STEREOTYPES AND POLITICS

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NBER Working Paper No. 27194
May 2020
JEL No. D03,D8,D91

ABSTRACT

We examine US voters' beliefs about views held by Republicans and Democrats. While individuals exaggerate partisan differences on a range of socioeconomic and political issues, we document that belief distortions are larger on issues that individuals consider more important. We organize these facts using a model of stereotypes where distortions are stronger for issues that are more salient to voters. In line with the model, belief distortions are predictable from the differences across parties, in particular the relative prevalence of extreme attitudes. To assess the impact of issue salience, we show that the end of the Cold War in 1991, which shifted US voters' attention away from external threats and towards domestic issues, led to an increase in perceived polarization in the latter, and more so for issues with more stereotypical partisan differences. The reverse pattern occurred after the terrorist attacks in 2001, when attention swung back towards external threats. The distortions we identify are quantitatively significant, and could have important consequences for political engagement as such distortions strongly predict voting turnout.

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1 Introduction

The recent changes in the political landscape in the US and Europe have sparked renewed interest among social scientists on the dynamics of political behavior. One line of research has focused on whether voters and political parties have become more polarized in their positions.[1] Other work has examined voters' perceptions of others' political attitudes, documenting that perceived partisan differences significantly inflate actual ones (Bordalo et al., 2016; Westfall et al., 2015). In this paper, we provide further evidence on the drivers of such distortions, and the political implications that these might generate.

We start by documenting two facts, using nationally representative survey data from the American National Election Studies (ANES), which elicit political behavior (e.g. voting or making political contributions), political attitudes, and *beliefs* about political attitudes held by Republicans and by Democrats. First, exaggerated beliefs about partisan differences strongly predict political engagement: individuals who perceive larger partisan differences are significantly more likely to report they voted, made political contributions, and participated in political campaigns. These patterns hold, quantitatively and qualitatively, also when we control for factors typically associated with political engagement, such as demographics, socioeconomic status, own attitudes, and strength of partisan identification. Focusing on self-identified partisans, our evidence suggests that this is primarily driven by distortions in beliefs about how distant the *other* party is from one's own party.[2] Second, while individuals exaggerate differences between Republicans and Democrats on a range of socioeconomic and political issues, such exaggerations are larger on issues that respondents consider more important and pressing for the country. In other words, individuals make *larger* mistakes in their perception of partisan differences on the dimensions that are *more* salient to them.

These facts suggest that understanding the drivers of perceived polarization is important to accounting for voting behavior. To this effect, we develop and test a model in which beliefs about political attitudes reflect stereotyping, and stereotyping is stronger for more salient issues. Stereotyping captures the tendency of probabilistic assessments to overweigh the prevalence of the types that are easily accessible in mind, which often are the types that are more likely in one group *relative* to a comparison group (Kahneman and Tversky, 1972; Gennaioli and Shleifer, 2010; Bordalo et al., 2016). As an example, while wealthy individuals are more prevalent among Republicans than among Democrats, only an estimated 2% of Republicans earn more than $250,000 per year.

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[1]For the US, some authors have argued that actual ideology has not changed much since the 1970s (Fiorina et al., 2006; Fiorina and Abrams, 2008; Bertrand and Kamenica, 2018; Desmet and Wacziarg, 2020) while others have emphasized that ideological differences between partisans have dramatically increased (Abramowitz and Saunders, 2008; Iyengar et al., 2012; Mason, 2014; Gentzkow, 2016; Abramowitz, 2018; Boxell et al., 2020; Wu, 2020).

[2]This is consistent with voters' perceptions of partisan differences (i.e., perceived polarization) having a first order effect on political engagement (Davis et al., 1970), and has been documented by prior works such as Westfall et al. (2015). In fact, individuals may be more inclined to turnout to vote if they perceive larger differences across parties, particularly if they perceive parties farther from their own political preferences to be extreme.

Yet, popular beliefs assume that this share is much higher — in one survey, the average stated share is above 30% (Ahler and Sood, 2018). In this approach, in line with cognitive psychology (Schneider, 2004), stereotypes exaggerate true differences across groups. As a consequence, they can account for the observed exaggeration in perceived partisan differences. This mechanism has been applied to political beliefs in Bordalo et al. (2016); Gennaioli and Tabellini (2019) (we return to these below).

Since the importance attached to specific issues varies across individuals and over time, the natural tendency to stereotype may be diluted for issues that are not top of mind. Our assumption that issue salience modulates the strength of stereotyping resonates with the finding that respondents exaggerate partisan differences more on issues they deem more important, but its motivation runs deeper. Evidence shows that, when attention is directed to a sensorial stimulus, such as size or brightness, differences along that dimension are perceived to be larger, while differences in other, relatively neglected dimensions are judged to be smaller (Nosofsky, 1988). Similarly, when attention is focused on one issue, it leverages the disproportionate accessibility of the types that are representative along that issue. When attention is less engaged, differential accessibility of types matters less. In this view, representativeness and stereotyping are latent characteristics that are activated when issues draw attention. An implication of this view is that issues are linked to each other through salience: the more attention is devoted to one issue, the less is engaged in others, so that the strength of stereotyping is negatively correlated across issues perceived as distinct. In turn, this mechanism implies that exogenous shifts to the salience of one issue impact beliefs about other issues as well.

Our framework generates several predictions that shed light on the link among political attitudes, stereotyping, issue salience, and beliefs about political groups. First, and in line with previous findings in Bordalo et al. (2016), we confirm that belief distortions are predictable from the true distributions of political views within each party: beliefs about partisan differences are exaggerated more on issues where extreme types are more representative.[3]. Representativeness-induced belief distortions are quantitatively large: according to our estimates, the exaggeration of partisan differences for issues at the top 75th percentile of tail representativeness is 5% higher than that for issues at the bottom 25th percentile.

Second, we show that shocks to issue salience change beliefs about partisan differences. To attach a causal interpretation to the relationship between salience and belief distortions, going beyond the individual-level correlations described above, we exploit a major, exogenous shock to issue salience: the end of the Cold War in 1991. From the American perspective, the dissolution of the Soviet Union and the collapse of the communist regimes in Eastern Europe represented a

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[3]Throughout the paper, we interpret survey data on beliefs about a party's position as capturing beliefs about the average position of members of that party — a common assumption in the literature (Westfall et al., 2015; Boxell et al., 2018). We present evidence that our results are unlikely to be driven by ANES respondents reporting beliefs about elites, political leaders, or otherwise more visible representatives. We discuss issues of mis-measurement in greater detail in Section 6.

dramatic and unexpected reduction in the salience of external threats. We present evidence from the ANES that the share of American voters who considered national defense related issues as more pressing sharply decreased right after 1991. Conversely, the share of Americans who viewed domestic issues, such as social welfare and race relations, as most pressing nearly doubled right after 1991, moving from 45 to almost 80 percent in less than 4 years. Consistent with the model's predictions, as external threats faded away with the end of the Cold War, exaggeration of beliefs on partisan differences dropped on external issues such as defense spending, and increased on domestic ones. Both patterns are statistically and quantitatively significant, and are driven by movement in beliefs, rather than by changes in respondents' positions.

Third, we show that salience influences beliefs by modulating the strength of stereotyping: as predicted by the model, issue salience affects the extent to which beliefs overweigh extreme, representative types. Focusing on domestic issues, which became more salient after the end of the Cold War, we exploit two complementary, but distinct sources of variation. We first exploit the Cold War shock to issue salience, and document that domestic issues that were more representative before 1991 experienced a significantly larger increase in belief distortions after 1991. Next, leveraging within issue variation and relying on individuals' reported beliefs, we show that the interaction of self-reported issue salience and representativeness significantly predicts belief distortions. These results indicate that issue salience and partisan representativeness are complementary forces shaping individuals' exaggeration of partisan differences.

The three patterns described above are robust to a range of specifications of true partisan differences and of elicited beliefs, and hold across a variety of subsamples. Our most stringent specification includes individual and survey wave fixed effects, implying that the analysis solely exploits within-individual across-issue over-time variation.

These patterns are not specific to the end of the Cold War, and are instead likely to apply to a broader range of contexts. First, we observe the exact opposite patterns after 2001, when the salience of external threats re-emerged as a result of the September 11th terrorist attacks and the subsequent Afghanistan and Iraq wars. We show that not only did Americans shift their attention away from domestic issues and towards external ones after 2001, but they also significantly lowered (raised) perceived partisan differences on domestic (external) issues, again controlling for true differences. Second, we structurally estimate the model on the basis of the Cold War shock. We estimate the belief distortion parameter, which captures the strength of stereotyping, to be around 0.3 for non-salient issues and 0.4 for salient issues. The calibrated model performs well out of sample, both in predicting beliefs after the terrorism shock and in explaining within-respondent variation in beliefs as a function of (individual-specific) issue salience. The estimated values are comparable to those estimated in other settings, including laboratory evidence on beliefs about gender ability (Bordalo et al., 2019a) and survey-based expectations about firm earnings (Bordalo et al., 2019b). This suggests that the same underlying cognitive mechanism identified in other contexts may account for a sizable part of the biases observed in our political context as

well. Crucially, results also reveal a strong role for variations in issue salience, which in our data modulates belief distortions by up to 35%.

The interpretation of our results has, so far, abstracted from "supply side" drivers of belief distortions (Murphy and Shleifer, 2004). For example, shocks to issue salience due to the end of the Cold War might have been accompanied by "supply side" responses in which party leaders or the partisan media took more extreme positions on domestic issues, as parties sought to establish new dividing lines (Glaeser et al., 2005). By shaping popular views about political parties, such responses might influence our results if party leaders strategically adopted more extreme positions on more stereotypical issues. Our analysis suggests that this channel cannot fully explain our results, and points to a richer interaction between supply of and demand for political messages.

First, the positive relationship between issue salience and beliefs about partisan differences holds *within individuals*, even when controlling for any — observed and unobserved — time varying issue specific characteristics, which could include strategic response of politicians. Second, results are unchanged both when focusing on partisans who do not strongly identify with their party and, more importantly, when including independent voters, who are less likely to be captured by a partisan biased political discourse. Third, we do not detect any further increase in the strength of stereotyping after 1996, when the roll out of Fox News Network unfolded and influenced election outcomes in 2000 (DellaVigna and Kaplan, 2007). Finally, even if a supply channel of polarizing political messages were to be at play, we argue that it would be consistent with the stereotype mechanism we propose. In a world where there is no shortage of supply of political messages, the binding constraint may be the take-up by voters. Polarizing messages may gain traction when the issues at hand are salient to voters or when they have strong but latent stereotypes.[4]

Taken together, our evidence suggests that beliefs about partisan differences reflect stereotypes – in the sense of overweighting extreme, representative types – for issues that are salient to voters. Our results also indicate that beliefs about political groups can shift dramatically even when the underlying fundamentals change little, provided an issue's relative salience changes or extreme positions become relatively more frequent. The historical context of the end of the Cold War also points to a mechanism that social scientists have been long speculating about. That is, the sudden appearance of an "external threat" can unite a country, as citizens perceive each other as more similar.[5] The removal of a common enemy can have the opposite effect, inducing citizens to perceive each other as further apart on a variety of domestic issues, ultimately undermining

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[4]Consistent with this view and our results, recent work by Giavazzi et al. (2020) shows that shocks to public opinion caused by terrorist attacks increase voters' alignment with the values historically promoted by a right-wing populist party in Germany (AfD). That is, holding constant parties' rhetoric and position, changes in issue salience move voters closer to politicians, rather than the other way around.

[5]Levendusky (2018) finds that priming common identity can reduce affective political polarization in the US. Milder version of external threats can be induced via sports competitions, as Depetris-Chauvin et al. (2018) show that victories in national football tournament in sub-Saharan Africa increased national identity and decreased specific ethnic identities.

social cohesion in the country. Importantly, as we demonstrate, the appearance or disappearance of external threats needs not change the *actual* underlying political attitudes and ideology among citizens in order to create shifts to national unity and citizens' beliefs about each other.

Other frameworks have been proposed to explain beliefs about political groups. Westfall et al. (2015) suggest that beliefs reflect individual characteristics such as partisanship and extremeness of views. This, however, is inconsistent with the role of issue salience in driving belief distortions. In fact, the end of the Cold War represents a shock common to all American voters. Another explanation for distortion in beliefs is rational inattention (Matèjka and Tabellini, 2017). The fact that distortions are larger for more salient topics is hard to reconcile with a rational inattention mechanism, in which voters would be better informed about issues that are important to them. Yet another view, more generally related to motivated reasoning and affective politics, is that beliefs about political groups may be motivated by individuals' preferences (Benabou and Tirole, 2016), so that more extreme positions are attributed to members of a group that is disliked (Iyengar et al., 2018). In contrast to this account, we find that salience-induced distortions in beliefs about partisan differences are quantitatively similar between strong and weak partisans, and if anything more pronounced among the latter. This account also does not naturally produce the salience-driven dynamics in belief distortions that we document. These considerations suggest that, even though motivated beliefs driven by partisan identity might shape individuals' view about partisan differences, such channel is likely orthogonal to issue salience and representativeness that we examine in this paper.[6]

Our paper contributes to the recent, growing literature that studies beliefs in the context of politics and identity.[7] Closest to our paper, Gennaioli and Tabellini (2019) present a model where issue salience and group identification are derived from actual differences across voters. In their model, not only individuals stereotype the resulting groups (as in our work), but they also "slant" their attitudes to the average attitudes of their in-group, as in social identity theory (Tajfel and Turner, 1979). Our analysis abstracts from the channel that connects beliefs to preferences (through social identification), which can generate significant political realignments as those experienced in Western countries in recent decades (Piketty, 2018). Instead, our paper highlights the malleability of beliefs to changes in issue salience, which can arise following exogenous shocks, and their interaction with latent stereotypes. In a different context, Fouka et al. (2019b) document that the 1915-1930 migration of African Americans to the US North facilitated the assimilation of previously arrived European immigrants, presumably by reducing native whites' perceived distance between themselves and the immigrants.[8] We complement this work by emphasizing the impli-

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[6]Since emotion and affective politics might be stimulated as issues become more salient, they would exaggerate the stereotype-based belief distortions driven by cognitive factors.

[7]A series of papers have documented theoretically and empirically that individuals tend to identify with groups that have higher socioeconomic status (Shayo, 2009; Grossman and Helpman, 2019; Atkin et al., 2019).

[8]In a companion paper, Fouka et al. (2019a) show that Mexican immigration to the US between 1970 and 2010 reduced prejudice and improved attitudes of native whites towards African Americans, by raising the salience of nativity, relative to race, as the key feature that defines in- and out-group boundaries in the society.

cation of stereotype-based belief distortions to the domain of political attitudes, especially beliefs about political groups. We demonstrate that shifts in issue salience have the potential to induce substantial changes in perceptions of other political groups, with significant implications for political behavior including voting. As such, our analysis provides new insight into the potential benefits, but also the challenges, to political entrepreneurs who try to shape issue salience.[9]

The rest of the paper is organized as follows. In Section 2, we describe the data used in our paper, and then present stylized facts on US citizens' beliefs about partisan differences. In Section 3, we lay out a model of political stereotypes motivated by these stylized facts, and derive the three predictions that guide our empirical analysis. In Section 4, using a variety of sources, we document that the end of the Cold War triggered an abrupt change to issue salience among American voters. In Section 5, we map the predictions of the model to the data, and present our key empirical findings. Section 6 discusses various issues regarding internal and external validity, including the estimation of model parameters. Section 7 concludes.

2   Perceived partisan differences: data and stylized facts

We use the American National Election Studies (ANES) to measure citizens' own political attitudes, as well as their perception of partisan differences over time. Section 2.1 describes the ANES and introduces the survey questions that we use. Next, Section 2.2 presents three stylized facts: *(i)* individuals who perceive higher partisan differences are significantly more active in the political domain; *(ii)* respondents systematically over-estimate partisan differences; and *(iii)* people perceive larger partisan differences on issues that they consider as more important for the country.

2.1   The American National Election Studies (ANES)

The ANES is a nationally representative survey on public opinion and political participation in the United States, conducted since 1948 by the University of Michigan every two years until 2004, and every four years afterwards. It is widely considered the "gold standard" for data on political views and ideology in the US (Gentzkow, 2016), and has long been used in political science and political economy. Surveys are mostly run using face-to-face interviews in respondents' homes — a feature that guarantees data quality.[10] The ANES asks questions on demographics, party affiliation, strength of partisanship, political engagement, ideology, and political attitudes. Also, and crucially for our purposes, since the early 1980s it has consistently elicited respondents' beliefs about political attitudes held by the Democratic and the Republican parties on a range of socioeconomic and political issues.

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[9]This complements works such as Enke (2019) that highlights the cultural and moral foundations of political attitudes, which aim to explain cross-sectional variations and long-run trends.

[10]More details on ANES sampling methodology can be found here: `http://www.electionstudies.org/wp-content/uploads/2018/04/nes012492.pdf`.

For most of the paper, we focus on the period between 1980 and 2000, which allows us to examine the effect of the end of the Cold War on perceived partisan differences.[11] Between 1,275 and 2,300 individuals were surveyed in each wave, yielding a total of more than 20,000 respondents. In order to compare actual and perceived partisan positions across issues, our baseline analysis is focused on the subsample of ANES respondents who self-identify as either Republicans or as Democrats.[12] During our sample period, Democrats and Republicans account for, respectively, around 40% and 25% of respondents (see Appendix Figure A.1), so this restriction reduces the number of respondents per survey wave to the range of 600-1,200 for a total of approximately 10,500 respondents.

We focus on the six socioeconomic and political issues for which the ANES elicits both own attitudes and beliefs on the attitudes of Democrats and Republicans. These are: *(1)* defense spending; *(2)* whether the government should actively provide job-related aid; *(3)* whether the government should do more or less to aid African Americans and other minorities; *(4)* whether government spending on items such as health and education should be increased or decreased; *(5)* whether men and women should have equal roles in society; and *(6)* a broadly defined liberal vs. conservative scale.[13] Respondents can answer on a scale of 1 (most liberal) to 7 (most conservative). The exact wording of questions asked to infer respondents' own positions is presented in Table 1, and remained largely unchanged throughout the survey waves that we focus on.

After the questions on "where would you place yourself on this scale" for each of the six issues described above, respondents are then asked about their beliefs about the average positions of the Democratic and Republican Parties for each of these attitudinal dimensions. The questions read:

1	Where would you place the Republican Party? [on a scale of 1-7]
2	Where would you place the Democratic Party? [on a scale of 1-7]

For every attitudinal dimension and survey wave, we construct a measure of each respondent's beliefs about partisan differences by taking the difference between her beliefs about the position of the Republican Party and her beliefs about the position of the Democratic Party. Perceived partisan differences are, on average, positive, since across all issues the Republican Party is always (perceived to be) more conservative than the Democratic Party. We also measure actual partisan differences for each of the corresponding issues in each year, based on the Democratic and Republican respondents' own attitudes. Specifically, for each issue-year, we construct the av-

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[11]In Section 6, we extend the time horizon to 2004, in order to include the survey conducted after the terrorist attacks of September 11, 2001.

