the same scale, meaning that it facilitates comparisons between states and across time.

There is one drawback of using ballots cast for the highest office as the numerator of the VEP measure: It only utilizes valid votes. Often, ballots are discounted due to things such as registration problems, voters casting a ballot in the wrong polling place, or people not following the procedural directions written on the ballot. The procedures for dealing with these issues in the context of the election varies from state to state. However, as a measure of raw participation, this strategy ignores ballots that were disqualified, and it biases participation rates downward. A solution to this problem is to used total ballots cast, which considers these errors when evaluating participation. Despite the virtue of this alternative, not all states report the number of total ballots cast. When available, McDonald incorporates this information.

The second important component of the VEP turnout measure is estimating the number of eligible voters. Traditionally, this portion of the voter turnout measure is calculated by using the voting-age population of each state or congressional district through data from the U.S. Census Bureau. However, this estimate does not account for the number of felons in each state, citizens who live abroad, or the number of non-citizens living in a particular state or congressional district. The ineligible felon population is estimated from data obtained from the U.S. Department of Justice, which records the number of citizens on probation, on parole, and the number who are currently incarcerated. These estimates are matched with data from the Sentencing

Project which tracks the status of state disenfranchisement laws for those in prison, on probation, or on parole.

The number of citizens living overseas are removed from the voter turnout calculation by using data from the U.S. Consular Service, the Federal Voting Assistance Program, and the Department of Defense. These sources account for citizens and U.S. military that claim a state of residence, but do not vote in the location that they claim as a permanent residence.

Prior to 2000, McDonald interpolates the decennial census estimates to account for non-citizens living in a particular state or congressional district. For years after 2000, McDonald makes use of the American Community Survey to remove non-citizens from the voting-age population. This method is slightly different than what he has done in the past where he uses the Census Bureau's Current Population Survey to account for the number of non-citizens. He makes this change because data from the American Community Survey is published more frequently.[2]

The VEP measure of turnout is available for the 1980 - 2012 elections. The data are not available prior to 1980 because of the lack of resources necessary to adjust the voting-age population estimate. For instance, the Department of Justice only began reporting complete correction statistics in 1978. Also, the Census Bureau did not create a voting-age population measure for the 1950s or the 1970s; although, it did for the 1960s.

5.2 Measuring the Predictors of Macro-level Voter Turnout

The Correlates dataset contains many useful state-level variables that help explain the variation in voter turnout. For instance, the the dataset contains variables that measure the partisan and ideological tendencies of both the electorate and state

[2]For more information on this new calculation see McDonald (2011).

legislatures for a good number of years. Additionally, the Correlates dataset contains variables that allow for demographic controls such as income, education, and electoral competitiveness.

5.2.1 Polarization

The Correlates data set contains two measures of state-level of polarization that compares the level of polarization in each state's House of Representatives and in each state's Senate. These are the same measures of polarization found in the work of Shor and McCarty (2011). Their measures of polarization are called NPAT scores, which were estimated by analyzing the roll-call votes of state legislators by fitting a multi-dimensional spatial model in each chamber of a state's legislature.[3] As with the roll-call analyses found for Congress, the first dimension of the spatial model explains almost all the variance in roll-call voting behavior. As with the literature in Congress, they interpret this first dimension of roll-call behavior as a direct measure of political ideology.

In order to place these state-level estimates of ideology on a common scale, Shor and McCarty utilized the Project Vote Smart National Political Aptitude Test (NPAT). This is a survey of state legislators that measures their opinions about state policies. The NPAT asks each state legislator the same questions regardless of their state of residence or the chamber in which they serve. Additionally, the survey asks most of the same questions over time. In other words, this survey allows comparison of state legislator ideology regardless of the chamber or year in which the legislator serves. Additionally, these scores are directly comparable to measures of ideology in Congress. Because these measures of polarization are comparable across time and leg-

[3]Specifically, these scholars estimated a multi-dimensional Bayesian Item-Response Theory model. For more on this, see Jackman (2001).

islative chamber. I make use of the House Difference and Senate Difference variables contained in the Correlates data set. These measures of ideology are available from 1994 until 2012.

5.2.2 Partisanship and Ideology in the Electorate

When considering a model of voter turnout, it is necessary to account for the state or the congressional district's partisan and ideological proclivities. Fortunately, the Correlates dataset contains such measures. Erikson *et al.* (1993) used public opinion surveys to estimate both state-level partisanship and ideology. Because public opinion surveys have show to be reliable estimates of these two concepts, I make use of these two variables.

