Vote Choice Formation and Minimal Effects of TV Debates: Evidence from 61 Elections in Nine OECD Countries

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Abstract

We use 201,000 observations from repeated survey data in 61 elections in nine OECD countries since 1952 to study the formation of vote choices and policy preferences in the electoral season and assess how TV debates contribute to this process. We find that the share of voters who state a pre-election vote intention corresponding to their final vote choice increases by 15 percentage points in the two months preceding the election. Changes in individual vote choices mostly result from changes in beliefs about competing candidates and in issue salience, and they generate aggregate shifts in predicted vote shares. Policy preferences, on the other hand, remain remarkably stable over time. We use an event study to estimate the impact of TV debates, and we find that they affect significantly neither individual vote choice and policy preference formation nor aggregate vote shares. This suggests that information continuously received by voters exerts more influence on their behavior than TV debates do.

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1 Introduction

A healthy democracy requires informed voters (Downs, 1957; Delli Carpini and Keeter, 1997). One view is that the weeks immediately preceding elections are a crucial period in this respect because candidates' campaigns give voters the information they base their votes on (e.g., Holbrook, 1996; Hillygus and Shields, 2009; Hillygus, 2010). An alternative view is that campaigns have minimal effects because most people form their vote choice long in advance, based on group identities and party attachments rather than individual candidates' characteristics and election-specific information (Lazarsfeld et al., 1944; Berelson et al., 1954; Campbell et al., 1960; Bartels, 2000). We use repeated survey data in 61 elections around the world to disentangle these contrasting views. First, we determine what fraction of people form their vote choice in the last two months before an election and whether changes in vote intentions are driven by changes in voters' beliefs about candidates, in their policy preferences, or in issue salience (DellaVigna and Gentzkow, 2010). Second, we use an event-study approach to assess the contribution to this process of TV debates, commonly thought to be among campaigns' most salient events. Our findings shed light on the drivers of voter behavior and election results, and they hold lessons for the design of partisan campaigns and the regulation thereof.

People usually pay more attention to politics when elections are near. Information received in the electoral season may first affect voters' choice by changing their beliefs about candidates. Information on candidates' relative qualities and policy positions facilitates prospective voting and issue voting (Enelow and Hinich, 1984; Alvarez, 1988; Popkin, 1991; Fridkin and Kenney, 2011; Hirano et al., 2015). In addition, voters may use the pre-election period to learn about the incumbent's policies and how the country and its economy have fared since the last election, which they can use to engage in retrospective voting (Key, 1966; Fiorina, 1981; Vavreck, 2009; Healy and Malhotra, 2013; Strömberg, 2015). Second, polls may clarify the identity of the front-runners and thus affect the choices of people voting strategically, i.e., based on likely outcomes of the election rather than expressively, for their favorite candidate (Duverger, 1954; Hall and Snyder, 2015). Third, priming mechanisms may lead voters to reevaluate candidates based on issues which received the most coverage during the campaign (Iyengar and Kinder, 1987). Finally, persuasive communication can change people's votes by changing their policy preferences (Page and Jones, 1979; Minozzi et al., 2015; Broockman and Kalla, 2016).

If voters cast their ballots based on information received in the electoral season, one should expect a large number of them to reach their final vote choice only shortly before the election. On the other hand, people may vote based on preexisting partisan affiliations even if they pay attention to electoral campaigns. Communication by parties, which represents a large share of the information voters are exposed to in the period leading to an election, and TV debates among the candidates may actually strengthen partisan identities and increase polarization (Holbert, 2005; Levendusky, 2013). In turn, this partisan strengthening might decrease voters' exposure and receptiveness to pieces of information challenging their views (Taber and Lodge, 2006; Gentzkow and Shapiro, 2010).

Our first set of results relate to the *overall impact of information received during the electoral season*. To estimate the fraction of people forming their vote choice shortly before an election, we assembled a dataset of nationally representative surveys conducted around 61 national elections in nine countries, from 1952 to 2016, and including a total of 201,000 observations. All surveys interviewed a new set of people every day before the election to elicit their vote intention, then surveyed these same people again after the election to record their actual vote choice. By comparing voters' responses to the two surveys, we can ascertain whether they had already settled on their final vote choice by the time of the pre-electoral survey without having to rely on their own recollection of the date when they made up their mind. Most of our observations come from surveys which allocated respondents' interview date randomly, facilitating the interpretation of outcome differences over time. We find that the fraction of people with identical pre-election vote intention and post-election vote declaration increases by about 15 percentage points over the last 60 days before the election. This results both from an increased fraction of people stating any vote intention and increased consistency conditional on stating a vote intention. While men, older voters, voters with higher income, and voters who are not employed show more consistency between vote intention and vote choice throughout the period, this outcome increases faster for younger voters and those without a college degree, suggesting that voters with less preexisting knowledge are more influenced by the information received in the electoral season, in line with Bayesian updating.

The increase in individual vote choice consistency does not simply result from decreased noise, with some voters switching from one candidate to another while others follow the opposite trajectory. Instead, we find that it is concomitant with aggregate trends in the relative strength of competing candidates. We compute each candidate's daily predicted vote share

based on the vote intentions of respondents surveyed on that day, and compare it to their final vote share measured in the post-electoral survey. The total distance between predicted and final vote shares, measured as half the sum of the absolute value of these candidate-level differences, decreases by about 4 percentage points over the last 60 days before the election. This result indicates that vote choice formation during the electoral season can change the outcome of an election and that it is unlikely to be driven by shocks lacking any information content: indeed, such shocks should be expected to cancel each other in the aggregate. Instead, we argue that our results are primarily driven by information acquired and processed during the last two months and, therefore, that they provide a good measure of how this information affects individual vote choice formation, aggregate vote shares, and the result of the election (see Section 3.4 for more details on this interpretation).

Our second set of results shed light on the *mechanisms through which information affects people's vote choices*. To test whether vote choice formation is driven by changes in policy preferences, we use a set of policy questions which, similarly to people's vote choice, were asked in both the pre- and post-electoral surveys. Strikingly, we do not find any increase in the consistency between policy preferences expressed before and after an election. The fact that vote choice formation in the electoral season is not mirrored by a similar process of policy preference formation indicates, of course, that the latter is unlikely to explain the former. It also suggests that the reverse relationship, whereby voters adjust their policy preferences to their choice of candidate (Lenz, 2012; Barber and Pope, 2019), does not play an important role in the elections we study.

We use a similar method to explore the role of priming. Using questions asked both before and after the election and recording the issue that respondents consider the most important, we find that the consistency between their pre- and post-electoral survey responses increases over time. This suggests that one of the ways in which information affects vote choice is by changing the relative salience of different issues.

Finally, we assess the role of beliefs voters hold on candidates. Using questions directly recording voters' beliefs and asked both before and after the election, we find that belief consistency also increases over the electoral season: its daily increase is about half the size of the increase in vote choice consistency, albeit not statistically significant. The fraction of voters forming their vote choice in the last two months is much lower in U.S. bipartisan elections than in multiparty elections held in the other countries in the sample, bringing additional evidence

that beliefs on candidates contribute an important share to vote choice formation. Indeed, we should expect campaign information to change beliefs relatively more in multiparty elections, where the higher number of candidates may reduce the precision of initial priors. To identify the role of different types of beliefs, we compare the shift in vote intentions for incumbents and strong candidates, who should benefit from increased information and changed beliefs on candidates' relative chances of victory if people vote strategically, and for lesser-known candidates (challengers, new candidates, or small candidates), who should benefit from increased information available to voters on candidates' issue positions and quality. We find that people who eventually vote for lesser-known candidates are more likely to make up their minds during the electoral season; these candidates' vote shares grow over the last 60 days before the election; and the concentration of predicted vote shares does not increase in that period, bringing support for the latter interpretation.

Overall, these results suggest that electoral campaigns affect vote choices by providing information which changes issues salience and voters' beliefs on candidates' attributes without changing their policy preferences or likelihood to rally to the front-runners.

Our third set of results provide evidence on the *relative importance of different sources of information*. Voters may update their beliefs and policy preferences based on information they continuously receive from the media, candidates' campaigns, or discussions with family members, friends, and coworkers (Huckfeldt and Sprague, 1995; Beck et al., 2002), and they may converge on their final choice at different paces. Alternatively, many may form their vote choices within a few critical moments, including TV debates, party conventions, campaign rallies, scandals, and major domestic and international events such as conflicts, terrorist attacks, or economic crises (e.g., Shaw, 1999a; Linn et al., 2009).

To investigate the role of discrete events in the formation of vote choice, we focus on TV debates between presidential candidates or, in parliamentary systems, between candidates for prime minister. The first reason is that TV debates have a tremendous potential to inform voters (Jamieson and Birdsell, 1988). They give direct and simultaneous exposure to candidates and allow voters to compare their policy positions and performance in an exercise which campaign teams do not control as they do scripted speeches, media interviews, or TV ads. Debates draw larger audiences than any other campaign event: they regularly attract more than half of eligible voters (McKinney and Carlin, 2004; Benoit and Henson, 2007); for instance, 84 million watched the first Clinton-Trump debate in 2016 (Stelter, 2016), and close to 80% report watch-

ing TV debates in our sample. Debates can also influence non-watchers, through subsequent discussions (Patterson, 2002; Cho and Ha, 2012), social media posts (McKinney et al., 2014), and media commentaries (Lemert et al., 1991; Kaid et al., 2000). Second, holding TV debates before national elections is the norm in a growing number of countries (National Democratic Institute, 2014): after the first presidential TV debate, between Richard Nixon and John F. Kennedy in 1960, TV debates were held in each U.S. election beginning in 1976 and the practice quickly spread to other countries, including Canada (1968), Germany (1972), France (1974), the Netherlands (1977), Israel (1977), Australia (1984), New Zealand (1984), Austria (1994), Ukraine (1994), South Africa (1994), Poland (1995), Greece (1996), South Korea (1997), Sweden (1998), Taiwan (2004), the U.K. (2010), and Kenya (2013). The now-common use of debates invites using a cross-country sample to study their impact.

We use an event-study approach pooling 56 TV debates in 22 elections in seven countries of our sample. Including this large number of debates instead of focusing on a single election or a single country as in the preexisting literature, dramatically increases our statistical power and the external validity of our estimates. In addition, the fact that debates were held at different times in different elections enables us to disentangle their effect from underlying time trends by controlling for a full set of daily fixed effects indicating the distance to the election. Our identification assumption, which we discuss at greater length in Section 5, is that, conditional on these and other controls, the timing of debates is uncorrelated with the outcomes.

We do not find any significant impact of TV debates on individual consistency between vote intentions and vote choices or that between policy preferences expressed before and after an election. At the aggregate level, the debates affected significantly neither the distance between predicted and final vote shares, nor short-term daily changes in parties' predicted vote shares. All effects are close to zero and precisely estimated. For instance, considering the 95% confidence interval, we can reject any impact higher than 0.9 percentage point on individual vote choice consistency and 0.2 percentage point on the distance between predicted and final vote shares at the 5% level. Using our estimates of the overall vote choice formation over the electoral season as a benchmark, we find that TV debates contribute no more than 6% of the total increase in vote choice consistency and 5% of the total decrease in the distance to final vote shares. Remarkably, we do not find that debates contribute to vote choice formation for any group of voters, including those who report watching debates and those we found to be most likely to form their vote choice shortly before the election, or when focusing on types of debates

which could be expected to be more impactful: the first debate held during the campaign as opposed to later debates, or debates held in close races, fluctuating races, or multiparty systems. Finally, debates do not impact the predicted vote share even of lesser-known candidates, who benefit from the campaign the most overall. We conclude that the contribution of TV debates to the formation of vote decisions is negligible.

1.1 Contribution to the Literature

We make three important contributions to the literature on the determinants of vote choices, policy preferences, and electoral results.

Many papers study the influence of interpersonal discussions, the media, and partisan communication on these outcomes. Experiments by Nickerson (2008) and Bond et al. (2012) show that information received from personal online or offline contacts can be very impactful, and quasi-experimental evidence indicates that information provided by TV (Simon and Stern, 1955; Gentzkow, 2006; DellaVigna and Kaplan, 2007; Enikolopov et al., 2011), radio (Adena et al., 2015), newspapers (Gerber et al., 2009; Gentzkow et al., 2011; Chiang and Knight, 2011), and the internet (Falck et al., 2014; Campante et al., 2017) can also substantially affect voter behavior. However, the effects of political ads disseminated by candidates' campaigns through these media are more modest (Krasno and Green, 2008; Broockman and Green, 2014) and short-lived (Gerber et al., 2011). While Larreguy et al. (2018) report positive effects of radio ads on vote shares, Spenkuch and Toniatti (2018) find that TV ads do not change vote choices and only affect the electoral results by altering the composition of the electorate. Turning to candidates' field campaigns, Shaw et al. (2012) do not find any significant effect of robocalls, but most studies report substantial effects on vote choice of more personalized forms of communication such as direct mail (Rogers and Middleton, 2015), phone calls (Arceneaux, 2007), door-to-door visits (Pons, 2018, but see Broockman and Kalla, 2018), and town hall meetings (Fujiwara and Wantchekon, 2013; Wantchekon et al., 2019).

Our first contribution is to estimate the impact on vote choice of another major type of partisan communication, on which the existing evidence is less conclusive: TV debates between candidates. Although their medium, television, is the same as that of political ads, voters may find TV debates more informative because they last much longer, subject all candidates to the same exercise, and test their ability to respond in the moment to unexpected moderators' questions and opponents' arguments. A large number of studies explore the effects of TV debates

by focusing on a unique election or a small number of races held in the same country and comparing individual vote intentions (e.g., Hillygus and Jackman, 2003), aggregate polls shares (e.g., Shaw, 1999a), or betting odds (e.g., Shaw and Roberts, 2000) before and after debates (for broader reviews of the literature on debates, see McKinney and Carlin (2004) and Birdsell (2017)). Most of this research focuses on the U.S., but a few papers study debates in other countries, including Canada (e.g., Blais and Boyer, 1996), the U.K. (e.g., Pattie and Johnston, 2011), Germany (e.g., Schrott, 1990), Australia (e.g., Senior, 2008), and the Netherlands (e.g., van der Meer et al., 2016). While many studies find modest or null effects (e.g., Katz and Feldman, 1962; Sears and Chaffee, 1979; Lanoue, 1991; Shaw, 1999b; McKinney and Warner, 2013), others conclude that debates truly matter, particularly when they occur earlier in the electoral season and for voters with less information (e.g., Chaffee and Choe, 1980; Geer, 1988; Lanoue, 1992; Benoit et al., 2003; Kenski et al., 2010). However, these studies' simple pre/post difference designs fail to control for underlying trends, threatening the internal validity of their results. Instead, we take advantage of the large number of debates which took place in the periods covered by our surveys and of the variation in their timing to flexibly control for the time to the election. This novel strategy provides more reliable estimates of debates' impact. The fact that our event study includes debates held in a large number of elections and countries also increases the external validity of our estimates well beyond that of any preexisting work. Methodologically, we draw on recent event studies used in other settings (e.g., Chetty et al., 2014; Dobkin et al., 2018).

Our study is related to recent experimental evidence on a different type of debates: non-televised debates shown on smartphones, in public gatherings, or broadcast on the radio, and opposing parliamentary candidates in low-income democracies (Brierley et al., 2019; Bowles and Larreguy, 2019; Bidwell et al., 2019). Scarce political information characterizing these studies' contexts (Pande, 2011) may contribute to explain the substantial effects on vote choices they find, as emphasized by Brierley et al. (2019). Using randomized experiments to measure the impact of presidential or prime-ministerial TV debates has proven more difficult given the large fraction of the population that watches them and their possible influence on nonviewers. Mullainathan et al. (2009) encourage a random selection of 505 out of 1,000 New York City voters to watch the final 2005 mayoral election debate and increase the fraction of watchers by 21 percentage points. They do not find any significant impact on opinions on candidates but acknowledge that subsequent discussions and media commentaries, which they did not vary,

may explain this null result. Instead, Fridkin et al. (2007) use a lab experiment with 145 participants to measure both the impact of watching live the final 2004 U.S. TV debate and of media's instant analysis following it. This setting guaranteed 100% differential take-up as long as subjects remained in the lab. Measuring their immediate reactions, the authors report large effects on candidates' evaluations. In contrast, we find null effects on vote intentions one to three days afterward, suggesting that debates' effects quickly fade away. Supporting this interpretation, a recent Mechanical Turk experiment which varied post-debate media coverage reports rapid decay in effects on subjects' evaluations of candidates' debate performances (Gross et al., 2019).

While most existing research on vote choice seeks to isolate the impact of a specific source of information or type of campaign contact, our second contribution is to provide an overall estimate of their combined influence in the last two months before an election. We build on Wlezien and Erikson (2002) and Wlezien et al. (2017), who show that election polls are increasingly predictive of the final result as the election comes closer. This pattern holds across most countries examined by Jennings and Wlezien (2016). Our finding that the distance between predicted and final vote shares decreases over time replicates this result in our set of elections, which partly overlaps theirs. The fact that we use individual-level repeated survey data instead of aggregate polls enables us to complete the study of time patterns in vote choice formation in three important ways. First, we determine the fraction of voters who converge on their final choice during the campaign, which differs from the reduction in the distance between predicted and final vote shares. Second, we compare the patterns of vote choice formation across different types of voters to identify the groups that electoral campaigns influence the most. The differences across groups we uncover are interesting in their own right and they inform our heterogeneous impact analysis of TV debates. Third, we can investigate the mechanisms through which information affects vote choices.

Our last contribution is to shed light on the role of beliefs and policy preferences in vote choice formation (DellaVigna and Gentzkow, 2010). A large body of evidence shows that some of the information obtained by voters during the campaign relates to events that occured before, such as economic fundamentals, which explains the good performance of models forecasting election results based on these variables (e.g., Fair, 1978; Rosenstone, 1983; Gelman and King, 1993; Stevenson and Vavreck, 2000). Other studies find that new information on candidates' valence and policy platforms which emerges during the campaign also matters (e.g., Kendall et al., 2015; Cruz et al., 2018). In both bodies of evidence, information received by voters affects

their vote choice by changing their beliefs, whether on candidates or on the state of the economy. On the other hand, recent evidence shows that interpersonal discussions can also lead people to change their preferences, including on issues as resistant to change as intergroup prejudices (Broockman and Kalla, 2016). One could similarly expect partisan campaigns to convince voters by changing their policy preferences when they use this type of contact. We assess the overall contribution of changes in beliefs, policy preferences, and issue salience to the formation of vote choice. We do not find any increase in the consistency between policy preferences expressed before and after an election. Our evidence indicates that information received during the campaign tends to affect vote choices and election outcomes by changing beliefs and issue salience more than policy preferences.

The remainder of the paper is organized as followed. Section 2 describes our data. Sections 3 and 4 study the formation of vote choices, beliefs, policy preferences, and issue salience during the electoral season. Section 5 estimates the impact of TV debates on these outcomes, and Section 6 concludes.

2 Data

2.1 Campaign Surveys

We assembled a new dataset of nationally representative surveys conducted around 61 elections in nine countries, from 1952 to 2016. The data come from the American National Election Time Series Studies (1952 to 2016), the Canadian Election Studies (1988 to 2015), the British Election Studies (2001, 2010, 20015, 2016), the New Zealand Election Studies (1996, 1999, 2002), the Dutch Parliamentary Election Studies (1998, 2002, 2006), the National Annenberg Election Surveys (2000, 2004, 2008), the German Longitudinal Election Studies (2009, 2013), the Swiss Electoral Studies (2011, 2015), the Italian National Election Studies (2013), and the Austrian National Election Studies (2013). While all surveys are available online, either to the general public or for research purposes, identifying them and standardizing the responses collected with independent questionnaires in order to integrate them into a common empirical framework marks an important effort.[1]

A few surveys cover multiple elections because multiple offices were on the ballot on the same day (for instance President and member of Congress in the U.S.) or because voters can cast

[1]The full list of links at which the surveys can be downloaded is available in Appendix A.1.

multiple ballots (for instance Germany's first and second votes). We define each of these offices or ballots as a separate election. For instance, the 1996 wave of the American National Election Studies covers two elections: the 1996 Presidential and Congressional elections. Conversely, the 2000, 2004, and 2008 U.S. elections are covered both by the American National Election Time Series Studies (henceforth ANES) and the National Annenberg Election Surveys (henceforth NAES). Appendix Table A.1 shows the full list of elections, their date, type, voting rule, as well as key features of the corresponding surveys. 33% of the elections were for President, 54% for lower house, 5% for upper house, 5% for governor, and 3% were referenda. 80% used the plurality rule and 20% the proportional rule. We refer indifferently to the individual candidates competing in plurality elections and lists competing in proportional elections as "candidates." On average, the corresponding surveys spanned 52 days and included 3,500 respondents. We keep all respondents surveyed 60 days before the election or less as only few surveys started earlier, limiting statistical power to examine earlier outcomes.

To build this dataset, we searched for all electoral surveys around the world that satisfy three criteria. First, they must survey respondents twice: once before the election, to elicit their vote intention, and once afterwards, to record their actual vote choice. We observe 201,000 pre-election vote intentions from 172,000 unique respondents and post-electoral responses for about 154,000 (77%) of these observations. The median length between the election and the post-electoral survey was 16 days on average. The representativeness of the surveys and the high response rate to the post-electoral survey ensured a strong correlation between actual vote shares and vote shares computed based on survey respondents: 0.91 on average. Second, surveys must interview a new set of respondents every day and record the corresponding date. Third, respondents surveyed on different dates must be as similar as possible.

To satisfy the third criterion, most of our sample comes from rolling cross-sections—surveys that randomly allocate each respondent's interview date. This design implies that the set of respondents surveyed on any particular day can be treated as an independently drawn random sample and it reduces the risk that answers from respondents surveyed on different dates differ because of underlying differences in their characteristics (Knight and Marsh, 2002; Johnston and Brady, 2002; Brady and Johnston, 2006). To increase statistical power, we complemented our sample with surveys that were not designed as rolling cross-sections but are statistically close to daily random sampling. Specifically, we include surveys that show neither too strong a coefficient of variation in daily sample size nor too large imbalances in pairwise comparisons

of daily respondents' observable characteristics (see Appendix A.2 for additional details). Our results are robust to excluding this subset, accounting for 23% of our observations.[2] As shown in Appendix Table A.2, most surveys were administered face-to-face (for 15% of elections) or by combining face-to-face with another method (12%). The others were administered by phone (43%) and online (30%).

Our key variables of interest are respondents' pre-election vote intention and post-election vote declaration. In addition, we study possible drivers of changes in their vote choice by using questions on policy preferences, issue salience, and beliefs on candidates. We focus on questions asked in the same way before and after the election, allowing us to use the same specifications as for the formation of vote choice. We identified 42 questions from eight surveys that recorded the policy preferences of a total of 62,000 respondents, and 69 questions from 10 surveys that elicited the beliefs of 54,000 respondents on the quality and policy positions of competing candidates (e.g., "Which party is best to handle the economic crisis?" or "Does Bush or Kerry favor an increase in the minimum wage?"). The full list of these questions is available in Appendix Tables A.3 and A.4. To measure changes in issue salience, we use open-ended questions in 11 surveys asking a total of 43,000 respondents which issue they find the most important in this election. We rank all possible answers in all surveys under 10 categories: economic policy (e.g., 'inflation'), social policy (e.g., 'abortion'), foreign policy (e.g., 'Iraq war'), public safety (e.g., 'crime and violence'), civil rights (e.g., 'civil liberties'), moral values (e.g., 'decline of tradition'), institutions (e.g., 'country stability'), politics (e.g., 'integrity in politics'), electoral issues (e.g., 'low turnout'), and other issues.

Finally, we keep the following covariates for heterogeneity and other secondary analyses and standardize them across surveys: respondents' education, age, gender, income, and employment status, which are recorded by the vast majority of surveys, as well as their exposure to different media outlets, their party affiliation, their propensity to watch TV debates and read polls, whether they have been contacted or visited by a party, and how frequently they have discussions about politics, when available (see Appendix Table A.2).

2.2 Complementary Data

We supplement the survey data with information that we collected from separate sources including ParlGov and the Manifesto Project on candidates competing in each election: their

[2] All results restricted to the subset of rolling cross-sections are shown in Appendix Tables D.4 through D.12.

party, their incumbency status, and whether they were on the ballot for the first time or not (see Appendix Table A.5).

In addition, we systematically searched for all TV debates held between presidential or prime-ministerial candidates during the periods covered by election surveys in our sample. Some surveys asked respondents whether they had watched debates, thereby indicating that debates had taken place before the corresponding election. In addition, we searched for the existence and dates of TV debates on the internet and relied primarily on the following sources: academic papers, TV channels archives (such as CBC Archives),[3] newspaper articles,[4] and Wikipedia. We cross-checked these different sources to ensure that we recorded debates' dates accurately. The full list of debates included in our analysis is shown in Appendix Table A.6.

3 The Formation of Vote Choices

3.1 Vote Choice Formation

We first study the timing of vote choice formation. The fraction of people who decide which candidate to vote for in the last weeks before an election (rather than earlier) is difficult to estimate directly. Indeed, it is difficult for voters to assess the likelihood that they will stick to their vote intention, ex ante, or to recall the exact date they made up their mind, ex post. We overcome this issue by using questions recording vote intention and vote choice, which are easier to respond to, and by comparing each respondent's answers to both. Formally, we define vote choice consistency as a dummy equal to 1 if the respondent's pre-election vote intention and post-election vote declaration coincide and 0 if they differ or if the respondent did not state any vote intention. Based on this outcome, we can compute the share of respondents surveyed on any day who will vote according to their intention and the share who will change their mind. A possible concern is that misreporting could lead us to overestimate the true fraction of inconsistent voters. Importantly, this bias is only present if consistent voters misreport their vote intention while reporting their actual vote choice, or the reverse. Instead, consistent voters who misreport both in the same way are accurately counted as consistent. Still, to address this concern, our main object of interest is not the *level* of consistency but the *change* in this outcome over the last 60 days before the election.

[3] These archives are available at http://www.cbc.ca/archives/entry/1993-leaders-debate.

[4] For instance, see http://news.bbc.co.uk/2/hi/uk_news/politics/election_2010/8612153.stm.

Formally, we estimate the following OLS specification:

$$C_{it}^{e} = \sum_{t=-60}^{-1} \beta_t D_t + \alpha^e + W_{it}^{'}\lambda + u_{it}^{e}, \tag{1}$$

where C_{it}^{e} is the vote choice consistency of respondent i, surveyed for the first time t days before election e, D_t's are 60 fixed effects indicating the number of days relative to the election, α^e are election fixed effects,[5] and W_{it} is a vector of controls. W_{it} includes fixed effects for the day of the week in which the pre-electoral survey took place (Monday through Sunday) and for the number of days separating the post-electoral survey from the election. Indeed, the post-electoral survey lag may be correlated with response accuracy and it is larger on average for respondents who received the pre-electoral survey closer to the election (see Appendix Figure B.2). By controlling flexibly for this variable, we ensure that observed differences in the fraction of consistent voters across time are not driven by differential misreporting of vote choice. Finally, specifications shown in Appendix Tables D.1 through D.3 also control for the following sociodemographic characteristics: education (dummies indicating above high school education and college degree), age, gender, income quartiles, and employment status. Despite our survey selection process, some of these variables show slight imbalance over time (see Appendix Table B.2 and Appendix Figure B.1). For each control variable, we also include a dummy equal to 1 when the control is missing. Our findings on vote choice formation are nearly identical when adding these controls.

The key coefficients of interest are the β_t's. We center all control variables around their mean value at $t = -1$ and do not include a constant, so that β_{-1} is equal to the outcome's sample average among respondents surveyed one day before the election and, for any $t \neq 1$, β_t is the (conditional) expected outcome for respondents surveyed t days before. Our sample includes all respondents successfully interviewed before and after the election who stated that they intended to vote, in the first survey, and who reported that they actually voted and gave a vote choice declaration, in the second.[6] In this and all other regressions in this section and Section 4, standard errors are clustered at the survey level. For instance, all respondents surveyed

[5] We include two separate fixed effects for U.S. elections covered both by ANES and NAES, to also control for survey effects.

[6] As shown in Appendix Figure B.3b and column 2 of Appendix Table B.1, the fraction of respondents who stated that they intended to vote, in the first survey, and who reported that they actually voted and gave a vote choice declaration, in the second, increases over time, but at a much slower pace than the increase in vote choice consistency shown in Table 1. Together with the robustness of our results to controlling for sociodemographic characteristics (see Appendix Tables D.1 through D.3), this alleviates the concern that our results may be biased by differential sample selection.

in the 2008 wave of the American National Election Studies correspond to one cluster. Our results are robust to clustering the standard errors at the level of the election date, as shown in Appendix Tables D.13 through D.16. Respondents in the 2008 wave of both the American National Election Survey and the National Annenberg Election Surveys are then included in the same cluster, for instance.

We plot the β_t coefficients and their 95% confidence interval against time in Figure 1a. We find that 60 days before the election, 72% of voters state a vote intention corresponding to their final vote choice. The consistency between these voters' actual choice and their intention expressed in the pre-electoral survey suggests that they voted based on earlier information or along party lines. The fraction of people with identical pre-election vote intention and post-election vote declaration increases by 15 percentage points over the last two months before the election, up to 87%. Most of the increase takes place in the last month. The 13% of voters who remain inconsistent even though they were surveyed just one day before the election include last-minute deciders as well as voters who were actually consistent but did not want to reveal their vote intention and voters who were consistent but misreported either their vote intention or their vote choice. Voters may misreport their vote choice because they forgot, because they expect their choice to be frowned upon by the pollster, or out of the desire to say they voted for the winner (e.g., Wright, 1993). Post-electoral vote choice misreporting may increase with the time elapsed since the election, which our post-electoral survey lag dummies control for, but it should not correlate with the timing of the pre-electoral survey. It should thus not bias our estimate of the change in outcome over time. Overall, our estimates indicate that 15 to 28% of voters form their vote choice during the last two months before the election.

To measure the daily average increase in vote choice consistency and test whether the trend is linear or convex, we estimate the following equation:

$$C_{it}^{e} = \beta t + \delta t^2 + \alpha^{e} + W_{it}^{'}\lambda + u_{it}^{e}, \tag{2}$$

where t is a linear time trend defined as minus the number of days separating the pre-election interview from the election. The results are reported in Table 1. The quadratic term is omitted in column 1 but included in column 2. We find that each additional day increases vote choice consistency by 0.2 percentage points on average, an estimate that is significant at

the 1% level (column 1), and that the increase in consistency follows a convex pattern, with a significant acceleration in the last weeks preceding the election.

The increase in vote choice consistency can result from an increased fraction of people stating any vote intention or increased vote choice consistency conditional on doing so. Accordingly, we estimate equation 1 using as outcome a dummy equal to 1 if the respondent states a vote intention (including if she announces that she will cast a blank or null vote) and 0 otherwise. We then restrict the sample to respondents stating a vote intention and use a dummy equal to 1 if their final vote choice corresponds.[7] Selection into this subsample changes over time, calling for caution in interpreting the results. As shown in Figure 1b, both the probability of stating a vote intention and conditional vote choice consistency increase in the last two months before the election. The increase is steeper for the latter outcome, suggesting that vote choice formation in this period is driven by a decrease in the fraction of voters changing their mind at least as much as in the fraction of undecided voters. Finally, columns 3 through 6 of Table 1 show the estimates from using stating a vote intention and conditional consistency as outcomes in specifications of the form in equation 2. Both outcomes follow an increasing and convex pattern, similar to vote choice consistency.

3.2 Heterogeneity Across Voters

Voters with less preexisting knowledge on candidates' valence and issue positions or on the state of the economy may show a larger increase in their vote choice consistency before the election if they are more impacted by the information they receive in this period, as Bayesian updating would predict (e.g., Zaller, 1992; Freedman et al., 2004). On the other hand, these voters may be less likely to change their vote intention if they are less likely to hear, understand, and remember the campaign messages in the first place (e.g., Miller and Krosnick, 2000; Prior, 2007). To test these opposite predictions, we compare the timing of vote choice formation for voters with high and low education, which is a strong correlate of political informedness.[8] We also test for differences along four additional dimensions available across most surveys and

[7] Our sample for the first outcome includes all respondents successfully interviewed before the election who stated that they intended to vote. As shown in Appendix Figure B.3a and column 1 of Appendix Table B.1, the fraction of respondents who satisfy this criterion is stable over time. For the second outcome, our sample includes all respondents successfully interviewed before and after the election who stated that they intended to vote and shared a vote intention, in the first survey, and who said that they actually voted and gave a vote choice declaration, in the second.

[8] As shown in Appendix Table B.2, the fraction of college educated voters is stable over time.

known to predict policy preferences and vote choices (e.g., Alesina and La Ferrara, 2005; Pew Research Center, 2016; Marshall, 2019): age, gender, income, and employment status.

We use the following specification separately for each characteristic:

$$C_{it}^{e} = \sum_{t=-60}^{-1} \beta_t D_t + \sum_{t=-60}^{-1} \gamma_t \Omega_i D_t + \alpha^e + W_{it}^{e\prime}\lambda + u_{it}^{e}, \tag{3}$$

where Ω_i is a dummy variable equal to 1 if respondent i is a "type-a" voter—defined as male, above the median age of that survey's respondents, college-educated, above the median income, or not employed—and zero if she is "type-b"—female, below median age, not college-educated, below median income, or employed. We center all control variables around their mean value at day $t = -1$ among type-b voters so that β_{-1} is the outcome's sample average among type-b respondents surveyed one day before the election and, for any $t \neq 1$, β_t (resp. $\beta_t + \gamma_t$) is the expected outcome for type-b (resp. type-a) respondents surveyed t days before the election. The γ_t's measure differential effects for the latter group.

Appendix Figure B.5 plots the β_t and $\beta_t + \gamma_t$ coefficients for each voter characteristic. While vote choice consistency is lower among women and younger voters throughout, it increases substantially for all groups during the 60 days before the election.

To investigate the statistical significance of differences in vote choice consistency changes across groups, we estimate a specification in which we replace the D_t's by a linear time trend, similarly as in equation 2:

$$C_{it}^{e} = \beta t + \Omega_i + \gamma \Omega_i t + \alpha^e + W_{it}^{e\prime}\lambda + u_{it}^{e}, \tag{4}$$

so that γ measures the differential increase in the outcome for type-a voters over time.

Columns 1 through 5 of Table 2, which include one characteristic at a time, show that type-a voters are more consistent (between 0.8 and 3.8 percentage points) than type-b on average but that vote choice consistency increases faster for younger voters and those without a college degree. The latter differences remain significant (at the 10% and 5% levels) in a specification controlling for all sociodemographic characteristics and their interaction with the time trend: any additional day increases vote choice consistency by an additional 0.05 percentage points on average (or about 25% of the average daily change) both for younger voters compared to older voters and for voters without a college degree compared to college degree holders (column 6). Much of the differential increase in vote choice consistency for younger voters is driven by

voters below 25 years old: as shown in Appendix Table B.3, this group's vote choice consistency increases by an additional 0.04 percentage points on average, compared to other voters below median age. This difference is as large as the difference between the latter group and voters above median age, but not statistically significant.

Appendix Table B.4 replicates this analysis for the probability of stating a vote intention (column 1) and vote choice consistency conditional on doing so (column 2). We find that the larger increase in vote choice consistency of younger voters and voters without a college degree is mostly driven by larger changes in the latter outcome. These results indicate that younger and less-educated voters are more susceptible to the influence of electoral campaigns. We do not find heterogeneity in vote choice formation along any other dimension.

3.3 Convergence on Final Vote Shares

Changes in individual vote intentions may partly compensate each other if they simply reflect decreased noise: voters switching from intending to vote for candidate A to actually voting for candidate B will not affect aggregate vote shares and the outcome of the election if an equal number of voters follow the opposite trajectory. However, individual vote choice formation may also reflect broad shifts in candidate support. We should then expect increased individual consistency between vote intention and vote choice to be concomitant with a convergence from predicted vote shares on final vote shares.

To test this hypothesis, we use vote intentions stated in the pre-electoral survey and vote choices reported in the post-electoral survey to compute $\widetilde{V}_{ct}^{e}$, the predicted vote share of candidate c in election e among respondents surveyed at time t, and V_{ct}^{e}, the candidate's final vote share among the same respondents.[9] We define the overall distance between predicted and final vote shares as $\Delta V_{t}^{e} = \frac{1}{2}\sum_{c}\left|\widetilde{V}_{ct}^{e} - V_{ct}^{e}\right|$, which is equal to half of the Manhattan distance. It corresponds to the minimal share of voters who need to change their vote intention after the pre-electoral survey to explain the difference between predicted and final vote shares' distributions.

[9]Our sample includes all respondents successfully interviewed before and after the election who stated that they intended to vote and gave a vote intention different from voting blank or null, in the first survey, and who said that they actually voted and gave a vote choice declaration different from voting blank or null, in the second. Our analysis occurs at the election level, not the race level: for instance, we aggregate the vote intentions and vote choices of all respondents surveyed about U.S. congressional elections irrespective of the local race in which they participate.

We measure changes in this outcome with a specification of the form in equation 1, but using only one observation per election per day instead of one observation per individual response:

$$\Delta V_t^e = \sum_{t=-60}^{-1} \beta_t D_t + \alpha^e + W_t^{e\prime}\lambda + u_t^e, \tag{5}$$

where W_t^e includes pre-electoral survey day-of-the-week fixed effects, the average post-electoral survey lag among respondents who received the pre-electoral survey at time t, and, in some specifications, their average sociodemographic characteristics. To give more weight to vote shares measured more precisely, we weight each observation by $\frac{N_t^e}{N_t}$, where N_t is the total number of respondents surveyed at time t and N_t^e is the subset of these respondents surveyed for election e.

We plot the β_t coefficients on Figure 2. The overall distance between predicted and final vote shares is divided by two, from eight percentage points on average, 60 days before the election, to four percentage points the day before. As shown in columns 7 and 8 of Table 1, where we estimate equation 2 using ΔV_t^e as outcome, the decrease in this distance is linear but not concave. It is also common to all types of voters, as shown in Appendix Figure B.6. This figure is obtained by computing the distance $\Delta_{t\omega}^e$ separately for type-a ($\omega = 1$) and type-b ($\omega = 0$) voters, estimating the equation

$$\Delta_{t\omega}^e = \sum_{t=-60}^{-1} \beta_t D_t + \sum_{t=-60}^{-1} \gamma_t D_t \Omega_\omega + \alpha^e + W_{t\omega}^{e\prime}\lambda + u_{t\omega}^e, \tag{6}$$

and plotting the β_t and $\beta_t + \gamma_t$ coefficients for each voter characteristic.

Finally, Figure 3 plots the predicted vote share accuracy (1 minus the distance with final vote shares) together with individual consistency between vote intention and vote choice. Predicted vote share accuracy is always higher than individual consistency because voters who do not state any vote intention drive down the latter without necessarily affecting the former and some differences between vote intentions and vote choice cancel each other when aggregated across voters. Both outcomes rise over time, but the change is larger for individual consistency since the increased fraction of voters stating a vote intention and vote choice trajectories balancing each other contribute to increasing this outcome without reducing the distance to final vote shares.

3.4 Interpretation

The magnitudes of the increase in vote choice consistency and of the convergence on final vote shares during the last two months before an election are interesting in their own right. We now turn to the interpretation of these patterns. We argue that they are primarily driven by the information voters receive during the electoral season as opposed to information already available to voters well before the campaign begins and, therefore, that they provide a good measure of the impact of this information on individual vote choice formation, aggregate vote shares, and the result of the election. While previous work has sought to isolate the impact of specific types of information by comparing voters exposed to them or not, our approach studying the timing of vote choice formation accounts for the overall impact of all types of information received during the campaign, without having to observe the particular pieces of information that people are exposed to.

Our argumentation has three parts. First, we argue that new information should be expected to generate the observed patterns if it feeds into people's vote choices. Second, we explore whether increased vote choice consistency could result from people's choice of candidate being affected by a series of shocks lacking any information content, and we find that this alternative interpretation is at odds with some of the results. Third, we discuss the possibility that voters postpone voting decisions due, for instance, to the cognitive costs of processing existing information. While this mechanism is a plausible explanation for the observed increase in vote choice consistency over time, making our estimates an upper bound of the effect of information received during the electoral season, we contend that the actual effect of new information is likely to be close to this upper bound.

Stream of information

There are two distinct reasons why voters receiving a stream of information and incorporating it into their evaluation of candidates should be expected to show increasing consistency between their pre-election vote intention and their vote choice over time. First, voters surveyed later in the campaign will have received more information. Accordingly, Bayesian updating predicts that their posterior on candidates will be more precise, making them more likely to state a vote intention and less likely to change it afterwards. Some voters may simply stop paying attention to new information once they have accumulated the amount of evidence they deem sufficient to decide whom to vote for, especially if information acquisition is costly (e.g.,

Simon, 1955; Sims, 2003). The stopping boundary after which new information is discarded can be predefined, as in the original drift diffusion model (Ratcliff, 1978), or chosen according to an endogenous stopping rule, as in recent extensions of this model (e.g., Canen, 2017; Fudenberg et al., 2018).[10]

The second reason why voters surveyed later in the campaign should be expected to show higher consistency is that their pre-electoral survey vote intention and their final vote choice are based on more similar information sets. Indeed, the shorter lapse of time between their survey and the election implies that the quantity of new information they will receive in this interval is mechanically lower. In addition, theories of bounded memory (e.g., Wilson, 2014) would predict that the likelihood that they will have forgotten information received before the survey by the time they have to cast their vote is itself lower. Interestingly, this reasoning would hold even in the extreme case where each new piece of information overshadowed all previous pieces and where people's vote choices were swayed by the latest piece of information they receive. Instead, increased vote choice consistency over time should be seen as a sign that vote choices are information-rich if they result from the fact that voters surveyed later in the campaign have accumulated more information.

Assessing the exact process through which voters aggregate information and the weight they put on earlier signals is beyond the scope of this project, but some of our results do suggest that vote intentions incorporate a growing amount of information as time passes. Indeed, a process in which voters' views are swayed by the latest piece of information they receive could potentially account for the increase in conditional vote choice consistency, but it is harder to reconcile such a process with voters' increasing likelihood to express a vote intention. A possible view is that voters surveyed earlier in the campaign do not want to state a vote intention because they know that the likelihood that future pieces of information might alter it remains high. However, it seems implausible that voters would adjust in a very unsophisticated way to new pieces of information (to the point of discarding any previous information) and, at the same time, exhibit such level of sophistication when choosing whether or not to state a vote intention. Voters' increasing likelihood to express a vote intention is more in line with the view that voters aggregate information over time and only state a vote intention when their level of information makes them feel sufficiently confident about it. Consistent with this view, Ap-

[10] In these models, voters choose an optimal stopping time based on the tradeoff between the gains from additional information and its costs. Gains from additional information may increase with information that was already received. For instance, Canen and Martin (2019) find that voters often respond to campaign ads by acquiring more information.

pendix Figure B.4 shows that, conditional on stating a vote intention, people's certainty of their choice, normalized to range from 0 to 1 across all surveys when available, increases as well.

Similarly as for the increase in individual vote choice consistency and certainty, all other results shown in Sections 3.1 through 3.3 are consistent with vote choice formation during the last two months before an election being primarily driven by new information. Younger and less-educated voters, who have less preexisting information (e.g., Angelucci and Prat, 2019), should be expected to be more affected by information received in this period, as we find. Convexity in the increase in vote choice consistency should be expected if the stream of information available to voters increases as the election gets closer, either due to increasing demand (by voters eager to make up their mind) or supply (by the media, campaigns, or discussions with others). Finally, changes in predicted aggregate vote shares should be expected if a large number of voters receive the same information and update their vote intentions in the same direction as a result.