[12]However, as documented in the appendix, results are robust to including individuals who identify as Independents. Implicitly, our sample also restricts to respondents whose individual characteristics and ideology (including beliefs on party positions across issues) are available.

[13]Appendix Table A.1 presents the survey waves for which questions on these issues were asked. In related work, Westfall et al. (2015) consider the following four additional issues: *(1)* cooperation with Russia; *(2)* urban unrest; *(3)* rights of the accused; and *(4)* school busing. Since these questions are available only for pre-1990 years, we do not include them in our analysis.

erage stated position by respondents that identify with either party, and then take the difference between the average position of Republicans and the average position of Democrats.

Following previous work (Boxell et al., 2018; Westfall et al., 2015), we interpret responses to questions 1 and 2 reported above as reflecting respondents' beliefs about the average member of the corresponding political parties. We acknowledge that these questions do not specifically ask about party members, but rather, about the parties as a whole. If beliefs about party members' position differ from respondents' beliefs about the position of the party, there might be a wedge between our measure of beliefs about partisan differences and our proxy for actual partisan distance. Unless this gap were to vary across issues and change differentially over time, this should not affect the interpretation of our empirical results.[14] More importantly, our results suggest that belief distortions are driven by the relative prevalence of members with given positions across parties, so that views about Democrats depend systematically on the distribution of Republicans. Such a structure is not easily reconciled with respondents anchoring their answers on a different, yet unbiased, moment of the party distributions.

Finally, we construct a measure of issue salience at the respondent level, relying on a specific question that asks to list (up to) the three most important problems facing the country, and to then identify the single most pressing one. The exact question wording is as follows: *(1)* "What do you think are the most important problems facing the country?" (up to three issues are recorded); and *(2)* "Of those problems you have mentioned, what would you say is the single most important one?" These questions are open-ended in the raw data, and the ANES assigns responses to a number of categories. We match each category to one of the issues for which we have data on beliefs about parties' positions. In this process we have to omit the broad "liberal-conservative" issue, for which no corresponding category exists in the ANES classification. When considering the most important problem question, we are thus left with five sets of issues: *(1)* defense spending; *(2)* aid to African Americans; *(3)* government spending (e.g. on social welfare programs); *(4)* job aid (e.g. unemployment compensations); and *(5)* women's role and rights.

2.2 Stylized facts about perceived partisan differences

Perceived partisan differences predict political engagement   We first examine if perceived partisan differences are associated with political engagement. Conducting an analysis similar to that reported in Westfall et al. (2015), Figure 1 plots the point estimate (with corresponding 95% confidence intervals) for a regression of self-reported political behaviors — voting, intention to vote, making political contributions, and working for a political campaign — on average perceived partisan differences across all issues.[15] All regressions partial out survey wave fixed effects (which

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[14]We discuss how potential mis-measurement might pose a threat to our empirical strategy in greater detail in Section 6.

[15]Bernstein et al. (2001) document that US voters may over-report their voting behaviors in surveys. To the extent that self-reported voting is not differentially exaggerated for individuals with different perceived partisan differences,

then implicitly control for average actual partisan differences) and a set of individual controls including age, age squared, education, marital status, religion, party affiliation, an indicator for being a "strong partisan", and the average position held by the respondent across issues.[16] Table 2 examines the relationship more formally, focusing on a dummy equal to one if any of the political actions considered in Figure 1 is reported by the respondent.

The pattern that emerges is striking: perceived partisan differences are positively and strongly associated with political engagement, even after controlling for respondents' own political attitudes. Comparing two individuals at the 75th and 25th percentiles of perceived partisan differences, the former is almost 8 percentage points more likely than the latter to take any political action. The correlation becomes somewhat smaller when controlling for race and gender, but remains highly statistically significant (Table 2, Column 5).[17] The magnitude of our estimates is large even when compared to findings from the existing literature on the relationship between political engagement and individual characteristics. For example, Leighley and Nagler (1992) document that, after controlling for education and a host of additional individual characteristics (e.g. income, occupation, age, and marital status), African Americans are between 3.6% and 10.1% more likely to vote relative to whites, whereas women are between 0.2% and 1.5% more likely to vote than men. Controlling for a similar set of covariates, we find that a 50th percentile increase in perceived partisan differences, on the other hand, is associated with a 7.8% higher probability of voting.[18]

We can decompose perceived partisan differences into two components: the perceived difference between one's own political attitudes and the position of the opposite party, and that of one's own party. We observe that both differences are strongly associated with political engagement (Table 2, Column 3). Though causality is not established, this suggests an intuitive rationale for the role of perceived partisan differences in turnout decisions: the more extreme the "other" party is perceived to be, the more likely one is to vote.

Perceived partisan differences exaggerate actual differences   We next examine the extent to which perceived partisan differences correspond to actual differences between Democratic and Republican ANES respondents, replicating the patterns documented by prior works such as West-

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such over-reporting would not affect the interpretation of our results presented here.

[16]To ease the interpretation of results, both perceived partisan differences and each political action are standardized by subtracting the mean and dividing through the standard deviation.

[17]In unreported regressions, we also control for respondents' thermometers towards own and opposing party as proxies for affective polarization, which has been found to predict political behavior (Mason, 2014). However, after controlling for perceived distance between parties, the relationship between affective polarization and political behavior was no longer statistically significant and became quantitatively small.

[18]Due to data limitation we are unable to control for income and occupation. However, we include dummies for educational attainment, age, gender, race, marital status, as well as partisanship and average individual position on the various ANES socioeconomic issues. The 7.8% higher voting probability is obtained by multiplying the coefficient on average perceived partisan differences (0.023) by the interquartile range of perceived partisan differences (2.5), and dividing it through the average of the dependent variable (0.73).

fall et al. (2015). In Figure 2, we plot, for each issue-year combination, average perceived partisan differences against their actual counterpart. As it appears, perceived partisan differences strongly correlate with actual ones: ANES respondents perceive partisan differences to be larger when actual differences between Democrats and Republicans are higher.[19]

At the same time, however, beliefs about partisan differences systematically exaggerate actual ones: the constant for the regression corresponding to results plotted in Figure 2 is 0.845 (s.e. = 0.096), making all the dots fall above the 45 degree line. Taken literally, this means that in the case where actual differences were equal to zero, perceived partisan differences were exaggerated by almost 1 point (out of 7). To more directly assess such exaggerations, Table 3 presents the summary statistics at the issue level, on actual and perceived partisan differences (Panels A and B), as well as on the difference between the two (Panel C).[20] On average, the actual difference between Republicans and Democrats across domestic issues is approximately 1 unit (on a 7-point scale), and is around 0.7 unit for external issue (namely, defense spending). Consistent with Bordalo et al. (2016) and Westfall et al. (2015), perceived differences are almost twice as large — ranging from 1.1 (for women's role in Column 7) to 2.1 (for the broad liberal-conservative issue in Column 3), with an average of 1.7.[21]

Perceived partisan differences are more distorted on more salient issues On average, perceived partisan differences systematically exaggerate actual ones. However, there exists substantial heterogeneity in beliefs about partisan differences across issues, as well as in their exaggeration relative to actual differences (Table 3, Panel B). Such heterogeneity remains even *within* respondents and, as we document next, is systematically associated with the salience of the issue perceived by the respondent.

To assess the role of issue salience on beliefs, we regress the perceived partisan difference on a given issue against an indicator for whether the respondent identifies that issue as the most important problem facing the country at the time of the interview. Table 4 presents the results. The unconditional correlation between perceived partisan differences and issue salience is positive, statistically significant, and quantitatively large. According to the coefficient reported in Column 1, perceived partisan differences by an individual are 0.3 units (or, 16%) higher on the most important issue, compared to those on the other issues.[22] This relationship remains unchanged when including survey wave and individual fixed effects (Column 2). In Column 3, we

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[19]This strong correlation also alleviates concern that ANES respondents may be thinking exclusively about differences in party platform and political leader when they answer questions on "where would you place the Republican/Democratic Party."

[20]Appendix Table A.2 presents more detailed summary statistics on the distribution of respondents' position on each issue, before and after the end of the Cold War.

[21]As noted also in Gentzkow (2016), actual and perceived partisan differences on the role of women in the society are rather small, probably due to the fact that both Democrats and Republicans hold relatively liberal views on this issue.

[22]Due to data limitation, we can only evaluate the impact of issue salience, measured in terms of its ranking, and not based on a continuous measure of salience. Our conjecture is that a ranking-based indicator, as the one constructed here, is likely to provide a lower bound for the effects of issue salience on beliefs about partisan differences.

control for respondents' position on the issue as well as for the actual average difference between Republicans and Democrats on that issue. The magnitude of the coefficient falls by almost one third — naturally, as perceived differences reflect actual differences — but remains statistically and quantitatively significant. In particular, the respondent's own position plays a small role in driving belief distortions. Column 4 further augments the set of controls by including issue fixed effects.

Finally, in Column 5, we control for issue×year fixed effects, and the coefficient remains nearly unchanged. Together with the individual fixed effects, this specification only exploits variations in issue salience *within* respondent *within* a given year, netting out the average perceived salience of the corresponding issues during that particular year. In other words, the positive association between issue salience and perceived partisan differences is not driven by changes in issue salience common to all respondents, such as shifts in politicians' policy platform, or extreme political messages tailored to the most salient socioeconomic issues. Holding these (potential) "supply side" factors fixed, respondents who happen to consider one issue as more pressing perceive larger partisan differences on that issue, compared to other respondents who perceive another issue as more pressing during the same year.

Taken together, our evidence indicates that individuals exaggerate perceived partisan differences more on issues that are *more* salient to them. Moreover, these distortions are unlikely to arise exclusively from the strategic behavior of politicians. Motivated by the set of stylized facts presented here, in Section 3, we introduce a conceptual framework that accounts for voters' inaccurate beliefs where distortions depend on group stereotypes, issue salience, and the interaction between the two. The model generates testable predictions, which we then take to the data in Section 5.

3   Political stereotypes

Starting with Kahneman and Tversky (1972), a growing body of work points to systematic departures from the benchmark of statistically optimal beliefs, from simple probabilistic judgments to the formation of expectations. According to Tversky and Kahneman (1983), probabilistic judgments overweigh information that comes easily to mind, which can entail departures from the rational benchmark. Can such cognitive mechanisms help explain the distortions in beliefs about political groups documented above?

Assessments of social groups often reflect the use of the representativeness heuristic, whereby a type is perceived as likely in a group if it is merely representative, namely if it is more likely in that group than in a relevant comparison group (Gennaioli and Shleifer, 2010). Consider for example the assessment of the wealth distribution among Republicans. Even though being very wealthy is rare among Republicans (only 2% of Republican households have annual income above

$250,000), it is more common among Republicans than among Democrats.[23] As a consequence, wealth comes easily to mind when thinking about Republicans, and as such its prevalence is over-estimated. Indeed, average survey respondents believe that as many as 38% of Republicans earn more than $ 250,000 (Ahler and Sood, 2018). Bordalo et al. (2016) show that this mechanism gives rise to belief distortions and to social stereotypes, including in the political domain.

To examine whether biased political beliefs reflect stereotypes about political groups, and if such distortions get amplified when issues become more salient, we describe testable predictions about the type and extent of distortions that arise, which we later take to the data. In Section 3.1, we outline the stereotypes model as applied to our setting; we present the model's predictions in Section 3.2.

3.1 Stereotypes and perceived partisan differences

There are two political groups, $g \in \{D, R\}$ for Democrats and Republicans, and two issues $j \in \{d, e\}$ for domestic and external. Members of each group hold positions on each issue j. Because the data consist of repeated cross sections, we take as a primitive the distribution of positions across groups.

Formally, we denote by $p_t(x_j|g)$ the share of members of group g at time t who hold position $x_j \in X$ on issue j. Here X is a scale, e.g. $\{1, \ldots, 7\}$ common across issues and over time, such that on average Republicans choose higher levels of x. The average position of group g on issue j at time t is then

$$\overline{x}_{j,g,t} = \sum_{x_j \in X} x_j \cdot p_t(x_j|g)$$

with $\overline{x}_{j,R,t} > \overline{x}_{j,D,t}$ for all issues j and survey waves t. We also observe individuals' beliefs about the current average position of each group on each issue — that is, the belief about the contemporaneous $\overline{x}_{j,g,t}$. Here we abstract from heterogeneity across respondents, and denote the average belief by $\widehat{x}_{j,g,t}$. For simplicity, we now omit the time index.

Following Bordalo et al. (2016), individuals' beliefs about the positions of g-members on issue j are distorted by putting too much weight on those positions that are more representative of g, that is, that are more typical of or associated with g relative to the comparison group, denoted $-g$. The statistical notion of association between a position and a group is that of diagnosticity, or relative likelihood. Formally, the representativeness of position x for group g is defined as

$$R(x_j, g) = \frac{p(x_j|g)}{p(x_j|-g)} \tag{1}$$

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[23]The estimated share of Democrats with annual income above $250,000 is around 0.5%.

and stereotypical beliefs about g on issue j are

$$\hat{p}(x_j|g) = p(x_j|g) \cdot R(x_j,g)^{\frac{\sigma_j}{\sum_l \sigma_l}} \cdot \frac{1}{Z_{jg}} \tag{2}$$

where $\sigma_j \geq 0$ is the salience of issue j and Z_{jg} is a normalizing constant.

Equation (2) has two key features. First, beliefs are anchored to the true distribution $p(x_j|g)$, but exaggerate the prevalence of types that are representative of g relative to $-g$, i.e. types x_j with high $R(x_j, g)$. While the comparison group $-g$ is not observed, the survey setting strongly suggests that Democrats are compared to Republicans and vice-versa. Two main reasons support this view. First, subjects are asked about both Republicans and Democrats throughout the survey. Second, given the two-party system in the US, asking subjects to think about one party naturally cues the comparison with the other party.

The second feature of Equation (2) is that the strength of representativeness distortions is itself modulated by the (normalized) salience of the issues, $\sigma_j / \sum_l \sigma_l$. Recall that representativeness of a type, viewed as the ease with which it comes to mind, can be thought of as a latent characteristic. The more attentive a subject is to the issue at hand, the more this differential accessibility matters. Thus, for very salient issues, stereotypes apply with their full force. For less salient issues, no type is particularly accessible because attention is less engaged. An implication of this view is that there is an attention externality across issues: the more attention is engaged in one issue, the less is engaged in a different issue, so that the strength of stereotypes is negatively correlated across issues perceived as distinct, as captured by the normalized salience n Equation (2).

According to Equation (2), the believed average position of group g on issue j is:

$$\widehat{x}_{j,g} = \sum_{x \in X} x \cdot \hat{p}\left(x_j|g\right), \tag{3}$$

To see how beliefs are distorted, recall that higher position values are associated with Republican attitudes. Formally, the distribution of positions for Republicans first order stochastically dominates that for Democrats:

$$\sum_{x_j=1}^{s} p(x_j|D) > \sum_{x_j=1}^{s} p(x_j|R), \ \ \text{for } s \in \{1,\ldots,7\} \tag{4}$$

which in fact holds in the data for all issues j and all survey waves t. This condition implies that representativeness, $\frac{p(x|g)}{p(x|-g)}$, of a position for $g = Republicans$ increases with its level x. This is a crucial feature: it implies that the most extreme right wing position is most overweighted in beliefs about Republicans, while the most extreme left wing position is most overweighted in beliefs about Democrats. As a result, on average, beliefs about Republicans move to the right, and those about Democrats move to the left. Formally, if $p(x_j|R)$ first order stochastically dominates $p(x_j|D)$, diagnostic beliefs about the parties exaggerate true average differences, $\widehat{x}_{j,R} - \widehat{x}_{j,D} \geq$

$x_{j,R} - x_{j,D}$, and the inequality is strict for $\sigma_j > 0$. This "kernel of truth" property is consistent with the exaggeration documented in Figure 2 and in Table 3, and yields several distinctive testable hypotheses described below.

3.2 Model's predictions

According to Equation (2), beliefs about a group g emphasize its differences relative to a comparison group $-g$. To derive testable predictions, it is useful to express distortions in beliefs directly in terms of the representativeness of types, which is measurable in the data. To do that, we define the representativeness of the "Republican tail" as:

$$LR_{j,R} = \frac{\sum_{x=6,7} p(x_j|R)}{\sum_{x=6,7} p(x_j|D)} \tag{5}$$

where LR stands for the likelihood ratio (an equivalent definition can be easily constructed for the "Democratic tail"). Then, following Bordalo et al. (2016), we expand Equation (2) when $p(x_j|g)$ is close to $p(x_j|-g)$ to find:

$$\widehat{x}_{j,R} \approx x_{j,R} + \frac{\sigma_j}{\sum_l \sigma_l} \left(LR_{j,R} - 1\right) \lambda_{j,R} \tag{6}$$

$$\widehat{x}_{j,D} \approx x_{j,D} - \frac{\sigma_j}{\sum_l \sigma_l} \left(LR_{j,R} - 1\right) \lambda_{j,D} \tag{7}$$

where $\lambda_{j,R}, \lambda_{j,D}$ are positive constants that depend on the groups' distributions (see Bordalo et al. (2016), Proposition 4). It follows immediately that:

$$\widehat{x}_{j,R} - \widehat{x}_{j,D} \approx x_{j,R} - x_{j,D} + \frac{\sigma_j}{\sum_l \sigma_l} \left(LR_{j,R} - 1\right) \left(\lambda_{j,R} + \lambda_{j,D}\right) \tag{8}$$

Controlling for actual differences, perceived partisan differences increase in the representativeness of the tail of the distribution, to an extent that is modulated by the salience of the issue. This equation entails the following predictions.

Prediction 1 *Controlling for true differences, perceived partisan differences on issue j increase in the representativeness of tail positions.*

This prediction states that the exaggeration of true differences across parties is driven by the disproportionate weight put on tail types, due to the fact that such types are rare in the opposite party and are thus very representative. Beliefs display a "kernel of truth" that goes beyond a simple exaggeration of mean differences. Instead, distortions are predictable from the full distribution of positions across both parties.

Prediction 2 *Controlling for true differences, perceived partisan differences on issue j increase in the*

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salience of issue j and decrease in the salience of issue $-j$.

This prediction concerns how perceived partisan differences shift as the salience of the corresponding issue changes, independently of changes in the actual distributions of partisan positions. It also highlights the externalities across issues, whereby a change in the salience of one issue shapes beliefs about parties' positions along other issues.

Prediction 3 *Controlling for true differences, perceived partisan differences on issue j depend more strongly on the representativeness of tail positions when the salience of issue j increases.*

According to this prediction, issue salience amplifies belief distortions through a specific channel, namely by increasing the attention devoted to representative types in each party. In other words, the model predicts that issue salience and partisan representativeness are *complementary* in enlarging perceived partisan differences.