The party variable contained in the Correlates dataset is a yearly measure that compares the number of Democrats to the number of Republicans in each each state. The measure is calculated by subtracting the number of Republican identifiers from the number of Democratic identifiers. A positive score indicates that the state has a more Democratic electorate, and a negative score indicates that a state has a more Republican electorate.

The ideology variable contained in the Correlates dataset is nearly identical to the partisanship variable. It compares the number of liberals to the number of conservatives in each state. This measure is calculated by subtracting the number of Conservatives from the number of Liberals in each state. A positive score indicates that the state has a more liberal electorate, and negative score indicates that a state as a more conservative electorate. Both the partisanship variables are available for years 1976 - 2011.

5.2.3 Control Variables

In addition to polarization, partisanship, and ideology, I include three additional control variables. Of which, the control for state electoral competitiveness is probably the most important. I make use the 4 year moving average of percentage of safe seats as a control for electoral competitiveness.[4] According to this measure a seat is considered safe if it typically wins by a margin of 10% or greater.

At the individual-level, voters with higher levels of education are more likely to vote. This finding should hold in the aggregate as well. States that have better education systems should have different levels of voter turnout than do states that do not. Fortunately, the Correlates dataset has a variety of education variables. However, many of these variables do not mesh well with the time span necessary to conduct the analyses of voter turnout. As a proxy for state education level, I use the average daily school attendance rate for each state. This data was collected by the National Center for Education Statistics, and it is available from the early 1970s until 2009.

As with higher education levels, income levels also matter at the individual-level. This finding should hold in the aggregate as well. States that have higher levels of income should also have different rates of voter turnout than do states with lower levels of income. I measure state income levels as total personal income in 1000s of dollars. This measure is also available from the early 1970s until 2010.

5.2.4 Missing Data

As with any dataset that amalgamates information from multiple sources, the Correlates data set has various levels of missingness among many of its constituent parts. The VEP measure of voter turnout and the measures of ideology and party are

[4]This measure was first proposed by Austin Ranney and later updated by Klarner (2013).

the only variables in the analyses that do not have any missing data. However, the two polarization variables have relatively high levels of missingness. This is largely due to states not consistently reporting the voting scores of members of their legislatures. Most of the missingness comes form the middle years of the 1990s. There is some missing data on the control variables, but they are relatively low.

The large issue is that these disparate data sources are from projects that began at different time periods. The selected predictor variables from the Correlates data set – polarization, party, ideology, education, income, and electoral competition – truncate the the full range of the voter turnout time series. The final data frame that I used here spans from 1994 - 2008. I handle the missing data contained in the Correlates dataset by performing complete case analyses in the forthcoming sections.

5.3 Modeling Macro-level Voter Turnout

In this section, I present a series of regression models to analyze the relationship between voter turnout and polarization. Because the VEP measure of turnout is a normally distributed, continuous variable, a linear model will perform exceptionally well to uncover the effect that polarization has on voter turnout.

The nature of these analyses allows an over-time comparison of voter turnout for each state. In other words, these analyses operate within the time-series cross-sectional framework. In order to facilitate the over time comparisons, I estimated a series of linear regression models with fixed effects.[5]

Table 5.1 reports a series of linear regression models that uncovers the relationship between polarization and voter turnout with the party identification of the state as

[5]The term fixed effect means different things for different disciplines. By fixed effects, I mean allowing the intercept to vary across different time periods. I accomplish this feat by including dummy variable for the 1996 to 2008 elections. The 1994 election is withheld as the reference category.

a predictor. Model 1 considers how Senate polarization affects voter turnout. Model 2 substitutes House polarization for Senate polarization, and Model 3 includes both as predictors. Including both chambers as measures as predictors of polarization may be a source of concern for some scholars. However, a test for variance inflation factors suggests that multicolinearity is not a concern for this model. The variance inflation factors for both polarization terms are both approximately 3.60.

Model 1 suggests that Senate polarization is statistically significant and positively related to voter turnout. A one-unit increase in the Senate Polarization variable produces a 0.03 increase in voter turnout rate when considering the effects of the other predictors. However, this model suggests that state-level partisanship is unrelated to voter turnout because the coefficient is not statistically significant.