Alternative interpretation: information-free shocks

We now discuss whether increased vote choice consistency could result from a stream of shocks containing no information but affecting vote choices: for instance, shocks altering the utility function that voters maximize, as in random utility or perturbed utility models (e.g., McFadden, 1973; Fudenberg et al., 2015), and changing their evaluations of candidates.[11] To the extent that present shocks feed into future vote choices, and whatever the exact underlying process is, voters surveyed closer to an election may be more likely to vote for the candidate they announced simply because fewer shocks will hit them between their survey and the election. In addition, simple processes can generate convexity in the increase in vote choice consistency. If voters' evaluations of candidates follow a random walk, for instance, the expected difference between these evaluations at the time of the pre-electoral survey and on election day should increase with the distance between the two dates but at a decreasing pace.

This interpretation may be appealing for its simplicity, yet it is at odds with three of our results. First, it can account for the increase in vote choice consistency conditional on stating a vote intention, but it is harder to reconcile with increases in the fraction of people expressing a vote intention and in their level of certainty about it.

[11] Shocks changing voters' beliefs on the payoffs and behavior of others could also lead them to change their own behavior if they vote strategically (e.g., Harsanyi, 1973).

Second, this theory does not predict the larger increase in vote choice consistency observed among groups of voters with less preexisting information. Indeed, there is no clear reason to expect these voters to be hit by a larger number of non-information shocks or to be more responsive to them.

Third, and most importantly, random shocks affecting different voters should cancel each other in the aggregate, a prediction at odds with the observed convergence between predicted and final vote shares. To account for this convergence, one would need to assume that shocks are correlated across voters. However, it is hard to see how shocks could affect the electorate at large without containing any relevant information.

Complementary interpretation: cognitive costs of processing information

While our preferred interpretation attributes the increase in vote choice consistency to the acquisition of new information, delays in incorporating existing information into vote decisions could contribute to this pattern, consistent with theories of information processing costs. In this complementary interpretation, making one's vote choice takes time and effort, and the fraction of voters who have paid this cost increases over time.

At the individual level, this interpretation could contribute to explain the increased likelihood to state a vote intention as well as increased consistency and certainty about it. Indeed, respondents surveyed earlier in the campaign may provide more noisy answers if they haven't really decided yet which candidate they will vote for. At the aggregate level, this interpretation could contribute to explain the convergence on final vote shares if people who make their vote choice later in the campaign have different preferences than the rest of the electorate or if those who state a vote intention without having fully thought through it tend to be swayed in the same direction by available information once they process it.

We see this interpretation as complementary to our preferred one. First, even in this interpretation, choices of voters showing an increase in consistency are based on information that requires time to process, instead of preexisting factors such as partisan affiliations. This information is just not necessarily information they received during the last 60 days before the election.

Second, while postponing one's vote choice until shortly before the election could simply be a manifestation of procrastination, it could also be a rational decision reflecting voters' expectation of receiving useful information until the very last day before the election and their desire

to incorporate all this information into their vote choice. The increased consistency observed in the last few days should then be attributed jointly to people receiving new information and spending more time to process it in this period.

Third, it is unlikely that the interpretation centered on delays in information processing could, alone, fully account for our results. It is not clear why such an interpretation would predict a larger increase in vote choice consistency among younger and less educated voters, even if it is not necessarily incompatible with it. In addition, the next section provides evidence of convergence for outcomes which do not require that people exert cognitive skills but where people should be expected to be affected by new information, such as issue salience. This is consistent with vote choice formation being driven for the most part by new information received during the campaign.

In sum, the increase in vote choice consistency and the convergence on final vote shares shown in Sections 3.1 through 3.3 result from information received during the last 60 days before the election and possibly other factors, including postponed information processing. Accordingly, these estimates provide an upper bound on the impact of information obtained during the electoral season. Still, we highlighted several reasons why the actual effect of information is likely to be close to this upper bound.

4 Formation of Beliefs, Policy Preferences, and Issue Salience

4.1 Formation of Policy Preferences

Information can affect vote choices through multiple mechanisms. First, voters' policy preferences might change over the course of the campaign, estranging them from the candidate they preferred initially and bringing them closer to the candidate they eventually vote for. Second, voters might update their beliefs on candidates' issue positions and valence. This may lead them to favor a new candidate that they feel relatively closer to ideologically or find more competent. Third, in races in which more than two candidates are initially in contention for victory, polls may clarify the identity of the front-runners and lead strategic voters to desert candidates with too little chance of winning, to avoid losing their vote. Fourth, electoral season information may be centered on certain issues, increasing the salience of these issues and priming voters to evaluate candidates on them. Voters may thus desert candidates they were close

to on issues which received less coverage, even though their policy preferences and beliefs on candidates' issue positions, valence, and electoral chances remain unchanged.

To investigate the role played by the first mechanism, we test whether the formation of vote choice is mirrored by changes in policy preferences. We define individual i's policy preference consistency on question q as:

$$C_{it}^{q} = 1 - \frac{\left|\widetilde{A}_{it}^{q} - A_{it}^{q}\right|}{\overline{A^{q}} - \underline{A^{q}}}$$

where $\widetilde{A}_{it}^{q}$ (resp. A_{it}^{q}) is the respondent's answer to the question before (resp. after) the election and $\overline{A^{q}} - \underline{A^{q}}$ is the range of possible answers. This normalization allows us to use questions with different answer scales in the same regression.

We estimate equations 1 and 2 using policy preference consistency as outcome and replacing election fixed effects with question fixed effects.[12] As shown in Figure 4a and column 1 of Table 3, policy preferences remain remarkably stable in the last two months before an election, contrasting with the increase in vote choice consistency observed in Figure 1a.[13] This result is robust to using an alternative definition of the outcome: a dummy equal to 1 if the respondent gives the same exact answer in the pre- and post-electoral survey (column 1 of Table B.6). Appendix Figure B.8a and Appendix Table B.5a show that the probability of stating a policy preference does not change over time either.

We then explore heterogeneity in the formation of policy preferences. Column 1 of Appendix Table B.7, estimated based on equation 4, shows that college degree holders and voters above the median income are more consistent in their policy preferences than their counterparts. However, only one of the differences in trends across voter types is significant (at the 10% level).

Simply put, the persuasive communication voters receive in the electoral season does not alter their policy preferences.

[12] Our sample includes all respondents successfully interviewed before and after the election who stated a policy preference in the second survey. Unlike self-reported vote choice, the accuracy of reported policy preferences should not depend on the time lapsed since the election. A more likely source of variation in policy preference changes is the distance between the pre- and post-electoral survey. Therefore, in this specification and in all regressions regarding policy preferences, we control for dummies indicating the number of days separating the pre- and post-electoral survey instead of the distance between the latter and the election.

[13] The increase in vote choice consistency is equally steep in the subsample of surveys in which at least one policy question was asked before and after the election (Appendix Figure B.7).

4.2 Changes in Issue Salience

We use a similar method to explore the role of priming. We define issue salience consistency as a dummy equal to 1 if the respondent mentions an issue that she considers to be the most important in the pre-electoral survey and provides the same answer in the post-electoral survey.[14] We estimate equations 1 and 2 using this outcome.[15]

As shown in Figure 4b, consistency in issue salience increases by 10 percentage points during the last two months before an election. The daily 0.15 percentage points increase shown in Table 3 column 3 is significant at the 10% level and slightly smaller than the daily increase in vote choice consistency (column 1 of Table 1). The increase in issue salience consistency is driven by increases both in the probability of stating an important issue (Appendix Table B.5b, column 2) and in consistency conditional on stating an issue (column 3). Finally, as shown in column 2 of Appendix Table B.7, the average daily change in issue salience consistency is positive (but not always significant) for all types of voters, and it is significantly larger for voters above the median income.

These results indicate that electoral season information increases the salience of some issues while decreasing the importance of others, and they suggest that priming mechanisms contribute an important share to vote choice formation.

4.3 Changes in Beliefs on Candidates

We finally investigate whether increased vote choice consistency in the period leading to an election is also driven by changes in beliefs voters hold about candidates.

Using questions recording beliefs on candidates' issue positions and quality, we find that the average daily increase in belief consistency in the last two months before the election is about half the daily change in vote choice consistency (0.1 percentage points) but that it falls short of statistical significance (Figure 4c and Table 3, column 5).[16] We complement this evidence by comparing changes in vote choice consistency across different types of elections and

[14] As described in Section 2.1, an 'issue' refers to one of 10 broad categories. As shown in column 2 of Appendix Table B.6, the results are robust to defining consistency in issue salience as a dummy equal to 1 if the respondent gives the exact same answer before and after the election.

[15] Our sample includes all respondents successfully interviewed before and after the election who stated a most important issue in the second survey. Similarly as in regressions regarding policy preference consistency, we control for dummies indicating the number of days separating the pre- and post-electoral survey instead of the distance between the latter and the election.

[16] Questions recording beliefs on candidates are of two types. Some questions ask voters to select one of the candidates, e.g. the candidate that talks the most about a particular issue. Belief consistency is then defined as a dummy equal to 1 if the respondent provides the same answer in the pre- and post-electoral survey. Other questions survey voters about a particular candidate, e.g. asking how competent she is. Belief consistency is then

across supporters of different types of candidates, an approach which is less direct but which has the advantage of using all our data, not just surveys recording voters' beliefs both before and after the election.

We can expect information received in the electoral season to change beliefs on candidates relatively more in multiparty settings, where the diversity of candidates and frequent changes in the party system may reduce the precision of initial priors on all dimensions. If changes in beliefs on candidates are responsible for the formation of vote choices, we should thus expect vote choice consistency to be initially lower and increase more rapidly in multiparty elections than in bipartisan systems.

Using a specification of the form in equation 3, we interact time fixed effects with a dummy Ω^e equal to 1 for the U.S., where the vast majority of elections are bipartisan, by difference with the multiparty systems prevalent in all other countries in the sample.[17] As shown in Appendix Figure B.9a, vote choice consistency increases in both types of elections, but a much larger fraction of voters form their vote choice in the last two months in multiparty elections. Similarly, Figure B.9c, obtained from estimating a specification of the form in equation 6, shows that the distance between predicted and final vote shares is initially lower and decreases less in the U.S. than in other countries. This evidence is only suggestive since other differences than in the party system may drive the observed patterns. Regardless, these results are noteworthy: they inform our heterogeneity analysis of debates' impact and suggest that lessons from U.S. studies on factors affecting voter behavior and electoral results, which account for most of the existing literature, may not extend to other contexts.

We now distinguish beliefs on candidates' positions and quality, which may affect the choice of any voter, from beliefs on their chances to win the election, which should primarily affect strategic voters.[18] Changes in the second type of beliefs should be more consequential for vote choice in plurality rule elections, where the incentives to be strategic are stronger than under proportional rule since the winner takes all. As shown in Appendix Figure B.9b, the rates of increase in vote choice consistency are similar in both types of elections, suggesting that changes in the former type of beliefs, due to new information on candidates' positions and

defined similarly as preference consistency, using the range of possible answers as denominator. Our estimates pool both types of questions.

[17] To avoid perfect multicollinearity with the set of α^e we drop one election fixed effect for each election type (U.S. or non-U.S.). In Appendix Table B.8, we estimate a specification of the form in equation 4 where we interact the linear time trend with Ω^e and include the set of election fixed effects α^e but exclude the dummy Ω^e to avoid perfect multicollinearity.

[18] Outside of strategic considerations, information on candidates' chances may affect voters if they use it as a signal of quality or if they desire to vote for the winner (Pons and Tricaud, 2019).

quality or actual changes in these variables exert more influence on vote choice. Similarly, the distance between predicted and final vote shares decreases at the same pace in both types of elections (Appendix Figure B.9d).[19]

To bring additional evidence on the role of these two types of beliefs, let us note that information on candidates' positions and quality should more greatly benefit the candidates on whom voters have less prior knowledge, including new and small candidates, as well as any candidate challenging the incumbent (Alvarez, 1988; Fujiwara and Wantchekon, 2013; Larreguy et al., 2018). If changes in related beliefs are responsible for vote choice formation, people who eventually vote for lesser-known candidates should converge on their vote choice later in the campaign, and these candidates should see their predicted vote share increase over time. Instead, information on candidates' chances should lead strategic voters to rally to the strongest candidates, increasing these candidates' predicted vote shares as well as overall vote share concentration.[20] We now test these opposite predictions.

First, we compare individual vote choice formation between voters who end up voting for well-established candidates and for candidates likely to be lesser-known at the beginning of the campaign. Formally, we estimate specifications of the form in equation 3 where we define as type-a voters people voting for a challenger, a small party, or a new party; and as type-b people voting for the party that won the last election, an initially strong party (with an average predicted vote share larger than 10% in the first five days of the survey), or for a party that had competed in earlier elections.[21] As shown in Appendix Figure B.11, vote choice consistency is initially lower and it increases faster among those who eventually vote for new candidates, small candidates and challengers.[22] Appendix Table B.10, obtained using equation 4, corroborates these results. The differential increase in vote choice consistency of people

[19] These results are robust to excluding U.S. elections (which all use the plurality rule), as shown in Appendix Figure B.10. In addition, Appendix Table B.8 shows results from estimating specifications of the form in equations 3 and 6, where we interact a linear time trend with election type. We find that the change in vote choice consistency is slower in U.S. bipartisan elections than in other countries (column 1), but that it does not differ significantly between plurality and proportional systems (column 2). This holds true when including both types of elections in the same regression (columns 3 and 4). The change in the distance between predicted and final vote shares is also lower in U.S. elections, but this difference is not statistically significant (columns 5 through 8).

[20] We should expect similar patterns if people become more willing to vote strategically as the election gets closer, for instance because its stakes become more salient (e.g., Hillygus, 2007).

[21] The party that won the last election is defined as the party of the president, the governor, the prime minister (in lower house elections that lead to the designation of a prime minister), or the party with plurality at the house (in other lower house elections and in upper house elections). The party is defined as new if it was absent from the previous presidential election, from any race in the country (for lower and upper house elections), or from that state's race (for gubernatorial elections).

[22] As shown in Appendix Figure B.13 and Appendix Table B.9, the fractions of voters who report voting for a small party, a challenger, or a new party in the post-electoral survey are stable over time, suggesting that our results are not driven by changes in sample composition.

voting for small candidates, challengers, and new candidates remains statistically significant in a specification controlling for all candidate types as well as their interaction with the time trend, with or without sociodemographic controls (columns 4 and 5). Appendix Table B.11 shows similar patterns when using a dummy for stating a vote intention as alternative outcome. In particular, the probability of stating a vote intention during the campaign increases much faster among voters who eventually vote for a new candidate, with an estimated daily increase that is 0.23 percentage points larger than for those who vote for a party that had been present in earlier elections (columns 3).

Second, we compare changes in the predicted vote share of different types of candidates in the last two months before an election, using the individual likelihood to vote for these candidates as outcome, the same specification and sample of elections, and excluding respondents who do not state a vote intention or announce that they will cast a blank or null vote. As shown in Appendix Figure B.12, the likelihood to vote for a challenger, a small, or a new candidate increases slightly over the campaign. Coefficients from specifications of the form in equation 2 are shown in columns 3 through 8 of Table 4: support for these types of candidates increases linearly as the election gets closer, with significant coefficients on the linear time trend for challengers and small candidates.

Finally, we estimate equation 5 using the following index of vote share concentration as outcome: $M_t^e = \sum_c \left(\widetilde{V}_{ct}^e\right)^2$. As shown in Figure 5 and columns 1 and 2 of Table 4, vote share concentration does not increase, on average, in the last two months before an election.

Overall, these pieces of evidence provide support for the interpretation that vote choice formation is driven by changed beliefs on candidates' issue positions and quality more than on their relative chances. This conclusion echoes recent evidence indicating that voters are more likely to behave expressively than strategically (Pons and Tricaud, 2018).

5 Impact of TV Debates

5.1 Estimation Strategy

We now investigate which types of information are responsible for the formation of vote choices and beliefs on candidates as well as changes in issue salience. One view is that voters base their choice of candidate on information they continuously receive from the media, candidates' campaigns, and discussions with others. Figure 7 plots the fraction of voters who

report getting information frequently from newspapers, TV, radio, and the Internet, having been contacted or visited by a party during the campaign, having seen election polls recently, and discussing politics frequently with others over time. Point estimates are shown in Table C.1. All these outcomes increase during the electoral season, suggesting that the corresponding sources of information may be responsible for the concomitant increase in vote choice consistency. On the other hand, the slow and continuous convergence of vote intentions on final vote choices observed across elections does not preclude the possibility that discrete events, taking place at different times in each race, play a decisive role by changing the mind of many voters.

We use an event-study approach to estimate the impact on the formation of vote choice and policy preferences of the most salient of these events: TV debates. In many elections, multiple debates take place. We exclude debates held less than three days from one another, to be able to estimate effects up to three days after.[23] This leaves us with a total of 56 debates. Figure 6 shows the dates of all debates in our sample: debates were held between one and 44 days before the election, with an average of 23 days. The fact that TV debates are concentrated in the period in which vote choice consistency increases the fastest makes them as plausible a driver of vote choice formation as the sources of information shown in Figure 7. The full list of debates is included in Appendix Table A.6, together with the following information: whether the debates included presidential candidates or candidates for prime minister, their date, the time to the election, and the surveys covering them. For debates preceding the 2000, 2004, and 2008 U.S. presidential elections, we use survey responses from both ANES and NAES.

An observation is a respondent x debate x election: some debates affect several elections, for instance the first and second votes in Germany. For each debate and election, our estimation uses all respondents in the corresponding survey. As a result, the same response is included multiple times when multiple debates were held before the same election. In total, our sample includes 302,000 observations. We cluster standard errors at the debate level to adjust for the correlation between the error terms of all observations related to the same debate. This clustering also accommodates for the fact that some U.S. debates are covered by two surveys. As in Section 3, we also check the robustness of our results to clustering the standard errors at the level of the election date (Appendix Tables D.17 through D.21).

[23] The results are robust to an extended model excluding debates held less than five days from one another and including relative day dummies for up to five (not three) days before and after the debate. The corresponding results are shown in Appendix Tables D.26 through D.29.

Our main specification is as follows:

$$Y_{it}^{d} = \sum_{k=-3}^{-2} \mu_k + \sum_{k=0}^{3} \mu_k + \mu_{4-} + \mu_{4+} + \sum_{t=-1}^{-60} \beta_t D_t + \alpha^d + W_{it}^{'}\lambda + u_{it}^{d}, \tag{7}$$

where Y_{it}^{d} is the outcome for respondent i, surveyed t days before the election corresponding to debate d, μ_k ($-3 \leq k \leq 3$) are dummies indicating the number of days relative to the debate, μ_{4-} and μ_{4+} are dummies equal to 1 for respondents surveyed four days or more before or after the debate, respectively, and α^d are debate x election fixed effects.[24]

The key coefficients of interest are μ_1, μ_2, and μ_3, which measure the impact of debates one to three days after, relative to the omitted category μ_{-1}. We use the day before the debate as reference group in order to avoid including any treated voter in this group. Indeed, some respondents are surveyed on the day of the debate but later in the day.[25] Our main estimates capture direct effects of debates as well as indirect effects of subsequent media commentaries and discussions, both on people who watch debates and those who do not. In Section 5.4, we separate effects on watchers and non-watchers.

Importantly, the fact that debates took place at different times in different elections, as shown on Figure 6, allows us to control flexibly for the number of days relative to the election, with the 60 D_t daily fixed effects. This is critical to disentangle the effect of debates from the underlying time trends shown in Section 3. In addition, the vector W_{it} controls again for day-of-the-week and post-electoral survey lag fixed effects and, in some specifications, for sociodemographic characteristics.[26]

Our identifying assumption is that conditional on all these controls, and conditional on having a TV debate during our observation window, the timing of the debate is uncorrelated with the outcome. In addition, we assume that any pre-trend before the fourth day preceding the debate or any impact after the fourth day following it are accurately captured by the fixed effects μ_{4-} and μ_{4+}. Our results are robust to an alternative specification which does not require this assumption because it uses a sample restricted to a balanced panel of observations for each of the three days preceding and following each debate and excluding all respondents

[24] We include separate fixed effects for elections affected by the same debate. We also include two separate fixed effects for U.S. debates covered both by ANES and NAES.

[25] The exact time of the interview is not reported in all surveys. This information is available for 4,300 respondents surveyed on the day of 10 different debates. We find that 14% of them were surveyed after the debate started, on average, with a maximum of 44%.

[26] Controlling for the day-of-the-week fixed effects is particularly important here since debates often take place on Thursdays, and the characteristics of people successfully interviewed on different weekdays may differ.

surveyed before or after. In this specification, we control for election fixed effects instead of debate fixed effects because collinearity prevents estimating a full set of debate fixed effects, time fixed effects, and fixed effects for days relative to the debate. The corresponding results are shown in Appendix Tables D.22 through D.25.

There are three important potential threats to our identification strategy. First, systematic differences in the characteristics of respondents surveyed before and after debates would clearly violate the identifying assumption. We should not expect such differences, given the rolling cross-section design used by most of our sample surveys, and we verify that they are indeed not present by estimating equation 7 using our sociodemographic characteristics as outcomes: high-school and college education, age, gender, income quartiles, and employment status. We report the corresponding μ_k's in Appendix Table C.2. Out of 64 differences, 10 are significant at the 10% level, three at the 5% level, and one at the 1% level. We show the robustness of our results to controlling for these factors.

A second potential risk arises if unexpected shocks occurring on the same day or immediately before or after the debate bias our estimates. This risk is important for existing studies using pre/post difference designs and focusing on a unique debate or a few debates only. In our case, such shocks would only violate the identifying assumption if they were systematically correlated with debates' dates. Given the large number of debates in our sample, and conditional on our daily fixed effects and other controls, this should not be the case.

The third and perhaps most serious potential violation of the identifying assumption comes from the fact that, of course, debates do not happen unexpectedly. Instead, their dates are known long in advance. As a result, candidates and the media may strategically time their communication around them. This could first generate continuous trends in outcomes around debates, which the pre-debate dummies μ_{-3} and μ_{-2} allow us to test for. However, these dummies would not capture discrete changes taking place on the day of the debate or immediately after. One possibility is that the amount of information increases abruptly (or that voters pay significantly more attention to it) after the debate, biasing our estimates upwards. Given our mostly null results, changes susceptible to bias our estimates downwards would be more concerning. For instance, downard bias could occur if candidates decreased the intensity of their campaign and if media decreased their coverage thereof, after the debate, because they anticipate debate-related information will lower the returns of any other type of communication, or if voters decreased their media consumption.

We cannot fully rule out this possibility, but our data allow us to test for discrete changes in media consumption and partisan communication. We estimate equation 7 using dummies for getting information frequently from newspapers, TV, radio, and the Internet as outcomes (Appendix Table C.3 columns 1 through 4). None of the pre-debate dummies are significant, except for the probability of using the Internet as a source of information, which tends to be higher two and three days before the debate with a mean point estimate of two percentage points, significant at the 1% level (column 4). The post-debate dummies are mostly insignificant, except for a decrease in the probability of listening to the news on the radio three days after the debate (column 3), and an increase in the probability of using the Internet for information two days after the debate (column 4). Overall, these estimates do not provide consistent evidence of either increased or decreased media consumption around TV debates. In addition, columns 5 and 8 show no significant effect of debates on the probability of having seen election polls recently or of discussing politics frequently with others. We then use dummies for having been contacted and having been visited by a party as outcomes and obtain only small and non-significant coefficients on post-debate dummies (columns 6 and 7). While these results support our identifying assumption, we note that the object of all questions—either overall media consumption or having been contacted by a party since the beginning of the campaign, not just on the day of the survey—, limits our ability to measure discrete changes in these outcomes and reduces the power of this test.

The next two sections measure mean effects of debates on individual and aggregate outcomes. Section 5.4 then explores potential sources of heterogeneity in debate impact.

5.2 Effects on Individual Outcomes

We first use equation 7 to measure the impact of TV debates on our main outcome, C_{it}, the individual consistency between pre-election vote intention and post-election vote declaration defined in Section 3.1.[27] We would not be able to measure the impact of TV debates using only post-electoral survey responses: by the time of such surveys, vote choices reported by *all* respondents may reflect debates' influence. However, if debates do help voters decide between candidates, we should expect the fraction of people stating a vote intention identical to their

[27]Once again, our sample includes all respondents successfully interviewed before and after the election who stated that they intended to vote, in the first survey, and who reported that they actually voted and gave a vote choice declaration, in the second. As shown in column 2 of Appendix Table C.4, TV debates do not affect this outcome, alleviating the concern that our results may be biased by differential sample selection.

actual vote to be higher among those who answered the pre-electoral survey right after the debate than those interviewed right before. Day-to-day increases in vote choice consistency after the debates, conditional on the controls, would indicate that debates' effects increase over time. Given our mostly null results, it is important to note that studying individual vote choice formation should help uncover effects which aggregate predicted vote shares could miss. For instance, viewed through a partisan lens, debates and subsequent media commentaries may increase the likelihood that voters of opposing sides express support for the nominee of their preferred party instead of not stating any vote intention. Our measure of individual vote choice consistency would capture this effect even if the impact on aggregate vote shares were null.

We report the coefficients on the μ_k dummies indicating the number of days relative to the debate in Table 5 and plot them in Figure 8. The dummy for the third day before the debate is positive (Figure 8a and Table 5, column 1), but the dummy for the second day before the debate is of the opposite sign. Both dummies are not significant, indicating no clear pre-trend. The dummies for the following days are all close to zero and not significant. Debates decrease individual vote choice consistency by a non-significant 0.3 percentage points for the average respondent surveyed in the three following days. Estimates of the overall vote choice formation over the electoral season shown in Section 3 provide a useful benchmark to interpret this result. Considering the upper bound of the 95% confidence interval, we can reject any impact of debates on vote choice consistency higher than 0.9 percentage point at the 5% level, which corresponds to 6% of the overall 15 percentage points increase over the electoral season shown in Figure 1. These results are robust to controlling for respondents' sociodemographic characteristics (column 2).

We next measure the impact of debates on the two following individual-level outcomes: stating any vote intention[28], and vote choice consistency conditional on doing so. We do not observe any pre-trend in the likelihood to state a vote intention (Figure 8b and Table 5, columns 3 and 4) and the impact on this outcome is not significant on any day after the debate (column 4). Overall, the impact on the likelihood to state any vote intention of the average respondent surveyed in the three days following the debate is not significant in either specification shown in columns 3 and 4.

We observe a small pre-trend in conditional vote choice consistency, with a significant coefficient on the dummy for the third day before the debate and an increase in coefficient size

[28]This outcome is defined on the sample of respondents who declare intending to turn out. Column 1 of Appendix Table C.4 shows that TV debates do not affect turnout intention.

over time until the day before the debate (Figure 8c and Table 5, columns 5 and 6). However, the effect of debates on this outcome for the average respondent surveyed in the three days following the debate is negative but not significant.

Finally, none of the relative days dummies are significant when using consistency in issue salience or in beliefs on candidates as outcome, suggesting that debates do not affect the factors found to be likely contributors to vote choice formation in Section 4. Effects on policy preference consistency are not significant either (Appendix Figure C.1 and Table 6).[29] These results should be interpreted with caution because policy questions (resp. issue salience questions) asked in both pre- and post-electoral surveys are only available for 14% (resp. 11%) of the debates, restricting statistical power.

All our point estimates measure the impact of debates in the short run. If our estimates were positive and significant, we could be worried about potential subsequent reversion to the mean. Instead, it is unlikely that the null effects we measure three to five days after the debate give way to larger effects later on.

5.3 Effects on Aggregate Outcomes

Debates' lack of impact on individual vote choice consistency does not necessarily preclude effects on aggregate vote shares: debates may lead some voters to change their views without fully converging on their final vote choice yet.

We first measure debates' effects on ΔV_t, the overall distance between predicted and final vote shares defined in Section 3.3,[30] with a specification of the form in equation 7 but using only one observation per debate per day:

$$\Delta V_t^d = \sum_{k=-3}^{-2} \mu_k + \sum_{k=0}^{3} \mu_k + \mu_{4-} + \mu_{4+} + \sum_{t=-1}^{-60} \beta_t D_t + \alpha^d + W_t^{'}\lambda + u_t^d. \tag{8}$$

As shown in Figure 9a and in columns 1 and 2 of Table 7, all pre- and post-debate relative days dummies are close to zero and not significant. The average effect of debates on this outcome in the three following days is small (0.3 percentage points) and not statistically significant. Considering the lower bound of the 95% confidence interval, we can reject any impact lower

[29] In the specification using consistency in policy preferences as outcome, we control for question $\times$ debate fixed effects instead of debate fixed effects.

[30] As in Section 3.3, the outcome is constructed after restricting the sample to voters who state a valid vote intention as well as a valid post-election vote declaration, and we weight each observation by the number of respondents the outcome was constructed from, relative to the overall number of respondents surveyed at that same relative time to the debate.

than -0.2 percentage points at the 5% level, which corresponds to 5% of the overall four percentage points decrease in the distance between predicted and final vote shares over the electoral season shown in Figure 2. This result is unchanged when controlling for sociodemographic variables (column 2).

Even if debates do not contribute to the convergence on final vote shares, they may generate short-term shifts in aggregate vote intentions. We define the overall daily change in predicted vote shares as $\delta V_t^d = \frac{1}{2}\sum_c \left|\widetilde{V}_{ct}^d - \widetilde{V}_{ct-1}^d\right|$, where $\widetilde{V}_{ct}$ is the predicted vote share of candidate c among respondents surveyed at time t. δV_t corresponds to the minimal share of voters who need to change their vote intention to explain the difference between predicted vote shares' distributions at time t and the previous day. We estimate equation 8 using this outcome, and we show the results in Figure 9b and in columns 3 and 4 of Table 7.[31] Surprisingly, the dummy for the day of the debate is negative and significant, indicating that predicted vote shares change relatively less on that day. The post-debate dummies are negative, with an average coefficient size of -0.8pp that is not significant at any conventional level, suggesting that debates do not generate short-term shifts in aggregate vote intentions exceeding the average daily changes, conditional on controls.

5.4 Treatment Impact Heterogeneity

The null average effects of debates reported in Sections 5.2 and 5.3 do not rule out the possibility that debates matter in certain conditions. Debates may affect specific groups of voters or benefit particular candidates, and their effects may depend on the time at which they take place and on the type of election (McKinney and Carlin, 2004). We now explore treatment impact heterogeneity on individual vote choice and aggregate vote shares along these three dimensions.

We first study the potential mediating influence of debates' time and election type: debates may only affect vote choices in contexts in which preexisting knowledge about the candidates is low or incentives to pay attention to the debate are high, for instance because the race is tight (e.g., Chaffee, 1978; Sears and Chaffee, 1979). To test this hypothesis, we compare debates across the following types: the first debate of each race to debates taking place later in the electoral season, when the fraction of voters who have already converged on their final vote

[31] In this specification we weight each observation by the number of t and t-1 respondents the outcome was constructed from, relative to the overall number of respondents surveyed at these distances from the debate.

choice is higher; close races to expected landslides; highly fluctuating races, where predicted vote shares change a lot from one day to the next, to more stable races;[32] the U.S. bipartisan system to multiparty systems, in which a larger fraction of voters form their vote choice shortly before the election (as shown in Appendix Figure B.9 and discussed in Section 3); and plurality rule to proportional rule elections.

To study treatment impact heterogeneity on vote choice formation, we change equation 7 to interact the relative days dummies with indicators of debate type or election type:

$$\begin{aligned} Y_{it}^{d} &= \left[\sum_{k=-3}^{-2}\mu_k + \sum_{k=0}^{3}\mu_k + \mu_{4-} + \mu_{4+}\right] \times \Omega^{d} \\ &+ \left[\sum_{k=-3}^{-2}\eta_k + \sum_{k=0}^{3}\eta_k + \eta_{4-} + \eta_{4+}\right] \times \left(1-\Omega^{d}\right) \\ &+ \sum_{t=-1}^{-60}\beta_t D_t + \alpha^{d} + W_{it}'\lambda + u_{it}^{d}, \end{aligned} \tag{9}$$

where Ω is a dummy equal to 1 for "type-a" races or debates, for which effects may be expected to be larger, and 0 otherwise. We interact the μ_k's and the η_k's with Ω and $(1-\Omega)$, respectively, so that they measure the effects of the two types of debates, not the difference in effect size. This enables us to directly test the null that neither type-a nor type-b debates have significant effects.

Results are shown in Table 8 and Appendix Figure C.2. While a few pre- and post-debate relative days dummies are statistically significant, as would be expected given the large number of tests, we do not find any positive and significant effect on vote choice consistency in the three days following early or later debates or debates held in any subset of races we examine. This is true whether we consider the day related dummies separately or take their average to measure effects on the average respondent surveyed in these three days.

We use a similar method to study treatment impact heterogeneity on the overall distance between predicted and final vote shares. Specifically, we interact the relative days dummies with indicators of debate type or election type in equation 8:

$$\begin{aligned} \Delta V_{t}^{d} &= \left[\sum_{k=-3}^{-2}\mu_k + \sum_{k=0}^{3}\mu_k + \mu_{4-} + \mu_{4+}\right] \times \Omega^{d} \\ &+ \left[\sum_{k=-3}^{-2}\eta_k + \sum_{k=0}^{3}\eta_k + \eta_{4-} + \eta_{4+}\right] \times \left(1-\Omega^{d}\right) \\ &+ \sum_{t=-1}^{-60}\beta_t D_t + \alpha^{d} + W_{t}'\lambda + u_{t}^{d}. \end{aligned} \tag{10}$$

[32] We define close races as elections for which the mean weighted difference in vote shares between the two leading candidates over the five days before the debate is smaller than five percentage points, and highly fluctuating races as elections in which the mean weighted daily change in vote shares (as defined in Section 5.3) over the five days before the debate is higher than 10 percentage points.

The results are shown in Table C.5, as well as Appendix Figure C.3. We do not find any negative and significant effect on the distance between predicted and final vote shares of any type of debate or of debates held in any type of race.

We now explore treatment impact heterogeneity along voter characteristics with a specification of the form:

$$\begin{aligned} Y_{it}^{d} &= \left[\sum_{k=-3}^{-2}\mu_k + \sum_{k=0}^{3}\mu_k + \mu_{4-} + \mu_{4+}\right] \times \Omega_i \\ &+ \left[\sum_{k=-3}^{-2}\eta_k + \sum_{k=0}^{3}\eta_k + \eta_{4-} + \eta_{4+}\right] \times (1-\Omega_i) \\ &+ \Omega_i + \sum_{t=-1}^{-60}\beta_t D_t + \alpha^d + W_{it}'\lambda + u_{it}^d, \end{aligned} \tag{11}$$

where Ω is a dummy for being a "type-a" voter. First and foremost, we measure effects separately for voters who report watching debates and those who do not, to test the natural assumption that the former group may be more affected. We do not separate watchers from non-watchers based on information recorded in the pre-electoral survey, as this would likely generate different splits among people surveyed before and after the debate. Instead, we use post-electoral survey questions recording whether the respondents watch debates in general or whether they watched the debates held before that election. This information is available for a third of the debates. Importantly, the fraction of debate watchers is not significantly different among those who received the pre-electoral survey before and after the debate, conditional on the controls (column 8 of Table C.3). In addition to watchers, debates could plausibly have larger effects on voters with weak or no party identification, who may be freer to switch candidates (e.g., Vavreck, 2009). Strength of party identification is available in surveys covering about two-thirds of the debates in our sample and does not vary significantly around debates (column 9 of Table C.3). Debates could further be expected to have larger effects on voters without college education and young voters, whom we found to be more likely to form their vote choice during the campaign in Section 3.2. Results obtained from equations 10 and 11 using these four variables as well as our other sociodemographic characteristics as mediating factors are reported in Table 9, as well as Appendix Table C.6 and Appendix Figures C.4 and C.5. Considering average effects on debate watchers surveyed in the three following days, debates do not have any significant effect on vote choice consistency or the convergence from predicted vote shares on final vote shares measured among these voters. We do not find any significant effect on the average respondent surveyed in the three days following debates for any other of the 13 subgroups of voters we consider, except non-watchers. Effects on the vote

choice consistency and distance to final vote shares are significant among this smaller group of respondents but with unexpected negative and positive signs, respectively. Point estimates of similar magnitude and identical sign on pre-debate dummies suggest that these effects are spuriously driven by unusually high vote choice consistency and low distance to final vote shares among non-watchers surveyed the day before the debate more than by any actual impact of debates.

Finally, we test whether debates systematically benefit some candidates at the expense of others and, in particular, whether they contribute to the increase in the vote share of challengers, small, and new candidates, observed in Figure B.12. We first run a specification of the form in equation 8 to estimate the impact of debates on vote share concentration. Then, we run a specification of the form in equation 7 for each type of candidate, using a dummy equal to 1 if the respondent intends to vote for them as outcome. As shown in Appendix Figure C.6 and Appendix Table C.7, debates increase significantly neither the concentration of predicted vote shares nor the predicted vote share of challengers, new candidates, or small candidates.

Overall, the results in this section suggest that the impact of TV debates on vote choice formation is minimal.

6 Conclusion

Using 201,000 observations from repeated survey data in 61 elections around the world since 1952, we find that the fraction of people who state a pre-election vote intention identical to the vote choice they report after the election increases by 15 percentage points on average in the 60 days preceding the vote. This increase in individual vote choice consistency is concomitant with a four percentage points reduction in the overall distance between predicted and final vote shares. In other words, voters who make up their mind in this period affect the electoral results. These effects are larger in multiparty elections than in the U.S. biparty system, they are similar across races using plurality and proportional rule, and they benefit lesser-known candidates relatively more. These patterns suggest that changes in vote choices reflect expressive motives more than strategic behavior and are driven by changed beliefs on candidate' issue positions or valence more than their chances of victory. The substantial increase in the consistency between issues that voters rate the most important before and after an election suggests that priming also contributes to vote choice formation.

While our results support the view that campaigns have substantial effects on vote choices, it would be wrong to infer that voters are an uninformed public, swayed by any information they receive in the electoral season. It is quite the opposite. First, contrasting with their vote choice, people's policy preferences are not affected by the campaign: we were surprised to find that the fraction of respondents stating identical policy preferences in the pre- and post-electoral survey does not increase at all during the campaign. In addition, our event-study approach finds that presidential or prime minister TV debates, campaigns' most salient events, do not play any significant role in shaping voters' choice of candidate. For all the interest they generate, the large audience they draw, and the many media commentaries they provoke, debates affect neither individual vote choices nor aggregate vote shares, even in the very short run. These null findings are observed even for a race's first debate and in multiparty elections, in which voters remains undecided until later in the campaign. They hold when focusing on less-educated and young voters, who are the most influenced by campaigns, or on lesser-known candidates, who benefit the most from them.

These results suggest that, even if voters sometimes seem relatively uninformed, their vote choices actually aggregate a lot of information, beyond just debates, and that other sources are more impactful. A possible interpretation is that voters discard candidates' debate statements because they rationally expect them to be more biased than information coming from non-partisan sources, or that they only pay attention to statements aligned with their beliefs. But existing evidence shows that some forms of partisan communication do persuade voters. An alternative interpretation is that the particular medium through which debates are broadcast is what matters: it is difficult for candidates to change people's minds, and this does not happen on TV or radio. This interpretation is consistent with the fact that campaign advertisements diffused through these channels fail to affect individual vote choices (Spenkuch and Toniatti, 2018), differently from more personalized contacts such as phone calls, door-to-door visits, or town hall meetings (e.g., Arceneaux, 2007; Fujiwara and Wantchekon, 2013; Pons, 2018).

One implication is that candidates should focus on organizing these more-impactful activities if they want to increase their chances of winning, even if this means spending less time on TV and more time recruiting and organizing volunteers. In the elections we study, only a minority of voters report having been contacted or visited by a party. In addition, as shown in Figures 7f and 7g , this fraction only increases late in the electoral season, when most voters have already made up their minds.

Our results also have implications for the regulation of campaigns. Since the first presidential TV debate in the U.S. in 1960, there has been a continuous and ongoing effort to diffuse this innovation to countries which have not adopted it yet (see for instance the work done by the Commission on Presidential Debates or the National Democratic Institute), and to improve the format of debates and the fairness with which they treat all competitors, including third-party candidates, in countries where debates have become a tradition (e.g., McKinney and Carlin, 2004). Our results suggest that some of this energy may be better spent in studying and reforming campaign regulations to ensure that all campaigns have equal direct access to voters and in monitoring the most personal and tailored forms of partisan communication, on the field and in social media, to improve the quality of information available to voters and thereby increase the chance that their final choice corresponds to their actual preferences. This may require granting administrative bodies responsible for organizing and supervising elections more resources, while better controlling those resources available to candidates.