4   Issue salience and the end of the Cold War

In this section, we describe the main source of variation that we exploit to test the model's predictions regarding the salience of issues. We use the end of the Cold War as a shock that rapidly and dramatically changed the salience of external and domestic socioeconomic issues among American voters.

The Cold War (1946 - 1991) was a period of immense geopolitical tension between the Eastern Bloc (Soviet Union and its satellite states) and the Western Bloc (the United States and its allies). Although the two superpowers never directly fought during the Cold War, many crisis episodes pushed the world to the edge of mass conflict and likely destruction: from the Berlin Blockade (1948-1949), to the Korean War (1959-1953), to the Suez crisis (1956), to the repression of the Hungarian Uprising (1956), to the Cuban missile crisis (1962), to the crushing of the Prague Spring (1968), and to the Euromissiles crisis (1977-1987).[24]

The Cold War came unexpectedly, and broadly peacefully, to an end between 1989 and 1991, following Soviet leader Gorbachev's liberalization initiatives and refusal to use Soviet troops to bolster the faltering Warsaw Pact regimes, as had occurred in the past. The result was a wave of revolutions in 1989 that peacefully (with the exception of the Romanian Revolution) overthrew all of the Communist regimes of Central and Eastern Europe, epitomized by the fall of the Berlin

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[24]Two particular incidents mark peaks of intensity of the Cold War era. In August 1953, the Soviet Union tested its first hydrogen bomb. Although not as powerful as the bomb tested by the United States nine months earlier, it had a key advantage that it was a deployable weapon, small enough to be dropped from an airplane. John Foster Dulles, then Secretary of State of the United States, addressing the United Nations soon after said that "Physical scientists have now found means which, if they are developed, can wipe life off the surface of this planet." In the early 1980s, the threat of nuclear conflicts became large and salient: the nuclear weapons' design shifted from war-deterrence to war-fighting, the nuclear arms race between the Soviet Union and the United States accelerated since 1980, and communication between the two superpowers almost completely broke down.

Wall. The Communist Party of the Soviet Union itself lost control following an abortive coup attempt in August 1991. This episode led to the formal dissolution of the USSR in December 1991, the collapse of Communist regimes in other countries, and an official end of the Cold War era. The year of 1991 represents a particular watershed moment in the reduction of external threats for the United States. The Strategic Arms Limitation Treaty was signed, President George H.W. Bush announced the withdrawal of thousands of tactical weapons and strategic missiles, and President Mikhail Gorbachev announced similar initiatives, indicating that the Soviet Union would suspend nuclear testing.

Perceived external threats decline after 1991 The imminence of external threats during the Cold War and the dramatic removal of such threats in 1991 were widely felt in measures of public discourse, consistent with a dramatic shift in the salience of external issues.

In what follows we provide two examples on public discourse. First, we consider the "Doomsday Clock": a measure created by the Bulletin of the Atomic Scientists at the dawn of the Cold War in 1947 to indicate their perception of the intensity of threats to humanity. The decision to move (or to leave in place) the minute hand of the Doomsday Clock is made every year by the Bulletin. The dotted line in the top panel of Figure 3 presents the Clock's minutes to midnight from 1947 to 2000. In 1991, the Bulletin reset the Doomsday Clock from 10 to 17 minutes until midnight, together with the following announcement:

> The clock is in a new region because we feel the world has entered a new era. Never before has the Board of Directors moved the minute hand so far at one time. Conceived at the dawn of the Cold War, the Clock was designed with a 15-minute range. John A. Simpson, one of the Bulletin's founders, says that a 15 minute scale was all anyone thought would be needed in their lifetimes. … [The reset] reflects a conviction that the world was changing in fundamental and positive ways. … The Cold War is over. The 40-year-long East-West nuclear arms race has ended. The world has entered a new post-Cold War era.

Second, we turn to media coverage of the Cold War. The solid line in the top panel of Figure 3 reports the number of articles that mentioned the words Soviet, Russia, or Communist published on the *New York Times* between 1980 and 1995. One observes an abrupt decrease after 1991, as the frequency of Soviet related articles dropped by almost half. This decrease is even starker for articles published on the front page of the newspaper. While it is difficult to distinguish the specific sentiment portrayed in these articles from simple keyword queries, the lower frequency of Soviet related articles clearly reflects a sudden and drastic decrease in the salience of the threat of a foreign power.

Importantly, the decrease in the external threats was felt among US citizens as well. Using ANES data, we demonstrate that external threats did indeed become perceived as less prominent

after 1991 by Americans. In the bottom panel of Figure 3, we trace the share of ANES respondents who considered external threats and diplomatic issues as the most pressing ones facing the US at the moment when they answered the survey, over the period between 1980 and 1996. During the 1980s, around 25% of respondents perceived external threats and related issues as most pressing. This share abruptly dropped below 5% in the 1992 survey, immediately after the end of the Cold War.[25] This pattern resembles that from the shifts in Doomsday Clock minutes to midnight and from the share of articles on the *New York Times* covering the Soviet threats (see the top panel of Figure 3).

In contrast, the perceived salience of domestic socioeconomic issues — aid to African Americans, government spending on social welfare programs, job aid, and women's role and rights — grew immediately after the end of the Cold War. Figure 4 shows that while about 45% of respondents perceived domestic issues as most pressing prior to 1991, such share jumped to 75% in 1992 right after the end of the Cold War. The timing and magnitude of this increase echo that of the drop in the salience of external and diplomatic issues. As the salience of external threats decreased with the end of the Cold War, salience of the domestic counterparts rose.

Taken together, the evidence presented in this section indicates that the end of the Cold War induced a substantial decrease in the salience of external issues among US citizens. In our empirical analysis, we exploit this shock to test how changes in issue salience affect the exaggeration of beliefs about partisan differences.

5   Results

In this section, we test the predictions of the model presented in Section 3. First, we show that distortions in beliefs reflect the excess weight put on representative tails (Section 5.1). Second, we document that issue salience amplifies belief distortions (Section 5.2). Third, we test the main prediction of the model, and show that the strength of representativeness increases in issue salience (Section 5.3).

5.1   Belief distortions and representativeness of tail positions

According to Prediction 1, the exaggeration of partisan differences increases in the representativeness of each party's extreme positions, *ceteris paribus*. Formally, from Equation (8) we obtain an expression of the form:

$$\widehat{x}_{R,ijt} - \widehat{x}_{D,ijt} = x_{R,jt} - x_{D,jt} + \beta LR_{jt} + u_{ijt} \tag{9}$$

where $\widehat{x}_{P,ijt}$ is respondent i's belief about the position of party $P \in \{D, R\}$ on issue j in year t; $x_{P,jt}$ denotes each party's true position; and LR_{jt} measures the partisan representativeness of the

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[25]An almost identical pattern is observed if we focus on the share of respondents who consider external threats among the top 2 most pressing issues facing the US, as shown in Appendix Figure A.2.

tails.[26] Testing Prediction 1 amounts to examining whether $\beta > 0$. In our regression analysis, we measure true differences, $x_{R,jt} - x_{D,jt}$, using the difference between average positions reported by partisan ANES respondents, and we define tail representativeness as:

$$LR_{jt} = \frac{\sum_{x=6,7} p(x_j|R)}{\sum_{x=6,7} p(x_j|D)} \cdot \frac{\sum_{x=1,2} p(x_j|D)}{\sum_{x=1,2} p(x_j|R)}$$

That is, tail representativeness — the likelihood ratio LR_{jt} — is the product of the representativeness of the conservative tail for Republicans times the representativeness of the liberal tail for Democrats. This empirical definition entails a symmetric role for both tails in driving belief distortions — a feature that is implicit in the derivation of Proposition 2. The measures of the average likelihood ratios are reported in Table 5, Column 1. In the Appendix, we show that results are robust to focusing on representativeness of each tail separately.[27]

To estimate Equation (9), we exploit two sources of variations in tail partisan likelihood ratios: first, across issues at a specific point in time ($\overline{LR}_j$); second, within issues over time (LR_{jt}). To operationalize the cross-issue variation, we start from the definition of representativeness given by LR_{jt}, and construct an issue-level measure of representativeness given each issue's average tail representativeness between 1980 and 1990, $\overline{LR}_j = avg_{t<1991} LR_{jt}$. Notably, this measure only exploits variation across issues before the end of the Cold War in 1991. The advantage of this specification is two-fold. First, while the contemporaneous measure of LR_{jt} combines both cross-issue and over-time variation, it is more susceptible to measurement error in the distribution of political attitudes. Second, even when there is variation in actual positions over time, respondents' beliefs may be slow-moving and adjust with a lag. To demonstrate the robustness of the results, we present estimation using both issue-level likelihood ratios (pre-1991 averages) and the contemporaneous measures.

To minimize concerns about large changes in attitudinal distributions, we restrict attention to the period between 1980 and 2000. Also, to align our empirical analysis to the model, we omit defense spending and focus only on domestic issues, which experience similar salience shocks over this period. Finally, to ease interpretation, we standardize our measures of representativeness, $\overline{LR}_j$ and LR_{jt}, by subtracting their means and dividing by their standard deviations. Thus, β in Equation (9) can be interpreted as the effect of one standard deviation change in the likelihood ratio on beliefs about partisan differences.

Results are reported in Table 6. Panel A leverages variation in issues' average tail representativeness ($\overline{LR}_j$), while Panel B relies on cross-issue-over-time variation in tail partisan likelihood

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[26]In Equation (8), beliefs exaggerate actual differences provided that partisan tails are disproportionately representative, and are thus a function of $LR_j - 1$. This level shifter does not affect either the identifying relationship between tail representativeness and beliefs or the interpretation of coefficients estimated from Equation (9).

[27]Note that Equation (9) assumes that variation in tail representativeness is independent from variation in the salience of issues. While this condition might not hold in the data, Equation (9) nonetheless provides a useful first pass to the data, exploring whether belief distortions are linked to the likelihood ratio of tail positions.

ratio (LR_{jt}). Column 1 shows that beliefs about partisan differences reflect actual differences. Adding our measures of representativeness in Column 2 yields our main result: beliefs are significantly and positively associated with the representativeness of tail positions, in line with Prediction 1. Moreover, the coefficient of actual differences falls relative to Column 1. This indicates that, not only beliefs exaggerate actual differences, but also, they do so by emphasizing tail positions — a pattern consistent with the context dependent nature of stereotypes. These results are remarkably robust: we obtain similar coefficients with both empirical strategies (Panels A and B), and irrespective of controlling for year and individual fixed effects (Column 3), as well as for individual respondents' positions on each issue in a given year (Column 4). In other words, we obtain strong evidence for stereotyping even using within-subject variation across issues.[28]

In sum, these results provide evidence for stereotyping of political groups, complementing earlier evidence by Bordalo et al. (2016). Stereotypes reflect overweighting of each party's extreme types, and the extent of overweight is shaped by their tail representativeness relative to the other party.

5.2   Belief distortions and issue salience

We now turn to Prediction 2: all else equal, exaggerations of partisan differences are increasing in issue salience. Formally, from Equation (8), we obtain an expression of the form:

$$\widehat{x}_{R,ijt} - \widehat{x}_{D,ijt} = x_{R,jt} - x_{D,jt} + \gamma\sigma_{ijt} + u_{ijt} \tag{10}$$

where σ_{ijt} is the salience of issue j at time t for respondent i; and γ captures the average partisan representativeness across issues.

When estimating Equation (10), we implement a strategy akin to an event study design: we exploit the fact that the end of the Cold War in 1991 induced a sudden drop in the salience of external and diplomatic issues, and a corresponding rise in the salience of domestic, socioeconomic issues (see Section 4).[29] According to Prediction 2, controlling for actual differences, perceived partisan differences on issues related to external threats (i.e. defense spending) should fall, while those on domestic issues should rise after 1991. Since the end of the Cold War was a shock common to all Americans, σ_{ijt} can be written simply as σ_{jt}, which we capture using *Post-1991*, a dummy equal to 1 for survey years strictly greater than 1991. We test whether $\gamma > 0$ for domestic issues, and $\gamma < 0$ for defense spending.

We start by visually inspecting whether perceived partisan differences changed as issue salience

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[28]These results are also robust to alternative constructions of the average likelihood ratios, for example, using years between 1980 and 2000 that span the entire sample (Appendix Table A.4).

[29]The event study design does not allow us to rule out temporal shocks that occurred at the same time when the Cold War ended that could shift perceived partisan differences through channels other than changes in issue salience. Nonetheless, by narrowing the analysis to a short window just around the period surrounding the end of the Cold War, we remove some of the secular trend in perceived partisan differences over a slightly longer time horizon. In Section 6, we present placebo tests using break years other than 1991.

shifted at the end of the Cold War. Figure 5, top panel, presents the trends in actual and perceived partisan differences on defense spending, between 1984 and 1996, normalized by their 1984 value. The bottom panel plots the equivalent for domestic issues. While there was only a minor decrease in actual partisan difference (dotted line) on defense spending right after the end of the Cold War, the perceived partisan difference (solid line) on this issue experienced a substantial drop. Conversely, there was a moderate increase in the actual partisan differences in attitudes among domestic issues, from an average of 1.0 just before the end of the Cold War to 1.3 immediately after the end of the Cold War. However, relative to the modest increase in actual partisan differences, perceived partisan differences on domestic issues increased much more noticeably, rising from 1.6 just before to 2.2 immediately after the Cold War ended.

Table 7 presents the regression results. We separately examine perceived partisan differences regarding the external issue (i.e. defense spending; Column 1), and regarding all domestic socioeconomic issues (pooled together in Column 2; for each of the 5 individual issues in Columns 3-7). Panel A presents regression estimates that regress beliefs on actual partisan differences alone, where we document that beliefs about partisan differences are strongly correlated with actual differences, with coefficients ranging between 0.5 and 1.4 depending on the issues. Panel B adds the indicator of whether the survey was conducted after 1991. Finally, Panel C controls for individual covariates, including partisanship and individual position on each issue.

Consistent with Prediction 2, Panel B shows that issue salience has a remarkable impact on beliefs: perceived partisan differences decreased substantially for defense spending right after 1991, while simultaneously increasing for all domestic issues. The *Post-1991* indicator is statistically different from zero and economically large for all topics except women's role in society. Panel C confirms the coefficients are robust to the inclusion of individual controls.[30] The changes in perceived partisan differences after 1991 are sizable. Relative to pre-1991 means, and accounting for changes in actual differences, perceived differences increase by approximately 11% for domestic issues and decline by 30% for the external issue.

We conclude this section by stressing the symmetry between these results and those obtained in Table 4, where, relying on a different source of variation, we find that individuals perceive larger partisan differences — above and beyond actual ones — on issues that are more salient to them. Notably, the individual level measure of salience exploited in Table 4 allows us to control for any time-varying issue characteristic, including possible "supply side" reactions to issue salience. At the same time, the exogenous nature of the Cold War shock exploited in Table 7 reduces concerns of endogeneity and reverse causation, such as the possibility that individuals consider an issue more salient because they hold more distorted beliefs on that issue in the first place.

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[30]The pattern we document here is robust to considering only the three survey waves before and after 1991 (correspondingly, from 1986 to 1996), as shown in Appendix Table A.5.

5.3 Complementarity between representativeness and salience

Finally, we turn to the main prediction of the model, and examine whether issue salience drives beliefs by modulating the strength of stereotyping. Specifically, we focus on domestic issues, and investigate the extent to which issue salience and partisan representativeness are *complementary* in distorting beliefs about partisan differences. We proceed by estimating two separate regressions.

First, we rely on a specification of the form:

$$\widehat{x}_{R,ijt} - \widehat{x}_{D,ijt} = x_{R,jt} - x_{D,jt} + \delta\sigma_{ijt} \times \overline{LR}_j + u_{ijt} \tag{11}$$

In this case, Prediction 3 corresponds to the parametric restriction that $\delta > 0$. As before, we estimate Equation (11) by combining variation in issue salience over time with variation in the representativeness of parties' tail positions across issues at a given time.

Table 8 presents the first set of results. As in previous tables, we start by regressing beliefs on actual differences (Column 1). Then, in Column 2, we augment this specification by adding the key, model-predicted interaction of salience and representativeness. This term combines cross-sectional variation in representativeness before 1991, using the standardized measure $\overline{LR}_j$ from Section 5.1, with time variation in issue salience coming from the end of the Cold War. In line with the model, belief distortions driven by representativeness are larger on issues that are more salient. As domestic issues became more salient after the end of the Cold War, exaggeration of partisan differences increased *more* on issues where differences were *more* representative to begin with. These results are robust to adding the main effects of salience and representativeness (Column 3) as well as controls for individual positions (Column 4).

The magnitude of the coefficient on the interaction between $\overline{LR}_j$ and the Post-1991 dummy is substantial. According to our preferred specification in Column 4, one standard deviation increase in $\overline{LR}_j$ is associated with a 0.063 increase in perceived partisan difference after 1991. Given that average perceived partisan differences increased from 1.624 to 2.003 during the 1980-2000 period, the cross-issue likelihood ratios can explain around 20% of the underlying variation.

In Appendix Table A.6, we exploit *within* individual salience of issues over time, and interact $\overline{LR}_j$ with an indicator equal to one if the individual considers an issue the most important one in a given year. Not only are our results robust to using this, within-individual source of variation, but their magnitude is also larger than in our baseline analysis. In particular, according to our most preferred specification, reported in Column 4, when comparing the most salient issue for an individual to the other issues, a one standard deviation increase in $\overline{LR}_j$ is associated with a 0.28 point higher perceived partisan difference, which is a sizable effect.

The second strategy to test Prediction 3 exploits over time variation in both salience and representativeness. Specifically, we estimate the relationship between beliefs about partisan differences and partisan representativeness before and after the end of the Cold War. We split the sample period in two — 1980-1990 and 1992-2000 — and compute the average likelihood ratio for each

issue before ($\overline{LR_{j,Pre}}$) and after ($\overline{LR_{j,Post}}$) the end of the Cold War. Then, for each sub-period, we estimate regression specifications of the form:

$$\widehat{x}_{R,ijt} - \widehat{x}_{D,ijt} = x_{R,jt} - x_{D,jt} + \beta_T \overline{LR}_{j,T} + u_{ijt} \tag{12}$$

where $T = Pre, Post$. Note that this is a more power demanding test than that in Table 8, since the period-specific associations are identified out of 5 different issues, and are compared against a relatively short window of time.

Table 9 shows that representativeness shapes perceived partisan differences across all domestic issues (consistent with Table 6), but its role is significantly stronger in the period after the end of the Cold War. The bottom of Table 9 also reports the p-value for a t-test of equality of coefficients: as it appears, the difference between coefficients in Columns 1 and 2, where we only include the average likelihood ratio and actual differences, is statistically significant at the 1% level. Columns 3 and 4 augment the previous specification by including respondents' own attitudes on the corresponding issues, while Columns 5 and 6 include survey year and individual respondents fixed effects. Results remain unchanged: the coefficient on the likelihood ratio after 1991 is almost twice as large as that for the pre-1991 years.