Model 2 suggests that House polarization is a statistically significant predictor of voter turnout. As with the previous model, House polarization is also positively related to voter turnout. This models suggests that when the control variables are held constant, a one-unit increase in the polarization variable produces a 0.06 increase in the voter turnout variable, all else equal. In contrast to the first model, state-level partisanship does seem to matter when considering the effect of House polarization. The models suggest that more Democratic electorates are more likely vote vote than are Republican electorates when House polarization is held at its mean value.

Model 3 considers the effect of both Senate and House polarization. However only House polarization term is statistically significant. The coefficients in this model are largely the same as they are in the second model. In terms of explained variance, Model 3 is no improvement over the first two models which can be seen through the nearly identical Adjusted R-square values of each model. Considering this finding, I suggest that when considering the effects of polarization on voter turnout with party as a control variable either House or Senate polarization can be used as a measure of

Table 5.1: Polarization and Party as Predictors of Voter Turnout

	Model 1	Model 2	Model 3
Intercept	0.80*	0.80*	0.81*
	(0.13)	(0.13)	(0.13)
Party	0.03	0.06*	0.06*
	(0.03)	(0.03)	(0.03)
Senate Polarization	0.03*		0.00
	(0.01)		(0.01)
House Polarization		0.05*	0.05*
		(0.01)	(0.01)
Personal Income	−0.00*	−0.00*	−0.00*
	(0.00)	(0.00)	(0.00)
School Attendance	−0.00	−0.00	−0.00
	(0.00)	(0.00)	(0.00)
Percent Safe	−0.00*	−0.00*	−0.00*
	(0.00)	(0.00)	(0.00)
1996	0.11*	0.11*	0.11*
	(0.03)	(0.03)	(0.03)
1998	−0.02	−0.01	−0.02
	(0.03)	(0.03)	(0.03)
2000	0.14*	0.15*	0.14*
	(0.03)	(0.03)	(0.03)
2002	0.01	0.02	0.01
	(0.03)	(0.03)	(0.03)
2004	0.20*	0.21*	0.20*
	(0.03)	(0.03)	(0.03)
2006	0.02	0.02	0.02
	(0.03)	(0.03)	(0.03)
2008	0.21*	0.22*	0.21*
	(0.03)	(0.03)	(0.03)
N	350	345	343
R^2	0.71	0.72	0.72
adj. R^2	0.70	0.71	0.71
Resid. sd	0.06	0.06	0.06

Standard errors in parentheses

* indicates significance at $p < 0.05$

polarization, but including both predictors in the model provides no real additional explanatory power. Because a more parsimonious statistical model is always preferable to explain political behavior, I turn my attention to the predictions for the first model of voter turnout.