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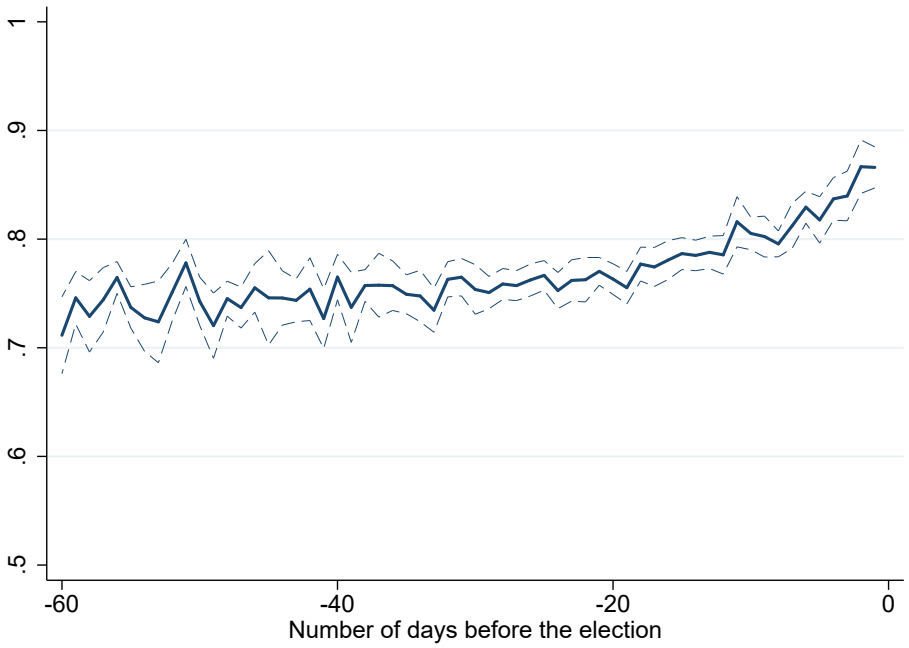
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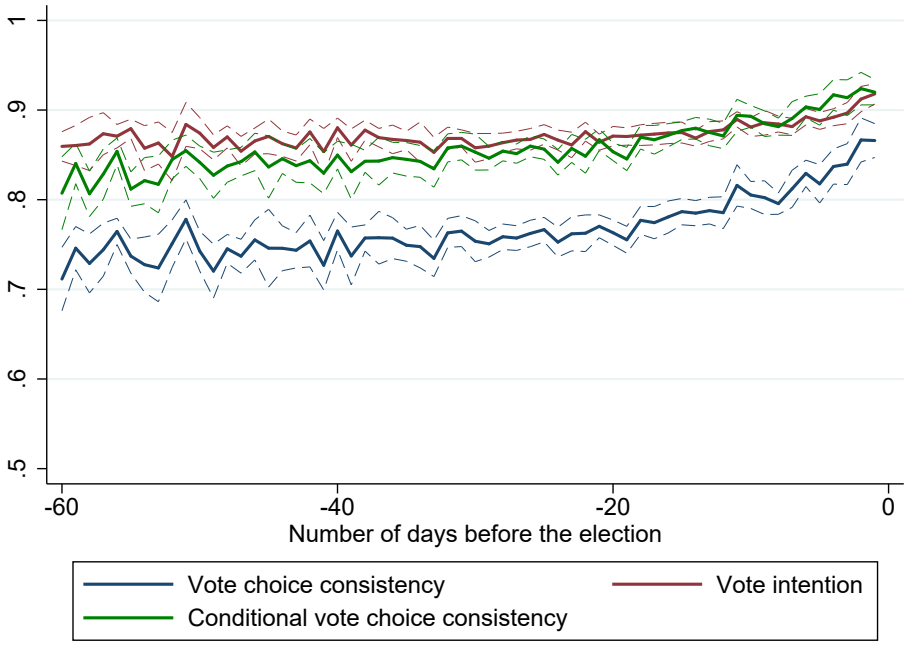
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Figure 1: Vote choice consistency over time

(a) Vote choice consistency

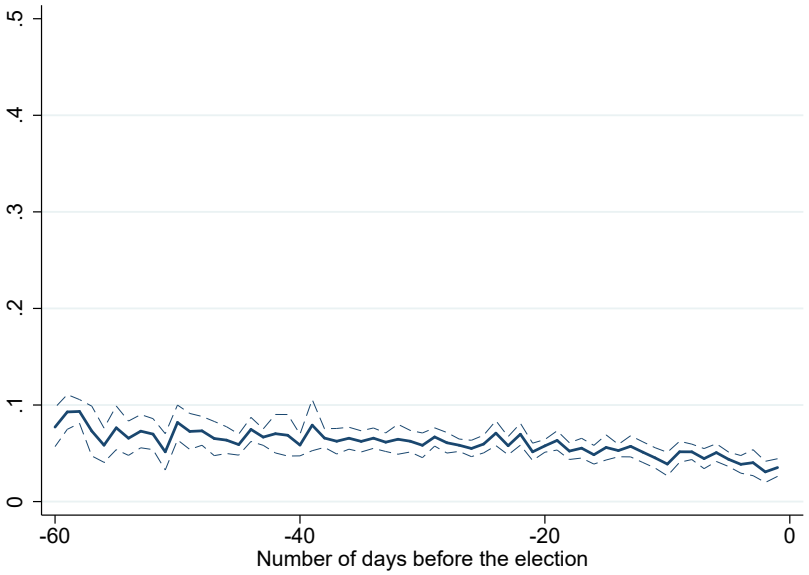


(b) Vote choice consistency, vote intention, and conditional consistency



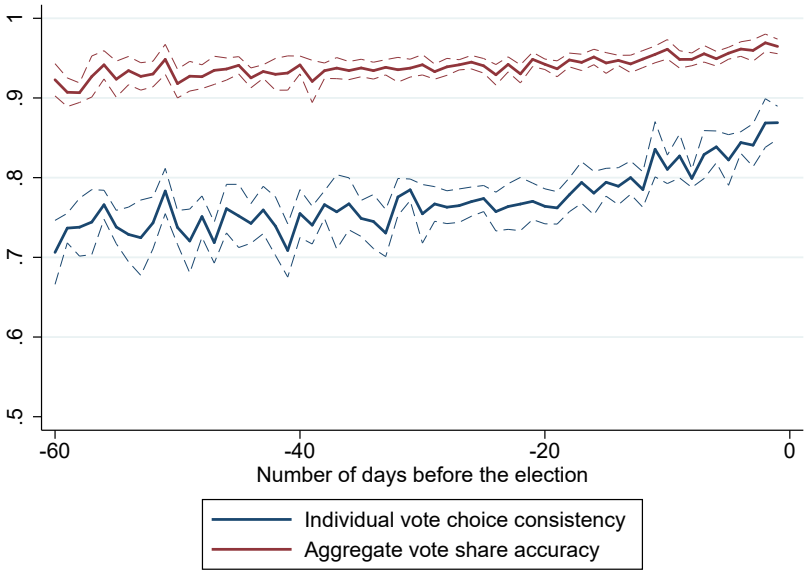
Notes: Figure 1a shows the point estimates and the 95% confidence interval from a regression of vote choice consistency on 60 fixed effects indicating the number of days relative to the election. We control for election fixed effects as well as fixed effects for the day of the week in which the pre-electoral survey took place and for the number of days separating the post-electoral survey from the election. Standard errors are adjusted for clustering at the survey level. The sample includes all respondents successfully interviewed before and after the election who stated that they intended to vote, in the first survey, and who reported that they actually voted and gave a vote choice declaration, in the second (N = 154,186). Figure 1b shows results of the same specification for two additional outcomes: vote intention and conditional vote choice consistency. The respective samples include all respondents successfully interviewed before the election who stated that they intended to vote (N = 200,587); and all respondents successfully interviewed before and after the election who stated that they intended to vote and gave a vote intention, in the first survey, and who said that they actually voted and gave a vote choice declaration, in the second (N = 138,454).

Figure 2: Distance between predicted and final vote shares



Notes: We show the point estimates and the 95% confidence interval from a regression of the distance between predicted and final vote shares on 60 fixed effects indicating the number of days relative to the election. Vote shares are computed based on all respondents successfully interviewed before and after the election who stated that they intended to vote and gave a vote intention different from voting blank or null, in the first survey, and who said that they actually voted and gave a vote choice declaration different from voting blank or null, in the second. We use one observation per election per day and weight each observation by the number of respondents who received the pre-electoral survey on that day for that election, relative to the total number of respondents surveyed on that day across all elections. We control for election fixed effects, fixed effects for the day of the week in which the pre-electoral survey took place, and the average number of days separating the post-electoral survey from the election. Standard errors are adjusted for clustering at the survey level. N=2,969.

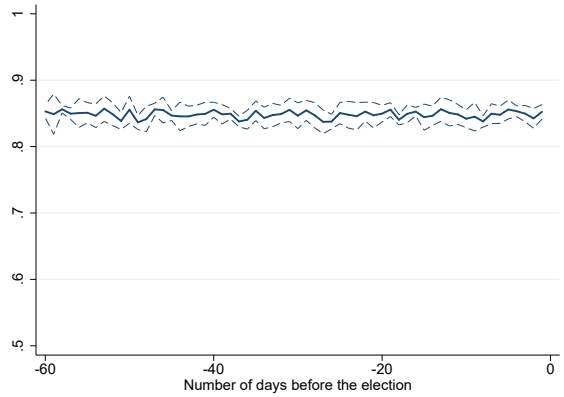
Figure 3: Vote choice consistency and vote share accuracy



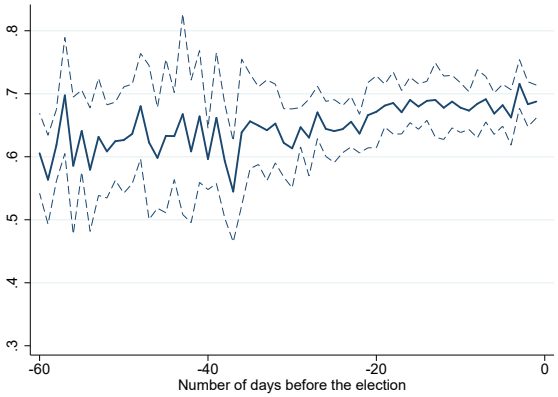
Notes: We show the point estimates and the 95% confidence interval from regressions of individual vote choice consistency and one minus the distance between predicted and final vote shares on 60 fixed effects indicating the number of days relative to the election. Other notes as in Figures 1 and 2.

Figure 4: Consistency in policy preferences, issue salience, and beliefs on candidates

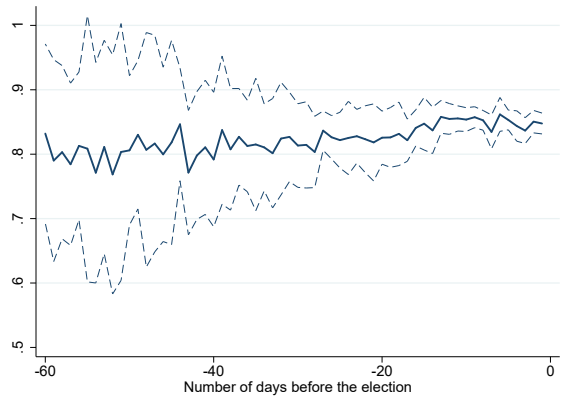
(a) Consistency in policy preferences



(b) Consistency in issue salience

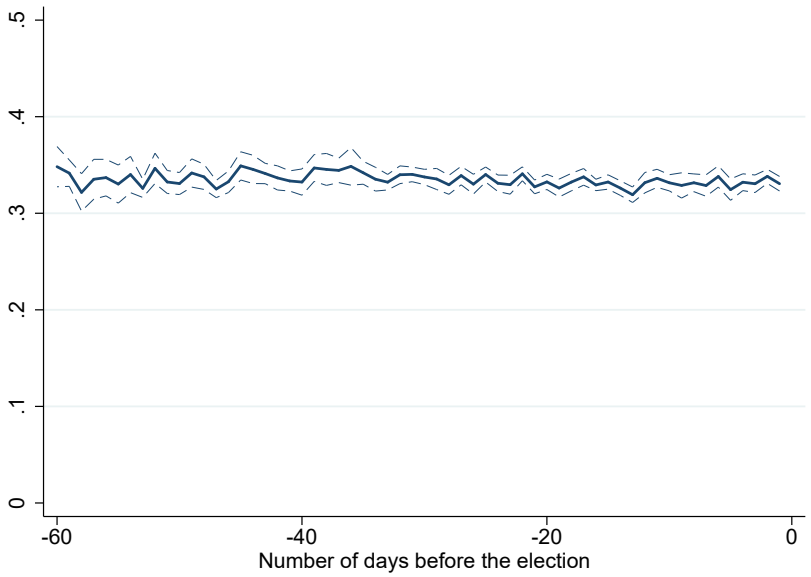


(c) Consistency in beliefs on candidates



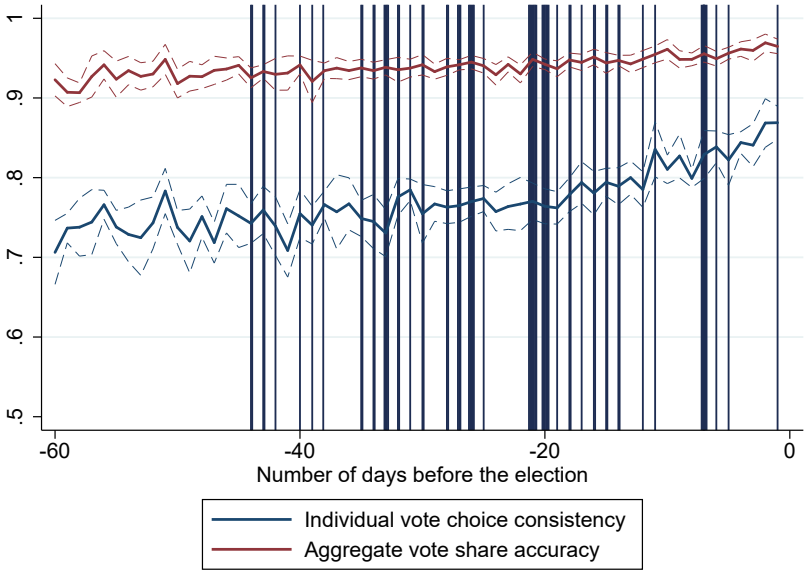
Notes: We show the point estimates and the 95% confidence interval from regressions of consistency in policy preferences (Figure 4a), issue salience (Figure 4b), and beliefs on candidates (Figure 4c) on 60 fixed effects indicating the number of days relative to the election. We control for election fixed effects as well as fixed effects for the day of the week in which the pre-electoral survey took place and for the number of days separating the pre- and post-electoral survey. In Figure 4a, the sample includes all respondents successfully interviewed before and after the election who stated a policy preference in the second survey. We use one observation per respondent per policy question (N = 172,389) and control for policy question fixed effects instead of election fixed effects. In Figure 4b, the sample includes all respondents successfully interviewed before and after the election who stated a salient issue in the second survey (N = 40,348). In Figure 4c, the sample includes all respondents successfully interviewed before and after the election who stated a belief on candidates in the second survey. We use one observation per respondent per belief question (N = 278,665) and control for belief question fixed effects instead of election fixed effects. Standard errors are adjusted for clustering at the survey level.

Figure 5: Vote share concentration



Notes: We show the point estimates and the 95% confidence interval from a regression of the vote share concentration on 60 fixed effects indicating the number of days relative to the election. The outcome is computed based on all respondents successfully interviewed before the election who stated that they intended to vote and gave a vote intention different from voting blank or null. Other notes as in Figure 2.

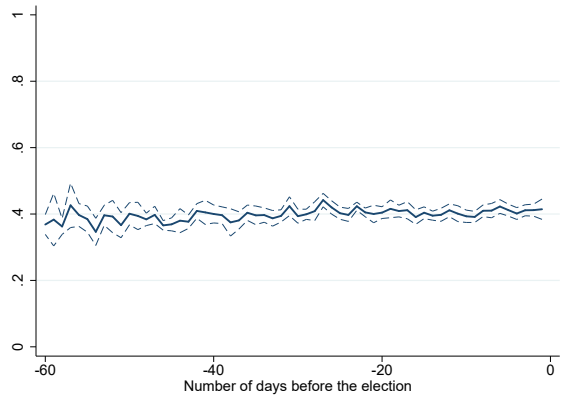
Figure 6: Vote choice consistency, vote share accuracy, and debate dates



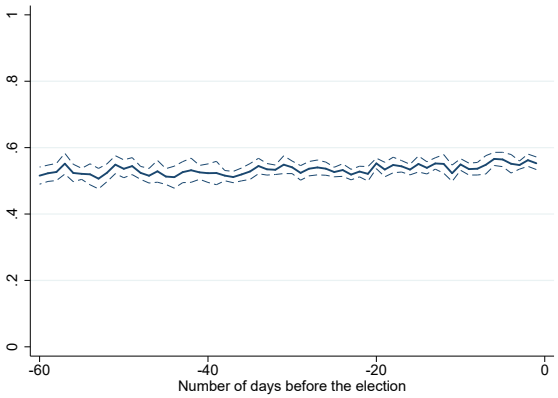
Notes: Each debate is represented by a vertical bar. Thicker bars correspond to dates in which debates were held in multiple elections. On average, debates were held 23 days before the election. Other notes as in Figure 3.

Figure 7: Media consumption, partisan communication, and political discussions

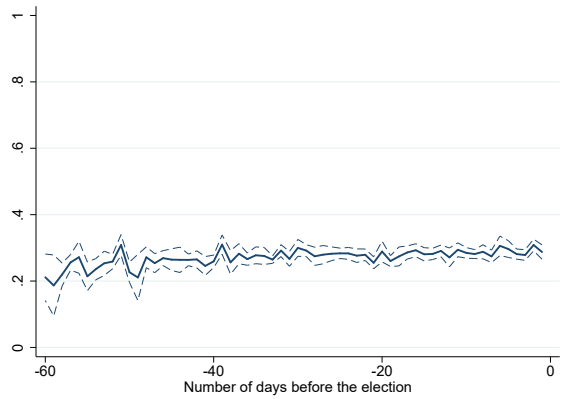
(a) Newspapers



(b) TV



(c) Radio



(d) Internet

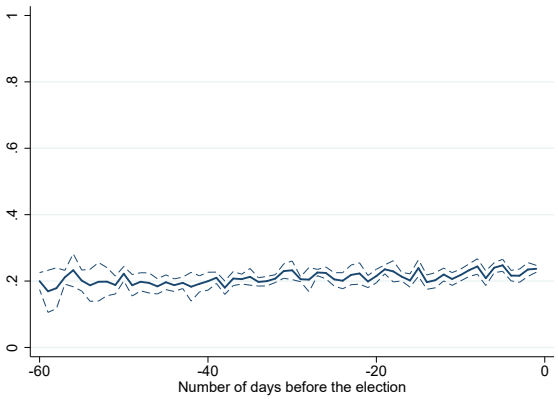
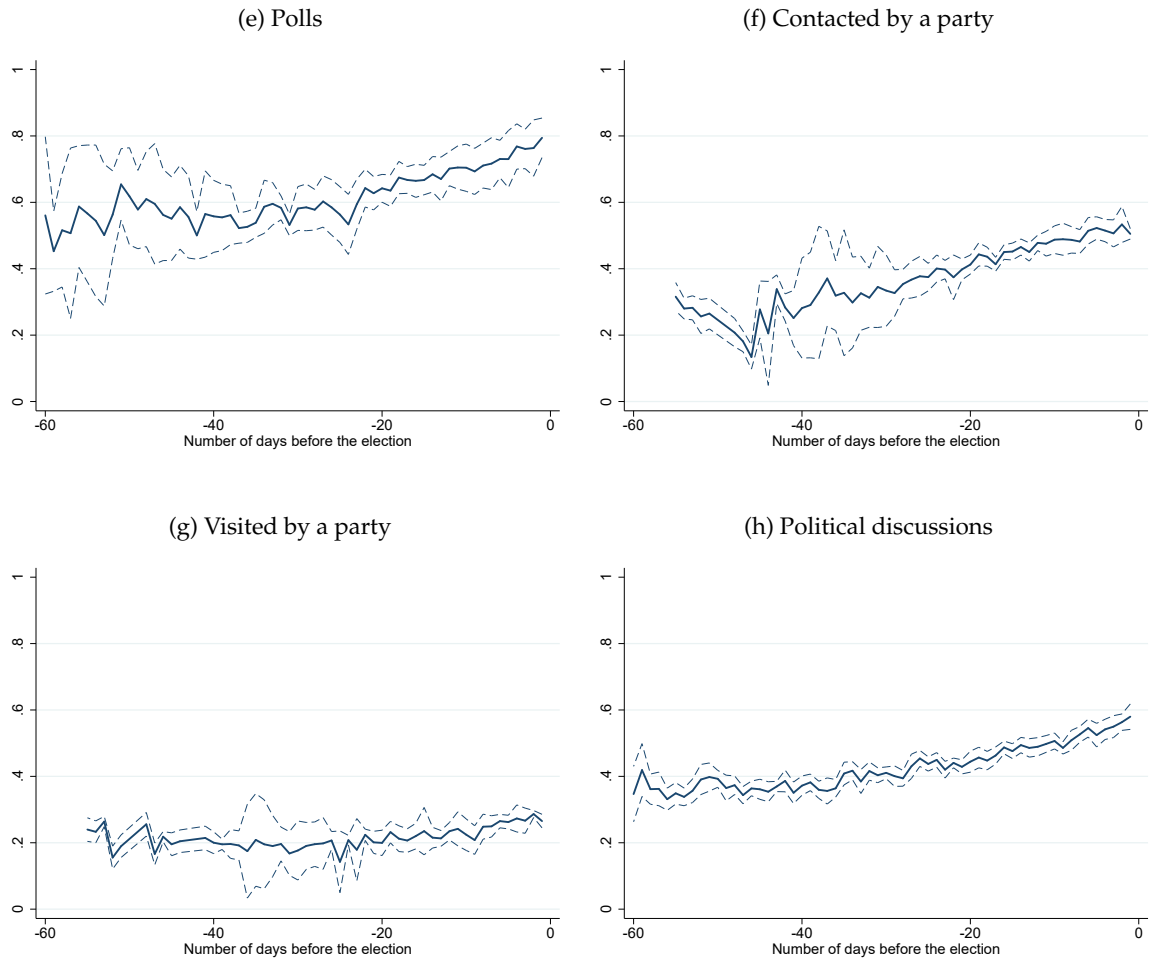
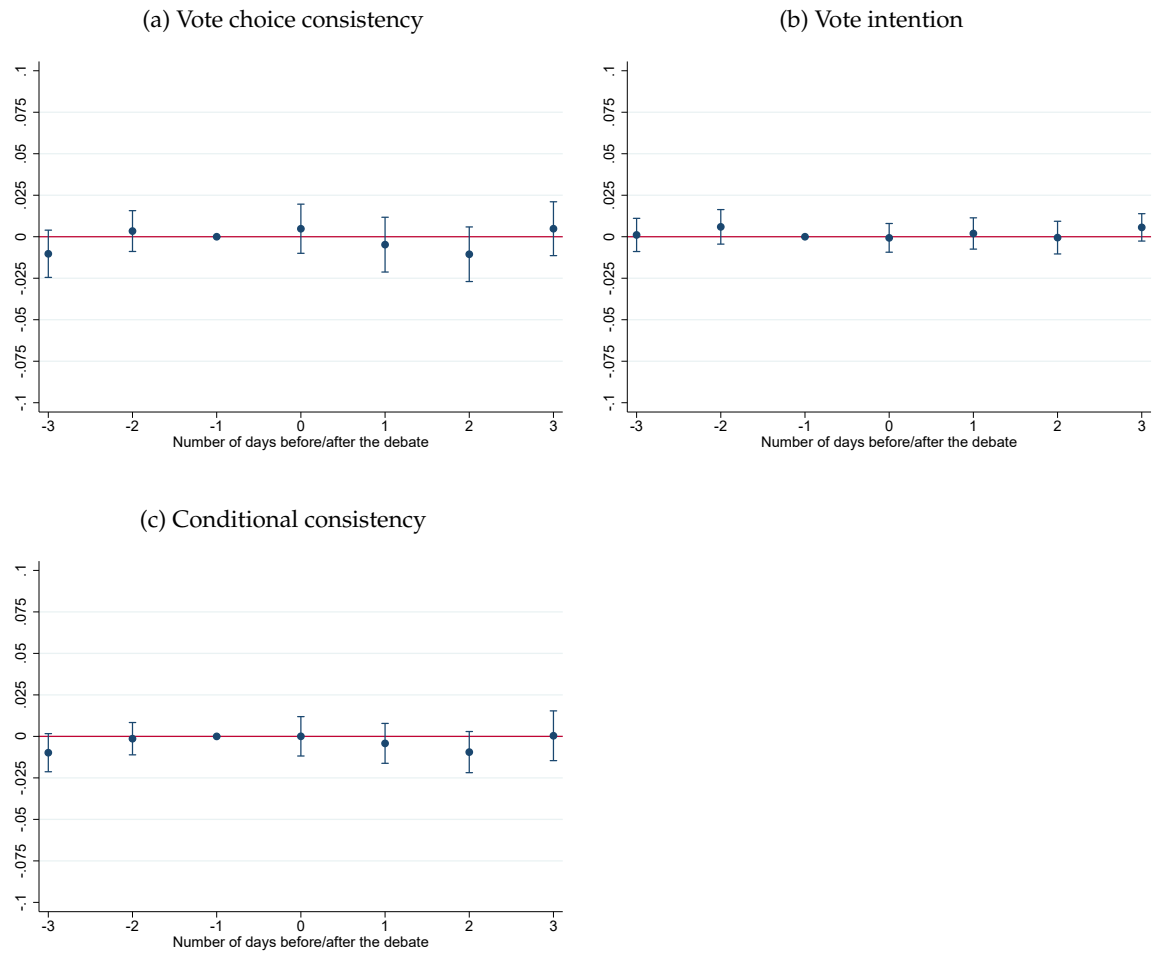


Figure 7: Media consumption, partisan communication, and political discussions (cont.)



Notes: We show the point estimates and the 95% confidence interval from regressions of different forms of media consumption and partisan communication on 60 fixed effects indicating the number of days relative to the election. The sample includes all respondents successfully interviewed before the election who stated that they intended to vote. The outcomes are dummies for getting information frequently from newspapers (N=141,183), TV (N=141,213), radio (N=103,737), and the Internet (N=99,011), having seen election polls recently (N=36,590), having been contacted by a party during the campaign (N=48,593), having been visited by a party during the campaign (N=20,884), , and discussing politics frequently with others (N=78,969). Other notes as in Figure 1.

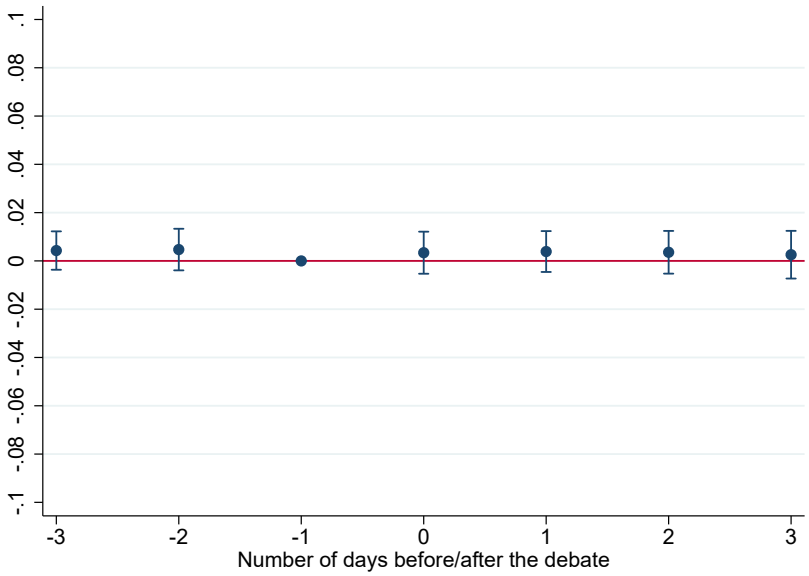
Figure 8: Debates' effects on vote choice consistency



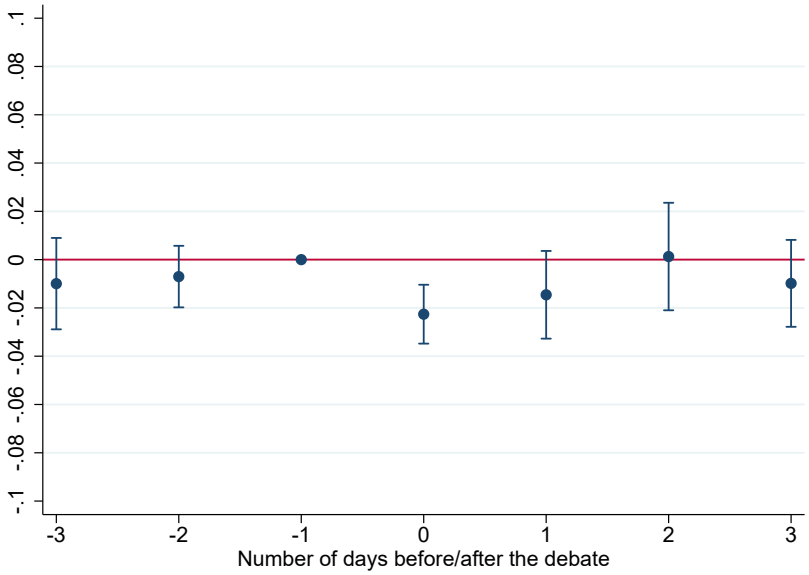
Notes: We show point estimates and 95% confidence intervals from regressions of vote choice consistency, vote intention, and conditional vote choice consistency on dummy variables for being surveyed two or three days before the debate, a dummy for being surveyed on the day of the debate, as well as dummies for being surveyed one, two, or three days after the debate. We also include dummies for being surveyed four days or more before or after the debate, respectively, and omit the dummy for being surveyed one day before the debate. We control for debate x election fixed effects as well as fixed effects for the number of days relative to the election and the day of the week in which the pre-electoral survey took place. In Figures 8a and 8c, we also control for fixed effects for the number of days separating the post-electoral survey from the election. For each debate and election, our estimation uses all respondents in samples defined as in Figure 1. Standard errors are adjusted for clustering at the debate level. There are 56 debates, after excluding debates held less than three days from one another. N=240,799; 301,697; and 221,995, respectively.

Figure 9: Debates' effects on aggregate vote shares

(a) Distance between predicted and final vote shares



(b) Daily change in predicted vote shares



Notes: We show point estimates and 95% confidence intervals from regressions of the distance between predicted and final vote shares, and daily change in predicted vote shares on dummy variables for being surveyed two or three days before the debate, a dummy for being surveyed on the day of the debate, as well as dummies for being surveyed one, two, or three days after the debate. We also include dummies for being surveyed four days or more before or after the debate, respectively, and omit the dummy for being surveyed one day before the debate. We control for debate x election fixed effects, fixed effects for the number of days relative to the election and for the day of the week in which the pre-electoral survey took place, and the average number of days separating the post-electoral survey from the election. We use one observation per election per day. The weights and the set of respondents used to compute vote shares in Figure 9a are the same as in Figure 2. In Figure 9b, vote shares are computed based on all respondents successfully interviewed before the election who stated that they intended to vote and gave a vote intention different from voting blank or null, and we weight each observation by the number of t and t-1 respondents the outcome was constructed from, relative to the overall number of respondents surveyed at these distances from the debate. Standard errors are adjusted for clustering at the debate level. There are 56 debates, after excluding debates held less than three days from one another. N=3,693 and 3,630, respectively.

Table 1: Vote choice consistency and distance between predicted and final vote shares

	Vote choice consistency		Vote intention		Conditional consistency		Distance between predicted and final vote shares	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time	0.0020***	0.0051***	0.0006***	0.0022***	0.0016***	0.0035***	-0.0006***	-0.0011**
	(0.0003)	(0.0009)	(0.0002)	(0.0004)	(0.0003)	(0.0007)	(0.0002)	(0.0004)
Time^2		0.0001***		0.0000***		0.0000***		-0.0000
		(0.0000)		(0.0000)		(0.0000)		(0.0000)
Observations	154186	154186	200587	200587	138454	138454	2969	2969
R^2	0.804	0.804	0.888	0.889	0.883	0.883	0.764	0.764
Mean at day -1	0.8660	0.8660	0.9180	0.9180	0.9200	0.9200	0.0353	0.0353

Notes: Standard errors clustered at the survey level are in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). Time is defined as minus the number of days separating the preelectoral survey from the election. We use one observation per respondent in columns 1 through 6 and control for election fixed effects as well as fixed effects for the day of the week in which the pre-electoral survey took place. In columns 1, 2, 5, and 6, we also control for the number of days separating the post-electoral survey from the election. The sample includes all respondents successfully interviewed before and after the election who stated that they intended to vote, in the first survey, and who reported that they actually voted and gave a vote choice declaration, in the second (columns 1 and 2); all respondents successfully interviewed before the election who stated that they intended to vote (columns 3 and 4); and all respondents successfully interviewed before and after the election who stated that they intended to vote and gave a vote intention, in the first survey, and who said that they actually voted and gave a vote choice declaration, in the second (columns 5 and 6). We use one observation per election per day in columns 7 and 8 and control for election fixed effects, fixed effects for the day of the week in which the preelectoral survey took place, and the average number of days separating the post-electoral survey from the election. We compute vote shares based on all respondents successfully interviewed before and after the election who stated that they intended to vote and gave a vote intention different from voting blank or null, in the first survey, and who said that they actually voted and gave a vote choice declaration different from voting blank or null, in the second. We weight each observation by the number of respondents who received the pre-electoral survey on that day for that election, relative to the total number of respondents surveyed on that day across all elections.

Table 2: Vote choice consistency across voter types

	College degree vs. no college degree (1)	Above median age vs. below (2)	Male vs. female (3)	Above median income vs. below (4)	Not employed vs. employed (5)	All (6)
Time	0.0018***	0.0022***	0.0019***	0.0017***	0.0020***	0.0019***
	(0.0003)	(0.0004)	(0.0004)	(0.0003)	(0.0004)	(0.0004)
College degree	0.0083					0.0071
	(0.0058)					(0.0060)
Time * College degree	-0.0004**					-0.0005**
	(0.0002)					(0.0002)
Above median age		0.0248**				0.0240**
		(0.0097)				(0.0103)
Time * Above median age		-0.0005**				-0.0005*
		(0.0002)				(0.0002)
Male			0.0383***			0.0354***
			(0.0059)			(0.0058)
Time * Male			0.0001			0.0001
			(0.0002)			(0.0002)
Above median income				0.0174**		0.0181**
				(0.0071)		(0.0073)
Time * Above median income				0.0003		0.0003
				(0.0003)		(0.0003)
Not employed					0.0095*	0.0115**
					(0.0051)	(0.0051)
Time* Not employed					-0.0002	-0.0000
					(0.0002)	(0.0002)
Observations	154186	154186	154186	154186	154186	154186
R^2	0.804	0.805	0.804	0.804	0.804	0.805
Mean at day -1	0.8660	0.8660	0.8660	0.8660	0.8660	0.8660

Notes: Standard errors clustered at the survey level are in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). We regress vote choice consistency on a linear time trend and its interaction with dummies for having a college degree, being above the median age, a male, above the median income, and not employed. Other notes as in Table 1.

Table 3: Consistency in policy preferences, issue salience, and beliefs on candidates

	Consistency in policy preferences		Consistency in issue salience		Consistency in beliefs on candidates	
	(1)	(2)	(3)	(4)	(5)	(6)
Time	-0.0000	0.0002	0.0015*	0.0020	0.0010	0.0015
	(0.0001)	(0.0004)	(0.0007)	(0.0015)	(0.0014)	(0.0011)
Time^2		0.0000		0.0000		0.0000
		(0.0000)		(0.0000)		(0.0000)
Observations	173896	173896	40517	40517	278665	278665
R^2	0.914	0.914	0.682	0.682	0.817	0.817
Mean at day -1	0.8524	0.8524	0.6876	0.6876	0.8477	0.8477

Notes: Standard errors clustered at the survey level are in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). We control for election fixed effects as well as fixed effects for the day of the week in which the pre-electoral survey took place and for the number of days separating the pre- and post-electoral survey. In columns 1 and 2, the sample includes all respondents successfully interviewed before and after the election who stated a policy preference in the second survey, we use one observation per respondent per policy question, and we control for policy question fixed effects instead of election fixed effects. In columns 3 and 4, the sample includes all respondents successfully interviewed before and after the election who responded to the issue salience question in the second survey. In columns 5 and 6, the sample includes all respondents successfully interviewed before and after the election who stated a belief on candidates in the second survey, we use one observation per respondent per belief question, and we control for belief question fixed effects instead of election fixed effects.

Table 4: Vote share concentration and likelihood to vote for lesser-known candidates

	Vote share concentration		Support for challenger		Support for small candidate		Support for new candidate	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time	-0.00017	-0.00035	0.00050***	0.00101**	0.00033**	0.00058	0.00004	0.00009
	(0.00011)	(0.00025)	(0.00016)	(0.00041)	(0.00016)	(0.00040)	(0.00004)	(0.00012)
$Time^2$		-0.00000		0.00001		0.00000		0.00000
		(0.00000)		(0.00001)		(0.00001)		(0.00000)
Observations	2991	2991	149787	149787	175607	175607	147419	147419
R^2	0.990	0.990	0.646	0.646	0.208	0.208	0.116	0.116
Mean at day -1	0.33058	0.33058	0.66379	0.66379	0.12311	0.12311	0.01387	0.01387

Notes: Standard errors clustered at the survey level are in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). We use one observation per election per day in columns 1 and 2 and compute vote share concentration based on all respondents successfully interviewed before the election who stated that they intended to vote and gave a vote intention different from voting blank or null. We use one observation for each of these respondents in columns 3 through 8 and define the outcomes as dummies equal to 1 if they intend to vote for a challenger, a small candidate, or a new candidate. We control for election fixed effects as well as fixed effects for the day of the week in which the pre-electoral survey took place. Other notes as in Table 1.

Table 5: Debates' effects on vote choice consistency

	Vote choice consistency		Vote intention		Conditional consistency	
	(1)	(2)	(3)	(4)	(5)	(6)
Before -3	-0.014*	-0.014*	-0.001	-0.000	-0.016**	-0.016**
	(0.008)	(0.008)	(0.004)	(0.004)	(0.007)	(0.007)
-3	-0.010	-0.010	0.001	0.001	-0.010*	-0.010
	(0.007)	(0.007)	(0.005)	(0.005)	(0.006)	(0.006)
-2	0.003	0.004	0.006	0.006	-0.001	-0.001
	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)
0	0.005	0.006	-0.001	-0.000	0.000	0.001
	(0.007)	(0.007)	(0.004)	(0.004)	(0.006)	(0.006)
+1	-0.005	-0.004	0.002	0.002	-0.004	-0.003
	(0.008)	(0.008)	(0.005)	(0.005)	(0.006)	(0.006)
+2	-0.011	-0.010	-0.001	-0.001	-0.009	-0.009
	(0.008)	(0.008)	(0.005)	(0.005)	(0.006)	(0.006)
+3	0.005	0.005	0.006	0.006	0.000	0.000
	(0.008)	(0.008)	(0.004)	(0.004)	(0.007)	(0.007)
After +3	-0.001	-0.001	0.003	0.003	-0.004	-0.004
	(0.008)	(0.008)	(0.004)	(0.004)	(0.007)	(0.007)
Observations	240799	240799	301697	301697	221995	221995
R^2	0.062	0.066	0.065	0.072	0.043	0.046
Mean at debate day	0.816	0.816	0.908	0.908	0.881	0.881
Number of debates	56	56	56	56	56	56
Sociodemographic controls		X		X		X
Average pre-debate dummies -3 and -2	-0.003	-0.003	0.004	0.004	-0.006	-0.005
P-val/Pre	0.548	0.589	0.404	0.370	0.197	0.216
Average post-debate dummies 1, 2, and 3	-0.003	-0.003	0.002	0.003	-0.004	-0.004
P-val/Post	0.570	0.616	0.507	0.462	0.380	0.410

Notes: Standard errors clustered at the debate level are in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). For each debate and election, our estimation uses all respondents in samples defined as in Table 1. We control for debate x election fixed effects as well as fixed effects for the number of days relative to the election and the day of the week in which the pre-electoral survey took place. In columns 1, 2, 5, and 6 we also control for fixed effects for the number of days separating the post-electoral survey from the election. Sociodemographic controls include education (dummies indicating above high school education and college degree), gender, age, income quartiles, and employment status. The mean value of the two pre-debate dummies and the mean value of the three post-debate dummies are also reported, along with their p-values.

Table 6: Debates' effects on consistency in policy preferences, issue salience, and beliefs on candidates

	Consistency in policy preferences		Consistency in issue salience		Consistency in beliefs on candidates	
	(1)	(2)	(3)	(4)	(5)	(6)
Before -3	-0.000	-0.000	-0.006	-0.006	-0.002	-0.002
	(0.002)	(0.002)	(0.010)	(0.009)	(0.002)	(0.002)
-3	-0.005	-0.004	-0.006	-0.005	0.003	0.003
	(0.003)	(0.003)	(0.011)	(0.011)	(0.004)	(0.004)
-2	-0.002	-0.002	-0.015	-0.014	-0.002	-0.003
	(0.002)	(0.002)	(0.014)	(0.014)	(0.003)	(0.003)
0	0.000	0.000	0.002	0.003	0.003	0.003
	(0.001)	(0.001)	(0.008)	(0.008)	(0.004)	(0.003)
+1	0.002	0.002	-0.016	-0.015	-0.003	-0.002
	(0.002)	(0.002)	(0.012)	(0.011)	(0.003)	(0.002)
+2	0.001	0.001	-0.004	-0.004	0.007	0.007
	(0.004)	(0.004)	(0.010)	(0.010)	(0.004)	(0.004)
+3	0.002	0.002	-0.011	-0.011	-0.000	-0.000
	(0.003)	(0.003)	(0.014)	(0.014)	(0.003)	(0.003)
After +3	-0.002	-0.002	-0.005	-0.005	0.006	0.006
	(0.002)	(0.002)	(0.006)	(0.006)	(0.003)	(0.003)
Observations	270786	270786	45207	45207	478934	478934
R^2	0.048	0.052	0.025	0.032	0.041	0.048
Mean at debate day	0.862	0.862	0.717	0.717	0.844	0.844
Number of debates	8	8	6	6	15	15
Sociodemographic controls		X		X		X
Average pre-debate dummies -3 and -2	-0.003	-0.003	-0.010	-0.009	0.000	-0.000
P-val/Pre	0.184	0.166	0.427	0.446	0.983	0.996
Average post-debate dummies 1, 2, and 3	0.002	0.002	-0.011	-0.010	0.001	0.002
P-val/Post	0.499	0.482	0.360	0.385	0.490	0.341

Notes: Standard errors clustered at the debate level are in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). For each debate and election, our estimation uses all respondents in samples defined as in Table 3. In columns 1 and 2, we use one observation per respondent per policy question and control for question × debate fixed effects instead of debate fixed effects. In columns 5 and 6, we use one observation per respondent per belief question and control for question × debate fixed effects instead of debate fixed effects. Other notes as in Table 5.

Table 7: Debates' effects on aggregate vote shares

	Distance between predicted and final vote shares		Daily change in predicted vote shares	
	(1)	(2)	(3)	(4)
Before -3	0.008*	0.007*	-0.009	-0.009
	(0.005)	(0.004)	(0.007)	(0.007)
-3	0.004	0.004	-0.010	-0.010
	(0.004)	(0.004)	(0.009)	(0.009)
-2	0.005	0.004	-0.007	-0.007
	(0.004)	(0.004)	(0.006)	(0.006)
0	0.003	0.002	-0.023***	-0.022***
	(0.004)	(0.004)	(0.006)	(0.006)
+1	0.004	0.003	-0.015	-0.015
	(0.004)	(0.004)	(0.009)	(0.009)
+2	0.004	0.003	0.001	0.000
	(0.004)	(0.004)	(0.011)	(0.011)
+3	0.003	0.002	-0.010	-0.011
	(0.005)	(0.005)	(0.009)	(0.009)
After +3	0.007	0.006	-0.011*	-0.011*
	(0.005)	(0.005)	(0.006)	(0.006)
Observations	3693	3693	3630	3630
R^2	0.567	0.572	0.483	0.489
Mean at debate day	0.047	0.047	0.076	0.076
Number of debates	56	56	56	56
Sociodemographic controls		X		X
Average pre-debate dummies -3 and -2	0.004	0.004	-0.008	-0.009
P-val/Pre	0.202	0.247	0.196	0.165
Average post-debate dummies 1, 2, and 3	0.003	0.003	-0.008	-0.008
P-val/Post	0.387	0.467	0.384	0.328

Notes: Standard errors clustered at the debate level are in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). We use one observation per election per day. The weights and the set of respondents used to compute vote shares in columns 1 and 2 are the same as in Table 1, columns 7 and 8. In columns 3 and 4, vote shares are computed based on all respondents successfully interviewed before the election who stated that they intended to vote and gave a vote intention different from voting blank or null, and we weight each observation by the number of *t* and *t*-1 respondents the outcome was constructed from, relative to the overall number of respondents surveyed at these distances from the debate. We control for debate x election fixed effects, fixed effects for the number of days relative to the election and for the day of the week in which the pre-electoral survey took place, and the average number of days separating the post-electoral survey from the election. Sociodemographic controls are averages of the sociodemographic variables included in Table 5. The mean value of the two pre-debate dummies and the mean value of the three post-debate dummies are also reported, along with their p-values.