Taken together, these results provide strong evidence that beliefs about partisan differences are shaped by representativeness-based stereotyping, and that the strength of stereotyping is (positively) modulated by the salience of issues.

Decomposing perceived partisan differences by cohorts   Finally, we investigate if the increase in perceived partisan differences after the end of the Cold War varies across people born in different years. Different birth cohorts were exposed to the peak of the Cold War for a different amount of time. In Figure 6, we present heterogeneous shifts in perceived partisan differences after the end of the Cold War by birth cohorts. In the top panel, we re-estimate the baseline specifications to test Prediction (2), regressing perceived differences on domestic issues in each year against the Post-1991 indicator (controlling for actual differences in party position) for various birth cohorts, plotting the corresponding coefficients and 95% confidence intervals on the *Post* dummy. In particular, we estimate separate regressions for each birth cohort from 1940 to 1970 (included) with a 20 year moving window. For instance, the point estimate corresponding to birth cohort 1940 is obtained by estimating our baseline specification for Prediction (2) including respondents born between 1930 and 1950.

The bottom panel of Figure 6 presents a similar cohort heterogeneity analysis with respect to the $LR \times Post$ coefficients in the baseline specification used to test Prediction (3), i.e. Column 4 of Table 8. In both panels, the increase in the perception of partisan differences (net of actual differences) after the end of the Cold War is stronger among respondents in the younger cohorts. Notably, individuals born after 1970 spent the majority of their formative years after the end of

the Cold War. For these individuals, the focus on national unity and external threats may be less fervent to begin with.[31] This could explain why younger respondents' beliefs about partisan differences were more malleable and responsive to shocks in issue salience after the end of the Cold War. In contrast, for older cohorts who grew up during the peak of the Cold War, the mindset of external threats of the Soviet regime may have been more entrenched, and even the formal end of the Cold War may have not been enough to generate a substantial shift in issue salience for them.

6 Discussion

In this section, we first discuss the internal validity of our results, describing several robustness tests and assessing the evidence on the role of the political supply side in driving beliefs. We then turn to external validity, examining the impact on beliefs of another shock to issue salience, as well as calibrating the model and assessing its performance.

6.1 Internal validity

Robustness Our baseline analysis relies on the assumption that people take into account the full contemporaneous distributions of both parties. Here we show that our results are also robust to various additional specifications. We focus on the full specification, Equation (12), whereby the salience of an issue complements how stereotypical the tails are is driving beliefs about partisan differences. In the Appendix, we relax this assumption by: (*i*) using lagged (rather than contemporaneous) actual differences in attitudes across parties; (*ii*) replacing the average position of party members with the mode; (*iii*) constructing actual partisan differences by restricting the samples to respondents who identify as "strong partisans" or by extending the sample to respondents who identify as leaning Democrat of Republican; (*iv*) dropping respondents with extreme beliefs and restricting the analysis to the winsorized belief distribution; (*v*) zooming closer to the sample around the 1991 threshold, using respondents from 1980-1994;[32] (*vi*) imputing missing perceived partisan differences for certain year and issue combinations, either using values from the closest observation prior or post the missing year; (*vii*) trimming extreme perceived partisan differences; (*viii*) experimenting with alternative ways to construct the likelihood ratios, using different definitions of tail attitudes; and (*ix*) weighing the regression by issues' corresponding relative salience. We also show that results are unchanged when including survey year, issue, and individual fixed effects, thereby only exploiting within-individual across-issue over-time variation, absorbing any

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[31]See, for example, Giuliano and Spilimbergo (2014) for a study that analyzes the impact of formative years on individuals' subsequent preferences and behaviors.

[32]The baseline results are also robust to excluding the observations in 1994, ruling out the possibility that the introduction of Fox News network and New York Times across the country, as well as the Gingrich's "Republican Revoliution" in 1994 could affect the identified effects (George and Waldfogel, 2006; DellaVigna and Kaplan, 2007).

temporal differences in party compositions.[33] Appendix Figure A.5, Tables A.7, A.8, and A.9 show that the results are robust to these specifications, reflecting stability of stereotypical tails, which are mainly populated by strong partisans.

Relatedly, we show that our results on the impact of the Cold War shock on beliefs do not arise from underlying trends. We conduct a set of placebo tests where we replace the end of the Cold War to years other than 1991 during the sampling period. As show in Appendix Figures A.6 and Table A.10, the impact on perceived partisan differences is evident only for 1991, and not other years such as 1984 or 1996.

Supply side response In our empirical analysis, we assume that ANES respondents answer questions about beliefs on political parties while thinking about attitudes of the average party member. Violation of this assumption might threaten the interpretation of our results if the following three conditions are met simultaneously: (*i*) respondents form their beliefs about party positions thinking about political elites (e.g. party leaders); (*ii*) political elites became more polarized after 1991 on issues that were more stereotypical before 1991; and (*iii*) the average partisan respondent did not become similarly more extreme on these more stereotypical issues.

Directly observing attitudes of political elites on each issue is challenging. Moreover, even if elites' position across the issues considered in our work were available, mapping these to the 1-7 point scale recorded in the ANES would be difficult, and would require substantial degree of discretion. Thus, rather than trying to directly measure political elites' attitudes, we pursue a different strategy, and provide five corroborating pieces of evidence that alleviate the concern of mis-measurement in the nature that we described above.

First, as mentioned above, results are robust to construct average partisan differences by restricting the sample to respondents who define themselves as strong partisans (Table A.7, Column 6). These individuals hold more extreme positions relative to the average party member, and should thus be closer to party elites.[34] Second, focusing on the two years for which this was possible (1980 and 1982), Appendix Table A.11 compares the feelings of ANES respondents towards party members with those towards parties, and shows that the two are quantitatively very similar. This observation suggests that beliefs about the party and about its members might be

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[33]One may still be concerned that the compositional differences could affect the overall magnitudes if there is substantial underlying temporal heterogeneity across people in different parties and with different demographic characteristics. In Appendix Figure A.3, we plot the share of the sample who are male, white, Christian, college graduates, married, and aged 65 or above, among Republicans and Democrats throughout the period of 1980 to 2000. One can see that there is no strong secular trend in changes of partisan compositions during this period. Even though the share of partisans with a college degree raises over time, this upward trend is not differential between Democrats and Republicans, and, more importantly, we do not observe noticeable trend break in partisan composition right after the end of the Cold War. Moreover, as shown in Appendix Figure A.4, there is little evidence of partisan heterogeneity in perceived issue salience during the period of 1980 to 2000.

[34]In our sample, strong partisan Republicans have an average position (across all six issues) of 4.93, while Republicans who do not define themselves as strong partisans, report an average position of 4.45. Similarly, the average position among Democrats is 3.38 for strong partisans and 3.73 for non-strong partisans.

quantitatively close. Third, in Section 2 we showed that, at the individual level, the relationship between issue salience and beliefs about partisan differences holds also when controlling for any time varying, unobservable issue characteristic (see Table 4, Column 5). These issue specific trends can include the set of strategic messages delivered by politicians or the media, who might choose to adopt more extreme positions on issues that voters view as more important. To the extent that voters are exposed to all such messages, our analysis controls for supply side variation.[35] Fourth, in Appendix Table A.8, we show that results are robust to including in our sample also leaning independents — a group of voters who are less likely to be "captured" by elites rhetoric. Finally, in Appendix Table A.10, we show that changes in belief distortions are concentrated around the end of the Cold War, and there is no increase in belief distortions during the roll out of Fox News (1996 to 2000). Similarly, Columns (2) and (3) of Appendix Table A.7 show that results are unchanged — if anything stronger — when excluding years after 1994.

Alternative mechanisms We now consider whether other mechanisms that generate distorted beliefs can explain the evidence presented above. We focus on two prominent classes of models. First, as advocated by Westfall et al. (2015), bias in beliefs about political groups could be driven by hostility towards the "other" group, whose members might be perceived as competitors. Given that respondents prefer their own position, assigning a more extreme position to the other party may further lower their views of the latter. This mechanism is often defined as "affective politics", or affective polarization (Iyengar et al., 2018), and is consistent with the literature on motivated beliefs. Such framework might be consistent with our evidence, in line with Prediction (2), that individuals perceive bigger partisan differences on issues that they consider as more important. However, proxies for the strength of this mechanism, such as the strength of partisan affiliation or own attitude in an issue, have little explanatory power for the exaggeration of partisan differences. More importantly, motivated beliefs and affective politics do not generate the context dependence of beliefs highlighted in Prediction (1) and Table 7, whereby beliefs about a group exaggerate differences relative to another group, nor the complementarity of tail representativeness with issue salience, Prediction (3) and Table 8.

Second, belief distortion about political groups might result from a rational inattention mechanism, as in Matèjka and Tabellini (2017). This framework predicts that individuals hold more accurate beliefs on issues that are more important to them. In Matèjka and Tabellini (2017), individuals with more extreme positions on an issue care more about it, and should therefore be better informed. This is not the case in our data. In fact, using individuals' own assessment of issue salience, we find that individuals' beliefs are more distorted precisely on issues that are most salient to them (Section 2.2, Table 4) or when predicting issue salience with exogenous shocks (Ta-

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[35]While we cannot fully control for instances where voters self-select into biased media or political channels, we note that a prime example of media bias — the rise of Fox News — took place at least 5 years after the Cold War shock, as Fox News was gradually introduced from 1996 to 2000 (DellaVigna and Kaplan, 2007). Reassuringly, our results are robust to restricting attention to survey years before 1996.

bles 7 and 8). However, our results relate to Matèjka and Tabellini (2017) in the following sense: individuals do perceive larger differences across parties on issues that are more important to them. The key difference is that in our model, as in the data, perceiving larger differences makes beliefs more, not less, distorted.

A third, related possibility is that, in the process of seeking information about issues that are salient to them, individuals are disproportionately exposed to one-sided, exaggerated or non-representative information about parties' positions. This goes back to the supply side mechanism discussed above, and a central role for this mechanism is not supported by our evidence.

6.2 External validity

Our central empirical exercise focuses on the shock to issue salience brought about by the end of the Cold War in 1991. Yet, the conceptual framework and the underlying psychological under-pinning ought to apply beyond this particular episode. We now assess the external validity of our results in two ways. First, we examine the impact of a different shock — the September 11, 2001 terrorist attacks — to Americans' beliefs about partisan differences. Second, we calibrate the model using our baseline data, compare the estimated model parameters with those obtained in other non-political contexts, and then assess the model's ability to quantitatively account for belief distortions out of sample.

The 9/11 terrorist attacks The September 11, 2001 terrorist attacks and the subsequent wars in Afghanistan and Iraq marked the beginning of an "anti-terrorism era". We show that these events significantly raised the salience of external threats (in this case, terrorism), and directly affected issue salience on external vs. domestic issues among Americans in opposite directions relative to what occurred after 1991. Figure 4 documents that the share of respondents who considered external threats as the most pressing issue facing the US rose precisely after 2001. Conversely, the share of respondents who regarded domestic social welfare and race related issues (the two largest domestic issues mentioned by ANES respondents) as pressing began to decrease sharply after 2001.[36] Interestingly, both trends reverse the pattern that had begun right after the end of the Cold War in 1991. Hence, after 2001, the relative salience of external threats increased while that of domestic issues decreased.

In Table 10, we test how perceived partisan differences changed after 2001, zooming in on a relatively narrow window of sample before and after the 2001 period.[37] In Column 1, we focus on the external issue (i.e. defense spending), whose salience increased after 2001. Perceived partisan differences on defense spending sharply increased after 2001, and the magnitude of such increase

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[36]These trends are almost identical when including all non-external issues among the domestic socioeconomic issues used to produce Figure 4.

[37]As noted above, to avoid any possible effect coming from the elections of Barack Obama and Donald Trump on perceived partisan differences, we omit survey years after 2004. Our findings are robust to considering as "pre-period" either only post-1996 years or the whole decade between 1990 and 2000.

becomes even larger once we account for the actual change in partisan differences on defense spending (Column 2). Next, Columns 3 and 4 turn to domestic socioeconomic issues, pooling them together, after 2001. Contrary to Columns 1 and 2, perceived partisan differences on domestic issues decreased after 2001, consistent with the model's prediction, as the salience of these issues dropped.

These results indicate that after 2001, as an opposite shock to issue salience relative to the end of the Cold War hit the US, perceived partisan differences shifted abruptly, and in the correspondingly opposite directions. Moreover, changes in perceived partisan differences after 2001 are larger among the issues that are more partisan representative (proxied by higher partisan likelihood ratios). These patterns, again consistent with the predictions of the model, suggest that the forces highlighted in the conceptual framework and documented in the aftermath of the Cold War are likely to operate in many other contexts.

Model calibration Previous sections documented that beliefs about partisan differences are distorted by the representativeness of tail positions, to an extent that increases in the salience of the issue, in line with our model. We perform a calibration exercise to assess how well the model explains observed beliefs, and to quantify the role of salience in driving distortions.

We adopt a simplified version of the model, where issue salience takes only two values, σ_H and σ_L, with $\sigma_H > \sigma_L > 0$. For each issue-year observation, we compute the beliefs entailed by the vector (σ_H, σ_L) noting that external issues (defense spending) were salient prior to 1991 but not afterwards, while the reverse holds for domestic issues. This generates a cross section of belief distortions across salient and non-salient issues in a given year as well as changes in the average belief distortions on each issue over time, before and after 1991. Importantly, the assumption that issue salience can take only two values implies that changes in salience over time and across issues are constrained to be the same.

We first pin down the parameters to match the observed average beliefs across external and domestic issues in the period 1980 to 2000. The values obtained are informative about the importance of both stereotyping, through the average distortion $\frac{\sigma_H + \sigma_L}{2}$, and salience, through the relative change $\frac{\sigma_H}{\sigma_L} - 1$. We then assess the model's performance in two out-of-sample tests. First, we compare the model's predictions to actual beliefs about partisan differences across domestic and external issues after the terrorist attacks of September 11, 2001, when the salience of external threats increased again (Figure 4). Second, we assess the extent to which the high-low salience parameters account for the differential distortions of beliefs within individual respondents across issues that are salient or not to them.

For each vector (σ_L, σ_H) in a grid $[0, \sigma_{max}] \times [0, \sigma_{max}]$ we generate model-predicted beliefs for

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each party g's average position on each issue j and year t using Equations (2) and (3):

$$\tilde{x}_{g,jt}(\sigma_{j,t}) = \sum_{x \in \{1,\dots,7\}} x \cdot p(x_j|g) \left[\frac{p(x_j|g)}{p(x_j|-g)} \right]^{\sigma_{ij}} \frac{1}{Z_{g,jt}}$$

where $\sigma_{j,t} = \sigma_H$ for salient issues, i.e. for $j = external, t < 1991$ and for $j = domestic, t > 1991$, and $\sigma(j,t) = \sigma_L$ otherwise. We then pick parameters σ_H^*, σ_L^* that minimize the error in the predicted partisan differences across issues and over time:

$$(\sigma_H^*, \sigma_L^*) = argmin_{\sigma_H, \sigma_L} \sum_{j,t} \left[\left(\tilde{x}_{R,jt}(\sigma_{j,t}) - \tilde{x}_{D,jt}(\sigma_{j,t}) \right) - \left(\widehat{x}_{R,jt} - \widehat{x}_{D,jt} \right) \right]^2 \tag{13}$$

where $\widehat{x}_{g,jt}$ are the beliefs elicited in the survey. In (13), we do not account for the issue "women's role", because there is only one data point post 1991.[38]

We obtain

$$\sigma_L^* = 0.30, \quad \sigma_H^* = 0.41 \tag{14}$$

These parameters are positive and tightly estimated. Figure 7 shows how the loss function varies with σ_L and σ_H, when the other parameter is re-optimized at each point. Given our estimation process, the two parameters are pinned down independently. This is reflected in the fact that for this range of σ_L, the optimal σ_H is constant and equal to 0.41, while for the corresponding range of σ_H the optimal σ_L is constant and equal to 0.3. These parameters generate significant distortions in beliefs. While the raw data show an average exaggeration of partisan differences of 0.79 units across all issue-year observations (Table A.2), the calibration suggests an average exaggeration of 0.76 units.

Importantly, these parameters are close in magnitude to those estimated in different settings and using different methodologies. In experiments that elicited ability in trivia questions on different topics, as well as beliefs about ability genders, Bordalo et al. (2019a) document a similar exaggeration of cross group differences and obtain a median estimate of 0.32; using surveyed expectations of a variety of macroeconomic and financial variables by professional forecasters, Bordalo et al. (2018) find a median estimate of 0.50.[39] This suggests that, despite the possibly specific features of political beliefs, the extent of stereotyping may be quantitatively similar across settings, and capture a large share of the systematic distortions observed in our data.

The parameters reported in (14) reveal an important role for issue salience, with σ_H^* about 37% larger than σ_L^*. Accordingly, the calibration predicts substantial belief distortions, and substan-

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[38]As noted in Gentzkow (2016) and Baldassarri and Park (2020) among others, this issue is special also in that both Democrats and Republicans hold substantially more liberal positions and the actual distance between parties (and partisans) is significantly smaller than for other issues (see also Table 3).

[39]While here we simulate beliefs based on true distributions, following Equation (2) in the model above, Bordalo et al. (2019a) pin down the distortion parameter by matching the amplification of average differences across groups, and Bordalo et al. (2018) match the average revision of forecasts and forecast errors.

tially more exaggeration under high salience than under low salience. While the average exaggeration of partisan differences across all issues-year observations is 0.76, this masks significant variation in salience and representativeness of the tails. The relative contribution of each can be estimated using these parameters. Average exaggeration would drop to 0.64 units if all issues were low-salience, and would climb to 0.88 units if all issues were high-salience. Furthermore, keeping all else equal, if all issues had low salience with the lowest likelihood ratio for the conservative tail in our sample the average exaggeration would be 0.24; conversely, if all issues had high salience issue with the highest likelihood ratio in our sample the average exaggeration would be 1.18 — from nearly accurate beliefs to more than doubling the difference across groups.[40]

In sum, our analysis entails large and predictable distortions in beliefs on the basis of features of the environment (representativeness of tails and issue salience) that are arguably not specific to the particular political judgment task at hand.

Model performance   The estimates in (14) suggest that issue salience has a large effect on beliefs about parties' positions, and reinforces the idea that swings in beliefs can arise even in the absence of any changes in fundamentals (i.e. actual attitudes by party members). However, because salience is not measured quantitatively, one may wonder whether the current calibration has predictive power out of sample. We address this issue as follows: by restricting issue salience to just two levels, the model makes clear predictions for changes in salience in any other setting. We now assess the performance of this simple model out of sample by comparing the model's predictions to the data, focusing on years not used in the calibration.