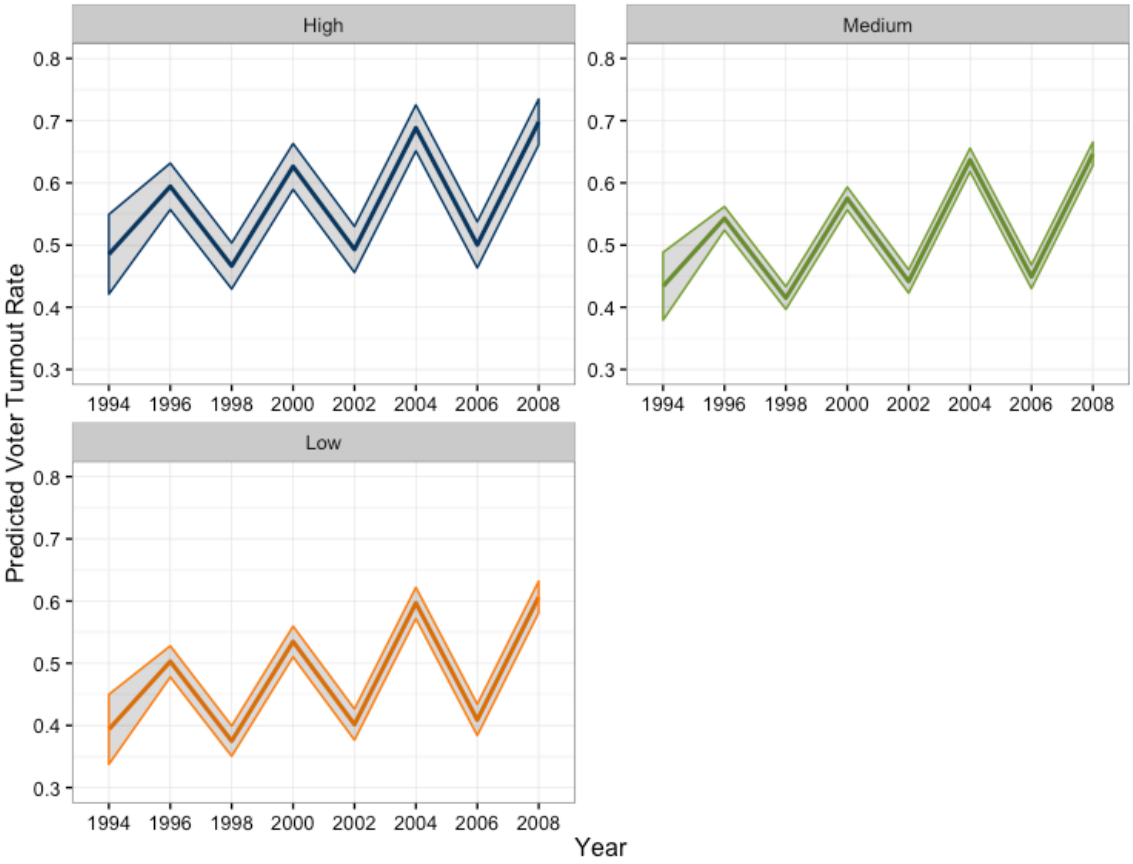
Figure 5.1 shows the predicted voter turnout rate from Model 1 when Senate polarization is held at its minimum value, mean value, and maximum value. All other predictors are held at their mean value. The model suggests that when comparing the minimum value of polarization to the maximum value of polarization the voter turnout rate increases by about 0.10 for both presidential election years and non-presidential election years.

For instance, during the 2000 election, states with low Senate polarization had predicted voter turnout rate of 0.53. States that display a mean level of Senate polarization had a predicted voter turnout rate of 0.57, and states that have a maximum level of Senate polarization had a predicted turnout rate of 0.63, all else equal. A 0.10 increase in turnout is both statistically significant and substantive important.

The trend holds for non-presidential years as well. During the 2006 election, the models suggests that states with the minimum level of Senate polarization have 0.41 predicted turnout rate, and a state with a mean level of Senate polarization has a 0.45 predicted voter turnout rate. Whereas a state with the maximum level of Senate polarization has a 0.51 predicted turnout rate.

Table 5.2 reports a series of linear regression models that considers the relationship between polarization and voter turnout with the ideology of the state included as a predictor. Model 4 only considers the effect of Senate polarization on voter turnout. The model suggests that Senate polarization is significantly and positively related to voter turnout. For example, a one unit increase in the Senate polarization variable produces a 0.03 increase in the voter turnout rate, *ceteris paribus*. Additionally, the

Figure 5.1: Predicted Voter Turnout By Polarization Level Considering Party



model suggests that more liberal states will have higher turnout than will a conservative rate when considering other relevant predictors are held at their mean value.

Model 5 replaces the Senate polarization variable with House polarization, but the effect of the new polarization variable is essentially the same as the previous one. A one-unit increase in the House polarization variable produces a 0.04 increase in the voter turnout rate. This model also suggest that more liberal states will have greater turnout rates than will conservative states when other variables are held constant at their mean value.

Model 6 considers the effect of both Senate polarization and House polarization on voter turnout rate with ideology included as a predictor variable. However, only House polarization is statistically significant in this model. The coefficient, again, sug-