Table 8: Debates' effects on vote choice consistency by debate and election type

	First vs next debate (1)	Close vs less-close race (2)	Fluctuating vs stable race (3)	U.S. vs other countries (4)	Plurality vs proportional rule (5)
-3*type-b	-0.011*	-0.011	-0.001	-0.014	-0.041*
	(0.007)	(0.007)	(0.012)	(0.009)	(0.024)
-2*type-b	0.009	0.004	0.006	-0.001	-0.023
	(0.007)	(0.006)	(0.014)	(0.007)	(0.019)
0*type-b	0.008	0.001	0.020	0.008	-0.012
	(0.009)	(0.007)	(0.013)	(0.010)	(0.022)
+1*type-b	0.003	-0.002	-0.002	-0.006	-0.043
	(0.008)	(0.008)	(0.016)	(0.011)	(0.029)
+2*type-b	-0.009	-0.010	-0.009	-0.013	-0.056**
	(0.009)	(0.008)	(0.014)	(0.010)	(0.024)
+3*type-b	0.001	0.006	-0.005	0.004	-0.013
	(0.009)	(0.008)	(0.014)	(0.011)	(0.032)
-3*type-a	-0.008	-0.000	-0.014	0.001	-0.005
	(0.019)	(0.025)	(0.009)	(0.014)	(0.007)
-2*type-a	-0.013	-0.005	0.002	0.013	0.007
	(0.013)	(0.017)	(0.006)	(0.011)	(0.006)
0*type-a	-0.001	0.039	-0.001	-0.001	0.009
	(0.014)	(0.025)	(0.009)	(0.011)	(0.008)
+1*type-a	-0.023	-0.021	-0.005	-0.001	0.003
	(0.022)	(0.034)	(0.009)	(0.013)	(0.008)
+2*type-a	-0.015	-0.017	-0.012	-0.007	-0.004
	(0.018)	(0.034)	(0.010)	(0.012)	(0.008)
+3*type-a	0.012	-0.004	0.008	0.006	0.009
	(0.021)	(0.030)	(0.010)	(0.008)	(0.008)
Observations	240799	240799	240799	240799	240799
R^2	0.066	0.066	0.066	0.066	0.066
Mean at debate day	0.247	0.119	0.725	0.268	0.889
Number of debates	56	56	56	56	56
Sociodemographic controls	X	X	X	X	X
Average pre-debate dummies for type-b	-0.001	-0.003	0.003	-0.007	-0.032
P-val/Pre*type-b	0.847	0.562	0.799	0.299	0.092
Average post-debate dummies for type-b	-0.002	-0.002	-0.005	-0.005	-0.038
P-val/Post*type-b	0.797	0.725	0.659	0.525	0.084
Average pre-debate dummies for type-a	-0.010	-0.002	-0.006	0.007	0.001
P-val/Pre*type-a	0.500	0.896	0.373	0.490	0.828
Average post-debate dummies for type-a	-0.009	-0.014	-0.003	-0.001	0.003
P-val/Post*type-a	0.627	0.594	0.671	0.949	0.658

Notes: Standard errors clustered at the debate level are in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). We interact the relative days dummies with indicators for type-a debate or election (first debate, close race, fluctuating race, U.S. bipartisan system, and plurality rule) and type-b debate or election (next debates, less close race, more stable race, multiparty system, and proportional rule). Dummies for being surveyed four days or more before or after the debate interacted with the type-a and type-b indicators were included in the regressions but are not shown, for presentation clarity. Other notes as in Table 5.

Table 9: Debates' effects on vote choice consistency by voter type

	Debate watchers vs non-watchers (1)	Strong vs weak party identification (2)	College degree vs no college degree (3)	Above median age vs below (4)	Male vs female (5)	Above median income vs below (6)	Not employed vs employed (7)
-3*type-b	-0.067*	-0.014	-0.008	-0.009	-0.019*	-0.015	-0.003
	(0.033)	(0.011)	(0.011)	(0.009)	(0.010)	(0.011)	(0.010)
-2*type-b	-0.071**	0.009	0.004	0.002	0.006	0.006	0.001
	(0.028)	(0.010)	(0.009)	(0.009)	(0.010)	(0.008)	(0.010)
0*type-b	-0.125**	-0.005	0.010	0.004	-0.006	-0.005	0.009
	(0.052)	(0.011)	(0.011)	(0.011)	(0.012)	(0.013)	(0.009)
+1*type-b	-0.173***	-0.007	-0.003	-0.006	-0.011	0.002	-0.009
	(0.060)	(0.014)	(0.010)	(0.011)	(0.012)	(0.011)	(0.011)
+2*type-b	-0.129**	-0.009	-0.021*	-0.008	-0.017	-0.014	-0.021*
	(0.046)	(0.012)	(0.011)	(0.010)	(0.012)	(0.012)	(0.010)
+3*type-b	-0.055**	-0.005	-0.000	0.010	0.004	-0.009	0.007
	(0.025)	(0.014)	(0.009)	(0.012)	(0.010)	(0.011)	(0.011)
-3*type-a	0.014	-0.003	-0.021**	-0.011	-0.000	-0.001	-0.018
	(0.011)	(0.011)	(0.009)	(0.011)	(0.009)	(0.009)	(0.012)
-2*type-a	0.001	-0.006	0.009	0.004	0.001	0.007	0.007
	(0.008)	(0.011)	(0.010)	(0.009)	(0.007)	(0.009)	(0.011)
0*type-a	0.011	-0.002	-0.009	0.007	0.018**	0.010	-0.012
	(0.011)	(0.010)	(0.009)	(0.012)	(0.009)	(0.010)	(0.014)
+1*type-a	0.014	-0.007	-0.010	-0.002	0.003	0.005	-0.004
	(0.013)	(0.010)	(0.013)	(0.011)	(0.010)	(0.011)	(0.012)
+2*type-a	0.008	-0.009	-0.000	-0.013	-0.003	-0.001	-0.010
	(0.009)	(0.010)	(0.011)	(0.012)	(0.012)	(0.012)	(0.014)
+3*type-a	0.017	-0.002	-0.013	0.001	0.006	0.005	-0.012
	(0.010)	(0.011)	(0.011)	(0.009)	(0.011)	(0.012)	(0.011)
Observations	67482	163089	192372	240019	240683	191366	191601
R^2	0.077	0.064	0.064	0.066	0.066	0.061	0.075
Mean at debate day	0.936	0.331	0.374	0.522	0.496	0.548	0.388
Number of debates	19	36	51	56	56	50	48
Sociodemographic controls	X	X	X	X	X	X	X
Average pre-debate dummies for type-b	-0.069	-0.003	-0.002	-0.003	-0.006	-0.005	-0.001
P-val/Pre*type-b	0.019	0.778	0.809	0.675	0.487	0.579	0.881
Average post-debate dummies for type-b	-0.119	-0.007	-0.008	-0.001	-0.008	-0.007	-0.008
P-val/Post*type-b	0.008	0.498	0.306	0.885	0.329	0.436	0.326
Average pre-debate dummies for type-a	0.008	-0.005	-0.006	-0.004	0.000	0.003	-0.006
P-val/Pre*type-a	0.373	0.608	0.413	0.672	0.954	0.671	0.581
Average post-debate dummies for type-a	0.013	-0.006	-0.008	-0.005	0.002	0.003	-0.008
P-val/Post*type-a	0.161	0.513	0.380	0.610	0.810	0.744	0.423

Notes: Standard errors clustered at the debate level are in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). We interact the relative days dummies with indicators for type-a voter (debate watcher, voter with strong party identification, with a college degree, above the median age, male, above the median income, and not employed) and type-b voter (non-debate watcher, voter with weak or no party identification, without college degree, below the median age, female, below the median income, and employed) and also control for the dummy for being a type-a voter, uninteracted. Dummies for being surveyed four days or more before or after the debate interacted with the type-a and type-b indicators were included in the regressions but are not shown, for presentation clarity. Other notes as in Table 5.

Appendix to "Vote Choice Formation and Minimal Effects of TV Debates" (Le Pennec and Pons)

- Appendix A: Additional Information on the Data
  - Appendix A.1: Links to Surveys
  - Appendix A.2: Selection of non-RCS Surveys
  - Appendix A.3: Sampling Frame
- Appendix B: The Formation of Vote Choices: Additional Figures and Tables
- Appendix C: Impact of TV Debates: Additional Figures and Tables
- Appendix D: Additional Robustness Checks
  - Appendix D.1: Sociodemographic Controls
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  - Appendix D.3: Standard Errors Adjusted for Clustering at the Election Date Level
  - Appendix D.4: Event Study with Balanced Panel on Three-Day Window
  - Appendix D.5: Event Study with Five-Day Window

A Additional Information on the Data

A.1 Links to Surveys

The nationally representative surveys included in our dataset can be downloaded at the following links:

- Austrian National Election Studies: https://www.autnes.at/en/data-download/
- British Election Studies: https://www.britishelectionstudy.com/data/#.XRlYB-hKhPY
- Canadian Election Studies: https://ces-eec.arts.ubc.ca/english-section/surveys/
- Dutch Parliamentary Election Studies:

https://www.surveydata.nl/browse-our-data/repository/dutch-parliamentary-election-studies-28

- German Longitudinal Election Studies: https://www.gesis.org/en/elections-home/gles/data/
- Italian National Election Studies: http://www.itanes.org/en/
- Swiss Electoral Studies: https://forscenter.ch/projects/selects/
- New Zealand Election Studies: http://www.nzes.org/
- American National Election Time Series Studies: https://electionstudies.org/data-center/
- National Annenberg Election Surveys:

https://www.annenbergpublicpolicycenter.org/political-communication/naes/

A.2 Selection of non-RCS Surveys

To increase statistical power, we complemented our sample of rolling cross-sections with surveys that were not designed as rolling cross-sections but interviewed a new set of respondents every day before the election, surveyed them again after the election, and satisfied the two additional following conditions.

First, we estimate the coefficient of variation in daily sample size for each survey. This coefficient is defined as $\frac{\sigma_{N^t}}{\mu_{N^t}}$, where N_t is the number of respondents surveyed on day t, and μ_{N^t} and σ_{N^t} are the mean and standard deviation of this variable, respectively. We exclude

surveys with a coefficient larger than 60%, a benchmark defined based on the largest coefficient of variation observed in the rolling-cross sections.

Second, we test for differences in mean sociodemographic characteristics (education, age, gender, income, and employment status) for any pair of daily samples. We exclude surveys for which we reject the null hypothesis of no difference in mean characteristics more than 15% of the times, a benchmark defined again based on the rolling-cross sections.

Surveys from the American National Election Time Series Studies, the Dutch Parliamentary Election Studies, and the New Zealand Election Studies were included in the sample as they satisfy both conditions. Surveys from the Cooperative Congressional Election Studies (in the United States), the Swedish National Election Studies, and the Israel National Election Studies were considered but excluded because they violated one of these conditions.

A.3 Sampling Frame

This section provides the full list of elections, surveys, policy and belief questions, parties, and TV debates included in our analysis.

Table A.1: List of elections by country

(a) United States

Survey	Election Date	Election Type	Voting Rule	Pre-election: # days	Pre-election: # obs.	Post-election: # obs.	Post-election: median lag
ANES 1952	11/4/1952	Governor	Plurality	49	752	608	19
ANES 1952	11/4/1952	Lower House	Plurality	49	1226	881	19
ANES 1952	11/4/1952	President	Plurality	49	1331	1104	19
ANES 1952	11/4/1952	Upper House	Plurality	49	933	685	19
ANES 1956	11/6/1956	President	Plurality	47	1246	1107	21
ANES 1960	11/8/1960	President	Plurality	57	872	779	23
ANES 1964	11/3/1964	President	Plurality	57	1395	1179	21
ANES 1968	11/5/1968	President	Plurality	58	1302	1026	19
ANES 1972	11/7/1972	President	Plurality	66	2117	1535	22
ANES 1976	11/2/1976	President	Plurality	49	1311	1133	37
ANES 1980	11/4/1980	President	Plurality	63	1196	895	N/A
ANES 1984	11/6/1984	President	Plurality	63	1807	1336	11
ANES 1988	11/8/1988	President	Plurality	63	1616	1171	13
ANES 1992	11/3/1992	President	Plurality	63	2041	1610	27
ANES 1996	11/5/1996	Lower House	Plurality	63	1088	760	12
ANES 1996	11/5/1996	President	Plurality	63	1314	967	12
ANES 2000	11/7/2000	President	Plurality	63	1348	947	14
ANES 2004	11/2/2004	President	Plurality	56	860	622	11
ANES 2008	11/4/2008	President	Plurality	63	1318	898	14
ANES 2012	11/6/2012	Governor	Plurality	58	155	96	20
ANES 2012	11/6/2012	Lower House	Plurality	58	1117	718	20
ANES 2012	11/6/2012	President	Plurality	58	1518	1181	20
ANES 2012	11/6/2012	Upper House	Plurality	58	846	573	20
ANES 2016	11/8/2016	Governor	Plurality	62	444	292	11
ANES 2016	11/8/2016	Lower House	Plurality	62	2818	1917	11
ANES 2016	11/8/2016	President	Plurality	62	3366	2488	11
ANES 2016	11/8/2016	Upper House	Plurality	62	2061	1388	11
NAES 2000	11/7/2000	President	Plurality	112	2922	2586	15
NAES 2004	11/2/2004	President	Plurality	110	7181	6533	26
NAES 2008	11/4/2008	President	Plurality	67	16661	11982	37

(b) Austria

Survey	Election Date	Election Type	Voting Rule	Pre-election: # days	Pre-election: # obs.	Post-election: # obs.	Post-election: median lag
AUTNES 2013	9/29/2013	Lower House	Proportional	40	2421	1543	18

(c) United Kingdom

Survey	Election Date	Election Type	Voting Rule	Pre-election: # days	Pre-election: # obs.	Post-election: # obs.	Post-election: median lag
BES 2001	6/7/2001	Lower House	Plurality	30	4499	2833	4
BES 2010	5/6/2010	Lower House	Plurality	29	13720	11093	2
BES 2015	5/7/2015	Lower House	Plurality	38	22680	20395	3
BES 2016	6/23/2016	Referendum	Plurality	48	24851	20141	3

(d) Canada

Survey	Election Date	Election Type	Voting Rule	Pre-election: # days	Pre-election: # obs.	Post-election: # obs.	Post-election: median lag
CES 1988	11/21/1988	Lower House	Plurality	47	3034	2125	24
CES 1992	10/26/1992	Referendum	Plurality	32	1777	1428	9
CES 1993	10/25/1993	Lower House	Plurality	45	2916	2347	12
CES 1997	6/2/1997	Lower House	Plurality	36	2671	1869	14
CES 2000	11/27/2000	Lower House	Plurality	34	2405	1606	19
CES 2004	6/28/2004	Lower House	Plurality	36	2530	1730	26
CES 2006	1/23/2006	Lower House	Plurality	50	2670	2053	14
CES 2008	10/14/2008	Lower House	Plurality	18	2008	1378	8
CES 2011	5/2/2011	Lower House	Plurality	37	2753	2046	16
CES 2015	10/19/2015	Lower House	Plurality	69	4448	2712	11

(e) Netherlands

Survey	Election Date	Election Type	Voting Rule	Pre-election: # days	Pre-election: # obs.	Post-election: # obs.	Post-election: median lag
DPES 1998	5/6/1998	Lower House	Proportional	34	1774	1504	16
DPES 2002	5/15/2002	Lower House	Proportional	31	1815	1475	12
DPES 2006	11/22/2006	Lower House	Proportional	39	2382	2133	7

(f) Germany

Survey	Election Date	Election Type	Voting Rule	Pre-election: # days	Pre-election: # obs.	Post-election: # obs.	Post-election: median lag
GLES 2009	9/27/2009	Lower House - 1st vote	Plurality	60	4366	2930	8
GLES 2009	9/27/2009	Lower House - 2nd vote	Proportional	60	4411	3003	8
GLES 2013	9/22/2013	Lower House - 1st vote	Plurality	76	6027	4040	8
GLES 2013	9/22/2013	Lower House - 2nd vote	Proportional	76	6100	4122	8

(g) Switzerland

Survey	Election Date	Election Type	Voting Rule	Pre-election: # days	Pre-election: # obs.	Post-election: # obs.	Post-election: median lag
SELECTS 2011	10/23/2011	Lower House	Proportional	41	1648	1174	4
SELECTS 2015	10/18/2015	Lower House	Proportional	62	4016	3392	2

(h) Italy

Survey	Election Date	Election Type	Voting Rule	Pre-election: # days	Pre-election: # obs.	Post-election: # obs.	Post-election: median lag
ITANES 2013	2/24/2013	Lower House	Proportional	43	5148	1464	31

(i) New Zealand

Survey	Election Date	Election Type	Voting Rule	Pre-election: # days	Pre-election: # obs.	Post-election: # obs.	Post-election: median lag
NZES 1996	10/12/1996	Lower House - 1st vote	Plurality	37	2096	1967	24
NZES 1996	10/12/1996	Lower House - 2nd vote	Proportional	37	2095	2024	24
NZES 1999	11/27/1999	Lower House - 1st vote	Plurality	40	2211	2074	23
NZES 1999	11/27/1999	Lower House - 2nd vote	Proportional	40	1983	1916	23
NZES 2002	7/27/2002	Lower House - 1st vote	Plurality	36	2076	1980	N/A
NZES 2002	7/27/2002	Lower House - 2nd vote	Proportional	36	2014	1901	N/A

Notes: The included surveys are the American National Election Time Series Studies (ANES), the National Annenberg Election Surveys (NAES), the Austrian National Election Studies (AUTNES), the British Election Studies (BES), the Canadian Election Studies (CES), the Dutch Parliamentary Election Studies (DPES), the German Longitudinal Election Studies (GLES), the Italian National Election Studies (ITANES), the Swiss Electoral Studies (SELECTS), and the New Zealand Election Studies (NZES). In New Zealand, Lower House refers to the only house in its unicameral parliament. Other columns report the number of days covered by the pre-election survey, the number of respondents surveyed before and after the election, and the median number of days separating the post-electoral survey from the election.

Table A.2: List of surveys by country

(a) United States

Survey	Survey Mode	RCS Design	Sociodemographic Factors	Media Consumption	Contact by Party	Party Identification	Watching Debates
ANES 1952	Face-to-face	No	All	None	None	Yes	No
ANES 1956	Face-to-face	No	Some	None	None	No	No
ANES 1960	Face-to-face	No	All	None	None	Yes	No
ANES 1964	Face-to-face	No	All	None	None	No	No
ANES 1968	Face-to-face/ Mail	No	Some	None	None	No	No
ANES 1972	Face-to-face/ Mail	No	All	None	None	No	No
ANES 1976	Face-to-face	No	All	None	None	No	Yes
ANES 1980	Face-to-face	No	All	Some	None	Yes	Yes
ANES 1984	Face-to-face/ Phone	No	All	Some	None	Yes	Yes
ANES 1988	Face-to-face	No	All	Some	None	No	No
ANES 1992	Face-to-face/ Phone	No	Some	None	None	No	No
ANES 1996	Face-to-face/ Phone	No	All	Some	None	Yes	No
ANES 2000	Face-to-face/ Phone	No	All	Some	None	No	No
ANES 2004	Face-to-face	No	All	Some	None	No	No
ANES 2008	Face-to-face	No	All	Some	None	No	No
ANES 2012	Face-to-face	No	All	Some	None	Yes	No
ANES 2016	Face-to-face/ Online	No	Some	Some	None	No	No
NAES 2000	Phone	Yes	All	Some	None	Yes	Yes
NAES 2004	Phone	Yes	All	Some	None	Yes	Yes
NAES 2008	Phone/Online	Yes	All	Some	None	Yes	No

(b) Canada

Survey	Survey Mode	RCS Design	Sociodemographic Factors	Media Consumption	Contact by Party	Party Identification	Watching Debates
CES 1988	Phone	Yes	All	Some	None	Yes	Yes
CES 1992	Phone	Yes	All	Some	None	No	Yes
CES 1993	Phone	Yes	All	Some	Some	Yes	Yes
CES 1997	Phone	Yes	All	Some	None	Yes	Yes
CES 2000	Phone	Yes	All	Some	All	No	Yes
CES 2004	Phone	Yes	All	Some	All	No	Yes
CES 2006	Phone	Yes	Some	Some	None	No	No
CES 2008	Phone	Yes	Some	None	None	No	No
CES 2011	Phone	Yes	Some	None	None	No	No
CES 2015	Online	Yes	All	None	None	Yes	No

(c) Netherlands

Survey	Survey Mode	RCS Design	Sociodemographic Factors	Media Consumption	Contact by Party	Party Identification	Watching Debates
DPES 1998	Face-to-face/ Phone	No	All	Some	None	No	No
DPES 2002	Face-to-face	No	Some	Some	None	No	No
DPES 2006	Face-to-face	No	All	Some	None	No	No

(d) Germany

Survey	Survey Mode	RCS Design	Sociodemographic Factors	Media Consumption	Contact by Party	Party Identification	Watching Debates
GLES 2009	Phone	Yes	Some	Some	Some	Yes	Yes
GLES 2013	Phone	Yes	Some	Some	Some	Yes	Yes

(e) Switzerland

Survey	Survey Mode	RCS Design	Sociodemographic Factors	Media Consumption	Contact by Party	Party Identification	Watching Debates
SELECTS 2011	Phone	Yes	All	Some	None	No	No
SELECTS 2015	Phone	Yes	All	Some	None	Yes	No

(f) Italy

Survey	Survey Mode	RCS Design	Sociodemographic Factors	Media Consumption	Contact by Party	Party Identification	Watching Debates
ITANES 2013	Face-to-face	Yes	Some	None	None	No	No

(g) New Zealand

Survey	Survey Mode	RCS Design	Sociodemographic Factors	Media Consumption	Contact by Party	Party Identification	Watching Debates
NZES 1996	Phone	Yes	All	Some	All	No	No
NZES 1999	Phone	Yes	All	Some	Some	No	No
NZES 2002	Phone/Online	No	All	Some	Some	Yes	No

Notes: For each survey included in the analysis, we indicate: which survey mode was used; whether the survey is a rolling cross-section; whether all, some, or none of the selected sociodemographic factors and variables on media consumption and contact by a party or a candidate during the campaign are available in the pre-election survey; and whether information on party identification and watching TV debates is available in the post-electoral survey. Other notes as in Table A.1.

Table A.3: List of policy questions by country

(a) United States

Survey	Year	Question
NAES	2004	Making recent federal tax cuts permanent—do you favor or oppose this?
NAES	2004	Do you favor or oppose increasing the $5.15 minimum wage employers now must pay their workers?
NAES	2004	As far as you know, has the No Child Left Behind education law made American public schools much better, somewhat better, somewhat worse, much worse, or hasn't it made a difference?
NAES	2004	The federal government helping to pay for health insurance for all children—do you favor or oppose this?
NAES	2004	The federal government helping employers pay the cost of their workers' health insurance—do you favor or oppose this?
NAES	2004	Who do you think will benefit more from the new Medicare prescription drug plan—seniors on Medicare or the drug manufacturers?
NAES	2004	Changing the recently passed Medicare prescription drug law to allow re-importing drugs from Canada—do you favor or oppose this?
NAES	2004	Do you favor or oppose allowing workers to invest some of their Social Security contributions in the stock market?
NAES	2004	Do you think the US should keep military troops in Iraq until a stable government is established there, or do you think the U.S. should bring its troops home as soon as possible?
NAES	2004	Laws making it more difficult for a woman to get an abortion—do you favor or oppose this?
NAES	2004	Making additional stem cell lines from human embryos available for federally funded research on diseases like Parkinson's—do you favor or oppose this?
NAES	2004	Would you favor or oppose an amendment to the U.S. Constitution saying that no state can allow two men to marry each other or two women to marry each other?
NAES	2004	Extending the federal law banning assault weapons—do you favor or oppose this?
NAES	2004	The government placing limits on how much people could collect when a jury finds that a doctor has committed medical malpractice—do you favor or oppose this?
NAES	2008	[Split 1] Do you favor or oppose the federal government in Washington negotiating more free trade agreements like NAFTA?
NAES	2008	[Split 2] Do you favor or oppose the federal government in Washington negotiating more free trade agreements like NAFTA?
NAES	2008	I'm going to read you some plans for United States policy in Iraq. Please tell me which one comes closest to your own position: The US should withdraw all troops from Iraq as soon as possible. The US should set a deadline for withdrawing its troops if the Iraqi government doesn't show definite progress. The US should keep its troops in Iraq until a stable government is established.
NAES	2008	I'm going to read you a proposal some have made regarding immigration. Please tell me whether you strongly favor, somewhat favor, somewhat oppose, or strongly oppose it: provide a path to citizenship for some illegal aliens who agree to return to their home country for a period of time and pay substantial fines.
NAES	2008	I'm going to read you a proposal some have made regarding immigration. Please tell me whether you strongly favor, somewhat favor, somewhat oppose, or strongly oppose it: increase border security by building a fence along part of the US border with Mexico.
NAES	2008	Please tell me which of the following statements about abortion comes closest to your own view: Abortion should be available to anyone who wants it. Abortion should be available, but with stricter limits than it is now. Abortion should not be permitted except in cases of rape, incest, or when the life of the woman is at risk. Abortion should not be permitted under any circumstances.
NAES	2008	There has been much talk recently about whether gays and lesbians should have the legal right to marry someone of the same sex. Which of the following options comes closest to your position on this issue? I support full marriage rights for gay and lesbian couples. I support civil unions or domestic partnerships, but not gay marriage. I do not support any form of legal recognition of the relationships of gay and lesbian couples.

(b) United Kingdom

Survey	Year	Question
BES	2001	Thinking of the Single European Currency, which of the following statements on this card would come closest to your own view?
BES	2016	Some people feel that Britain should do all it can to unite fully with the European Union. Other people feel that Britain should do all it can to protect its independence from the European Union. Where would you place yourself on this scale?
BES	2016	Some people think that the UK should allow *many more* immigrants to come to the UK to live and others think that the UK should allow *many fewer* immigrants. Where would you place yourself on this scale?
BES	2016	In politics people sometimes talk of left and right. Where would you place yourself on the following scale?

(c) Germany

Survey	Year	Question
GLES	2009	How would you describe your own views on the economy?
GLES	2009	[Split 1] How would you describe your views on the issue of nuclear energy? Should more nuclear power stations be built or should all nuclear power stations be closed down today?
GLES	2009	[Split 2] How would you describe your views on the issue of nuclear energy? Should more nuclear power stations be built or should all nuclear power stations be closed down today?
GLES	2009	To what extent do you agree with the statement: "The German Armed Forces should be pulled out of Afghanistan immediately"?
GLES	2013	And what do you think of the following statements? Immigrants should be obliged to assimilate into the German culture.
GLES	2013	And what do you think of the following statements? The government should take measures to reduce the discrepancies in income.
GLES	2013	And what do you think of the following statements? In times of the European debt crisis, Germany should provide financial support for the EU member states with financial and economic difficulties.

(d) Canada

Survey	Year	Question
CES	1988	And now a question about child care. Which of the following three statements comes closest to your own opinion? If parents want child care, they should pay for it THEMSELVES or the government should provide financial help to DAY CARE centers.
CES	1988	[Split 1] Now we would like to get your views on abortion. We know that this is a sensitive question. Of the following three positions, which is closest to your own opinion: abortion should NEVER be permitted or should be a matter of the woman's personal choice?
CES	1988	[Split 2] Now we would like to get your views on abortion. We know that this is a sensitive question. Of the following three positions, which is closest to your own opinion: abortion should NEVER be permitted or should be a matter of the woman's personal choice?
CES	1988	Now I would like to ask you about the Meech Lake Accord, reached by the federal and provincial governments. Do you support the accord or oppose it?
CES	1988	As we have already mentioned, the government has made a number of changes to the tax system. On the whole, do you support or oppose these changes?
CES	1992	Do you agree or disagree with the proposal to recognize the right of Canada's aboriginal peoples to govern themselves?
CES	1992	Quebec has been guaranteed one quarter of the seats in the House of Commons. Do you agree or disagree with this proposal?
CES	1992	Do you agree or disagree with the proposal to recognize Quebec as a distinct society?
CES	1992	If you had to choose, should each province HAVE AN EQUAL NUMBER of Senators or should BIGGER provinces have MORE Senators?
CES	1992	Does the agreement give the Senate TOO MUCH, TOO LITTLE, or about the RIGHT AMOUNT OF POWER?

Notes: We report all policy questions included in our analysis, based on the survey codebooks. Split 1 and Split 2 refer to subgroups of respondents who are asked the same question but were framed differently beforehand.

Table A.4: List of belief questions by country

(a) United States

Survey	Year	Question
ANES	1976	Where would you place the Democratic Party on this scale: How much the government should guarantee jobs?
ANES	1976	Where would you place the Republican Party on this scale: How much the government should guarantee jobs?
NAES	2004	To the best of your knowledge, who favors making the recent tax cuts permanent—George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, who favors eliminating tax breaks for overseas profits of American corporations and using the money to cut corporate income taxes—George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, which candidate favors increasing the $5.15 minimum wage employers must pay their workers—George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, who favors the federal government helping to pay for health insurance for all children and helping employers pay the cost of the workers' health insurance—George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, who favors changing the recently passed Medicare prescription drug law to allow re-importing drugs from Canada—George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, which candidate favors allowing the federal government to negotiate with drug companies for lower prescription drug prices for senior citizens—George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, who favors allowing workers to invest some of their Social Security contributions in the stock market—George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, who favors reinstating the military draft— George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, who favors laws making it more difficult for a woman to get an abortion— George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, which candidate wants to make additional stem cell lines from human embryos available for federally funded research on diseases like Parkinson's— George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, who urges Congress to extend the federal law banning assault weapons—George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, which candidate favors placing limits on how much people can collect when a jury finds that a doctor has committed medical malpractice—George W. Bush, John Kerry, both, or neither?
NAES	2004	To the best of your knowledge, who is a former prosecutor—George W. Bush, John Kerry, both, or neither?

(b) Austria

Survey	Year	Question
AUTNES	2013	Party best able to handle the issue you find the most important?
AUTNES	2013	Party with best proposals: financial and euro crisis?
AUTNES	2013	Party with best proposals: education?
AUTNES	2013	Party with best proposals: unemployment?
AUTNES	2013	Party with best proposals: immigration?
AUTNES	2013	Party with best proposals: fighting corruption?
AUTNES	2013	Party with most statements: financial and euro crisis?
AUTNES	2013	Party with most statements: education?
AUTNES	2013	Party with most statements: unemployment?
AUTNES	2013	Party with most statements: immigration?
AUTNES	2013	Party with most statements: fighting corruption?

(c) United Kingdom

Survey	Year	Question
BES	2010	Which party is best able to handle the issue you find the most important?
BES	2010	How well do you think the Labour government has handled Britain's education system?
BES	2010	How well do you think the Labour government has handled immigration?
BES	2010	How well do you think the Labour government has handled the National Health Service?
BES	2010	How well do you think the Labour government has handled the current financial crisis?
BES	2010	How well do you think the Labour government has handled the economy in general?
BES	2010	How well do you think the Labour government has handled the level of taxation?
BES	2015	Which party is best able to handle the issue you find the most important?
BES	2015	How well do you think Conservatives are able to handle the single most important issue facing the country?
BES	2015	How well do you think the Labour Party is able to handle the single most important issue facing the country?
BES	2015	How well do you think the Liberal Democrat party is able to handle the single most important issue facing the country?
BES	2015	How well do you think UKIP is able to handle the single most important issue facing the country?
BES	2015	How well do you think the Green Party is able to handle the single most important issue facing the country?

(d) Germany

Survey	Year	Question
GLES	2009	And which political party do you think is best able to solve the issue you find most important?
GLES	2009	In your view, using a scale from 1 to 11, what is the position of the CDU on this socioeconomic dimension?
GLES	2009	In your view, using a scale from 1 to 11, what is the position of the SPD on this socioeconomic dimension?
GLES	2009	In your view, using a scale from 1 to 11, what is the position of the FDP on this socioeconomic dimension?
GLES	2009	In your view, using a scale from 1 to 11, what is the position of the Green Party on this socioeconomic dimension?
GLES	2009	In your view, using a scale from 1 to 11, what is the position of the Die Linke on this socioeconomic dimension?
GLES	2009	In your view, what is the position of the CDU on the use of nuclear energy?
GLES	2009	In your view, what is the position of the SPD on the use of nuclear energy?
GLES	2009	In your view, what is the position of the FDP on the use of nuclear energy?
GLES	2009	In your view, what is the position of the Green Party on the use of nuclear energy?
GLES	2009	In your view, what is the position of Die Linke on the use of nuclear energy?
GLES	2013	And which political party do you think is best able to solve this problem?

(e) Canada

Survey	Year	Question
CES	2004	Do you happen to recall which party is promising to get rid of the gun registry?
CES	2004	Which party is promising to do away with the Federal Sales Tax on family essentials?
CES	2004	Which party is promising to increase military spending by 2 billion dollars each year?
CES	2004	Which party is promising to spend 250 million for fighting AIDS in poor countries?
CES	2004	Do you happen to recall which party is promising to spend 4 billion dollars to reduce waiting times for surgeries?
CES	2004	Which party is promising an inheritance tax on estates over 1 million dollars?

(f) Switzerland

Survey	Year	Question
SELECTS	2011	In your opinion, which party is the best qualified to resolve the issue you find the most important?
SELECTS	2015	In your opinion, which political party is the most competent to solve the issue you find the most important?
SELECTS	2015	From your point of view, which party spends the most time in the following areas: European policy?
SELECTS	2015	From your point of view, which party spends the most time in the following areas: immigration policy?
SELECTS	2015	From your point of view, which party spends the most time in the following areas: social policy?
SELECTS	2015	From your point of view, which party spends the most time in the following areas: environmental policy?
SELECTS	2015	From your point of view, which party spends the most time in the following areas: economic policy?
SELECTS	2015	And which party is the most competent in the following areas: European policy?
SELECTS	2015	And which party is the most competent in the following areas: migration policy?
SELECTS	2015	And which party is the most competent in the following areas: social policy?
SELECTS	2015	And which party is the most competent in the following areas: environmental policy?
SELECTS	2015	And which party is the most competent in the following areas: economic policy?

Notes: We report all belief questions included in our analysis, based on the survey codebooks.

Table A.5: List of parties by country

(a) United States 1952-1996

Election Date	Election Type	Candidate	Incumbent	Small	New
4-Nov-52	Governor	Democratic Party	N/A	No	N/A
4-Nov-52	Governor	Republican Party	N/A	No	N/A
4-Nov-52	Lower House	Democratic Party	Yes	No	No
4-Nov-52	Lower House	Republican Party	No	No	No
4-Nov-52	President	Adlai Stevenson	Yes	No	No
4-Nov-52	President	Dwight D. Eisenhower	No	No	No
4-Nov-52	Upper House	Democratic Party	No	No	No
4-Nov-52	Upper House	Republican Party	No	No	No
6-Nov-56	President	Adlai Stevenson	No	No	No
6-Nov-56	President	Dwight D. Eisenhower	Yes	No	No
8-Nov-60	President	John F. Kennedy	No	No	No
8-Nov-60	President	Richard Nixon	Yes	No	No
3-Nov-64	President	Lyndon B. Johnson	Yes	No	No
3-Nov-64	President	Barry Goldwater	No	Yes	No
5-Nov-68	President	Hubert Humphrey	Yes	No	No
5-Nov-68	President	Richard Nixon	No	No	No
7-Nov-72	President	George McGovern	No	No	No
7-Nov-72	President	Richard Nixon	Yes	No	No
2-Nov-76	President	Jimmy Carter	No	Yes	No
2-Nov-76	President	Gerald Ford	Yes	No	No
2-Nov-76	President	Lester Maddox	No	Yes	No
4-Nov-80	President	Jimmy Carter	Yes	No	No
4-Nov-80	President	Ronald Reagan	No	No	No
4-Nov-80	President	John B. Anderson	No	Yes	No
6-Nov-84	President	Walter Mondale	No	No	No
6-Nov-84	President	Ronald Reagan	Yes	No	No
8-Nov-88	President	Michael Dukakis	No	No	No
8-Nov-88	President	George Bush	Yes	No	No
3-Nov-92	President	George Bush	Yes	No	No
3-Nov-92	President	Bill Clinton	No	No	No
3-Nov-92	President	Ross Perot	No	Yes	No
5-Nov-96	Lower House	Democratic Party	No	No	No
5-Nov-96	Lower House	Republican Party	Yes	No	No
5-Nov-96	President	Bill Clinton	Yes	No	No
5-Nov-96	President	Bob Dole	No	No	No
5-Nov-96	President	Ross Perot	No	Yes	No

(b) United States 2000-2016

Election Date	Election Type	Candidate	Incumbent	Small	New
7-Nov-00	President	Al Gore	Yes	No	No
7-Nov-00	President	George W. Bush	No	No	No
7-Nov-00	President	Pat Buchanan	No	Yes	No
7-Nov-00	President	Ralph Nader	No	Yes	No
7-Nov-00	President	Pat Buchanan	No	Yes	No
7-Nov-00	President	George W. Bush	No	No	No
7-Nov-00	President	Al Gore	Yes	No	No
7-Nov-00	President	Ralph Nader	No	Yes	No
2-Nov-04	President	John Kerry	No	No	No
2-Nov-04	President	George W. Bush	Yes	No	No
2-Nov-04	President	Ralph Nader	No	Yes	No
2-Nov-04	President	George W. Bush	Yes	No	No
2-Nov-04	President	John Kerry	No	No	No
2-Nov-04	President	Ralph Nader	No	Yes	No
4-Nov-08	President	Barack Obama	No	No	No
4-Nov-08	President	John McCain	Yes	No	No
4-Nov-08	President	Barack Obama and Joe Biden	No	No	No
4-Nov-08	President	Bob Barr and Wayne Allyn Root	No	Yes	No
4-Nov-08	President	John McCain and Sarah Palin	Yes	No	No
4-Nov-08	President	Ralph Nader and Matt Gonzalez	No	Yes	No
6-Nov-12	Governor	Democratic Party	No	No	N/A
6-Nov-12	Governor	Republican Party	No	No	N/A
6-Nov-12	Lower House	Democratic Party	No	No	No
6-Nov-12	Lower House	Republican Party	Yes	No	No
6-Nov-12	Lower House	Independent(s)	No	Yes	No
6-Nov-12	President	Barack Obama	Yes	No	No
6-Nov-12	President	Mitt Romney	No	No	No
6-Nov-12	Upper House	Democratic Party	Yes	No	No
6-Nov-12	Upper House	Republican Party	No	No	No
8-Nov-16	Governor	Democratic Party	No	No	N/A
8-Nov-16	Governor	Republican Party	No	No	N/A
8-Nov-16	Lower House	Democratic Party	No	No	No
8-Nov-16	Lower House	Republican Party	Yes	No	No
8-Nov-16	President	Hillary Clinton	Yes	No	No
8-Nov-16	President	Donald Trump	No	No	No
8-Nov-16	President	Gary Johnson	No	Yes	No
8-Nov-16	President	Jill Stein	No	Yes	No
8-Nov-16	Upper House	Democratic Party	No	No	No
8-Nov-16	Upper House	Republican Party	Yes	No	No

(c) Austria

Election Date	Election Type	Candidate	Incumbent	Small	New
29-Sep-13	Lower House	Alliance for the Future of Austria	No	Yes	No
29-Sep-13	Lower House	Freedom Party in Carinthia	No	Yes	No
29-Sep-13	Lower House	Freedom Party	No	No	No
29-Sep-13	Lower House	Communist Party	No	Yes	No
29-Sep-13	Lower House	The New Austria and Liberal Forum	No	Yes	Yes
29-Sep-13	Lower House	Austrian People's Party	No	No	No
29-Sep-13	Lower House	Pirate Party	No	Yes	Yes
29-Sep-13	Lower House	Social Democratic Party	Yes	No	No
29-Sep-13	Lower House	Team Stronach	No	Yes	Yes
29-Sep-13	Lower House	The Greens - The Green Alternative	No	No	No

(d) United Kingdom

Election Date	Election Type	Candidate	Incumbent	Small	New
7-Jun-01	Lower House	Conservative Party	No	No	No
7-Jun-01	Lower House	Green Party	No	Yes	No
7-Jun-01	Lower House	Labour Party	Yes	No	No
7-Jun-01	Lower House	Liberal Democrat	No	No	No
7-Jun-01	Lower House	Plaid Cymru	No	Yes	No
7-Jun-01	Lower House	Scottish National Party	No	Yes	No
6-May-10	Lower House	British National Party	No	Yes	No
6-May-10	Lower House	Conservative Party	No	No	No
6-May-10	Lower House	Green Party	No	Yes	No
6-May-10	Lower House	Labour Party	Yes	No	No
6-May-10	Lower House	Liberal Democrat	No	No	No
6-May-10	Lower House	Plaid Cymru	No	Yes	No
6-May-10	Lower House	Scottish National Party	No	Yes	No
6-May-10	Lower House	United Kingdom Independence Party	No	Yes	No
7-May-15	Lower House	British National Party	No	Yes	No
7-May-15	Lower House	Conservative Party	Yes	No	No
7-May-15	Lower House	Green Party	No	Yes	No
7-May-15	Lower House	Labour Party	No	No	No
7-May-15	Lower House	Liberal Democrat	No	Yes	No
7-May-15	Lower House	Plaid Cymru	No	Yes	No
7-May-15	Lower House	Scottish National Party	No	Yes	No
7-May-15	Lower House	United Kingdom Independence Party	No	No	No
23-Jun-16	Referendum	Leave the EU	N/A	No	N/A
23-Jun-16	Referendum	Stay/Remain in the EU	N/A	No	N/A

(e) Canada

Election Date	Election Type	Candidate	Incumbent	Small	New
21-Nov-88	Lower House	Progressive Conservative Party	Yes	No	No
21-Nov-88	Lower House	Liberal Party	No	No	No
21-Nov-88	Lower House	New Democratic Party	No	No	No
21-Nov-88	Lower House	Other	No	Yes	No
26-Oct-92	Referendum	No	N/A	No	N/A
26-Oct-92	Referendum	Yes	N/A	No	N/A
25-Oct-93	Lower House	Bloc Québécois	No	No	Yes
25-Oct-93	Lower House	Progressive Conservative Party	Yes	No	No
25-Oct-93	Lower House	Liberal Party	No	No	No
25-Oct-93	Lower House	New Democratic Party	No	Yes	No
25-Oct-93	Lower House	Reform Party	No	No	No
2-Jun-97	Lower House	Bloc Québécois	No	No	No
2-Jun-97	Lower House	Liberal Party	Yes	No	No
2-Jun-97	Lower House	New Democratic Party	No	No	No
2-Jun-97	Lower House	Progressive Conservative Party	No	No	No
2-Jun-97	Lower House	Reform Party	No	No	No
27-Nov-00	Lower House	Alliance Party	No	No	Yes
27-Nov-00	Lower House	Bloc Québécois	No	Yes	No
27-Nov-00	Lower House	Progressive Conservative Party	No	Yes	No
27-Nov-00	Lower House	Liberal Party	Yes	No	No
27-Nov-00	Lower House	New Democratic Party	No	Yes	No
28-Jun-04	Lower House	Bloc Québécois	No	No	No
28-Jun-04	Lower House	Conservative Party	No	No	No
28-Jun-04	Lower House	Green Party	No	Yes	No
28-Jun-04	Lower House	Liberal Party	Yes	No	No
28-Jun-04	Lower House	Marijuana Party	No	Yes	No
28-Jun-04	Lower House	New Democratic Party	No	No	No
23-Jan-06	Lower House	Alliance Party	No	Yes	No
23-Jan-06	Lower House	Bloc Québécois	No	No	No
23-Jan-06	Lower House	Conservative Party	No	No	No
23-Jan-06	Lower House	Liberal Party	Yes	No	No
23-Jan-06	Lower House	New Democratic Party	No	No	No
14-Oct-08	Lower House	Bloc Québécois	No	No	No
14-Oct-08	Lower House	Conservative Party	Yes	No	No
14-Oct-08	Lower House	Green Party	No	Yes	No
14-Oct-08	Lower House	Liberal Party	No	No	No
14-Oct-08	Lower House	New Democratic Party	No	No	No
2-May-11	Lower House	Bloc Québécois	No	No	No
2-May-11	Lower House	Conservative Party	Yes	No	No
2-May-11	Lower House	Green Party	No	Yes	No
2-May-11	Lower House	Liberal Party	No	No	No
2-May-11	Lower House	New Democratic Party	No	No	No
19-Oct-15	Lower House	Bloc Québécois	No	Yes	No
19-Oct-15	Lower House	Conservative Party	Yes	No	No
19-Oct-15	Lower House	Green Party	No	Yes	No
19-Oct-15	Lower House	Liberal Party	No	No	No
19-Oct-15	Lower House	New Democratic Party	No	No	No