First, we consider how beliefs about partisan differences change after 2001, leveraging the fact that perceptions of external threats increased dramatically after the terrorist attacks of September 11, 2001, as reflected by ANES respondents' reports of the most pressing issue for the country. Second, we consider how beliefs of individual respondents vary across issues that they consider the most salient or not. We compute predicted beliefs on partisan differences after 2001 and compare them to actual beliefs, under three models: *(i)* the rational model; *(ii)* a model with constant strength of stereotyping σ calibrated with the same data as (14); and *(iii)* the model with parameters specified in (14). The entailed (constant) salience parameter in model *(ii)* is $\sigma = 0.36$, which, unsurprisingly, is close to the average salience in (14).

We first assess the importance of the overall level of stereotyping. The model of stereotyping with constant salience reduces the mean squared error attained by the rational model by 68% when predicting beliefs post 2001, and by 61% when predicting the average individual level beliefs as a function of individual level issue salience. Next, we assess the importance of issue salience. The calibrated model (14) further reduces the mean squared error attained by the constant salience model by another 56% for the post 2001 data and by another 15% for the individual salience data.

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[40]The observation with lowest tail likelihood ratio in our sample is Defense Spending in 1990 (where $LR = 1.05$). The observation with highest tail likelihood ratio in our sample is Government Spending in 2000 (where $LR = 10.08$).

In sum, the calibrated model with variable salience provides a good quantitative match to beliefs after 2001. The performance of the model is particularly good to match the renewed focus and distortions on parties' positions on defense spending, significantly improving on the model with constant salience. Faced with a clear external threat, belief distortions of respondents went back to their pre-1991 levels. This suggests that levels of distortions in similar situations can be predicted more broadly.

Finally, the model has good predictive power for within-individual differential stereotyping as a function of issue salience, even though all individuals were pooled and individual differences (other than the "most important issue") were not taken into account. This suggests that a high-low view of issue salience is a useful, tractable approach to circumvent the lack of direct quantitative measurement of issue salience.

7   Conclusion

Individuals' perceptions of partisan differences are an important yet understudied class of political beliefs. In this paper, we use nationally representative survey data from the US to show that citizens who perceive higher partisan differences are more politically engaged, even when accounting for individual characteristics and for the actual partisan difference across socioeconomic issues. Moreover, we provide evidence that perceived partisan differences systematically exaggerate actual ones, especially on issues that citizens consider more important. Building on these stylized facts, we develop a model of political stereotypes based on repesentativeness and salience heuristics to capture the factors that shape individuals' beliefs about others' political and social attitudes.

The model yields three predictions. First, the exaggeration of partisan differences increases in the representativeness of extreme partisan positions. Second, such exaggeration is increasing in issue salience. Third, issue salience and representativeness of extreme partisan positions are complementary, and such complementarity can act as a multiplier in distorting individuals' beliefs about partisan differences. Exploiting the shock to issue salience — away from external and towards domestic issues — induced by the end of the Cold War in 1991, we provide empirical evidence consistent with these three predictions. We show that these results hold (in opposite directions) when we focus on a conceptually similar but opposite shock, namely, the terrorist attacks of September 11, 2001 and the subsequent wars in Afghanistan and Iraq, which increased the salience of external threats. This suggests that the mechanisms captured in the model are not specific to the end of the Cold War, but are likely to operate in a variety of other political contexts as well.

Our results show that perceptions of partisan differences not only hinge on actual differences ("kernel of truth"), but also get distorted by cognitive mechanisms related to representativeness, salience, and stereotype. In particular, perceptions of partisan differences can shift abruptly in

response to a sudden change in issue salience. Perhaps counter-intuitively, the more attention one pays to a particular policy issue, the more biased her beliefs on partisan differences on that issue might become.

Our findings open a novel set of questions for political economists and political scientists. For example, do beliefs about partisan differences causally affect one's political behaviors? Do such beliefs feedback and affect one's own attitudes on the corresponding socioeconomic and political issues? Do politicians strategically respond, further inflating perceived partisan differences? These are fascinating questions for future work.

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Figures and tables
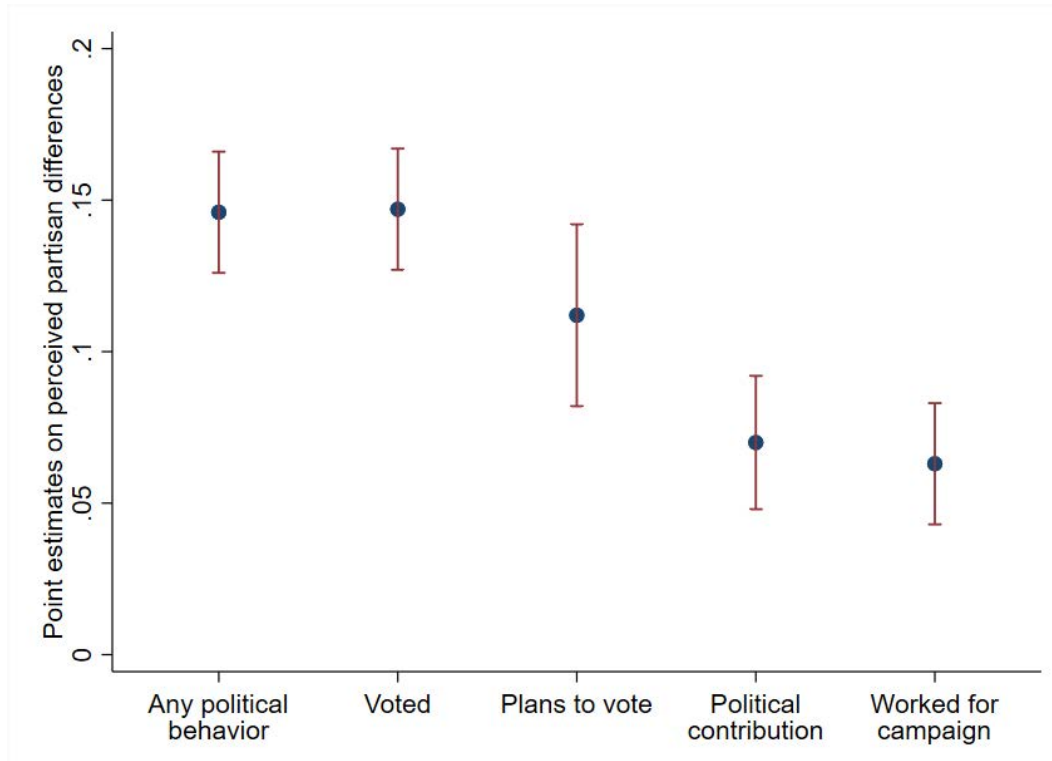
Figure 1: This figure plots the associations between perceived partisan difference and political engagements. Political engagements include: voted in the last election (second dot); plans to vote in the next election (third dot); made any political contribution during the past electoral campaign (fourth dot); worked or was actively involved in political activities like canvassing etc. in the past electoral campaign (last dot). The first dot is a dummy equal to 1 if any of the four actions just mentioned was undertaken. The regression coefficients on perceived partisan differences (averaged across all issues) are plotted, where we regress political engagements, one at a time, on perceived partisan differences, controlling for a vector of individual controls including age, age squared, gender, education, marital status, religion, party affiliation; an indicator for being a "strong partisan"; and the average individual position across the various issues, as well as the survey wave fixed effects. To ease the interpretation of results, both perceived partisan differences and each of the outcomes are standardized by subtracting the mean and dividing through the standard deviation. The sample is restricted to ANES respondents during the 1980 and 2000 waves who are either Republicans or Democrats.
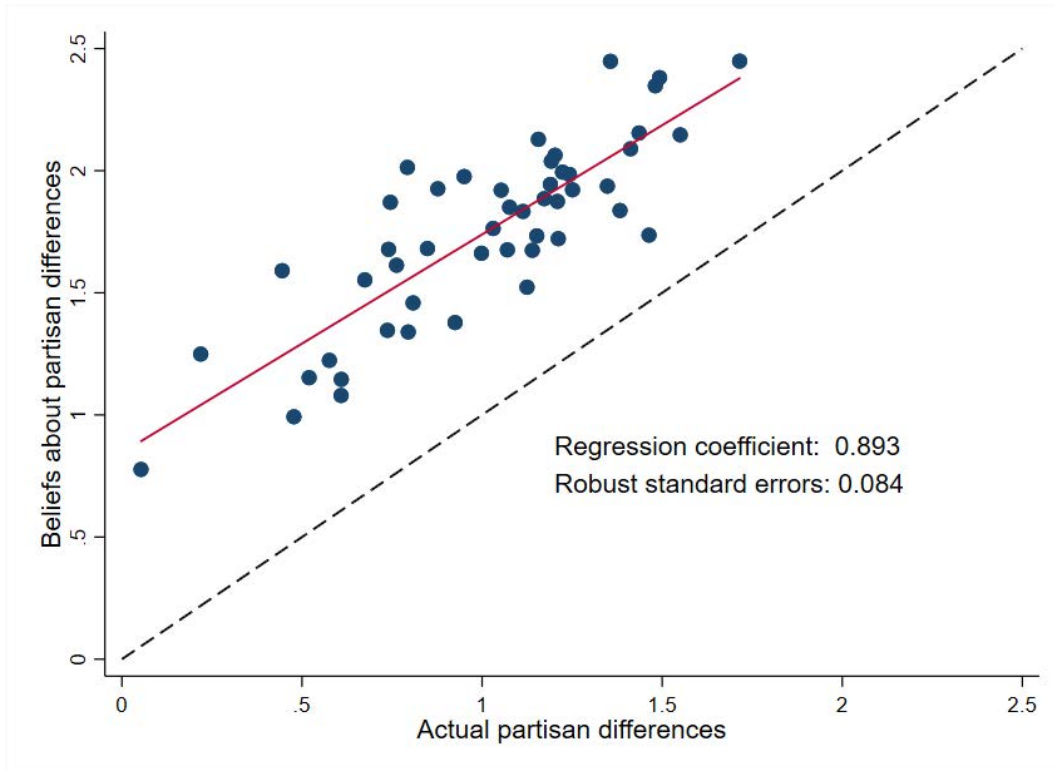
Figure 2: This figure plots, for each issue-year, the actual differences in mean attitudes between ANES respondents who identify as Democrats and those who identify as Republicans (x-axis), against the corresponding perceived partisan differences (y-axis). Regression coefficient (without additional controls) is shown as well as the corresponding robust standard errors.
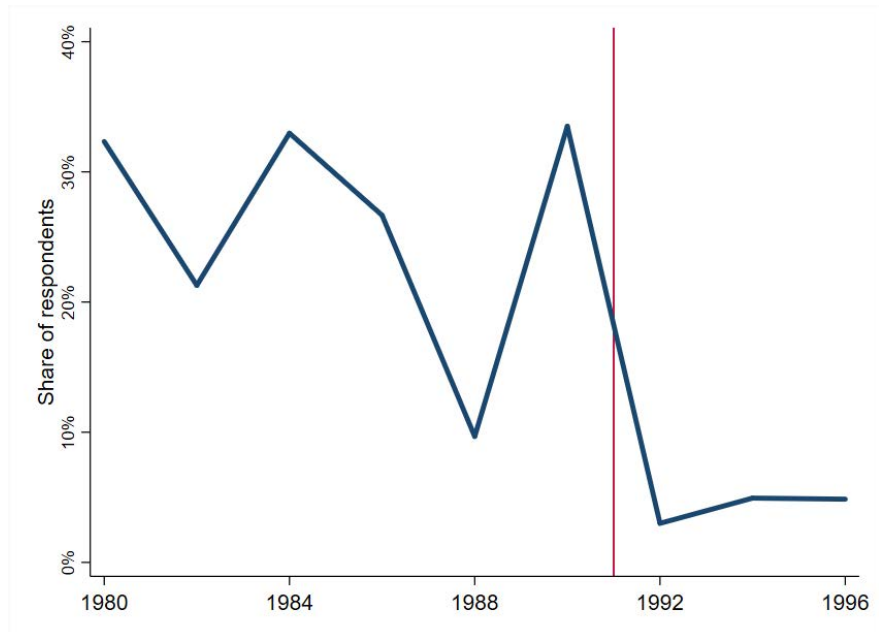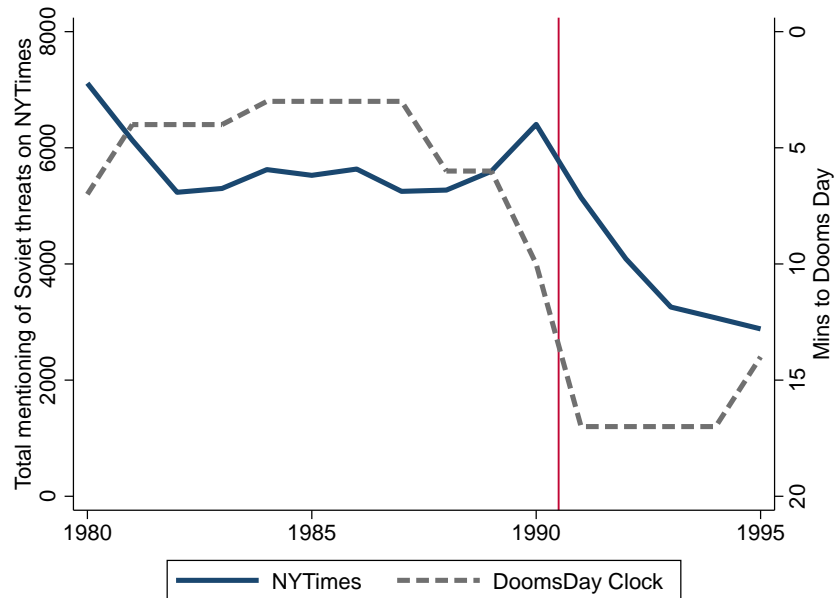
Figure 3: Top panel: end of the Cold War and external threats, measured by the total number of times Soviet Union, Russia, or Communist were mentioned on the *New York Times*, and the minutes to midnight according to DoomsDay Clock (created by the Bulletin of the Atomic Scientists). Bottom panel: perceived external threats, measured by the proportion of people who claim external threats and diplomatic issues are the most pressing issue facing the US at the moment of the survey, according to the ANES. The sample is restricted to ANES respondents during the 1980 and 2000 waves who are either Republicans or Democrats.
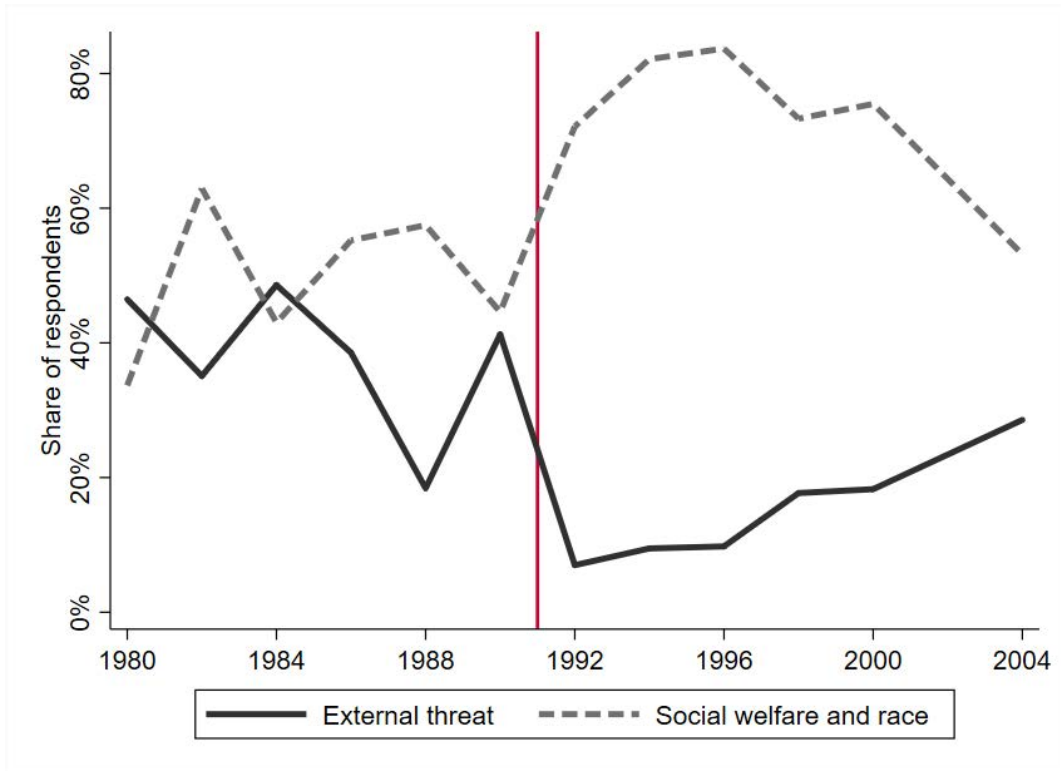
Figure 4: Proportion of respondents who consider external threats and diplomatic issues as the most pressing issue facing the US at the moment of the survey, and the proportion of respondents who consider domestic issues such as social welfare and race as most pressing. The sample is restricted to ANES respondents during the 1980 and 2004 waves who are either Republicans or Democrats.
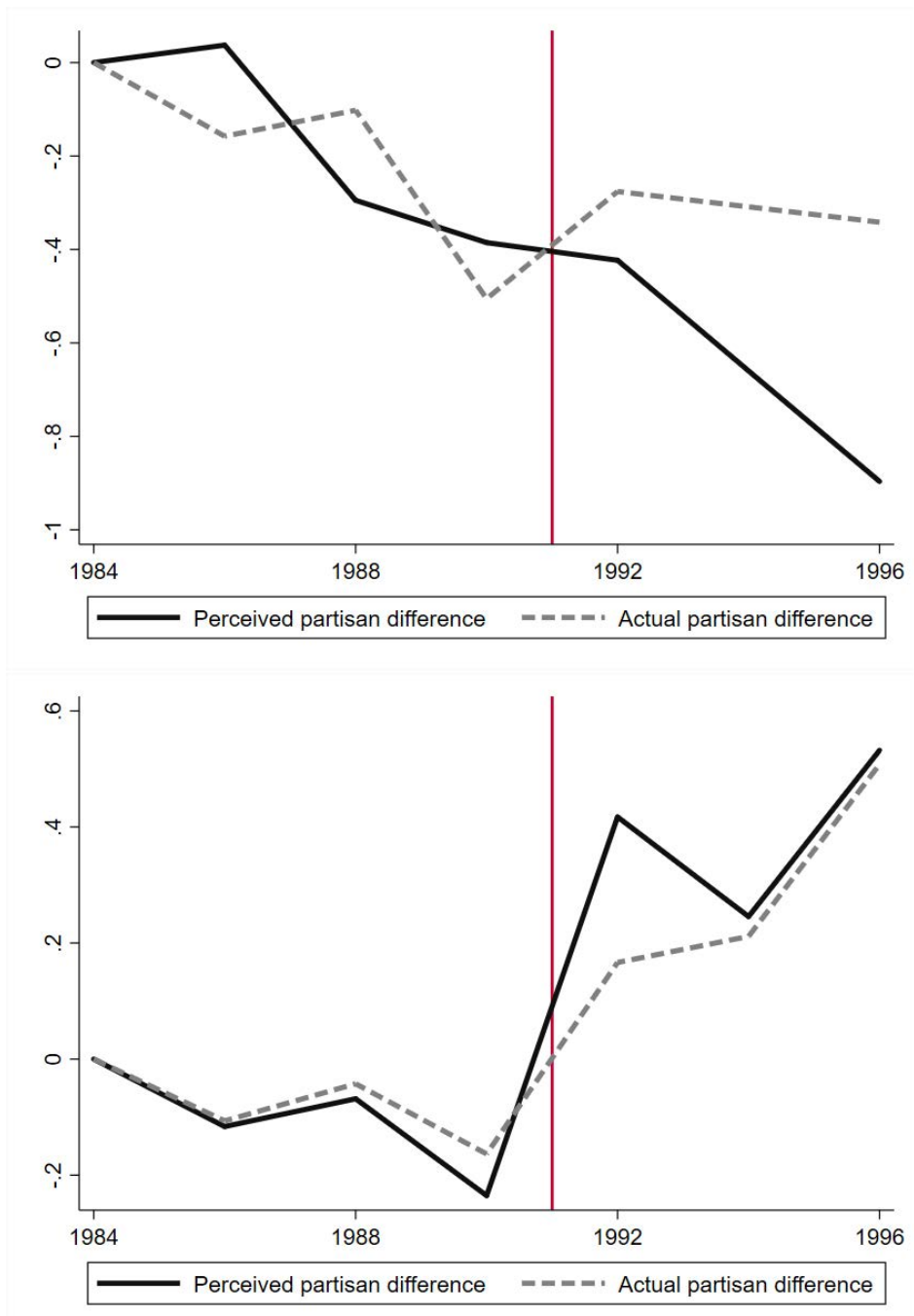
Figure 5: Perceived differences between Democrats and Republicans, versus actual differences during the same period: on the issue of defense spending (top panel), and on domestic issues (bottom panel). For domestic issues, we aggregate across the 5 domestic issues, weighing the issues according to their corresponding pre-1990 partisan likelihood ratios at both tails of the attitudinal distribution. The sample is restricted to ANES respondents during the 1980 and 2000 waves who are either Republicans or Democrats. Actual and perceived partisan differences are normalized by their 1984 level.
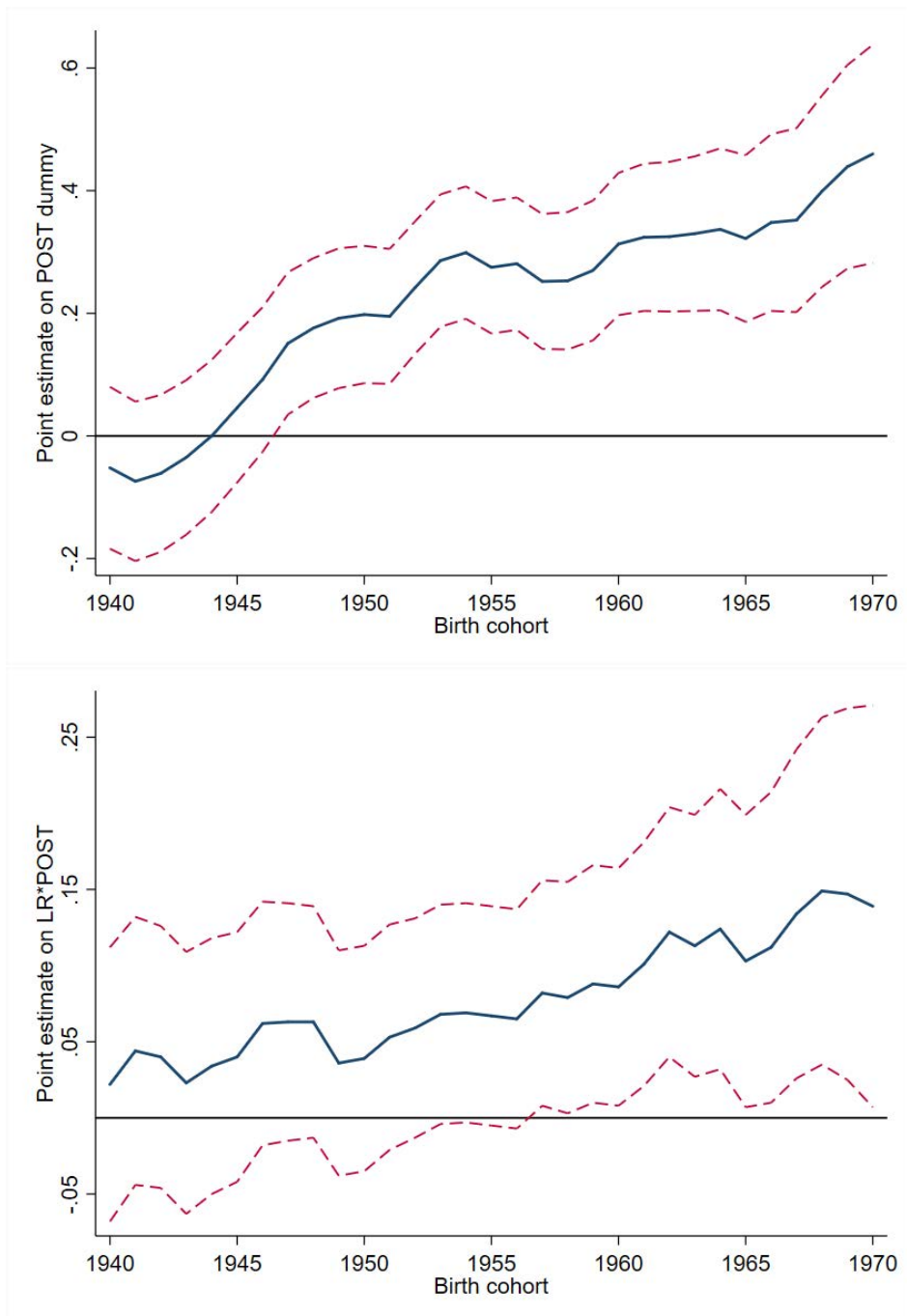
Figure 6: Heterogeneous changes in perceived partisan differences after the end of the Cold War, by birth cohorts. Top panel plots the coefficients on Post-1990 indicator, estimated from subsamples of birth cohorts from 1940 to 1970 with a -10 to +10 moving window. Bottom panel plots the coefficients on LR×Post-1990, estimated from subsamples of birth cohorts from 1940 to 1970 with a -10 to +10 moving window. The sample is restricted to ANES respondents during the 1980 and 2000 waves who are either Republicans or Democrats.