Table 5.2: Polarization and Ideology as Predictors of Voter Turnout

	Model 4	Model 5	Model 6
Intercept	0.84*	0.84*	0.60*
	(0.13)	(0.12)	(0.05)
Ideology	0.15*	0.15*	0.14*
	(0.03)	(0.03)	(0.03)
Senate Polarization	0.03*		0.00
	(0.01)		(0.01)
House Polarization		0.04*	0.04*
		(0.01)	(0.01)
Personal Income	−0.00*	−0.00*	−0.00*
	(0.00)	(0.00)	(0.00)
Attendance	−0.00	−0.00*	
	(0.00)	(0.00)	
Percent Safe	−0.00*	−0.00*	−0.00*
	(0.00)	(0.00)	(0.00)
1996	0.11*	0.11*	0.11*
	(0.03)	(0.03)	(0.03)
1998	−0.02	−0.02	−0.02
	(0.03)	(0.03)	(0.03)
2000	0.13*	0.14*	0.14*
	(0.03)	(0.03)	(0.03)
2002	−0.00	0.00	0.00
	(0.03)	(0.03)	(0.03)
2004	0.20*	0.20*	0.20*
	(0.03)	(0.03)	(0.03)
2006	0.01	0.02	0.02
	(0.03)	(0.03)	(0.03)
2008	0.21*	0.22*	0.21*
	(0.03)	(0.03)	(0.03)
2010			0.03
			(0.03)
N	350	345	373
R^2	0.73	0.74	0.74
adj. R^2	0.72	0.73	0.73
Resid. sd	0.06	0.06	0.06

Standard errors in parentheses

* indicates significance at $p < 0.05$

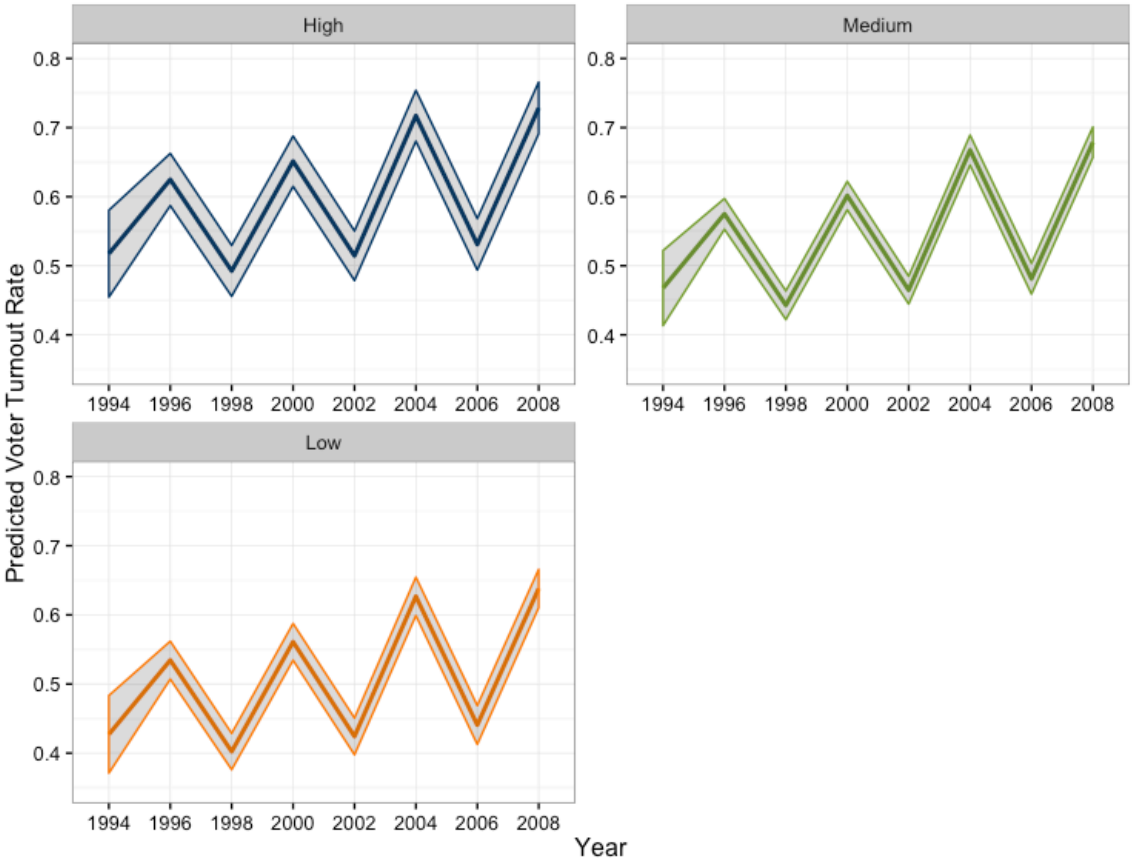
gests that polarization is positively related to vote choice. The positive coefficient for ideology suggests that more liberal states have higher levels of turnout than do conservative states when other predictors are held constant at their mean value.