(f) Netherlands

Election Date	Election Type	Candidate	Incumbent	Small	New
6-May-98	Lower House	General Elderly Alliance	No	Yes	Yes
6-May-98	Lower House	Christian Democratic Appeal	No	No	No
6-May-98	Lower House	Centre Democrats	No	Yes	No
6-May-98	Lower House	Democrats 66	No	Yes	No
6-May-98	Lower House	The Greens	No	Yes	No
6-May-98	Lower House	Reformed Political Union	No	Yes	No
6-May-98	Lower House	Green Left	No	Yes	No
6-May-98	Lower House	Mobile Netherlands	No	Yes	No
6-May-98	Lower House	Pacifist Socialist Party	No	Yes	No
6-May-98	Lower House	Labour Party	Yes	No	No
6-May-98	Lower House	Reforming Political Federation	No	Yes	No
6-May-98	Lower House	Political Reformed Party	No	Yes	No
6-May-98	Lower House	Socialist Party	No	Yes	No
6-May-98	Lower House	Seniors 2000	No	Yes	No
6-May-98	Lower House	Union 55+	No	Yes	No
6-May-98	Lower House	Progressive Integration Party	No	Yes	No
6-May-98	Lower House	People's Party for Freedom and Democracy	No	No	No
15-May-02	Lower House	Christian Democratic Appeal	No	No	No
15-May-02	Lower House	Christian Union	No	Yes	No
15-May-02	Lower House	Democrats 66	No	Yes	No
15-May-02	Lower House	Green Left	No	Yes	No
15-May-02	Lower House	Livable Netherlands	No	Yes	No
15-May-02	Lower House	Pim Fortuyn List	No	No	No
15-May-02	Lower House	Labour Party	Yes	No	No
15-May-02	Lower House	Political Reformed Party	No	Yes	No
15-May-02	Lower House	Socialist Party	No	Yes	No
15-May-02	Lower House	People's Party for Freedom and Democracy	No	No	No
15-May-02	Lower House	United Seniors Party	No	Yes	No
22-Nov-06	Lower House	Christian Democratic Appeal	Yes	No	No
22-Nov-06	Lower House	Christian Union	No	Yes	No
22-Nov-06	Lower House	Democrats 66	No	Yes	No
22-Nov-06	Lower House	One Netherlands	No	Yes	Yes
22-Nov-06	Lower House	Pim Fortuyn List	No	Yes	No
22-Nov-06	Lower House	Green Left	No	Yes	No
22-Nov-06	Lower House	Party for the Animals	No	Yes	No
22-Nov-06	Lower House	Party for Freedom	No	Yes	No
22-Nov-06	Lower House	Party for the Netherlands	No	Yes	Yes
22-Nov-06	Lower House	Labour Party	No	No	No
22-Nov-06	Lower House	Politically Reformed Party	No	Yes	No
22-Nov-06	Lower House	Socialist Party	No	Yes	No
22-Nov-06	Lower House	People's Party for Freedom and Democracy	No	No	No

(g) Germany

Election Date	Election Type	Candidate	Incumbent	Small	New
27-Sep-09	Lower House	Christian Democratic Union/Christian Social Union in Bavaria	Yes	No	No
27-Sep-09	Lower House	The Left	No	No	Yes
27-Sep-09	Lower House	Free Democratic Party	No	Yes	No
27-Sep-09	Lower House	Alliance 90s/The Greens	No	No	No
27-Sep-09	Lower House	National Democratic Party of Germany	No	Yes	No
27-Sep-09	Lower House	Pirate Party Germany	No	Yes	Yes
27-Sep-09	Lower House	The Republicans	No	Yes	No
27-Sep-09	Lower House	Social Demoratic Party of Germany	No	No	No
22-Sep-13	Lower House	Alternative for Germany	No	Yes	Yes
22-Sep-13	Lower House	Christian Democratic Union	Yes	No	No
22-Sep-13	Lower House	The Left	No	Yes	No
22-Sep-13	Lower House	Free Democratic Party	No	Yes	No
22-Sep-13	Lower House	Alliance 90s/The Greens	No	No	No
22-Sep-13	Lower House	National Democratic Party of Germany	No	Yes	No
22-Sep-13	Lower House	Pirate Party Germany	No	Yes	No
22-Sep-13	Lower House	Social Demoratic Party of Germany	No	No	No

(h) Switzerland

Election Date	Election Type	Candidate	Incumbent	Small	New
23-Oct-11	Lower House	Conservative Democratic Party	No	Yes	Yes
23-Oct-11	Lower House	Christian Democratic People's Party	No	No	No
23-Oct-11	Lower House	FDP.The Liberals	No	No	No
23-Oct-11	Lower House	Green Liberal Party	No	Yes	No
23-Oct-11	Lower House	Green Party	No	Yes	No
23-Oct-11	Lower House	Social Democratic Party	No	No	No
23-Oct-11	Lower House	Swiss People's Party	Yes	No	No
18-Oct-15	Lower House	Conservative Democratic Party	No	Yes	No
18-Oct-15	Lower House	Christian Democratic People's Party	No	No	No
18-Oct-15	Lower House	FDP.The Liberals	No	No	No
18-Oct-15	Lower House	Green Liberal Party	No	Yes	No
18-Oct-15	Lower House	Green Party	No	Yes	No
18-Oct-15	Lower House	Social Democratic Party	No	No	No
18-Oct-15	Lower House	Swiss People's Party	Yes	No	No

(i) Italy

Election Date	Election Type	Candidate	Incumbent	Small	New
24-Feb-13	Lower House	Democratic Centre	No	Yes	Yes
24-Feb-13	Lower House	Stop the Decline	No	Yes	Yes
24-Feb-13	Lower House	Future and Freedom	No	Yes	Yes
24-Feb-13	Lower House	Brothers of Italy	No	Yes	No
24-Feb-13	Lower House	The Right	No	Yes	No
24-Feb-13	Lower House	Northern League	No	Yes	No
24-Feb-13	Lower House	Five Star Movement	No	No	No
24-Feb-13	Lower House	Democratic Party	No	No	No
24-Feb-13	Lower House	The People of Freedom	Yes	No	No
24-Feb-13	Lower House	Civil Revolution	No	Yes	No
24-Feb-13	Lower House	Civic Choice	No	No	No
24-Feb-13	Lower House	Left Ecology Freedom	No	Yes	No
24-Feb-13	Lower House	Union of the Centre	No	Yes	No

(j) New Zealand

Election Date	Election Type	Candidate	Incumbent	Small	New
12-Oct-96	Lower House	ACT	No	Yes	Yes
12-Oct-96	Lower House	Alliance	No	No	No
12-Oct-96	Lower House	Christian Coalition	No	Yes	Yes
12-Oct-96	Lower House	Labour Party	No	No	No
12-Oct-96	Lower House	National Party	Yes	No	No
12-Oct-96	Lower House	New Zealand First	No	No	No
12-Oct-96	Lower House	United	No	Yes	No
27-Nov-99	Lower House	ACT	No	Yes	No
27-Nov-99	Lower House	Alliance	No	Yes	No
27-Nov-99	Lower House	Green Party	No	Yes	No
27-Nov-99	Lower House	Labour Party	No	No	No
27-Nov-99	Lower House	National Party	Yes	No	No
27-Nov-99	Lower House	New Zealand First	No	Yes	No
27-Jul-02	Lower House	National Party	No	No	No
27-Jul-02	Lower House	ACT	No	Yes	No
27-Jul-02	Lower House	Alliance	No	Yes	No
27-Jul-02	Lower House	Christian Heritage	No	Yes	Yes
27-Jul-02	Lower House	Green Party	No	Yes	No
27-Jul-02	Lower House	Independent(s)	No	Yes	No
27-Jul-02	Lower House	New Zealand First	No	Yes	No
27-Jul-02	Lower House	United Future	No	Yes	No
27-Jul-02	Lower House	Labour Party	Yes	No	No

Notes: We report the list of candidates or parties included as possible answers to questions on pre-electoral vote intention and post-electoral vote declaration in each survey. Options such as "Other candidate" or "Blank/Invalid vote" are not reported in this list but included in some of our analyses.

Table A.6: List of TV debates by country

(a) United States

Survey	Debate Date	Year	Election Type	# days before election
ANES 1960	26-Sep	1960	President	43
ANES 1960	7-Oct	1960	President	32
ANES 1960	13-Oct	1960	President	26
ANES 1960	21-Oct	1960	President	18
ANES 1976	23-Sep	1976	President	40
ANES 1976	6-Oct	1976	President	27
ANES 1976	15-Oct	1976	President	18
ANES 1976	22-Oct	1976	President	11
ANES 1980	21-Sep	1980	President	44
ANES 1980	28-Oct	1980	President	7
ANES 1984	7-Oct	1984	President	30
ANES 1984	11-Oct	1984	President	26
ANES 1984	21-Oct	1984	President	16
ANES 1988	25-Sep	1988	President	44
ANES 1988	5-Oct	1988	President	34
ANES 1988	13-Oct	1988	President	26
ANES 1992	19-Oct	1992	President	15
ANES 1996	16-Oct	1996	President	20
ANES 2000	11-Oct	2000	President	27
NAES 2000	″	″	″	″
ANES 2000	17-Oct	2000	President	21
NAES 2000	″	″	″	″
ANES 2004	30-Sep	2004	President	33
NAES 2004	″	″	″	″
ANES 2004	13-Oct	2004	President	20
NAES 2004	″	″	″	″
ANES 2008	26-Sep	2008	President	39
NAES 2008	″	″	″	″
ANES 2008	2-Oct	2008	President	33
NAES 2008	″	″	″	″
ANES 2008	7-Oct	2008	President	28
NAES 2008	″	″	″	″
ANES 2008	15-Oct	2008	President	20
NAES 2008	″	″	″	″
ANES 2012	3-Oct	2012	President	34
ANES 2012	11-Oct	2012	President	26
ANES 2012	16-Oct	2012	President	21
ANES 2012	22-Oct	2012	President	15
ANES 2016	26-Sep	2016	President	43
ANES 2016	4-Oct	2016	President	35
ANES 2016	9-Oct	2016	President	30
ANES 2016	19-Oct	2016	President	20

(b) Austria

Survey	Debate Date	Year	Election Type	# days before election
AUTNES 2013	29-Aug	2013	Lower House	31

(c) United Kingdom

Survey	Debate Date	Year	Election Type	# days before election
BES 2010	15-Apr	2010	Lower House	21
BES 2010	22-Apr	2010	Lower House	14
BES 2010	29-Apr	2010	Lower House	7
BES 2015	2-Apr	2015	Lower House	35
BES 2015	16-Apr	2015	Lower House	21
BES 2015	30-Apr	2015	Lower House	7

(d) Canada

Survey	Debate Date	Year	Election Type	# days before election
CES 2015	17-Sep	2015	Lower House	32
CES 2015	24-Sep	2015	Lower House	25
CES 2015	28-Sep	2015	Lower House	21
CES 2015	2-Oct	2015	Lower House	17

(e) Netherlands

Survey	Debate Date	Year	Election Type	# days before election
DPES 2006	3-Nov	2006	Lower House	19-Jan-00
DPES 2006	15-Nov	2006	Lower House	7-Jan-00
DPES 2006	21-Nov	2006	Lower House	1-Jan-00

(f) Germany

Survey	Debate Date	Year	Election Type	# days before election
GLES 2009	13-Sep	2009	Lower House	14
GLES 2013	1-Sep	2013	Lower House	21

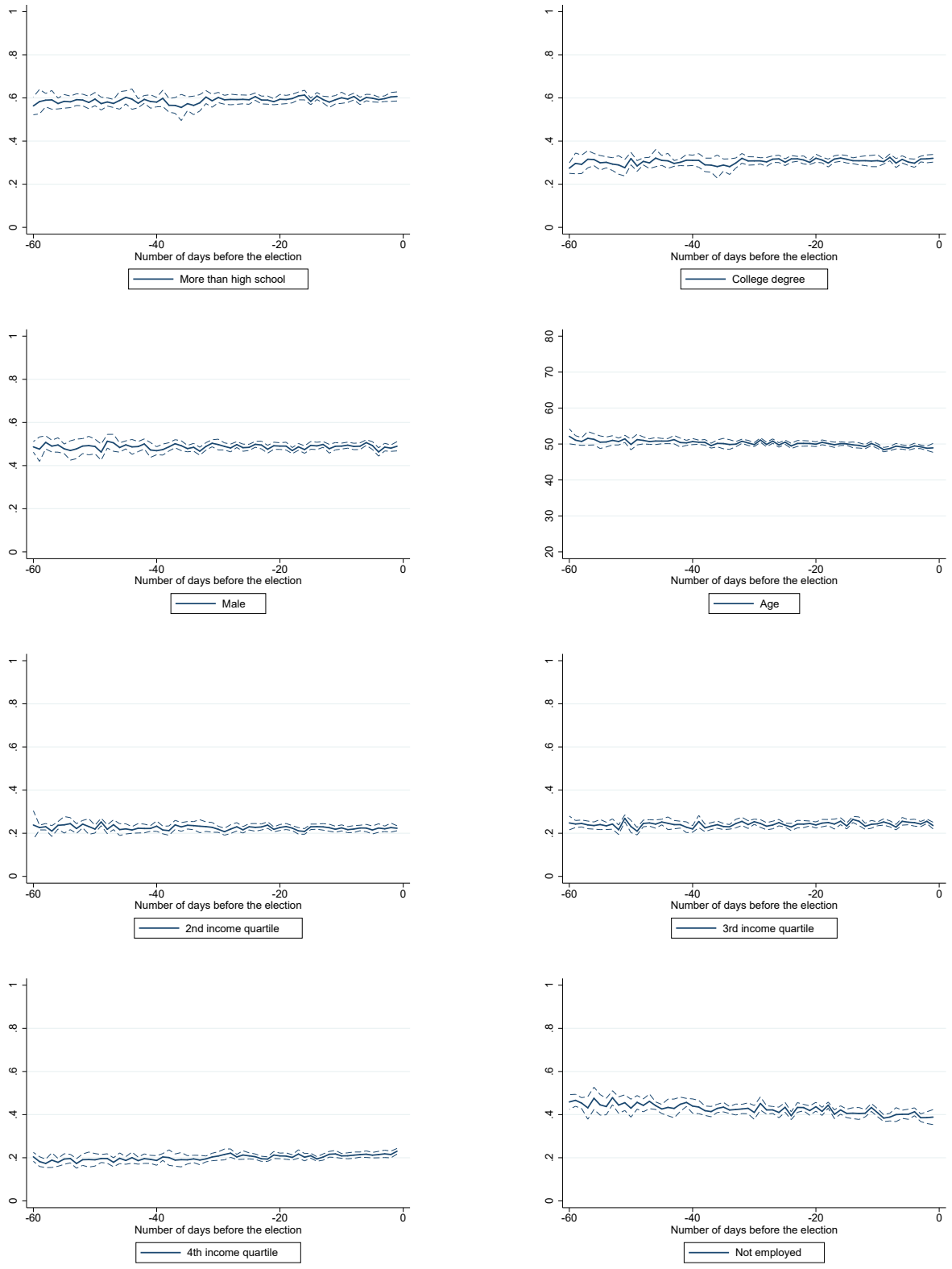
(g) New Zealand

Survey	Debate Date	Year	Election Type	# days before election
NZES 1996	26-Sep	1996	Lower House	16
NZES 1996	7-Oct	1996	Lower House	5
NZES 1999	27-Oct	1999	Lower House	31
NZES 1999	1-Nov	1999	Lower House	26
NZES 2002	15-Jul	2002	Lower House	12
NZES 2002	22-Jul	2002	Lower House	5

Notes: For each debate included in the analysis, we indicate the date when the debate was held and the number of days separating the debate from the election. Other notes as in Table A.1.

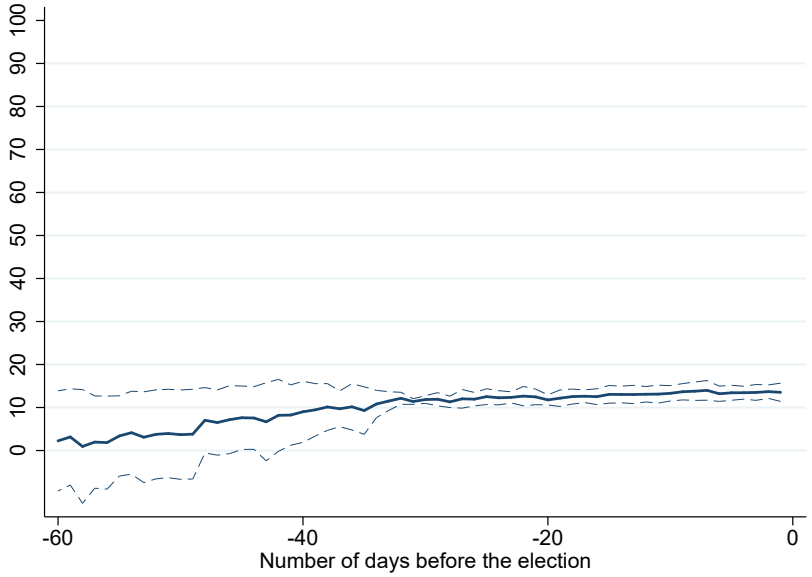
B The Formation of Vote Choices: Additional Figures and Tables

Figure B.1: Voter characteristics over time



Notes: We show the point estimates and the 95% confidence interval from a regression of each sociodemographic characteristic on 60 fixed effects indicating the number of days relative to the election. We control for election fixed effects as well as fixed effects for the day of the week in which the pre-electoral survey took place. Standard errors are adjusted for clustering at the survey level. The sample includes all respondents successfully interviewed before the election who stated that they intended to vote.

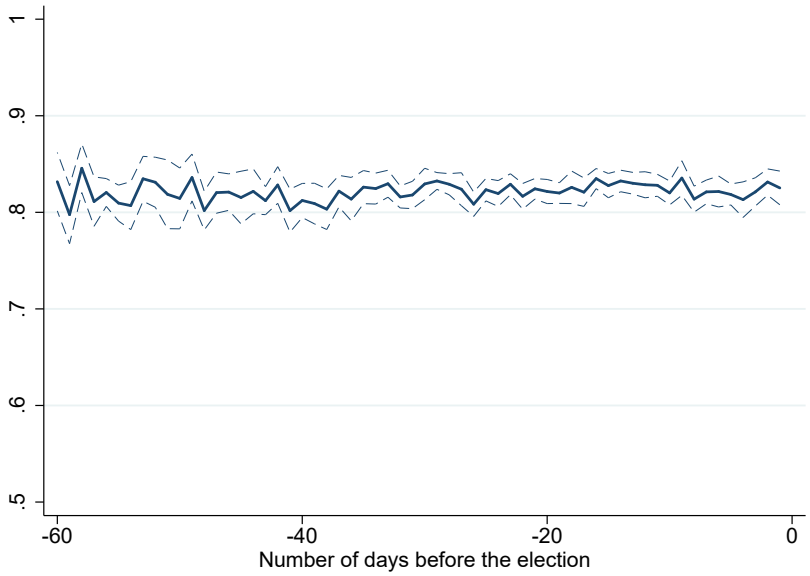
Figure B.2: Number of days separating the post-electoral survey from the election



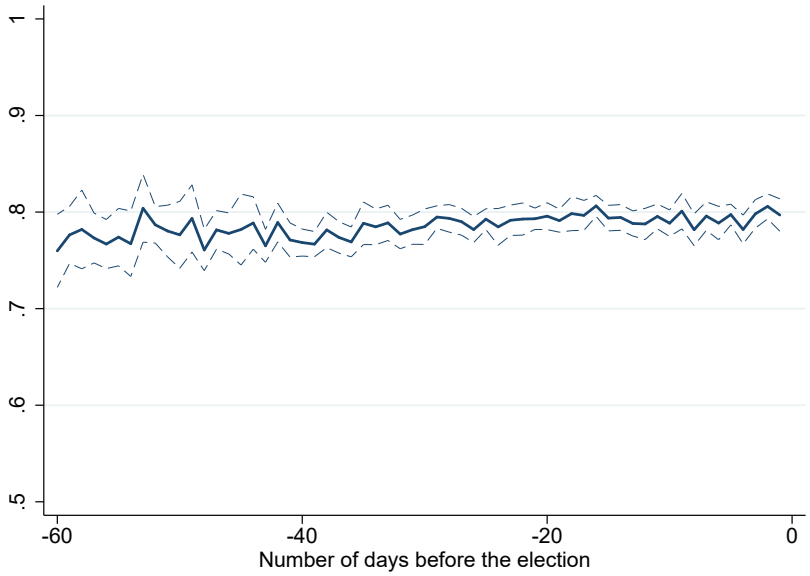
Notes: We show the point estimates and the 95% confidence interval from a regression of the number of days separating the post-electoral survey from the election on 60 fixed effects indicating the number of days separating the pre-electoral survey from the election. The sample includes all respondents successfully interviewed before and after the election who stated that they intended to vote, in the first survey, and who reported that they actually voted and gave a vote choice declaration, in the second. Other notes as in Figure B.1.

Figure B.3: Sample selection tests

(a) Intending to turn out

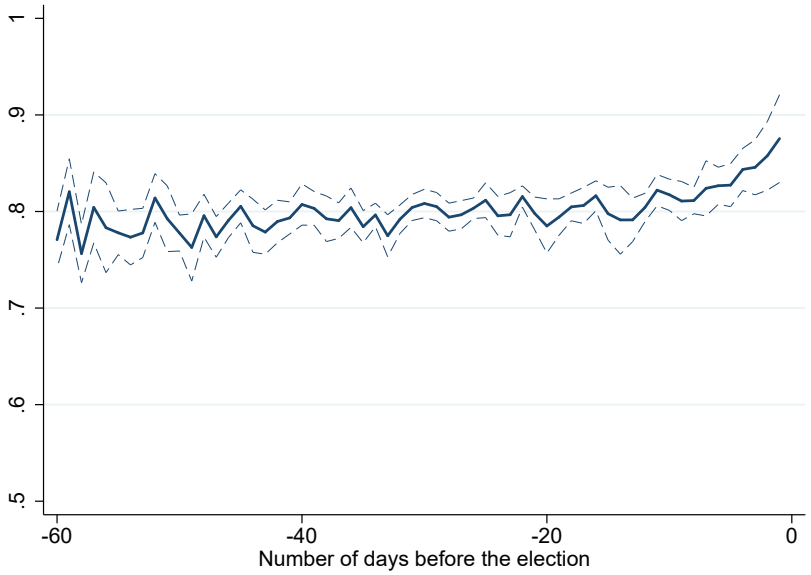


(b) Intending to turn out, declaring having turned out, and giving a valid vote declaration



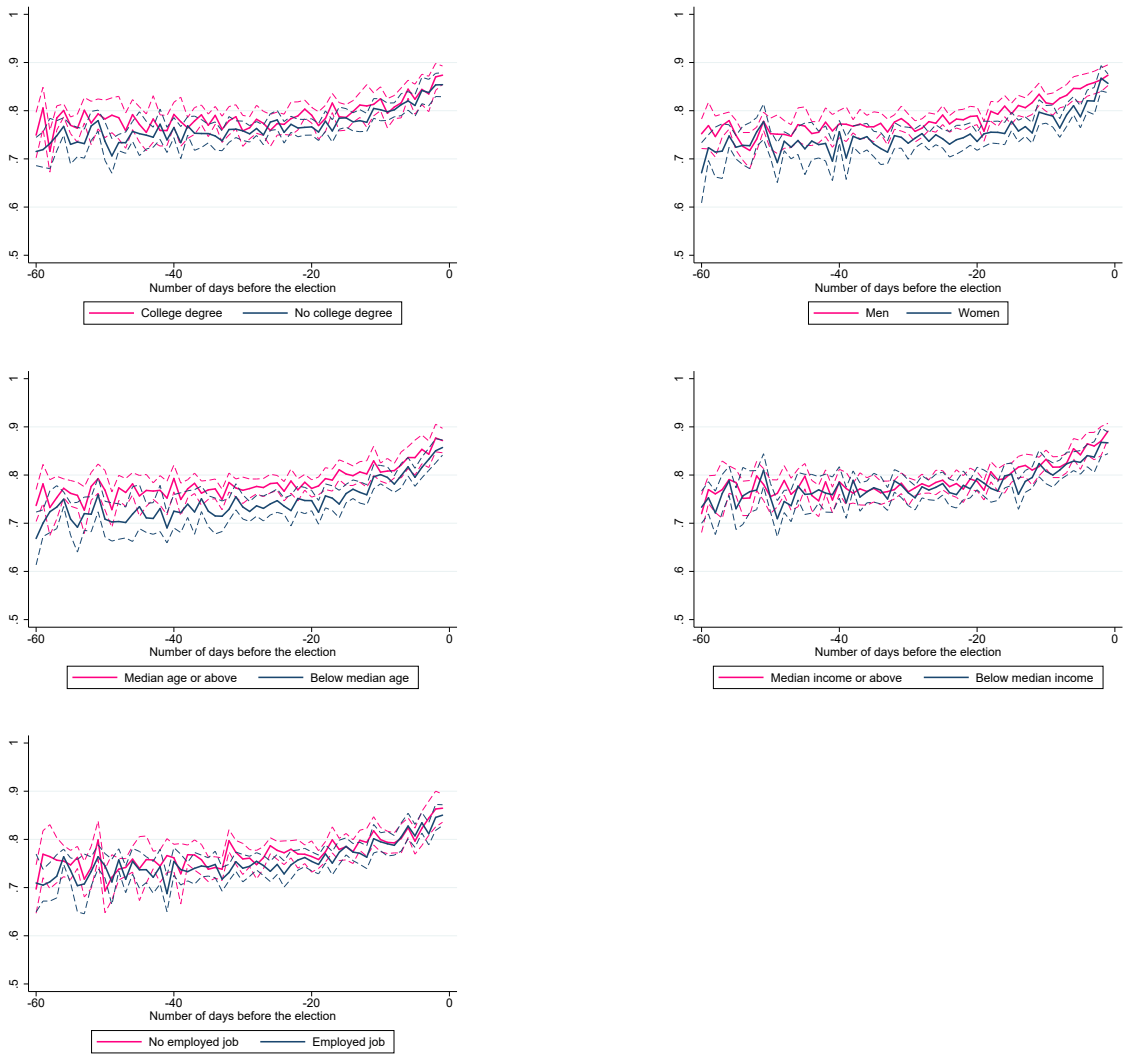
Notes: Figure B.3a shows the point estimates and 95% confidence interval from a regression of a dummy variable equal to 1 if the respondent stated that they intended to vote on 60 fixed effects indicating the number of days relative to the election. In Figure B.3b, the outcome is a dummy equal to 1 if the respondent stated that they intended to vote, in the first survey, and reported that they actually voted and gave a vote choice declaration, in the second. Other notes as in Figure B.1.

Figure B.4: Certainty of vote intention



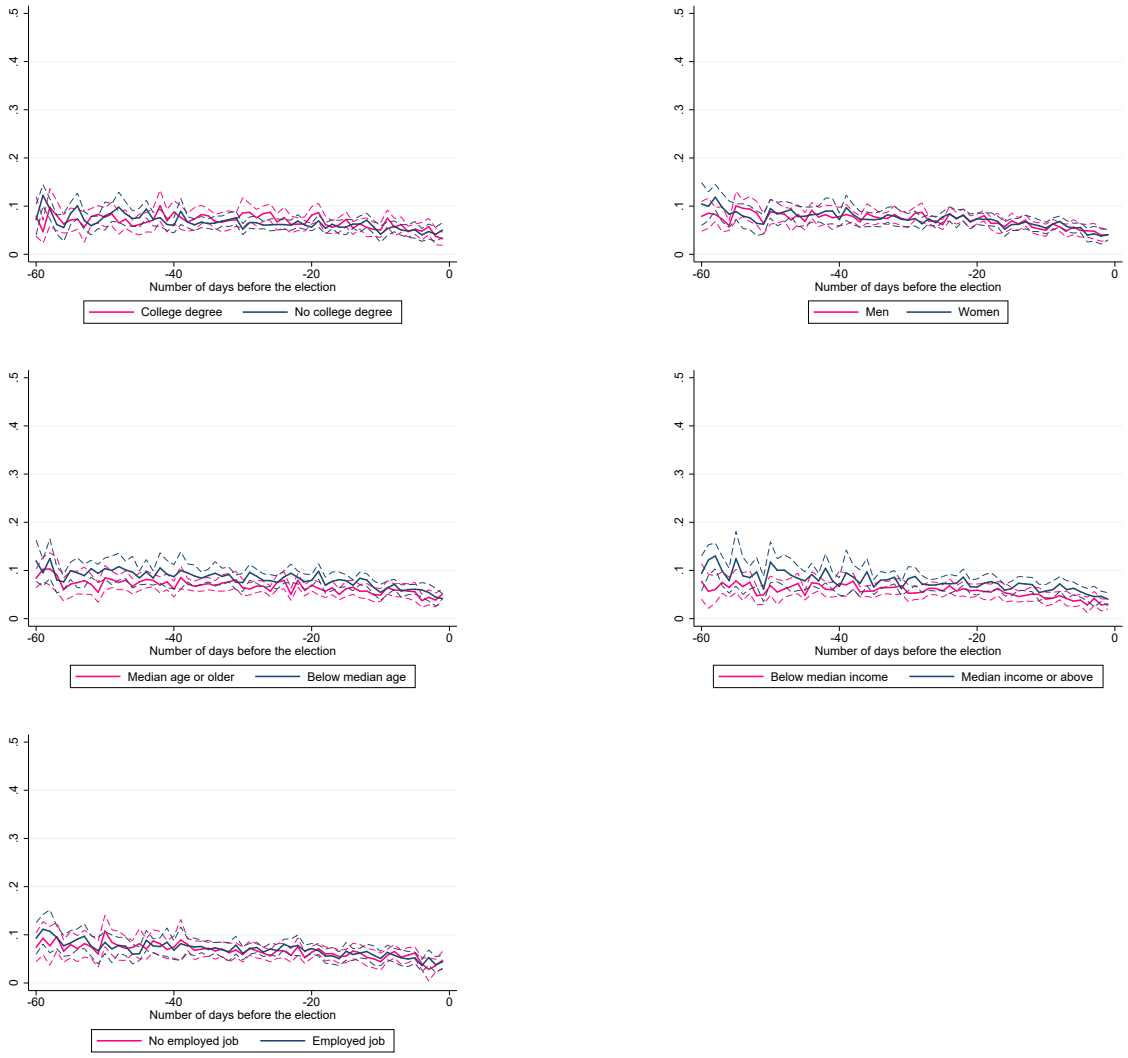
Notes: We show the point estimates and 95% confidence interval from a regression of the certainty of the stated vote intention (conditional on stating a vote intention) on 60 fixed effects indicating the number of days relative to the election. The sample includes all respondents who declared they intended to vote and provided a vote intention before the election. Other notes as in Figure B.1.

Figure B.5: Vote choice consistency across voter types



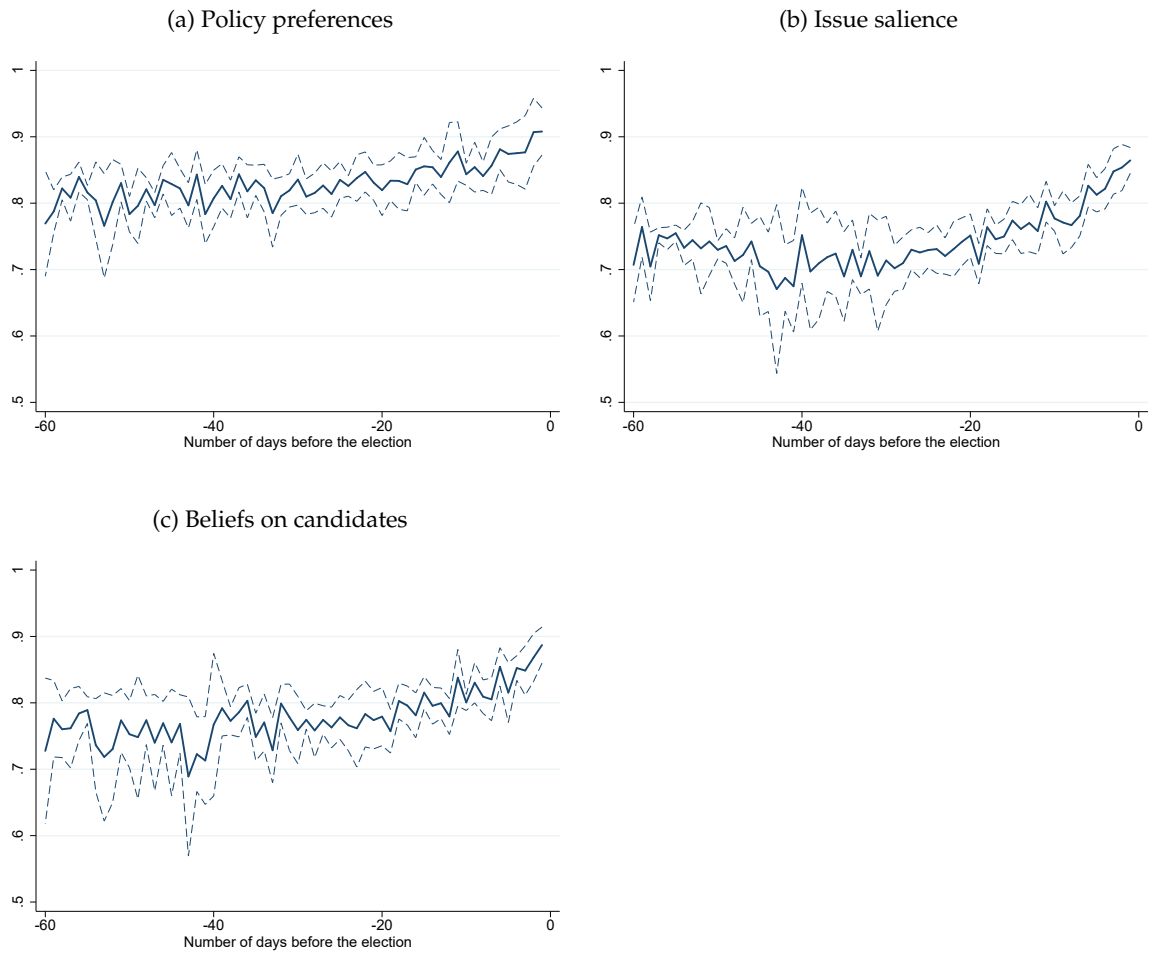
Notes: We show the point estimates and the 95% confidence interval from a regression of vote choice consistency on 60 fixed effects indicating the number of days relative to the election as well as their interaction with a dummy for being a type-a voter (college degree holder, median age or above, male, median income or above, not employed) as opposed to a type-b voter (no college degree, below median age, female, below median income, employed). Other notes as in Figure 1.

Figure B.6: Distance to final vote shares across voter types



Notes: We show the point estimates and the 95% confidence interval from a regression of the distance between predicted and final vote shares on 60 fixed effects indicating the number of days relative to the election as well as their interaction with a dummy for being a type-a voter (college degree holder, median age or above, male, median income or above, not employed) as opposed to a type-b voter (no college degree, below median age, female, below median income, employed). The vote shares are constructed separately for type-a and type-b voters. Other notes as in Figure 2.

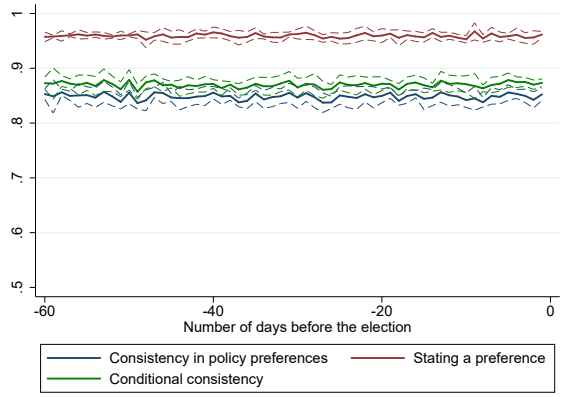
Figure B.7: Vote choice consistency in surveys measuring policy preferences, issue salience, and beliefs on candidates



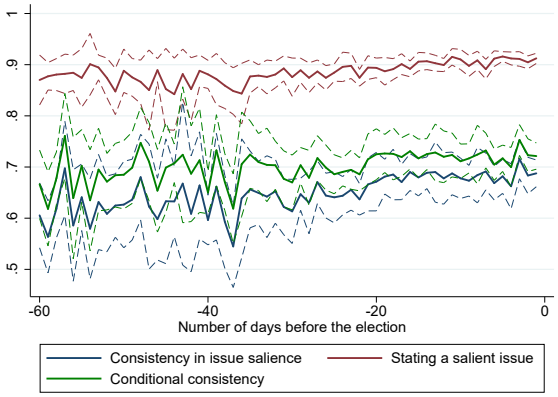
Notes: The sample is restricted to the eight surveys with available pre- and post-electoral questions on policy preferences (Figure B.7a), the 11 surveys with available pre- and post-electoral questions on issue salience (Figure B.7b) and the 10 surveys with available pre- and post-electoral questions on beliefs on candidates (Figure B.7c). Other notes as in Figure 1.

Figure B.8: Conditional and unconditional consistency in policy preferences, issue salience, and beliefs on candidates

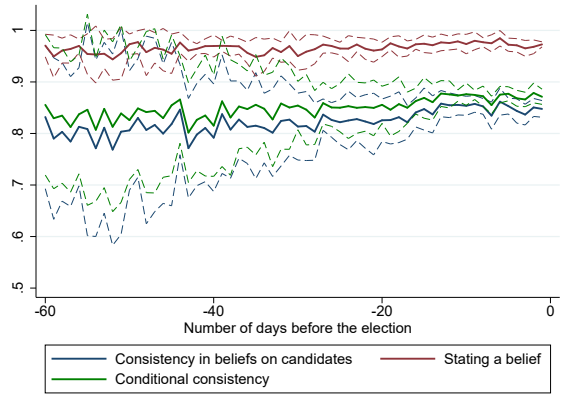
(a) Policy preferences



(b) Issue salience



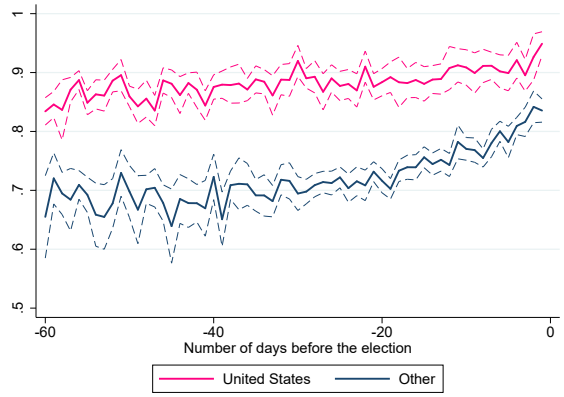
(c) Beliefs on candidates



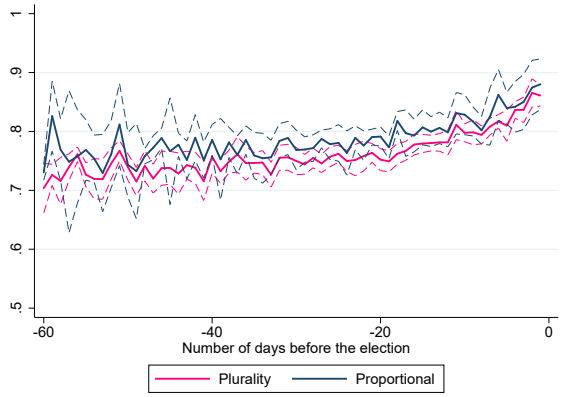
Notes: The sample includes (respectively) all respondents successfully interviewed before and after the election who stated a policy preference (Figure B.8a), a salient issue (Figure B.8b), or a belief on candidates (Figure B.8c) in the second survey; all respondents successfully interviewed before the election; and all respondents successfully interviewed before and after the election who stated a policy preference, a salient issue, or a belief on candidates in both the first and the second surveys. Other notes as in Figure 4.