Figure 7: Model calibration loss function.

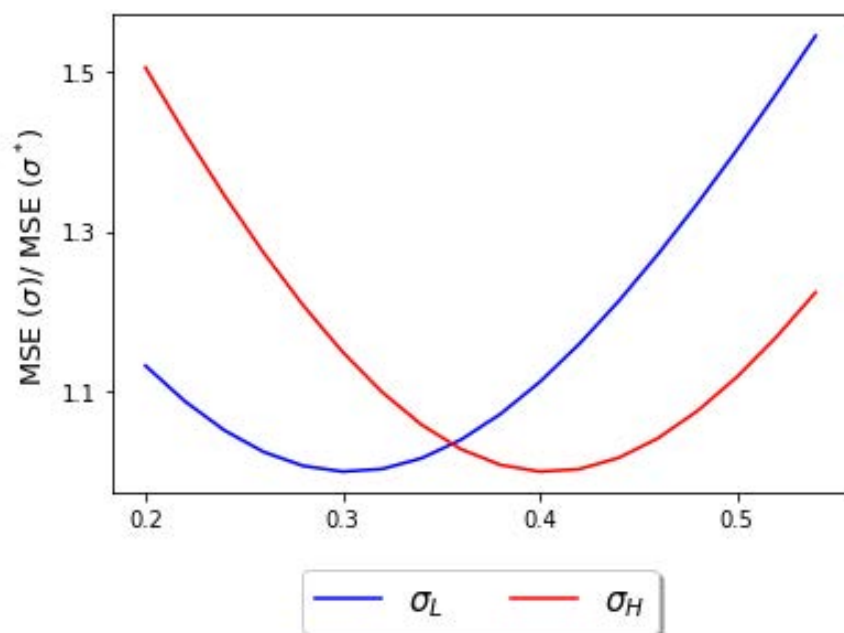**Table 1:** ANES questions on socioeconomic and political attitudes

Issue	Question wording	Most liberal response	Mot conservative response
Liberal vs Conservative	We hear a lot of talk these days about liberals and conservatives. Here is a 7-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale, or haven't you thought much about this?	Extremely liberal	Extremely conservative
Government spending	Some people think the government should provide fewer services, even in areas such as health and education in order to reduce spending. Suppose these people are at one end of the scale at point 1. Other people feel it is important for the government to provide many more services even if it means an increase in spending. Suppose these people are at the other end, at point 7. And of course, some other people have opinions somewhere in between at points 2, 3, 4, 5, or 6. Where would you place yourself on this scale, or haven't you thought much about this?	Government provides many more services, increase spending a lot	Government provides many fewer services, reduce spending a lot
Defense spending	Some people believe that we should spend much less money for defense. Others feel that defense spending should be greatly increased. Where would you place yourself on this scale, or haven't you thought much about this?	Greatly decrease defense spending	Greatly increase defense spending
Job aid	Some people feel the government in Washington should see to it that every person has a job and a good standard of living. Others think government should just let each person get ahead on their own. Where would you place yourself on this scale, or haven't you thought much about this?	Government should make sure every person has a job and a good standard of living	Government should let each person get ahead on their own
Aid to African Americans	Some people feel that the government in Washington should make every effort to improve the social and economic position of blacks. others feel that the government should not make any special effort to help blacks because they should help themselves. Where would you place yourself on this scale, or haven't you thought much about this?	Government should help African Americans	African Americans should help themselves
Women's rights	Recently there has been a lot of talk about women's rights. Some people feel that women should have an equal role with men in running business, industry, and government. Others feel that women's place is in the home. Where would you place yourself on this scale, or haven't you thought much about this?	Women and men should have an equal role	Women's place is in the home

Table 2: Perceived partisan differences and political engagement

Variables:	Political engagement				
	(1)	(2)	(3)	(4)	(5)
Perceived partisan differences	0.077***	0.075***		0.067***	0.038***
	(0.005)	(0.005)		(0.005)	(0.005)
| Perceived position of other party - own position |			0.022***		
			(0.008)		
| Perceived position of own party - own position |			-0.058***		
			(0.010)		
Republican				0.008	-0.012
				(0.010)	(0.010)
Own attitude (average)				0.031***	0.013***
				(0.004)	(0.004)
Strong partisan				0.134***	0.114***
				(0.009)	(0.009)
White					-0.011
					(0.009)
Male					0.037***
					(0.013)
Observations	10,434	10,434	9,393	10,434	9,800
Year FE		X	X	X	X
All individual controls			X	X	X

Notes: *Political engagement* is a dummy equal to 1 if the respondent reported any of the following political behaviors: voted in the last election, plans to vote in the next election, made any political contribution during the past electoral campaign, and worked or was actively involved in political activities like canvassing etc. in the past electoral campaign. *Perceived partisan differences* are perceived differences between Democrats and Republicans, averaged across all issues, standardized by subtracting its mean and dividing through its standard deviation. *Political party* indicates whether the individual belongs to the Democratic or Republican Party. *Own attitudes* is the individual position on various socioeconomic issues, averaged across issues. *Strong partisanship* is a dummy equal to 1 if the the individual "feels strong about his/her own party." *Demographic controls* include several individual demographic characteristics (race, age, age squared, education, gender, marital status, religion). *White* and *Male* are indicators if the individual is, respectively, white and male. Robust standard errors, clustered at the individual level, in parentheses. The sample is restricted to ANES respondents during the 1980 and 2000 waves who are either Republicans or Democrats. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 3: Actual and perceived differences in political attitudes

Issues:	Perceived differences between Democrats and Republicans						
	Defense spending	Domestic issues *(pooled)*	Liberal vs. conservative	Government aid	Job spending	Aid to blacks	Women's role
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Actual attitudes							
Republicans	4.415	4.685	5.033	4.562	5.043	4.939	2.887
Democrats	3.704	3.599	3.742	3.369	3.808	4.098	2.588
Difference	0.711	1.086	1.291	1.192	1.235	0.840	0.299
Panel B: Perceived attitudes							
Republicans	5.160	4.857	5.188	4.768	5.057	4.791	3.905
Democrats	3.570	3.062	3.115	2.904	3.204	3.195	2.891
Difference	1.591	1.795	1.291	1.864	1.853	1.596	1.014
Panel C: Beliefs exaggeration							
Exaggeration	0.879	0.709	0.782	0.671	0.618	0.756	0.715
Exaggeration (%)	123.0%	65.3%	60.5%	56.3%	50.0%	90.0%	239%
Observations	7,718	32,110	8,061	9,214	5,769	5,230	3,836

Notes: the table reports the actual attitudes (Panel A) of Republicans and Democrats, and beliefs about the attitudes (Panel B) of the Republican and the Democratic Party on each of the issues reported at the top of each column. "Difference" refers to the partisan difference in (actual or perceived) attitudes. Panel C reports the exaggeration of the difference in Panel B relative to Panel A, both on the ANES numerical scale (1 to 7) and in percent (relative to actual differences). "Domestic issues pooled" in Column 2 refers to the average among the five domestic issues reported in Columns 3 to 7.

Table 4: Perceived partisan differences and issue importance

Variables:	Beliefs about partisan differences				
	(1)	(2)	(3)	(4)	(5)
Most important problem	0.270***	0.245***	0.083*	0.104**	0.103**
	(0.045)	(0.044)	(0.045)	(0.045)	(0.047)
Observations	27,038	26,568	26,568	26,568	26,568
Year FE		X	X	X	
Individual FE		X	X	X	X
Controls			X	X	X
Issue FE				X	
Issue × year FE					X

Notes: *Most important problem* is a dummy equal to 1 if respondent answered that the issue was the "most important problem facing the country" in the corresponding year. Controls in Columns 3-5 include individual attitudes, and the actual differences between the Democratic and Republican Parties on the corresponding issue. Robust standard errors, clustered at the individual level, in parentheses. The sample is restricted to ANES respondents during the 1980 and 2000 waves who are either Republicans or Democrats. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 5: Likelihood ratios between parties

Issues	Likelihood ratios			
	Both tails [1-2, 6-7]	Conservative tail [6-7]	Liberal tail [1-2]	% Respondents considered as most important problem
	(1)	(2)	(3)	(4)
All	13.79	2.769	4.086	
Liberal-Conservative	37.82	4.518	7.729	
Government Spending	11.33	3.567	3.122	14.6
Job aid	7.935	2.539	3.14	13.8
Defense spending	5.001	1.563	3.157	5.4
Aid to blacks	7.200	1.697	4.159	0.5
Women's role	1.406	1.236	1.126	0.4

Notes: The first three columns refer to the likelihood ratio constructed as described in the main text averaged over the period 1980 to 1990: Column 1 focuses on both the liberal and conservative tails of the attitudinal distribution; Column 2 focuses on just the conservative tail; and Column 3 focuses on just the liberal tail. The last column reports the share of respondents mentioning the corresponding issues as the "most important problem facing this country." As the likelihood ratio, the most important issue indicators are averaged between 1980 and 1990. A residual category for any other response not included in the main issue categories reported here is not shown for brevity. The sample is restricted to ANES respondents during the 1980 and 2000 waves who are either Republicans or Democrats.

Table 6: Issues' partisan representativeness and perceived partisan differences

	Beliefs about partisan differences			
	(1)	(2)	(3)	(4)
Panel A: Pre-1991 average				
Actual differences	0.956***	0.849***	0.671***	0.716***
	(0.035)	(0.042)	(0.043)	(0.044)
LR		0.066***	0.060***	0.064***
		(0.015)	(0.015)	(0.014)
Panel B: Contemporaneous				
Actual differences	0.956***	0.846***	0.724***	0.774***
	(0.035)	(0.039)	(0.040)	(0.042)
LR		0.065***	0.053***	0.053***
		(0.015)	(0.016)	(0.016)
Observations	31,074	30,334	30,334	30,334
Year FE		X	X	X
Individual FE		X	X	X
Individual position				X

Notes: The dependent variable is the difference in respondents' beliefs about the position held by the Republican and the Democratic Party on a given issue (excluding "defense spending") in a given year. The sample is restricted to years 1980 to 2000 and to respondents who self-identify as either Republicans or Democrats. *LR* is the pre-1991 average (resp. contemporaneous) likelihood ratio on each issue in Panel A (resp. Panel B). Column 1 includes only average partisan differences; Column 2 adds LR; Column 3 replicates Column 2 by also including year and individual fixed effects; Column 4 adds the position held by respondents on each issue in each year. Robust standard errors clustered at the individual level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 7: Perceived partisan differences

Issues:	Beliefs about differences between Democrats and Republicans						
	Defense spending	Domestic issues *(pooled)*	Liberal vs. conservative	Government aid	Job aid	Aid to Blacks	Women's role
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Perceived vs. actual differences							
Actual differences	1.404***	0.956***	1.190***	0.834***	0.658**	0.449*	0.527***
	(0.161)	(0.035)	(0.123)	(0.135)	(0.325)	(0.242)	(0.179)
Panel B: Before and after 1991							
Actual differences	1.095***	0.898***	0.639***	0.740***	0.557*	-0.077	0.469**
	(0.171)	(0.035)	(0.229)	(0.146)	(0.326)	(0.314)	(0.228)
Post-1991	-0.309***	0.104***	0.280***	0.089*	0.140**	0.221***	0.045
	(0.056)	(0.036)	(0.100)	(0.051)	(0.057)	(0.083)	(0.109)
Panel C: Before and after 1991, control for individual characteristics							
Actual differences	0.935***	0.975***	0.579***	0.846***	0.487	-0.283	0.422*
	(0.167)	(0.036)	(0.219)	(0.146)	(0.321)	(0.303)	(0.112)
Post-1991	-0.334***	0.075**	0.245**	0.062	0.132**	0.313***	0.034
	(0.054)	(0.035)	(0.096)	(0.051)	(0.056)	(0.081)	(0.107)
Observations	7,644	30,871	7,990	9,133	5,756	5,210	2,782