As with the other set of voter turnout models, a more parsimonious model is preferable to a more complicated one. Because Models 4 through 6 all roughly explain the same amount of variance in voter turnout (based on the Adjusted R^2 value), I rely on the predictions of Model 4 to better understand how polarization explains voter turnout. Figure 5.2 displays the predictions from Model 4. As with the predictions from Model 1, Senate polarization was held at its minimum value, mean value, and maximum value. All of the other predictors were held at their means. In the end, these predictions are very similar to Model 1.

For example during the 2000 election, a state with low Senate polarization had a 0.56 predicted turnout rate. A state with a medium amount of Senate polarization had 0.60 predicted turnout rate, and a state with a high amount of Senate polarization had a 0.65 predicted voter turnout rate. A 0.09 change in the predicted turnout rate is both statistically significant and substantively meaningful.

As with the predictions for Model 1, this trend also holds for non-presidential election years. In 2006, a state with a low level of Senate polarization had a 0.44 predicted voter turnout rate. A state with a medium amount of Senate polarization had a 0.48 predicted voter turnout rate, and a state with a high level of Senate polarization has a 0.53 voter turnout rate when other important variables are held constant at their mean value.

Figure 5.2: Predicted Voter Turnout By Polarization Level Considering Ideology



5.4 Summary

The results in this chapter show that polarization is an important predictor of voter turnout. States that have high polarization compared to low polarization have a 0.10 greater predicted turnout rate. The models perform equally well regardless of whether Senate polarization or House polarization is included as a predictor. Additionally, the partisan and ideological tendencies of the electorate seem to matter as well. Electorates that identify as more Democratic or more liberal both have a higher predicted voter turnout rate than states who have a more Republican or conservative electorate.

Chapter 6

CONCLUSION

The analyses in the previous chapters have demonstrated that polarization is an important factor that influences voter turnout at both the individual and aggregate levels. In this section, I provide a discussion of the findings from the three empirical chapters, and I offer some suggestions for future research.

The chapter that presented evidence of polarization arrived at one basic but important conclusion: Political elites are very polarized, but the American electorate is much less so. Despite the fact that voters are less polarized than legislators, the public still has sorted into like-minded groups. This feature of the electorate is undeniably due to the behavior of political elites. As members of Congress and legislators in our statehouses have become more polarized, the public has picked up on those division, and it is now reflected in the policy preferences of voters. This feature is largely seen in the Basic Space Scaling models of issue preferences.

The survey based analyses show many interesting things about polarization and congressional elections. However, the most important thing to take away from the analyses is that polarization affects voters differently depending on the type of political behavior under consideration. For starters, polarization seems to affect voters differently based on their partisan identification. In most instances found the analyses, strong partisans behaved differently in the context of a highly polarized party system than did voters who identify as Independent partisans, which was largely seen in the affective evaluations and vote choice analyses.

Independents evaluated Republicans and Democrats similarly in terms of affect under the no polarization condition as they did under the high polarization condition.

This finding meshes well with what we know about voters who identify as Independents. They have less attachment to political parties, so it is perfectly understandable that they are unmoved by polarization in their evaluations of the party system.

By contrast, strong partisans are very much influenced by polarization when it comes to affective evaluations of the party system. Polarization significantly increases positive evaluations of their own party, and it decreases positive evaluations of the opposition party. In each of the models, strong partisan evaluations moved to the maximum value of the affect scale under high polarization when they were asked to evaluate their party, and strong partisan evaluations moved to the minimum value of affect when they were asked to evaluate the opposition party. This finding also meshes well with what we know about strong partisans. They display a very high level of attachment to their party label, and they vehemently oppose the candidates and policies of the opposition, which leads to negative affective evaluations. Strong partisans are the most likely type of voter to pay attention to political campaigns, which is why they are the group most affected by elite discourse when it comes to affective evaluations of the party system.

In terms of vote choice, polarization seemed to drastically influence the vote choice of pure Independents. This can be seen by the changing pattern among pure Independents from the 2012 to the 1992 election. In the former election, they were more likely to prefer the Democratic candidate. However, in the other election, voters who identified as pure Independents were more likely to vote for the Republican candidate. This change in vote preference can be explained by two things.