Figure B.9: Vote choice consistency and distance to final vote shares across election types

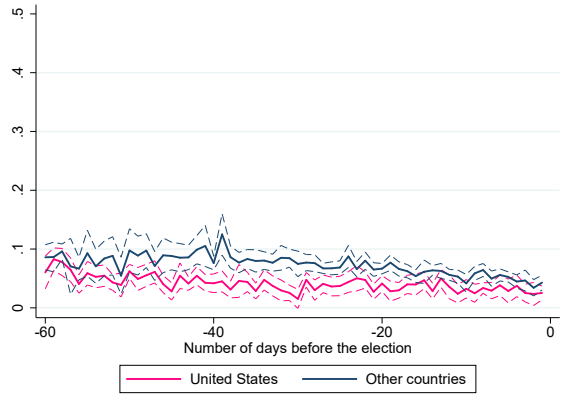
(a) Vote choice consistency



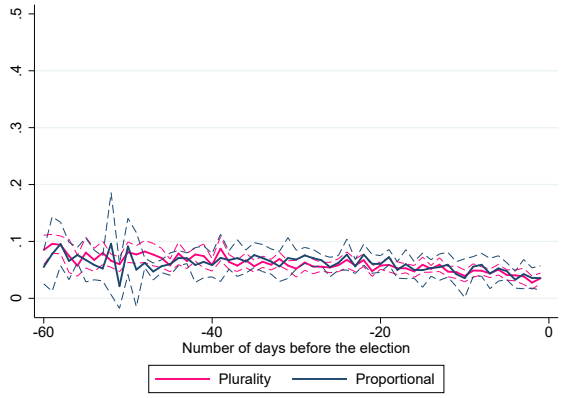
(b) Vote choice consistency



(c) Distance between predicted and final vote shares



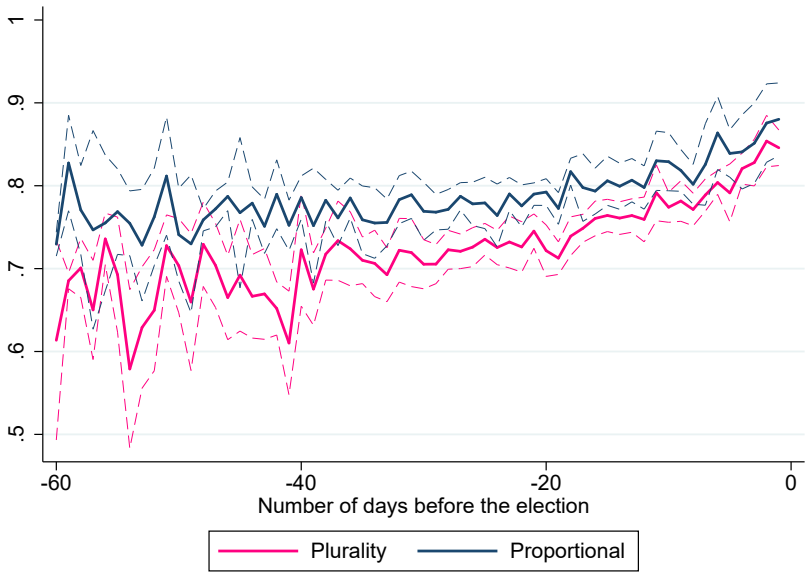
(d) Distance between predicted and final vote shares



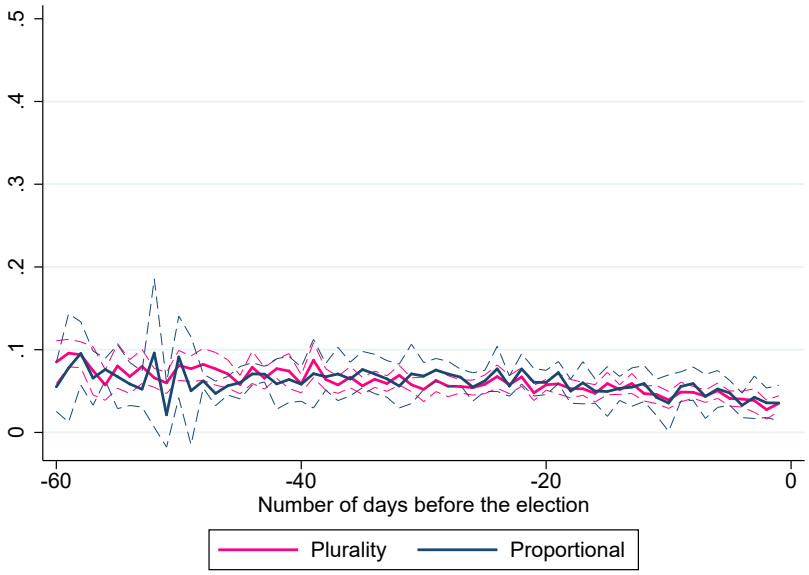
Notes: Figures B.9a and B.9b show the point estimates and the 95% confidence interval from a regression of vote choice consistency on 60 fixed effects indicating the number of days relative to the election as well as their interaction with a dummy for being surveyed before a type-a election (the U.S. bipartisan system or a plurality voting rule) as opposed to a type-b election (a multipartisan system or a proportional voting rule). N=132,617. In Figures B.9c and B.9d, the outcome is the distance between predicted and final vote shares, we use one observation per election per day and we weight each observation by the number of respondents who received the pre-electoral survey on that day for that election, relative to the total number of respondents surveyed on that day across all elections. N=2,889. Other notes as in Figures 1 and 2.

Figure B.10: Vote choice consistency across election types, and excluding the United States

(a) Vote choice consistency

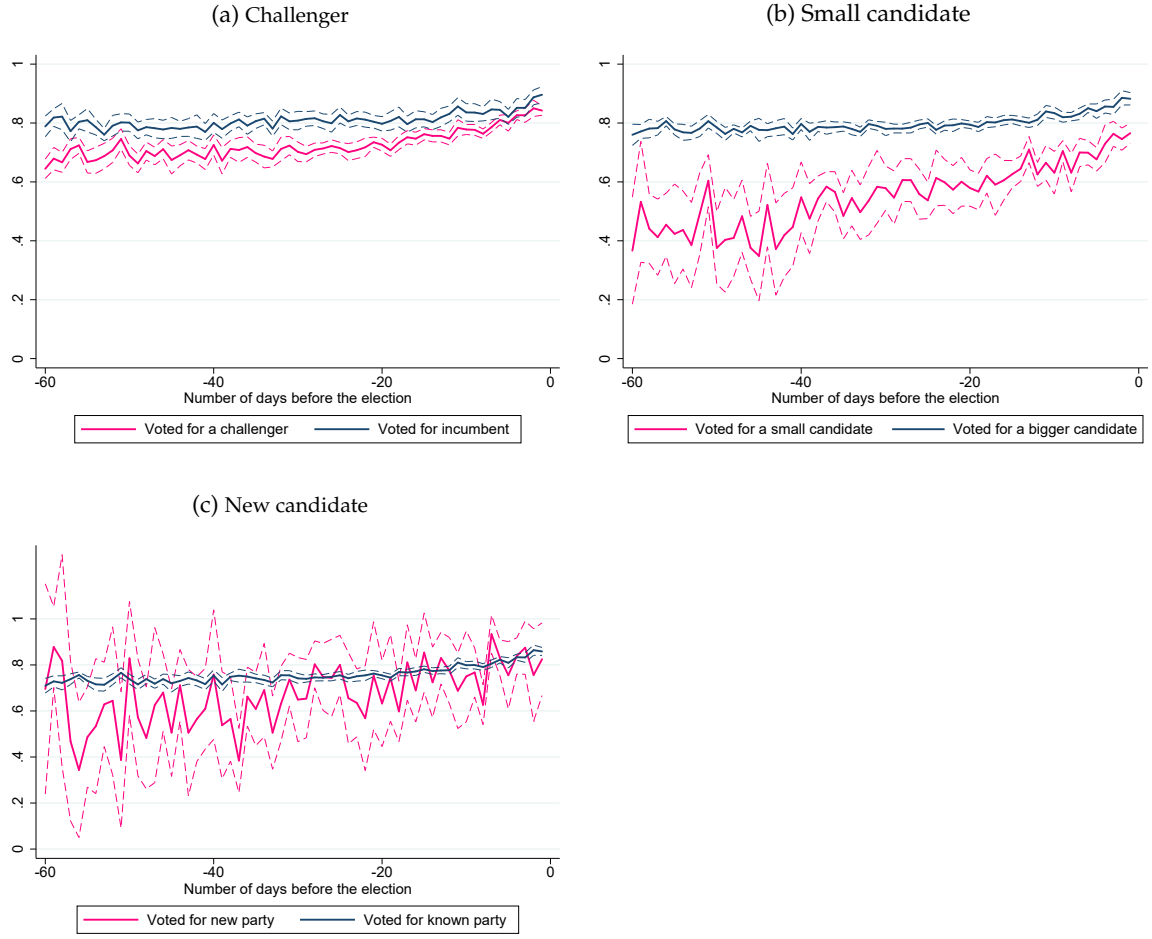


(b) Distance between predicted and final vote shares



Notes: The United States elections are excluded from the sample of elections using a plurality voting rule. Other notes as in Figure B.9.

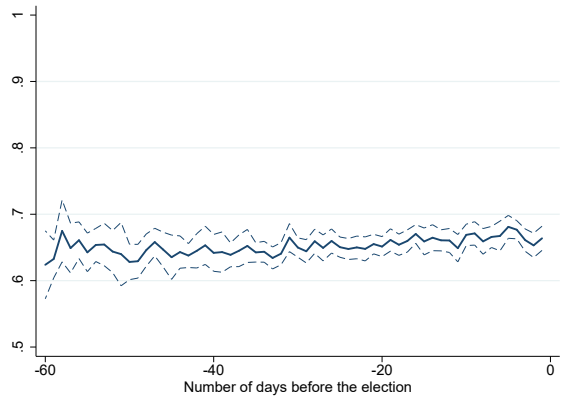
Figure B.11: Vote choice consistency across voters choosing different candidates



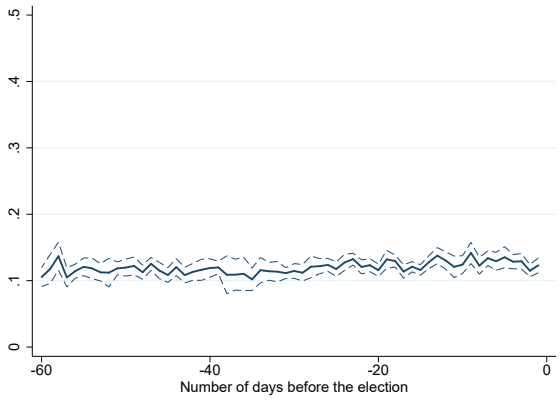
Notes: We show the point estimates and the 95% confidence interval from a regression of vote choice consistency on 60 fixed effects indicating the number of days relative to the election as well as their interaction with a dummy for declaring having voted for a lesser-known candidate: a challenger (N=131,792), a candidate that started the campaign with less than 10% of the predicted votes (N=152,592), and a party that had not been on the ballot before (N=117,598). The sample includes respondents successfully interviewed before and after the election who stated that they intended to vote and gave a vote intention different from voting blank or null, in the first survey, and who said that they actually voted and gave a vote choice declaration different from voting blank or null, in the second. Other notes as in Figure 1.

Figure B.12: Likelihood to vote for lesser-known candidates

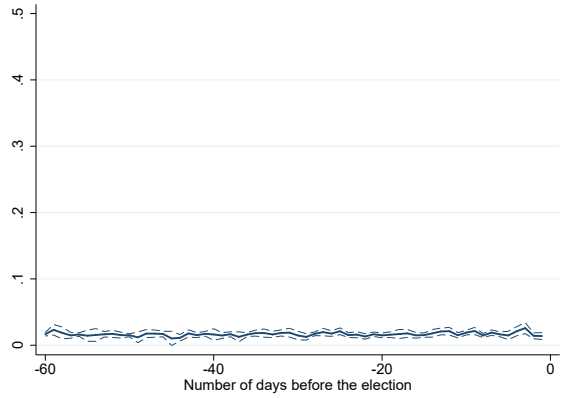
(a) Challenger



(b) Small candidate



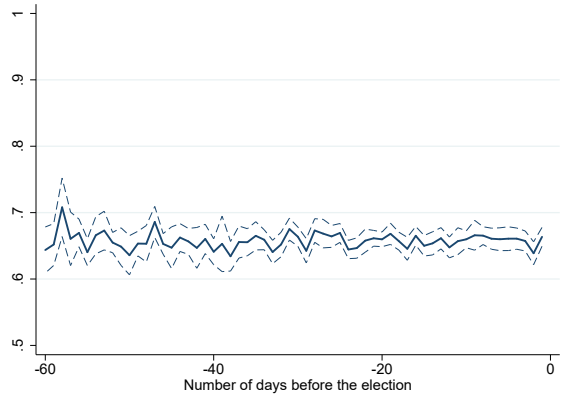
(c) New candidate



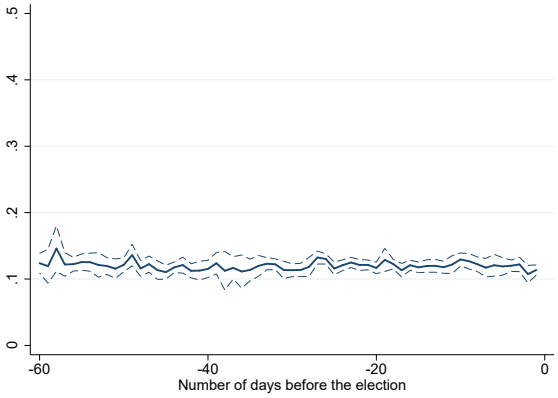
Notes: We show the point estimates and the 95% confidence interval from a regression of a dummy for intending to vote for a lesser-known candidate (challenger, small candidate, new candidate) on 60 fixed effects indicating the number of days relative to the election. The sample includes all respondents successfully interviewed before the election who stated that they intended to vote and gave a vote intention different from voting blank or null, and we control for election fixed effects as well as fixed effects for the day of the week in which the pre-electoral survey took place. N=149,787 (Figure B.12a), N=184,043 (Figure B.12b), and N=135,435 (Figure B.12c).

Figure B.13: Final vote for lesser-known candidates

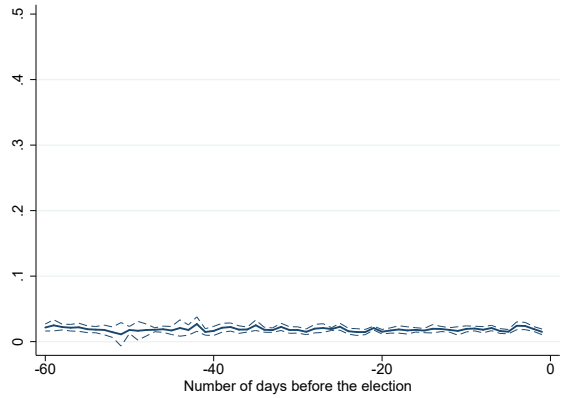
(a) Challenger



(b) Small candidate



(c) New candidate



Notes: The sample includes respondents successfully interviewed before and after the election who stated that they intended to vote and gave a vote intention different from voting blank or null, in the first survey, and who said that they actually voted and gave a vote choice declaration different from voting blank or null, in the second. We control for election fixed effects as well as fixed effects for the day of the week in which the pre-electoral survey took place and for the number of days separating the post-electoral survey from the election. Other notes as in Figure B.11.

Table B.1: Sample selection tests

	Turnout intention (1)	Turnout intention and declaration (2)
Time	0.0002	0.0004***
	(0.0002)	(0.0001)
Observations	250043	201813
R^2	0.821	0.786
Mean at day -1	0.8253	0.7970

Notes: Standard errors clustered at the survey level are in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). Time is defined as minus the number of days separating the preelection interview from the election. In column 1, the sample includes all respondents successfully interviewed before the election and the outcome is a dummy equal to 1 if the respondent stated that they intended to vote. In column 2, the sample includes all respondents successfully interviewed before and after the election and the outcome is a dummy equal to 1 if the respondent stated that they intended to vote, in the first survey, and reported that they actually voted and gave a vote choice declaration, in the second. We control for election fixed effects as well as fixed effects for the day of the week in which the pre-electoral survey took place, and we additionally control for the number of days separating the post-electoral survey from the election in column 2.

Table B.2: Sociodemographic characteristics over time

	More education than high school (1)	College degree (2)	Male (3)	Age (4)	2nd income quartile (5)	3rd income quartile (6)	4th income quartile (7)	Not employed (8)
Time to election	0.0004	0.0003	-0.0000	-0.0369***	-0.0001	0.0002*	0.0006***	-0.0010***
	(0.0003)	(0.0003)	(0.0001)	(0.0081)	(0.0001)	(0.0001)	(0.0002)	(0.0002)
Observations	154418	146513	173834	171618	121875	121875	121875	141171
R^2	0.607	0.349	0.487	0.908	0.256	0.261	0.227	0.427
Mean at day -1	0.6070	0.3202	0.4897	48.9246	0.2231	0.2357	0.2303	0.3886

Notes: The sample includes all respondents successfully interviewed before the election who stated that they intended to vote. Other notes as in Table B.1.

Table B.3: Vote choice consistency across voter types with more detailed age categories

	(1)	(2)
Time	0.0022***	0.0018***
	(0.0004)	(0.0004)
Above median age	0.0229***	0.0221**
	(0.0085)	(0.0089)
Time * Above median age	-0.0004**	-0.0004*
	(0.0002)	(0.0002)
25 years old or younger	-0.0125	-0.0108
	(0.0146)	(0.0153)
Time * 25 years old or younger	0.0004	0.0004
	(0.0003)	(0.0004)
Male		0.0355***
		(0.0059)
Not employed		0.0125**
		(0.0052)
College degree		0.0070
		(0.0058)
Above median income		0.0179**
		(0.0072)
Time * Male		0.0001
		(0.0002)
Time* Not employed		-0.0001
		(0.0002)
Time * College degree		-0.0005**
		(0.0002)
Time * Above median income		0.0003
		(0.0003)
Observations	154186	154186
R^2	0.805	0.805
Mean at day -1	0.8660	0.8660

Notes: Same notes as in Table 2. We include an additional dummy for being 25 years old or younger and its interaction with the linear time trend.

Table B.4: Vote intention and conditional consistency across voter types

	Vote intention (1)	Conditional consistency (2)
Time	0.0008**	0.0020***
	(0.0003)	(0.0003)
College degree	0.0101*	-0.0057
	(0.0056)	(0.0055)
Time * College degree	-0.0003*	-0.0006***
	(0.0002)	(0.0002)
Above median age	0.0149**	0.0139**
	(0.0061)	(0.0068)
Time * Above median age	-0.0002	-0.0004*
	(0.0002)	(0.0002)
Male	0.0393***	0.0079**
	(0.0064)	(0.0031)
Time * Male	0.0001	0.0001
	(0.0002)	(0.0001)
Above median income	0.0226***	0.0049
	(0.0051)	(0.0072)
Time * Above median income	0.0001	0.0001
	(0.0001)	(0.0003)
Not employed	0.0071*	0.0017
	(0.0038)	(0.0045)
Time* Not employed	0.0000	-0.0002
	(0.0001)	(0.0002)
Observations	200587	138454
R^2	0.889	0.883
Mean at day -1	0.9180	0.9200

Notes: In column 1, the sample includes all respondents successfully interviewed before the election who stated that they intended to vote. In column 2, the sample includes all respondents successfully interviewed before and after the election who stated that they intended to vote and gave a vote intention, in the first survey, and who said that they actually voted and gave a vote choice declaration, in the second. Other notes as in Table 2.

Table B.5: Conditional and unconditional consistency in policy preferences, issue salience, and beliefs on candidates

(a) Policy preferences

	Consistency (1)	Giving an answer (2)	Conditional consistency (3)
Time	-0.0000	-0.0000	0.0000
	(0.0001)	(0.0000)	(0.0001)
Observations	173896	272517	169067
R^2	0.914	0.963	0.938
Mean at day -1	0.8524	0.9616	0.8735

(b) Issue salience

	Consistency (1)	Giving an answer (2)	Conditional consistency (3)
Time	0.0015*	0.0010**	0.0009*
	(0.0007)	(0.0004)	(0.0005)
Observations	40517	57513	38477
R^2	0.682	0.914	0.720
Mean at day -1	0.6876	0.9124	0.7214

(c) Beliefs on candidates

	Consistency (1)	Giving an answer (2)	Conditional consistency (3)
Time	0.0010	0.0003	0.0008
	(0.0014)	(0.0003)	(0.0013)
Observations	278665	278665	267867
R^2	0.817	0.964	0.850
Mean at day -1	0.8477	0.9729	0.8713

Notes: In column 1, the sample includes all respondents successfully interviewed before and after the election who stated a policy preference (Table B.5a), a salient issue (Table B.5b), or a belief on candidates (Table B.5c) in the second survey. In column 2, the sample includes all respondents successfully interviewed before the election. In column 3, the sample includes all respondents successfully interviewed before and after the election who stated a policy preference, a salient issue, or a belief on candidates in both the first and the second surveys. Other notes as in Table 3.

Table B.6: Exact consistency in policy preferences, issue salience, and beliefs on candidates

	Policy preferences (1)	Issue salience (2)	Beliefs on candidates (3)
Time	-0.0000	0.0021**	0.0010
	(0.0002)	(0.0009)	(0.0014)
Observations	173896	42743	278665
R^2	0.639	0.522	0.655
Mean at day -1	0.6319	0.5216	0.6525

Notes: The sample includes all respondents successfully interviewed before and after the election who stated a policy preference (column 1), a salient issue (column 2), or a belief on candidates (column 3) in the second survey. Other notes as in Table 3.

Table B.7: Consistency in policy preferences, issue salience, and beliefs on candidates across voter types

	Policy preferences (1)	Issue salience (2)	Beliefs on candidates (3)
Time	-0.0003***	0.0003	0.0012
	(0.0001)	(0.0011)	(0.0015)
Male	0.0130	0.0232	0.0198**
	(0.0086)	(0.0251)	(0.0063)
Above median age	0.0130	-0.0186	0.0220***
	(0.0125)	(0.0181)	(0.0037)
Not employed	-0.0008	-0.0275**	-0.0085
	(0.0081)	(0.0117)	(0.0096)
College degree	0.0319***	-0.0029	0.0215
	(0.0089)	(0.0151)	(0.0226)
Above median income	0.0196*	0.0541***	0.0149**
	(0.0085)	(0.0097)	(0.0059)
Time * Male	0.0000	0.0010	-0.0003
	(0.0001)	(0.0008)	(0.0002)
Time * Above median age	0.0000	0.0002	0.0007**
	(0.0001)	(0.0006)	(0.0002)
Time* Not employed	-0.0001	-0.0000	-0.0003
	(0.0001)	(0.0004)	(0.0003)
Time * College degree	0.0003*	-0.0001	-0.0006
	(0.0001)	(0.0006)	(0.0005)
Time * Above median income	0.0003	0.0010**	-0.0001
	(0.0002)	(0.0004)	(0.0002)
Observations	173896	40517	278665
R^2	0.914	0.683	0.818
Mean at day -1	0.8524	0.6876	0.8477

Notes: The sample includes all respondents successfully interviewed before and after the election who stated a policy preference (column 1), a salient issue (column 2), or a belief on candidates (column 3) in the second survey. Other notes as in Tables 2 and 3.

Table B.8: Vote choice consistency and distance to final vote shares across election types

	Vote choice consistency				Distance between predicted and final vote shares			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time	0.0028***	0.0027***	0.0027***	0.0028***	-0.0009***	-0.0010***	-0.0010***	-0.0011***
	(0.0004)	(0.0005)	(0.0005)	(0.0005)	(0.0002)	(0.0003)	(0.0003)	(0.0003)
Time * U.S.	-0.0019***		-0.0019***	-0.0019***	0.0004		0.0003	0.0003
	(0.0004)		(0.0005)	(0.0005)	(0.0002)		(0.0003)	(0.0003)
Time * Plurality rule		-0.0007	0.0001	0.0001		0.0003	0.0002	0.0002
		(0.0006)	(0.0007)	(0.0007)		(0.0004)	(0.0004)	(0.0004)
Observations	132617	132617	132617	132617	2889	2889	2889	2889
R^2	0.786	0.786	0.786	0.788	0.771	0.771	0.772	0.773
Mean at day -1	0.8528	0.8528	0.8528	0.8528	0.0402	0.0402	0.0402	0.0402
Socio-demographic controls				X				X

Notes: The linear time trend is interacted with dummies for being surveyed before a type-a election (U.S. bipartisan system or plurality voting rule) as opposed to a type-b election (multiparty system or proportional rule). Other notes as in Tables 1 and 2.

Table B.9: Final vote for lesser-known candidates

	Voted for a challenger (1)	Voted for a small candidate (2)	Voted for a new candidate (3)
Time	0.0001	0.0000	-0.0000
	(0.0001)	(0.0001)	(0.0000)
Observations	131792	152592	129832
R^2	0.652	0.223	0.125
Mean at day -1	0.6677	0.1187	0.0145

Notes: The sample includes all respondents successfully interviewed before and after the election who stated that they intended to vote, in the first survey, and who reported that they actually voted and gave a vote choice declaration, in the second. Other notes as in Table B.2.

Table B.10: Vote choice consistency across voters choosing different candidates

	Voted for a challenger vs the incumbent (1)	Voted for a small vs a bigger candidate (2)	Voted for a new vs known candidate (3)	All (4)	All (5)
Time	0.0013***	0.0016***	0.0020***	0.0011***	0.0011***
	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0003)
Voted for a challenger	-0.0462***			-0.0144	-0.0134
	(0.0154)			(0.0141)	(0.0143)
Time * Voted for a challenger	0.0013***			0.0010***	0.0011***
	(0.0004)			(0.0004)	(0.0004)
Voted for a small candidate		-0.1122***		-0.0869***	-0.0863***
		(0.0283)		(0.0273)	(0.0265)
Time * Voted for a small candidate		0.0042***		0.0033***	0.0033***
		(0.0008)		(0.0007)	(0.0007)
Voted for a new candidate			0.0093	0.0355	0.0327
			(0.0563)	(0.0311)	(0.0304)
Time * Voted for a new candidate			0.0032***	0.0016***	0.0017***
			(0.0012)	(0.0005)	(0.0005)
Observations	154186	154186	154186	154186	154186
R^2	0.806	0.810	0.807	0.811	0.812
Mean at day -1	0.8660	0.8660	0.8660	0.8660	0.8660
Sociodemographic controls					X

Notes: The linear time trend is interacted with dummies for having voted for a lesser-known candidate (challenger, small candidate, new candidate). The sample includes all respondents successfully interviewed before and after the election who stated that they intended to vote, in the first survey, and who reported that they actually voted and gave a vote choice declaration, in the second. Other notes as in Tables 1 and 2.

Table B.11: Stating a vote intention across voters choosing different candidates

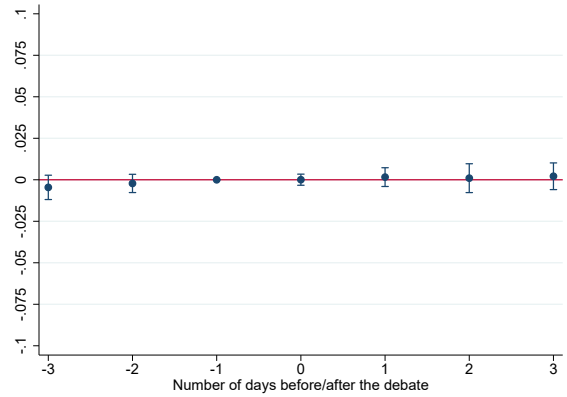
	Voted for a challenger vs the incumbent (1)	Voted for a small vs a bigger candidate (2)	Voted for a new vs known candidate (3)	All (4)	All (5)
Time	0.0005**	0.0006***	0.0007***	0.0004**	0.0004**
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
Voted for a challenger	-0.0085			0.0011	0.0016
	(0.0062)			(0.0066)	(0.0067)
Time * Voted for a challenger	0.0004**			0.0004**	0.0004**
	(0.0002)			(0.0002)	(0.0002)
Voted for a small candidate		-0.0324***		-0.0287***	-0.0291***
		(0.0074)		(0.0073)	(0.0065)
Time * Voted for a small candidate		0.0007**		0.0004	0.0005
		(0.0003)		(0.0003)	(0.0003)
Voted for a new candidate			0.0756***	0.0866***	0.0824***
			(0.0281)	(0.0189)	(0.0179)
Time * Voted for a new candidate			0.0023***	0.0019***	0.0019***
			(0.0006)	(0.0004)	(0.0004)
Observations	200587	200587	200587	200587	200587
R^2	0.890	0.890	0.890	0.891	0.891
Mean at day -1	0.9180	0.9180	0.9180	0.9180	0.9180
Sociodemographic controls					X

Notes: The sample includes all respondents successfully interviewed before the election who stated that they intended to vote. Other notes as in Table B.10.

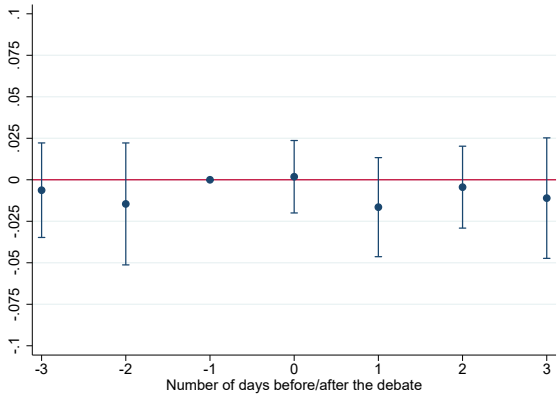
C Impact of TV Debates: Additional Figures and Tables

Figure C.1: Debates' effects on consistency in policy preferences, issue salience, and beliefs on candidates

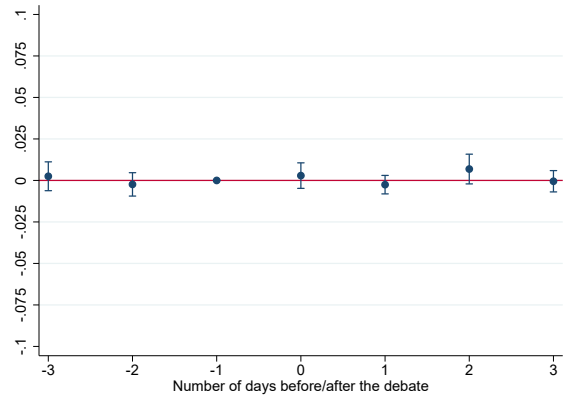
(a) Consistency in policy preferences



(b) Consistency in issue salience

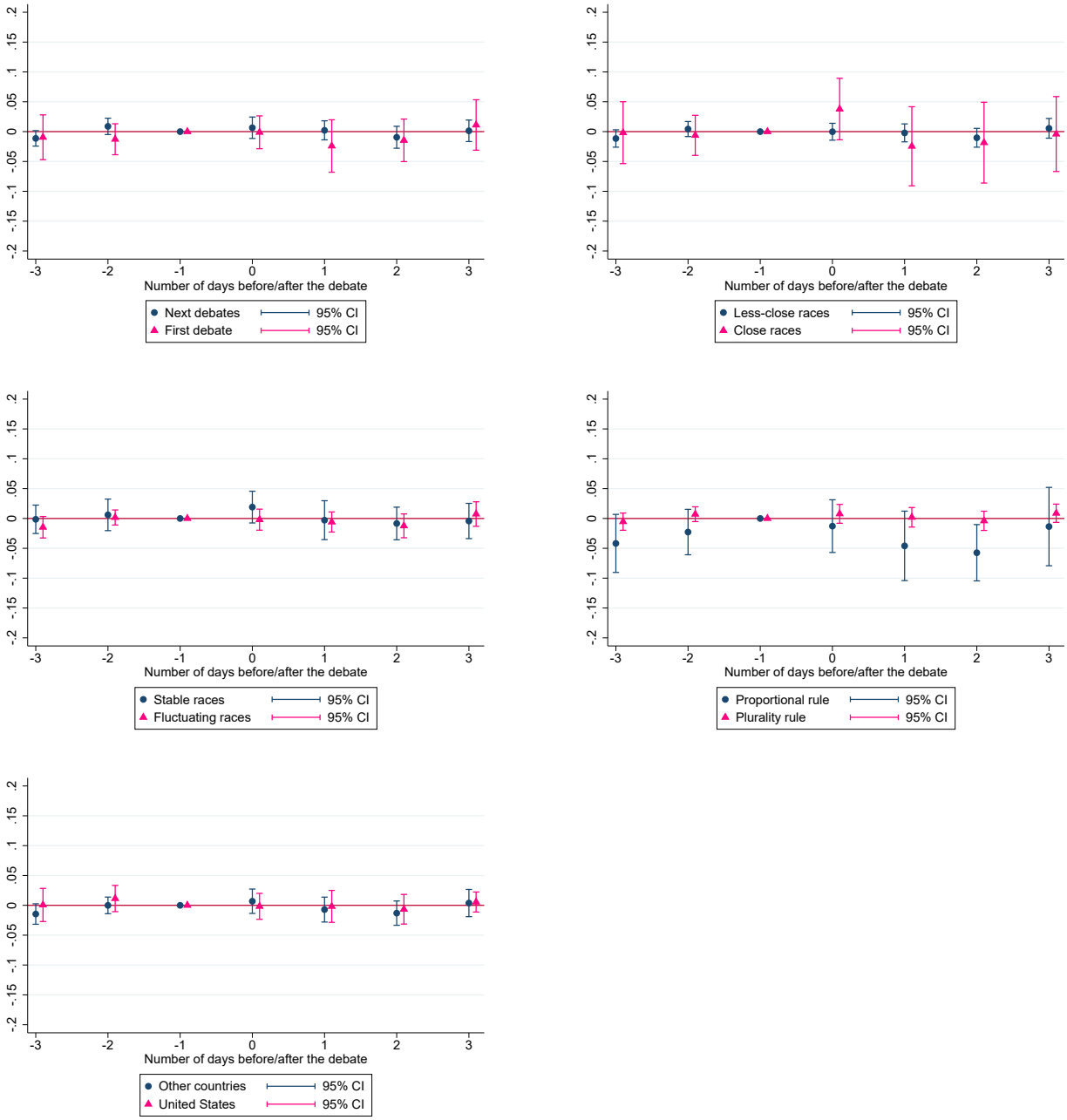


(c) Consistency in beliefs on candidates



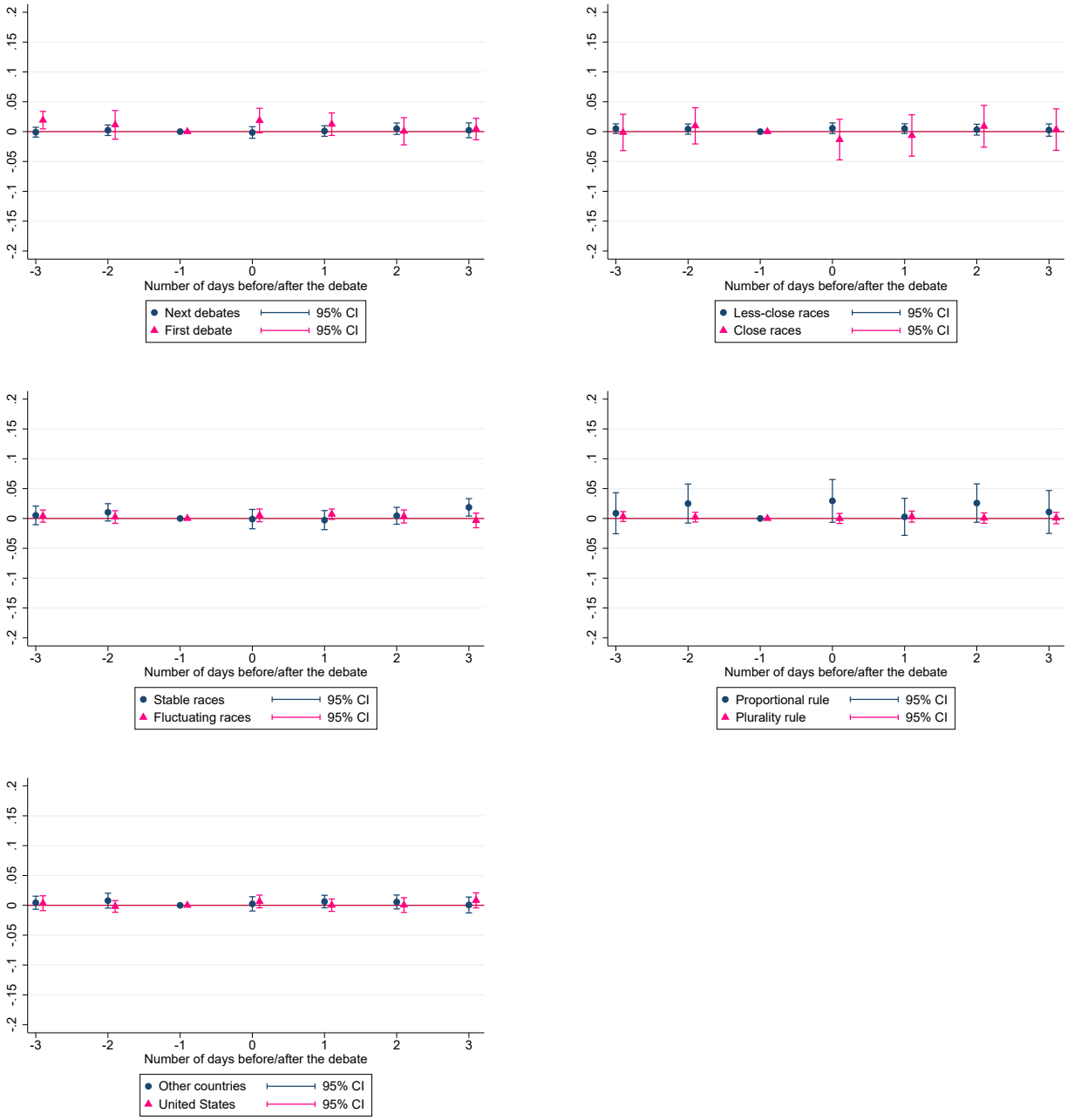
Notes: We show point estimates and 95% confidence intervals from regressions of consistency in policy preferences and issue salience on dummy variables for being surveyed two or three days before the debate, a dummy for being surveyed on the day of the debate, as well as dummies for being surveyed one, two, or three days after the debate. We also include dummies for being surveyed four days or more before or after the debate, respectively, and omit the dummy for being surveyed one day before the debate. We control for debate x election x question fixed effects in Figures C.1a and C.1c and for debate x election fixed effects in Figure C.1b, as well as fixed effects for the number of days relative to the election, the day of the week in which the pre-electoral survey took place, and the number of days separating the pre- and post-electoral survey. For each debate and election, our estimation uses all respondents in samples defined as in Figure 4. Standard errors are adjusted for clustering at the debate level. There are eight debates (N=293,683) in Figure C.1a, six debates (N=45,207) in Figure C.1b, and 15 debates (N=478,934) in Figure C.1c after excluding debates held less than three days from one another.

Figure C.2: Debates' effects on vote choice consistency across debate and election types



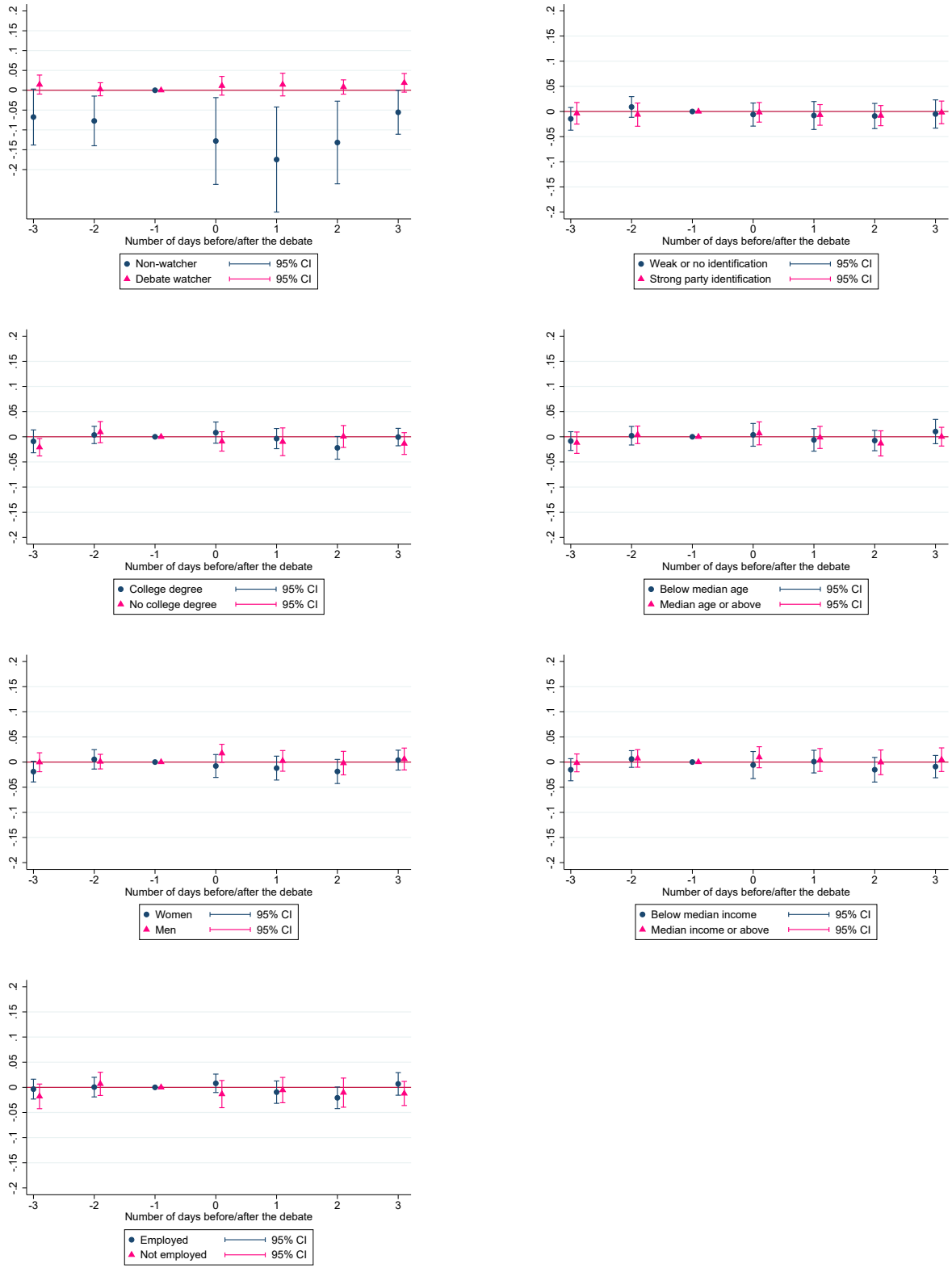
Notes: We interact the relative days dummies with indicators for type-a debate or election (first debate, close race, fluctuating race, U.S. bipartisan system, and plurality rule) and type-b debate or election (next debates, less close race, more stable race, multiparty system, and proportional rule). Other notes as in Figure 8a.

Figure C.3: Debates' effects on distance to final vote shares across debate and election types



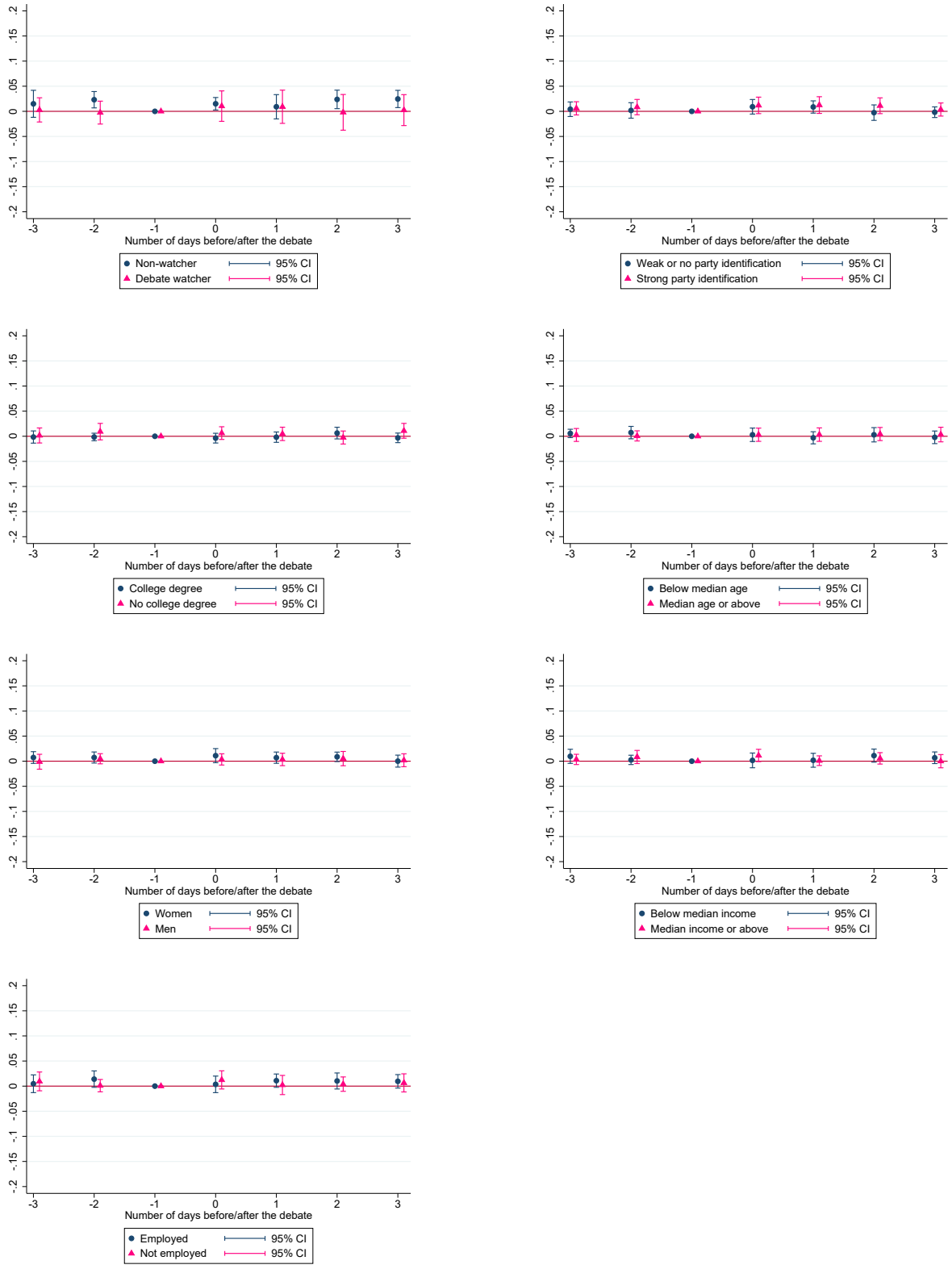
Notes: We interact the relative days dummies with indicators for type-a debate or election (first debate, close race, fluctuating race, U.S. bipartisan system, and plurality rule) and type-b debate or election (next debates, less close race, more stable race, multiparty system, and proportional rule). Other notes as in Figure 9a.