Notes: the dependent variable is the difference in respondents' beliefs about the position held by the Republican and the Democratic Party on a given issue (reported at the top of each column) in a given year. Pooled (Domestic) in Column 2 refers to the five domestic issues in Columns 3 to 7. The sample is restricted to years 1980 to 2000 and to respondents who self-identify as either Republicans or Democrats. *POST-1991* is a dummy equal to 1 for survey years strictly greater than 1990, and Actual differences is the difference in average reported position of Democrats and Republicans. Panel C replicates Panel B by including also a number of individual controls (individual position on the issue; a dummy equal to 1 if the respondent is a Democrat; a dummy equal to 1 if the respondent is male; a dummy equal to 1 if the respondent is white; age; age squared; and a dummy equal to 1 if the respondent identifies as a "strong partisan"). Standard errors clustered at the individual level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 8: Increased perceived partisan differences and issues' likelihood ratios

Variables:	Beliefs about partisan differences			
	(1)	(2)	(3)	(4)
Actual differences	0.956***	0.885***	0.750***	0.784***
	(0.035)	(0.037)	(0.042)	(0.043)
LR × Post-1991		0.100***	0.067***	0.063**
		(0.020)	(0.024)	(0.024)
LR			0.053***	0.058***
			(0.018)	(0.018)
Post-1991			0.128***	0.126***
			(0.036)	(0.036)
Observations	31,074	31,074	31,074	31,074
Individual Position				X

Notes: The dependent variable is the difference in respondents' beliefs about the position held by the Republican and the Democratic Party on a given issue (excluding "defense spending") in a given year. The sample is restricted to years 1980 to 2000 and to respondents who self-identify as either Republicans or Democrats. *LR* is the pre-1991 average likelihood ratio on each issue; Post-1991 is an indicator equal to 1 for survey years greater than 1990. Robust standard errors clustered at the individual level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 9: Perceived partisan differences and contemporaneous likelihood ratios

| Variables:	Beliefs about partisan differences					
	Pre-1991	Post-1991	Pre-1991	Post-1991	Pre-1991	Post-1991
	(1)	(2)	(3)	(4)	(5)	(6)
LR_t	0.179***	0.247***	0.038**	0.098***	0.043**	0.101***
	(0.016)	(0.019)	(0.019)	(0.024)	(0.019)	(0.024)
p-value on t-test	0.006		0.049		0.058	
Observations	18,885	12,189	18,401	11,933	18,401	11,933
R-squared	0.006	0.012	0.521	0.597	0.521	0.597
Year FE			X	X	X	X
Individual FE			X	X	X	X
Actual differences			X	X	X	X
Own attitudes					X	X

Notes: The dependent variable is the difference in respondents' beliefs about the position held by the Republican and the Democratic Party on a given issue (excluding "defense spending") in a given year. Columns 1, 3, and 5 restrict to survey waves conducted prior to 1992; Columns 2, 4, and 6 restrict to survey waves conducted after 1990. LR_t is the average likelihood ratio — the share of Republicans stating position 6 or 7 relative to the share of Democrats stating position 6 or 7, times the share of Democrats stating position 1 or 2 relative to the share of Republicans stating position 1 or 2, averaged over years prior to 1990 (Columns 1, 3, and 5) or after 1990 (Columns 2, 4, and 6) — constructed over the relevant time period (pre 1992 in Columns 1, 3, and 5; post 1990 in Columns 2, 4, and 6). "P-value on t-test" presents the p-values of t-tests of the null hypothesis that the coefficients on LR_t are different for the pre-1991 and post-1991 periods. The sample is restricted to ANES respondents during the 1980 and 2000 waves who are either Republicans or Democrats. Robust standard errors, clustered at the individual level, in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 10: Perceived partisan differences after 2000

Variables:	Beliefs about partisan differences			
	Defense spending		Domestic issues *(pooled)*	
	(1)	(2)	(3)	(4)
Post-2000	0.697***	1.253***	-0.053	-0.159***
	(0.091)	(0.237)	(0.055)	(0.055)
Actual differences		-0.399		1.278***
		(0.404)		(0.023)
Observations	8,544	8,036	26,100	26,100

Notes: *Domestic issues (pooled)* is a z-score index of perceived partisan differences on 5 domestic socioeconomic issues: liberal vs. conservative; government aid; job spending; aid to blacks; and women's role. *Post-2000* is an indicator equals to 1 if year > 2000. *Actual difference* is the actual difference in the average stated position between Republicans and Democrats. The sample is restricted to ANES respondents during the 1990 and 2004 waves who are either Republicans or Democrats. Robust standard errors, clustered at the individual level, in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

ONLINE APPENDIX (NOT FOR PUBLICATION)
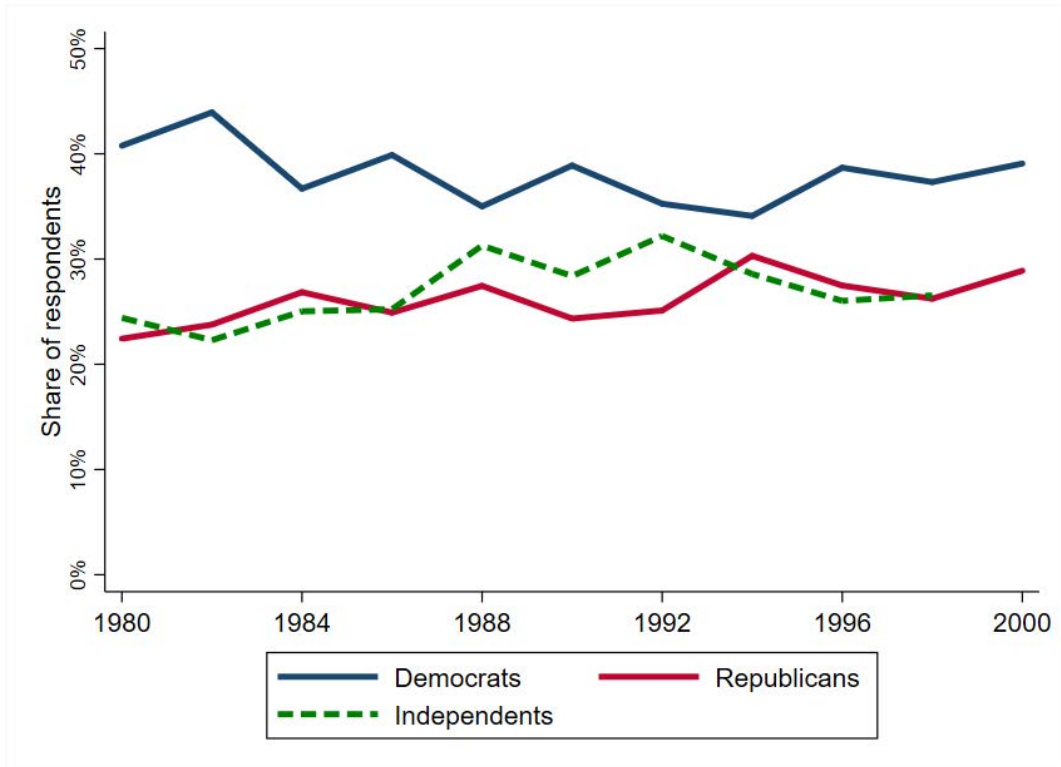
Figure A.1: The figure plots the share of survey respondents who identify as Democrats (blue, solid line), Republicans (red, solid line), or Independents (green, dotted line). For 2000, no answer was recorded for Independents, as the ANES only asked respondents whether they identified with either of the two main parties.
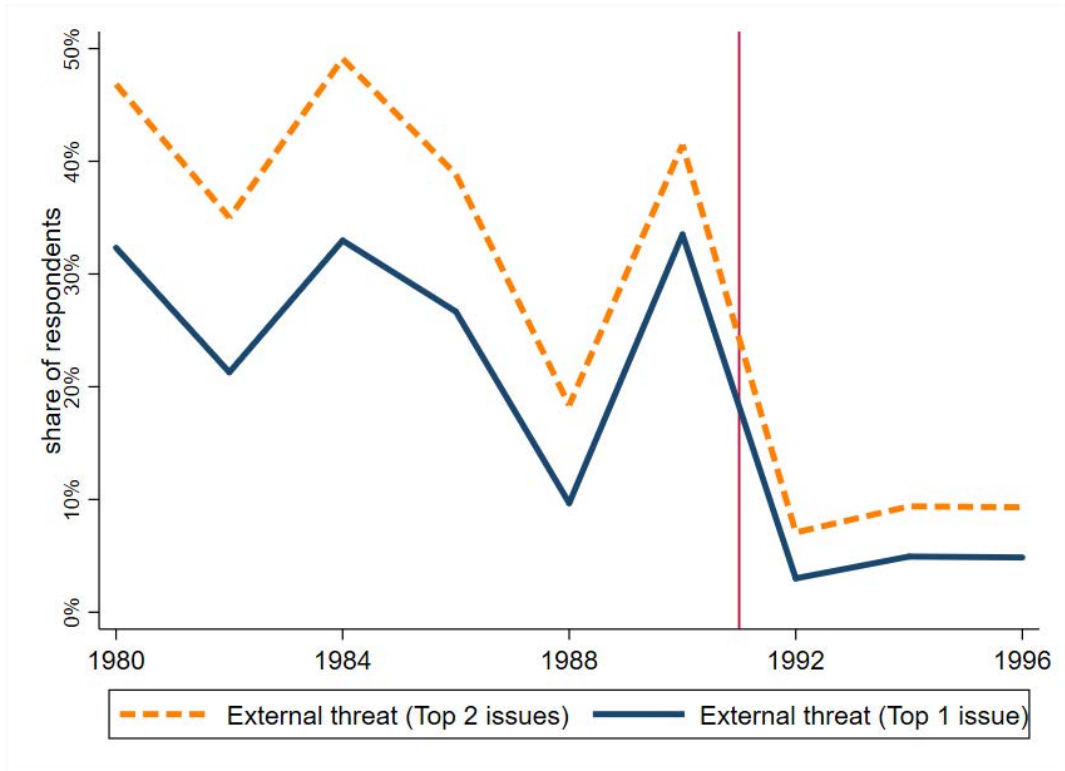
Figure A.2: The figure replicates Figure 3, bottom panel, in the main text considering the share of respondents who claim external threats and diplomatic issues are the first or second most pressing issue facing the US at the moment of the survey. The sample is restricted to ANES respondents during the 1980 and 2000 waves who are either Republicans or Democrats.
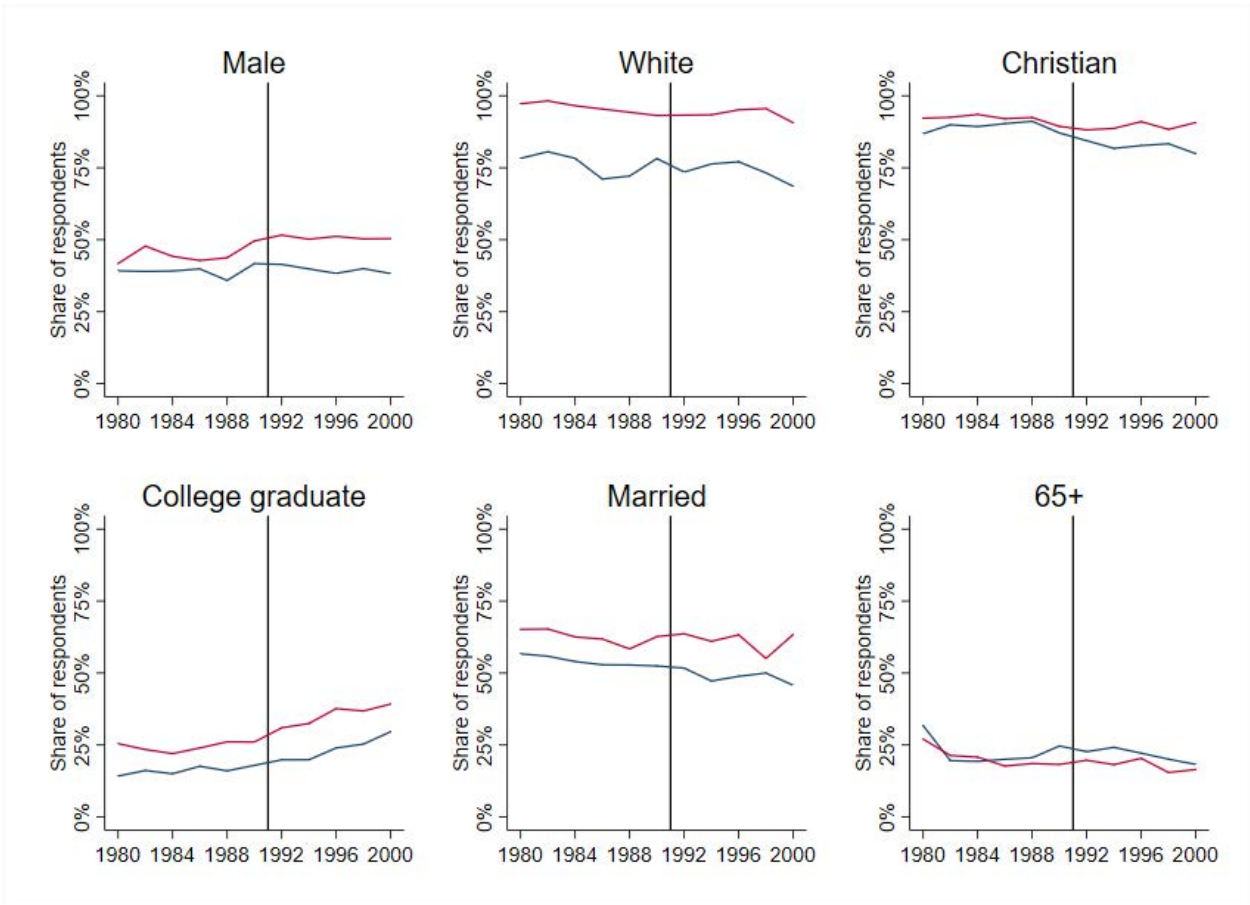
Figure A.3: The figure plots the share of party respondents (blue line for Democrats and red line for Republicans) with a given socioeconomic or cultural characteristic. The vertical black line corresponds to the end of the Cold War in 1991.
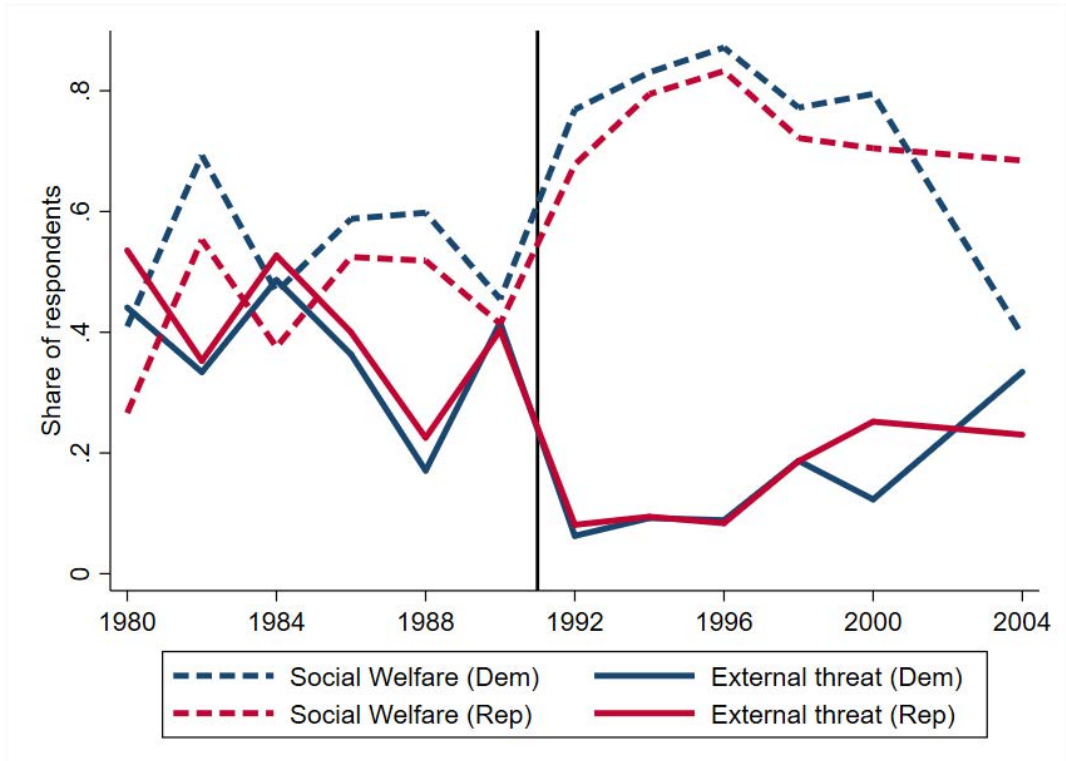
Figure A.4: Proportion of respondents, separately for Democrats and Republicans, who consider external threats and diplomatic issues as the most pressing issue facing the US at the moment of the survey, and the proportion of respondents who consider domestic issues such as social welfare and race as most pressing. The sample is restricted to the ANES respondents during the 1980 and 2000 waves who are either Republicans or Democrats.
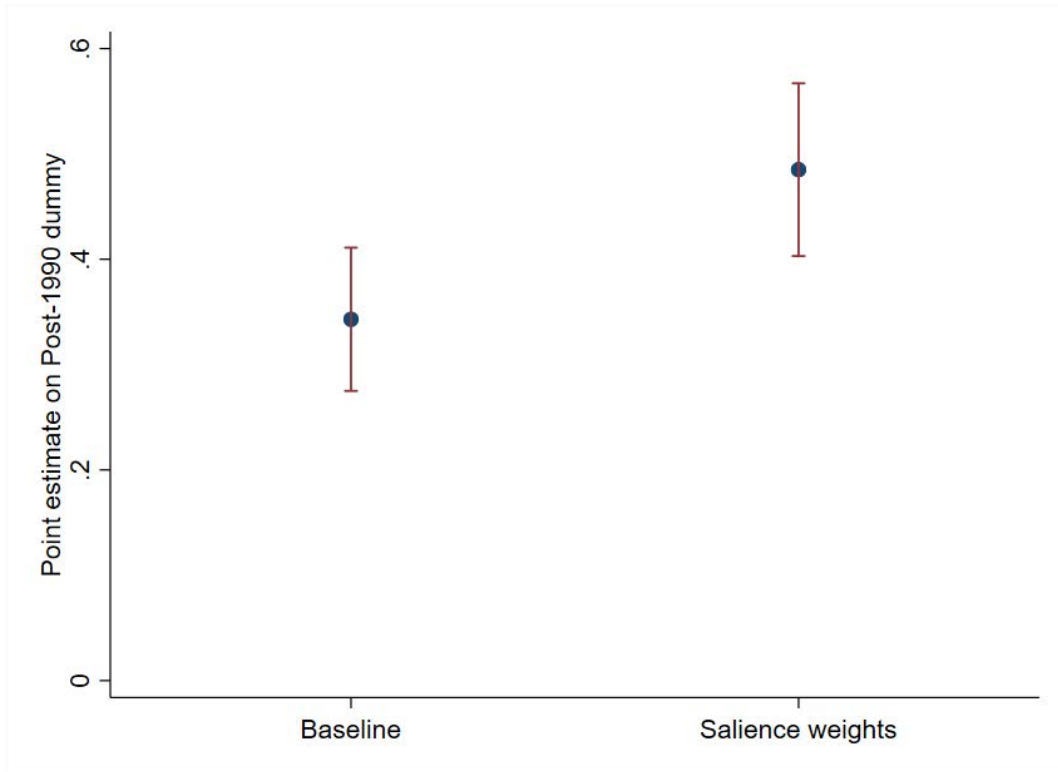
Figure A.5: The figure plots regression coefficients (with 95% confidence intervals) on the Post-1991 dummy for a specification where the dependent variable is the perceived partisan differences on domestic issues in each survey year between 1980 and 2000. The first dot on the left plots estimates the baseline, unweighted; the second dot estimates weighted regressions with "salience weights" constructed as follows. For each survey year, the salience weight on defense spending is given by the share of survey respondents who view that issue as the "most important problem" facing the country in that year. All domestic issues are then given a weight equal to 1 minus the salience weight attached to defense spending.
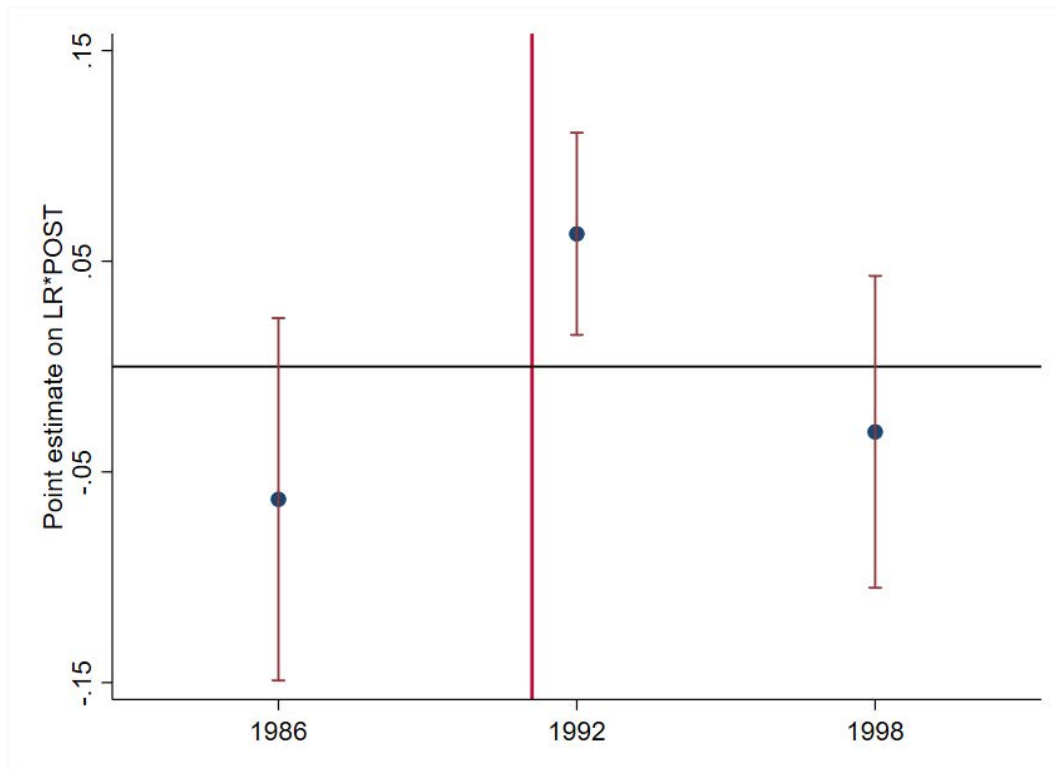
Figure A.6: The figure plots coefficients (with corresponding 95% confidence intervals) reported in Appendix Table A.10, Columns 1 to 3, where perceived partisan differences (on domestic issues) are regressed against the interaction between different time dummies and the pre-1991 average likelihood ratio. All regressions also control for actual average differences, individual respondents' position on the issue, as well as for issue, individual, and year fixed effects. The first (third) dot plots the coefficient on the pre-1991 average likelihood ratio and a dummy equal to 1 for survey years greater than 1984 (1996). The second dot corresponds to the baseline estimated coefficient reported in Column 4 of Table 8.