First, the context of the election may matter greatly for Independent voters. Things such as majority party performance, candidate approval ratings, the state of the economy, or other extraneous current events may have a larger influence on pure independent vote choice. Second, the influence of elite discourse should matter

more for pure Independents than it should for other types of voters. While strong partisans are the most likely to receive the information contained from elite discourse, pure Independents are the most likely to have their behavior altered from elite discourse that emanates from a highly polarized election. This coupled with the context of the election explains why an Independent voter could have their party preference change from election to election.

Among Independents who lean toward one of the major parties, the vote choice model suggests that these types of voters display similar – but certainly not identical – behavior to the strong partisans when it comes to polarization and vote choice. In 2012, Democratic leaning Independents saw a significant, positive change in voting for the Democratic Senate candidate, but Republican leaning Independents saw very little change in the probability of voting for the Democratic candidate. However, the results were completely opposite during the 1992 election: Republican leaning Independents saw a significant, positive change in voting for the Republican candidate, but the vote choice among Democratic leaning Independents was largely unchanged. This result suggests that Independents who lean to one particular party are less influenced by the context of the election, and they are less likely to be swayed by the information that comes from political elites of the opposing party.

The analyses pertaining to affective evaluation and vote choice illustrate how polarization affect voters differently. However, the analyses for party salience and voter turnout show that polarization can invoke a similar response among different types of voter. For instance, the party salience models suggest that polarization increases the probability that voters will have something to say about each of the respective parties. In each of the 1992 salience models, Republicans, Independents, and Democrats had similar rates of change in the number of comments provided in their post-election interviews as polarization moved from its minimum to maximum value. Additionally,

each of these party salience models nearly converged at the same probability of never providing a comment about either of the parties.

These result suggest that polarization can and does increase the number of comments that voters have about each of the parties. In this sense political information from elites only causes voters to provide an evaluation of what they see or hear. In this case, there should be no difference in the number of comments that voters provide. As polarization increases, voters are more likely to voice their opinion. One drawback of these analyses is that they do not have a directional component to comments. In other words, we don't know whether the number of comments are positive or negative. However, based on the results found in some of the other analyses of this chapter, I would hypothesize that the number of positive comments would increase for like-minded partisans and their associated leaning independents, and they would decrease for opposition partisans and opposition leaning independents.

Finally, the voter turnout analyses suggest that polarization increases the probability of voting for all types of partisans, age groups, and education levels. I initially expected that the greatest amount of change in the probability of voting would come from Independents because they the most room for movement in their probability of voting. However, the strong partisans moved at an equal rate even though they are already the most likely to vote. Strong partisans are already predisposed to casting a vote, but the fact that they displayed as much change as the Independents under a highly polarized shows the power that elite discourse can have on the decision to vote.

The results in the aggregate chapter show that polarization has the propensity to drastically increase voter turnout rates at the state-level. States with higher levels of polarization displayed had higher predicted rates of voter turnout than did states with

lower levels of polarization. This is encouraging because it shows that polarization can have a positive impact on the electorate.

In the end I feel that this project was mostly successful. The evidence of polarization chapter clearly showed that legislators are polarized. It is doubtful that further research would cast doubt on this conclusion. However, further advancement in the field could help scholars address whether partisanship or ideology is ultimate cause of polarization at the elite-level.

As far as evidence of polarization for voters, further research could benefit from a few small tweaks. First, researchers could collect more data to see if the electorate is polarized. So far, scholars have primarily relied on the ANES as their main source of data about voters. Other surveys such as the Cooperative Congressional Election Survey could prove useful in this endeavor. Additionally, the ANES has a limited amount of questions that are asked in a consistent way over time. This make over time comparisons somewhat difficult. Researchers could start asking questions more consistently over time. Finally, surveying the same individuals over time could prove useful.

Turning to the individual-level analyses of voter turnout and polarization, it may be useful for other scholars to move outside of the survey framework. Experiments and social network analyses could prove useful for understanding how voters incorporate information from political elites.

I think that the most room for improvement could come from the aggregate analyses. This project would certainly be aided by having a longer time frame with which to work. The roll-call voting records at the state-level have made considerable strides thanks to the work of Shor and McCarty. However, it would be nice to have records that go farther back in time. The same is true for the VEP time series.

In conclusion, many observers of American politics have postulated that polarization is bad for democracy. However, I have gone to great lengths to show that not every aspect of polarization is negative. A continual theme found in this dissertation is that polarization produces greater turnout.

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