Figure C.4: Debates' effects on vote choice consistency across voter types



Notes: We interact the relative days dummies with indicators for type-a voter (debate watcher, voter with strong party identification, with a college degree, above the median age, male, above the median income, and not employed) and type-b voter (non-debate watcher, voter with weak or no party identification, without college degree, below the median age, female, below the median income, and employed) and also control for the dummy for being a type-a voter. Other notes as in Figure 8a.

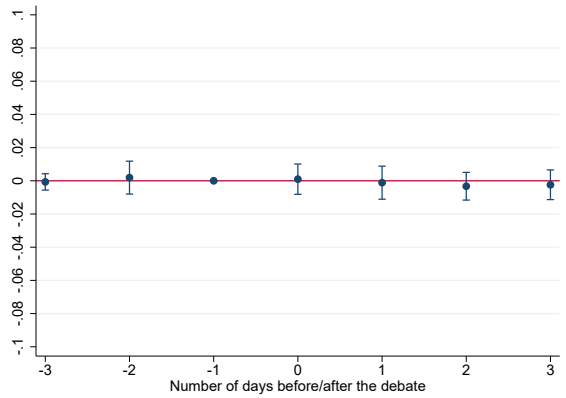
Figure C.5: Debates' effects on distance to final vote shares across voter types



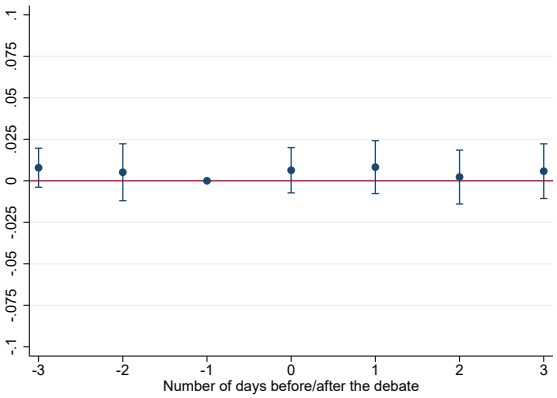
Notes: We interact the relative days dummies with indicators for type-a voter (debate watcher, voter with strong party identification, with a college degree, above the median age, male, above the median income, and not employed) and type-b voter (non-debate watcher, voter with weak or no party identification, without college degree, below the median age, female, below the median income, and employed) and also control for the dummy for being a type-a voter. Other notes as in Figure 9a.

Figure C.6: Debates' effects on support for lesser-known candidates

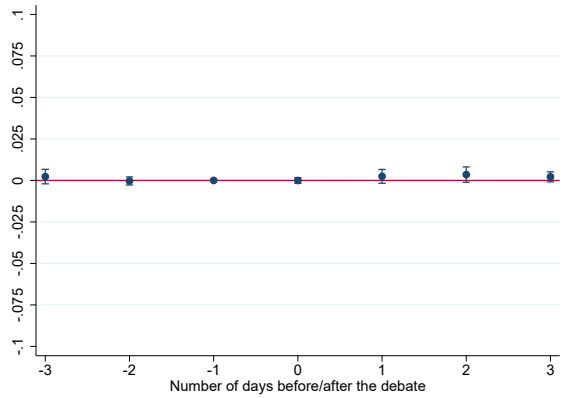
(a) Vote share concentration



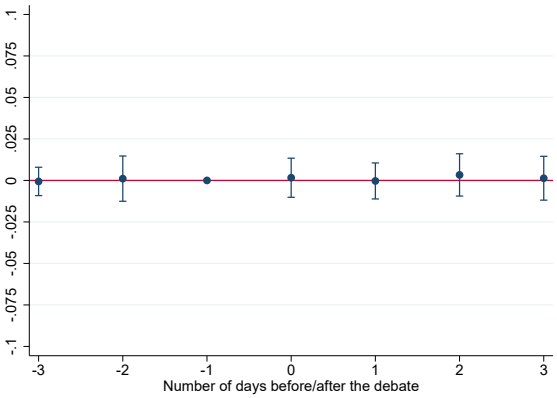
(b) Likelihood to vote for a challenger



(c) Likelihood to vote for a small candidate



(d) Likelihood to vote for a new candidate



Notes: We show point estimates and 95% confidence intervals from regressions of vote share concentration (Figure C.6a) as well as dummy variables for intending to vote for a challenger (Figure C.6b), a small candidate (Figure C.6c), or a new candidate (Figure C.6d) on dummy variables for being surveyed two or three days before the debate, a dummy for being surveyed on the day of the debate, as well as dummies for being surveyed one, two, or three days after the debate. We also include dummies for being surveyed four days or more before or after the debate, respectively, and omit the dummy for being surveyed one day before the debate. We control for debate x election fixed effects as well as fixed effects for the number of days relative to the election and the day of the week in which the pre-electoral survey took place. In Figure C.6a, we use one observation per election per day, and the weights and the set of respondents used to compute vote shares are the same as in Figure 5. In Figures C.6b through C.6d, our estimation uses all respondents in samples defined as in Figure 1a. Standard errors are adjusted for clustering at the debate level. There are 56 debates, after excluding debates held less than three days from one another. N=3,693; 272,552; 272,522; and 268,825, respectively.

Table C.1: Campaign exposure over time

	Newspapers (1)	Television (2)	Radio (3)	Internet (4)	Polls (5)	Contact by a party (6)	Visit by a party (7)	Political discussions (8)
Time	0.0002	0.0006***	0.0007**	0.0007***	0.0054***	0.0052***	0.0022*	0.0040***
	(0.0005)	(0.0002)	(0.0003)	(0.0001)	(0.0017)	(0.0015)	(0.0011)	(0.0004)
Observations	141183	141213	103737	99011	36590	48593	20884	78969
R^2	0.539	0.677	0.410	0.293	0.634	0.518	0.226	0.509
Mean at day -1	0.8660	0.8660	0.8660	0.8660	0.8660	0.8660	0.8660	0.8660

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Notes: The outcomes are dummies for getting information frequently from newspapers, TV, radio, and the Internet, having seen election polls recently, having been contacted by a party during the campaign, having been visited by a party during the campaign, and discussing politics frequently with others. Other notes as in Table B.2.

Table C.2: Sociodemographic characteristics around TV debates

	More education than high school (1)	College degree (2)	Age (3)	Male (4)	2nd income quartile (5)	3rd income quartile (6)	4th income quartile (7)	Not employed (8)
Before -3	-0.002	0.007	-0.101	0.001	-0.006	-0.003	0.010*	-0.000
	(0.011)	(0.010)	(0.385)	(0.006)	(0.005)	(0.006)	(0.006)	(0.010)
-3	-0.002	0.011	-0.093	-0.011	-0.012*	-0.004	0.008	-0.010
	(0.009)	(0.007)	(0.328)	(0.008)	(0.006)	(0.007)	(0.007)	(0.011)
-2	-0.018*	-0.004	0.133	-0.004	-0.004	-0.004	0.002	0.007
	(0.009)	(0.008)	(0.287)	(0.008)	(0.005)	(0.008)	(0.005)	(0.010)
0	-0.010	-0.001	-0.816***	0.003	-0.011*	-0.004	0.009	-0.020**
	(0.008)	(0.007)	(0.303)	(0.008)	(0.006)	(0.007)	(0.007)	(0.009)
+1	-0.006	0.000	-0.628*	-0.001	-0.009	-0.009	0.012	-0.006
	(0.007)	(0.008)	(0.328)	(0.007)	(0.006)	(0.006)	(0.007)	(0.010)
+2	-0.002	0.006	-0.114	0.006	-0.008	-0.004	0.012*	-0.020
	(0.010)	(0.011)	(0.393)	(0.011)	(0.009)	(0.005)	(0.006)	(0.013)
+3	-0.007	0.004	0.133	-0.011	-0.006	-0.005	0.007	0.018
	(0.010)	(0.012)	(0.328)	(0.008)	(0.007)	(0.006)	(0.007)	(0.012)
After +3	-0.007	-0.003	-0.008	0.001	-0.012**	-0.006	0.011*	-0.005
	(0.011)	(0.012)	(0.367)	(0.007)	(0.005)	(0.005)	(0.006)	(0.009)
Observations	262717	228250	280906	282309	228841	228841	228841	220439
R^2	0.056	0.043	0.015	0.006	0.059	0.055	0.046	0.025
Mean at debate day	0.599	0.364	49.060	0.491	0.209	0.223	0.199	0.392
Number of debates	51	51	56	56	50	50	50	48
F-stat	1.129	1.117	2.032	1.042	1.131	0.404	1.135	2.428
P-val	0.359	0.366	0.077	0.409	0.358	0.873	0.356	0.040

Notes: Standard errors clustered at the debate level are in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). For each debate and election, our estimation uses all respondents in samples defined as in Table 1 (columns 3 and 4). We control for debate x election fixed effects as well as fixed effects for the number of days relative to the election, the day of the week in which the pre-electoral survey took place, and the number of days separating the post-electoral survey from the election. We report the F-stat and p-value of a test of joint significance of the six relative debate dummies, from two days before the debate to three days after.

Table C.3: Debates' effects on campaign exposure and political engagement

	Newspapers (1)	Television (2)	Radio (3)	Internet (4)	Polls (5)	Contact by a party (6)	Visit by a party (7)	Political discussions (8)	Watching debates (9)	Strong party identification (10)
Before -3	0.003	-0.005	-0.005	0.008	-0.018	0.011	-0.001	-0.009	0.004	0.007
	(0.005)	(0.006)	(0.005)	(0.008)	(0.024)	(0.018)	(0.007)	(0.018)	(0.008)	(0.008)
-3	-0.004	-0.001	-0.011	0.023***	0.049*	-0.005	0.000	-0.009	0.010	-0.001
	(0.008)	(0.008)	(0.008)	(0.008)	(0.024)	(0.007)	(0.012)	(0.024)	(0.009)	(0.011)
-2	-0.001	-0.005	-0.005	0.018**	0.014	0.006	0.002	0.016	0.016	0.012
	(0.008)	(0.007)	(0.008)	(0.008)	(0.017)	(0.011)	(0.022)	(0.023)	(0.013)	(0.008)
0	0.007	-0.013	-0.021***	0.002	-0.040*	0.007	0.008	0.022	0.002	0.012
	(0.008)	(0.008)	(0.007)	(0.009)	(0.021)	(0.017)	(0.012)	(0.025)	(0.010)	(0.008)
+1	-0.011	0.000	-0.014	0.001	0.024	0.001	0.007	0.010	0.017	-0.003
	(0.008)	(0.008)	(0.011)	(0.009)	(0.050)	(0.015)	(0.007)	(0.024)	(0.012)	(0.010)
+2	0.000	-0.004	-0.011	0.020*	-0.010	0.010	-0.005	0.022	0.013	0.000
	(0.007)	(0.008)	(0.007)	(0.011)	(0.020)	(0.017)	(0.009)	(0.025)	(0.011)	(0.011)
+3	0.010	0.010	-0.023**	0.011	-0.039	0.003	0.008	0.020	0.001	0.003
	(0.010)	(0.007)	(0.008)	(0.008)	(0.021)	(0.018)	(0.009)	(0.024)	(0.009)	(0.010)
After +3	0.006	0.000	-0.007	0.013*	0.013	0.005	0.009	-0.001	0.000	0.004
	(0.005)	(0.006)	(0.005)	(0.007)	(0.029)	(0.018)	(0.013)	(0.023)	(0.007)	(0.008)
Observations	231947	206273	172177	158160	18324	78393	39950	35988	66484	165835
R^2	0.155	0.261	0.144	0.089	0.104	0.091	0.033	0.226	0.165	0.144
Mean at debate day	0.415	0.573	0.302	0.234	0.561	0.503	0.246	0.484	0.943	0.323
Number of debates	37	40	26	20	8	13	9	16	19	36
Average pre-debate dummies -3 and -2	-0.002	-0.003	-0.008	0.021	0.032	0.001	0.001	0.004	0.013	0.005
P-val/Pre	0.748	0.587	0.268	0.009	0.026	0.941	0.923	0.872	0.166	0.521
Average post-debate dummies 1, 2, and 3	-0.000	0.002	-0.016	0.011	-0.008	0.005	0.003	0.018	0.010	0.000
P-val/Post	0.986	0.785	0.014	0.202	0.691	0.773	0.534	0.378	0.252	0.976

Notes: The mean value of the two pre-debate dummies and the mean value of the three post-debate dummies are reported, along with their p-values. Other notes as in Tables C.1 and C.2.

Table C.4: Debates' effects on turnout intention and declaration around debates

	Turnout intention (1)	Turnout intention and declaration (2)
Before -3	0.003	0.005
	(0.006)	(0.007)
-3	0.003	0.003
	(0.007)	(0.007)
-2	0.002	0.009*
	(0.004)	(0.005)
0	-0.003	-0.005
	(0.006)	(0.007)
+1	0.003	0.004
	(0.006)	(0.008)
+2	0.001	0.002
	(0.006)	(0.007)
+3	0.004	0.009
	(0.005)	(0.005)
After +3	0.002	0.004
	(0.006)	(0.006)
Observations	326742	276347
R^2	0.104	0.074
Mean at debate day	0.859	0.821
Number of debates	56	56
Average pre-debate dummies -3 and -2	0.002	0.006
P-val/Pre	0.587	0.265
Average post-debate dummies 1, 2, and 3	0.003	0.005
P-val/Post	0.501	0.305

Notes: Same notes as in Tables B.1 and C.3.

Table C.5: Debates' effects on distance to final vote shares by debate and election type

	First vs next debate (1)	Close vs less-close race (2)	Fluctuating vs stable race (3)	U.S. vs other countries (4)	Plurality vs proportional rule (5)
-3*type-b	-0.001	0.005	0.005	0.004	0.008
	(0.004)	(0.004)	(0.008)	(0.006)	(0.017)
-2*type-b	0.002	0.004	0.009	0.007	0.023
	(0.005)	(0.004)	(0.007)	(0.006)	(0.017)
0*type-b	-0.003	0.005	-0.002	0.001	0.027
	(0.005)	(0.005)	(0.008)	(0.006)	(0.018)
+1*type-b	-0.000	0.004	-0.003	0.006	0.001
	(0.004)	(0.004)	(0.008)	(0.005)	(0.015)
+2*type-b	0.004	0.003	0.003	0.005	0.023
	(0.005)	(0.005)	(0.007)	(0.006)	(0.016)
+3*type-b	0.002	0.003	0.019**	-0.000	0.007
	(0.006)	(0.005)	(0.007)	(0.006)	(0.018)
-3*type-a	0.020***	-0.002	0.004	0.004	0.003
	(0.007)	(0.015)	(0.005)	(0.006)	(0.004)
-2*type-a	0.011	0.008	0.002	-0.001	0.002
	(0.012)	(0.016)	(0.005)	(0.005)	(0.004)
0*type-a	0.018*	-0.016	0.004	0.006	-0.001
	(0.010)	(0.018)	(0.005)	(0.006)	(0.004)
+1*type-a	0.013	-0.008	0.006	-0.000	0.002
	(0.009)	(0.018)	(0.004)	(0.005)	(0.005)
+2*type-a	0.000	0.004	0.003	-0.001	0.000
	(0.011)	(0.017)	(0.005)	(0.006)	(0.004)
+3*type-a	0.004	0.001	-0.004	0.010	0.001
	(0.009)	(0.017)	(0.006)	(0.006)	(0.005)
Observations	3693	3693	3693	3693	3693
R^2	0.574	0.573	0.573	0.579	0.579
Mean at debate day	0.047	0.047	0.047	0.047	0.047
Number of debates	56	56	56	56	56
Sociodemographic controls	X	X	X	X	X
Average pre-debate dummies -3 and -2*type-b	0.000	0.004	0.007	0.005	0.016
P-val/Pre*type-b	0.948	0.233	0.244	0.311	0.267
Average post-debate dummies 1, 2, and 3*type-b	0.002	0.003	0.007	0.003	0.010
P-val/Post*type-b	0.641	0.390	0.295	0.507	0.460
Average pre-debate dummies -3 and -2*type-a	0.015	0.003	0.003	0.001	0.002
P-val/Pre*type-a	0.070	0.798	0.529	0.760	0.488
Average post-debate dummies 1, 2, and 3*type-a	0.006	-0.001	0.002	0.003	0.001
P-val/Post*type-a	0.546	0.947	0.723	0.549	0.752

Notes: Same notes as in Tables 7 and 8.

Table C.6: Debates' effects on distance to final vote shares by voter type

	Debate watchers vs non-watchers (1)	Strong vs weak party identification (2)	College degree vs no college degree (3)	Above median age vs below (4)	Male vs female (5)	Above median income vs below (6)	Not employed vs employed (7)
-3*type-b	0.015	0.005	-0.003	0.004	0.006	0.009	0.004
	(0.013)	(0.007)	(0.006)	(0.004)	(0.006)	(0.007)	(0.009)
-2*type-b	0.023**	0.001	-0.003	0.006	0.006	0.003	0.013
	(0.009)	(0.008)	(0.004)	(0.006)	(0.005)	(0.005)	(0.008)
0*type-b	0.016**	0.009	-0.006	0.001	0.009	0.001	0.002
	(0.007)	(0.007)	(0.005)	(0.007)	(0.007)	(0.008)	(0.008)
+1*type-b	0.009	0.008	-0.004	-0.003	0.006	0.002	0.009
	(0.012)	(0.006)	(0.005)	(0.006)	(0.005)	(0.007)	(0.007)
+2*type-b	0.021**	-0.003	0.006	0.002	0.008	0.011	0.010
	(0.009)	(0.008)	(0.006)	(0.007)	(0.005)	(0.007)	(0.008)
+3*type-b	0.027***	-0.003	-0.005	-0.002	-0.001	0.007	0.008
	(0.009)	(0.006)	(0.005)	(0.006)	(0.006)	(0.006)	(0.007)
-3*type-a	0.003	0.006	-0.000	0.001	-0.002	0.003	0.008
	(0.011)	(0.006)	(0.007)	(0.006)	(0.008)	(0.005)	(0.009)
-2*type-a	-0.002	0.008	0.008	-0.001	0.004	0.009	0.000
	(0.012)	(0.007)	(0.008)	(0.005)	(0.005)	(0.007)	(0.006)
0*type-a	0.011	0.011	0.004	0.001	0.002	0.011*	0.011
	(0.015)	(0.008)	(0.006)	(0.007)	(0.005)	(0.006)	(0.009)
+1*type-a	0.009	0.012	0.003	0.003	0.002	0.001	0.001
	(0.016)	(0.008)	(0.007)	(0.006)	(0.006)	(0.005)	(0.009)
+2*type-a	-0.004	0.011	-0.003	0.003	0.004	0.005	0.004
	(0.016)	(0.008)	(0.006)	(0.006)	(0.007)	(0.006)	(0.007)
+3*type-a	0.004	0.002	0.009	0.003	0.001	0.000	0.005
	(0.016)	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)	(0.009)
Observations	2236	4168	6732	7386	7386	6418	6612
R^2	0.397	0.389	0.379	0.447	0.465	0.405	0.449
Mean at debate day	0.030	0.040	0.048	0.059	0.058	0.053	0.056
Number of debates	19	36	51	56	56	50	48
Sociodemographic controls	X	X	X	X	X	X	X
Average pre-debate dummies for type-b	0.019	0.003	-0.003	0.005	0.006	0.006	0.009
P-val/Pre*type-b	0.062	0.638	0.507	0.230	0.167	0.172	0.312
Average post-debate dummies for type-b	0.019	0.001	-0.001	-0.001	0.004	0.007	0.009
P-val/Post*type-b	0.032	0.868	0.822	0.807	0.325	0.164	0.143
Average pre-debate dummies for type-a	0.000	0.007	0.004	0.000	0.001	0.006	0.004
P-val/Pre*type-a	0.991	0.239	0.564	0.965	0.858	0.241	0.483
Average post-debate dummies for type-a	0.003	0.008	0.003	0.003	0.003	0.002	0.003
P-val/Post*type-a	0.846	0.223	0.585	0.550	0.658	0.625	0.658

Notes: Same notes as in Tables 7 and 9 .

Table C.7: Debates' effects on vote share concentration and likelihood to vote for lesser-known candidates

	Vote share concentration		Challenger		Small candidate		New candidate	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Before -3	-0.000	-0.000	-0.001	-0.000	0.004	0.004	0.001	0.001
	(0.004)	(0.003)	(0.006)	(0.006)	(0.005)	(0.005)	(0.001)	(0.001)
-3	-0.001	-0.002	0.008	0.007	-0.001	-0.001	0.002	0.002
	(0.002)	(0.003)	(0.006)	(0.006)	(0.004)	(0.004)	(0.002)	(0.002)
-2	0.002	0.001	0.005	0.005	0.001	0.001	-0.000	-0.000
	(0.005)	(0.005)	(0.009)	(0.009)	(0.007)	(0.007)	(0.001)	(0.001)
0	0.001	-0.000	0.006	0.006	0.002	0.001	-0.000	-0.000
	(0.005)	(0.004)	(0.007)	(0.007)	(0.006)	(0.006)	(0.001)	(0.001)
+1	-0.001	-0.002	0.008	0.008	-0.000	-0.001	0.002	0.002
	(0.005)	(0.005)	(0.008)	(0.008)	(0.005)	(0.005)	(0.002)	(0.002)
+2	-0.003	-0.004	0.002	0.002	0.003	0.003	0.004	0.003
	(0.004)	(0.004)	(0.008)	(0.008)	(0.006)	(0.006)	(0.002)	(0.002)
+3	-0.002	-0.002	0.006	0.006	0.001	0.002	0.002	0.002
	(0.004)	(0.005)	(0.008)	(0.008)	(0.007)	(0.007)	(0.002)	(0.001)
After +3	0.002	0.001	0.005	0.006	-0.001	-0.001	0.001	0.001
	(0.004)	(0.004)	(0.007)	(0.007)	(0.007)	(0.007)	(0.001)	(0.001)
Observations	3694	3694	272552	272552	272552	272552	268825	268825
R^2	0.911	0.912	0.048	0.053	0.089	0.095	0.072	0.073
Mean at debate day	0.321	0.321	0.641	0.641	0.157	0.157	0.004	0.004
Number of debates	56	56	56	56	56	56	56	56
Sociodemographic controls		X		X		X		X
Average pre-debate dummies -3 and -2	0.001	-0.000	0.007	0.006	0.000	0.000	0.001	0.001
P-val/Pre	0.833	0.932	0.303	0.323	0.959	0.944	0.463	0.462
Average post-debate dummies 1, 2, and 3	-0.002	-0.003	0.005	0.005	0.001	0.001	0.003	0.003
P-val/Post	0.481	0.434	0.397	0.401	0.766	0.765	0.086	0.088

Notes: Same notes as in Tables 4, 7 (columns 1 and 2) and 5 (columns 3 through 8).

D Additional Robustness Checks

D.1 Sociodemographic Controls

Table D.1: Vote choice consistency and distance to final vote shares, with sociodemographic controls

	Vote choice consistency		Vote intention		Conditional consistency		Distance between predicted and final vote shares	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time	0.0020***	0.0052***	0.0006***	0.0022***	0.0016***	0.0035***	-0.0007***	-0.0012**
	(0.0003)	(0.0009)	(0.0002)	(0.0004)	(0.0003)	(0.0008)	(0.0002)	(0.0004)
Time^2		0.0001***		0.0000***		0.0000***		-0.0000
		(0.0000)		(0.0000)		(0.0000)		(0.0000)
Observations	154186	154186	200587	200587	138454	138454	2969	2969
R^2	0.805	0.806	0.889	0.889	0.884	0.884	0.765	0.765
Mean at day -1	0.8660	0.8660	0.9180	0.9180	0.9200	0.9200	0.0353	0.0353

Notes: Each sociodemographic characteristic from Table B.2 and a dummy indicating whether it is missing are included. Other notes as in Table 1.

Table D.2: Consistency in policy peferences and issue salience, with sociodemographic controls

	Consistency in policy preferences		Consistency in issue salience		Consistency in beliefs on candidates	
	(1)	(2)	(3)	(4)	(5)	(6)
Time	-0.0000	0.0002	0.0013*	0.0016	0.0011	0.0015
	(0.0001)	(0.0004)	(0.0007)	(0.0014)	(0.0014)	(0.0011)
Time^2		0.0000		0.0000		0.0000
		(0.0000)		(0.0000)		(0.0000)
Observations	173896	173896	40517	40517	278665	278665
R^2	0.914	0.914	0.683	0.683	0.818	0.818
Mean at day -1	0.8524	0.8524	0.6876	0.6876	0.8477	0.8477

Notes: Same notes as in Tables 3 and D.1.

Table D.3: Vote share concentration and likelihood to vote for lesser-known candidates, with sociodemographic controls

	Vote share concentration		Support for challenger		Support for small candidate		Support for new candidate	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time	-0.00016	-0.00033	0.00048***	0.00095**	0.00030**	0.00053	0.00004	0.00009
	(0.00010)	(0.00023)	(0.00016)	(0.00041)	(0.00015)	(0.00037)	(0.00004)	(0.00012)
$Time^2$		-0.00000		0.00001		0.00000		0.00000
		(0.00000)		(0.00001)		(0.00000)		(0.00000)
Observations	2991	2991	149787	149787	175607	175607	147419	147419
R^2	0.990	0.990	0.647	0.647	0.212	0.212	0.117	0.117
Mean at day -1	0.33058	0.33058	0.66379	0.66379	0.12311	0.12311	0.01387	0.01387

Notes: Same notes as in Tables 4 and D.1.

D.2 Rolling Cross-sections

Table D.4: Vote choice formation and distance to final vote shares, rolling cross-sections

	Vote choice consistency		Vote intention		Conditional consistency		Distance between predicted and final vote shares	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time	0.0022***	0.0053***	0.0008***	0.0023***	0.0017***	0.0036***	-0.0007***	-0.0011**
	(0.0004)	(0.0011)	(0.0002)	(0.0005)	(0.0004)	(0.0009)	(0.0002)	(0.0005)
Time^2		0.0001***		0.0000***		0.0000***		-0.0000
		(0.0000)		(0.0000)		(0.0000)		(0.0000)
Observations	117821	117821	153819	153819	105829	105829	1295	1295
R^2	0.802	0.803	0.885	0.885	0.881	0.881	0.819	0.819
Mean at day -1	0.8711	0.8711	0.9192	0.9192	0.9237	0.9237	0.0581	0.0581

Notes: The sample is restricted to rolling cross-sections. Other notes as in Table 1.

Table D.5: Vote choice consistency across voter types, rolling cross-sections

	College degree vs. no college degree (1)	Above median age vs. below (2)	Male vs. female (3)	Above median income vs. below (4)	Not employed vs. employed (5)	All (6)
Time	0.0021***	0.0025***	0.0023***	0.0022***	0.0022***	0.0024***
	(0.0005)	(0.0005)	(0.0005)	(0.0004)	(0.0005)	(0.0005)
College degree	0.0011					-0.0006
	(0.0065)					(0.0064)
Time * College degree	-0.0006**					-0.0007**
	(0.0003)					(0.0003)
Above median age		0.0217**				0.0208*
		(0.0102)				(0.0112)
Time * Above median age		-0.0005*				-0.0005
		(0.0003)				(0.0003)
Male			0.0386***			0.0356***
			(0.0067)			(0.0067)
Time * Male			-0.0000			-0.0001
			(0.0003)			(0.0003)
Above median income				0.0137**		0.0160**
				(0.0060)		(0.0068)
Time * Above median income				-0.0000		0.0001
				(0.0002)		(0.0002)
Not employed					0.0089	0.0105*
					(0.0056)	(0.0056)
Time* Not employed					-0.0003	-0.0001
					(0.0002)	(0.0002)
Observations	117821	117821	117821	117821	117821	117821
R^2	0.802	0.803	0.803	0.802	0.802	0.803
Mean at day -1	0.8711	0.8711	0.8711	0.8711	0.8711	0.8711

Notes: Same notes as in Tables 2 and D.4.

Table D.6: Consistency in policy peferences, issue salience, and beliefs on candidates, rolling cross-sections

	Consistency in policy preferences		Consistency in issue salience		Consistency in beliefs on candidates	
	(1)	(2)	(3)	(4)	(5)	(6)
Time	-0.0000	0.0002	0.0015*	0.0020	0.0010	0.0016
	(0.0001)	(0.0004)	(0.0007)	(0.0015)	(0.0015)	(0.0011)
Time^2		0.0000		0.0000		0.0000
		(0.0000)		(0.0000)		(0.0000)
Observations	173896	173896	40517	40517	276386	276386
R^2	0.914	0.914	0.682	0.682	0.816	0.816
Mean at day -1	0.8524	0.8524	0.6876	0.6876	0.8477	0.8477

Notes: Same notes as in Tables 3 and D.4.

Table D.7: Vote share concentration and likelihood to vote for lesser-known candidates, rolling cross-sections

	Vote share concentration		Support for challenger		Support for small candidate		Support for new candidate	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time	-0.00017*	-0.00027	0.00054**	0.00073	0.00031	0.00041	0.00005	0.00008
	(0.00010)	(0.00020)	(0.00020)	(0.00045)	(0.00020)	(0.00041)	(0.00005)	(0.00016)
Time^2		-0.00000		0.00000		0.00000		0.00000
		(0.00000)		(0.00001)		(0.00000)		(0.00000)
Observations	1298	1298	109132	109132	134286	134286	107422	107422
R^2	0.995	0.995	0.670	0.670	0.195	0.195	0.119	0.119
Mean at day -1	0.54662	0.54662	0.68245	0.68245	0.11662	0.11662	0.01535	0.01535

Notes: Same notes as in Tables 4 and D.4.

Table D.8: Debates' effects on vote choice consistency, rolling cross-sections

	Vote choice consistency		Stating vote intention		Conditional consistency	
	(1)	(2)	(3)	(4)	(5)	(6)
Before -3	-0.012	-0.012	0.000	0.000	-0.013	-0.013
	(0.010)	(0.010)	(0.005)	(0.005)	(0.008)	(0.008)
-3	-0.008	-0.008	0.005	0.005	-0.009	-0.009
	(0.008)	(0.008)	(0.006)	(0.006)	(0.007)	(0.007)
-2	0.006	0.006	0.006	0.006	0.002	0.003
	(0.008)	(0.007)	(0.006)	(0.006)	(0.005)	(0.005)
0	0.006	0.007	-0.001	-0.000	0.003	0.003
	(0.009)	(0.009)	(0.007)	(0.007)	(0.006)	(0.006)
+1	-0.004	-0.003	0.004	0.005	-0.005	-0.004
	(0.010)	(0.010)	(0.005)	(0.005)	(0.006)	(0.006)
+2	-0.009	-0.009	0.002	0.002	-0.008	-0.008
	(0.009)	(0.009)	(0.006)	(0.006)	(0.006)	(0.006)
+3	0.009	0.009	0.009	0.009	0.001	0.001
	(0.010)	(0.009)	(0.005)	(0.005)	(0.008)	(0.008)
After +3	0.001	0.001	0.005	0.005	-0.003	-0.003
	(0.010)	(0.010)	(0.004)	(0.005)	(0.008)	(0.008)
Observations	188652	188652	235806	235806	174099	174099
R^2	0.054	0.058	0.051	0.059	0.041	0.043
Mean at debate day	0.812	0.812	0.906	0.906	0.876	0.876
Number of debates	25	25	25	25	25	25
Sociodemographic controls		X		X		X
Average pre-debate dummies -3 and -2	-0.001	-0.001	0.006	0.006	-0.003	-0.003
P-val/Pre	0.868	0.910	0.253	0.252	0.493	0.546
Average post-debate dummies 1, 2, and 3	-0.002	-0.001	0.005	0.005	-0.004	-0.004
P-val/Post	0.827	0.874	0.255	0.240	0.453	0.498

Notes: The sample is restricted to rolling cross-sections. Other notes as in Table 5.

Table D.9: Debates' effects on consistency in policy preferences, issue salience, and beliefs on candidates, rolling cross-sections

	Consistency in policy preferences		Consistency in issue salience		Consistency in beliefs on candidates	
	(1)	(2)	(3)	(4)	(5)	(6)
Before -3	-0.000	-0.000	-0.006	-0.006	-0.001	-0.001
	(0.002)	(0.002)	(0.010)	(0.009)	(0.002)	(0.002)
-3	-0.005	-0.004	-0.006	-0.005	0.002	0.003
	(0.003)	(0.003)	(0.011)	(0.011)	(0.004)	(0.004)
-2	-0.002	-0.002	-0.015	-0.014	-0.002	-0.002
	(0.002)	(0.002)	(0.014)	(0.014)	(0.003)	(0.003)
0	0.000	0.000	0.002	0.003	0.004	0.004
	(0.001)	(0.001)	(0.008)	(0.008)	(0.004)	(0.004)
+1	0.002	0.002	-0.016	-0.015	-0.002	-0.001
	(0.002)	(0.002)	(0.012)	(0.011)	(0.003)	(0.002)
+2	0.001	0.001	-0.004	-0.004	0.007	0.007
	(0.004)	(0.004)	(0.010)	(0.010)	(0.004)	(0.004)
+3	0.002	0.002	-0.011	-0.011	-0.001	-0.000
	(0.003)	(0.003)	(0.014)	(0.014)	(0.003)	(0.003)
After +3	-0.002	-0.002	-0.005	-0.005	0.006	0.006
	(0.002)	(0.002)	(0.006)	(0.006)	(0.004)	(0.004)
Observations	270786	270786	45207	45207	469818	469818
R^2	0.048	0.052	0.025	0.032	0.040	0.047
Mean at debate day	0.862	0.862	0.717	0.717	0.846	0.846
Number of debates	8	8	6	6	11	11
Sociodemographic controls		X		X		X
Average pre-debate dummies -3 and -2	-0.003	-0.003	-0.010	-0.009	0.000	0.000
P-val/Pre	0.184	0.166	0.427	0.446	0.896	0.920
Average post-debate dummies 1, 2, and 3	0.002	0.002	-0.011	-0.010	0.001	0.002
P-val/Post	0.499	0.482	0.360	0.385	0.472	0.307

Notes: Same notes as in Tables 6 and D.8.

Table D.10: Debates' effects on aggregate vote shares, rolling cross-sections

	Distance between predicted and final vote shares		Daily change in predicted vote shares	
	(1)	(2)	(3)	(4)
Before -3	0.007	0.005	-0.012*	-0.012*
	(0.005)	(0.005)	(0.007)	(0.007)
-3	0.004	0.004	-0.014	-0.013
	(0.004)	(0.004)	(0.011)	(0.011)
-2	0.004	0.003	-0.008	-0.007
	(0.004)	(0.004)	(0.005)	(0.006)
0	-0.000	-0.002	-0.025***	-0.024***
	(0.004)	(0.004)	(0.007)	(0.007)
+1	0.002	0.001	-0.018*	-0.018*
	(0.004)	(0.004)	(0.009)	(0.009)
+2	0.005	0.003	-0.003	-0.003
	(0.005)	(0.005)	(0.011)	(0.011)
+3	0.003	0.003	-0.006	-0.006
	(0.006)	(0.006)	(0.009)	(0.009)
After +3	0.005	0.003	-0.013*	-0.013*
	(0.006)	(0.005)	(0.007)	(0.006)
Observations	1509	1509	1485	1485
R^2	0.696	0.702	0.660	0.666
Mean at debate day	0.042	0.042	0.062	0.062
Number of debates	25	25	25	25
Sociodemographic controls		X		X
Average pre-debate dummies -3 and -2	0.004	0.004	-0.011	-0.010
P-val/Pre	0.206	0.236	0.148	0.150
Average post-debate dummies 1, 2, and 3	0.003	0.003	-0.009	-0.009
P-val/Post	0.445	0.555	0.326	0.334

Notes: Same notes as in Tables 7 and D.8.

Table D.11: Debates' effects on vote choice consistency by debate and election type, rolling cross-sections

	First vs next debate (1)	Close vs less-close race (2)	Fluctuating vs stable race (3)	U.S. vs other countries (4)	Plurality vs proportional rule (5)
-3*type-b	-0.015*	-0.008	0.013	-0.010	-0.041
	(0.008)	(0.009)	(0.008)	(0.010)	(0.029)
-2*type-b	0.008	0.002	-0.004	0.000	-0.026
	(0.008)	(0.010)	(0.044)	(0.008)	(0.028)
0*type-b	0.005	0.000	-0.017	0.010	-0.023
	(0.011)	(0.007)	(0.032)	(0.012)	(0.032)
+1*type-b	0.003	0.003	-0.007	-0.006	-0.085**
	(0.008)	(0.010)	(0.035)	(0.011)	(0.036)
+2*type-b	-0.012	-0.011	-0.038***	-0.010	-0.076**
	(0.010)	(0.011)	(0.013)	(0.011)	(0.031)
+3*type-b	0.000	0.006	0.003	0.009	-0.016
	(0.010)	(0.011)	(0.029)	(0.012)	(0.046)
-3*type-a	0.013	0.012	-0.010	0.002	-0.005
	(0.018)	(0.007)	(0.010)	(0.016)	(0.008)
-2*type-a	-0.001	-0.078***	0.000	0.026*	0.009
	(0.015)	(0.004)	(0.008)	(0.014)	(0.007)
0*type-a	0.013	0.011	0.003	-0.006	0.010
	(0.017)	(0.034)	(0.007)	(0.016)	(0.010)
+1*type-a	-0.022	-0.101***	-0.000	0.003	0.005
	(0.029)	(0.029)	(0.009)	(0.018)	(0.009)
+2*type-a	-0.001	-0.040	-0.007	-0.009	-0.003
	(0.019)	(0.027)	(0.011)	(0.014)	(0.009)
+3*type-a	0.035	-0.048	0.004	0.006	0.012
	(0.024)	(0.068)	(0.012)	(0.011)	(0.009)
Observations	188652	142278	142278	188652	188652
R^2	0.058	0.050	0.050	0.058	0.058
Mean at debate day	0.229	0.018	0.899	0.158	0.922
Number of debates	25	15	15	25	25
Sociodemographic controls	X	X	X	X	X
Average pre-debate dummies for type-b	-0.004	-0.003	0.004	-0.005	-0.034
P-val/Pre*type-b	0.610	0.749	0.862	0.566	0.210
Average post-debate dummies for type-b	-0.003	-0.001	-0.014	-0.002	-0.059
P-val/Post*type-b	0.668	0.933	0.507	0.799	0.059
Average pre-debate dummies for type-a	0.006	-0.033	-0.005	0.014	0.002
P-val/Pre*type-a	0.705	0.000	0.564	0.250	0.798
Average post-debate dummies for type-a	0.004	-0.063	-0.001	-0.000	0.005
P-val/Post*type-a	0.849	0.000	0.909	0.990	0.471

Notes: Same notes as in Tables 8 and D.8.

Table D.12: Debates' effects on vote choice consistency by voter type, rolling cross-sections

	Debate watchers vs non-watchers (1)	Strong vs weak party identification (2)	College degree vs no college degree (3)	Above median age vs below (4)	Male vs female (5)	Above median income vs below (6)	Not employed vs employed (7)
-3*type-b	-0.064**	-0.006	-0.003	-0.006	-0.021*	-0.018	-0.000
	(0.021)	(0.012)	(0.013)	(0.011)	(0.012)	(0.011)	(0.011)
-2*type-b	-0.080**	0.009	0.014	-0.000	0.008	0.009	0.001
	(0.031)	(0.011)	(0.009)	(0.011)	(0.012)	(0.010)	(0.012)
0*type-b	-0.169**	0.004	0.016	0.003	-0.008	-0.008	0.013
	(0.072)	(0.013)	(0.015)	(0.015)	(0.015)	(0.016)	(0.011)
+1*type-b	-0.184**	-0.002	0.003	-0.007	-0.016	0.004	-0.014
	(0.077)	(0.016)	(0.012)	(0.013)	(0.014)	(0.013)	(0.013)
+2*type-b	-0.158***	-0.005	-0.012	-0.008	-0.018	-0.013	-0.021*
	(0.043)	(0.013)	(0.011)	(0.012)	(0.014)	(0.014)	(0.012)
+3*type-b	-0.060**	0.002	0.002	0.011	0.005	-0.004	0.008
	(0.022)	(0.015)	(0.010)	(0.014)	(0.011)	(0.011)	(0.012)
-3*type-a	0.008	-0.002	-0.019*	-0.010	0.006	-0.003	-0.018
	(0.009)	(0.011)	(0.010)	(0.011)	(0.010)	(0.010)	(0.013)
-2*type-a	-0.004	-0.010	0.009	0.010	0.005	0.012	0.011
	(0.005)	(0.011)	(0.012)	(0.009)	(0.007)	(0.008)	(0.011)
0*type-a	0.007	0.002	-0.013	0.011	0.023**	0.019*	-0.012
	(0.012)	(0.010)	(0.013)	(0.013)	(0.010)	(0.010)	(0.015)
+1*type-a	0.006	-0.006	-0.010	0.000	0.010	0.003	0.001
	(0.013)	(0.010)	(0.016)	(0.012)	(0.011)	(0.012)	(0.013)
+2*type-a	-0.000	-0.007	-0.005	-0.011	0.000	0.003	-0.008
	(0.006)	(0.010)	(0.012)	(0.014)	(0.013)	(0.012)	(0.015)
+3*type-a	0.008	0.000	-0.006	0.007	0.014	0.009	-0.003
	(0.007)	(0.011)	(0.014)	(0.010)	(0.012)	(0.012)	(0.012)
Observations	56658	147322	140810	188319	188648	153091	152254
R^2	0.077	0.065	0.054	0.058	0.058	0.048	0.067
Mean at debate day	0.953	0.326	0.396	0.530	0.505	0.576	0.403
Number of debates	9	20	20	25	25	23	22
Sociodemographic controls	X	X	X	X	X	X	X
Average pre-debate dummies for type-b	-0.072	0.002	0.006	-0.003	-0.006	-0.005	0.001
P-val/Pre*type-b	0.019	0.888	0.534	0.748	0.577	0.612	0.943
Average post-debate dummies for type-b	-0.134	-0.001	-0.002	-0.001	-0.010	-0.004	-0.009
P-val/Post*type-b	0.018	0.906	0.782	0.887	0.317	0.675	0.299
Average pre-debate dummies for type-a	0.002	-0.006	-0.005	0.000	0.005	0.004	-0.003
P-val/Pre*type-a	0.756	0.508	0.584	0.988	0.437	0.584	0.764
Average post-debate dummies for type-a	0.005	-0.004	-0.007	-0.001	0.008	0.005	-0.003
P-val/Post*type-a	0.486	0.623	0.517	0.917	0.413	0.599	0.767

Notes: Same notes as in Tables 9 and D.8.