A.7

Table A.1: Issues available by survey year

Issue	1980	1982	1984	1986	1988	1990	1992	1994	1996	1998	2000
Liberal-Conservative	X	X	X	X	X	X	X	X	X	X	X
Government Spending	X	X	X	X	X	X	X	X	X	X	X
Job Aid	X	X	X		X		X	X	X	X	X
Defense Spending	X	X	X	X	X	X	X		X		X
Aid to Blacks	X	X	X		X		X	X	X	X	X
Women's Role	X	X			X					X	

Table A.2: Actual and perceived attitudes: summary statistics

Issues:	Defense spending	Domestic issues *(pooled)*	Liberal vs. conservative	Government spending	Job aid	Aid to blacks	Women's role
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Pre-1991							
Actual attitudes							
Republicans	4.463	4.578	4.951	4.462	4.993	4.820	3.008
Democrats	3.718	3.596	3.814	3.324	3.768	4.025	2.778
Partisan difference	0.745	0.982	1.136	1.138	1.225	0.796	0.231
Perceived attitudes							
Republicans	5.284	4.773	5.095	4.725	4.974	4.747	3.946
Democrats	3.559	3.113	3.241	2.940	3.188	3.210	2.974
Partisan difference	1.725	1.660	1.853	1.785	1.786	1.537	1.102
Exaggeration	0.980	0.667	0.717	0.646	0.561	0.741	0.741
Panel B: Post-1991							
Actual attitudes							
Republicans	4.311	4.853	5.142	4.689	5.107	5.238	2.489
Democrats	3.674	3.606	3.647	3.428	3.859	4.285	1.969
Partisan difference	0.637	1.247	1.495	1.261	1.247	0.953	0.520
Perceived attitudes							
Republicans	4.893	4.795	5.311	4.823	5.164	4.904	3.771
Democrats	3.594	2.962	2.948	2.858	3.226	3.158	2.618
Partisan difference	1.299	1.833	2.363	1.965	1.938	1.746	1.153
Exaggeration	0.661	0.738	0.868	0.704	0.691	0.793	0.633

Notes: Panel A (resp. Panel B) reports average actual and perceived positions on each issue (in each column) for both the Republican and the Democratic Party, as well as the difference between the two (*Partisan differences*), for surveys conducted between 1980 and 1990 (resp. between 1992 and 2000) included. Actual positions are calculated by taking the average of the reported position across respondents of either party. Perceived positions are constructed by averaging individuals' beliefs about the position of either party. *Exaggeration* at the bottom of both Panels A and B refers to the difference between perceived and actual average partisan differences. Each column refers to an individual issue, except for Column 2 (*Domestic issues (pooled)*), which pools together all issues other than *Defense spending*.

Table A.3: Political engagement and beliefs about partisan differences on salient issues

	Political engagement			
	(1)	(2)	(3)	(4)
Panel A: MIP only				
Perceived differences on MIP	0.047***	0.046***	0.038***	0.024***
	(0.007)	(0.007)	(0.007)	(0.007)
Panel B: MIP vs non-MIP random				
Perceived differences on MIP	0.042***	0.040***	0.032***	0.022***
	(0.008)	(0.007)	(0.007)	(0.007)
Perceived differences on non-MIP	0.016**	0.021***	0.018**	0.009
	(0.008)	(0.007)	(0.007)	(0.007)
Observations	3,553	3,553	3,553	3,379
Year FE		X	X	X
Political controls			X	X
Demographic				X

Notes: The dependent variable is a dummy equal to 1 if the individual reported any political behavior (voting or intention to vote; political contributions; spend time working or trying to convince others to vote). In Panel A, the main regressor of interest is the perceived difference between Republicans and Democrats reported by the individual on the issue that she considered the most important problem facing the country in the year of the interview. In Panel B, both perceived differences on the most important issue and perceived differences on one of the other four issues (randomly selected) are included. To ease the interpretation of results, perceived differences are standardized by subtracting their mean and dividing by their standard deviation. Perceived differences on the most important issue and on non-most important issues can only be constructed the 5 issues (government spending; job aid; defense spending; aid to blacks; women's role) for which: i) individuals were asked about beliefs about party positions; and ii) answers to the most important problem question were available. Column 1 includes no controls; Column 2 adds survey year fixed effects; Column 3 also includes individual controls that capture political characteristics of the respondent (partisanship; a dummy for being a strong partisan; and average individual's reported position across issues). Column 4 adds individual demographic controls (age dummies, education dummies, religion dummies, and a dummy for being married). Standard errors, clustered at the individual level, in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.4: Robustness: issues' partisan representativeness and perceived partisan differences

	Beliefs about partisan differences			
	(1)	(2)	(3)	(4)
Panel A: Pre-1991 average				
LR	0.220***	0.173***	0.060***	0.064***
	(0.012)	(0.012)	(0.015)	(0.014)
Actual differences			0.671***	0.716***
			(0.043)	(0.044)
Panel B: 1980-2000 average				
LR	0.206***	0.159***	0.053***	0.055***
	(0.012)	(0.012)	(0.014)	(0.014)
Actual differences			0.692***	0.739***
			(0.041)	(0.043)
Observations	31,074	30,334	30,334	30,334
Year FE		X	X	X
Individual FE		X	X	X
Individual position				X

Notes: The dependent variable is the difference in respondents' beliefs about the position held by the Republican and the Democratic Party on a given issue (excluding "defense spending") in a given year. The sample is restricted to years 1980 to 2000 and to respondents who self-identify as either Republicans or Democrats. *LR* is the pre-1991 average (resp. 1980-2000 average) likelihood ratio on each issue in Panel A (resp. Panel B). Column 1 includes no controls; Column 2 adds survey year and individual fixed effects; Column 3 further includes average differences on each issue in a given year as reported by respondents in the ANES survey; Column 4 adds the position held by respondents on each issue in each year. Robust standard errors clustered at the individual level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.5: Robustness: perceived partisan differences after 1991

Issues:	Beliefs about differences between Democrats and Republicans					
	Defense spending	Domestic issues *(pooled)*	Liberal vs. conservative	Government aid	Job spending	Aid to blacks
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No controls						
Post-1991	-0.436***	0.520***	0.605***	0.344***	0.245***	0.334***
	(0.062)	(0.045)	(0.066)	(0.060)	(0.085)	(0.087)
Panel B: Control for actual partisan differences						
Post-1991	-0.392***	0.109**	0.382***	0.073	0.278***	0.368
	(0.064)	(0.052)	(0.134)	(0.085)	(0.099)	(0.615)
Actual differences	0.747***	1.025***	0.505*	1.280***	-0.460	-0.116
	(0.227)	(0.054)	(0.263)	(0.282)	(0.790)	(2.051)
Panel C: Control for individual characteristics						
Post-1991	-0.387***	0.084*	0.358***	0.067	0.290***	0.345
	(0.062)	(0.051)	(0.130)	(0.084)	(0.098)	(0.596)
Actual differences	0.939***	1.112***	0.425*	1.310***	-0.470	0.017
	(0.220)	(0.055)	(0.251)	(0.277)	(0.776)	(1.984)
Observations	4,795	16,786	5,141	5,628	2,856	2,269

Notes: the dependent variable is the difference in beliefs about the position of Republicans and Democrats on a given issue (reported at the top of each column) in a given year. Pooled (Domestic) in Column 2 refers to the five domestic issues in Columns 3 to 6. The sample is restricted to the 3 years before and the 3 years after the end of the Cold War, i.e. 1986, 1988, 1990, 1992, 1994, and 1996. The issue of women's role in the society was asked only in 1998 for the post-period, and so cannot be included in this exercise. *POST-1991* is a dummy equal to 1 for survey years strictly greater than 1990. Panel A includes no controls; Panel B includes the difference in average reported position of Democrats and Republicans. Panel C further includes a number of individual controls (individual position on the issue; a dummy equal to 1 if the respondent is a Democrat; a dummy equal to 1 if the respondent is male; a dummy equal to 1 if the respondent is white; age; age squared; and a dummy equal to 1 if the respondent identifies as a "strong partisan"). Standard errors clustered at the individual level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.6: Increased perceived partisan differences and issues' likelihood ratios: most important issues

Variables:	Beliefs about partisan differences			
	(1)	(2)	(3)	(4)
Actual differences	0.849***	0.834***	0.724***	0.750***
	(0.039)	(0.040)	(0.067)	(0.068)
LR × MIP		0.239***	0.265***	0.280***
		(0.071)	(0.097)	(0.097)
LR			0.051**	0.058**
			(0.023)	(0.023)
MIP			-0.068	-0.073
			(0.068)	(0.068)
Observations	20,499	20,499	20,499	20,499
Individual Position				X

Notes: The dependent variable is the difference in respondents' beliefs about the position held by the Republican and the Democratic Party on a given issue (excluding "defense spending") in a given year. The sample is restricted to years 1980 to 2000 and to respondents who self-identify as either Republicans or Democrats, and who report non-missing MIP. *LR* is the pre-1991 average likelihood ratio on each issue; *MIP* is a dummy equal to 1 if an issue is considered the most important problem facing the country for the respondent in the year of the interview. Robust standard errors clustered at the individual level in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.7: Robustness: alternative sample and specifications

Variables:	Beliefs about partisan differences								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LR×Post-1991	0.063**	0.117***	0.073**	0.113***	0.096***	0.075***	0.181***	0.069***	0.074***
	(0.024)	(0.030)	(0.034)	(0.027)	(0.025)	(0.023)	(0.020)	(0.020)	(0.026)
Observations	31,074	25,572	15,032	27,195	31,074	31,074	40,037	27,942	30,334
Sample	Baseline	1980-1994	1986-1994	Baseline	Baseline	Baseline	Impute missing	Windsorized	Baseline
Actual differences	Baseline	Baseline	Baseline	Lagged	Mode	Strong partisan	Baseline	Baseline	Baseline

Notes: Column 1 replicates the baseline specification (reported in Column 4 of Table 8); Column 2 (resp. 3) restricts attention to the 1980-1994 (resp. 1986-1994) period; Column 4 (resp. 5) replaces actual average partisan differences with lagged ones (resp. the mode); Column 6 constructs average actual partisan differences using only strong partisans; Column 7 replaces missing values for beliefs about partisan differences by imputing those in the previous non-missing years; Column 8 trims the top and bottom 5% of perceived partisan differences; Column 9 replicates the specification in Column 1 by also controlling for year, individual, and issue fixed effects. Robust standard errors, clustered at the individual level, in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.8: Robustness: independent respondents

Variables:	Beliefs about partisan differences			
	(1)	(2)	(3)	(4)
LR×Post-1991	0.063**	0.092***	0.096***	0.058**
	(0.024)	(0.024)	(0.026)	(0.023)
Observations	31,074	39,773	35,141	34,966
Sample	Baseline	Baseline + Indep.	Baseline + R-leaning Indep.	Baseline + D-leaning Indep.

Notes: Column 1 reports all results of Table 8 in the main text. Columns 2-4 replicate Column 1, adding to the baseline sample of respondents, respectively, Independents leaning towards the Republican Party, the Democratic Party, and to both parties. Robust standard errors, clustered at the individual level, in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.9: Decomposition of partisan likelihood ratios

Variables:	Beliefs about partisan differences		
	(1)	(2)	(3)
LR(both)×Post-1991	0.063**		
	(0.024)		
LR(conservative)×Post-1991		0.068***	
		(0.025)	
LR(liberal)×Post-1991			0.066***
			(0.024)
Observations	31,074	31,074	31,074

Notes: This table shows results re-estimating the baseline specification (Table 8, Column 4), using different subsamples and different likelihood ratio definitions. *Post-1991* is an indicator equal to 1 for survey years strictly greater than 1990. *LR(both)* is the share of Republicans stating position 6 or 7 relative to the share of Democrats stating position 6 or 7, times the share of Democrats stating position 1 or 2 relative to the share of Republicans stating position 1 or 2, averaged over all years between 1980 to 1990. *LR(conservative)* is the share of Republicans stating position 6 or 7 relative to the share of Democrats stating position 6 or 7, averaged over all years between 1980 to 1990. *LR(liberal)* is the share of Democrats stating position 1 or 2 relative to the share of Republicans stating position 1 or 2, averaged over all years between 1980 to 1990. Robust standard errors, clustered at the individual level, in parentheses. The sample is restricted to ANES respondents during the 1980 and 2000 waves who are either Republicans or Democrats. *** $p < 0.01$, **$p < 0.05$, * $p < 0.1$.

Table A.10: Robustness: placebo end of the Cold War timing

Variables:	Beliefs about partisan differences			
	(1)	(2)	(3)	(4)
LR×Post-1991	0.063**			0.080***
	(0.024)			(0.029)
LR×Post-1984		-0.063		-0.042
		(0.043)		(0.044)
LR×Post-1996			-0.031	-0.075*
			(0.037)	(0.042)
Observations	31,074	31,074	31,074	31,074

Notes: The dependent variable is the perceived difference between Republicans and Democrats, which is constructed as described in the main text. *LR* is the share of Republicans stating position 6 or 7 relative to the share of Democrats stating position 6 or 7, times the share of Democrats stating position 1 or 2 relative to the share of Republicans stating position 1 or 2, averaged over all years between 1980 to 1990. Column 1 replicates the most preferred specification reported in Column 4 of Table 8. Columns 2 and 3 interact the LR with a dummy equal to 1 for years greater than 1984 and 1996 respectively. Column 4 includes the interactions between LR and all three year dummies. Robust standard errors, clustered at the individual level, in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A.11: Sentiments towards party vs. party members

		Survey elicited sentiments towards ...				
	Democrats	Democratic Party	Difference	Republicans	Republican Party	Difference
	(1)	(2)	(3)	(4)	(5)	(6)
1980	67.18	64.11	3.076 [4.689]	59.71	57.07	2.636 [3.735]
1982	68.18	66.62	1.558 [3.230]	56.21	53.52	2.691 [5.098]

Notes: The table reports the average feeling thermometer towards Democrats and Republicans in Columns 1 and 4, and towards the Democratic and the Republican Party in Columns 2 and 5. Columns 3 and 6 test the null hypothesis of equality of means, with the t-statistic reported in square brackets. The sample is restricted to respondents who self-identified as either Republicans or Democrats, and who answered to all four feeling thermometer questions. The number of observation is 836 for 1980 and 908 for 1982. Source: ANES survey waves in 1980 and 1982.