D.3 Standard Errors Adjusted for Clustering at the Election Date Level

Table D.13: Vote choice consistency and distance to final vote shares, election date clusters

	Vote choice consistency		Vote intention		Conditional consistency		Distance between predicted and final vote shares	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time	0.0020***	0.0051***	0.0006***	0.0022***	0.0016***	0.0035***	-0.0006***	-0.0011**
	(0.0003)	(0.0009)	(0.0002)	(0.0004)	(0.0003)	(0.0008)	(0.0002)	(0.0005)
Time^2		0.0001***		0.0000***		0.0000***		-0.0000
		(0.0000)		(0.0000)		(0.0000)		(0.0000)
Observations	154186	154186	200587	200587	138454	138454	2969	2969
R^2	0.804	0.804	0.888	0.889	0.883	0.883	0.764	0.764
Mean at day -1	0.8660	0.8660	0.9180	0.9180	0.9200	0.9200	0.0353	0.0353

Notes: Standard errors are adjusted for clustering at the election date level. Other notes as in Table 1.

Table D.14: Vote choice consistency across voter types, election date clusters

	College degree vs. no college degree (1)	Above median age vs. below (2)	Male vs. female (3)	Above median income vs. below (4)	Not employed vs. employed (5)	All (6)
Time	0.0018***	0.0022***	0.0019***	0.0017***	0.0020***	0.0019***
	(0.0003)	(0.0004)	(0.0004)	(0.0003)	(0.0004)	(0.0004)
College degree	0.0083					0.0071
	(0.0059)					(0.0060)
Time * College degree	-0.0004**					-0.0005**
	(0.0002)					(0.0002)
Above median age		0.0248**				0.0240**
		(0.0097)				(0.0103)
Time * Above median age		-0.0005**				-0.0005*
		(0.0002)				(0.0002)
Male			0.0383***			0.0354***
			(0.0059)			(0.0058)
Time * Male			0.0001			0.0001
			(0.0002)			(0.0002)
Above median income				0.0174**		0.0181**
				(0.0070)		(0.0071)
Time * Above median income				0.0003		0.0003
				(0.0003)		(0.0002)
Not employed					0.0095*	0.0115**
					(0.0051)	(0.0051)
Time* Not employed					-0.0002	-0.0000
					(0.0002)	(0.0002)
Observations	154186	154186	154186	154186	154186	154186
R^2	0.804	0.805	0.804	0.804	0.804	0.805
Mean at day -1	0.8660	0.8660	0.8660	0.8660	0.8660	0.8660

Notes: Same notes as in Tables 2 and D.13.

Table D.15: Consistency in policy preferences, issue salience, and beliefs on candidates, election date clusters

	Consistency in policy preferences		Consistency in issue salience		Consistency in beliefs on candidates	
	(1)	(2)	(3)	(4)	(5)	(6)
Time	-0.0000	0.0002	0.0015*	0.0020	0.0010	0.0015
	(0.0001)	(0.0004)	(0.0007)	(0.0015)	(0.0014)	(0.0011)
Time^2		0.0000		0.0000		0.0000
		(0.0000)		(0.0000)		(0.0000)
Observations	173896	173896	40517	40517	278665	278665
R^2	0.914	0.914	0.682	0.682	0.817	0.817
Mean at day -1	0.8524	0.8524	0.6876	0.6876	0.8477	0.8477

Notes: Same notes as in Tables 3 and D.13.

Table D.16: Vote share concentration and likelihood to vote for lesser-known candidates, election date clusters

	Vote share concentration		Support for challenger		Support for small candidate		Support for new candidate	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time	-0.00017	-0.00035	0.00050***	0.00101**	0.00033**	0.00058	0.00004	0.00009
	(0.00011)	(0.00024)	(0.00017)	(0.00044)	(0.00016)	(0.00040)	(0.00004)	(0.00012)
Time^2		-0.00000		0.00001		0.00000		0.00000
		(0.00000)		(0.00001)		(0.00001)		(0.00000)
Observations	2991	2991	149787	149787	175607	175607	147419	147419
R^2	0.990	0.990	0.646	0.646	0.208	0.208	0.116	0.116
Mean at day -1	0.33058	0.33058	0.66379	0.66379	0.12311	0.12311	0.01387	0.01387

Notes: Same notes as in Tables 4 and D.13.

Table D.17: Debates' effects on vote choice consistency, election date clusters

	Vote choice consistency		Stating vote intention		Conditional consistency	
	(1)	(2)	(3)	(4)	(5)	(6)
Before -3	-0.014*	-0.014*	-0.001	-0.000	-0.016**	-0.016**
	(0.007)	(0.007)	(0.004)	(0.004)	(0.006)	(0.006)
-3	-0.010*	-0.010*	0.001	0.001	-0.010*	-0.010*
	(0.005)	(0.005)	(0.004)	(0.004)	(0.005)	(0.005)
-2	0.003	0.004	0.006	0.006	-0.001	-0.001
	(0.007)	(0.007)	(0.004)	(0.005)	(0.005)	(0.005)
0	0.005	0.006	-0.001	-0.000	0.000	0.001
	(0.006)	(0.006)	(0.004)	(0.004)	(0.005)	(0.005)
+1	-0.005	-0.004	0.002	0.002	-0.004	-0.003
	(0.007)	(0.007)	(0.004)	(0.004)	(0.005)	(0.005)
+2	-0.011	-0.010	-0.001	-0.001	-0.009*	-0.009*
	(0.007)	(0.007)	(0.004)	(0.004)	(0.005)	(0.005)
+3	0.005	0.005	0.006*	0.006*	0.000	0.000
	(0.007)	(0.008)	(0.003)	(0.003)	(0.006)	(0.006)
After +3	-0.001	-0.001	0.003	0.003	-0.004	-0.004
	(0.009)	(0.009)	(0.003)	(0.003)	(0.007)	(0.007)
Observations	240799	240799	301697	301697	221995	221995
R^2	0.062	0.066	0.065	0.072	0.043	0.046
Mean at debate day	0.816	0.816	0.908	0.908	0.881	0.881
Number of debates	56	56	56	56	56	56
Sociodemographic controls		X		X		X
Average pre-debate dummies -3 and -2	-0.003	-0.003	0.004	0.004	-0.006	-0.005
P-val/Pre	0.493	0.547	0.244	0.226	0.163	0.184
Average post-debate dummies 1, 2, and 3	-0.003	-0.003	0.002	0.003	-0.004	-0.004
P-val/Post	0.578	0.623	0.407	0.369	0.391	0.418

Notes: Standard errors are adjusted for clustering at the election date level. Other notes as in Table 5.

Table D.18: Debates' effects on consistency in policy preferences, issue salience, and beliefs on candidates, election date clusters

	Consistency in policy preferences		Consistency in issue salience		Consistency in beliefs on candidates	
	(1)	(2)	(3)	(4)	(5)	(6)
Before -3	-0.000	-0.000	-0.006	-0.006	-0.002	-0.002
	(0.001)	(0.001)	(0.009)	(0.008)	(0.002)	(0.002)
-3	-0.005	-0.004	-0.006	-0.005	0.003	0.003
	(0.004)	(0.004)	(0.008)	(0.008)	(0.002)	(0.002)
-2	-0.002	-0.002	-0.015	-0.014	-0.002	-0.003
	(0.002)	(0.002)	(0.018)	(0.017)	(0.003)	(0.003)
0	0.000	0.000	0.002	0.003	0.003	0.003
	(0.000)	(0.000)	(0.003)	(0.003)	(0.003)	(0.003)
+1	0.002	0.002	-0.016	-0.015	-0.003	-0.002
	(0.001)	(0.001)	(0.018)	(0.017)	(0.003)	(0.002)
+2	0.001	0.001	-0.004	-0.004	0.007	0.007
	(0.002)	(0.002)	(0.005)	(0.005)	(0.004)	(0.004)
+3	0.002	0.002	-0.011	-0.011	-0.000	-0.000
	(0.004)	(0.004)	(0.014)	(0.013)	(0.003)	(0.002)
After +3	-0.002	-0.002	-0.005	-0.005	0.006	0.006
	(0.001)	(0.001)	(0.005)	(0.005)	(0.004)	(0.004)
Observations	270786	270786	45207	45207	478934	478934
R^2	0.048	0.052	0.025	0.032	0.041	0.048
Mean at debate day	0.862	0.862	0.717	0.717	0.844	0.844
Number of debates	8	8	6	6	15	15
Sociodemographic controls		X		X		X
Average pre-debate dummies -3 and -2	-0.003	-0.003	-0.010	-0.009	0.000	-0.000
P-val/Pre	0.330	0.321	0.503	0.516	0.951	0.988
Average post-debate dummies 1, 2, and 3	0.002	0.002	-0.011	-0.010	0.001	0.002
P-val/Post	0.464	0.456	0.474	0.489	0.158	0.113

Notes: Same notes as in Tables 6 and D.17.

Table D.19: Debates' effects on aggregate vote shares, election date clusters

	Distance between predicted and final vote shares		Daily change in predicted vote shares	
	(1)	(2)	(3)	(4)
Before -3	0.008*	0.007*	-0.009	-0.009
	(0.004)	(0.004)	(0.007)	(0.007)
-3	0.004	0.004	-0.010	-0.010
	(0.003)	(0.003)	(0.008)	(0.007)
-2	0.005	0.004	-0.007	-0.007
	(0.004)	(0.004)	(0.004)	(0.004)
0	0.003	0.002	-0.023***	-0.022***
	(0.004)	(0.004)	(0.007)	(0.007)
+1	0.004	0.003	-0.015*	-0.015*
	(0.005)	(0.004)	(0.008)	(0.008)
+2	0.004	0.003	0.001	0.000
	(0.004)	(0.004)	(0.010)	(0.010)
+3	0.003	0.002	-0.010	-0.011
	(0.004)	(0.003)	(0.007)	(0.007)
After +3	0.007	0.006	-0.011*	-0.011*
	(0.005)	(0.005)	(0.006)	(0.006)
Observations	3693	3693	3630	3630
R^2	0.567	0.572	0.483	0.489
Mean at debate day	0.047	0.047	0.076	0.076
Number of debates	56	56	56	56
Sociodemographic controls		X		X
Average pre-debate dummies -3 and -2	0.004	0.004	-0.008	-0.009
P-val/Pre	0.160	0.173	0.087	0.060
Average post-debate dummies 1, 2, and 3	0.003	0.003	-0.008	-0.008
P-val/Post	0.316	0.360	0.282	0.226

Notes: Same notes as in Tables 7 and D.17.

Table D.20: Debates' effects on vote choice consistency by debate and election type, election date clusters

	First vs next debate (1)	Close vs less-close race (2)	Fluctuating vs stable race (3)	U.S. vs other countries (4)	Plurality vs proportional rule (5)
-3*type-b	-0.011**	-0.008	0.001	-0.014*	-0.041*
	(0.005)	(0.009)	(0.010)	(0.008)	(0.022)
-2*type-b	0.009	0.000	-0.009	-0.001	-0.023
	(0.007)	(0.010)	(0.021)	(0.007)	(0.022)
0*type-b	0.008	-0.001	0.001	0.008	-0.012
	(0.008)	(0.006)	(0.013)	(0.010)	(0.028)
+1*type-b	0.003	0.001	-0.010	-0.006	-0.043
	(0.005)	(0.009)	(0.014)	(0.010)	(0.035)
+2*type-b	-0.009*	-0.011	-0.027***	-0.013	-0.056**
	(0.005)	(0.009)	(0.008)	(0.009)	(0.024)
+3*type-b	0.001	0.002	0.004	0.004	-0.013
	(0.007)	(0.009)	(0.016)	(0.010)	(0.030)
-3*type-a	-0.008	-0.008	-0.011	0.001	-0.005
	(0.017)	(0.012)	(0.010)	(0.007)	(0.004)
-2*type-a	-0.013	-0.032**	-0.002	0.013	0.007
	(0.015)	(0.013)	(0.007)	(0.011)	(0.007)
0*type-a	-0.001	0.020	0.002	-0.001	0.009
	(0.014)	(0.013)	(0.007)	(0.006)	(0.007)
+1*type-a	-0.023	-0.022	0.000	-0.001	0.003
	(0.021)	(0.022)	(0.008)	(0.006)	(0.006)
+2*type-a	-0.015	-0.029**	-0.008	-0.007	-0.004
	(0.018)	(0.014)	(0.010)	(0.008)	(0.006)
+3*type-a	0.012	0.002	0.000	0.006	0.009
	(0.019)	(0.021)	(0.010)	(0.005)	(0.006)
Observations	240799	180124	180124	240799	240799
R^2	0.066	0.062	0.062	0.066	0.066
Mean at debate day	0.247	0.140	0.773	0.268	0.889
Number of debates	56	39	39	56	56
Sociodemographic controls	X	X	X	X	X
Average pre-debate dummies for type-b	-0.001	-0.004	-0.004	-0.007	-0.032
P-val/Pre*type-b	0.786	0.668	0.747	0.286	0.133
Average post-debate dummies for type-b	-0.002	-0.003	-0.011	-0.005	-0.038
P-val/Post*type-b	0.682	0.752	0.229	0.560	0.119
Average pre-debate dummies for type-a	-0.010	-0.020	-0.007	0.007	0.001
P-val/Pre*type-a	0.501	0.017	0.432	0.213	0.775
Average post-debate dummies for type-a	-0.009	-0.016	-0.002	-0.001	0.003
P-val/Post*type-a	0.620	0.119	0.797	0.916	0.615

Notes: Same notes as in Tables 8 and D.17.

Table D.21: Debates' effect on vote choice consistency by voter type, election date clusters

	Debate watchers vs non-watchers (1)	Strong vs weak party identification (2)	College degree vs no college degree (3)	Above median age vs below (4)	Male vs female (5)	Above median income vs below (6)	Not employed vs employed (7)
-3*type-b	-0.067**	-0.014*	-0.008	-0.009	-0.019***	-0.015*	-0.003
	(0.027)	(0.007)	(0.010)	(0.007)	(0.006)	(0.008)	(0.007)
-2*type-b	-0.071**	0.009	0.004	0.002	0.006	0.006	0.001
	(0.023)	(0.007)	(0.010)	(0.012)	(0.010)	(0.006)	(0.011)
0*type-b	-0.125*	-0.005	0.010	0.004	-0.006	-0.005	0.009
	(0.055)	(0.011)	(0.010)	(0.006)	(0.011)	(0.013)	(0.007)
+1*type-b	-0.173**	-0.007	-0.003	-0.006	-0.011	0.002	-0.009
	(0.064)	(0.011)	(0.008)	(0.009)	(0.008)	(0.009)	(0.010)
+2*type-b	-0.129**	-0.009	-0.021*	-0.008	-0.017	-0.014*	-0.021**
	(0.052)	(0.007)	(0.010)	(0.010)	(0.011)	(0.008)	(0.010)
+3*type-b	-0.055**	-0.005	-0.000	0.010	0.004	-0.009	0.007
	(0.021)	(0.014)	(0.009)	(0.009)	(0.008)	(0.011)	(0.011)
-3*type-a	0.014	-0.003	-0.021***	-0.011	-0.000	-0.001	-0.018
	(0.012)	(0.009)	(0.005)	(0.010)	(0.008)	(0.008)	(0.011)
-2*type-a	0.001	-0.006	0.009	0.004	0.001	0.007	0.007
	(0.006)	(0.009)	(0.013)	(0.008)	(0.007)	(0.010)	(0.013)
0*type-a	0.011	-0.002	-0.009	0.007	0.018***	0.010	-0.012
	(0.009)	(0.007)	(0.006)	(0.013)	(0.006)	(0.011)	(0.013)
+1*type-a	0.014	-0.007	-0.010	-0.002	0.003	0.005	-0.004
	(0.010)	(0.009)	(0.013)	(0.011)	(0.009)	(0.011)	(0.012)
+2*type-a	0.008	-0.009	-0.000	-0.013	-0.003	-0.001	-0.010
	(0.007)	(0.012)	(0.011)	(0.013)	(0.011)	(0.014)	(0.012)
+3*type-a	0.017	-0.002	-0.013	0.001	0.006	0.005	-0.012
	(0.012)	(0.015)	(0.009)	(0.008)	(0.009)	(0.013)	(0.011)
Observations	67482	163089	192372	240019	240683	191366	191601
R^2	0.077	0.064	0.064	0.066	0.066	0.061	0.075
Mean at debate day	0.936	0.331	0.374	0.522	0.496	0.548	0.388
Number of debates	19	36	51	56	56	50	48
Sociodemographic controls	X	X	X	X	X	X	X
Average pre-debate dummies for type-b	-0.069	-0.003	-0.002	-0.003	-0.006	-0.005	-0.001
P-val/Pre*type-b	0.014	0.672	0.816	0.679	0.373	0.412	0.876
Average post-debate dummies for type-b	-0.119	-0.007	-0.008	-0.001	-0.008	-0.007	-0.008
P-val/Post*type-b	0.022	0.459	0.263	0.870	0.226	0.283	0.310
Average pre-debate dummies for type-a	0.008	-0.005	-0.006	-0.004	0.000	0.003	-0.006
P-val/Pre*type-a	0.309	0.392	0.451	0.653	0.950	0.720	0.574
Average post-debate dummies for type-a	0.013	-0.006	-0.008	-0.005	0.002	0.003	-0.008
P-val/Post*type-a	0.193	0.603	0.370	0.636	0.799	0.795	0.412

Notes: Same notes as in Tables 9 and D.17.

D.4 Event Study with Balanced Panel on Three-Day Window

Table D.22: Debates' effects on vote choice consistency, balanced panel

	Vote choice consistency		Stating vote intention		Conditional consistency	
	(1)	(2)	(3)	(4)	(5)	(6)
-3	-0.003	-0.003	0.008	0.008	-0.013	-0.013
	(0.011)	(0.011)	(0.006)	(0.006)	(0.009)	(0.009)
-2	0.003	0.003	0.006	0.006	-0.007	-0.007
	(0.012)	(0.012)	(0.008)	(0.008)	(0.007)	(0.007)
0	0.003	0.004	-0.006	-0.006	-0.006	-0.005
	(0.014)	(0.014)	(0.007)	(0.007)	(0.011)	(0.011)
+1	-0.003	-0.003	0.009	0.009	-0.010	-0.009
	(0.014)	(0.014)	(0.007)	(0.007)	(0.009)	(0.009)
+2	-0.017	-0.018	0.007	0.006	-0.022**	-0.022**
	(0.012)	(0.012)	(0.005)	(0.005)	(0.010)	(0.010)
+3	-0.007	-0.007	0.009*	0.009*	-0.018*	-0.019*
	(0.012)	(0.012)	(0.005)	(0.005)	(0.010)	(0.010)
Observations	38071	38071	46710	46710	35386	35386
R^2	0.045	0.048	0.050	0.056	0.037	0.039
Mean at debate day	0.820	0.820	0.914	0.914	0.881	0.881
Number of debates	53	53	53	53	53	53
Sociodemographic controls		X		X		X
Average pre-debate dummies -3 and -2	0.000	0.000	0.007	0.007	-0.010	-0.010
P-val/Pre	0.981	0.999	0.236	0.241	0.157	0.160
Average post-debate dummies 1, 2, and 3	-0.009	-0.009	0.008	0.008	-0.017	-0.017
P-val/Post	0.425	0.419	0.119	0.122	0.061	0.057

Notes: The sample is restricted to debates for which respondents are surveyed on each day within the -3/+3-days window. Respondents surveyed earlier than three days before the debate or later than three days after the debate are excluded. Debate fixed effects are replaced by election fixed effects. Other notes as in Table 5.

Table D.23: Debates' effects on aggregate vote shares, balanced panel

	Distance between predicted and final vote shares		Daily change in predicted vote shares	
	(1)	(2)	(3)	(4)
-3	0.006	0.007	-0.019	-0.017
	(0.007)	(0.007)	(0.015)	(0.013)
-2	0.006	0.006	-0.006	-0.010
	(0.004)	(0.004)	(0.009)	(0.009)
0	0.003	0.004	-0.027*	-0.023*
	(0.008)	(0.008)	(0.014)	(0.013)
+1	0.001	0.001	-0.022	-0.022
	(0.008)	(0.009)	(0.014)	(0.013)
+2	0.001	0.001	0.004	0.002
	(0.007)	(0.007)	(0.013)	(0.014)
+3	0.005	0.007	-0.013	-0.015
	(0.007)	(0.007)	(0.017)	(0.016)
Observations	476	476	469	469
R^2	0.614	0.620	0.631	0.652
Mean at debate day	0.046	0.046	0.078	0.078
Number of debates	53	53	52	52
Sociodemographic controls		X		X
Average pre-debate dummies -3 and -2	0.006	0.006	-0.013	-0.013
P-val/Pre	0.200	0.186	0.193	0.162
Average post-debate dummies 1, 2, and 3	0.002	0.003	-0.010	-0.012
P-val/Post	0.707	0.679	0.412	0.347

Notes: Same notes as in Tables 7 and D.22.

Table D.24: Debates' effects on vote choice consistency by debate and election type, balanced panel

	First vs next debate (1)	Close vs less-close race (2)	Fluctuating vs stable race (3)	U.S. vs other countries (4)	Plurality vs proportional rule (5)
-3*type-b	-0.008	-0.020	0.005	-0.010	-0.042
	(0.011)	(0.016)	(0.016)	(0.020)	(0.025)
-2*type-b	0.012	0.002	-0.003	-0.005	-0.027
	(0.012)	(0.021)	(0.025)	(0.017)	(0.028)
0*type-b	0.008	-0.027*	0.000	0.015	-0.031
	(0.016)	(0.015)	(0.018)	(0.028)	(0.028)
+1*type-b	0.008	-0.018	-0.026	-0.011	-0.034
	(0.015)	(0.022)	(0.022)	(0.022)	(0.035)
+2*type-b	-0.015	-0.031**	-0.032*	-0.026	-0.054**
	(0.014)	(0.015)	(0.017)	(0.017)	(0.026)
+3*type-b	-0.011	-0.034**	-0.006	-0.010	-0.019
	(0.015)	(0.016)	(0.023)	(0.022)	(0.040)
-3*type-a	-0.015	0.018	-0.026	0.007	0.003
	(0.014)	(0.027)	(0.024)	(0.013)	(0.011)
-2*type-a	-0.025*	-0.040**	-0.008	0.011	0.009
	(0.014)	(0.018)	(0.022)	(0.014)	(0.012)
0*type-a	-0.016	0.018	-0.030**	-0.009	0.008
	(0.016)	(0.019)	(0.015)	(0.011)	(0.015)
+1*type-a	-0.029**	-0.038	-0.015	0.001	0.004
	(0.014)	(0.023)	(0.024)	(0.015)	(0.013)
+2*type-a	-0.027*	-0.047**	-0.037**	-0.010	-0.012
	(0.014)	(0.022)	(0.016)	(0.014)	(0.013)
+3*type-a	-0.005	0.013	-0.042***	0.000	-0.004
	(0.015)	(0.024)	(0.015)	(0.011)	(0.012)
Observations	38071	30744	30744	38071	38071
R^2	0.048	0.037	0.036	0.048	0.048
Mean at debate day	0.234	0.120	0.778	0.275	0.914
Number of debates	53	37	37	53	53
Sociodemographic controls	X	X	X	X	X
Average pre-debate dummies for type-b	0.002	-0.009	0.001	-0.008	-0.035
P-val/Pre*type-b	0.837	0.617	0.961	0.661	0.155
Average post-debate dummies for type-b	-0.006	-0.028	-0.021	-0.016	-0.036
P-val/Post*type-b	0.630	0.092	0.262	0.377	0.220
Average pre-debate dummies for type-a	-0.020	-0.011	-0.017	0.009	0.006
P-val/Pre*type-a	0.118	0.581	0.405	0.440	0.562
Average post-debate dummies for type-a	-0.020	-0.024	-0.031	-0.003	-0.004
P-val/Post*type-a	0.072	0.175	0.021	0.787	0.720

Notes: Same notes as in Tables 8 and D.22.

Table D.25: Debates' effects on vote choice consistency by voter type, balanced panel

	Debate watchers vs non-watchers (1)	Strong vs weak party identification (2)	College degree vs no college degree (3)	Above median age vs below (4)	Male vs female (5)	Above median income vs below (6)	Not employed vs employed (7)
-3*type-b	-0.071*	-0.028	-0.004	-0.008	-0.014	-0.010	0.005
	(0.040)	(0.019)	(0.012)	(0.013)	(0.013)	(0.015)	(0.011)
-2*type-b	-0.038	0.011	0.002	-0.005	0.004	0.003	-0.001
	(0.030)	(0.021)	(0.012)	(0.014)	(0.014)	(0.013)	(0.012)
0*type-b	-0.107**	-0.011	0.011	-0.003	-0.010	-0.011	0.002
	(0.049)	(0.027)	(0.013)	(0.016)	(0.017)	(0.019)	(0.013)
+1*type-b	-0.144**	-0.025	0.001	-0.010	-0.012	0.002	-0.005
	(0.065)	(0.021)	(0.014)	(0.016)	(0.016)	(0.016)	(0.015)
+2*type-b	-0.147**	-0.035*	-0.023	-0.022	-0.027*	-0.025	-0.022
	(0.067)	(0.020)	(0.016)	(0.014)	(0.014)	(0.015)	(0.014)
+3*type-b	-0.034	-0.040**	-0.004	-0.003	-0.008	-0.026**	-0.002
	(0.037)	(0.018)	(0.011)	(0.016)	(0.013)	(0.012)	(0.016)
-3*type-a	0.064**	-0.016	-0.022*	-0.005	0.006	-0.000	-0.005
	(0.026)	(0.016)	(0.012)	(0.014)	(0.014)	(0.013)	(0.017)
-2*type-a	0.034	-0.007	-0.001	0.003	-0.001	0.004	0.014
	(0.027)	(0.017)	(0.015)	(0.013)	(0.013)	(0.014)	(0.016)
0*type-a	0.042*	-0.011	-0.015	0.003	0.019	0.004	-0.014
	(0.022)	(0.022)	(0.015)	(0.017)	(0.015)	(0.014)	(0.019)
+1*type-a	0.041	-0.021	-0.013	-0.000	0.005	0.002	0.004
	(0.036)	(0.016)	(0.018)	(0.015)	(0.015)	(0.016)	(0.018)
+2*type-a	0.023	-0.030*	-0.006	-0.022	-0.009	-0.014	-0.005
	(0.033)	(0.016)	(0.015)	(0.014)	(0.015)	(0.015)	(0.017)
+3*type-a	0.041*	-0.032*	-0.024	-0.013	-0.008	-0.016	-0.017
	(0.022)	(0.017)	(0.015)	(0.013)	(0.015)	(0.016)	(0.017)
Observations	12319	27952	28055	37678	37811	30162	27939
R^2	0.056	0.052	0.052	0.047	0.047	0.043	0.060
Mean at debate day	0.942	0.330	0.374	0.517	0.499	0.545	0.377
Number of debates	19	36	48	53	53	47	45
Sociodemographic controls	X	X	X	X	X	X	X
Average pre-debate dummies for type-b	-0.054	-0.008	-0.001	-0.007	-0.005	-0.004	0.002
P-val/Pre*type-b	0.104	0.649	0.905	0.568	0.691	0.751	0.844
Average post-debate dummies for type-b	-0.108	-0.034	-0.009	-0.012	-0.015	-0.016	-0.010
P-val/Post*type-b	0.048	0.064	0.466	0.381	0.219	0.204	0.447
Average pre-debate dummies for type-a	0.049	-0.011	-0.011	-0.001	0.002	0.002	0.004
P-val/Pre*type-a	0.055	0.414	0.310	0.933	0.829	0.894	0.777
Average post-debate dummies for type-a	0.035	-0.028	-0.014	-0.012	-0.004	-0.009	-0.006
P-val/Post*type-a	0.219	0.076	0.261	0.350	0.754	0.497	0.691

Notes: Same notes as in Tables 9 and D.22.

D.5 Event Study with Five-Day Window

Table D.26: Debates' effects on vote choice consistency, five-day window

	Vote choice consistency		Stating vote intention		Conditional consistency	
	(1)	(2)	(3)	(4)	(5)	(6)
Before -5	-0.022**	-0.022**	-0.006	-0.006	-0.019**	-0.019**
	(0.010)	(0.010)	(0.005)	(0.005)	(0.008)	(0.008)
-5	-0.023**	-0.022**	-0.003	-0.003	-0.021**	-0.021**
	(0.010)	(0.010)	(0.004)	(0.004)	(0.010)	(0.010)
-4	-0.012	-0.011	0.002	0.002	-0.014	-0.014
	(0.011)	(0.011)	(0.005)	(0.005)	(0.011)	(0.011)
-3	-0.007	-0.007	0.001	0.001	-0.008	-0.008
	(0.007)	(0.007)	(0.006)	(0.006)	(0.007)	(0.007)
-2	-0.004	-0.004	0.005	0.005	-0.006	-0.006
	(0.008)	(0.008)	(0.006)	(0.006)	(0.006)	(0.006)
0	0.002	0.003	0.001	0.002	-0.002	-0.002
	(0.006)	(0.006)	(0.004)	(0.004)	(0.006)	(0.006)
+1	-0.002	-0.002	0.005	0.006	-0.003	-0.003
	(0.009)	(0.009)	(0.005)	(0.005)	(0.007)	(0.007)
+2	-0.010	-0.010	-0.001	-0.002	-0.009	-0.009
	(0.009)	(0.009)	(0.005)	(0.005)	(0.008)	(0.008)
+3	0.004	0.004	0.004	0.004	0.000	0.000
	(0.010)	(0.010)	(0.005)	(0.005)	(0.009)	(0.009)
+4	0.005	0.005	0.005	0.005	0.001	0.001
	(0.007)	(0.007)	(0.004)	(0.004)	(0.006)	(0.006)
+5	0.000	0.000	0.002	0.002	-0.002	-0.002
	(0.009)	(0.009)	(0.005)	(0.005)	(0.007)	(0.007)
After +5	-0.000	-0.000	0.004	0.004	-0.004	-0.004
	(0.010)	(0.010)	(0.005)	(0.005)	(0.009)	(0.009)
Observations	200519	200519	243269	243269	185797	185797
R^2	0.054	0.057	0.071	0.078	0.033	0.035
Mean at debate day	0.817	0.817	0.918	0.918	0.878	0.878
Number of debates	40	40	40	40	40	40
Sociodemographic controls		X		X		X
Average pre-debate dummies -5, -4, -3 and -2	-0.011	-0.011	0.001	0.001	-0.012	-0.012
P-val/Pre	0.150	0.166	0.790	0.761	0.088	0.090
Average post-debate dummies 1, 2, 3, 4 and 5	-0.001	-0.000	0.003	0.003	-0.003	-0.002
P-val/Post	0.928	0.948	0.415	0.419	0.646	0.659

Notes: The set of relative days dummies includes dummy variables for being surveyed two, three, four, or five days before the debate, a dummy for being surveyed on the day of the debate as well as dummies for being surveyed one, two, three, four, or five days after the debate. Debates held less than five days from one another are excluded. Other notes as in Table 5.

Table D.27: Debates' effect on aggregate vote shares, five-day window

	Distance between predicted and final vote shares		Daily change in predicted vote shares	
	(1)	(2)	(3)	(4)
Before -5	0.012**	0.011**	-0.013	-0.013
	(0.005)	(0.005)	(0.008)	(0.008)
-5	0.006	0.004	-0.006	-0.008
	(0.007)	(0.007)	(0.012)	(0.011)
-4	0.013**	0.011*	-0.012	-0.013*
	(0.006)	(0.006)	(0.008)	(0.008)
-3	0.006	0.005	-0.013	-0.013
	(0.005)	(0.005)	(0.011)	(0.011)
-2	0.006	0.005	-0.005	-0.006
	(0.006)	(0.006)	(0.008)	(0.007)
0	0.008	0.006	-0.021***	-0.020**
	(0.005)	(0.005)	(0.008)	(0.007)
+1	0.005	0.003	-0.012	-0.012
	(0.005)	(0.005)	(0.011)	(0.010)
+2	0.003	0.002	-0.009	-0.012
	(0.006)	(0.005)	(0.012)	(0.012)
+3	0.004	0.003	-0.011	-0.012
	(0.006)	(0.006)	(0.009)	(0.009)
+4	0.002	0.002	-0.018**	-0.017**
	(0.005)	(0.005)	(0.008)	(0.008)
+5	0.008	0.006	-0.013**	-0.013**
	(0.006)	(0.006)	(0.006)	(0.006)
After +5	0.008	0.007	-0.005	-0.005
	(0.007)	(0.006)	(0.008)	(0.008)
Observations	2463	2463	2415	2415
R^2	0.578	0.586	0.515	0.524
Mean at debate day	0.046	0.046	0.072	0.072
Number of debates	40	40	40	40
Sociodemographic controls		X		X
Average pre-debate dummies -5, -4, -3 and -2	0.008	0.006	-0.009	-0.010
P-val/Pre	0.134	0.196	0.232	0.167
Average post-debate dummies 1, 2, 3, 4 and 5	0.004	0.003	-0.013	-0.013
P-val/Post	0.350	0.453	0.118	0.097

Notes: Same notes as in Tables 7 and D.26.

Table D.28: Debates' effects on vote choice consistency by debate and election type, five-day window

	First vs next	Close vs less close	Fluctuating vs stable	US vs others	Plurality vs proportional rule
	(1)	(2)	(3)	(4)	(5)
-5*Type-b	-0.017**	-0.016	-0.031	-0.026*	-0.038
	(0.008)	(0.010)	(0.018)	(0.013)	(0.028)
-4*Type-b	0.002	-0.009	-0.019	-0.022	-0.078**
	(0.011)	(0.013)	(0.017)	(0.015)	(0.035)
-3*Type-b	-0.006	-0.007	0.001	-0.015*	-0.053**
	(0.006)	(0.008)	(0.012)	(0.008)	(0.026)
-2*Type-b	0.003	0.001	-0.009	-0.008	-0.038
	(0.009)	(0.009)	(0.020)	(0.008)	(0.024)
0*Type-b	0.003	-0.001	0.002	0.001	-0.017
	(0.007)	(0.006)	(0.014)	(0.007)	(0.025)
+1*Type-b	0.004	0.002	-0.010	-0.003	-0.026
	(0.008)	(0.009)	(0.018)	(0.009)	(0.034)
+2*Type-b	-0.008	-0.007	-0.026**	-0.011	-0.036
	(0.011)	(0.010)	(0.012)	(0.010)	(0.026)
+3*Type-b	0.001	0.005	0.006	0.004	-0.020
	(0.011)	(0.010)	(0.016)	(0.012)	(0.038)
+4*Type-b	0.002	0.002	0.017	0.001	0.010
	(0.008)	(0.008)	(0.013)	(0.008)	(0.029)
+5*Type-b	-0.007	0.002	0.013	-0.004	-0.042
	(0.009)	(0.009)	(0.012)	(0.011)	(0.037)
-5*Type-a	-0.032	-0.058**	-0.019*	-0.017	-0.021**
	(0.029)	(0.026)	(0.010)	(0.017)	(0.010)
-4*Type-a	-0.034	-0.021	-0.008	0.015	-0.002
	(0.030)	(0.022)	(0.013)	(0.010)	(0.009)
-3*Type-a	-0.012	-0.008	-0.010	0.018	0.000
	(0.022)	(0.024)	(0.009)	(0.014)	(0.007)
-2*Type-a	-0.023	-0.032**	-0.002	0.006	0.000
	(0.016)	(0.014)	(0.007)	(0.021)	(0.008)
0*Type-a	0.002	0.020	0.004	0.005	0.006
	(0.013)	(0.014)	(0.007)	(0.012)	(0.006)
+1*Type-a	-0.017	-0.022	0.001	0.000	0.003
	(0.023)	(0.024)	(0.009)	(0.021)	(0.009)
+2*Type-a	-0.016	-0.027	-0.005	-0.011	-0.006
	(0.017)	(0.019)	(0.011)	(0.017)	(0.009)
+3*Type-a	0.011	0.004	0.004	0.000	0.008
	(0.023)	(0.026)	(0.012)	(0.014)	(0.009)
+4*Type-a	0.012	0.033**	0.002	0.017	0.007
	(0.018)	(0.013)	(0.009)	(0.011)	(0.007)
+5*Type-a	0.016	-0.016	-0.003	0.015	0.006
	(0.020)	(0.019)	(0.011)	(0.013)	(0.008)
Observations	200519	200519	200519	200519	200519
R^2	0.058	0.058	0.057	0.058	0.058
Mean at debate day	0.249	0.140	0.773	0.194	0.896
Number of debates	40	40	40	40	40
Sociodemographic controls	X	X	X	X	X
Average pre-debate dummies -3 and -2*Type-b	-0.004	-0.008	-0.014	-0.018	-0.052
P-val/Pre*Type-b	0.518	0.382	0.269	0.076	0.036
Average post-debate dummies 1, 2, and 3*Type-b	-0.002	0.001	0.000	-0.003	-0.023
P-val/Post*Type-b	0.817	0.930	0.986	0.744	0.381
Average pre-debate dummies -3 and -2*Type-a	-0.025	-0.030	-0.010	0.006	-0.006
P-val/Pre*Type-a	0.277	0.046	0.275	0.606	0.403
Average post-debate dummies 1, 2, and 3*Type-a	0.001	-0.006	-0.000	0.004	0.004
P-val/Post*Type-a	0.943	0.693	0.989	0.693	0.518

Notes: Same notes as in Tables 8 and D.26.

Table D.29: Debates' effects on vote choice consistency by voter type, five-day window

	First vs next debate (1)	Close vs less-close race (2)	Fluctuating vs stable race (3)	U.S. vs other countries (4)	Plurality vs proportional rule (5)	(6)	(7)
-5*Type-b	-0.097*	-0.024	-0.024	-0.025	-0.025	-0.021	-0.023
	(0.047)	(0.016)	(0.017)	(0.018)	(0.015)	(0.015)	(0.016)
-4*Type-b	-0.171***	-0.012	-0.023	-0.015	-0.019	-0.016	-0.017
	(0.052)	(0.017)	(0.017)	(0.016)	(0.012)	(0.013)	(0.013)
-3*Type-b	-0.088**	-0.007	-0.009	-0.013	-0.013	-0.010	-0.004
	(0.036)	(0.011)	(0.013)	(0.010)	(0.011)	(0.011)	(0.011)
-2*Type-b	-0.102***	0.011	-0.013	-0.009	-0.001	-0.002	-0.009
	(0.027)	(0.011)	(0.010)	(0.011)	(0.011)	(0.011)	(0.012)
0*Type-b	-0.149**	-0.005	0.000	-0.001	-0.009	-0.016	0.008
	(0.055)	(0.009)	(0.009)	(0.012)	(0.009)	(0.011)	(0.009)
+1*Type-b	-0.216***	-0.003	-0.008	-0.005	-0.003	0.002	-0.004
	(0.057)	(0.013)	(0.010)	(0.013)	(0.012)	(0.011)	(0.012)
+2*Type-b	-0.165***	-0.002	-0.026**	-0.010	-0.016	-0.011	-0.026**
	(0.044)	(0.013)	(0.013)	(0.011)	(0.013)	(0.011)	(0.013)
+3*Type-b	-0.082***	0.002	-0.004	0.004	0.003	-0.005	-0.001
	(0.022)	(0.015)	(0.010)	(0.013)	(0.010)	(0.013)	(0.012)
+4*Type-b	-0.062	0.001	0.003	0.004	-0.002	0.012	-0.004
	(0.060)	(0.010)	(0.011)	(0.011)	(0.011)	(0.013)	(0.010)
+5*Type-b	-0.208***	0.006	-0.006	-0.006	-0.001	0.001	-0.004
	(0.038)	(0.014)	(0.010)	(0.011)	(0.011)	(0.013)	(0.010)
-3*Type-a	0.012	0.000	-0.013	-0.002	-0.001	0.004	-0.013
	(0.013)	(0.012)	(0.009)	(0.011)	(0.010)	(0.010)	(0.012)
-2*Type-a	-0.007	-0.011	0.011	-0.000	-0.007	0.005	-0.003
	(0.011)	(0.014)	(0.013)	(0.010)	(0.009)	(0.012)	(0.014)
0*Type-a	0.005	-0.003	-0.000	0.005	0.015	0.012	-0.021*
	(0.008)	(0.011)	(0.008)	(0.012)	(0.009)	(0.011)	(0.012)
+1*Type-a	0.014	-0.012	0.003	0.001	-0.000	0.012	-0.006
	(0.015)	(0.013)	(0.014)	(0.011)	(0.013)	(0.012)	(0.012)
+2*Type-a	0.003	-0.011	0.006	-0.009	-0.004	0.002	-0.003
	(0.009)	(0.013)	(0.012)	(0.014)	(0.012)	(0.014)	(0.014)
+3*Type-a	0.016	0.000	-0.018*	0.004	0.005	0.003	-0.012
	(0.012)	(0.013)	(0.010)	(0.011)	(0.012)	(0.013)	(0.013)
+4*Type-a	0.016	0.004	-0.006	0.005	0.012	0.002	0.008
	(0.010)	(0.011)	(0.011)	(0.009)	(0.008)	(0.013)	(0.014)
+5*Type-a	0.007	-0.000	-0.006	0.005	0.001	0.007	-0.013
	(0.010)	(0.012)	(0.012)	(0.013)	(0.009)	(0.014)	(0.014)
Observations	57206	149005	152119	200118	200462	154830	158495
R^2	0.070	0.053	0.053	0.058	0.057	0.053	0.067
Mean at debate day	0.941	0.301	0.383	0.527	0.497	0.581	0.400
Number of debates	15	26	35	40	40	36	35
Sociodemographic controls	X	X	X	X	X	X	X
Average pre-debate dummies for type-b	-0.114	-0.008	-0.017	-0.016	-0.014	-0.012	-0.013
P-val/Pre*type-b	0.000	0.522	0.155	0.187	0.162	0.233	0.224
Average post-debate dummies for type-b	-0.147	0.001	-0.008	-0.003	-0.004	-0.000	-0.008
P-val/Post*type-b	0.000	0.916	0.285	0.770	0.636	0.978	0.348
Average pre-debate dummies for type-a	0.002	-0.006	-0.012	-0.008	-0.008	-0.000	-0.017
P-val/Pre*type-a	0.793	0.596	0.161	0.408	0.387	0.997	0.138
Average post-debate dummies for type-a	0.011	-0.004	-0.004	0.001	0.003	0.005	-0.005
P-val/Post*type-a	0.230	0.699	0.625	0.894	0.753	0.637	0.586

Notes: Same notes as in Tables 9 and D.26.